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## GEOLOGICAL, GEOPHYSICAL & GEOCHEMICAL REPORT

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## ON THE

## DOMINION CREEK PROPERTY~

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By: M. J. Savell L. Bradish October, 1987

# TABLE OF CONTENTS

· · · · · · · · · · · · · · · · · · ·	PAGE
SUMMARY	. 1
INTRODUCTION	. 2
LOCATION AND ACCESS	. 2
PHYSIOGRAPHY & VEGETATION	. 2
CLAIM STATISTICS	. 2
PREVIOUS WORK	. 3
REGIONAL GEOLOGY	. з
PROPERTY GEOLOGY	. 4
GEOCHEMICAL SURVEY:	
Stream Sediments	. 5
Soils	. 5
GEOPHYSICAL SURVEY:	
Magnetics	. 6
VLF-EM	. 7
HLEM	. 8
TRENCHING	. 9
CONCLUSIONS	. 11
RECOMMENDATIONS	. 12
REFERENCES	. 12

APPENDIX I	Statement of Qualifications	13
APPENDIX II	Statement of Costs	14-19
APPENDIX III	Analytical Procedure	20, 21
	Instrumentation	22
APPENDIX V	Petrographic Analysis	
APPENDIX VI	Certificates of Analyses	

## LIST OF TABLES

Table 1	Claim Statistics	Page	з
Table 2	Summary Statistics (Soil Geochem)	Page	6a

LIST OF FIGURES

1	Location Map	1:8,000,000	2a
2	Claim Map - south half	1:50,000	2Ь
З	Claim Map - north half	1:50,000	2c

## Contained in Pocket

	<b>C</b> 1			1		<u>_</u>	
4	Geology	& Sample		lions			1:2,500
5	**	••	••		(Sheet	4)	**
6		**	**		(Sheet	5)	••
7	••	. 88	••		(Sheet	8)	• •
8	Soil Geo	chemistry	y-Cu,	Zn	(Sheet	2)	
9	**	••	-РЬ,	Ag	(Sheet	2)	**
10	° 10	**	-Au	-	(Sheet	2)	••
11	**	**	-Cu,	Zn	(Sheet	4)	••
12	**	**	-Pb,	Ag	(Sheet	4)	••
13	1	••	-Au	-	(Sheet	4)	
14	- 88	••	-Cu,	Zn	(Sheet	5)	••
15		**	-Pb,	Ag	(Sheet	5)	••
16	- <b></b>	••		-	(Sheet	5)	**
17	· •	••	-Cu,	Zn	(Sheet	8)	**
18	· ••	••	-Pb,	Ag	(Sheet	8)	**
19	**		-Au	-	(Sheet	8)	**
20	Magnetom	eter Surv	vey-ra	w pro	ofiles		**
21	Magnetom	eter Surv	vey-in	terpr	retation	r	**
22	-	rvey (Tx	-	-			**
23		rvey (Tx					
24	HLEM Sur	•					••
25		(North ar	d Sou	th Zo	nes)		1:1.000
26		(South Zo					1:200
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SUMMARY:

The AK I to IV mineral claims were acquired by Noranda in September, 1986 and surrounding DOCK claims staked in November, 1986. This report describes the subsequent exploration program undertaken to assess the economic potential of the occurrence of Au, Ag, Pb and Zn bearing quartz vein boulders discovered in Dominion Creek.

The property lies in the Cariboo Mountains of the Omineca belt and is underlain by Upper Proterozoic shales and limestones (Isaac and Cunningham Formations).

Trenching of several coincident Pb, Zn, Cu Ag and Au soil geochem anomalies has resulted in the discovery of several mineralized quartz veins. Grades of up to 31.8 gmt Au, 63.2 gmt Ag, 5.78% Pb and 2.82% Zn over 4.4 meters have been obtained from surface chip sampling. The veins appear to trend with bedding planes, however, faults have deformed these structures to some extent.

The structures should be tested by diamond drilling and other anomalies trenched.

## INTRODUCTION:

The AK I to IV mineral claims were acquired by Noranda in September, 1986. The claims were staked in August, 1986 by Nathen Kencayd to secure ground on which galena-sphalerite-pyritechalcopyrite bearing quartz vein boulders were found in stream gravels. The surrounding DOCK claims were staked by Noranda following acquisition of the AK claims.

This report describes the subsequent geological, geochemical and geophysical surveys undertaken between October 1986 and August, 1987 to assess the economic potential of the prospect. All geological surveys except for VLF-EM were performed by employees of Noranda Exploration Company, Limited. Road construction and excavator trenching was contracted to Sure-Spar Logging Co. Ltd., and Pat Murray and Sons Excavating Ltd. of Prince George, B.C.

The property consists of four continuous groups (see Table 1). The data has been compiled into a single report. A Statement of Costs has been prepared for each group (Appendix II).

## LOCATION & ACCESS:

The property is located approximately 110 km east-southeast of Prince George and 43 km north-northwest of Wells, B.C. (Figure #1) It can be reached via forest service roads from Prince George (approximately 155 km). A 6 km access road branching off the Bowron-Haggen Forest Service road was constructed to provide access to the main area of interest. The final 13 km of road to the property is ungravelled, winter logging road which is usable in summer but is rough and muddy during wet weather.

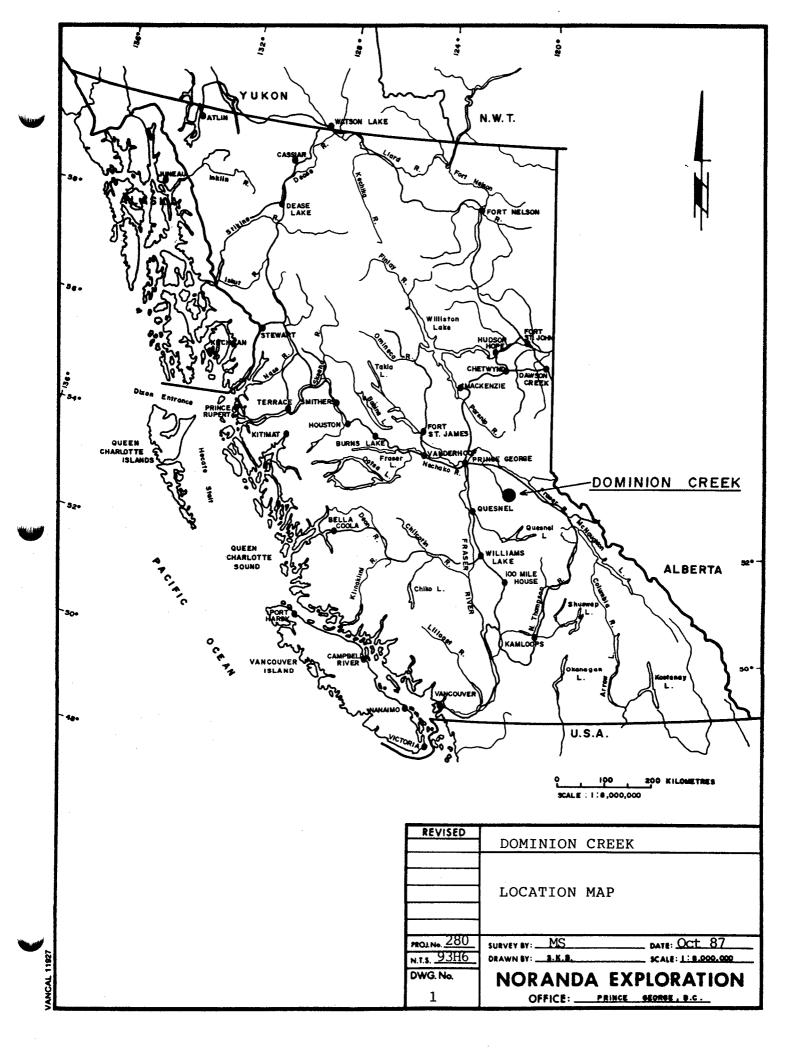
## PHYSIOGRAPHY & VEGETATION:

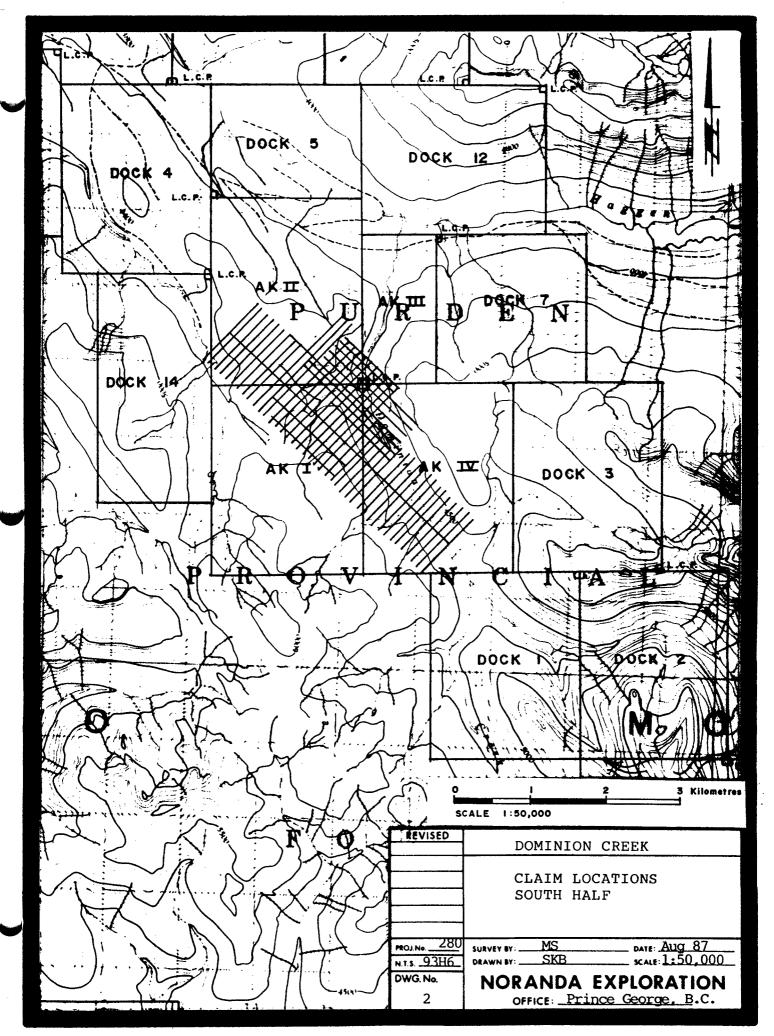
The claims lie within the Cariboo Mountains. Local terrane is gentle to steeply sloping and almost entirely forested. Local relief ranges from about 3500 to 6000 feet.

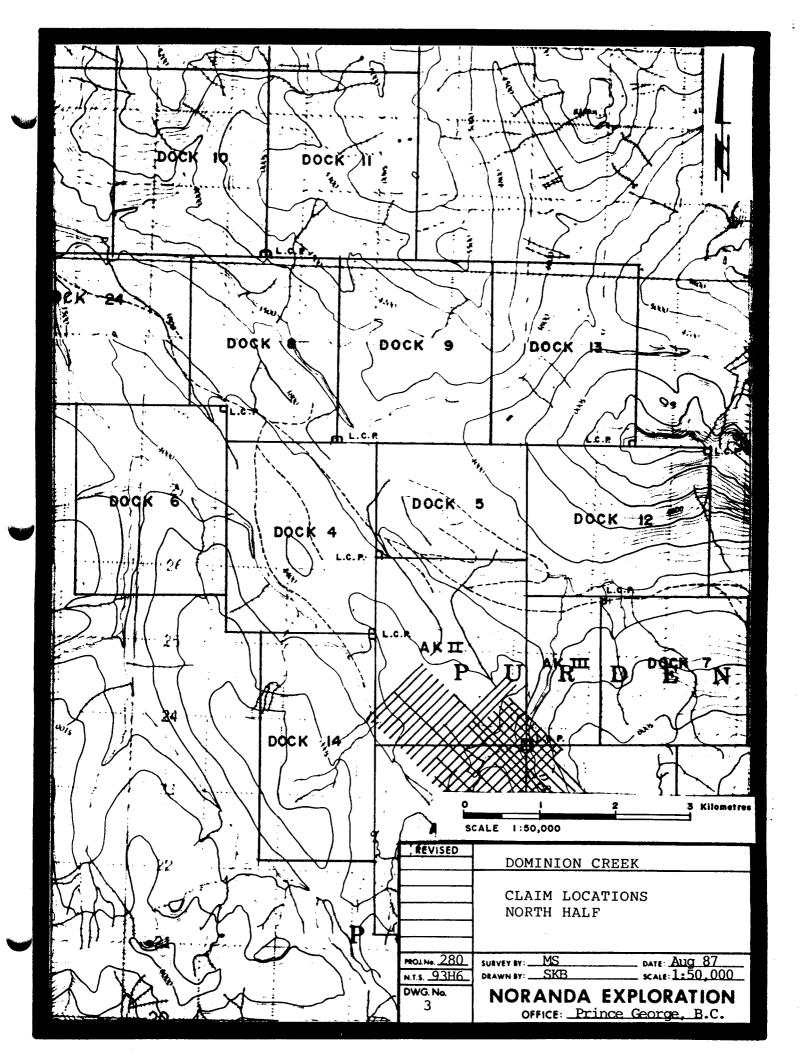
Vegetation consists of mature white spruce and balsam fir. A moderately dense undergrowth of dwarf willows, huckleberry and devils club covers most of the property.

### CLAIM STATISTICS:

The property is comprised of a 274 unit block of modified grid claims as listed below. (Figures #2 & #3). Upon acceptance of this report, the claims will be in good standing until the indicated expiry date.







NAME	RECORD #	UNITS	RECORD DATE	EXPIRY DATE
DC "A" GRO	UP:			
AK II	7862	20	Aug 5.1986	Aug 6, 1991
DOCK 5	8146	12	Nov 22, 1986	Nov 22, 1990
DOCK 9	8150	20	Nov 22. 1986	Nov 22, 1990
DOCK 10	8151	20	Nov 22, 1986	Nov 22, 1990
DOCK 11 /	8152	20	Nov 22, 1986	Nov 22, 1990
DC "B" GRO	UP:			
AK I		20	Aug 6, 1986	Aug 6. 1991
DOCK 4	8145	20	Nov 22, 1986	_
DOCK 6		20	Nov 22, 1986	
DOCK 8	8149	20	Nov 22, 1986	
DOCK 14	8153	18	Nov 22, 1986	Nov 22, 1990
DC "C" GRO	UP:			
	7863	8	Aug 6, 1986	Aug 6. 1990
DOCK 7	8148	16	Nov 22, 1986	
DC 'D' GRO	UP:			
AK IV	7864	20	Aug 6, 1986	Aug 6, 1991
DOCK 1	8143	20	Nov 22, 1986	Nov 22, 1990
DOCK 2	8144	20	Nov 22, 1986	Nov 22, 1990

TABLE 1 - CLAIM STATISTICS

### PREVIOUS WORK:

There is no record of any previous exploration work having been conducted in the area prior to staking in 1986. The 1984 government Regional Geochemical Survey detected a geochemically anomalous drainage (Clear Mountain area) which was followed up by the B.C. Ministry of Energy. Mines and Petroleum Resources (B.C.M.E.M.P.R.) in 1985. This follow up survey is reported in B.C.M.E.M.P.R. Paper 1986-1 and suggests a northwesterly trending linear zone is geochemically anomalous in Pb-Co-Fe-As- and Sb.

## **REGIONAL GEOLOGY:**

The property lies in the Cariboo Mountains of the Omineca belt. The regional geology is comprised of Upper Proterozoic to Cambrian continental margin sediments including quartzite, sandstone, siltstone, shale and limestone. The area has been mapped at a scale of 1 inch to four kilometers (Map 1356A) and studied in Paper 72-35. Struik (1986) considers these rocks part of the Cariboo sub-terrane which is part of the Cassiar Terrane of displaced continental margin sediments.

These rocks have been grouped with the Upper Proterozoic Winderemere tectonic assemblage, which consists of mainly clastic continental margin sediments of the Lower Cambrian Gog tectonic assemblage, which consists of rifted and passive continental margin sediments. On the property only rocks of the Isaac and Cunningham Formation (Winderemere assemblage) are exposed.

The area has been deformed into a series of northwest plunging major fold structures. The northwest trending Isaac Lake Fault which roughly cuts through the centre of the property separates the Isaac Lake Synclinorium to the east and the Lanezi Arch or Anticlinorium to the west. This deformational episode appears to have resulted in folding of deeper, older formations where as younger, high level formations display more fault dominated structures. This is probably a function of the physical characteristics (less competent shales at depth) of the rocks and the higher temperatures at depth. The rocks display low-grade metamorphic effects.

## PROPERTY GEOLOGY:

The property is underlain by rocks of the Isaac Formation and Cunningham Formation. Figures #4 through #7 show the geological plan at 1:2500 scale. Figures #25 and #26 show selected areas at more detailed scales. The Isaac formation consists predominantly of dark grey to black, fine grained, finely laminated, fissile, phyllitic to slatey argillite. It is variably graphitic. calcareous and pyritic. Pyrite forms medium to coarse grained cubes with shadows of quartz or calcite. Lesser amounts grey siltstone and quartzite are interbedded of with the Grey to black, micritic limestone also forms a major argillite. component of the Isaac Formation, especially near the upper, gradational contact with the Cunningham Formation. This limestone may be finely interbedded with the argillite or form individual beds up to 25-30 meters thick, and increases in proportion upwards towards the Cunningham. The overlying Cunningham Formation consists of massive to faintly laminated, micritic to finely crystalline, medium grey limestone with minor interbeds of graphitic argillite.

In general bedding attitudes are consistently northwest to west-northwest, and moderate to steeply dipping southwestward. A southeast plunging anticlinal axis was mapped on Dominion Creek near the east edge of the property. In the vicinity of the AK claims LCP, bedding trends have been shifted to an east-west orientation.

A major northwest trending fault cuts through the centre of the property and is evidenced by topographic lineaments and abrupt lithological contracts. This structure is thought to be the extension of the Isaac Lake Fault and strikes at about 145 degrees. Several smaller faults trending at about 155 degrees have been mapped (Figure #25) and these are thought to be splays of the Isaac Lake Fault.

Two prominent jointing sets were measured. The first cut is generally parallel to foliation, which is usually parallel to bedding. The second set is generally perpendicular to foliation and dips steeply to the east. These fractures are generally filled with a network of thin quartz and/or calcite veinlets.

## GEOCHEMICAL SURVEY:

## 1. Stream Sediments:

A stream sediment orientation survey was conducted to determine the geochemical signature associated with mineralization. Sample locations and analytical values are shown on Figures #4 to #7. Silt samples were collected from the active stream channel, placed in high wet strength Kraft paper envelopes and shipped to Vancouver, B.C., where they were analyzed by the methods described in Appendix III.

A total of 18 silt samples were collected and analyzed. Gold values are all at or below detectable limits. Silver values are also at or below detectable limits, except for sample #96138 (Figure #5) which contained 0.8 ppm Ag, and is located immediately downslope of mineralization. Lead values fall between 10 and 38 ppm, except #96138, which contained 140 ppm Pb. Zinc and copper results fall within background ranges, 76 to 160 ppm and 12 to 30 ppm, respectively.

Panned concentrates were obtained from 20 litre gravel samples collected on upstream ends of gravel bars in streams. The panned heavy mineral concentrate (20 to 40 grams) is shipped to Vancouver and analyzed as described in Appendix III. Gold values of up to 20,000 ppb were obtained, yet the samples taken nearest know mineralization (#18190, 91 - Figure #5) contained only 2500 and 7500 ppb Au. However, these samples contained the highest base metal values (up to 390 ppm Pb, 240 ppm Zn, 110 ppm Cu) and Ag values (up to 18.0 ppm Ag).

## 2. Soils:

For control purposes, a grid was established as presented on Figures #8 to #19. A baseline with a 135 degree azimuth was cut and designated 10,000E. Lines at 100 meter spacing were surveyed perpendicular to the baseline and designated lines 7500N to 11,500N. Eventually a series of lines was also run parallel to the baseline (Sheet 5). In certain areas, lines were run at 50 meter spacing or more detailed in both directions. Sample intervals are 25 meters or less. All lines are compass and hipchain controlled and stations are marked at 25 meter or closer intervals by fluorescent surveyors ribbon. A total of 68 km of grid lines were surveyed.

A total of 3399 samples were collected and analyzed for Pb and Zn and most of these also analyzed for Au, Ag, and Cu. The samples were collected from the "B" soil horizon by digging a small hole with a grubhoe. The samples were placed in Kraft paper envelopes and shipped for analysis to Noranda's lab at 1050 Davie St., Vancouver, B.C. The details of the analytical procedure is given in Appendix III. Line, sample locations and analytical values are presented on Figures #8 to #19. Table 2 is a summary of statistics of the analytical results.

Copper: Background levels fall within the range of 2 to 20 ppm. Values of up to 320 ppm were obtained near surface mineralization, however, the dispersion halos are very restricted in size.

Zinc: Background levels fall within the range of 8 to 80 ppm. There appears to be a wider scatter of threshold values, however the highest levels (up to 3300 ppm) correlate with exposed mineralization very well. The 200 ppm contour appears to define an anomalous dispersion halo of significant dimensions.

Lead: Background levels fall with the range of 1 to 20 ppm. A very distinct zone of threshold values (>25 ppm) roughly 100 to 400 meters wide, trending northwest through the center of the grid is observed. This is less evident on the higher, flat areas on the north end of the grid. Within this large threshold zone are found numerous large quartz vein boulders and the surface mineralization (Figures #4 to #7, #24, #25). The strongest results occur immediately downslope of known mineralization where values of up to 12,000 ppm were obtained. These are coincident with the highest Cu, Zn, Ag and Au values as well. The 100 ppm contour appears to define an anomalous dispersion halo of significant dimensions.

Silver: This element displays a very narrow dispersion halo around known mineralization. Values over 1.0 ppm are considered anomalous and lower values are generally background.

Gold: The 20 ppb contour appears to be roughly coincident with the large Pb threshold zone (>25 ppm) discussed above. Values near known mineralization reach 2400 ppb, and the 100 ppb contour appears to define an anomalous dispersion halo of significant dimensions.

### **GEOPHYSICAL SURVEY:**

### 1. Magnetics:

An extensive magnetic survey was completed on the Dominion Creek property during July and August of 1987. Total Field Magnetic readings were recorded at 10 meter intervals and with all applicable corrections applied to the data. A total of 39.8 km of grid lines were surveyed. The data is plotted on Figure #20 and interpretation shown on Figure #21.

The magnetic signature over the entire property is of low amplitude and exhibits a fairly uniform magnetic susceptibility. There are however, some important but subtle variations in the

Element	Zn		Pb		Au		Cu		Ag	
No. of Analyses	3658		3658		2044		1750		1750	
Lowest Value	8	ppm	1	ppm	10	ppb	2	ppm	0.2	ppm
Highest Value	3300	ppm	12000	ppm	4000	ppb	320	ppn	15.0	ppm
Mean (log) /	77.5		18.3		11.6		17.5		0.22	
Stand. Dev. (log)	0.195		0.336		0.227		0.225		0.139	
Mean (Arith)	87.7		33.6		18.3		20.0		0.25	
Stand. Dev	92.86		255.18		107.38		13.35		0.436	

## TABLE 2 - SUMMARY STATISTICS - SOIL GEOCHEM

magnetic picture that indicate changes in the mineralogy of the underlying geology. In addition, some structural features can be interpreted from the magnetic data.

A filtered version of the magnetic map is employed as the base for the interpretation map, however, most of the interpreted features are determined from the raw data. This filtered map will enhance the general magnetic bias recorded over this grid which has a primary preference of 145 degrees along with additional subsidiary directions of 160 degrees.

Three distinct magnetic domains are seen in the magnetic data and are as illustrated on the magnetic interpretation map.

<u>UNIT 1</u>) This magnetic package lies over about one third of the east side of the grid and is characterized by a magnetic signature that is slightly above the average background and with a more variable distribution of magnetic minerals which gives the contour map a somewhat "noisier" appearance. Within and particularly along the margin or contact there are concentrations albeit weak, of magnetic mineralization - hence the pronounced "thumbprint" anomalies.

<u>UNIT 2</u>) The central portion of the grid has a lower magnetic background and a subdued variability in its magnetic susceptibility when compared to UNIT 1. Within the "guts" of this area there are large zones of magnetic depletion which extend across most of the grid and appear to be truncated near line 11200N.

<u>UNIT 3</u>) This unit is a narrow(?) package at the (grid) north end of the grid that widens towards the (grid) south and strikes in an approximate 145 degree direction. This magnetic unit's response is just a few nanoTesla's above UNIT 2's magnetic response, but is fairly well defined.

Structural features are not directly defined, however, "magnetic breaks" are observed and are interpreted to be sourced by faults and shears. Several are mapped with this data set with strike directions of 095 and 005-010 degrees and are as seen on the interpretation map.

## 2. VLF-EM:

موالد الدرار المصيدات

Limited VLF-E.M. surveys were completed on a portion of the Dominion Creek grid. The VLF survey employed a Geonics E.M.-16 receiver with headings recorded from NLK (Jim Creek, Wash.) and NAA (Cutler, Maine). Readings were recorded at 12.5 meter intervals. Results are presented on Figures #22 and #23. A total of 7.5 km of grid lines were surveyed.

The VLF-E.M. surveys have mapped several zones of assumed bedrock conductivity. The data collected from two stations has produced an interesting comparison.

The data is presented in both Fraser Filter and profiled In-Phase/Quadrature form. The "conductor" axes are shown on both presentations as heavy lines and these are interpreted from the profile data rather than the Fraser Filtered data which can both create and destroy features.

### SEATTLE SURVEY

Two major trends were identified utilizing the Seattle transmitter along with a few smaller subsidiary responses. The two trends are separated by a distance of 200+ meters north of Line 9900N and some 350+ meters south of the same line.

A strong response is mapped between L.9800N/10290E and L.9600N/10360E yielding a strike direction of 110-115 degrees. A subparallel and weaker zone lies 100 to 150 meters grid east of this zone. Numerous additional responses are observed within the survey area.

### CUTLER SURVEY

Fewer "conductor" axes were defined by this survey employing the Cutler, Maine transmitter station. A major difference is that the major grid west conductor detected by the Seattle survey was not detected whereas the grid east zone is defined albeit at a lower amplitude

The third conductor discussed in the previous section was also detected, however, at a lower amplitude and with slightly different strike direction at approximately 120 degrees.

A large amplitude but dimensionally restricted response is recorded at L.9800N/10240E and extending in part to L.9850N. This response possibly exhibits a strike direction of 110 degrees or a length of 100+ meters.

A sharp response is recorded at L.9900N/10120E and extends to L.9850/10120E yielding a strike direction of approximately 120 degrees. This response is open towards grid north.

A final response of note is recorded at the grid NE corner of the survey block. This response was detected by both VLF surveys, however, the strongest response was recorded when using the Cutler transmitter.

## 3. HLEM:

A total of 1.45 km of SE-88 EM survey were completed on grid lines over known mineralization. The results are presented on Figure #24. The SE-88 EM survey defined a number of features which were originally identified by the VLF-EM survey. The difference between the two EM surveys are that the SE-88 survey indicates the western conductor to be sourced by a bedrock source which widens on Line 9800N to about 60 meters whereas the VLF-EM survey defined two discrete axes. The eastern axis may be caused by a change in the underlying resistivity (b/r or o/b ?).

### TRENCHING:

A trenching program was undertaken in order to evaluate the source of Au-Ag-Pb-2n mineralized quartz vein float occurrences and soil geochem anomalies detected in the surveys described above. A caterpillar 225 excavator was utilized. Bedrock was exposed along road sides on the steep slopes where the targets were located and are more appropriately described as roadcuts rather than as trenches. Locations of exposures, geology, sample locations and assay results are presented on Figures #25 (1:1000 scale) and #26 (1:200) scale. Note that a new chained, slope corrected grid was surveyed to map the trenches and this grid is shown on Figures #25 and #26, along with tie-in points to the geochem grid.

This work has exposed several promising quartz vein structures with economic Au, Ag, Pb, Zn, values over mineable widths. Two separate areas termed the North and South zones are indicated (Figure #25), the most promising being the South zone (Figure #26). These are described below:

## SOUTH ZONE:

#1A Vein: This consists of massive white quartz and silicified, quartz breccia with up to 10% gal-sph-cpy at the fault contact between siltstones and limestones. The structure parallels the fault and crosscuts the bedding. The 1A structure, which apparently follows a fault trending at 155-160 degrees, may be a bedding plane vein (#1B vein?) that has been dragged and flexed parallel to the fault by transverse motion. The vein was exposed for 12 metres and is open along strike and down dip. It assayed 14.13 gmt Au over 1.3 meters.

#1B Subsidiary Vein: This consists of a silicified quartz stringer zone parallel to bedding in a graphitic limestone unit. It was exposed at several locations over a 40 metre length and is open along strike and at depth. The best assay obtained was 27.53 gmt Au over 0.65 meters.

#28 Vein: This was found approximately 50 metres northeast of the #1 vein and consists of massive white quartz with isolated patches and bands of gal-sph-cpy. It appears to parallel bedding and dips at about 70 degrees. The 28 structure is observed to pinch, swell and branch along strike and probably does the same down dip. It apparently follows the bedding and is displaced by numerous small faults in several directions. It is open along strike and at depth. The best assay obtained was 32.09 gmt Au over 2.4 meters. #3B Vein: This is similar to both the above structures and assayed up to 31.8 gmt Au over 4.4 meters.

In addition, the 2B or a related structure was found to continue along strike to the southeast for at least 210 meters, however, grade and thickness appear to wane, at least where trenched. Assays up to 3.02 gmT Au/0.5 meters and 2.5 gmT Au/0.3 meters were obtained.

A sample of sulphide-rich vein material was submitted for petrographic analysis and is described in Appendix V. Mineralogy consists of quartz, sphalerite, galena, pyrite, chalcopyrite, calcite and native gold.

## NORTH ZONE:

Two Au-bearing structures have been identified. The first structure has been exposed in three trenches over a length of about 50 meters, and consists of a quartz vein which ranges from a massive vein 2 meters wide to a stringer zone of narrow pods and veinlets up to 4 meters wide. This structure is on the strike projection of the 1A structure (155 degree trending fault) in the south zone, however it trends parallel to bedding at 110 degrees. The best weighted average assay obtained is 6.21 gmT Au/2.4 meters. A grab sample ran 43.06 gmT Au. The second structure lies about 300 meters northeast of the first and has been exposed in two trenches, 50 meters apart. It is a sulphide bearing. bedding plane, quartz vein ranging in thickness from 0.25 to 0.7 meters and grades 27.57 and 17.21 gmT Au respectively.

Two structures indicated during access road construction were also trenched:

11275N,10025E: (Figure #5) This is approximately 1.4 km northwest of the South Zone. A 0.5 to 1.0 m thick quartz stringer/silicified zone at a limestone-phyllite contact contains pods and blebs of stibrite up to 5 cm thick. There were weak Pb (32 ppm) values detected near this structure, which trends at about 125 degrees. No Au or Ag was detected by the assay.

10640N,9875E: (Figure #6) This is a calcite-quartz vein from 1 to 1.3 m thick trending at about 112 degrees. No geochem signature was evident. No Au or Ag was detected by the assay.

## CONCLUSIONS:

The above described systematic exploration program has succeeded in locating the most probably source area of Au, Ag, Pb, Zn, and Cu being quartz vein boulders discovered in Dominion Creek. The exposed structures display economic grades and widths. The potential for locating similar structures elsewhere on the property is excellent.

Mineralization occurs in quartz veins hosted by limestones and argillites near the top of the Isaac Lake Formation. The northwest trending Isaac Lake fault passes a few hundred meters east of the north and south zones and may have provided a conduit along which deep sourced mineralizing hydrothermal solutions percolated. Quartz vein bearing basic dykes cutting Cunningham limestones observed 12 km to the north of the Formation mineralized veins may originate from a pluton from which these hydrothermal solutions emanated. Emplacement of veins at the top of the Isaac Formation may be associated with the change in deformational styles from folding to faulting which is coincident with the change from incompetent Proterozoic strata to the much more competent Lower Cambrian rocks, as described by Campbell, et. al (1973).

The stream sediment sampling survey indicates that elevated Pb values in the order of 5 to 7 times background levels can be obtained when the drainage area containing the mineralization is relatively small, however, analysis of panned heavy mineral concentrates may be more useful in detecting this style of mineralization within larger drainages. The panned samples show a distinct Pb, Zn, Cu, Ag and Au anomaly.

On relatively steep slopes, soil sampling at 100 m line spacing and 20 m intervals is sufficient to detect significant Au and Pb dispersion halos. Trenching targets can be narrowed down by more detailed sampling. On flat, higher areas till cover and lack of mechanical action, via gravity forces, appear to subdue geochem responses.

The mineralization discovered to date does not appear to have any direct geophysical characteristics, however, "magnetic breaks" and EM trends detected elsewhere should be tested.

Excavator trenching is a cost effective method of exposing bedrock and providing road access in this terrane.

## **RECOMMENDATIONS:**

The mineralized structures on the North and South Zones should be tested at depth by diamond drilling. Untested soil geochem anomalies should be excavated.

## **REFERENCES:**

- Boronowski, A.J. (1985): 1985 Orientation Survey. A Follow Up of Two 1984 Regional Geochemical Survey Geochemically Anomalous Drainages by Panned Stream Sediment and Silt Sampling in B.C. M.E.M.P.R. Geological Fieldwork, 1985, Paper 1986-1, pg. 115-120.
- Campbell, R.B. et al (1973): Geology of McBride Map Area, British Columbia. G.S.C. Paper 72-35.
- Struik, L.C.: Imbricated Terranes of the Cariboo gold belt with correlations and implications for tectonics in southeastern British Columbia. C.J.E.S. Vol 23, No. 8, Aug 1986, pg. 1047-1061.

### APPENDIX I

## STATEMENT OF QUALIFICATIONS

- I, Michael J. Savell of the City of Prince George, Province of British Columbia, do certify that:
- I am a geologist residing at 3507 Rosia Rd., Prince George, British Columbia.
- 2. I am a graduate of Dalhousie University with a Bachelor of Science (Honors) in Geology.
- 3. I am a member in good standing of the Geological Association of Canada, Canadian Institute of Mining, Prospector's and Developer's Association and the B.C.-Yukon Chamber of Mines.
- 4. I presently hold the position of Project Geologist with Noranda Exploration Company, Limited and have been in their employ since 1980.

in Banel

Michael J. Savell Geologist Noranda Exploration Company, Limited (No Personal Liability)

## APPENDIX I

# STATEMENT OF QUALIFICATIONS

I, Lyndon Bradish of Vancouver, Province of British Columbia, do hereby certify that:

1. I am a Geophysicist residing at 1826 Trutch Street, Vancouver British Columbia.

•

- 2. I am a graduate of the University of British Columbia with a B.Sc. (geophysics).
- 3. I am a member in good standing of the Society of Exploration Geophysicists, Canadian Institute of Mining and the Prospector's and Developer's Association.
- 4. I presently hold the position of Division Geophysicist with Noranda Exploration Company, Limited and have been in their employ since 1973.

Pra di

L. Bradish.

## APPENDIX II

## STATEMENT OF COST

DATE: Oct. 1987

PROJECT - DOMINION CREEK - DC 'A' GROUP (AK II, DOCK 5, 9, 10 & 11) TYPE OF REPORT - GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL a) Wages: No. of Days - 191 Rate per Day - \$120.68 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Wages \$ 23,049.88 Food and Accommodation: b) No. of Days - 191 Rate per Day - \$ 15.39 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost \$ 2,929.49 c) Transportation: No. of Days - 191 Rate per Day - \$ 26.06 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost \$ 4,977.46 Equipment, Supplies, Rentals, Repairs: d) Total Cost \$ 2,283.53 e) Analysis: 1119 soils - Pb,Zn @ \$2.70/sample \$3,021.30 

 683 soils - Au @ \$3.50/sample
 \$2,390.50

 621 soils - Ag @ \$0.60/sample
 \$372.60

 509 soils - Cu @ \$0.60/sample
 \$305.40

 34 rocks - Au, Ag, Pb, Zn @ \$17.25/sample \$ 586.50 7 silts, pan conc - Au, Ag, Pb, Zn,Cu @ \$7.40/sample \$ 51.80 Total Cost \$ 6,728.10 f) Other: Contractor - 7.5 km VLF-EM survey @ \$135.84/km \$ 1,018.80 g) Cost of Preparation of Report: Author \$100.00 Drafting \$100.00 Typing \$ 25.00 Total Cost \$ 225.00 \_\_\_\_\_ \$ 41,222.26

TOTAL COST

## STATEMENT OF COST

DATE: Oct. 1987

PROJECT - DOMINION CREEK - DC 'A' GROUP (AK II, DOCK 5, 9, 10 & 11)

PHYSICAL WORK

Road Construction and Trenching -Dates from Sept 1, 1986 to Aug 5, 1987

 159 hrs Caterpillar 225 excavator @ \$101.91/hour
 \$ 16,203.69

 Mob/demob
 660.00

 27 hrs America 35D excavator @ \$100/hr
 2,700.00

 28 hrs Caterpillar D7 tractor @ \$80/hr
 2,240.00

 1.5 km road building at \$3,793.10/km
 5,689.65

 5 days tree faller @ \$300/day
 1,500.00

Total Cost

\$ 28,993.34

### APPENDIX II

### STATEMENT OF COST

DATE: Oct. 1987

PROJECT - DOMINION CREEK - DC 'B' GROUP (AK I, DOCK 4, 6, 8, & 14) TYPE OF REPORT - GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL a) Wages: No. of Days - 119 Rate per Day - \$120.68 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Wages \$ 14,360.92 b) Food and Accommodation: No. of Days - 119 Rate per Day - \$ 15.39 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost \$ 1,831.41 c) Transportation: No. of Days - 119 Rate per Day - \$ 26.06 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost \$ 3,101.14 d) Equipment, Supplies, Rentals, Repairs: Total Cost \$ 1,423.85 e) Analysis: 990 soils - Pb,Zn @ \$2.70/sample \$2,673.00 619 soils - Au @ \$3.50/sample \$2,166.50 545 soils - Ag @ \$0.60/sample\$ 327.00509 soils - Cu @ \$0.60/sample\$ 305.40 129 rocks - Au, Ag, Pb, Zn @ \$17.25/sample \$2,225.25 6 silts, pan conc - Au,Ag,Pb, Zn,Cu @ \$7.40/sample \$ 44.40 Total Cost \$ 7,741.55 f) Other: g) Cost of Preparation of Report: Author \$100.00 Drafting \$100.00 Typing \$ 25.00 Total Cost Ś 225.00 \_\_\_\_\_\_ TOTAL COST \$ 28,683.37

## STATEMENT OF COST

PROJECT - DOMINION CREEK - DC 'B' GROUP (AK I, DOCK 4, 6, 8, & 14)

PHYSICAL WORK

Road Construction and Trenching -Dates from Sept 1, 1986 to Aug 5, 1987

 149.5 hrs Caterpillar 225 excavator @ \$101.91/hour
 \$ 15,235.55

 Mob/demob
 650.00

 26 hrs America 35D excavator @ \$100/hr
 2,600.00

 27 hrs Caterpillar D7 tractor @ \$80/hr
 2,160.00

 1.4 km road building at \$3,793.10/km
 5,310.34

 5 days tree faller @ \$300/day
 1,500.00

Total Cost

\$ 27,455.89

\_\_\_\_\_

## APPENDIX II

## STATEMENT OF COST

DATE: Oct. 1987

PROJECT - DOMINION CREEK - DC 'C' GROUP (AK III, DOCK 7) TYPE OF REPORT - GEOLOGICAL, GEOPHYSICAL, GEOCHENICAL a) Wages: No. of Days - 36 Rate per Day - \$120.68 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Wages \$ 4,344.48 ь) Food and Accommodation: No. of Days - 36 Rate per Day - \$ 15.39 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost ŝ 554.05 c) Transportation: No. of Days - 36 Rate per Day - \$ 26.06 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost \$ 938.16 d) Equipment, Supplies, Rentals, Repairs: Total Cost s 408.35 e) Analysis: 114 soils - Pb,Zn @ \$2.70/sample \$ 307.80 114 soils - Au @ \$3.50/sample \$ 399.00 50 soils - Ag @ \$0.60/sample 50 soils - Ag @ \$0.60/sample\$ 30.0050 soils - Cu @ \$0.60/sample\$ 30.00 2 rocks - Au, Ag, Pb, 2n @ \$17.25/sample \$ 34.50 3 silts, pan conc - Au,Ag,Pb, Zn,Cu @ \$7.40/sample \$ 22.20 Total Cost \$ 823.50 f) Other: g) Cost of Preparation of Report: Author \$100.00 Drafting \$100.00 Typing \$ 25.00 Total Cost 225.00 \$ \$ 7,293.53

TOTAL COST

### APPENDIX II

## STATEMENT OF COST

DATE: Oct. 1987 PROJECT - DOMINION CREEK - DC 'D' GROUP (AK IV, DOCK 1 & 2) TYPE OF REPORT - GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL a) Wages: No. of Days - 105 Rate per Day - \$120.68 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Wages \$ 12,671.40 Food and Accommodation: b) No. of Days - 105 Rate per Day - \$ 15.39 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost \$ 1,615.95 c) Transportation: No. of Days - 105 Rate per Day - \$ 26.06 Dates From - Sept 1, 1986 to Sept 1, 1987 Total Cost \$ 2,736.30 d) Equipment, Supplies, Rentals, Repairs: Total Cost \$ 1,257.28 e) Analysis: 1176 soils - Pb,Zn @ \$2.70/sample \$3,175.20 721 soils - Au @ \$3.50/sample\$2,523.50666 soils - Ag @ \$0.60/sample\$ 399.60616 soils - Cu @ \$0.60/sample\$ 369.60 33 rocks - Au, Ag, Pb, Zn @ \$17.25/sample \$ 569.25 8 silts, pan conc - Au, Ag, Pb, Zn,Cu @ \$7.40/sample \$ 59.20 Total Cost \$ 7,096.35 f) Other: g) Cost of Preparation of Report: Author \$100.00 Drafting \$100.00 \$ 25.00 Typing Total Cost s 225.00 \_\_\_\_\_

TOTAL COST

\$ 25,602.28

## APPENDIX III

## ANALYTICAL PROCEDURES

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984).

## PREPARATION OF SAMPLES

Sediments and soils are dried at approximately  $80^{\circ}$ C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). <u>Heavy</u> mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation.

## ANALYSIS OF SAMPLES

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighted out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition that that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

## ELEMENTS REQUIRING SPECIFIC DECOMPOSITION METHOD

Antimony - Sb: 0.2 g sample is attached with 3.3 ml of 6% tartaric aid, 1.5 ml conc. hydrochloric acid and 0.5 ml of conc. nitric acid, then heated in a water bath for 3 hours at  $95^{\circ}$ C. Sb is determined directly from the acid solution with an AA-475, equipped with electrodeless discharge lamp (EDL).

Arsenic - As: 0.2 - 0.4 g sample is digested with 1.5 ml of 70% perchloric acid and 0.5 ml of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

Barium - Ba: 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution. Bismuth - Bi: 0.2 g - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

Gold - Au: 10.0 g sample sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

Magnesium - Mg: 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

Tungsten - W: 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

Uranium - U: An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

Ag - 0	.2 Mn	- 20	Zn -	1	Au - 0.01	(10	ppb)
Cd - 0	.2 Mo	- 1	ЅЬ -	1	W - 2		
Co - 1	Ni	- 1	As -	1	U - 0.1		
Cu - 1	РЬ	- 1	Ba -	10			
Fe - 1	00 V -	10	Bi -	1			

## APPENDIX IV

## INSTRUMENTATION

## Ground Geophysics

### SE-88 EM System:

The SE-88 unit differs from the normal HLEM systems such as the MaxMin II above in that it measures without regard to phase, the ratio of signal amplitude between two frequencies which are transmitted and received simultaneously. A low frequency of 112 Hz is used as a reference frequency. The signal difference is integrated or averaged over a period of time in order to improve the signal to noise ratio.

The survey parameters employed on the follow-up programme are as follows:

: 100 meters
: 3037, 1012, 337 Hz
: 112 Hz
: 16 or 8 seconds
: 25 meters
: ratio of amplitude
between reference and
signal frequencies (%)

## MP-3 Magnetometer System:

Magnetometers manufactured by Scintrex Ltd. of Concord, Ontario were employed for these surveys. The MP-3 Total Field Magnetometer System consists of one or more field units and a base station. Diurnal and day to day variations are automatically corrected at the end of the survey by the built in microgrocessor giving the data a usable accuracy of 1 gamma.

## EM-16 VLF-EM System:

The EM-16 VLF-EM receiver is manufactured and serviced by GEONICS of Mississauga, Ontario. This instrument measures the dip of the null angle and phase of the electromagnetic field generated by very low frequency transmitters maintained by military forces around the world for communications purposes. Thefrequency range is between 15 and 30 KHz. with power outputs in the range of 50 kilowatts to 1 megawatt.

The operation of the EM-16 instrument is well documented in the manuals and other literature. Basically the system is physically oriented along the lines of the electromagnetic field and this angle of the null field is recorded as units of percent slope. Additionally the phase angle is also measured and recorded. This type of passive EM system suffers considerable influence from the local topography and as a high system frequency is employed, subtle variations in the underlying resistivity produce large variations in the recorded profiled data thus caution must be exercised in the interpretation of the data.

## APPENDIX V

# PETROGRAPHIC ANALYSIS

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager JOHN G. PAYNE, Ph. D. Geologist

> Report for: M. Savell, Noranda Exploration Company, Ltd., Unit 3A, 1750 Quinn Street, PRINCE GEORGE, B.C., V2N 1X3

Samples: "A", "B" 

P.O. BOX 39 8887 NASH STREET FORT LANGLEY, B.C. VGX 1JO

PHONE (604) 888-1323

Invoice 6194 December 1986

Sample "B" is a vein containing extremely fine to very fine grained intergrowths of sulfides, coarsely intergrown with quartz and minor calcite. Sulfides are dominated by sphalerite with lesser galena, and much less pyrite and chalcopyrite. Native gold is moderately abundant as grains up to 0.1 mm in size, mainly associated with galena in a variety of textures. Silver probably occurs mainly in galena.

## Sample "B" Quartz-Sphalerite-Galena-Pyrite-Chalcopyrite-Native Gold-Calcite Vein

The sample is a quartz-sulfide vein, with extremely fine to very fine grained intergrowths of sulfides in patches more coarsely intergrown with quartz. Sulfide textures suggest pyrite formed before other sulfides, and was partly fractured before introduction of other sulfides. Native gold occurs in a variety of textures, mostly with galena. Native gold is moderately abundant, and accounts for the gold in the assay. Silver probably occurs mainly in galena.

sphalerite	40-458
galena	12-15
pyrite	3-4
chalcopyrite	2-3
native gold	minor
quartz	30-35
calcite	2-3

Sulfides occur in extremley fine to very fine grained aggregates showing a variety of textures depending on mineral abundances. These patches are coarsely intergrown with quartz; the latter mineral forms patches up to several mm across containing very little sulfides.

Sphalerite forms very fine to fine grained aggregates in sphaleriterich zones. It contains exsolution, extremely fine grained blebs of chalcopyrite. Interstitial to sphalerite are galena, lesser chalcopyrite, and minor native gold. Where sphalerite is less abundant and galena more abundant, sphalerite forms irregular, subrounded grains from 0.05-0.1 mm in size surrounded by galena with lesser chalcopyrite.

Galena is interstitial to sphalerite in textures as described above. Galena-rich patches contain rounded grains of sphalerite and irregular patches of chalcopyrite.

Pyrite occurs as anhedral, in part rounded and in part irregular corroded and fractured grains from 0.05-0.3 mm in size. It is concentrated in some parts of the sample, within both sphalerite-rich and galena-rich parts of the sample. Fractures commonly are filled with galena, with or without chalcopyrite and native gold. Where other sulfides are less abundant, pyrite tends to be subhedral to euhedral in outline, forming cubic grains from 0.05-0.1 mm in size. These crystal faces commonly are in part at least against quartz. A few galena-rich patches contain subhedral to euhedral pyrite.

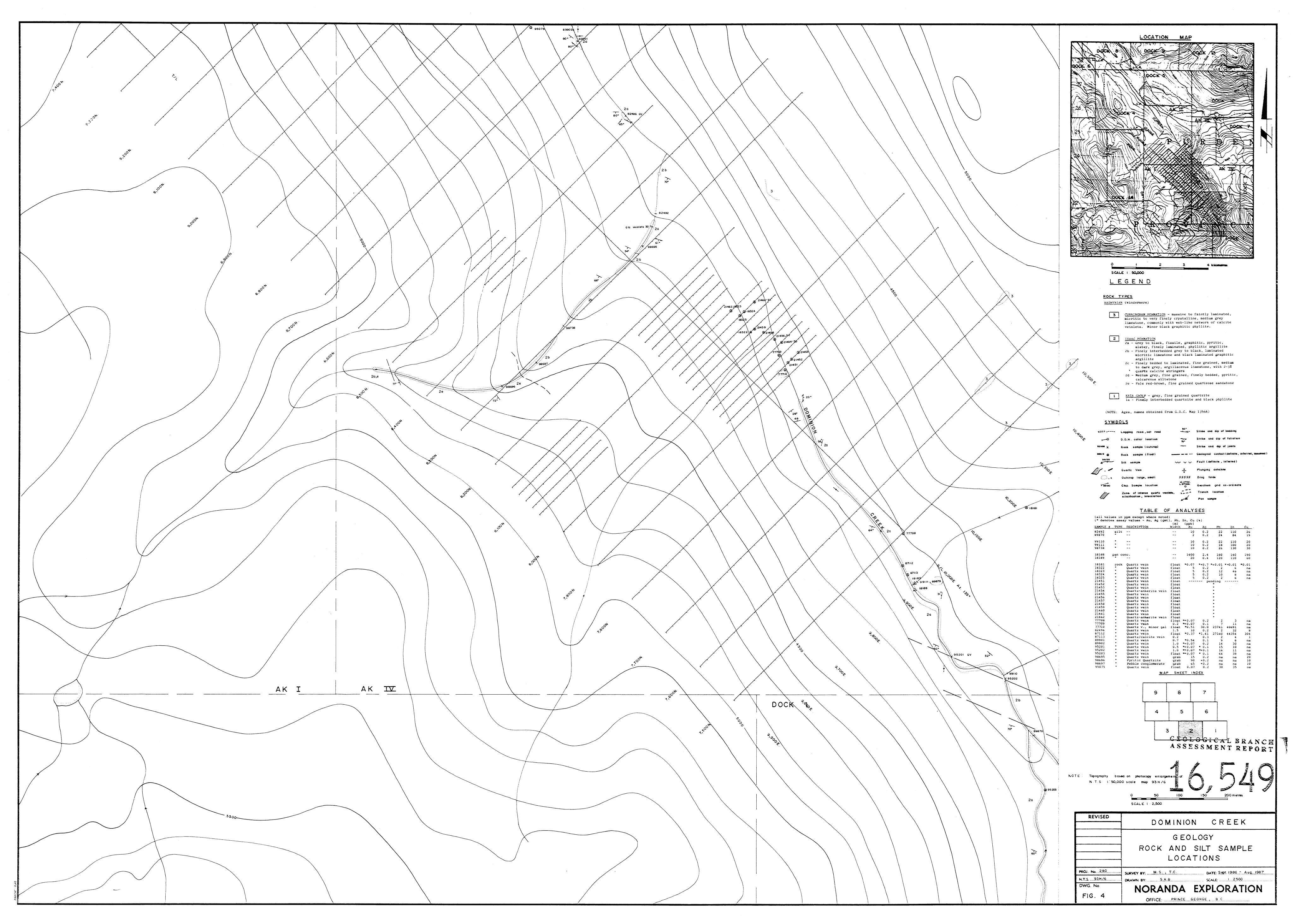
Chalcopyrite occurs mainly with galena in interstitial patches to sphalerite. Intergrowths with both sphalerite and galena are very intimate, with scattered coarser patches of chalcopyrite up to 0.3 mm in size. Chalcopyrite also occurs as exsolution blebs in sphalerite as described above.

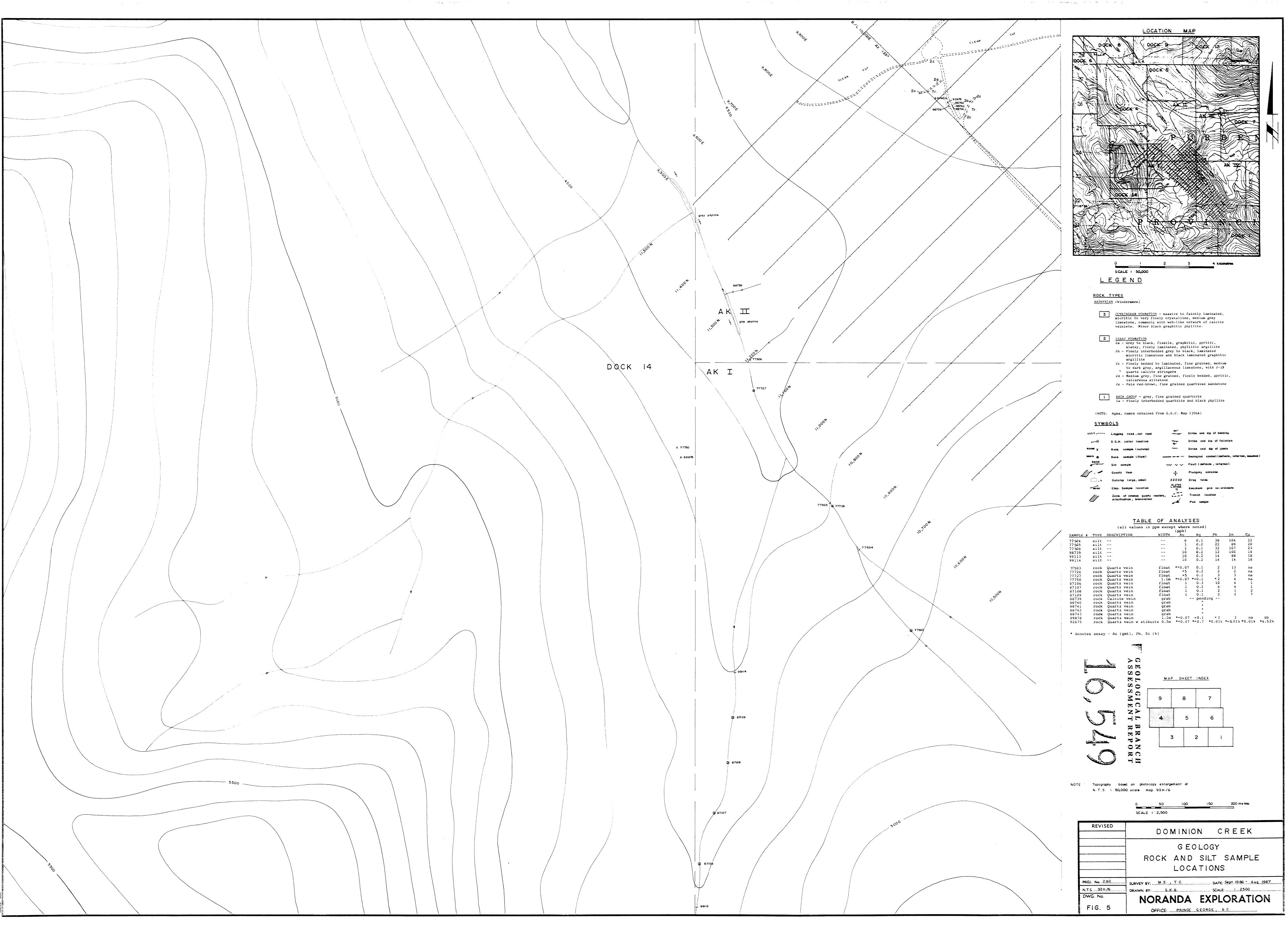
Native gold forms grains averaging 0.01-0.03 mm in size, with a few up to 0.1 mm across. It occurs mainly with galena interstitial to sphalerite, in fractures in pyrite, and in fractures or interstitial seams in quartz. Locally it occurs as inclusions in pyrite and as grains within quartz grains; these grains are mainly 0.01-0.02 mm in size.

Quartz forms fine to medium grained aggregates in quartz-rich patches, and fine to very fine grained aggregates more intimately intergrown with sulfide patches. Calcite? occurs in a few patches of very fine to fine graines intergrown with quartz. Identification and description of non-reflective minerals is tentative because they were examined only in hand sample and polished section.

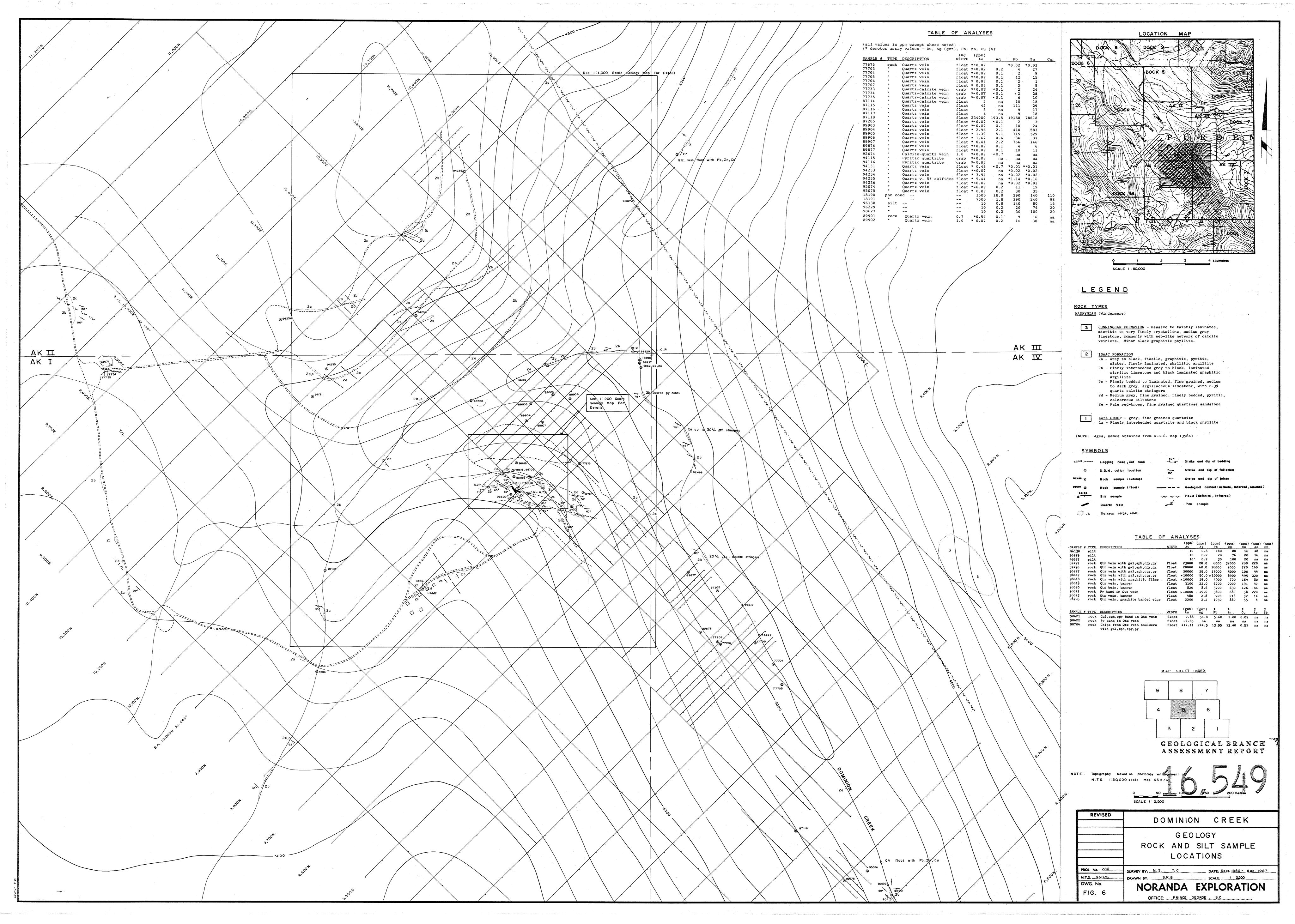
# APPENDIX VI

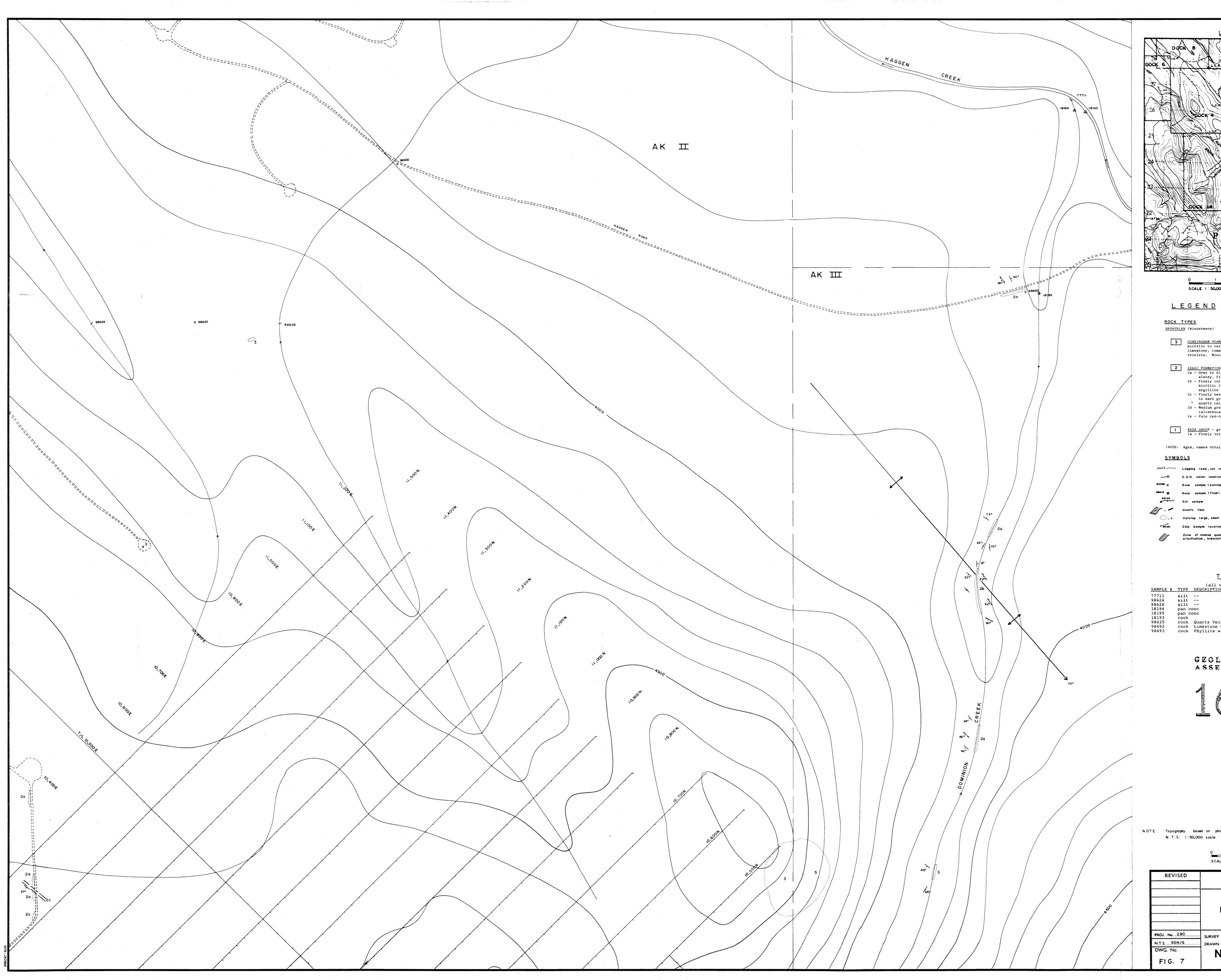
# CERTIFICATES OF ANALYSES



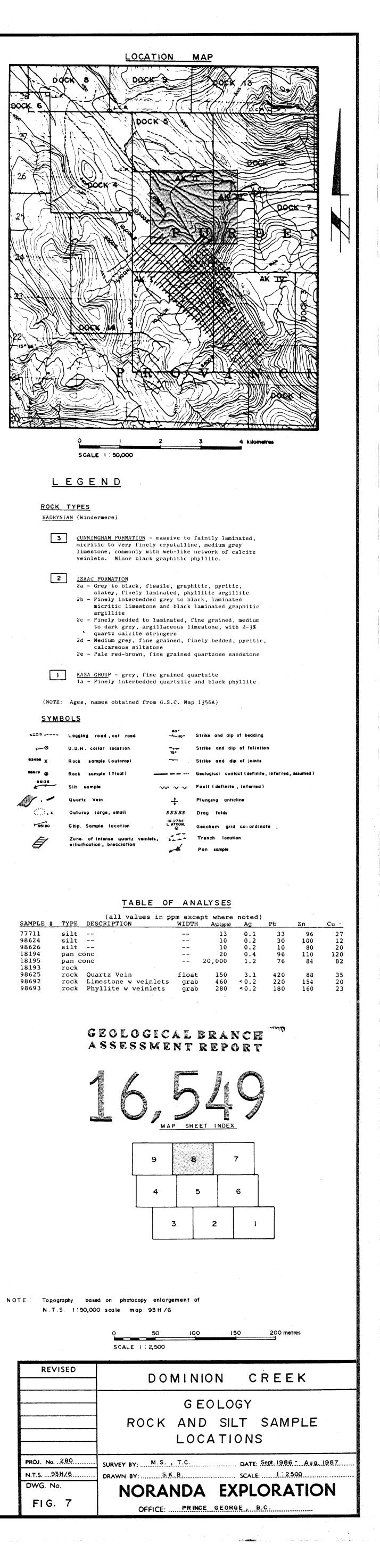


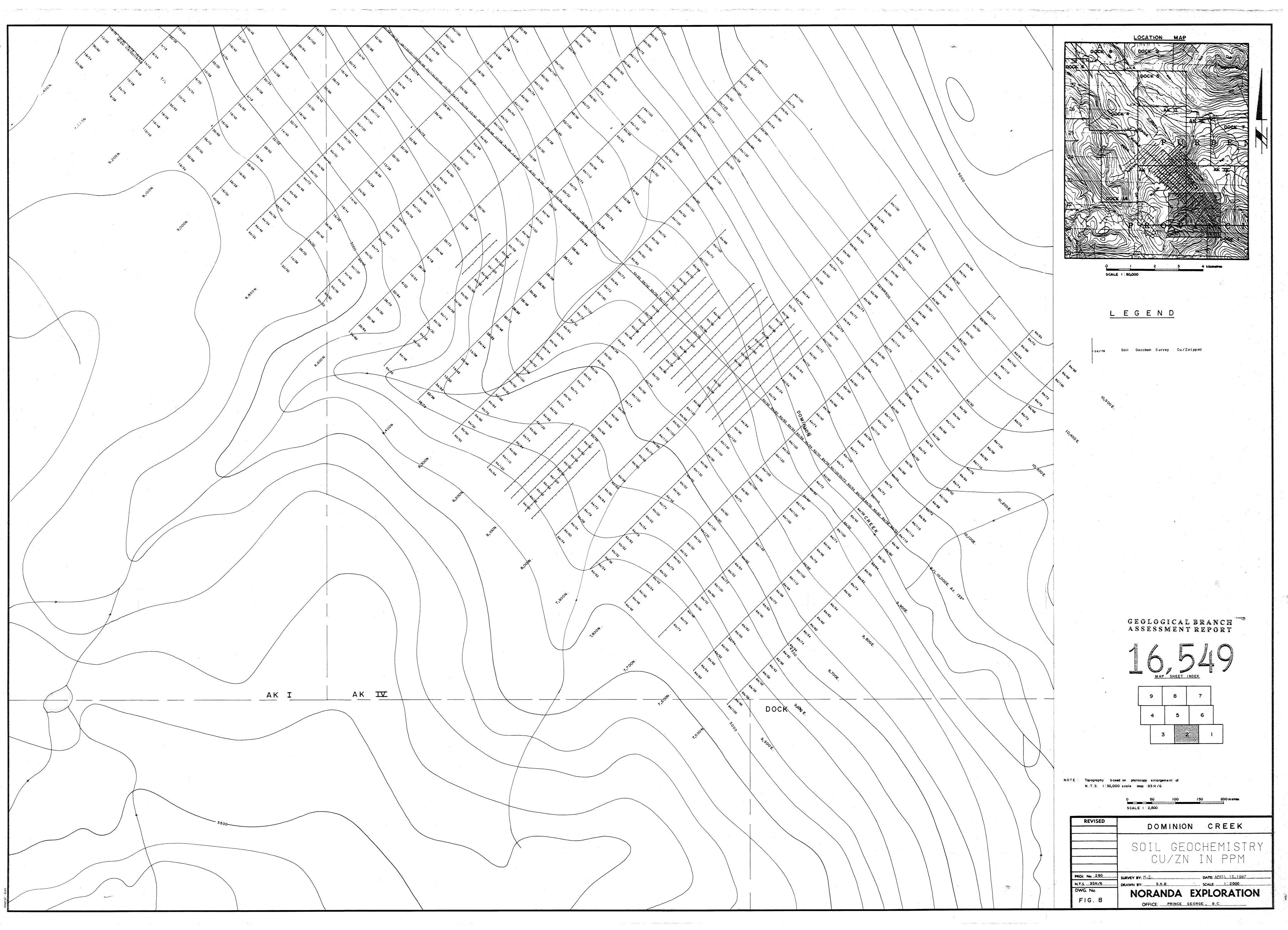


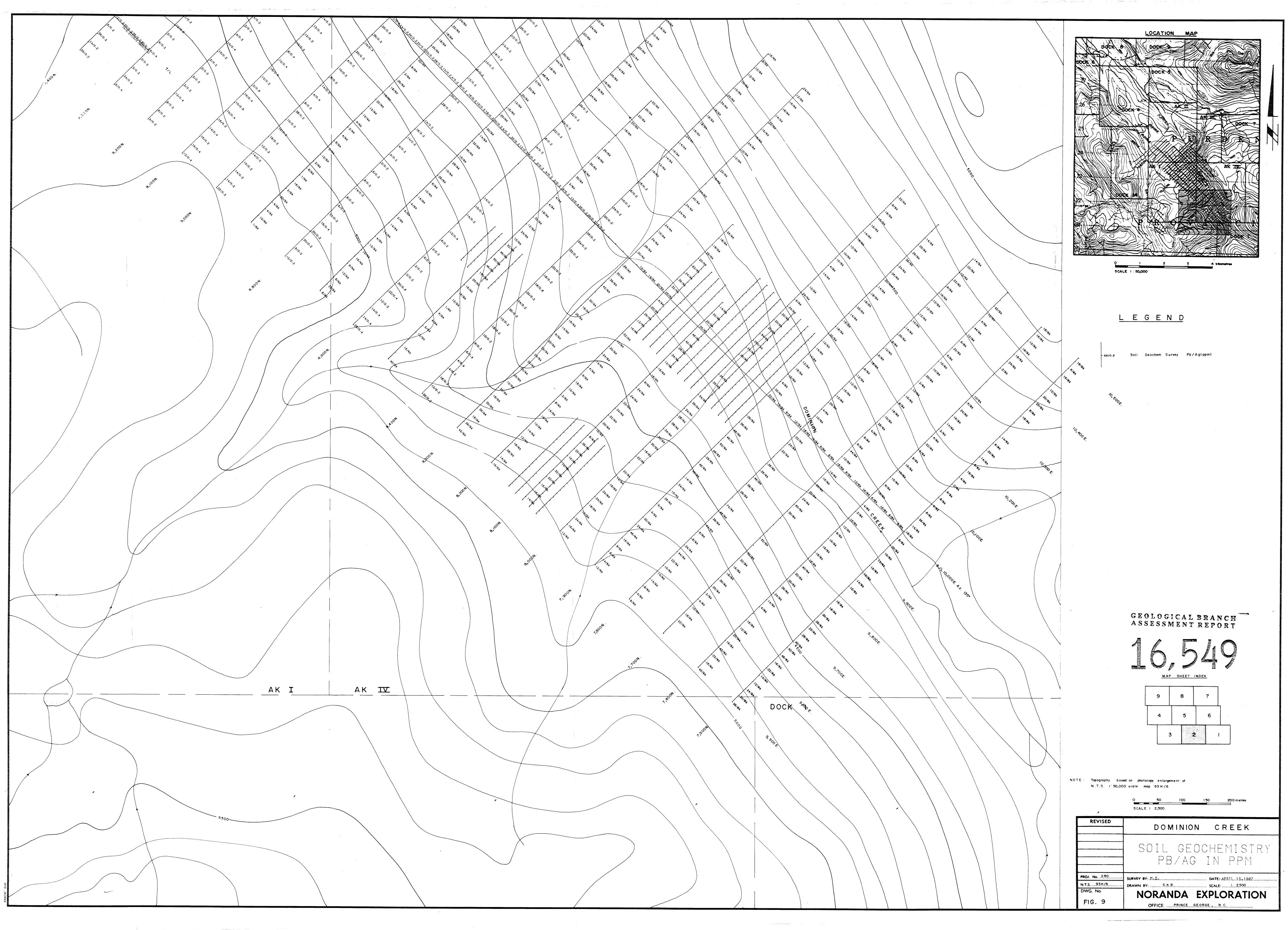


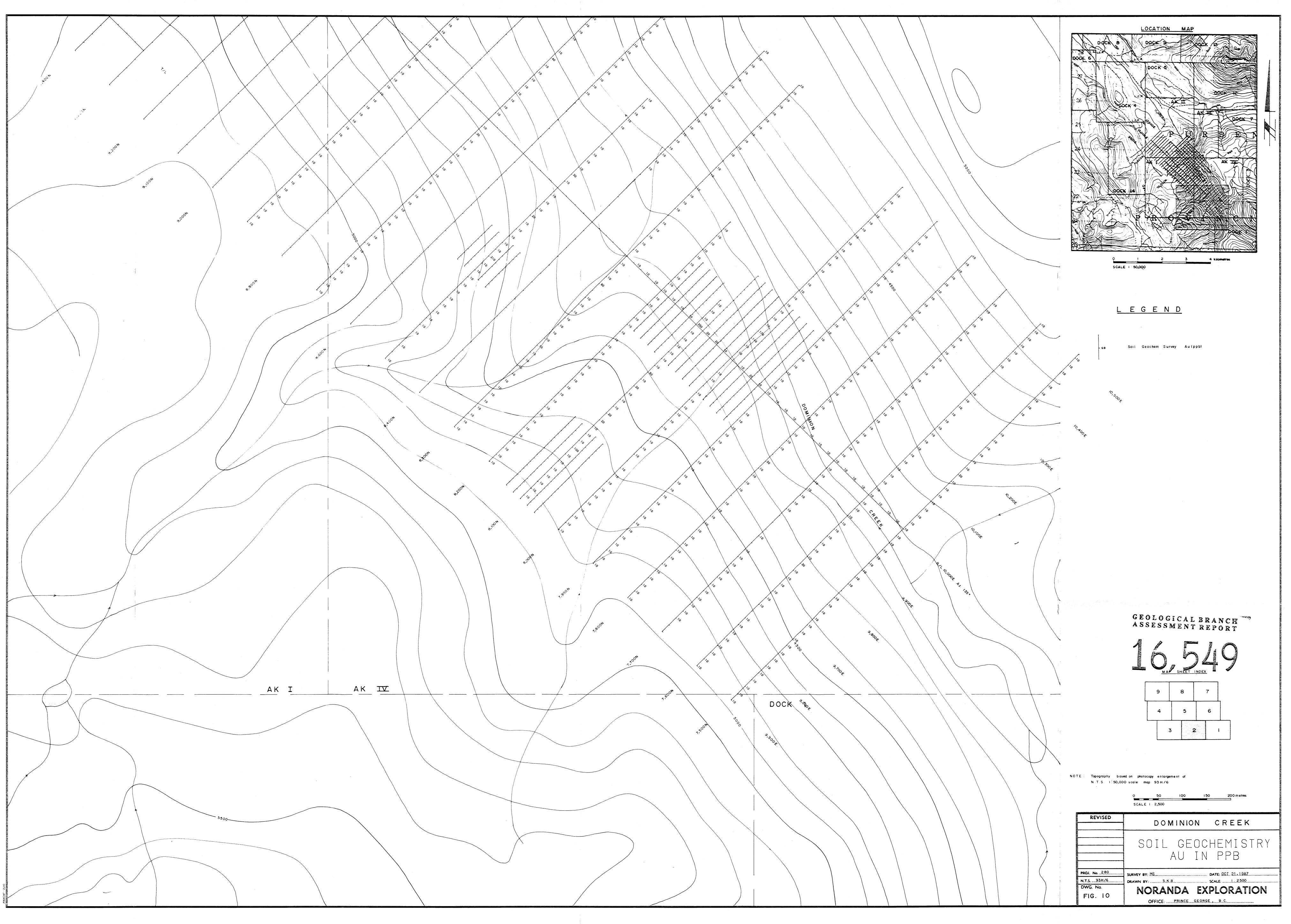


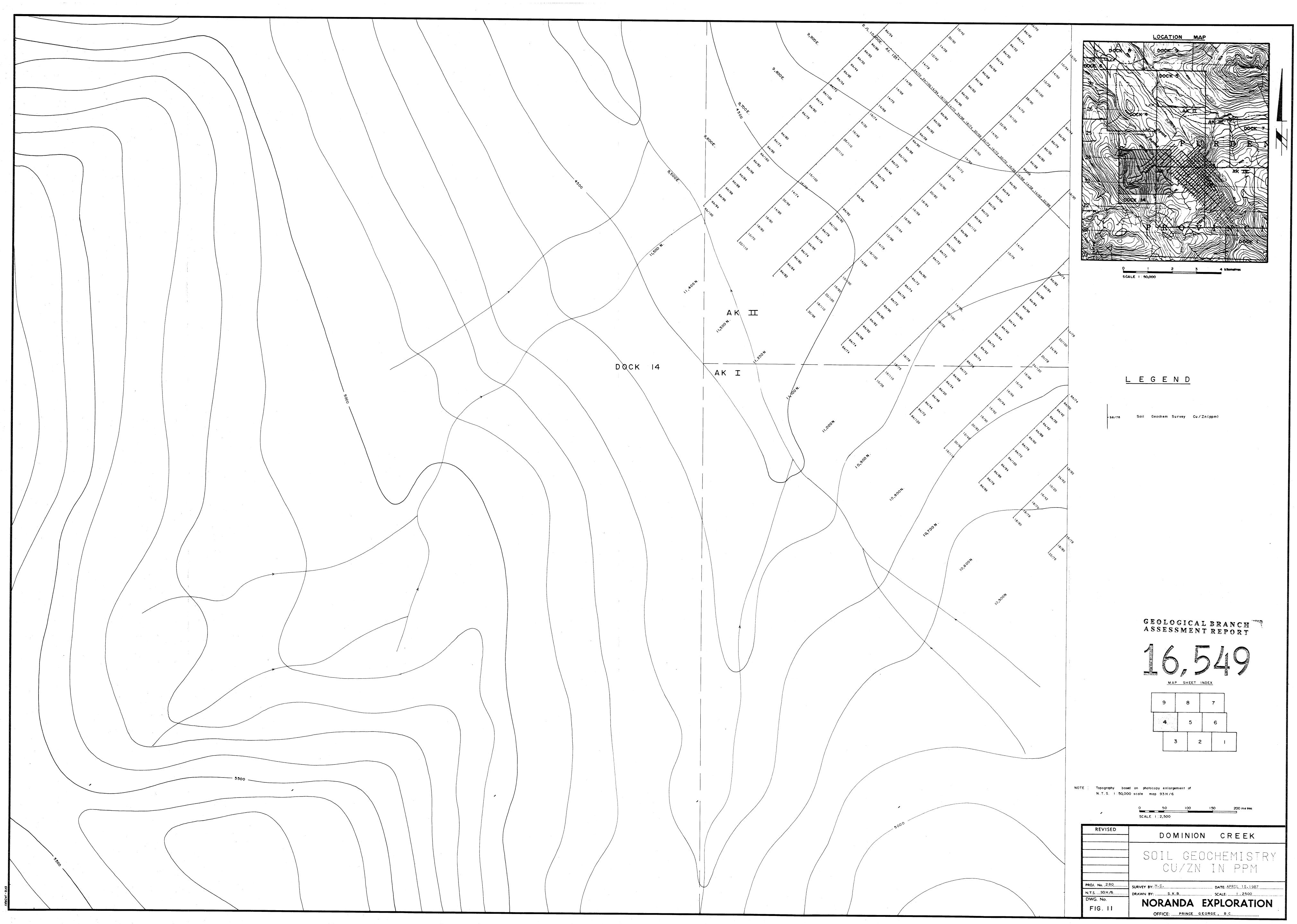






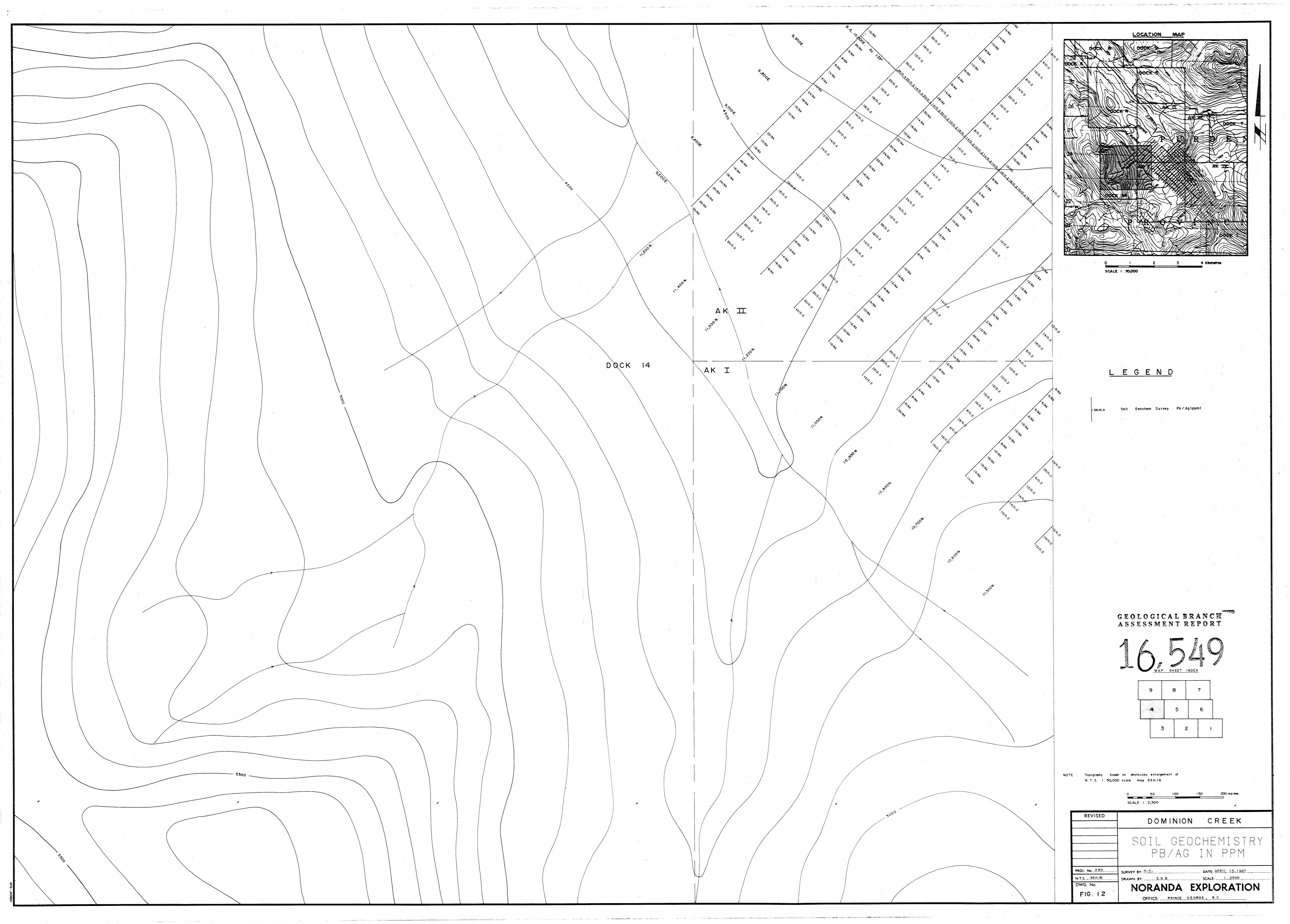


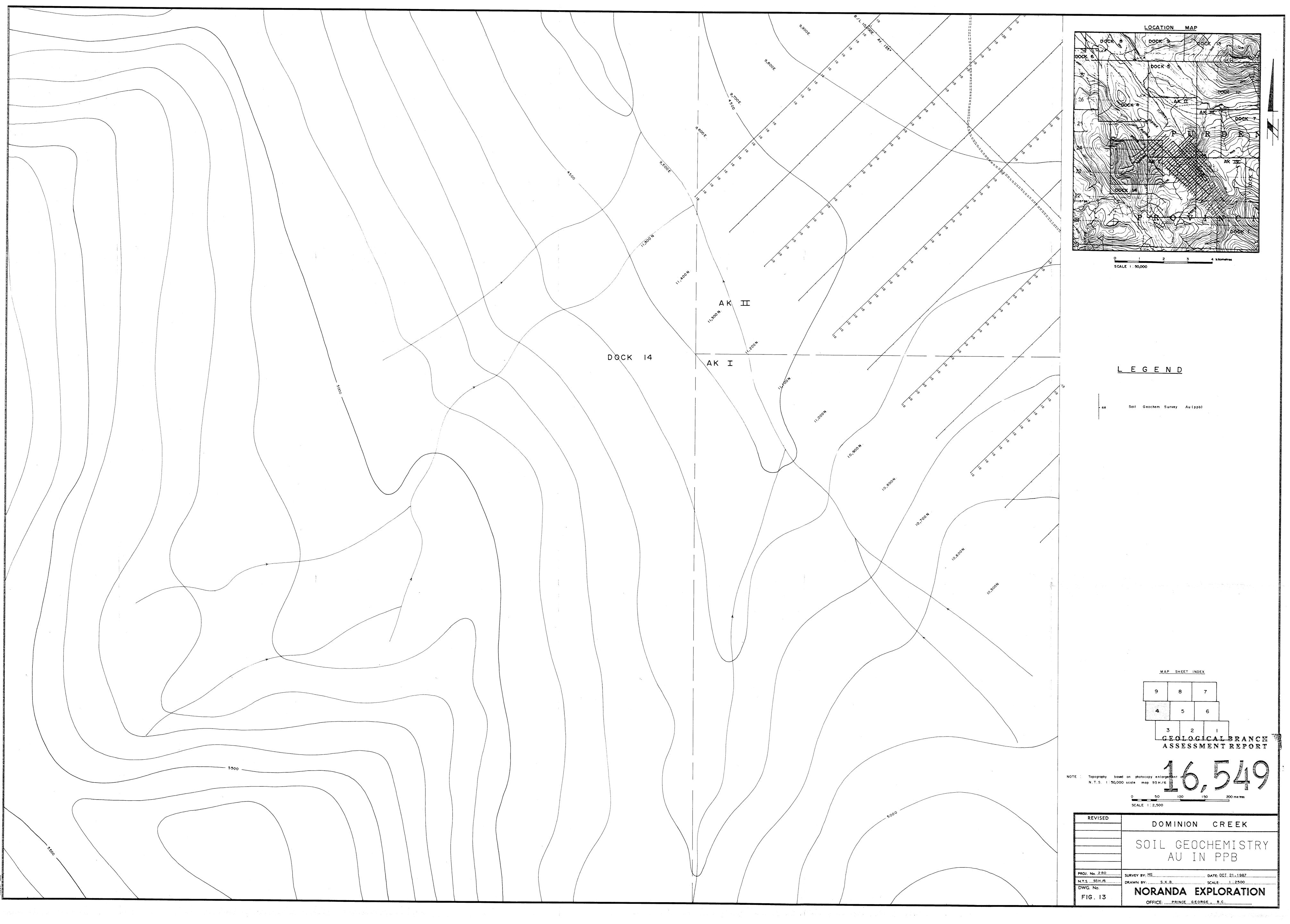




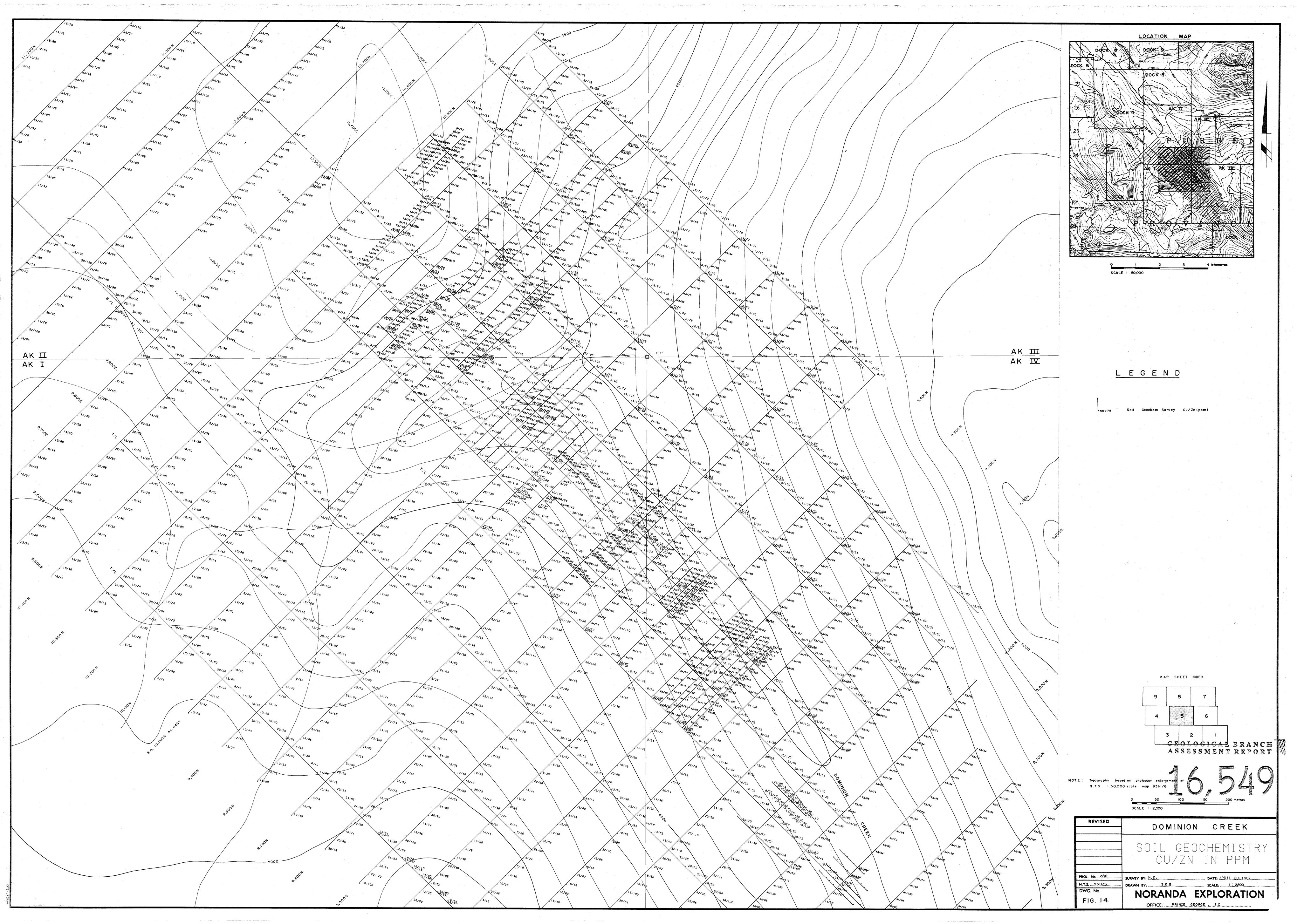


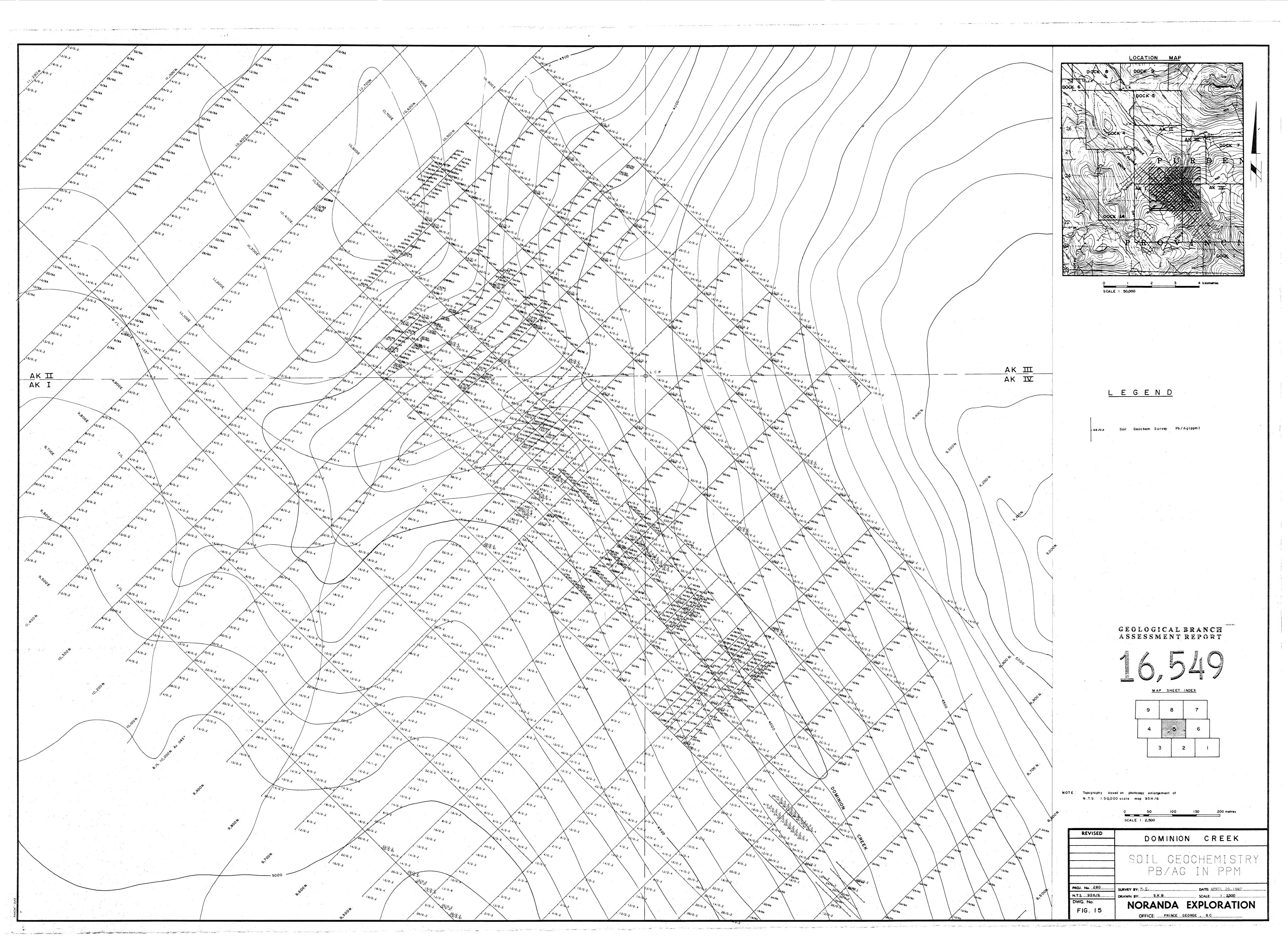
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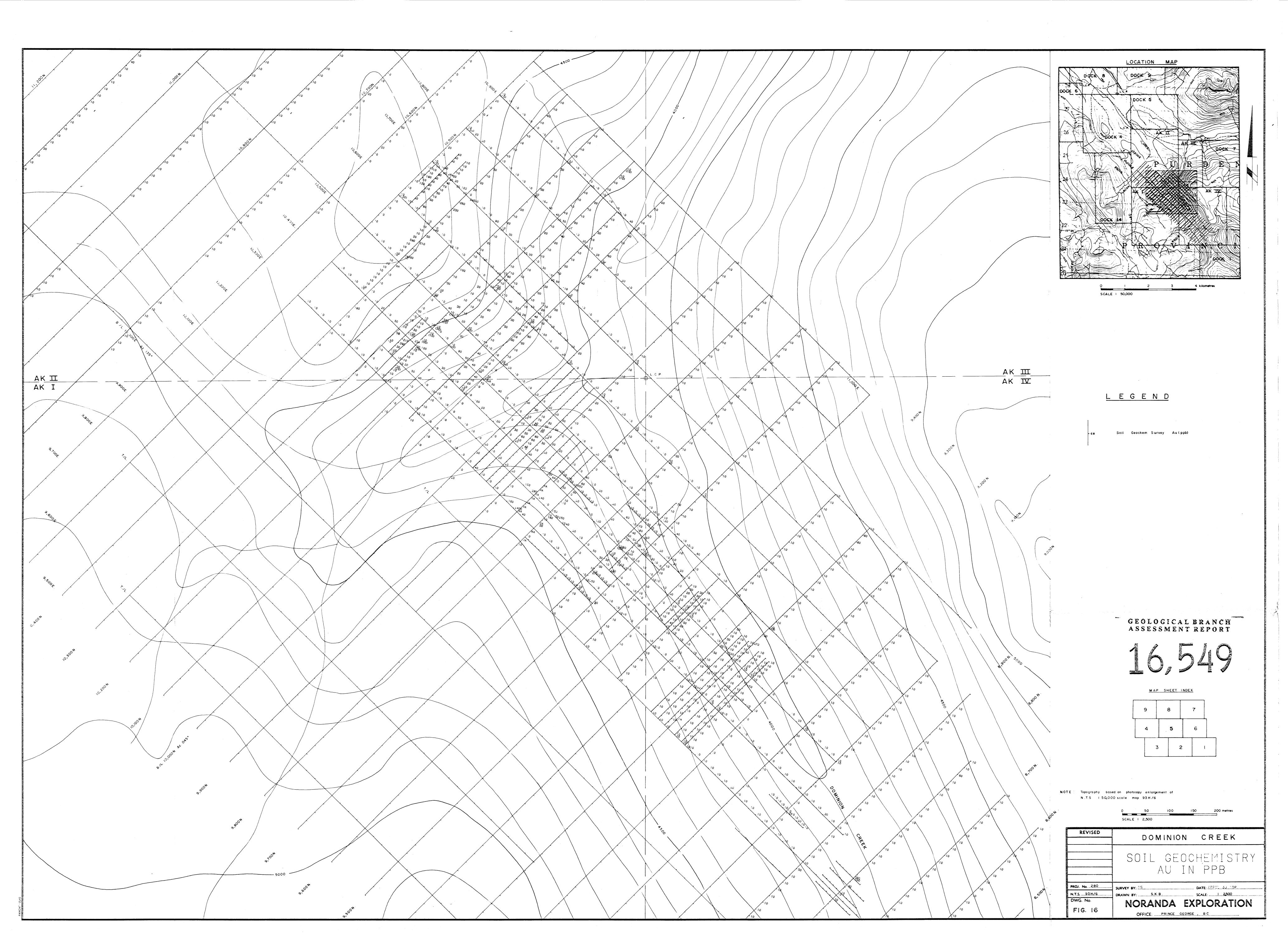


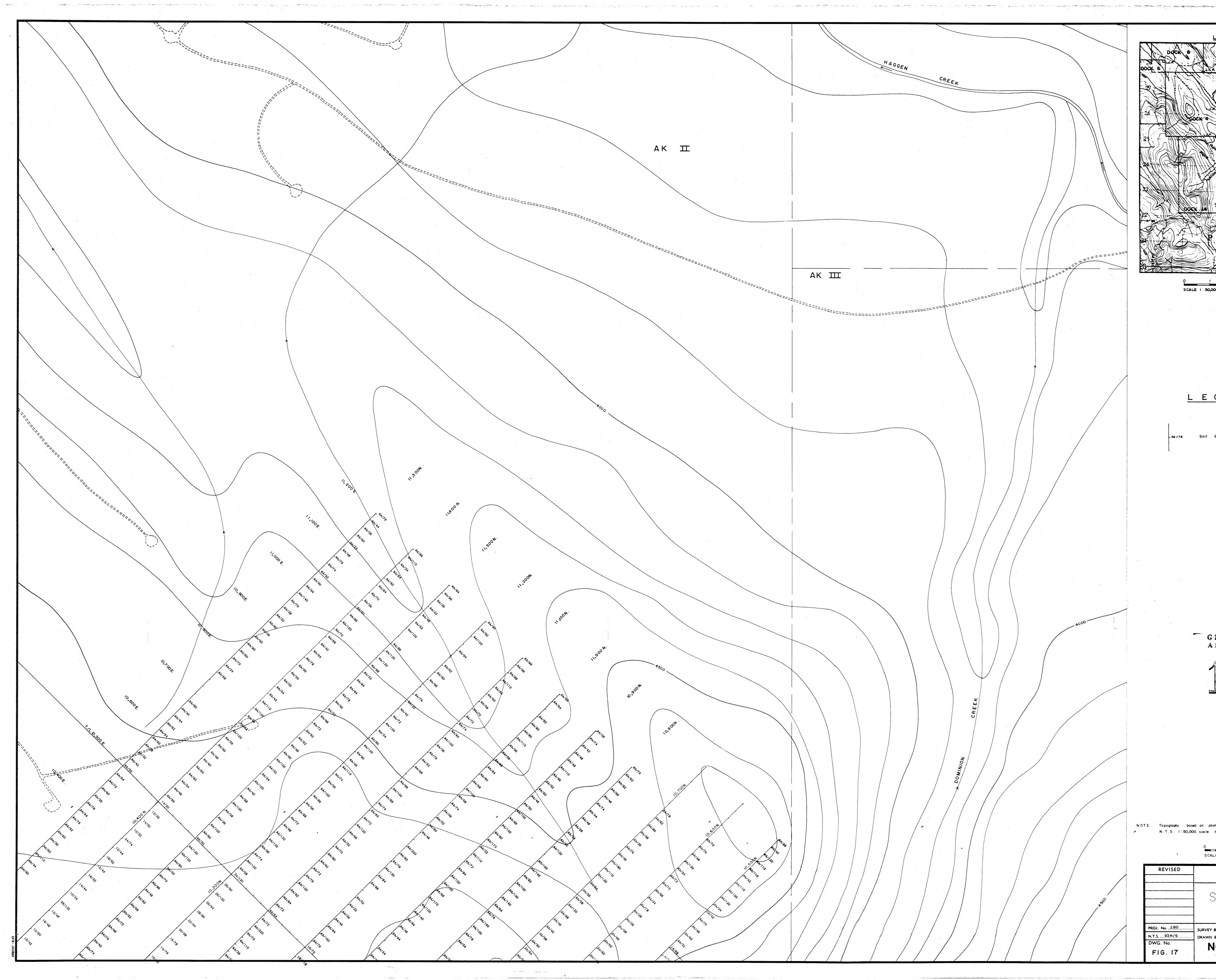






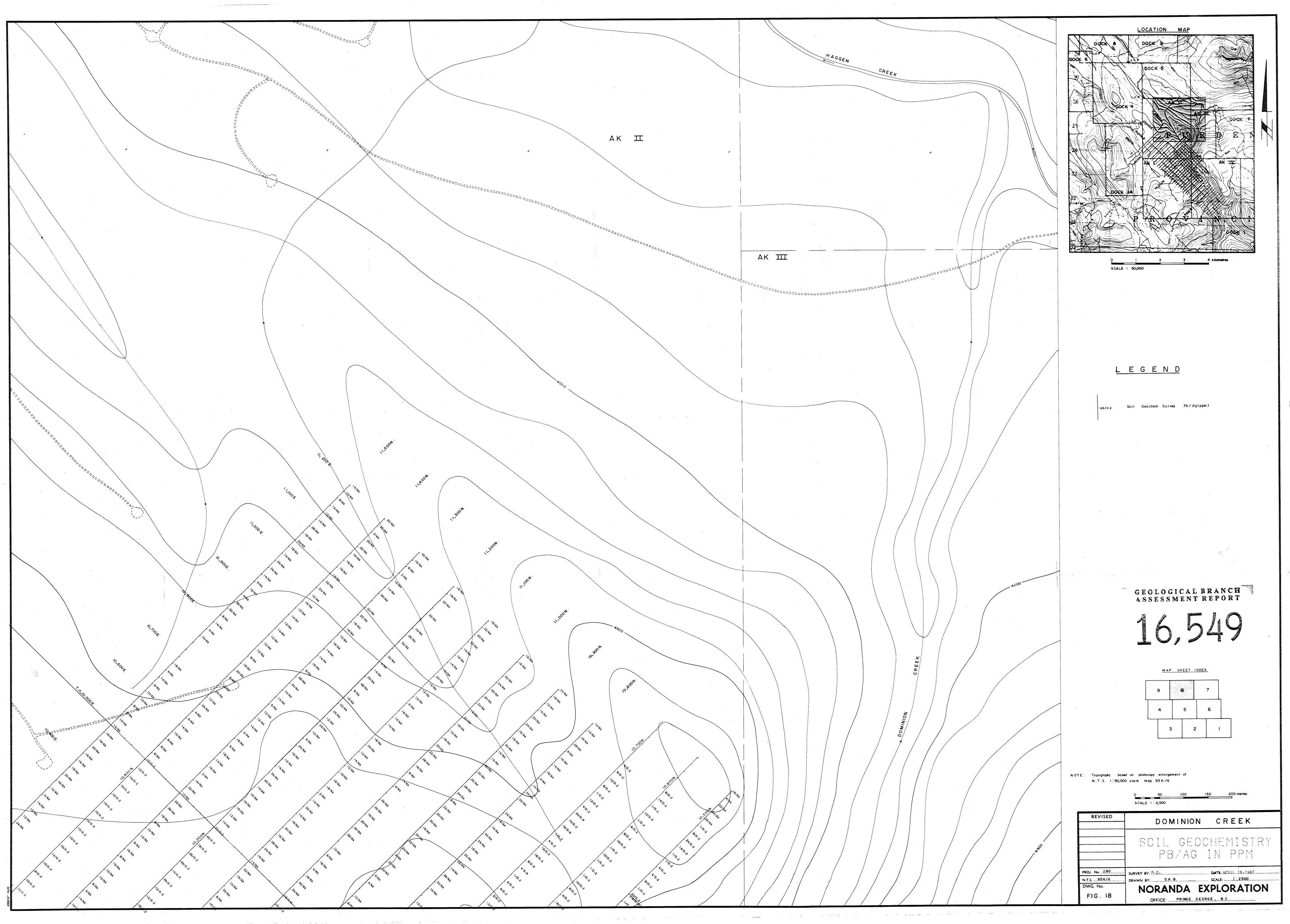






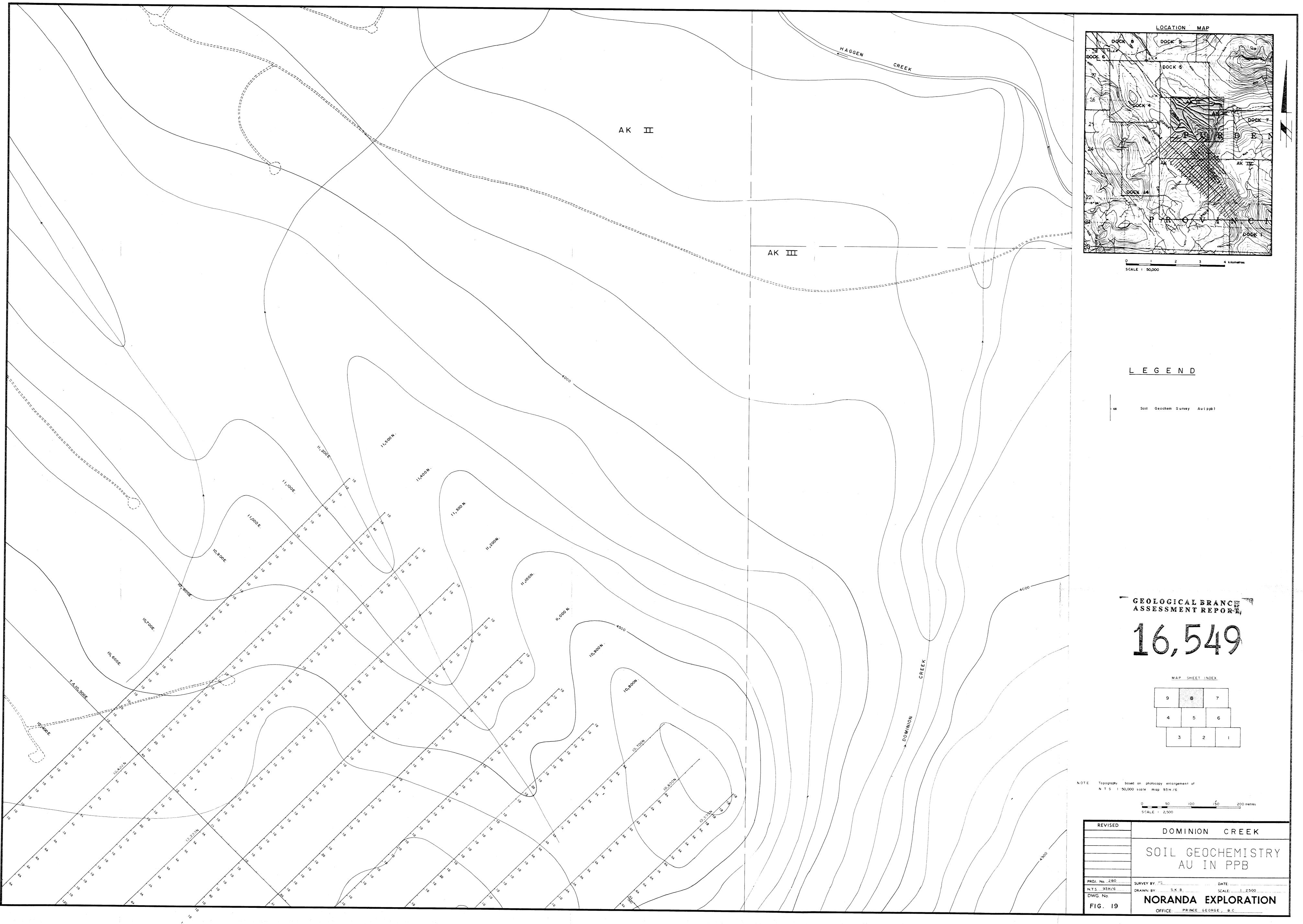
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OCATION MAP	
234 kilometres	
GEND	
Geochem Survey Cu/Zn(ppm)	
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map 93 H / 6	•
DOMINION CREEK	
SOIL GEOCHEMISTRY	
CU/ZN IN PPM	「「「「「「」」」」「「」」」」」」」」」」」」」」」」」」」」」」」」」」
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ORANDA EXPLORATION	



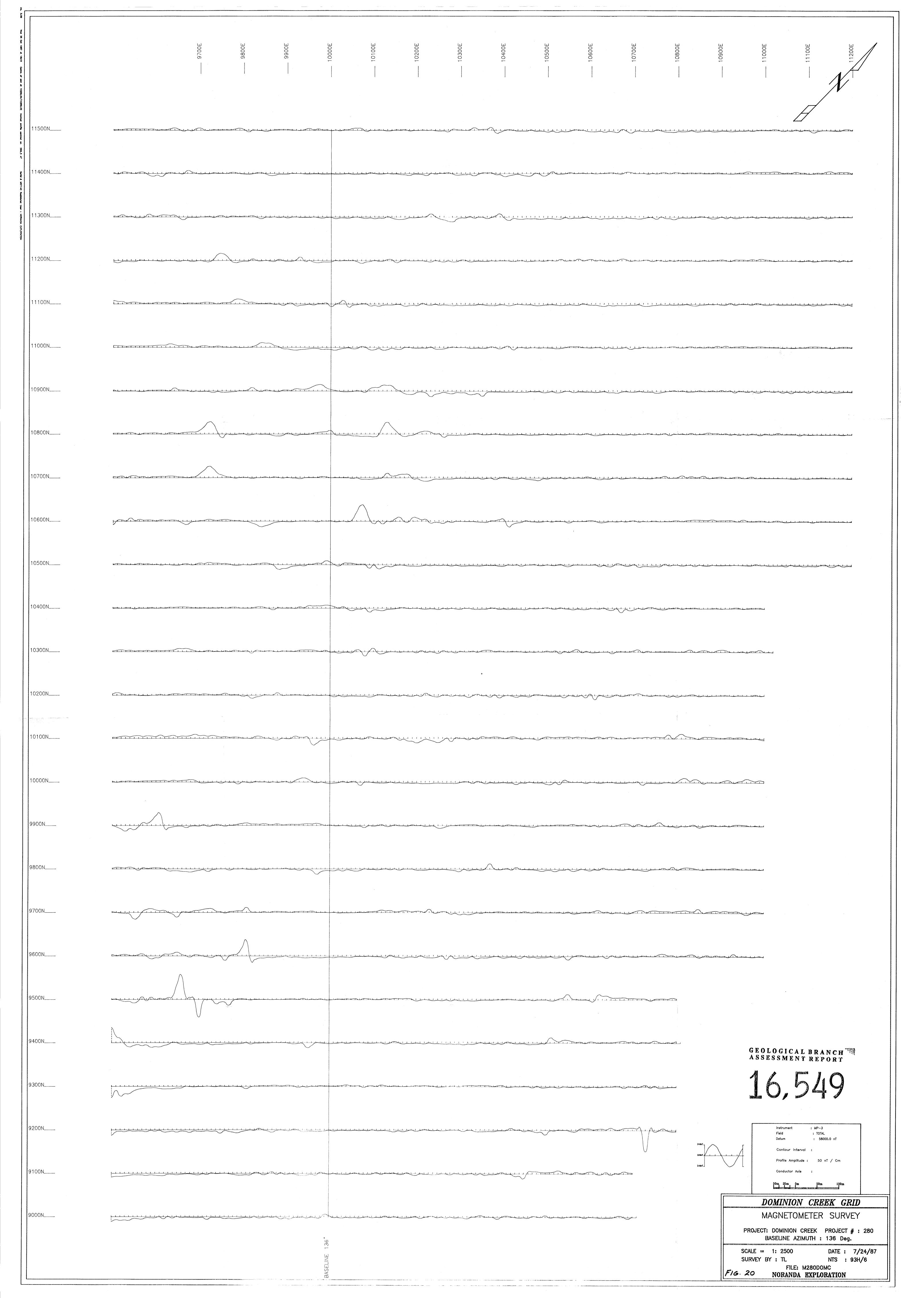


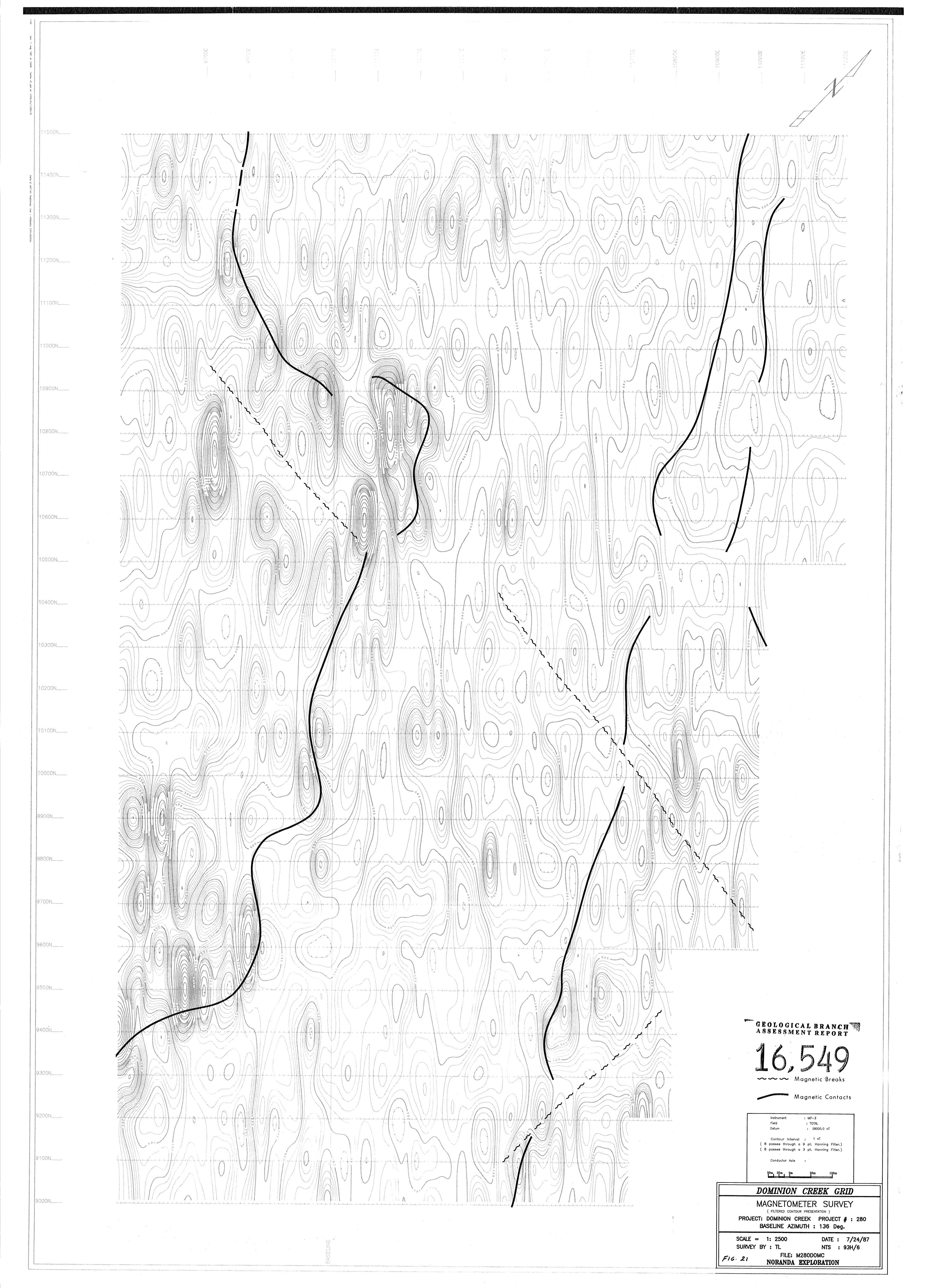
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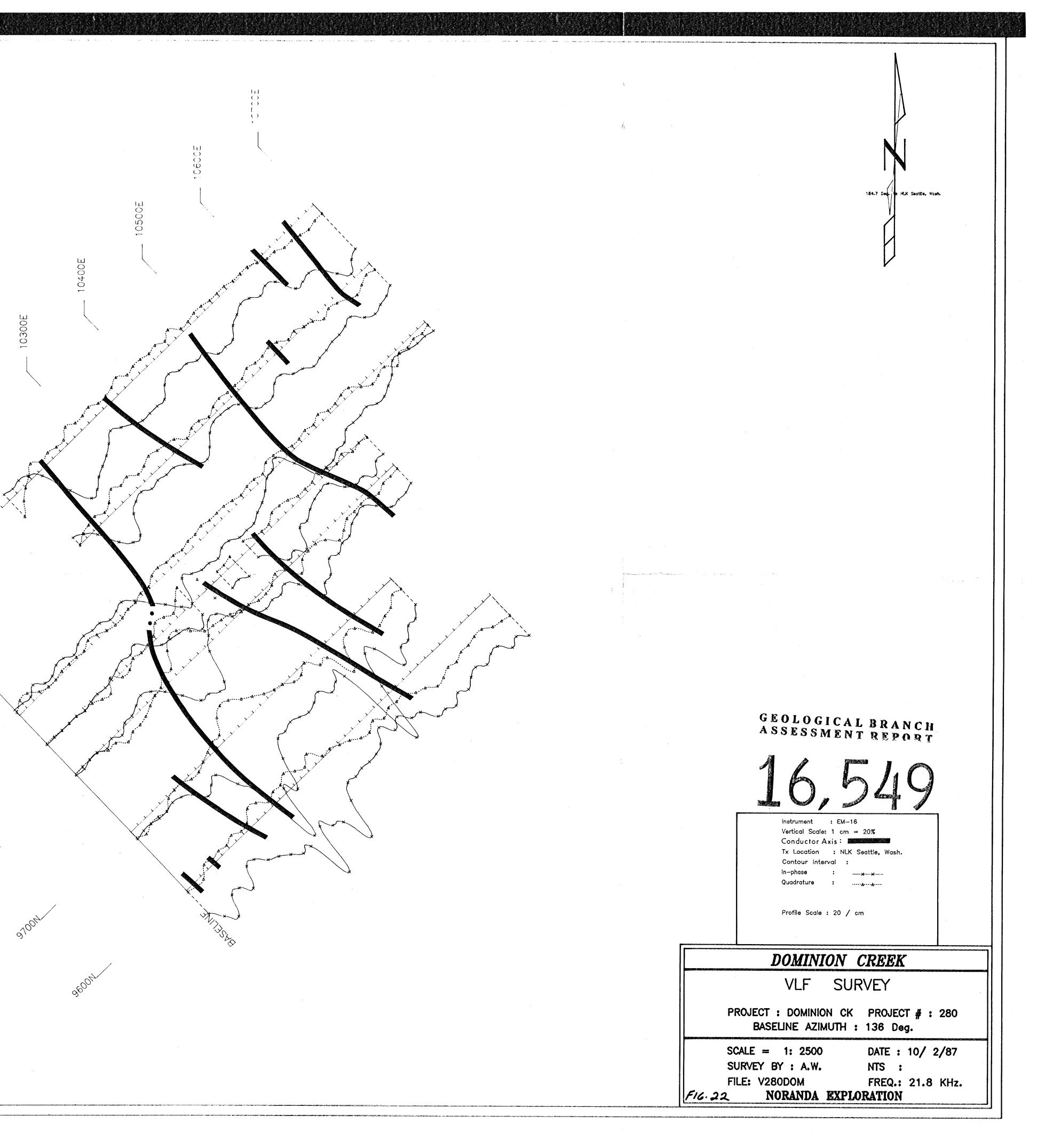
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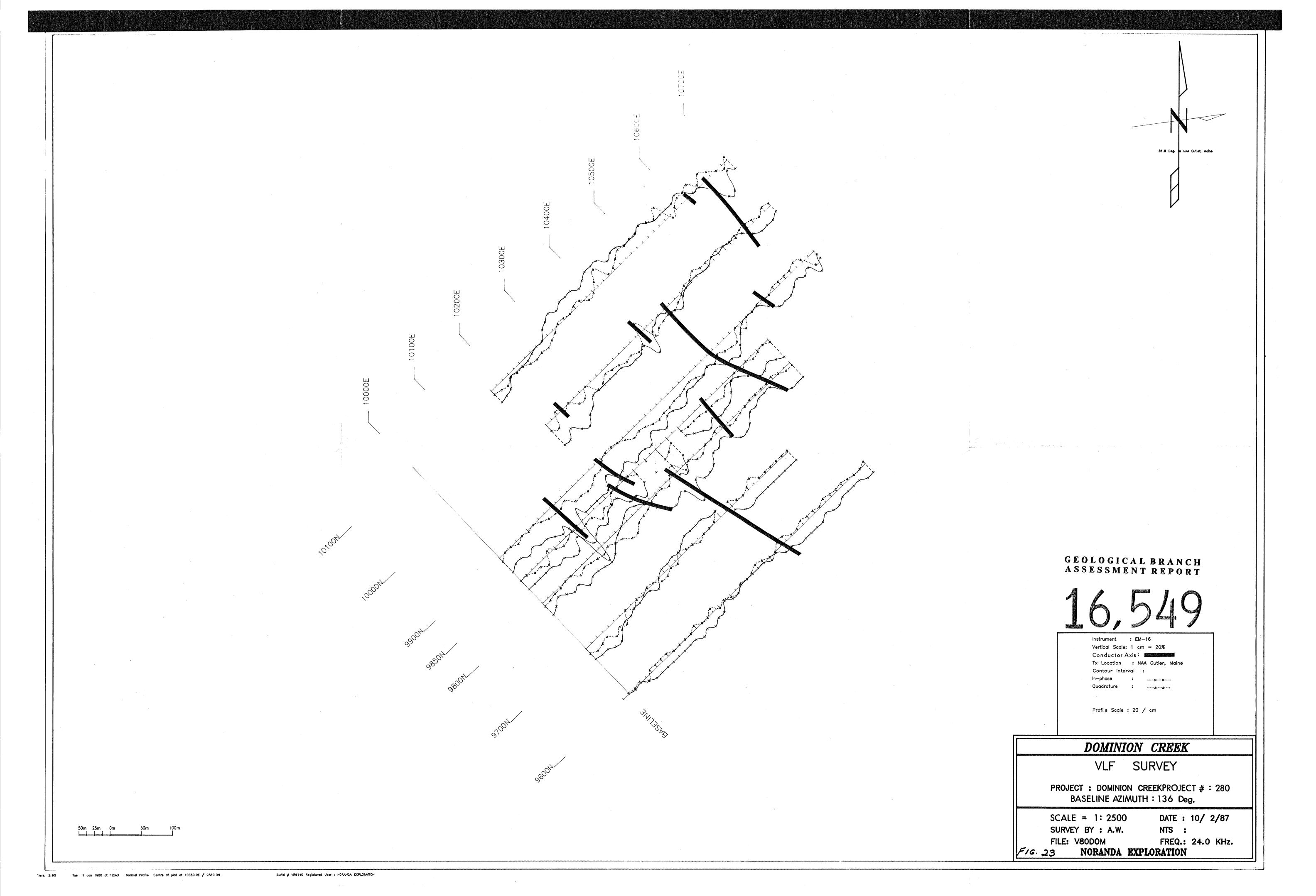
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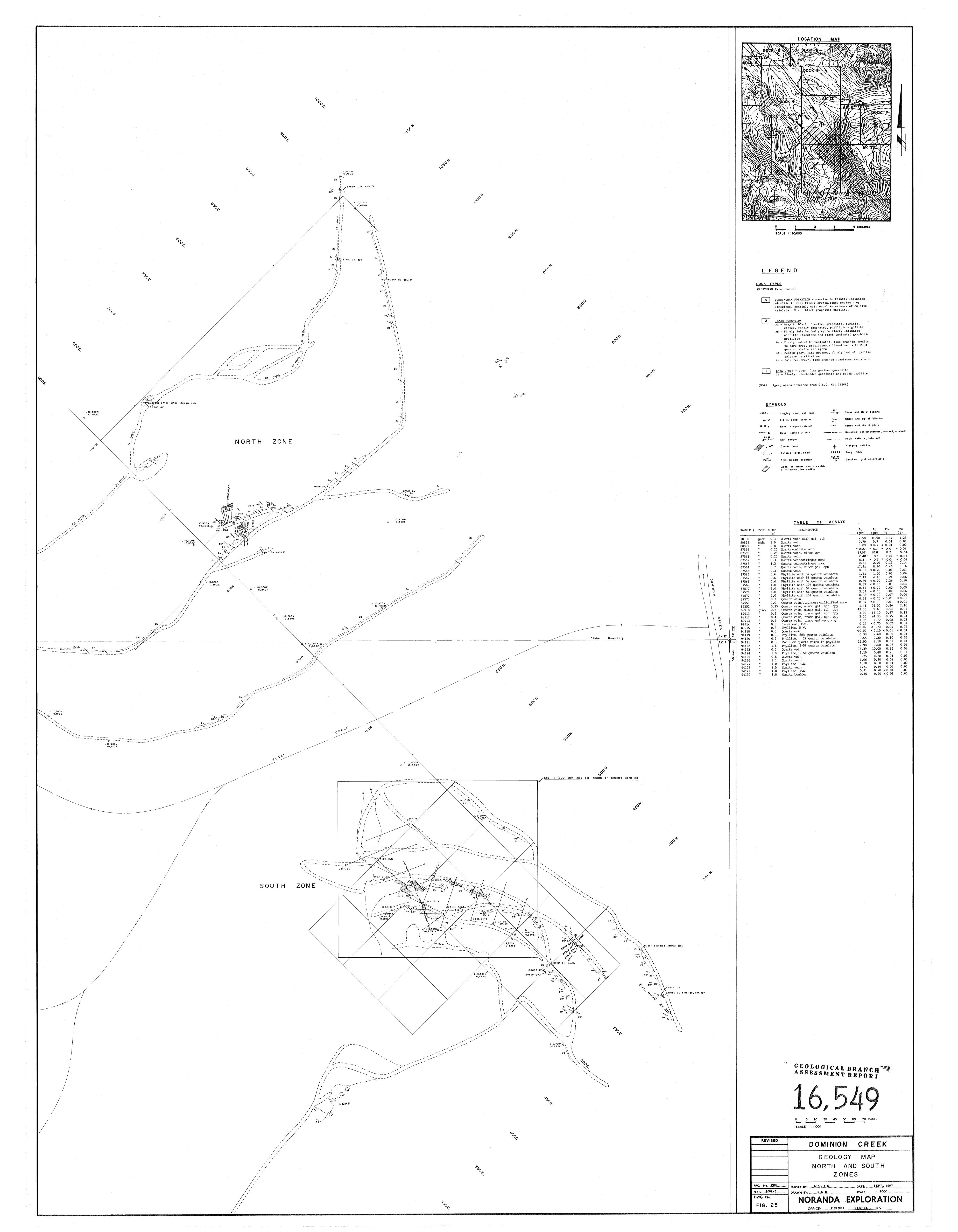
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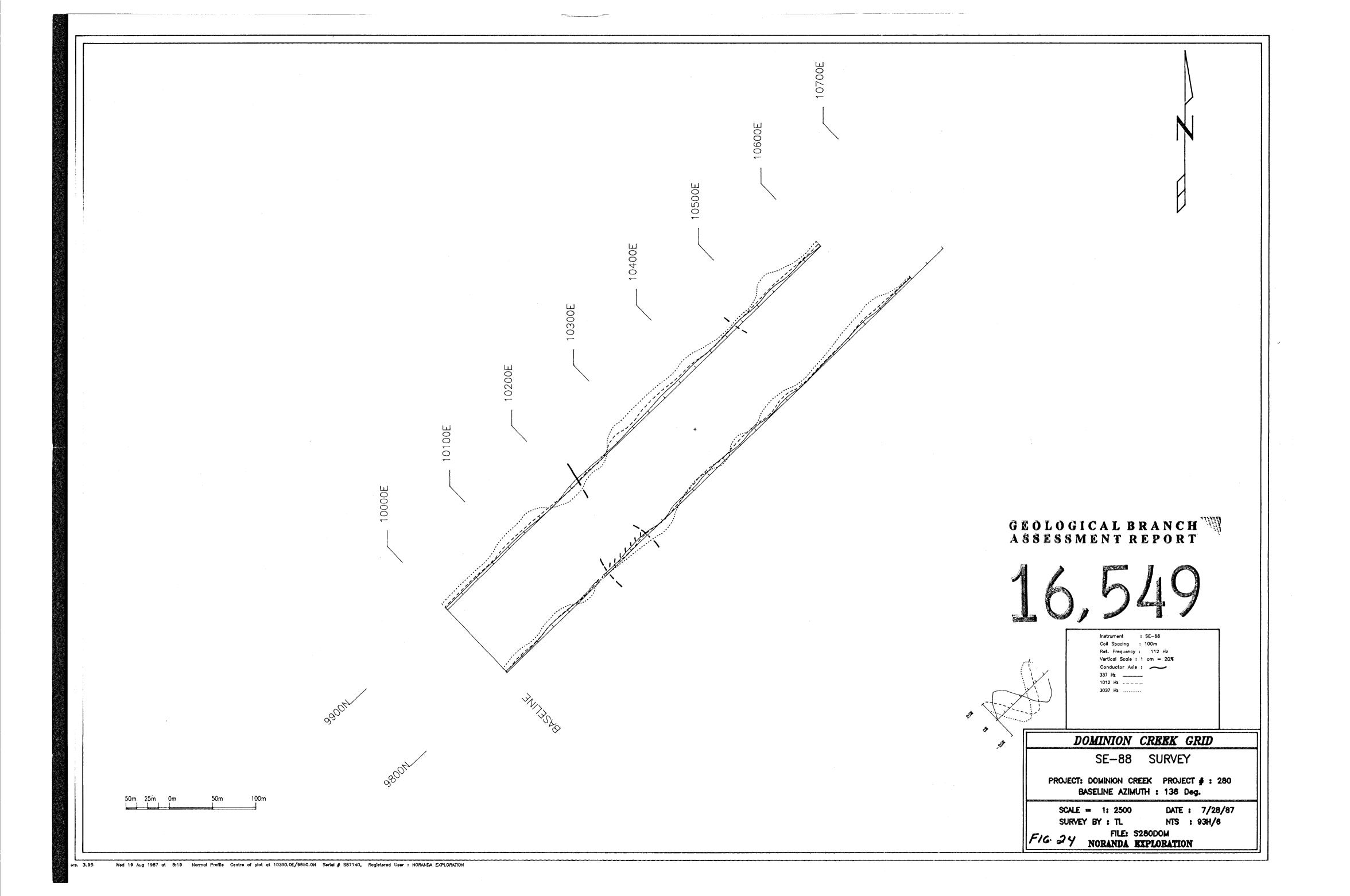
50m 25m 0m 50m 100m

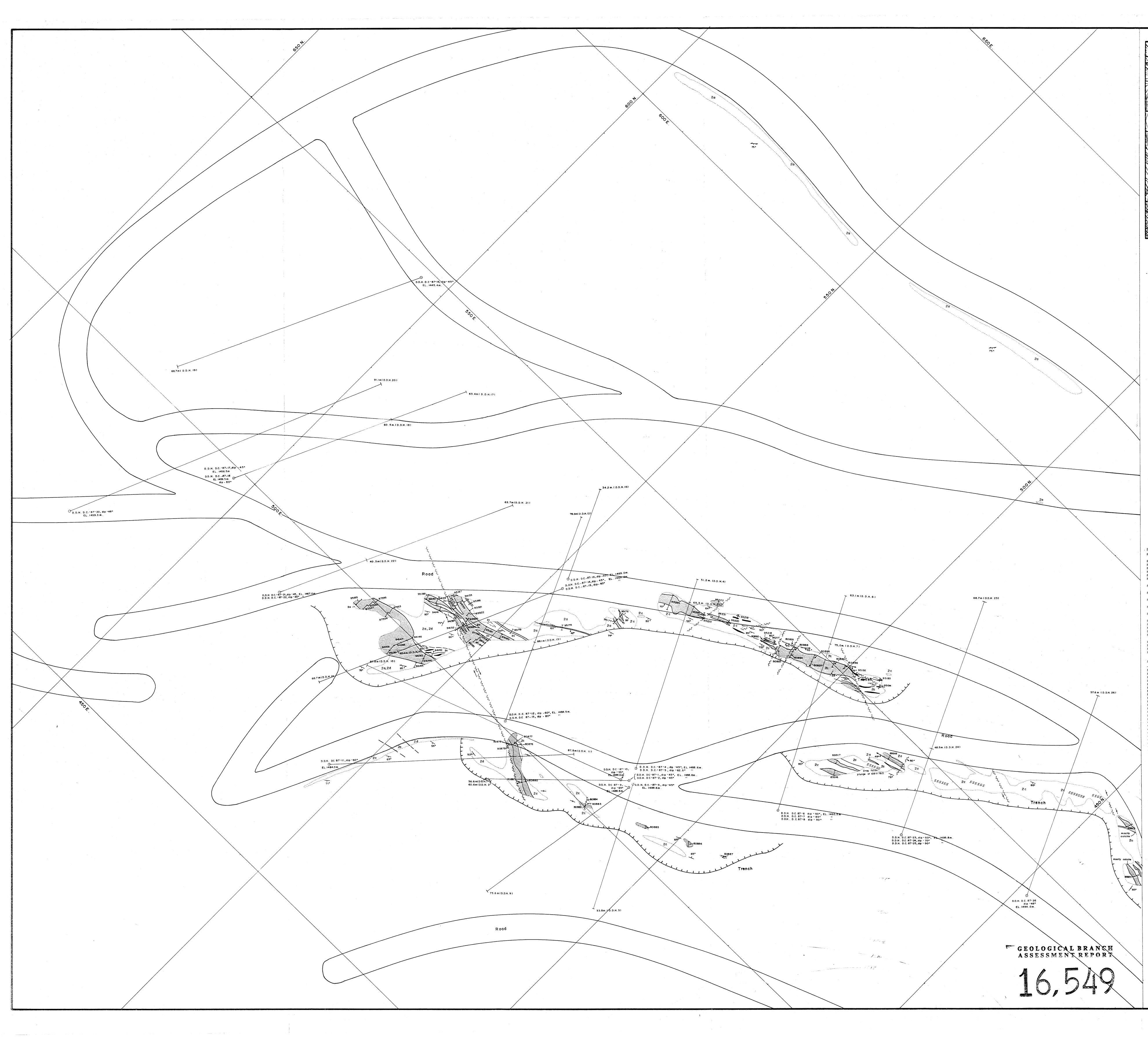
Vers. 3.95 Tue 1 Jan 1980 at 14:58 Normal Profile Centre of plot at 10350.0E / 9850.0N

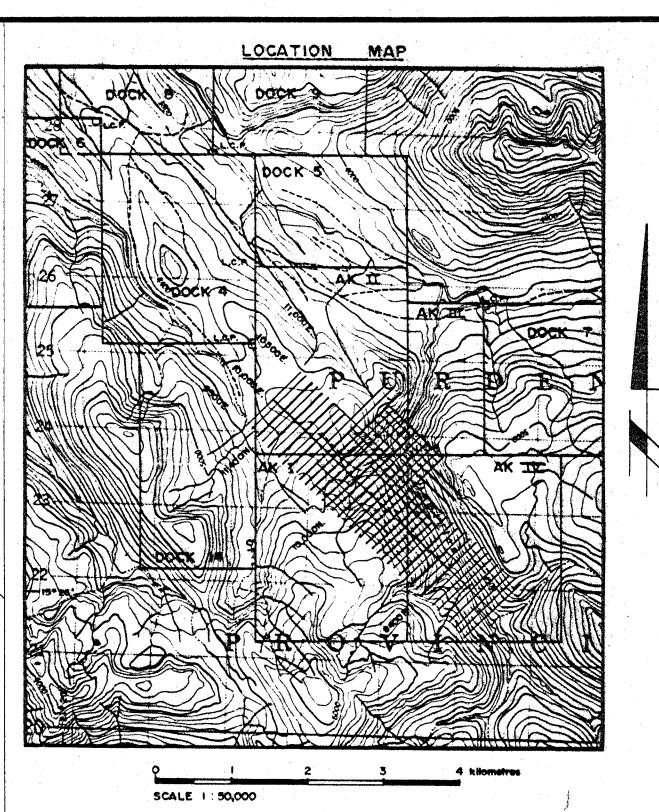












## LEGEND

## ROCK TYPES HADRYNIAN (Windermere)

3	<u>CUNNINGHAM FORMATION</u> - massive to faintly laminated, micritic to very finely crystalline, medium grey limestone, commonly with web-like network of calcite veinlets. Minor black graphitic phyllite.
2	<pre>ISAAC FORMATION 2a - Grey to black, fissile, graphitic, pyritic,     slatey, finely laminated, phyllitic argillite 2b - Finely interbedded grey to black, laminated     micritic limestone and black laminated graphitic     argillite 2c - Finely bedded to laminated, fine grained, medium     to dark grey, argillaceous limestone, with 2-3%     quartz calcite stringers 2d - Medium grey, fine grained, finely bedded, pyritic,     calcareous siltstone 2e - Pale red-brown, fine grained quartzose sandstone</pre>

## KAZA GROUP - grey, fine grained quartzite la - Finely interbedded quartzite and black phyllite

(NOTE: Ages, names obtained from G.S.C. Map 1356A)

SYMB	OLS		
5222 ,	Logging road, cat road	60 °	Strike and dip of bedding
-0	D.D.H. collar location	75•	Strike and dip of foliation
82496 X	Rock sample (outcrop)		Strike and dip of joints
98619 @	Rock sample (float)		Geological contact (definite, inferred, assumed)
86130	Siit sample	~ ~ ~	Fault (definite , inferred)
1	Quartz Vein	+	Plunging anticline
× 00000 ( ) × 0	Outcrop large, small	55555	Drag folds
95190	Chip. Sample location	Kur	Trench area
<b>I</b>	Zone. of intense quartz ve silicification , brecclation	binlets,	

				(All va	lues in	p.p.m.	except wh	ere note	ed)	
		WIDTH		Au	Ag	Pb	Zn	Cu	As	Sb
SAMPLE #	TYPE	(m)	DESCRIPTION	(gmT)	(gmT)					
80876	chip	0.8	Limestone H.W. #1 vein,	60ppb						÷.,
			10-20% calcite veinlets							
80877	chip	1.0	#1 vein, qtz breccia/silicified	3.60	24.69	25000	18000	460	22	100
80878	chip	0.6	#1 vein, gtz milky	31.68	8.23	~210	160	8	12	10
80879	chip	0.3	Siltstone gouge F.W. of #1 vein	140ppb						
80880	chip	0.85	Silicified gtz breccia	4.11	73.37	17000	15000	2240	44	1500
80881	chip	0.95	Barren white qtz vein	11.59	4.80	1100	280	36	8	36
80882	chip	0.6	Graphitic shale with 10% qtz	9.60	34.28	10000	1100	2200	28	120
80883	chip	0.6	stringers Graphitic shale with 25% qtz	0.51	15.09	17000	8000	870	20	80
•	•		stringers		0.74	1700	2200	134	24	40
80884	chip	0.8	Graphitic shale with trace of galena	0.03	2.74	1700	2200	134	<b>.</b> .	
80885	chip	0.65	Silicified qtz stringer/breccia	27.53	43.20	1900	30000	5800	26	- 26
80886	chip	1.4	zone Silicified qtz stringer/breccia	3.02	38.40	11000	8400	970	14	40
	-	•	zone	_				1100	20	50
80887	chip	0.3	Silicified qtz stringer/breccia zone	0.69	30.66	13000	9000	1140	20	24
80888	chip	1.3	zone #2 vein, massive milky qtz	12.21	45.51	15000	1900	1250	42	100
80889	chip	1.3	#2 vein, massive milky qtz	0.41	3.43	1400	170	42	26	8
80891	grab	0.15	#2 vein, sulphide rich band	5.01	49.37	9000	3900	2040	68	18
80892	chip	0.3	#28 vein, milky qtz	1.37	6.50	5500	845	44	6	31
80893	chip	1.6	#2B vein, milky qtz limonite	4.87	35.30	14000	4700	570	19	77
00095	curb	1.0	stained			•				2.1
80894	chip	2.05	#2B vein, milky white gtz	1.27	4.10	2280	137	40	5	12
80895	chip	1.4	#2B vein, milky white qtz	5.07	19,50	4080	585	90	7	31
80896	chip	1.1	#2B vein, milky white qtz	0.25	4.80	2540	152	64	8	10
80897	chip	0.6	#2B vein, white gtz	48.86	69.40	32400	7200	1580	38	55

	SAMPLE #	TYPE	WIDTH (m)	DESCRIPTION		Au (gmT)	Ag (gmT)	Pb (%)	Zn (%)	
	87553	chip	1.0	Quartz Vein	· · ·	1.03	1.0	.03	.12	
	87554	chip	0.8	Quartz Vein		< 0.07	< 0.7	.01	.03	
	87555	chip	0.6	Quartz Vein		1.89	1.7	.22	.20	
	87556	chip	1.0	Quartz Vein		0.07 < 0.07	< 0.7 < 0.7	.01	.01 < .01	
N.	87557	chip	1.0	Quartz Vein gal-sph-qtz Veir	, ,	77.59	207.1	16.10	6.42	
	87558 89917	chip chip	0.5	Quartz Vein	• • • •	< 0.07	< 0.7	.01	.01	
	89918	chip	1.0	Quartz Vein		< 0.07	< 0.7	.01	< .01	
	89919	chip	0.4	Calcite/Quartz \	/ein	< 0.07	< 0.7	.01	<.01	
	89920	chip	0.5	Calcite/Quartz \	/ein	< 0.07	< 0.7	.01	< .01	
	89921	chip	1.0	Quartz Vein		0.10	0.7 39.4	.02 3.17	.04	
	89922	chip	1.0	Quartz Vein Quartz Vein		3.33	10.6	.72	.25	
	-89923 89924	chip chip	1.0	Quartz Vein		0.51	0.7	.04	05	
	89925	chip	1.0	Quartz Vein		0.79	1.0	.05	.06	
	94132	chip	1.0	Limestone with a	quartz veinlets		< 0.7	. 02	.02	
	94133	chip	0.7	Quartz vein with	n phyllite	0.31	0.7	.05	.14	
	94134	chip	1.0	Quartz vein with		3.57	2.7	.13	.06	
	94135	chip	0.7	Phyllite with qu	uartz veinlets	1.58	5.5	. 30	. 30	
	94136	chip	0.6	Quartz Vein		20.54	28.8	.98	.26	
	94137	chip	.0.4	Phyllite		0.48 0.21	1.0 0.7	•05 •04⊡	.04	
	94138	chip	0.6	Quartz Vein Limestone		0.14	13.7	1.41	.09	
	94140	chip	0.9	Quartz vein wit	h limestone	0.62	15.4	2.03	.60	
	94141	chip	0,8	Quartz vein wit		0.34	37.7	2.97	1.98	
	94142	chip	1.0	Quartz Vein		0.07	12.7	1.07	.18	•
	94143	chip	1.0	Quartz Vein		0.45	4.1	. 31	.03	
	94144	chip	1.0	Quartz Vein		0.31	< 0.7	.02	.01	
	94145	chip	1.0	Phyllite		< 0.07	< 0.7	.04	.01	
	94146	chip	1.0	Quartz Vein		0.45	2.1	.09	.47	
	94147	chip	1.0	Quartz Vein Quartz Vein		0.31 0.07	< 0.7	.01	<.01	
	94148 94149	chip chip	1.0	Quartz Vein		< 0.07	< 0.7	.01	<.01	
	94150	chip	0.5	Quartz Vein		0.65	< 0.7	.01	<.01	
,	95140	chip	0.7	Limestone		pendin	g			
	95176	chip	1.0	Quartz Vein/Lim	estone	1.95	3.1	.24	.61	
N - 150	95177	chip	1.0	Quartz Vein		2.67	21.3	1,18	.09	
$\mathbf{N}$	95178	chip	1.0	Quartz Vein/Lim		0.48	3.8	.21	.11	
$\mathbf{X}$	95179	chip	1.0	Phyllite, Quart	z veiniets	0.07	< 0.7 < 0.7	.03	.03	
$\backslash$	95180 95181	chip chip	1.0 1.0	Quartz Vein Quartz Vein		0.14	< 0.7	.06	.06	
$\backslash$	95182	chip	1.0	Quartz Vein		17.45	35.7	3.75	.94	
$\sim$	95183	chip	1.0	Quartz Vein		69.53	143.3	10.82	5.97	
	95184	chip	1.0	Quartz Vein		44.88	92.6	10.38	5.20	
N Jr. 1	95185	chip	1.4	Quartz Vein		5.83	4.8	• 34	,21	
89912	95186	chip	1.0	Quartz Vein		10.83	24.7	2.10	. 30	
mostly	95187	chip	1.0	Quartz Vein		0.31	0.7	.06 1.56	.02 .06	. ·
calcite /	95188	chip	1.0	Quartz Vein		0.38 15.50	10.3	.53	1.56	
2c	95189	chip	1.0 0.3	Quartz Vein Limestone		0.51	0.7	.06	.19	
	95190 95192	chip chip	0.4	Quartz Vein/Lin	nestone	6.07	15.1	1.16	. 47	
	95193	chip	0.4	Quartz Vein/Lin		13.13	28.1	2.96	. 35	
· · · ·	95194	chip	0.5	Quartz Vein/Lir		0.75	1.7	.09		
	95217	chip	1.0	Quartz/Limestor	ne	16.83	47.3	1.42	1.17	
colcite	95218	chip	1.0	Quartz/Limeston		5.21	21.3	1.46	.78	
Section 1	95219	chip	1.0	Quartz/Limeston	ne	0.24	0.7	.14	.05 1 82	
: IN N.Y	95220	chip	1.4	Quartz Vein		8.33 7.68	21.9 22.3	.97	1.82 .57	
1111	95221	chip	1.0	Quartz Vein		14.06	11.3	.67	.15	•
12-103999	95222 95223	chip chip	$1.0 \\ 1.0$	Quartz Vein Quartz/Limesto:	ne	8.40	29.5	2,27	.36	
inco I I	95223	chip	2.4	Quartz Vein. i	ncl 0.5m Limest			11.75	2.89	
11	95225	chip	2.5	Quartz Vein, i	ncl 0.5m Limest	one 13.95	45.9	1.55	.28	
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REVISED	
M.S. Mar, 1987	DOMINION CREEK
M.S. Aug , 1987 M.S. Sept., 1987	GEOLOGY AND PLAN OF D.D.H.'s DC 871-26
PROJ. No	SURVEY BY: M.S. DATE: MAR., 1987
DWG. No.	DRAWN BY: S.K.B. SCALE 1 200 NORANDA EXPLORATION
FIG. 26	OFFICE PRINCE GEORGE , B.C.