ASSESSMENT EVALUATION REPORT

DAWSON MINING DISTRICT

NORDLING & RUDIS

094285

QUARTZ MINING CLAIMS

MONICA 1 TO 10
YC04655 -YC04664

ASSESSMENT PERIOD: 1999-2000

Albert W. Rudis

March 11, 2001

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 1200.00.

M. Burke

Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory

094285

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1. **REPORT:** This report covers Assessment Work accomplished in August 2000.

   a) Claim Information: Monica 1 - 10, YC04655 - YC04664.

   b) Location Map: The general location of these claims is shown in Appendix 1. The overall area is shown on the Quad Maps 115N-16.

   c) Claim Map: A claim map is given as Appendix 2.

   d) Access: Primary access is by helicopter. Depending on road condition, possible access is by truck up to the Matson Creek road, and then to the old Mar West mining access road that runs along the ridge line leading to Hart Mountain. Access from the end of this road is within a few miles from the top of the claim area. From there a difficult transit can be made by foot. Some assist may be possible by 4 wheeler.

2. **SUMMARY:**

   a) A 2km single line Total Magnetic Field Survey run adjacent the Monica claim line shows a intense mix of highs and lows indicating possible contact zones, and intrusive beneath the claims. Appendix 4 shows a stacked profile of the survey.

   b) Running of an additional Magnetic Survey and VLF-EM Survey of about 23 km is recommended. Total line surveyed should be about 23 km.

   c) Also recommended is soil sampling over anomalous areas to be defined in the survey grid.

3. **GEOLOGY AND PREVIOUS WORK:**

   a) General Geology: The local geology of the area is described in DIAND Open File 1996-1G, specifically in its coverage of 115N/15,16. An extract from the Geologic Map it presents is included at Appendix 3. The report states:

> "Northern Stewart River map area southwest of the Tintina Fault Zone is underlain by two distinct lithotectonic assemblages: 1) medium to high grade, polydeformed metasedimentary and met-igneous rocks of the Yukon-Tanana Terrane, and 2) weakly deformed and metamorphosed rocks to the Slide Mountain Terrane.

> These two assemblages are both mainly Paleozoic in age in the study area, and were juxtaposed by regional scale thrust faults in Early Mesozoic time, during a period of terrane accretion that affected much of the northern Cordillera. A variety of younger (post-accretion) volcanic, plutonic and sedimentary rocks are also present in the study area."[1]

The claim area falls within the Yukon-Tanana Terrane as described in this Open File.

b) Major Rock Units (from Open File 1996-1G):

- 1Kva: andesite flows and brecias. (late Cretaceous)
- DMS: medium to coarse grained mica schist. Commonly garnetiferous amphibolite, minor quartzite. (late Devonian)
- 1Kgdr:massive hornblende-biotite granodiorite.(late Cretaceous)
- 1Kst: sandstone, pebble conglomerate, minor shale, commonly coal-bearing. (late Cretaceous)
- DMgg: moderately to strongly foliated K-feldspar augen-bearing quartz monzonitic to granitic gneiss (S. Fiftymile Batholith). (early Mississippian)
- EJQM: massive to weakly foliated biotite and biotite-muscovite quartz monzonite and granite; includes abundant pegmatite and aplite phases. (early Jurasic)
- DMc: marble. (late Devonian to early Mississippian)
- 1Kgdr:massive hornblende-biotite granodiorite.(late Cretaceous)
- Psqm: rusty weathering quartz muscovite schist. (late Permian)
- Dmgdg: massive to strongly foliated dioritic to granodioritic gneiss (N. Fiftymile Batholith) (early Mississippian)

c) <u>Cheryl Creek Rock Units:</u>

1. Outcrops along the creek draining the Monica Claims (Cheryl Creek) show metamorphic mafic rocks including amphibolite and ultramafic rocks, probably belonging to the Nising, Nasina , and Slide Mountain assemblages. These rocks appear to strike east-west based on their aeromagnetic signature. For approximately the first mile from its mouth, the creek is underlain by orthogneiss of the Fifty Mile Batholith. These intrusive rocks have a very subdued aeromagnetic signature, and residual magnetite in placer deposits on Cheryl Creek are likely derived from the upstream rock units.

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[1] Open File 1996-1(G), pg. 1

d) Local Structure:

1. The area is structurally complex and has a scarcity of exposures. A regional scale thrust fault dominates the 50 Mile Creek along its left limit. The valley of the 60 Mile River in the central and western part of the Sixtymile District follows a northeast-trending graben structure that has downdropped Cretaceous volcanic and sedimentary rocks against metamorphic rocks of the Nasina and Klondike Schist. Cretaceous strata are cut by steeply-dipping normal faults. All of the smaller bodies of greenstone and/or ultramafic rocks in the area are thought to mark thrust faults.

2. There is a probable major fault running east - west about one mile up Cheryl Creek. This fault marks a change from metamorphic and mafic rocks, and the orthogneiss of the Fifty Mile Batholith. Structure taken close by this fault shows a strike of 069° and dip of 30° east. As noted above, the various ultramafic zones crossing Cheryl Creek are probably all related to thrust faults.

e) Previous Work: Previous MINFILE work reported in the general area is as follows:

1. *MINFILE #115N 039:* North-northeast striking, mesothermal (?) quartz-carbonate veins with major Ag, Pb and minor Au, Zn. 63-55-29N 140-48-52W
2. *MINFILE #115N 040:* Lenses of galena and arsenopyrite with minor sphalerite, tetrahedrite and boulangerite in northeast-striking quartz veins. Major Ag, Pb and minor Au, Zn. 63-54-50N 140-47-46W
3. *MINFILE #115N 042:* An epidote-magnetite-diopside skarn containing minor chalcopyrite and pyrrhotite developed at the contact between a marble layer and the intrusion (Dms and 1Kgdr). Major Cu, Ag, Pb, Au. 63-54-58N 140-34-35W
4. *MINFILE #115N 043:* 300 m long skarn with traces of malachite and old workings. 63-53-26N 140-37-40W
5. *MINFILE #115N 044:* Late Cretaceous quartz pebble conglomerate (unit 1Kst), with one specimen containing a small rounded flake of gold. The conglomerate has a thickness of 15-30 m and outcrops over approximately 0.8 km. It is capped by, and may extend under, andesitic volcanic rocks (unit 1Kva). No mineralization was found in 1973 by Silver Standard. Paleoplacer with Au as the major commodity. 63-53-18N 140-25-10W

6. *MINFILE #115N 119:* Another outcropping of unit 1Kst defined in MINFILE #115 044. 63-55-10N 140-25-32W
7. *MINFILE #115N 123:* A thrust -fault-bounded lens of serpentinite occurs along the fault to the east of the occurrence. A vuggy quartz carbonate vein with silver and minor gold, copper and no visible sulphides, outcrops on the hanging wall of the fault. 63-58-31N 140-53-15W
8. *MINFILE #115O 158:* Traces of disseminated galena within a very rusty weathering band of pyritic muscovite-quartz schist (Psqm) of Klondike Schist assemblage. 63-56-58N 140-42-48W

3. CURRENT WORK PERFORMED:

a) A two kilometer Total Field Magnetic Survey was run on a line adjacent to the Monica Claim post line.

1. Survey Grid: Two km of flagged line was placed adjacent to the claim post line of the Monica Claims. As such it was oriented at 060° T. Stations were located at 25 meter intervals. A Total Field Magnetic Survey was run over the full two kilometers. Location of the grid is shown on the claim map at Appendix 2.

2. Personnel and Equipment: Geophysical Technician, Shawn Ryan, c/o Box 887, Dawson City, conducted the survey. He was equipped with 1 -GEM Overhauser magnetometer, and 1-GEM Proton precession magnetometer. One day was spent on the property.

3. Specifications: Station spacing was at 25 meters. A base station was installed and cycled at 5 seconds throughout the survey.

5. RESULTS: The 2km Total Magnetic Field Survey shows a intense mix of highs and lows indicating possible contact zones, and intrusive beneath the claims. Appendix 4 gives a *stacked profile* of the survey.

6. CONCLUSIONS AND RECOMMENDATIONS:

a. The 2km single line Total Magnetic Field Survey run adjacent to the Monica claim line shows a intense mix of highs and lows. These indicate possible contact zones, and intrusive beneath the claims. Appendix 4 shows a stacked profile of the survey.

b. The mix of highs and lows is particularly significant in terms of potentially related Magnetic highs and lows shown on *Geophysics Paper 4282.*

    1. The claim group overlies an overall intense semicircular magnetic high. This high is in line NW to an elongated high of similar magnitude about a mile to the NW.

    2. The high is also in line to the NNE with the low area adjacent to Mount Hart (about one mile North of the claims), and to the SSW to a low that covers the pup draining the claim area.

c. The following further work is recommended:

    1. Establishment of a flagged grid with its baseline running along the center claim line. The baseline should run about 2.5 km long, and be flagged every 50 meters. Station lines should be placed every 100 meters on the base line, and should run about 500 meters to each side of the baseline. Stations should be set every 50 meters.

    2. Running of a Magnetic Survey and a VLF-EM Survey along the grid. Total line surveyed would be about 23 km.

    3. Soil sampling over anomalous areas to be defined in the survey grid.

7. STATEMENT OF QUALIFICATIONS:

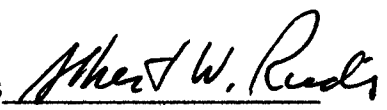
Albert Rudis has 15 years of experience in exploration and evaluation of mining properties. 9 years of this was in Nevada, where for over five years he served as the President of Nevada International, Inc., a small Nevada mining exploration and development corporation. He received three years of training on exploration in the Nevada Basis and Range Province from an exploration geologist partner with over 10 years of experience in Nevada. Mr. Rudis also has extensive research and analytical experience with the U.S. Government, five years of which was in scientific research and development as an operations research analyst at a U.S. Navy Laboratory. For the past six years Mr. Rudis has lived in Dawson City, Yukon. During this period he has been involved in placer mining on a full time basis, and has conducted exhaustive research into both historical and current placer mining operations and procedures. He has assisted and advised local miners on a voluntary basis as requested, and has consulted with select local placer miners with emphasis on ground evaluation, processing plant effectiveness, and drilling procedure. Mr. Rudis has a BS degree in Geology from Trinity College, Connecticut, and an MBA from the University of Oregon. Utilizing local archival and Whitehorse technical resources, he carried out an intensive six month period of self study in all aspects of historical and modern Klondike placer mining. He attended the Geoscience Forum in Whitehorse in 1997,1998,1999, and 2000, where he participated in all available short courses and technical sessions. He attended the Dawson Gold Show technical sessions each year from 1996 to 2000.

Albert W. Rudis  March 11, 2001

8. CERTIFICATION OF COST:

a. 2km of flagged line (2X350):	$ 700
b. 2km of total magnetic field survey (2X250):	$ 500
c. Report Preparation:	$ 800
d. **Total Cost:**	**$2000**

Certified to be true costs:

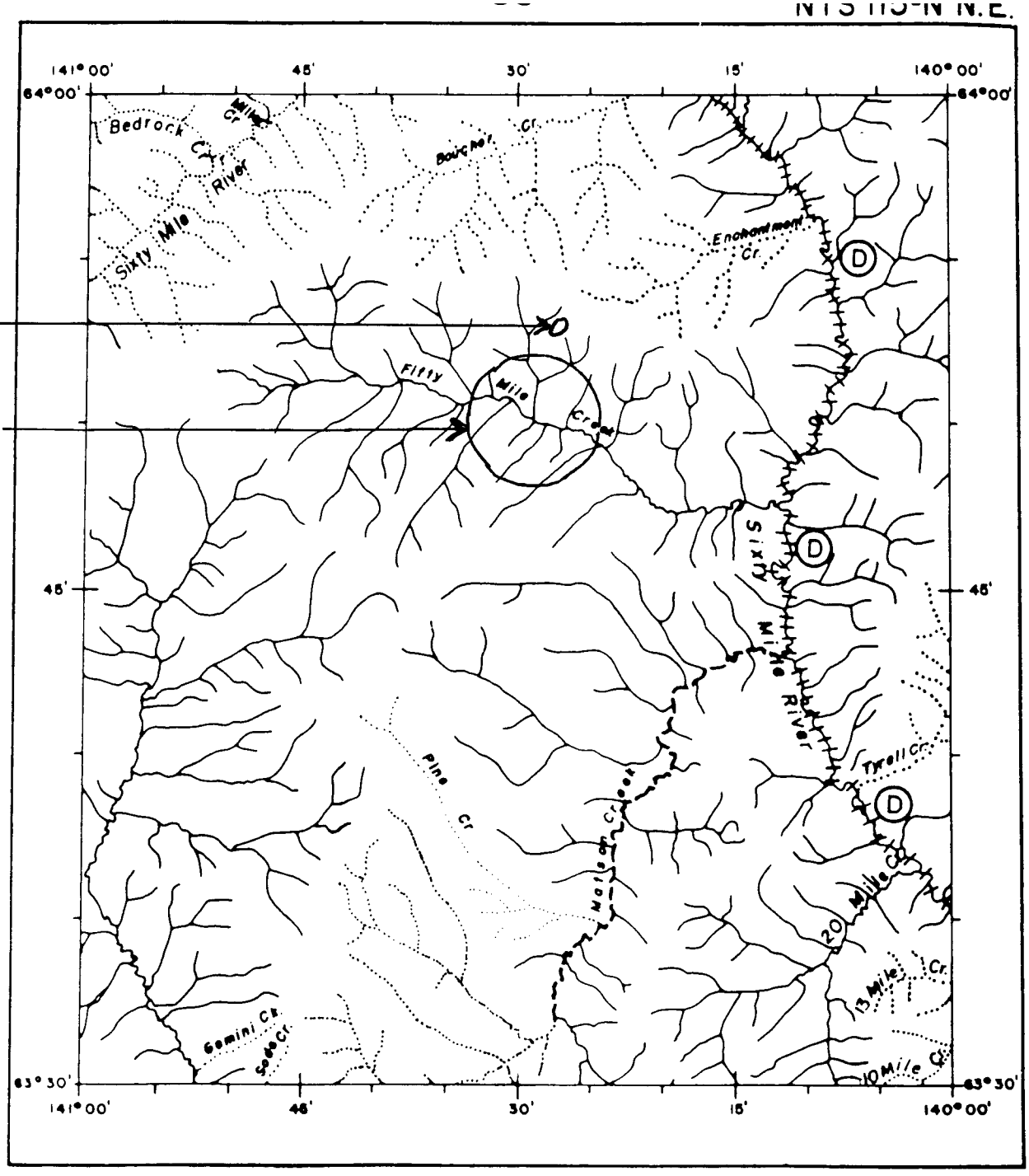
Albert W. Rudis  March 11, 2001

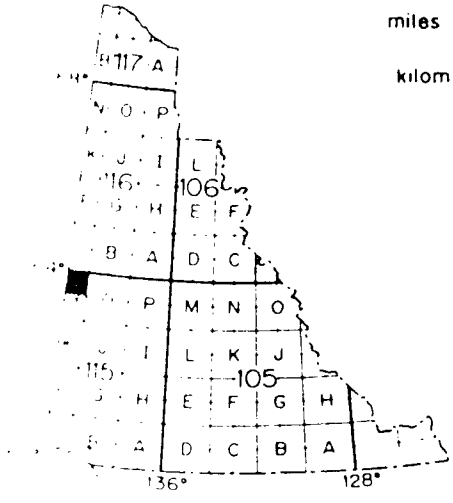
NTS 115-N N.E.

Appendix I.

MONICA CLAIMS

50 Mile Project Location





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kilometres 5 0 5

Type I

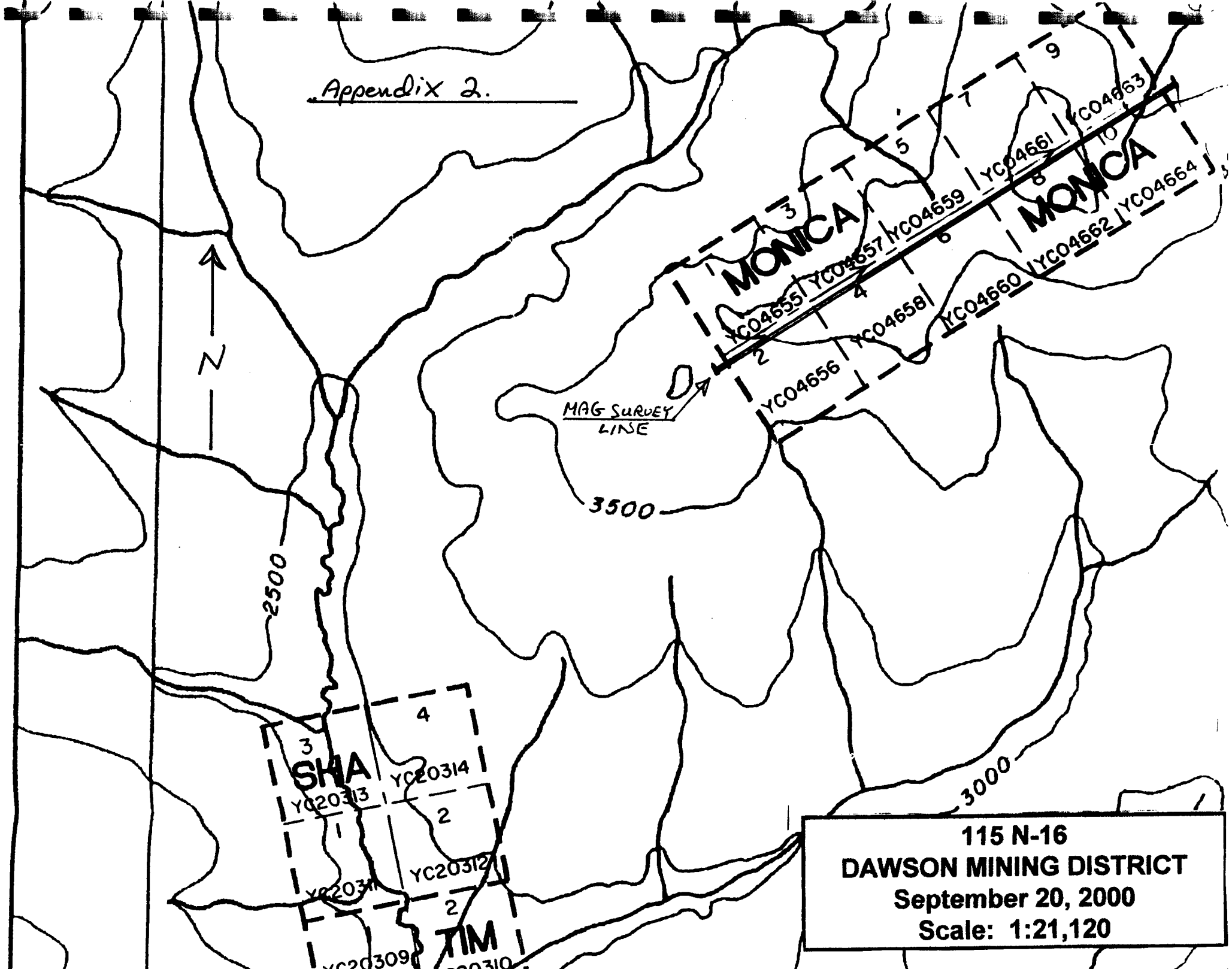
Type II

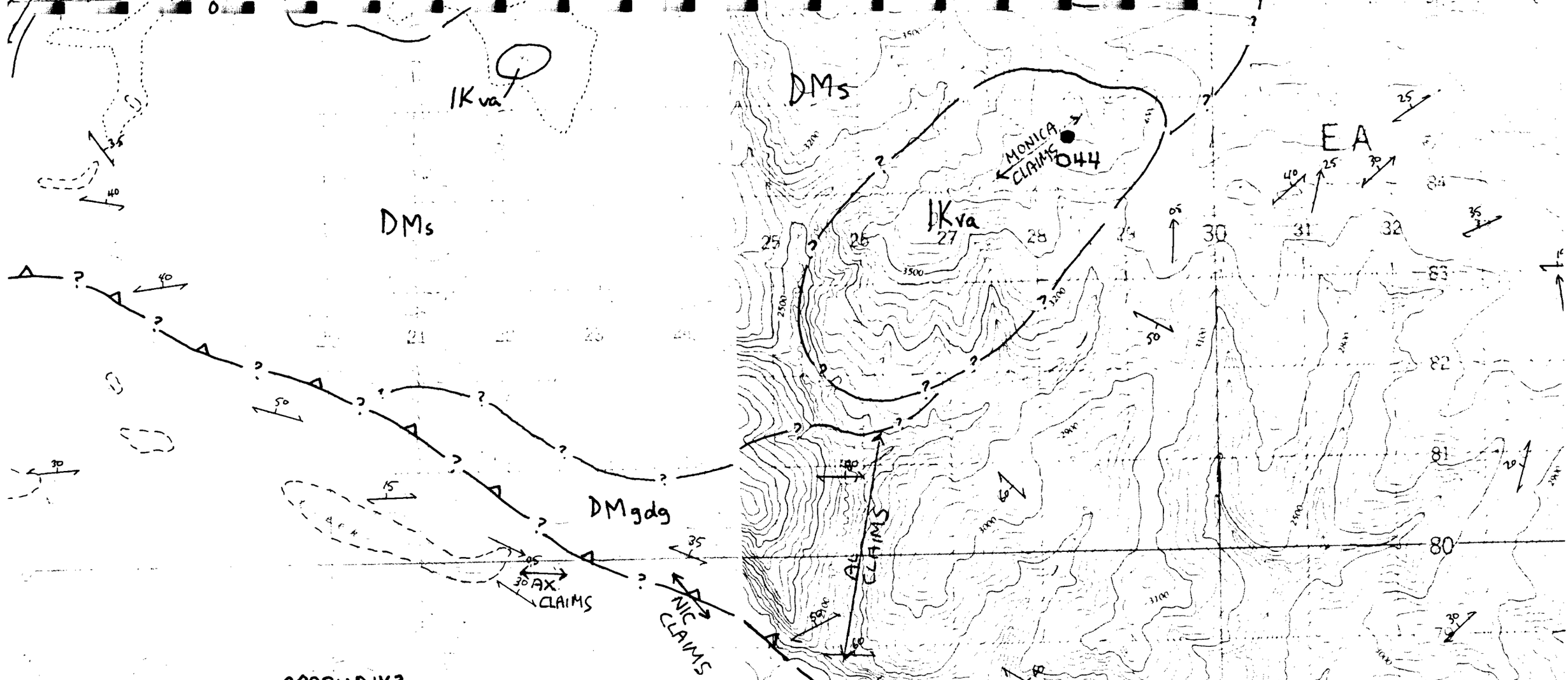
Type III

Type IV

Type V

YUKON PLACER AUTHORIZATION


Appendix 2.
N
MONICA
YC04655
YC04657
YC04659
YC04661
YC04663
YC04656
YC04658
YC04660
YC04662
YC04664
MAG SURVEY LINE
3500
3000
2500
SHA
YC20313
YC20314
YC20311
YC20312
TIM
YC20309
115 N-16
DAWSON MINING DISTRICT
September 20, 2000
Scale: 1:21,120



APPENDIX 3.

From Geologic Maps NTS 115N/15 & NTS 115/16
DIAND Yukon Open File 1996-1(G)
Scale: 1:50,000

- 1Kva: andesite flows and brecias. (late Cretaceous)
- DMS: medium to coarse grained mica schist. Commonly garnetiferous amphibolite, minor quartzite. (late Devonian)
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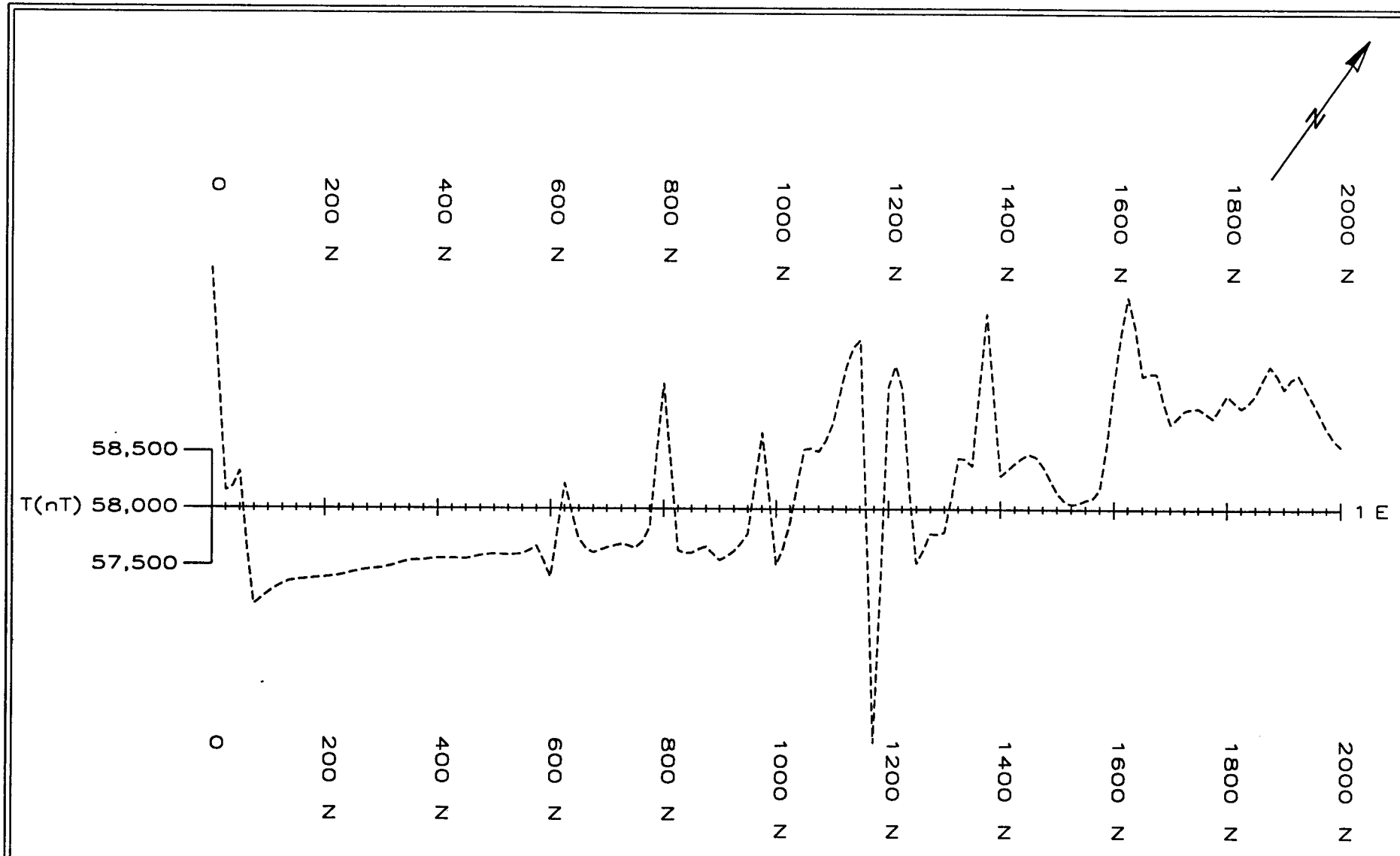

AL RUDIS	MONICA CLAIMS
	NTS: 115 N/16 | Datum: NAD 27
TOTAL MAGNETIC FIELD STACKED PROFILES FIGURE	Mining District: DAWSON
	Job: 2000-016 | Date: 05 Feb 01
	AURORA GEOSCIENCES LTD. GEOLOGY & GEOPHYSICS

0 250m
metres
Scale: 1:10,000

Appendix 4.