MAP NO.:

116C 2

ASSESSMENT REPORT
PROSPECTUS
CONFIDENTIAL X
OPEN FILE

DOCUMENT NO: 093128
MINING DISTRICT: DAWSON
TYPE OF WORK: GEOCHEMISTRY
GEOLOGICAL

REPORT FILED UNDER: DAVE DOWNING

DATE PERFORMED: JULY 17,18, AUG 5, 1993

DATE FILED: AUGUST 30, 1993

LOCATION: LAT.: 64°10'N

AREA: BROWNS CREEK

LONG.: 140°43'W

VALUE $: 4,000

CLAIM NAME & NO.: TAM 1-8 (YB41386-393)

WORK DONE BY: DAVE DOWNING

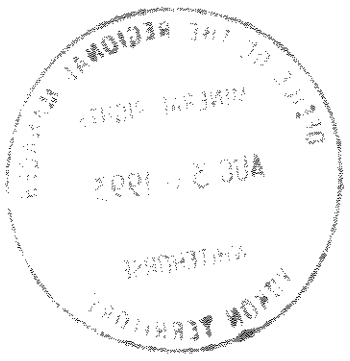
WORK DONE FOR: RESOURCE ENGINEERING

DATE TO GOOD STANDING:	

REMARKS: 50 SOIL SAMPLES WERE COLLECTED

TAM #1-8 CLAIMS GEOLOGICAL & GEOCHEMICAL SURVEY REPORT 1993

Report Submitted To The
Dawson Mining Recorder
NTS 116C02
Longitude 140° 43'
Latitude 64° 10'
17 August 1993
D.A. Downing. P. Eng.



82L/8W

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 $ 4000.

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

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1.0 INTRODUCTION

A preliminary exploration program of geological mapping and geochemical surveying was conducted on the TAM #1-8 quartz claims. The eight claims were staked in August 1992 to cover a zone of shearing and brecciation that exhibited extensive limonite staining and silicification.

The zone of interest is exposed in a slide area on the east side of Browns Creek. Browns Creek is a tributary to the Fortymile River near the Yukon Alaska border.

The discovery showing was mapped and sampled in 1992 subsequent to the claims being staked. Further geological mapping and a 50 sample soil geochemical survey was completed in July 1993.

This report, written by David A. Downing, P. Eng., of Resource Engineering, is submitted along with the appropriate forms and fees for assessment credit on the claims as per the provisions of the Yukon Quartz Mining Act.

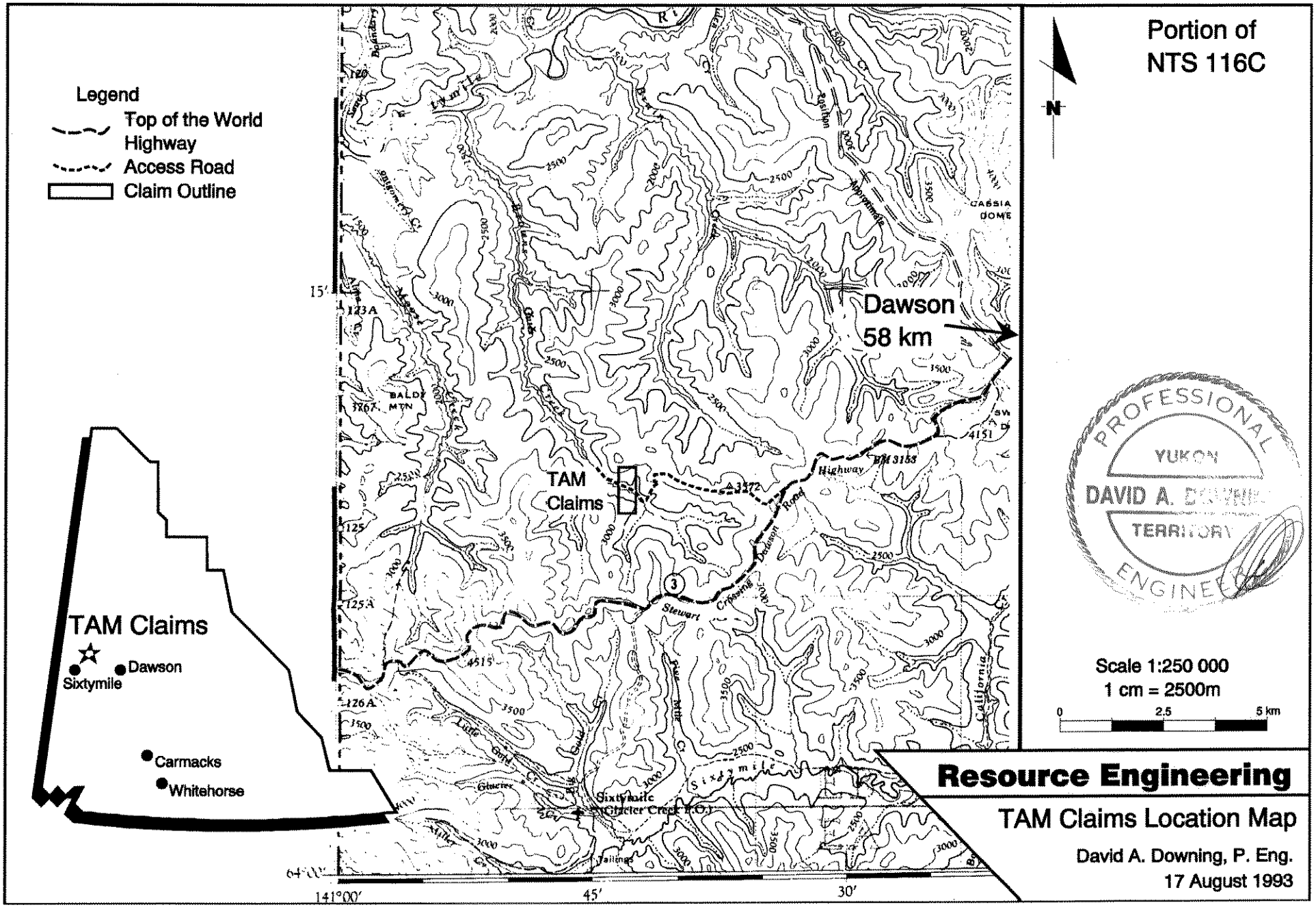
2.0 HISTORY

The Fortymile district was know for its placer gold prior to the gold rush of 1898. The discovery claims that precipitated the gold rush were recorded at the Fortymile townsite at the mouth of the Fortymile River. The creeks of the Fortymile and adjacent Sixtymile areas have been well prospected for placer gold using traditional panning methods for a hundred years. These creeks have been placer mined at various levels of activity until the present day. Browns Creek has one currently active placer operation 5 km downstream of the TAM claims.

One of the first lode discoveries in Yukon was made near Fortymile. Ogilvie on his first visit to the district in 1887 reported on a gold-silver prospect. The earlist records found are for claim 795 recorded by Isobella M. Healy in August 1896.

The source of asbestos noted in the area by the early placer miners was discoverd in April 1957 by G. Walters and A. Anderson. The Clinton Creek Mine operated from October 1967 until August 1978 producing over 1 million tonnes of fibre. Detailed magnetic surveys were completed during this period that delinated magnetic bodies lying on the soles of thrust sheets that loop through the Fortymile area.

The TAM showing was located during prospecting in 1992 as described in the introduction.


Legend
Top of the World Highway
Access Road
Claim Outline
TAM Claims
Dawson
Sixtymile
Carmacks
Whitehorse
Dawson
58 km
TAM
Claims
Portion of
NTS 116C
N
Scale 1:250 000
1 cm = 2500m
0
2.5
5 km
PROFESSIONAL
YUKON
DAVID A. DOWNING
TERRITORY
ENGINEER
Resource Engineering
TAM Claims Location Map
David A. Downing, P. Eng.
17 August 1993
141°00'
45'
30'
64°00'
15'

3.0 Location & Access

The TAM claims are located 75 km by road west of Dawson. They are located in the Browns Creek valley 4 km downstream from the ridge to the south. Browns Creek runs 16 km north from the ridge that separates the drainage of the Fortymile and Sixtymile Rivers into the Fortymile River.

Elevations on the claims range from 680 m at creek level up to 900 m at the north and south limits of the claim block.

The creek valley is filled with open black spruce away from the creek and thick willows and alders adjacent the creek. The south facing slopes are dry with open pine and poplar. The northerly facing slopes are wet and covered with thick moss and sparse, stunted black spruce.

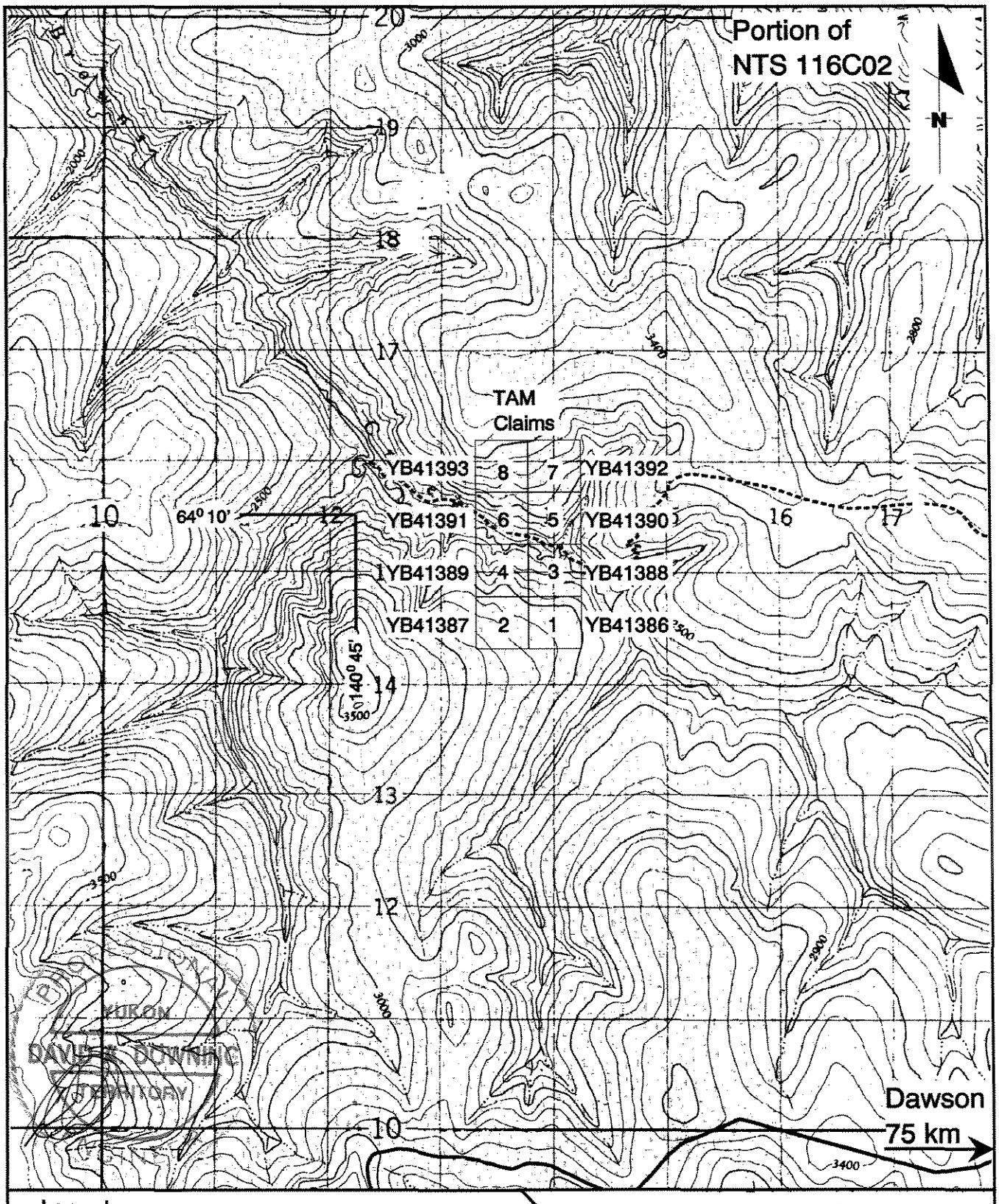
Location and access to the claims is illustrated on the proceeding page. The Top of the World Highway provides excellent access to within 5 km of the claims. A good 4x4 winter trail runs along the ridge between Browns and Bruin Creek. This trail runs along the ridge for most of the length of the creek, with several branch trails dropping into Browns and Bruin Creeks.

The trail to the TAM claims is the first left turn of the main trail. It is in good shape but is starting to wash out in the switchbacks. Four wheel drive is required for the very steep sections.The trail is blocked at the discovery showing due to rock debris.

4.0 Claim Status

The TAM 1-8 claims, grant numbers YB41386 - YB41393 respectively, are shown on the 1:50 000 scale map on page 4. The claim line runs due north.

The claims are recorded in the name of David A. Downing of Whitehorse. The claims were due to expire 18 August 1993. With the filing of this report, if accepted for the five years applied for, the claims will be in good standing until 18 August 1997.



Legend

Top of the World Highway

Access Road

Quartz Claim Outline

YB41386 Grant Number

Scale 1:50 000

1 cm = 500m

0 1 2 km

Resource Engineering

TAM Claims Location Map

David A. Downing, P. Eng.

17 August 1993

5.0 GEOLOGY

5.1 Regional Geology

The Dawson map area (NTS 116B,C southwest of the Tintina Fault Zone (Mortenson, 1988) is underlain mainly by greenschist to lower amphibolite facies metamorphic rocks of the Yukon-Tanana Terrane (Monger and Berg, 1987). These rocks can be divided into two main assemblages: 1) schists and gneisses derived from a variety of sedimentary and igneous protoliths and displaying a penetrative ductile deformation fabric; and 2) massive to brittlely sheared greenstone, diabase and serpentinized harzburgite. Assemblage 1 corresponds generally to rocks originally included in Green's (1972) units A, B, and D (Nasina Series, Klondike Schist and Pelly Gneiss, respectively), but has been further subdivided based on compositional, textures and limited isotopic age criteria. Assemblage 2 corresponds to Green's units C (greenstone= Pv and E, ultramafics = Pu). The two assemblages are now imbricated along low-angle brittle faults that may include thrust faults and tectonic slides along original stratigraphic contacts. These faults are rarely well exposed but can be traced as lithological contacts marked by the discontinuous occurrence of massive to sheared greenstone and/or serpentinite in felsenmeer and float.

5.2 Economic Geology

A great variety of styles of mineralization occur within the study area, including stratiform, porphyry, and skarn base metal occurrences, and precious metal-bearing mesothermal occurrences, and asbestos deposits in serpentinite. also present are numerous lignite occurrences in Eocene sediments along the Tintina Fault Zone and in sediments of unit lKst in the Sixtymile District, as well as portions of the Klondike, Sixtymile and Fortymile placer gold districts. The large number and variety of known mineral occurrences, together with the relatively limited mineral exploration activity that the area has attracted and the presence of extensive placer gold deposits for which no lode sources have yet been discovered, all underscore the substantial remining mineral potential of the area.

5.3 Property Geology

The geology of the property is dominated by Nasina Series quartzite and schist with minor marble. The outcrop is limited to exposures in road cuts and two ribs of resistant quartzite that run almost directly up the hillside. The property geology as mapped is displayed on the following page.

The legend corresponds with that of the regional geology.

The quartzite illustrated to the south of Browns Creek is found only in felsenmeer.

Evidence for the thrust fault is inferred from an exposed contact to the north of the map, local topography, and the presence of serpentinized harzburgite float and felsenmeer. It is readily apparent that the quartzite unit lies just above the thrust plane. There

LEGEND

Late Tertiary or Quaternary

- TQvb — fresh, brown weathering olivine basalt

Early Tertiary

- eTt — felsic lapilli tuff and volcanic breccia
- eTqfp — tan to rusty weathering, unfoliated quartz-feldspar porphyry
- eTdi — brown weathering fine-grained diabase and plagioclase-phyric basalt
- eTv — mafic to intermediate volcanic rocks
- PEst — brown weathering conglomerate, argillite, minor tuffs

Late Cretaceous

- lKva — massive andesite flows, breccias and plugs
- lKst — quartz pebble conglomerate, sandstone, shale, minor tuffs
- lKgd — massive unfoliated hornblende-biotite granodiorite and quartz monzonite
- lKqfp — massive unfoliated quartz-feldspar porphyry

Triassic

- Ts — weakly deformed, thinly bedded argillite, sandstone, argillaceous limestone

middle and upper Paleozoic

- Pv — massive and sheared greenstone and diabase
- Pu — serpentinite, serpentinized harzburgite, carbonatized ultramafic rocks, talc-carbonate schist

Klondike Schist

- Pqm — rusty weathering quartz-muscovite schist
- Pqa — quartz and/or feldspar augen-bearing quartz-muscovite (chlorite) schist
- Pks — Klondike Schist undifferentiated (includes units Pqm, Pqa, also chloritic schist and minor graphitic quartz-muscovite schist)

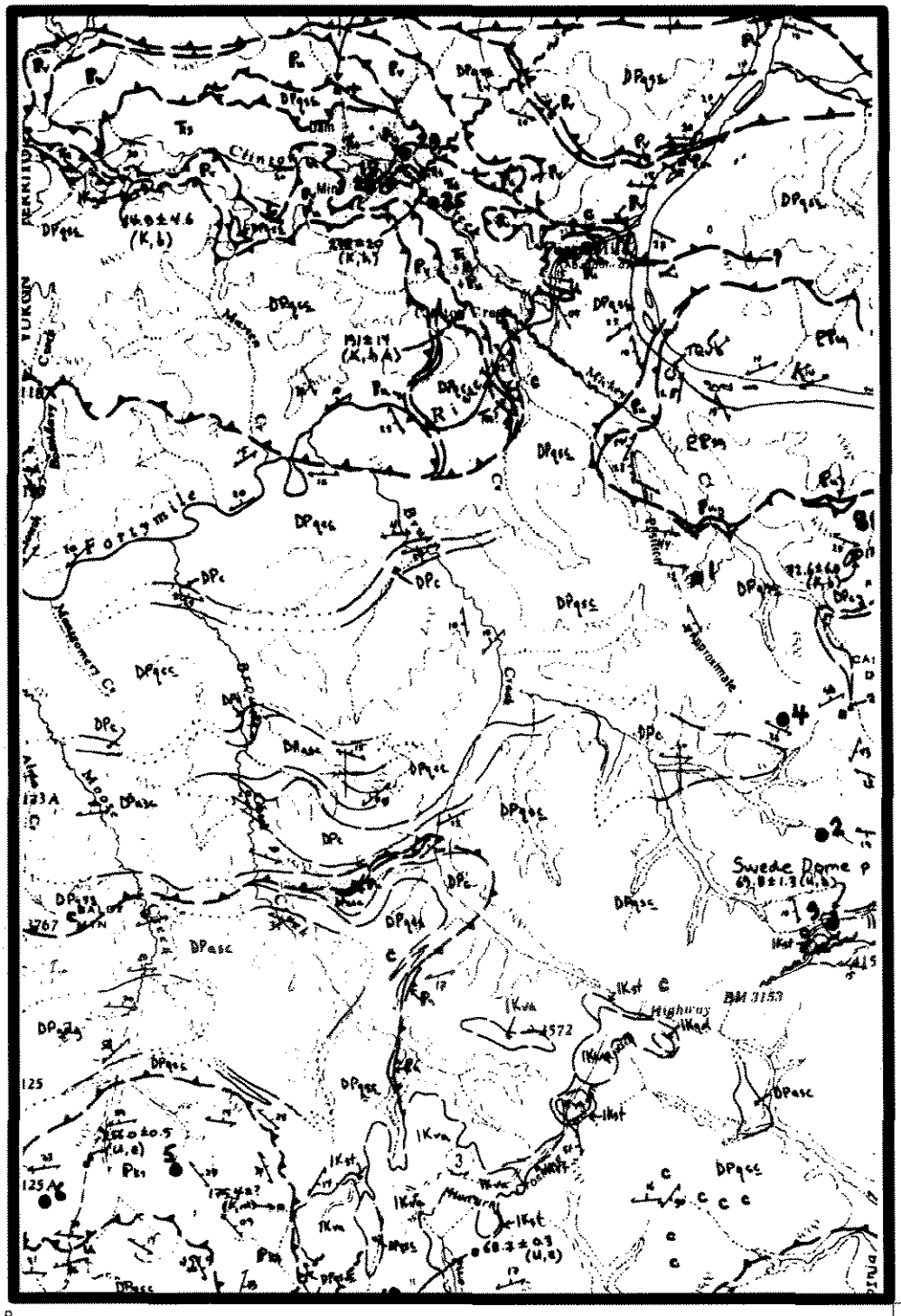
Nasina Series

- DPc — marble
- DPqa — quartz and/or feldspar augen-bearing quartz-muscovite schist
- DPmv — dark green weathering chlorite (± biotite) schist, amphibolite and garnet amphibolite
- DPgs — Nasina Series undifferentiated (mainly grey to black graphitic quartzite and quartz-muscovite (± biotite) schist; locally garnetiferous)
- DPmgd — massive to strongly foliated dioritic to granodioritic gneiss

Proterozoic(?) and Paleozoic

- PPsg — tan to pale green to medium brown weathering quartz-muscovite-chlorite schist, micaceous fine-grained quartzite, and banded quartz-feldspar-amphibole gneiss; includes locally abundant chlorite schist, metagabbro and marble
- PPc — marble
- PPqa — feldspar augen-bearing quartz-muscovite schist

- lithological contact (defined, approximate, assumed)
- thrust fault or slide (approximate, assumed)
- steep fault (defined, approximate, assumed)
- compositional layering in metamorphic rocks
- bedding (upright, tops unknown)
- u — altered ultramafic rock occurrence
- c — stretched pebble conglomerate occurrence
- q — quartz-feldspar porphyry dyke (unit eTqfp)
- m — mafic dyke (unit eTdi)
- p — granitic pegmatite occurrence
- ● 31 — mineral or coal occurrence (numbers correspond to Table 1)
- • (K,R,U; b,m,h,a,w,z) — isotopic age determination (K-Ar, Rb-Sr, U-Pb; biotite, muscovite, hornblende, actinolite, whole-rock, zircon)



from NTS 116C2

PROFESSIONAL ENGINEER
YUKON TERRITORY
DAVID A. DOWNING

from:
GSC Open File 1927

Resource Engineering

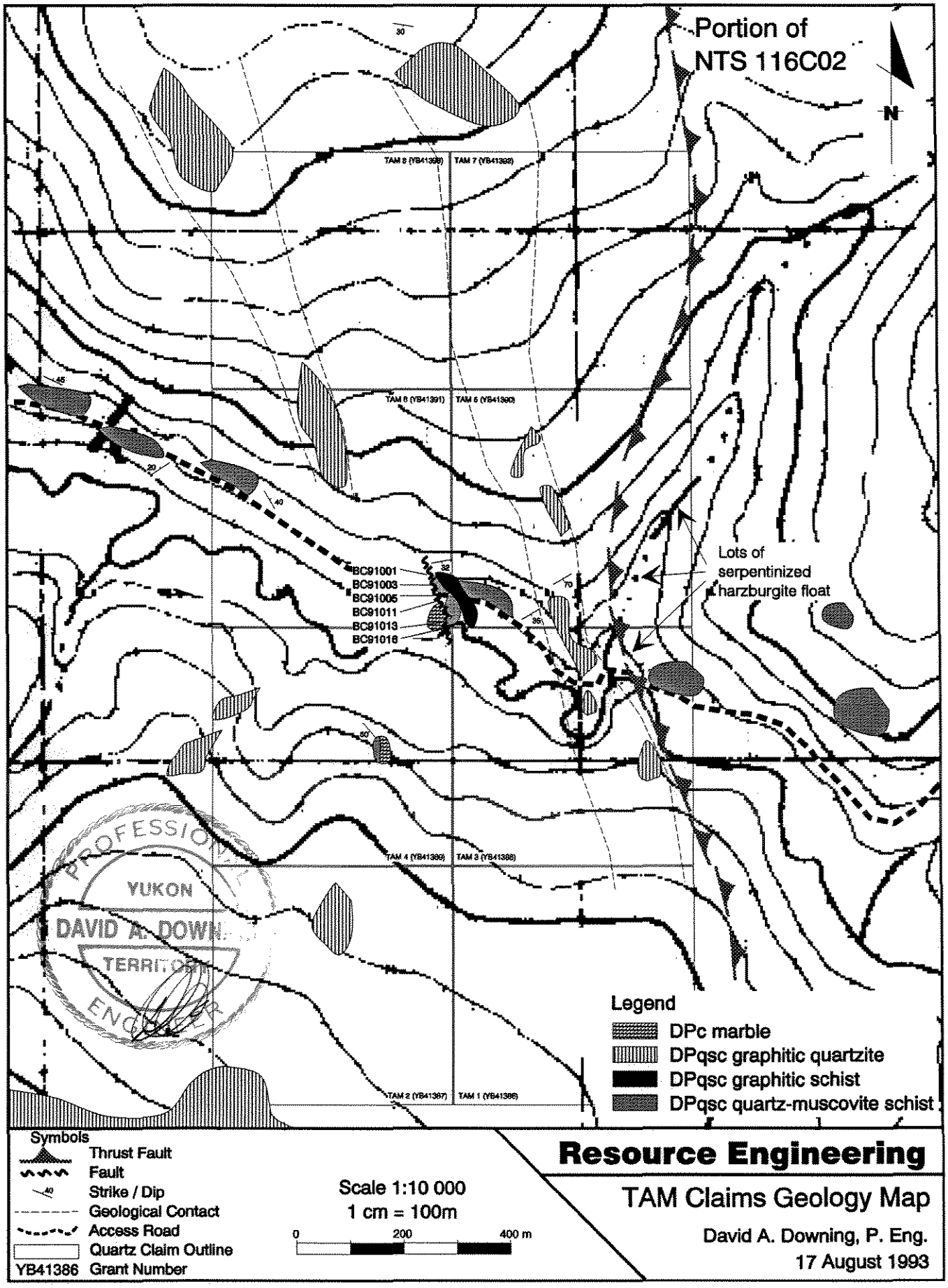
Scale 1:250 000
1 cm = 2500m

0 2.5 5 km

Regional Geology Map

David A. Downing, P. Eng.

17 August 1993


Portion of
NTS 116C02
N
TAM 8 (YB41389)
TAM 7 (YB41388)
TAM 6 (YB41391)
TAM 5 (YB41390)
TAM 4 (YB41393)
TAM 3 (YB41392)
TAM 2 (YB41395)
TAM 1 (YB41394)
BC91001
BC91003
BC91005
BC91011
BC91013
BC91016
Lots of
serpentinized
harzburgite float
PROFESSIONAL
YUKON
DAVID A. DOWN
TERRITORY
ENGINEER
Legend
DPc marble
DPqsc graphitic quartzite
DPqsc graphitic schist
DPqsc quartz-muscovite schist
Symbols
Thrust Fault
Fault
Strike / Dip
Geological Contact
Access Road
Quartz Claim Outline
YB41386 Grant Number
Scale 1:10 000
1 cm = 100m
0
200
400 m
Resource Engineering
TAM Claims Geology Map
David A. Downing, P. Eng.
17 August 1993

may be marble between the quartzite and thrust plane. Along the ridgetop to the north where the thrust is exposed, marble forms the hanging wall of the thrust.

It is not obvious from the outcrop as illustrated whether the Nasina Series stratigraphy is folded to form the two quartzite ribs or whether it is faulted to repeat the stratigraphy.

What is obvious is that at the center of the property, where the road cut and a cut formed by a bend in the creek provides a large exposure, a near vertical shear zone has considerable limonite and clay alteration. Associated with the limonite and clay alteration are areas of brecciation and silicification. Assays of this material run as high as 2 gm/t gold and 48 gm/t silver.

The shear zone had six 1m chip samples collected at an equal spacing down the exposure. The sample numbers are recorded on the property geology map. The assay results are included in Appendix C.

5.0 GEOCHEMICAL SURVEY

A limited 50 sample geochemical survey was conducted to test the feasibility of using geochemical surveying to further trace the the mineralized shear zone.

A sample grid was put in place on claims TAM 5-8. The claim line was used as the baseline with stations run every 25m. Five lines of 400m were run at 100m intervals centered on the baseline.

Samples were collected every 50m except for the center portion of lines 11N & 12N where samples were collected every 25m.

B horizon soils were collected from the dry south facing slope. The samples were placed in standard brown kraft paper envelopes.

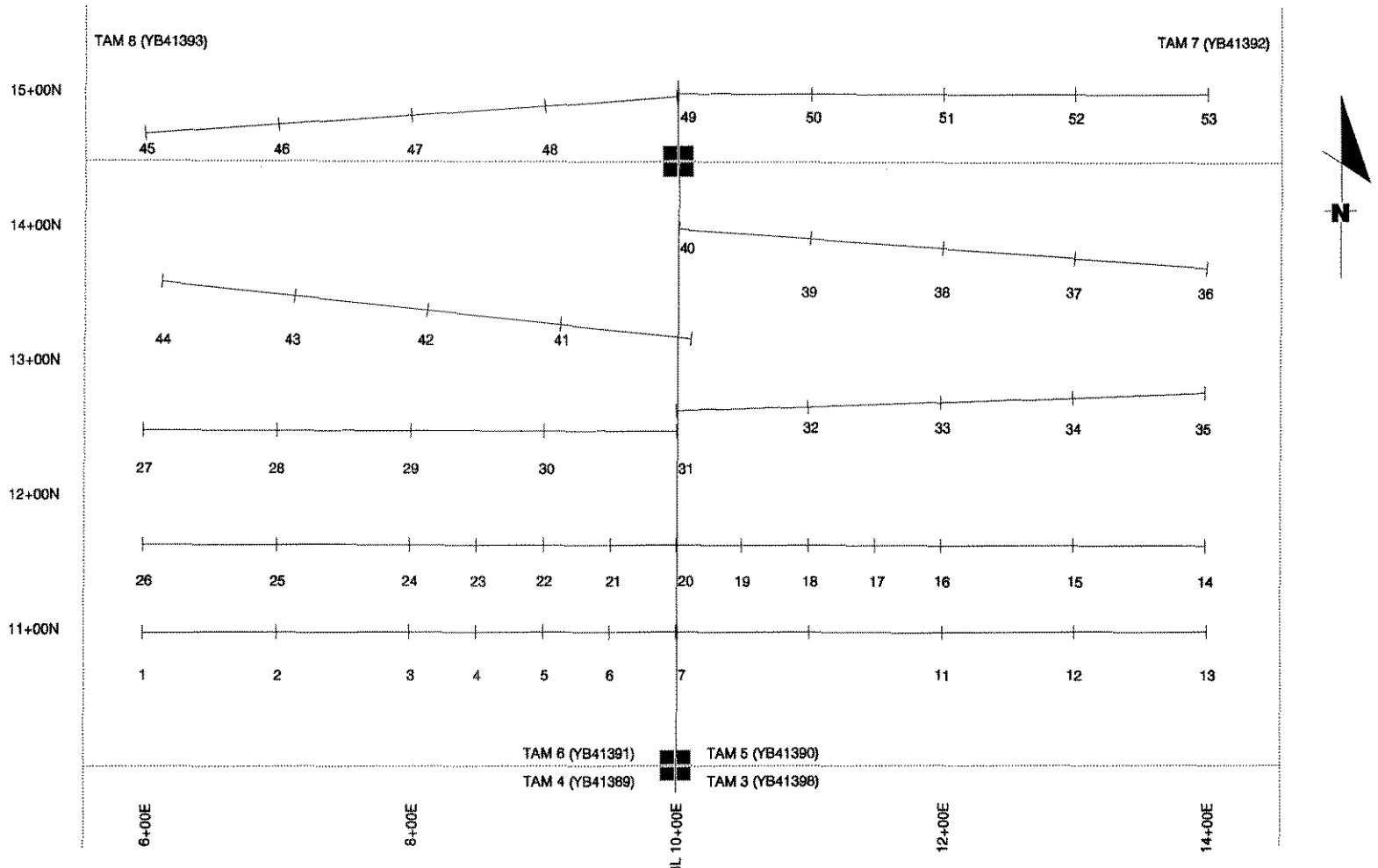
Northern Analytical Laboratories of Whitehorse, Yukon performed the geochemical analysis. The dried samples were sieved to -80 mesh and dissolved in aqua regia. Atomic adsorption analysis was completed for copper, nickel and lead.

The results were plotted on 1:5 000 scale grid maps. Due to the limited number of samples statistical analysis was abandoned for the purposes of selecting anomalous results. The results were contoured using roughly logarithmic contour intervals.

The soil sample grid and contoured results are included as the following four pages.

The results for copper, lead and nickel all show a central axis of values elevated above a lower surrounding background. Copper and nickel both returned higher values in the northeast corner.

The assay certificate is included as Appendix C.



Legend

- Claim Border
- Claim Post
- Flagged Line
- 25 Sample Numbers
- Geochemical Contour

Scale 1:5 000
1 cm = 50m

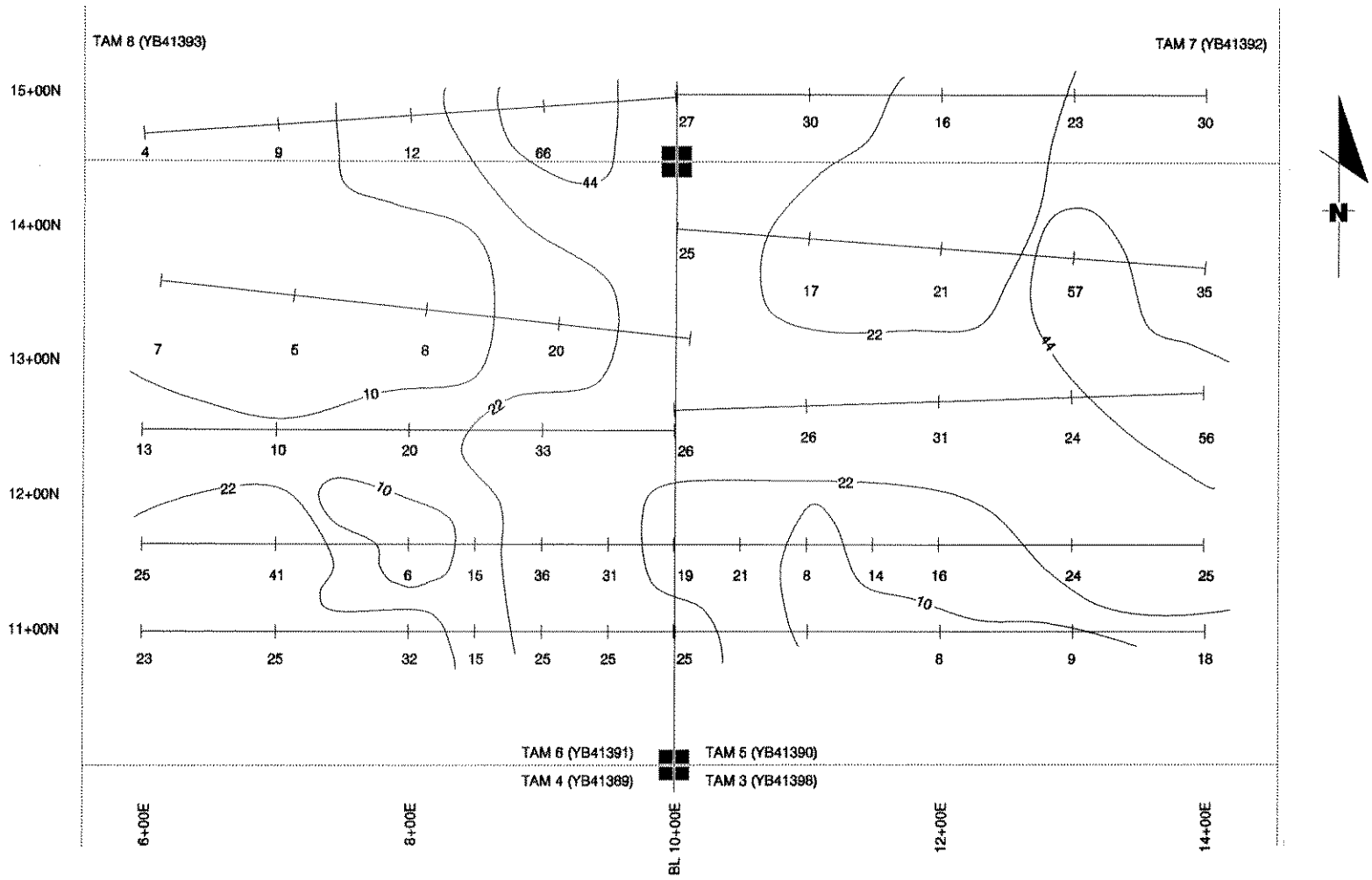
0 100 200

PROFESSIONAL ENGINEER
YUKON
DAVID A. DOWNING
TERRITORY

Resource Engineering

TAM Claims
Soil Sample Locations

David A. Downing, P. Eng. | 10 August 1993



Legend

- Claim Border
- Claim Post
- Flagged Line
- 25 Sample Value (ppm)
- 22 Geochemical Contour

Scale 1:5 000
1 cm = 50m

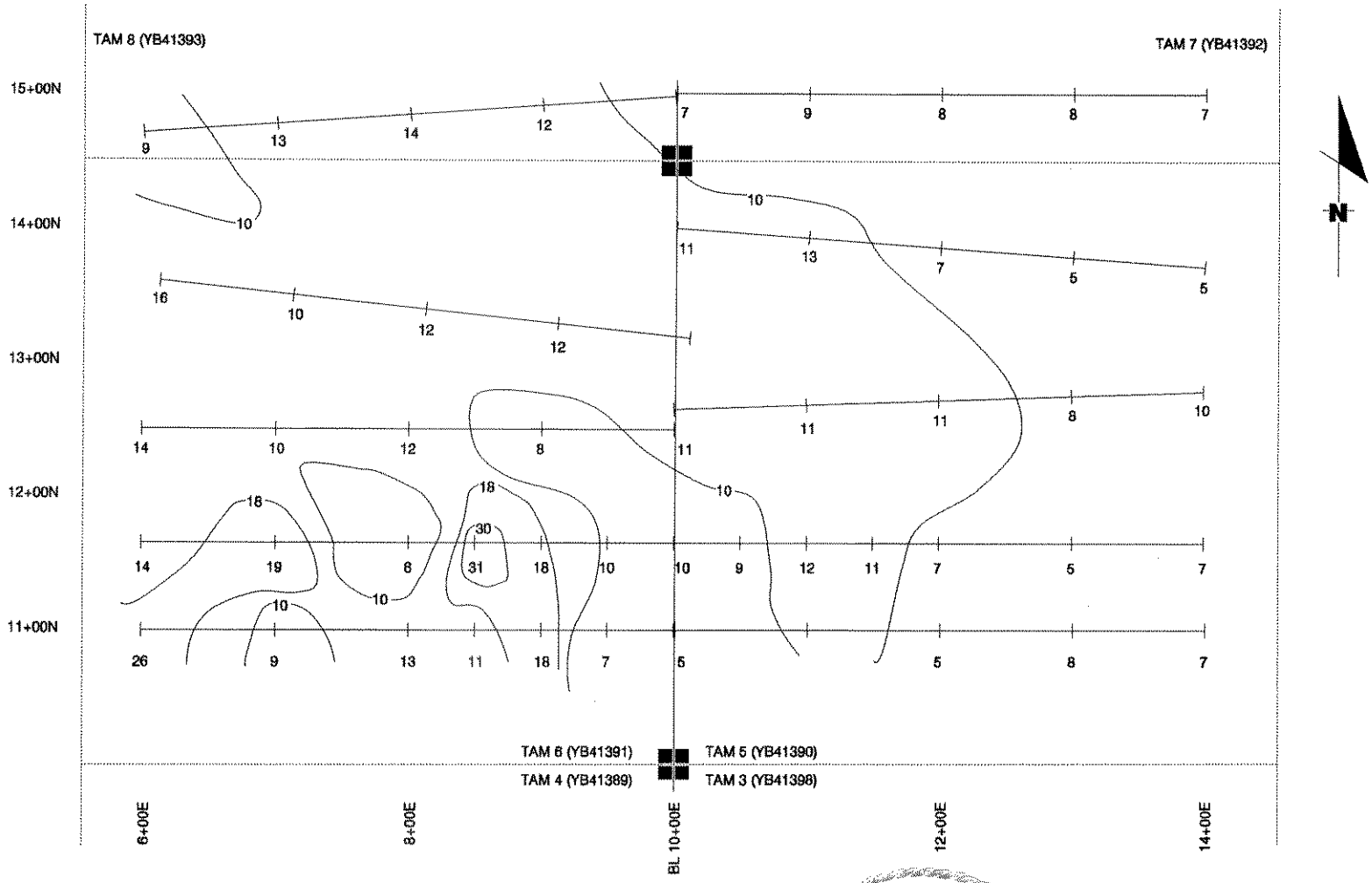
0 100 200

PROFESSIONAL ENGINEER YUKON DAVID A. DOWNING TERRITORY

Resource Engineering

TAM Claims
Copper in Soils

David A. Downing, P. Eng. | 10 August 1993



Legend

- Claim Border
- Claim Post
- Flagged Line
- 25 Sample Value (ppm)
- Geochemical Contour

Scale 1:5 000
1 cm = 50m

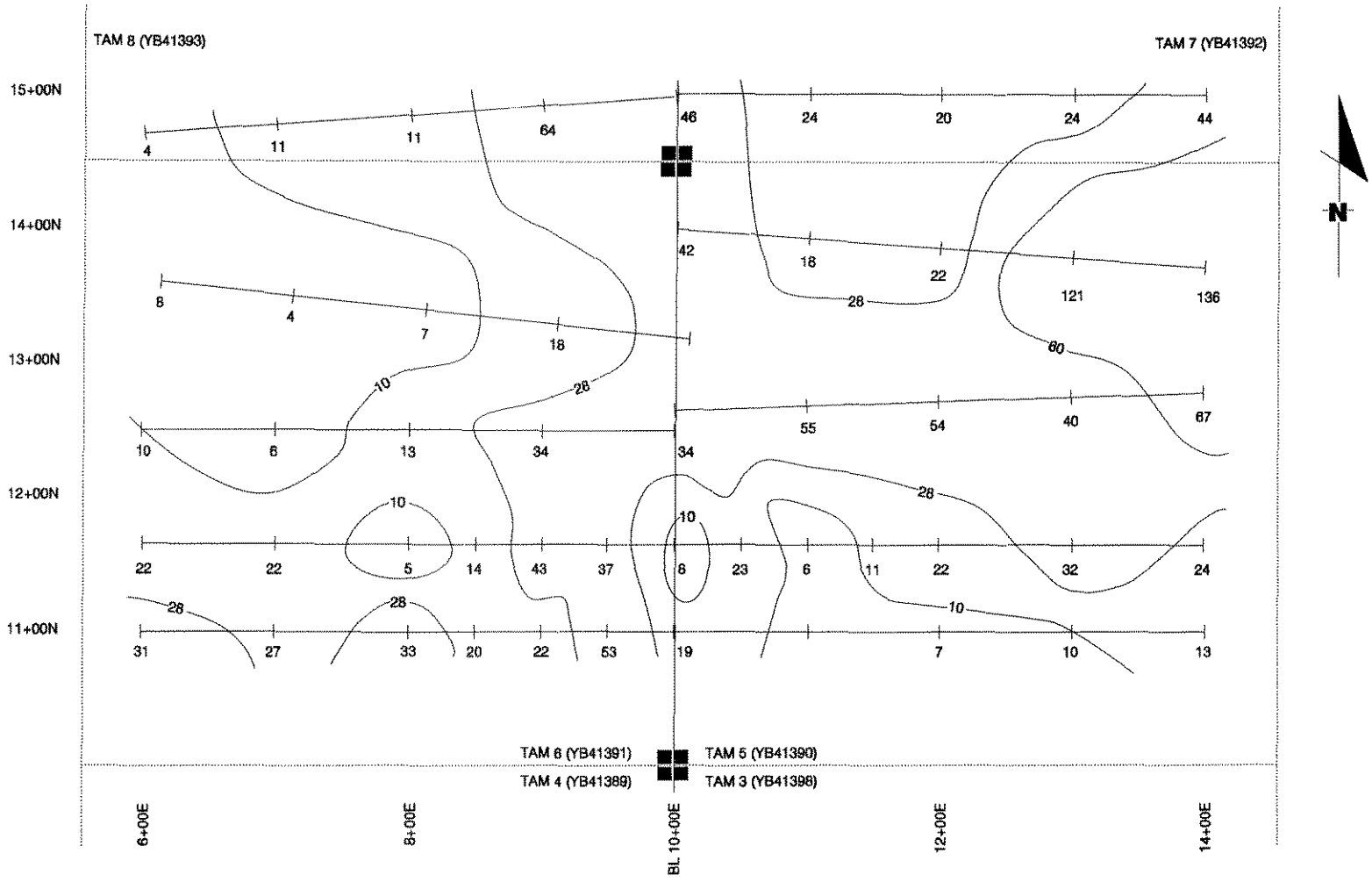
0 100 200

PROFESSIONAL ENGINEER

Resource Engineering

TAM Claims
Lead in Soils

David A. Downing, P. Eng. | 10 August 1993



Legend

- Claim Border
- Claim Post
- Flagged Line
- 25 Sample Value (ppm)
- Geochemical Contour

Scale 1:5 000
1 cm = 50m

0 100 200

PROFESSIONAL ENGINEER YUKON TERRITORY DAVID A. DOWNING

Resource Engineering

TAM Claims
Nickel in Soils

David A. Downing, P. Eng. | 10 August 1993

6.0 CONCLUSIONS & RECOMMENDATIONS

A shear zone in Nasina Series metamorphosed sediments displaying limonite and clay alteration is brecciated and locally silicified. The zone has elevated levels of gold, copper, silver and nickel.

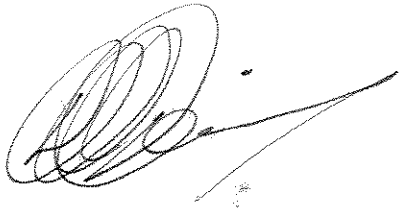
The shear zone occurs near the base of a thrust sheet.

From the small amount of initial work completed and the limited exposure it is difficult to associate the occurrence with a specific model type.

Soil sampling was effective at locating the axis of the shear, as well as another area of interest to the northeast.

The soil sampling should be extended to completely cover claims TAM 5-8.

A VLF-EM geophysical survey should be conducted to attempt to trace the graphitic shear zone both to the north and south.



TAM 1-8 Claims Assessment Expenses
Prospector: D.A. Downing
Project: Top of The World (Browns Creek)

Date: 17-Aug-93

Date	Item	Rate ($/day)	Man Days	Amount ($)
26,27 - Aug -92	Labor - D. Downing	550.00	2	1 100.00
26,27 - Aug -92	Living expense	50.00	2	100.00
17,18 - Jul - 93	Labor - D. Downing	550.00	2	1 100.00
17,18 - Jul - 93	Labor - E. Aasman	100.00	2	200.00
17,18 - Jul - 93	Labor - D. Booy	100.00	2	200.00
17,18 - Jul - 93	Living expense (3 people)	50.00	6	300.00
17,18 - Jul - 93	Labor - D. Downing	550.00	2	1 100.00
17,18 - Jul - 93	Labor - E. Aasman	100.00	2	200.00
17,18 - Jul - 93	Labor - D. Booy	100.00	2	200.00
17,18 - Jul - 93	Truck rental	64.00	2	128.00
5-Aug-93	Assays (WO#13985)			621.94
5-Aug-93	Assays (WO#13567)			115.56
16,17 - Aug -93	Data analysis, drafting & report	550.00	2	1 100.00

Total 6 465.50

8.0 REFERENCES

ABOTT, J.G. 1983: Origin of the Clinton Creek asbestos deposit; in Yukon Exploration and Geology 1982, Indian and Northern Affairs Canada, Whitehorse, p. 18 - 25

DEBICKI, R.L. (compiler) 1983a. Yukon Mineral Industry 1941 to 1959. Indian and Northern Affairs Canada, 136 p.

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APPENDIX A

Personnel

Supervisor:

David A. Downing, P. Eng.
RR1 S18 C23
Whitehorse, Yukon Y1A 4Z6
(403)633-3782

Soil Samplers:

Ezekiel Aasman
RR1 S18 C26
Whitehorse, Yukon Y1A 4Z6

David Booy
358 Sales Drive
Woodstock, Ontario N4S 8K3

Appendix B

Statement of Qualifications
David A. Downing, P.Eng.

Statement of Qualifications

I, David A. Downing, of 14 Buttercup Place, in the City of Whitehorse, in the Yukon Territory, Canada, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geological Engineer with Resource Engineering.

2. THAT I have an office located at 14 Buttercup Place, in the City of Whitehorse, in the Yukon Territory, Canada with postal address RR 1, Site 18, Compartment 23, Y1A 4Z6.

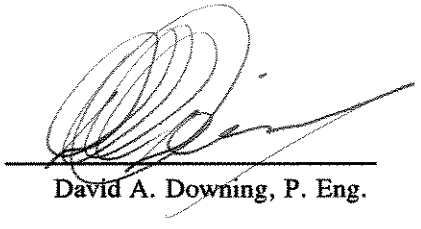
3. THAT I am a graduate of Queen's University (Kingston), located at Kingston, Ontario, Canada, where I obtained a Bachelor of Science (Eng.) in Geological Engineering (Exploration and Mineral Resource Evaluation) in 1978.

4. THAT I am a registered Professional Engineer (Geological) in the Association of Professional Engineers of Yukon Territory - #0873.

5. THAT I have practiced my profession as an engineer and geologist for the past sixteen years.

6. THAT I have personally prepared the report **TAM #1-8 Claims Geological & Geochemical Survey 1993**,.

Dated this 17th day of August 1993, in the City of Whitehorse, Yukon Territory



David A. Downing, P. Eng.

APPENDIX C

Assay Certificate

Northern Analytical Laboratories ltd.

06-Aug-93date | Assay Certificate | Page1

Resource Engineering | WO 13985

Sample	Au ppb	Cu ppm	Pb ppm	Ni ppm
72904A	8			
72905A	7			
72906A	18			
72907A	43			
72908A	24			
72909A	424			
72911A	12			
72912A	10			
72913A	9			
72914A	5			
72915A	7			
72919A	8			
BC 01		23	26	31
BC 02		25	9	27
BC 03		32	13	33
BC 04		15	11	20
BC 05		25	18	22
BC 06		25	7	53
BC 07		25	5	19
BC 11		8	5	7
BC 12		9	8	10
BC 13		18	7	13
BC 14		25	7	24
BC 15		24	5	32
BC 16		16	7	22
BC 17		14	11	11
BC 18		8	12	6
BC 19		21	9	23
BC 20		19	10	8
BC 21		31	10	37
BC 22		36	18	43
BC 23		15	31	14
BC 24		6	8	5
BC 25		41	19	22
BC 26		25	14	22
BC 27		13	14	10
BC 28		10	10	6
BC 29		20	12	13
BC 30		33	8	34
BC 31		26	11	34
BC 32		26	11	55
BC 33		31	11	54

Certified by

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

Northern Analytical Laboratories ltd.

Resource Engineering WO 13985

Sample	Au ppb	Cu ppm	Pb ppm	Ni ppm
BC 34		24	8	40
BC 35		56	10	67
BC 36		35	5	136
BC 37		57	5	121
BC 38		21	7	22
BC 39		17	13	18
BC 40		25	11	42
BC 41		20	12	18
BC 42		8	12	7
BC 43		5	10	4
BC 44		7	16	8
BC 45		4	9	4
BC 46		9	13	11
BC 47		12	14	11
BC 48		66	12	64
BC 49		27	7	46
BC 50		30	9	24
BC 51		16	8	20
BC 52		23	8	24
BC 53		30	7	44
BC101		42	5	68

Sample #	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm
BC 91001	----------	23.5	61	951	349	1241
BC91003	----------	23.8	31	1846	387	1552
BC91005	----------	5.4	<1	945	134	901
BC91011	----------	21.90	<1	2667	63	1799
BC91013	34	----------				
BC91016	0.061 oz/ton	1.411 oz/ton	<1	4092	76	24