1999 GEOLOGICAL and GEOCHEMICAL ASSESSMENT REPORT ON THE LIGHTNING/TEMPEST PROPERTY (Lightning 1-152, Tempest 1-60 Claims)

Feb. 24, 2000

094 081

Mayo Mining District
N.T.S. 105N/10

Latitude: 63 °38' North
Longitude: 133°07' West

Owner: NovaGold Resources Inc.

Author: Carl M. Schulze

Date of work: July 1999

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 $ 13 000 .

M. B[illegible]

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

TABLE OF CONTENTS

SUMMARY 1
CHAPTER 1: INTRODUCTION 2
1.1 Introductory Statement 2
1.2 Location and Access 2
1.3 Physiography and Vegetation 2
1.4 Regional Exploration History and Competitor Activity 2
1.5 Property Exploration History 4
1.6 Work Program 4
1.6.1 Sample Preparation and Assay Procedure 4
1.6.2 Personnel 5
CHAPTER 2: GEOLOGY 7
2.1 Regional Geology 7
2.2 Property Geology 7
CHAPTER 3: MINERALIZATION 14
CHAPTER FOUR: CONCLUSIONS 16
CHAPTER FIVE: RECOMMENDATIONS 17
BIBLIOGRAPHY 18
STATEMENT OF QUALIFICATIONS 19

LIST OF TABLES

		Page
Table 1	Status of Claims after 1999 Filing	4
Table 2	Stratigraphic Column: Lightning Property	9

LIST OF FIGURES

Figure 1	General Location Map	3
Figure 2	Government Claim Map	6
Figure 3	Regional Geologic Setting	10
Figure 4	Property Geology and Sample Location Map	11
Figure 5	Detail: Lightning Claims Sample Locations and Property Geology	12
Figure 6	Detail: Lightning/Tempest Claims Sample Locations and Property Geology	13

APPENDICES

Appendix 1	Applicable Expenditures for Assessment Credits
Appendix 2	Rock Sample Geochemical Results
Appendix 3	Silt Sample Geochemical Results
Appendix 4	Soil Sample Geochemical Results

SUMMARY

NovaGold Resources Inc. holds a 100% interest in the Lightning/Tempest Property, consisting of the LIGHTNING 1-152 and TEMPEST 1-60 Claims, roughly 180 km north of Ross River, Yukon. The property is located within the Selwyn Basin which consists of a broad package of Paleozoic sediments extending ESE from north-west of Dawson City to the Yukon-NWT border north of the major NW-SE trending Tintina Fault Zone. This stratigraphy consists of shallow shelf to off-shelf marine clastic and chemical sediments, as well as basinal clastic sediments derived from the Ancient North American Platform to the northeast. Age of deposition ranges from Late Precambrian to Permian. The Mid-Cretaceous Tombstone-Tungsten Suite has been emplaced into Selwyn basin stratigraphy, and occurs as an ESE trending belt extending for over 500 kilometres from the Alaskan border to the Yukon-NWT border. Intrusives are believed to control much of the economic gold mineralization within the Selwyn Basin.

Extensive thrust faulting began during Late Jurassic time, resulting in creation of an ESE trending, south dipping compressional regime, followed by an extensional tectonic regime marked by high angle orthogonal faults.

The Lightning/Tempest Property is underlain by a WNW-trending sequence of thrust-faulted members of Earn Group chert pebble conglomerate, greywacke and shale, and Road River Group shale and phyllite. Several altered quartz porphyritic monzonite dikes, including a set just north of the northern fault, extend roughly parallel to stratigraphy. Minor diorite and lamprophyre dikes occur at several locations.

Closely spaced reconnaissance traversing and local detailed exploration have revealed several broad gold geochemical anomalies across the property. The most significant is a six square kilometre area of strongly anomalous gold values in silt along an ESE trending lineament within northern parts of the property. Coincident gold-silver anomalies with values to 300 ppb Au and 118 gpt Ag were returned from this zone. Sampling of the northern dike occurrence returned values to 735 ppb Au, with low silver values, implying a separate local source for coincident gold-silver anomalies.

Geological mapping and geochemical sampling in 1999 indicate a local intensification of the compressional regime underlying the northern area of the property. The lineaments have been interpreted as east-southeast trending, south dipping thrust faults with possible transpressional reactivation. Results from 1999 exploration roughly one kilometre south-west of the main dike occurrence indicate an east-southeast trending, south dipping thrust fault emplacing Earn Group strongly graphitic black shale atop underlying Road River group phyllite and shale. Well developed limonitic quartz and quartz-carbonate stockwork and veining extends across the contact. The strong graphitic alteration suggests significant tectonic movement occurred along this fault plane, associated with substantial hydrothermal fluid emplacement.

This thrust fault may be one of several similar subparallel thrust faults in this region acting as conduits for fluid movement and possible subsequent metal deposition. Soil and silt sampling in 1999 delineated a broad 1400m x 500m gold and pathfinder element anomaly coinciding with the interpreted thrust fault southwest of the main dike occurrence. The anomaly is comprised of consistently weakly anomalous gold values to 35 ppb Au with moderately anomalous silver to 9.5 gpt Ag, with anomalous zinc, antimony and arsenic values. Abundant ferricrete occurs at specific elevations along streams draining the area. Similar anomalous gold and pathfinder element values were returned from westward extensions of this fault and the next fault contact to the north, proximal to the dike and coincident gold and silver-in-silt showings.

The Lightning/Tempest Property contains sizeable geochemical anomalies suggestive of significant deep-seated mineralized settings. However, a commitment must be made towards an exploration program capable of delineating deep-seated or overburden covered prospects through staged exploration phases. An initial phase of surface exploration, including grid establishment, channel sampling, geophysical surveying, and trenching should be undertaken to establish viability of drill targets. Subsequent programs will be based on results obtained.

CHAPTER 1: INTRODUCTION

1.1 Introductory Statement

The Lightning Property consists of 212 contiguous quartz mining claims (Lightning 1-152 and Tempest 1-60) covering a 47 square kilometre area within NTS Sheet 105N/10, in the Mayo Mining District (Fig. 1). The claims are 100% held by NovaGold Resources Inc.

The 1999 exploration program involved geological mapping, rock, soil and silt sampling across previously delineated geochemically anomalous areas.

1.2 Location and Access

The Lightning Property is located roughly 180 kilometres north of Ross River, Yukon Territory, and roughly 150 kilometers east of Mayo, Yukon. The property is centered at 63°68' North latitude, 133°07' West longitude on NTS Map Sheet 105N/10.

Access is by helicopter from a base camp located at Fairweather Lake roughly ten kilometers to the south. Accommodations are available at Swan Lake Lodge thirty-five kilometres to the northwest.

1.3 Physiography and Vegetation

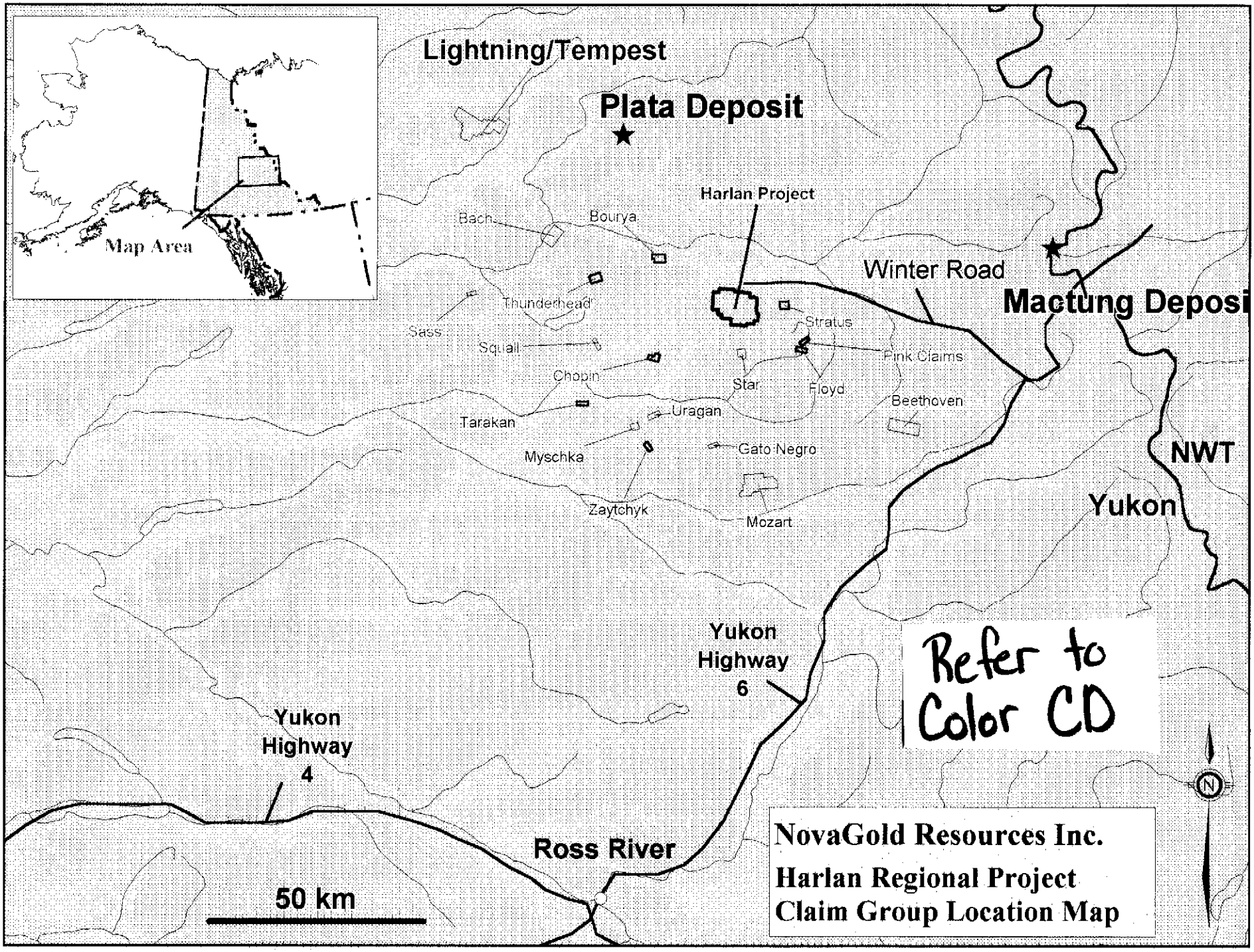
Property topography consists of fairly rugged mountains of moderate elevation with a prominent NW-SE trending ridge attaining 1700m of elevation across northern regions. Rubblecrop and talus with fairly abundant outcrop cover higher elevations.

Lower elevations are covered by typical cordilleran boreal spruce and fir forest grading into stunted conifers and buckbrush towards the tree line. Alpine tundra vegetation covers higher elevations.

1.4 Regional Exploration History and Competitor Activity

The property is located within a large underexplored portion of the Yukon. Several small claim blocks covering zinc in soil anomalies staked by Mr. R.Berdahl of Whitehorse, Yukon, were allowed to lapse by early 1997. The locations of these blocks are currently covered by the Lightning/Tempest property. The Plata lead-zinc property is located roughly fifty kilometers to the east. Limited exploration and staking of similar occurrences to the west of this has been done.

Approximately 400 claims, primarily the Gotcha and Gotit Claims were tied onto the west, north, and south boundaries of the Lightning/Tempest Property in early 1998 by International Kodiak Resources. International Kodiak conducted an airborne survey across their property and plan further exploration in 2000.


Lightning/Tempest
Plata Deposit
Harlan Project
Bach
Bourya
Winter Road
Mactung Deposi
Thunderhead
Sass
Squall
Stratus
Pink Claims
Chopin
Star
Floyd
Beethoven
Uragan
Tarakan
Myschka
Gato Negro
NWT
Yukon
Zaytchyk
Mozart
Yukon
Highway
6
Refer to
Color CD
Yukon
Highway
4
Ross River
50 km
NovaGold Resources Inc.
Harlan Regional Project
Claim Group Location Map
Map Area

1.5 Property Exploration History

Baritic and pyritic sediments and strongly limonitic float encountered during reconnaissance traversing by Viceroy Exploration (Canada) Inc. (VEC) led to the staking of the Lightning 1-12 Claims in June 1997. A series of stratigraphically controlled iron seeps along the north flank of the ridge roughly six kilometres to the east led to the staking of the Tempest 1-12 Claims. Assay results of silt sampling revealing a widespread gold anomaly led to the addition of the Lightning 13-152 Claims and Tempest 13-60 Claims (Figure 2). Work in 1998 delineated several potential metallogenic zones across the property.

In early 1999 VEC transferred its 100% interest in the property to NovaGold Resources Inc. which performed an exploration program in July.

Table 1 below lists detailed claim status, including assessment status and expiry dates. Figure 2 is a Claim Location Map showing recorded claim locations.

Table 1: Status of Lightning/Tempest Claims after 1999 Filing

Claim Name	Grant No.	Number Of Claims	Owner	New Expiry Date
Lightning 001 – 012	YB80993-104	12	NovaGold Resources Inc.	2-Sep-00
Lightning 013 – 150	YB98044-181	138		
Lightning 152	YB98183	1		
Tempest 001 – 004	YB80969-72	4		
Tempest 006	YB80974	1		
Tempest 008 – 012	YB80976-980	5		
Tempest 013 – 026	YB81387-400	14		
Tempest 027 – 060	YB97902-935	35		
Lightning 151	YB98182	1	NovaGold Resources Inc.	2-Sep-01
Tempest 005	YB80973	1		
Tempest 007	YB80975	1		

1.6 Work Program

The 1999 work program consisted of several closely spaced reconnaissance traverses involving geological mapping, rock and silt sampling, and B-horizon soil sampling at 100m intervals. Traversing was done across central and extreme north-western areas. A total of 25 rock, 113 soil and 4 silt samples were taken. All sampling was described in detail; data was entered into Microsoft Excel spreadsheet programs and combined with matching assay results.

1.6.1 Sample Preparation and Assay Procedure

Samples taken in 1999 were sent to NAL Laboratories of Whitehorse for gold fire assay analysis, then sent to IPL Laboratories in Vancouver for 30-element ICP analysis. At NAL, samples were pulverized to –100 mesh, then subject to 30-gram fire assay analysis with AA (atomic absorption) finish.

All rock, soil and silt sampling was quantifiably recorded in the field to ensure a high degree of quality control, and entered into standardized spreadsheet programs. Criteria for each sample included: sample type, width of chip sampling, lithology, alteration and mineralization, and "UTM" location. All sample locations have been tied into UTM co-ordinates and have been plotted. A sample database in Microsoft Excel format is included and can be interfaced with Autocad Map or MapInfo software programs.

1.6.2 Personnel

The following personnel did all applicable work for assessment:

Geologists:	G. Johnson	Senior Geologist
	C. Schulze	Project Geologist
	S. Soloviev	Geologist
Field Technicians:		
	S. Erdman	
Pilots:	Barry Guthrie	

LIGHTNING

TEMPEST

ASPO

0 2500 5000 ft.

0 1000 m

Scale 1 inch = 0.5 mile or 1:31,680

NovaGold Resources Inc.

LIGHTNING/TEMPEST CLAIM LOCATION MAP

DRAWN BY:	SCALE: 1/2 Mile : 1"
DATA BY: S.C.	NTS: 105 N/10
DATE: 29/02/00	FIGURE: 2

CHAPTER 2: GEOLOGY

2.1 Regional Geology

The Lightning/Tempest Property is located within the Selwyn Basin which consists of a broad package of Paleozoic sediments extending ESE from north-west of Dawson City to the Yukon-NWT border north of the major NW-SE trending Tintina Fault Zone. This stratigraphy consists of shallow shelf to off-shelf marine clastic and chemical sediments, as well as basinal clastic sediments derived from the Ancient North American Platform to the northeast. Age of deposition ranges from Late Precambrian to Permian. At least two major episodes of rifting have occurred: the first during deposition of the Late Precambrian Hyland Group sediments (Table 2), and the second during deposition of the Devono-Mississippian Earn Group sediments. These major rift zones often host poorly sorted coarse clastic sediments, such as debris flows or turbidite horizons. Several episodes of continental uplift have led to periods of increased erosion and resulting continental margin or miogeosynclinal deposition, resulting in the creation of sequences of comparatively high energy, shallow water sediments, often coarsely grained and variably calcareous. These are separated by strata formed under deeper, quieter water conditions, resulting in formation of fine clastic sediments and chert. The Mid-Cretaceous Tombstone-Tungsten Suite (95-89 Ma) has been emplaced within the Selwyn Basin. Intrusives of this suite occur along an ESE trending belt extending for over 500 kilometres from north-west of Dawson City, Yukon to the Yukon-NWT border. Intrusives are believed to control much of the economic gold mineralization within the Selwyn Basin.

Extensive thrust faulting along the entire extent of the Selwyn Basin began during Late Jurassic time, resulting in creation of a compressional regime. Most thrust faults are oriented roughly ESE, dipping to the south-west, subparallel to the overall ESE trend of stratigraphy. Several major regional thrust faults were formed including the Dawson Thrust, Tombstone Thrust, and Robert Service Thrust. This regional lineation has been overprinted by a slightly less pronounced north-northwest trending lineation, marked by high angle orthogonal faults suggesting the compressional regime was followed by an extensional tectonic regime.

2.2 Property Geology

The property overlies a sequence of WNW trending Devonian to Mississippian Earn Group clastic sediments suggesting a compressional regime (Fig. 3). Towards the northeast, Earn Group sediments consist primarily of chert pebble conglomerate with lesser greywacke and sandstone (Fig. 4 - 6). The clasts are largely derived from Road River Group chert and shale. Elsewhere on the property, Earn Group sediments tend to be more finely grained, consisting of shale to siltstone, locally graphitic, with localized chloritic members. Two major units of Road River Group chert, phyllite, siltstone, and shale overlie this sequence, probably along south dipping thrust fault contacts. These sediments, often weakly calcareous, have undergone brecciation with subsequent quartz stockwork development near these contacts. Weakly to strongly baritic, variably pyritic sediments occur along western portions of the base of the northern Road River Group member. To the east, a series of iron seeps at roughly the same elevation along most streams along the north flank of the prominent ridge marks the thrust contact.

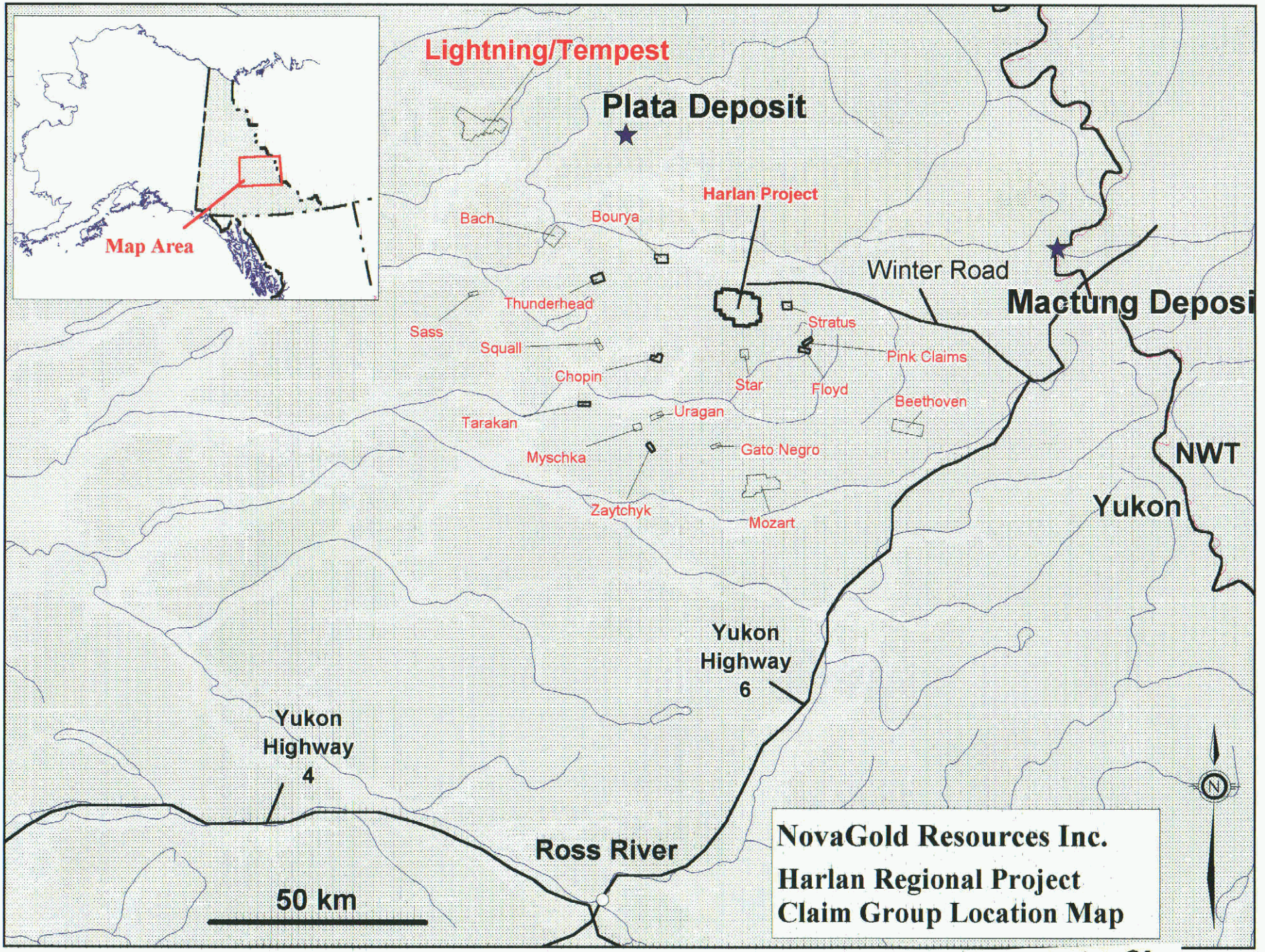
Several narrow quartz porphyritic monzonite dikes comprise a 100m wide WNW trending zone within Earn Group sediments slightly north of the northern thrust fault contact. Several other similar dikes occur within the southern Road River Group unit. At least two lamprophyre occurrences have been identified as well as fairly abundant silicified pyritic diorite float near the western baritic sediments.

A pronounced WNW trending lineament occurs north of the northern thrust fault, roughly parallel to local stratigraphy (Fig. 5, 6). Similar lineaments occur across central and extreme southern areas, often near dike occurrences. These appear to have been offset by a largely NNE trending extensional fault regime.

Results from 1999 geological mapping and geochemical sampling within north-central areas continue to indicate the presence of an east-southeast trending, south dipping thrust fault emplacing Earn Group strongly graphitic black shale atop underlying Road River group phyllite and shale. Well developed quartz and quartz-carbonate stockwork and veining extend across the contact, associated with strong limonitic staining and local pyrite boxwork. The strong graphitic alteration and mineralized veining suggest significant tectonic movement occurred along this fault plane, together with substantial hydrothermal fluid emplacement. This thrust fault may be one of several similar subparallel thrust faults in this region acting as conduits for fluid movement and possible subsequent metal deposition.

TABLE 2: LIGHTNING PROPERTY STRATIGRAPHIC COLUMN

Age	Group	Formation (Lithology)	Geology Map Designation	Rock Code	Description
Mid-Cretaceous	Tombstone Plutonic Suite (Selwyn Plutonic Suite)	Monzonite, Quartz Monzonite coeval South Fork Volcanics	Kqm, Kg	QM, MO	Felsic to intermediate quartz monzonitic, monzonitic, to quartz dioritic intrusives. The name "Selwyn Suite" often applies to eastern portion of the suite. Anvil Intrusives and coeval South Fork Volcanics now considered part of Tombstone Suite; varying phases due to different fractionation states rather than a separate major intrusive event.
Devonian - Mississippian	Earn Group	Prevost Formation	DMp (Dme)	CH, ARG ARGG	Brown weathering shale, grey to grey-brown weathering chert-pebble conglomerate, dark grey-black chert-quartz sandstone.
Devonian	Earn Group	Portrait Lake Formation	Dp (Dme)	CH, ARG, ARGG	Argillite, chert, minor sandstone and conglomerate. Black siliceous argillite form lower member. May contain minor greywacke, siltstone and baritic horizons.
Ordovician-Early Devonian	Road River Group	Steel Formation	(OSDr)	SS	Weakly to moderately calcareous orange weathering mudstone to siltstone, often bioturbated reflecting oxygenated bottom water conditions. Baritic horizons often form distinctive upper members near top of formation.
Ordovician-Early Devonian	Road River Group	Duo Lake Formation	Osd (OSDr)	CH, SLT, ARG	Black argillite and massive to thick bedded chert, weathers bluish white, local tan limonitic weathering.


Lightning/Tempest
Plata Deposit
Harlan Project
Bach
Bourya
Thunderhead
Sass
Squall
Chopin
Tarakan
Myschka
Zaytchyk
Uragan
Gato Negro
Mozart
Star
Floyd
Stratus
Pink Claims
Beethoven
Winter Road
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NWT
Yukon
Yukon Highway 6
Yukon Highway 4
Ross River
50 km
Map Area
N
NovaGold Resources Inc.
Harlan Regional Project
Claim Group Location Map

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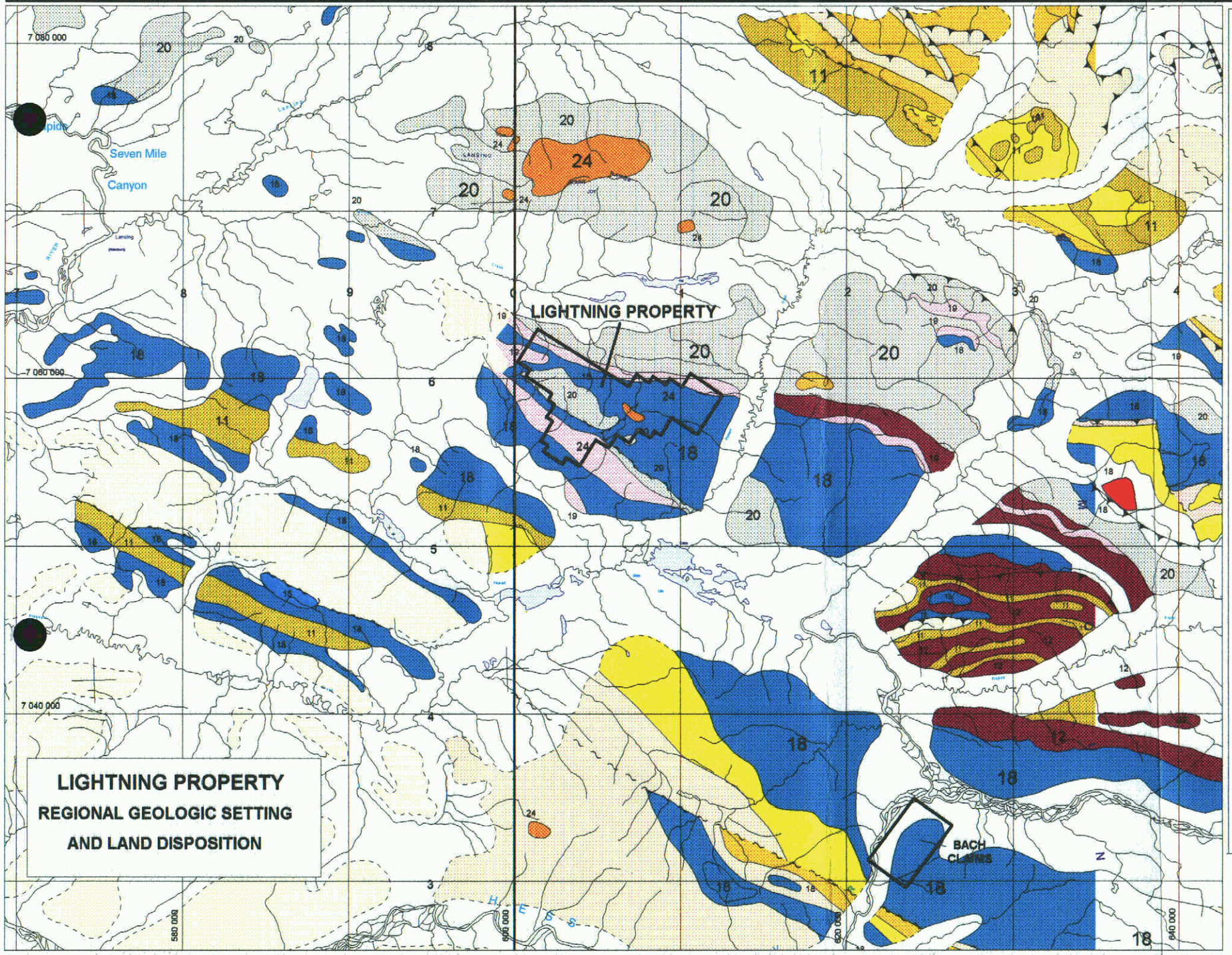

LIGHTNING PROPERTY
REGIONAL GEOLOGIC SETTING AND LAND DISPOSITION

GEOLOGICAL LEGEND

CENOZOIC

Quaternary

26 — Unconsolidated till, and alluvium

MESOZOIC

Cretaceous

24 — granite, quartz monzonite, syenite

PALEOZOIC

Permian

22 — Chert, cherty limestone, limestone

21 — Shale, siltstone, limy siltstone

Upper Pennsylvanian to Permian

"27" — basalt flows, tuffs, slate, phyllite, chert, carbonaceous shale.

Carboniferous to Permian

20 — Thin bedded limestone, minor black shale, chert, chert pebble conglomerate

Mississippian ?

19 — Keno Hill quartzite: quartzite, minor slate phyllite, argillaceous quartzite

Devonian

18 — "Lower Schist", argillite, slate, phyllite minor phyllite, limy quartzite (probably Earn Group equivalent)

17 — EARN GROUP: Black shale, argillite, slate, limestone, chert, quartzite, Chert-pebble conglomerate

16 — Felsic metavolcanics, quartz porphyry (part of lower schist?)

15 — Black platy limestone, argillite, and, interbedded chert

14 — Limestone, massive to thin bedded

13 — Limestone, dolomite

Ordovician - Silurian

12 — ROAD RIVER FORMATION: Interbedded chert and argillit, minor quartzite, chert pebble conglomerate, Steele Formation (siltstone)

RABBITKETTLE FORMATION

11 — Dolomite and limestone, black platy argillaceous limestone and dolomite

10 — Varicoloured slate

9 — Quartzite, slate, phyllite, limestone

LATE PRECAMBRIAN - EARLY CAMBRIAN

HYLAND GROUP: phyllite, calcareous phyllite, limestone, quartzite

0 5 10 Kilometres

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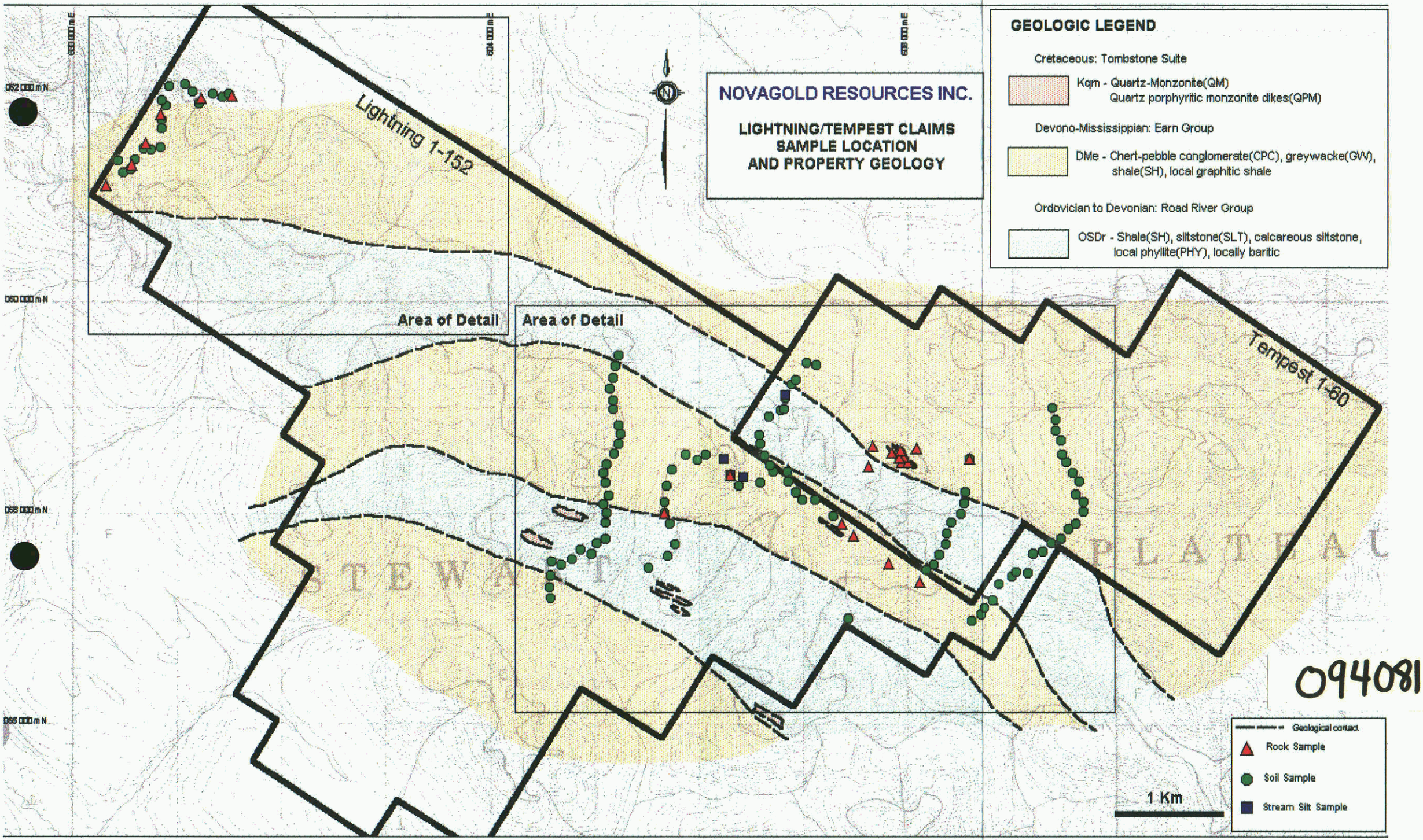
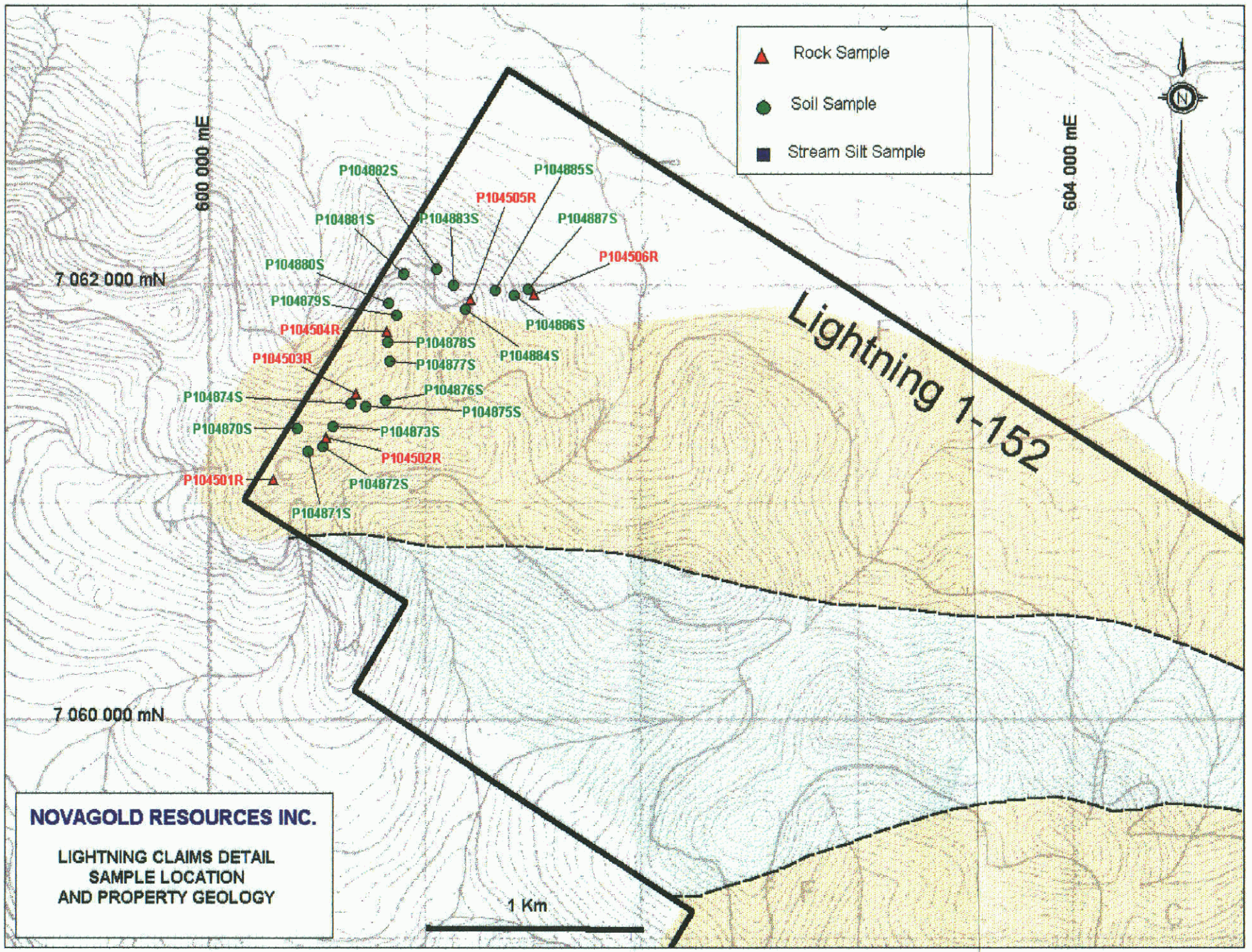

NOVAGOLD RESOURCES INC.
LIGHTNING/TEMPEST CLAIMS
SAMPLE LOCATION
AND PROPERTY GEOLOGY
GEOLOGIC LEGEND
Cretaceous: Tombstone Suite
Kqm - Quartz-Monzonite(QM)
Quartz porphyritic monzonite dikes(QPM)
Devono-Mississippian: Earn Group
DMe - Chert-pebble conglomerate(CPC), greywacke(GW), shale(SH), local graphitic shale
Ordovician to Devonian: Road River Group
OSDr - Shale(SH), siltstone(SLT), calcareous siltstone, local phyllite(PHY), locally baritic
Lightning 1-152
Tempest 1-60
Area of Detail
Area of Detail
Geological contact
Rock Sample
Soil Sample
Stream Silt Sample
1 Km
094081


Rock Sample
Soil Sample
Stream Silt Sample
600 000 mE
604 000 mE
7 062 000 mN
7 060 000 mN
Lightning 1-152
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P104885S
P104505R
P104881S
P104883S
P104887S
P104506R
P104880S
P104879S
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P104886S
P104884S
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P104502R
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NOVAGOLD RESOURCES INC.
LIGHTNING CLAIMS DETAIL
SAMPLE LOCATION
AND PROPERTY GEOLOGY

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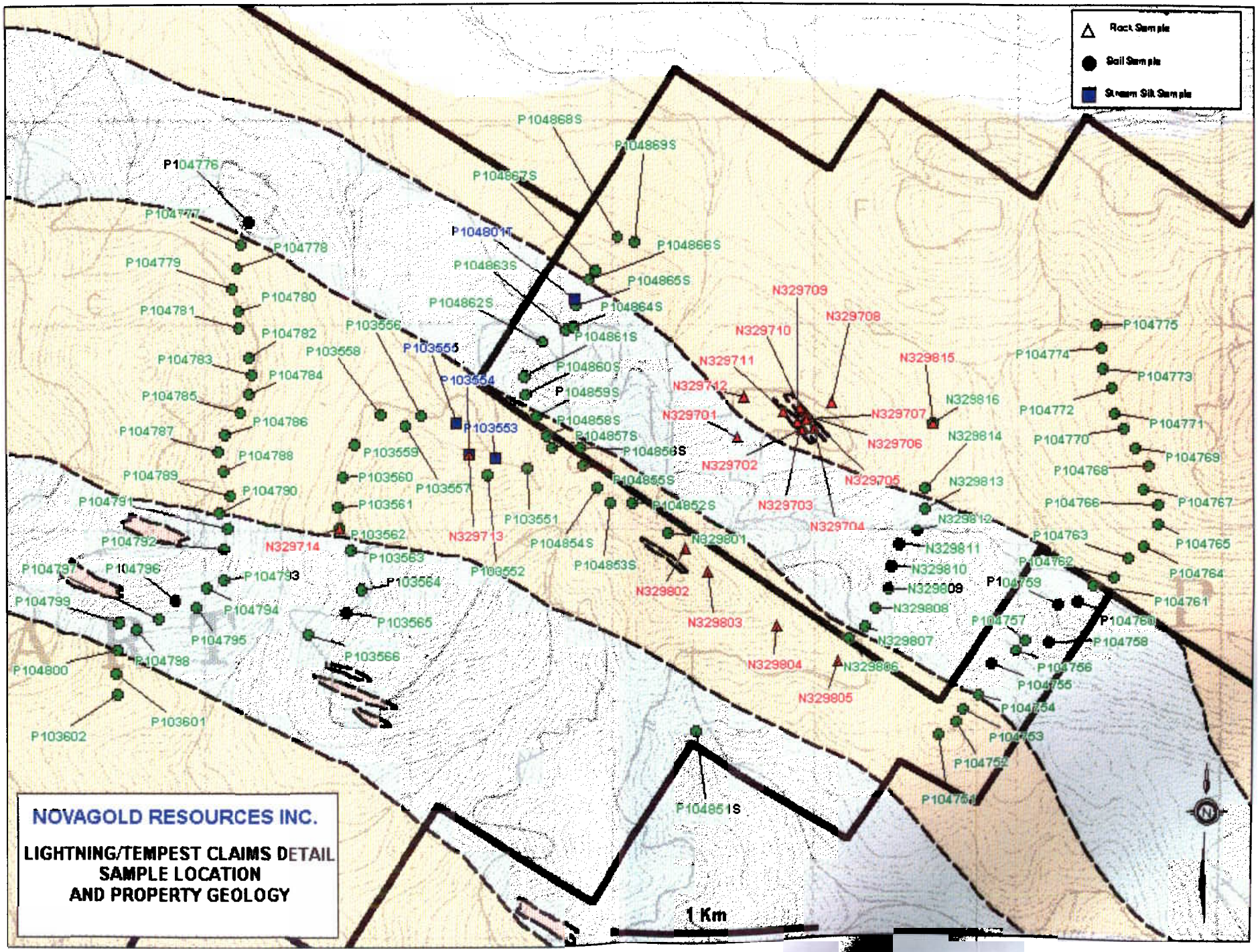
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Soil Sample
Stream Silt Sample
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NOVAGOLD RESOURCES INC.
LIGHTNING/TEMPEST CLAIMS DETAIL
SAMPLE LOCATION
AND PROPERTY GEOLOGY
1 Km
N

CHAPTER 3: MINERALIZATION

The structural setting of the Lightning/Tempest Property is favourable for emplacement of significant mineralization. The Earn and Road River Group sediments near the fault contacts have undergone extensive quartz stockworking with moderate limonitic staining. The northern quartz monzonite dikes just south of the lineament have undergone weak argillic alteration and silicification, and contain 1-2% fine to medium grained disseminated pyrite. The greenish dike material hosts fracture controlled quartz stockwork zones and may indicate fine grained scorodite. Values to 735 ppb Au with low silver values were returned from these dikes (Plate 2).

Towards the north boundary, silicified diorite dike float within the Lightning 1-12 Claims along the headwaters of a stream returning anomalous gold and pathfinder elements containing up to 5% pyrite and minor pyrrhotite and arsenopyrite, returned low values. Values to 165 ppb Au were returned from a lamprophyre dike. Minor strongly limonitic float identified at the Berdahl Showings failed to return significant metal values. No significant values were returned from the ferricrete showings.

Encouraging results have been returned from detailed stilt sampling across the property, including definition of a northern anomalous area covering six square kilometers along a 4.5 kilometre trend. Within this, elevated gold values to 100 ppb Au with silver values to 118 gpt Ag occur along the pronounced northern lineament, suggesting a possible mineralized corridor up to twelve kilometres long. Weakly elevated gold values to 50 ppb Au were returned from soil sampling across this lineament. Elevated gold and silver values were returned from detailed silt sampling at a specific elevation within chert pebble conglomerate along this corridor in the northeastern area. Also along this lineament towards the west margin of the Tempest 1-12 Claims, detailed silt sampling returned values to 300 ppb Au and > 100 gpt Ag with strongly elevated mercury, and elevated arsenic and antimony values. Local hand trenching revealed quartz stockwork zones within Earn Group greywacke, which returned values to 40 ppb Au; this is probably not the source of the pronounced anomalies. The northern quartz monzonite dikes occur nearby and are probably related to the lineament. However, associated low silver values suggest the dikes are not the direct source of the coincident gold-silver anomalies.

A number of similar gold-silver anomalies in silt returning up to 90 ppb Au occur along a subparallel lineament near the south property boundary. A third area of anomalous gold in silt values to 90 ppb occurs along a north-south trending lineament in the central area. These widespread strong silt anomalies suggest significant structurally controlled subsurface mineralization may exist at several localities within the property. Although base metal values are locally weakly elevated, the high precious metal values indicate a predominantly gold-silver source, as opposed to a massive sulfide source with minor associated precious metal.

Rock sampling of the north-central dike showing discovered in 1998 containing several ESE trending monzonitic dikes with abundant quartz veining returned values to 706 ppb Au, with elevated antimony values to 32 ppm Sb, roughly repeating 1998 results. Minor stibnite veining also occurs, returning a value of 123 ppb Au, with 11.2 ppm Ag, 0.11% Cu, 3.09% Sb and 11 ppm Hg.

Soil and silt sampling in 1999 delineated a broad 1400m x 500m gold and pathfinder element anomaly coinciding with the interpreted thrust fault emplacing Earn Group graphitic shale onto Road River Group phyllite to shale. This occurs roughly one kilometre southwest of the main dike showing. The anomaly is comprised of consistently weakly anomalous gold values to 35 ppb Au with moderately anomalous silver to 9.5 gpt Ag (10.6 gpt Ag from silt sampling), anomalous zinc and arsenic values to 1051 ppm Zn and 200 ppm As respectively, and strongly anomalous antimony values to 50 ppm Sb. This is locally capped by an area of near background values, suggesting the anomalous area may be stratabound or structurally controlled. The anomaly is associated with an area of abundant breccia and fracture controlled quartz veining within graphitic argillite, possibly delineating a thrust fault. Abundant ferricrete occurs at specific elevations along streams draining the area. Anomalous gold values, often associated with elevated base metal and pathfinder values, were returned from previous geochemical sampling across westward

extensions of this thrust fault. Similar values were returned from the next fault contact to the north, which is proximal to both the dike showings and the strongly anomalous coincident gold and silver-in-silt anomalies.

An anomalous area was delineated along the west flank of the valley hosting strongly anomalous gold in silt values, south-west of the thrust fault anomaly. A value of 22 ppb Au/ 600m with weakly anomalous copper and zinc values was returned from soil sampling. A weak coincident gold-copper-zinc anomaly was delineated within the extreme north-western areas. The most northern sample obtained from the same area returned 90 ppb Au.

CHAPTER FOUR: CONCLUSIONS

The Lightning/Tempest Property is located within the Selwyn Basin which consists of a broad package of Paleozoic sediments extending ESE from north-west of Dawson City to the Yukon-NWT border north of the major NW-SE trending Tintina Fault Zone. This stratigraphy consists of shallow shelf to off-shelf marine clastic and chemical sediments, as well as basinal clastic sediments derived from the Ancient North American Platform to the northeast. Age of deposition ranges from Late Precambrian to Permian. Several episodes of continental uplift have led to periods of increased erosion and resulting continental margin or miogeosynclinal deposition, resulting in the creation of sequences of comparatively high energy, shallow water sediments, separated by strata formed under deeper, quieter water conditions, resulting in formation of fine clastic sediments and chert. The Mid-Cretaceous Tombstone-Tungsten Suite occurs as an ESE trending belt extending for over 500 kilometres from the Alaskan border to the Yukon-NWT border. Intrusives are believed to control much of the economic gold mineralization within the Selwyn Basin.

Extensive thrust faulting began during Late Jurassic time, resulting in creation of an ESE trending, south dipping compressional regime. Several major regional thrust faults were formed including the Dawson Thrust, Tombstone Thrust, and Robert Service Thrust. This regional lineation has been overprinted by a slightly less pronounced north-northwest trending lineation, marked by high angle orthogonal faults suggesting the compressional regime was followed by an extensional tectonic regime.

The Lightning/Tempest Property is underlain by a WNW-trending sequence of thrust-faulted members of Earn Group chert pebble conglomerate, greywacke and shale, and Road River Group shale and phyllite. Several altered quartz porphyritic monzonite dikes, including a set just north of the northern fault, extend roughly parallel to stratigraphy. Minor diorite and lamprophyre dikes occur at several locations.

Closely spaced reconnaissance traversing and local detailed exploration have revealed several broad gold geochemical anomalies across the property. The most significant is a six square kilometre area of strongly anomalous gold values in silt along an ESE trending lineament within northern parts of the property. Coincident gold-silver anomalies with values to 300 ppb Au and 118 gpt Ag were returned from this zone. Sampling of the northern dike occurrence returned values to 735 ppb Au, with low silver values, implying a separate local source for coincident gold-silver anomalies.

Geological mapping and geochemical sampling in 1999 indicate a local intensification of the compressional regime underlying the northern area of the property. The lineaments have been interpreted as east-southeast trending, south dipping thrust faults with possible transpressional reactivation. Results from 1999 exploration roughly one kilometre south-west of the main dike occurrence indicate an east-southeast trending, south dipping thrust fault emplacing Earn Group strongly graphitic black shale atop underlying Road River group phyllite and shale. Well developed limonitic quartz and quartz-carbonate stockwork and veining extends across the contact. The strong graphitic alteration suggests significant tectonic movement occurred along this fault plane, associated with substantial hydrothermal fluid emplacement.

This thrust fault may be one of several similar subparallel thrust faults in this region acting as conduits for fluid movement and possible subsequent metal deposition. Soil and silt sampling in 1999 delineated a broad 1400m x 500m gold and pathfinder element anomaly coinciding with the interpreted thrust fault southwest of the main dike occurrence. The anomaly is comprised of consistently weakly anomalous gold values to 35 ppb Au with moderately anomalous silver to 9.5 gpt Ag, with anomalous zinc, antimony and arsenic values. Abundant ferricrete occurs at specific elevations along streams draining the area. Similar anomalous gold and pathfinder element values were returned from previous sampling across westward extensions of this fault and the next fault contact to the north, which is proximal to both the dike showings and the strongly anomalous coincident gold and silver-in-silt anomalies.

Two other significant areas of coincident gold - silver anomalies in silt occur in central and southern areas respectively. These widespread anomalies suggest significant structurally controlled subsurface mineralization may exist at several locations across the property. Although base metal values are locally weakly elevated, the high precious metal and pathfinder element values indicate a gold-silver source.

CHAPTER FIVE: RECOMMENDATIONS

The Lightning/Tempest Property contains sizeable geochemical anomalies suggestive of significant deep-seated mineralized settings. However, a commitment must be undertaken towards an exploration program capable of delineating deep-seated or overburden covered prospects through staged exploration phases.

Initially, a cut and flagged grid should be emplaced across the large northern geochemical anomaly, followed by detailed geological mapping, rock and soil sampling. Particular attention should be placed on analysis of pathfinder elements, including silver, to determine the locations of different metallogenic settings. Channel sampling should be done across the mineralized northern dikes. The strongly anomalous silt occurrence returning 300 ppb Au should be extensively prospected for mineralized outcrop or rubblecrop; results may warrant a mechanized trenching program. Strong local limonitic staining and abundant ferricrete occurrences along many geochemical anomalies suggest fairly abundant sulphide mineralization. Geophysical exploration, particularly surface EM and Induced Polarization surveys across these zones, are recommended to detect this style of mineralization, as well as stratigraphic contacts.

This phase shall be focused on delineation of drill targets; if none are viable, exploration across the property should then be discontinued.

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STATEMENT OF QUALIFICATIONS

I, Carl Schulze, of the City of Whitehorse, Yukon Territory, Canada, do hereby certify that:

1) I held the position of Project Geologist with NovaGold Resources Inc. during the exploration program, and currently perform geological services for NovaGold as a geological consultant with Wolf Star Resources.

2) I graduated from Lakehead University with a Bachelor of Science Degree in Geology in 1984.

3) I have been continually active in mineral exploration since 1984.

4) I supervised the exploration program and performed part of the work described in this report.

5) I am the immediate past president of the Yukon Chamber of Mines and a member of the Yukon Prospectors' Association.

Carl M. Schulze
Consulting Geologist
Wolf Star Resources

APPENDIX 1

APPLICABLE EXPENDITURES FOR ASSESSMENT CREDITS

Lightning/ Tempest Property Expenditures
(Lightning 1-152, Tempest 1-60 Claims)

Description	Expenditures
Personnel	$3,800
Helicopter, project support	$3,250
Geochemical Analyses	$2,581
Pre-program compilation	$900
Data compilation, report writing	$2,300
Total	**$12,700**

APPENDIX 2

ROCK SAMPLE GEOCHEMICAL RESULTS

2a) ROCK SAMPLE DESCRIPTION SHEET

Sample No.	Easting	Northing	Traverse	Zone	Sample Type	Width (m)	Sample Descr.	Form.	Lithology	Modifier	Colour	Carb. Presence	Silicification	Argillic Alt.	Potassic Alt.	Phyllic Alt.	Limonite	Mineral #1	Amount %	Mineral #2	Amt %	Other Mineral	Amt %	Date	Sampler	Comments
N329701	607632	7058442	99L8	8	Rb		CG	DMe	CPC	brecciated	dkn-blk		S1				S							26.07.99	SS	limonitized thin brecciation zone
N329702	607942	7058485	99L8	8	Rb		CG	DMe	BRT in CPC	vein	white													26.07.99	SS	barite vein up to 0,5 m in thick
N329703	607954	7058571	99L8	8	Rb		CG	DMe	QTZ in CPC	vein	white		S3	A2			W							26.07.99	SS	quartz vein
N329704	608007	7058489	99L8	8	Tl		CG	DMe	QTZ in CPC	vein	tan						S							26.07.99	SS	brecciated & limonitized quartz vein
N329705	607973	7058547	99L8	8	Rb		CG	Kqm	FP	dyke	green	C1	S2	A1			M	Scor	5					26.07.99	SS	large boulders - up to 0,7 m across
N329706	607974	7058546	99L8	8	Rb		CG	Kqm	FP	dyke	green	C1	S2	A1			M	Scor	5					26.07.99	SS	smaller boulders , up to 0,1 m across
N329707	607968	7058536	99L8	8	Rb		CG	DMe	STB in CPC	vein	yl-tan						S	Stb	10					26.07.99	SS	limonitized stibnite vein (sf)
N329708	608091	7058518	99L8	8	Tl		CG	DMe	QTZ in CPC	vein	tan		S3	A1			S							26.07.99	SS	brecciated & limonitized quartz vein
N329709	607924	7058521	99L8	8	Tl		CG	DMe	QTZ in CPC	brecciated	tan		S2	A1			S							26.07.99	SS	brecciated & limonitized quartz vein
N329710	607939	7058592	99L8	8	Tl		CG	DMe	QTZ in CPC	brecciated	tan		S2	A1			S							26.07.99	SS	brecciated & limonitized quartz vein
N329711	607852	7058574	99L8	8	Tl		CG	DMe	QTZ in CPC	brecciated	tan		S3	A1			M to S							26.07.99	SS	brecciated & limonitized quartz vein
N329712	607665	7058638	99L8	8	Tl		CG	DMe	QTZ in CPC	brecciated	tan		S3	A1			S							26.07.99	SS	barite veinlets inside quartz vein
N329713	606905	7058358	99L8	8	Ta		G		QTZ in black	vein	grey		S3				weak							28/7/99	SS	some sulphides ?
N329714	605671	7058000	99L8	8	Ta		G		QP	dyke	yellow	C1	S1	A1			weak	P	5					28/7/99	SS	pyrite cubes up to 3 mm across
N329802	607377	7057897	99L6	8				Kqm	F.P. Mo n	stwk	red?					P1								26/7/99	GJ	Hematite altered f.gr. interm. intrusive
N329803	607487	7057783	99L6	8				O6Dr?	Phy	stwk						P1								26/7/99	GJ	Phyllite, wk sec. sil, stworked
N329804	607824	7057523	99L6	8				OSDr?	Black sh	vned	blk													26/7/99	GJ	Black shale, some quartz veining
N329805	608127	7057352	99L6	8				OSDr?	Arg	brecciated														26/7/99	GJ	Brecciated argillite + qz vein
N329815	608588	7058516	99L6	8				OSDr?	Arg	stwk														26/7/99	GJ	Argillite with veined stockwork
P104501R	600308	7061091	99L1	8	CG		RC	OSDr	Qvn	fractured	tan						mod							28/7/99	CS	Qrvein, limonite al. fractures: sel c.g.
P104502R	600552	7061286	99L1	8	CG		Ta	OSDr	Sh	vned	brn	C1	S1				weak	P	tr					28/7/100	CS	15% Qz veins + stwork, selcct c.g.
P104503R	600687	7061488	99L1	8	CG		Ta	OSDr	Vein	stwk	dkm		S1	A1			strong	P	tr					28/7/101	CS	Lot, strong Py boxwork, scl c.g
P104504R	600812	7061772	99L1	8	CG		Ta	OSDr	Sh	fol	lt gry		S2	A1			weak	P	8					28/7/102	CS	Dirtem + vein assoc. Py - diagenetic?
P104505R	601219	7061919	99L1	8	CG		RC	OSDr	mst	fractured	brn		S1				strong	P	tr					28/7/103	CS	Strong frac. cont. Py, boxwork
P104506R	601511	7061943	99L1	8	CG		RC	DMe	ss	vned	brn	C1	S1				mod	P	tr					28/7/104	CS	Carbonate alt. sandstone

2b) ROCK SAMPLE GEOCHEMICAL RESULTS

Sample No.	Au	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Tl	Bi	Cd	Co	Ni	Ba	W	Cr	V	Mn	La	Sr	Zr	Sc	Ti	Al	Ca	Fe	Mg	K	Na	P
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%
N329701	10	2.1	64	67	376	1178	172	<3	295	<10	<2	4.2	5	35	94	7	250	2183	100	42	10187	10	18	0.01	5.01	1.16	12.62	0.12	0.5	0.01	4.6
N329702	7	0.9	1	8	10	27	6	<3	3	<10	<2	0.3	<1	<1	1017	5	6	16	10	<2	138	<1	<1	<0.01	0.04	0.02	0.15	0.01	0.01	0.01	0.03
N329703	16	1	5	13	7	21	10	<3	3	<10	<2	<0.1	1	6	1537	<5	200	25	42	<2	136	2	<1	<0.01	0.14	0.01	0.48	0.01	0.05	0.01	0.04
N329704	45	1.3	31	22	9	49	32	<3	23	<10	<2	<0.1	2	4	24	<5	134	61	21	<2	39	4	1	0.01	0.11	0.01	5.02	<0.01	0.6	0.01	0.08
N329705	706	1.1	9	12	4	76	18	<3	3	<10	<2	<0.1	1	4	540	<5	124	19	25	2	9	3	1	<0.01	0.34	0.02	0.95	0.03	0.21	0.01	0.01
N329706	219	0.6	5	11	4	71	19	<3	2	<10	<2	<0.1	1	4	989	<5	144	17	18	2	11	3	1	<0.01	0.34	0.01	0.46	0.02	0.19	0.01	<0.01
N329707	123	11.2	1111	91	163	<5	30885	11	1	<10	<2	11.2	3	76	596	<5	53	67	123	<2	2	1	1	<0.01	0.21	0.01	4.81	<0.01	0.02	<0.01	0.01
N329708	7	0.3	22	6	5	9	1932	<3	3	<10	<2	<0.1	1	4	726	<5	144	14	25	3	8	2	1	<0.01	0.08	0.01	1.25	0.01	0.05	0.01	0.01
N329709	127	2.6	70	68	34	14	256	<3	3	<10	<2	<0.1	5	14	390	<5	68	58	7	2	14	12	<1	0.01	0.29	0.01	13.86	0.01	0.11	0.01	0.04
N329710	25	0.7	38	27	12	77	567	<3	2	<10	<2	<0.1	1	6	120	<5	113	102	13	5	26	7	<1	<0.01	0.22	0.01	5.97	0.01	0.2	0.01	0.04
N329711	19	1	13	26	6	59	223	<3	20	<10	<2	<0.1	1	10	39	<5	216	31	25	<2	20	4	<1	<0.01	0.09	<0.01	3.53	<0.01	0.42	0.01	0.02
N329712	8	0.3	9	7	6	26	90	<3	5	<10	<2	<0.1	1	3	219	<5	201	20	26	2	13	2	<1	<0.01	0.06	0.02	1.41	0.01	0.09	0.01	0.02
N329713	<5	0.1	11	5	91	16	63	<3	4	<10	<2	<0.1	1	16	476	<5	216	7	39	<2	15	2	<1	<0.01	0.13	0.01	1.12	0.01	0.02	0.01	0.02
N329714	<5	<0.1	9	25	63	27	17	<3	<1	<10	<2	<0.1	1	7	157	5	56	<3	38	<2	2	11	<1	<0.01	0.3	0.02	0.44	<0.01	0.22	0.04	0.01
N329802	16	<0.1	99	55	426	<5	<5	<3	<1	<10	<2	<0.1	25	96	189	<5	16	137	17717	<2	50	32	36	<0.01	0.36	0.59	19.86	3.24	0.02	0.02	0.03
N329803	10	0.1	538	17	382	26	<5	<3	<1	<10	<2	<0.1	15	65	584	6	89	29	6478	2	59	12	8	<0.01	0.86	0.01	5.7	0.06	0.07	0.02	0.03
N329804	25	0.1	19	17	29	16	19	<3	2	<10	<2	<0.1	1	4	697	<5	90	25	104	3	71	1	1	0.01	0.28	0.01	1.15	0.02	0.09	0.02	0.04
N329805	<5	0.8	14	7	47	18	20	<3	6	<10	<2	<0.1	1	6	293	<5	165	46	97	3	32	3	1	<0.01	0.19	0.02	0.67	0.02	0.05	0.01	0.02
N329815	5	0.2	4	2	4	5	25	<3	1	<10	<2	<0.1	1	4	143	<5	211	9	58	<2	4	1	<1	<0.01	0.06	<0.01	0.34	<0.01	0.03	0.01	<0.01
P104501R	<5	<0.1	24	7	48	<5	7	<3	1	<10	<2	<0.1	3	18	1324	5	140	5	137	<2	23	1	1	<0.01	0.17	0.02	1.1	0.04	0.01	0.01	0.02
P104502R	<5	0.2	43	30	184	17	<5	<3	2	<10	<2	<0.1	16	43	643	<5	26	52	35056	5	813	9	5	<0.01	0.52	3.46	14.96	2.11	0.02	0.01	0.04
P104503R	17	0.9	70	40	211	12	<5	<3	<1	<10	<2	<0.1	13	56	619	8	75	53	1733	<2	45	8	3	<0.01	0.7	0.03	12.52	0.04	0.01	0.01	0.1
P104504R	7	<0.1	90	9	24	29	<5	<3	<1	<10	<2	<0.1	4	21	5547	<5	49	9	188	8	20	2	1	<0.01	1.01	0.03	1.1	0.06	0.07	0.01	0.02
P104505R	8	0.7	85	21	247	6	<5	<3	<1	<10	<2	<0.1	11	74	1346	<5	47	34	225	<2	24	4	4	<0.01	0.82	0.01	6.5	0.07	0.05	0.01	0.04
P104506R	6	0.2	5	11	44	38	12	<3	2	<10	<2	0.5	1	11	403	<5	67	10	565	3	467	2	<1	<0.01	0.06	7.67	2.81	2.7	0.01	0.01	0.03

APPENDIX 3

SILT SAMPLE GEOCHEMICAL RESULTS

3a) SILT SAMPLE DESCRIPTION SHEET

Sample No.	Easting	Northing	Zone	% Fines	Colour	Stream Grade	Stream Width	Date	Sampler	Comments
P103553	606430	7058938	8	70	BLACK	MOD	1,0	28/7/99	SS	
P103554	606305	7058958	8	80	BLACK	MOD	1,5	28/7/99	SS	
P103555	606237	7058513	8	70	BUFF	MOD	4,0	28/7/99	SS	
P104801T	606821	7059121	8	65	TAN	MOD	DRY	26/7/99	CS	Small outwash, dry

3b) SILT SAMPLE GEOCHEMICAL RESULTS

Sample No.	Au	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Tl	Bi	Cd	Co	Ni	Ba	W	Cr	V	Mn	La	Sr	Zr	Sc	Ti	Al	Ca	Fe	Mg	K	Na	P
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%
P101553	13	10.6	90	32	218	72	33	<3	32	<10	<2	1	2	27	151	<5	15	214	51	11	233	1	3	0.01	0.64	0.17	4.13	0.11	0.12	0.01	0.16
P101554	10	6.1	73	37	245	78	36	<3	29	<10	<2	<0.1	4	34	84	<5	39	220	52	11	189	2	4	0.01	0.59	0.15	6.6	0.13	0.12	0.01	0.13
P101555	9	4	50	31	181	56	32	<3	31	<10	<2	<0.1	4	23	50	<5	15	235	31	8	129	2	2	<0.01	0.44	0.07	7.46	0.09	0.15	0.01	0.36
P104801T	12	1.8	23	33	69	39	6	<3	21	<10	<2	0.2	4	18	529	<5	14	90	127	13	58	1	1	0.01	0.86	0.03	2.55	0.13	0.11	0.01	0.08

APPENDIX 4

SOIL SAMPLE GEOCHEMICAL RESULTS

4a) SOIL SAMPLE DESCRIPTION SHEET

Sample No.	Easting	Northing	Traverse	Zone	Horizon	Depth (cm)	Slope Angle	Colour	Permafrost (yes/no?)	% Course Fragments	Vegetation	Surficial Geology	Frag. Lithology	% Organics	Date	Sampler	Comments
N329801	607390	7057971	99L6	8	C	40		BLK	N				BLK SH		26/7/99	GSJ	
N329806	608180	7057462	99L6	8	C	30		BRN	N				BLK SH		26/7/99	GSJ	SOME QUARTZ
N329807	608259	7057516	99L6	8	C	40		GR-BRN	N				GR SH		26/7/99	GSJ	SOME QUARTZ
N329808	608306	7057608	99L6	8	C	40		LT GR	N				GR SH		26/7/99	GSJ	
N329809	608372	7057705	99L6	8	C	40		LT GR	N				GR SH		26/7/99	GSJ	LT. GREY SH; NEXT TO Fe SEEP
N329810	608382	7057808	99L6	8	C	35		DK GR	N				GR SH		26/7/99	GSJ	GR-BRN SHALE
N329811	608424	7057916	99L6	8	C	40		DK GR	N				GR SH		26/7/99	GSJ	DARK GREY SHALE
N329812	608510	7057989	99L6	8	C	40		GR-BRN	N				GR SH		26/7/99	GSJ	GR-BRN SHALE
N329813	608546	7058094	99L6	8	C	40		DK GR	N				GR SH		26/7/99	GSJ	DARK GREY SHALE
N329814	608547	7058200	99L6	8	C	40		GR-BRN	N				CPC		26/7/99	GSJ	
N329816	608588	7058514	99L6	8	C/B	30		RD-BRN	N				CPC		26/7/99	GSJ	CPC, ARGILLITE + STWORK
P103551	606590	7058291	99L4	8	BC	30	MOD	BLK	N	10	SP	RCROP	SH	5	28/7/99	SS	BLK SHALE FRAGMENTS
P103552	606391	7058256	99L4	8	B	20	MOD	GREY	N	20	SP	RCROP	SH	10	28/7/99	SS	BLK SHALE FRAGMENTS
P103556	606070	7058551	99L4	8	BC	20	MOD	GREY	N	20	SP	RCROP	SH	5	28/7/99	SS	BLK SHALE FRAGMENTS
P103557	605989	7058498	99L4	8	BC	30	MOD	GREY	N	10	SP	RCROP	SH	5	28/7/99	SS	BLK SHALE FRAGMENTS
P103558	605874	7058552	99L4	8	C	40	MOD	GREY	N	20	SP	RCROP	SH	5	28/7/99	SS	BLK SHALE FRAGMENTS
P103559	605743	7058409	99L4	8	C	40	MOD	BUF	N	30	PINE	TF	SH	10	28/7/99	SS	BLK SHALE FRAGMENTS
P103560	605688	7058253	99L4	8	C	30	MOD	BUF	N	30	PINE	TF	SH	5	28/7/99	SS	BLK SHALE FRAGMENTS
P103561	605665	7058102	99L4	8	C	30	MOD	BUF	N	20	PINE	TF	SH	5	28/7/99	SS	BLK SHALE FRAGMENTS
P103562	605671	7058000	99L4	8	BC	20	ST	BUF	N	10	PINE	TF	SH	5	28/7/99	SS	DYKES IN FLOAT
P103563	605723	7057896	99L4	8	C	30	ST	BUF	N	20	PINE	TF	PHY	5	28/7/99	SS	
P103564	605774	7057699	99L4	8	C	40	ST	TAN	N	5	PINE	TF	PHY	5	28/7/99	SS	
P103565	605700	7057586	99L4	8	C	20	ST	BUF	N	20	PINE	TF	PHY	5	28/7/99	SS	
P103566	605517	7057481	99L4	8	C	30	ST	TAN	N	5	PINE	TF	PHY	5	28/7/99	SS	
P103601	604576	7057290	99L3	8	B	20	MOD	ORG	N	30	PINE	TF	SH	10	28/7/99	SE	BLK SHALE FRAGMENTS
P103602	604584	7057191	99L3	8	B	20	MOD	ORG	N	30	PINE	TF	SH	10	28/7/99	SE	BLK SHALE FRAGMENTS
P104751	608619	7056978	99L7	8	BC	30	RT	GRY	N	50	SP	TF	SH	5	26/7	SE	
P104752	608707	7057041	99L7	8	B	30	ST	GRY	N	30	SP	TF	SH	10	26/7	SE	
P104753	608741	7057104	99L7	8	B	40	ST	GRY	N	10	SP	TF	SH	10	26/7	SE	
P104754	608818	7057179	99L7	8	B	30	ST	GRY	N	10	SP	TF	SH	10	26/7	SE	
P104755	608882	7057328	99L7	8	B	30	ST	ORG	N	10	SP	TF	SH	5	26/7	SE	
P104756	609004	7057396	99L7	8	B	35	ST	ORG	N	10	SP	TF	SH	5	26/7	SE	
P104757	609049	7057442	99L7	8	BC	40	ST	GRY	N	40	SP	TF	SH	5	26/7	SE	
P104758	609161	7057434	99L7	8	C	35	ST	GRY	N	60	SP	TF	SH	5	26/7	SE	
P104759	609206	7057621	99L7	8	BC	20	MOD	GRY	N	80	SP	TF	SH	0	26/7	SE	Skiff new creek, soil from uphill
P104760	609301	7057633	99L7	8	B	30	MOD	GRY	N	50	SP	TF	SH	0	26/7	SE	
P104761	609379	7057720	99L7	8	B	30	VAL	ORG	N	10	SP	TF	CPC	10	26/7	SE	
P104762	609481	7057758	99L7	8	BC	35	ST	ORG	N	20	SP	TF	CPC	10	26/7	SE	
P104763	609548	7057852	99L7	8	B	40	ST	BUF	N	70	SP	TF	CPC	10	26/7	SE	
P104764	609623	7057908	99L7	8	B	30	ST	ORG	N	20	SP	TF	CPC	0	26/7	SE	
P104765	609696	7058013	99L7	8	B	30	ST	ORG	N	30	SP	TF	CPC	0	26/7	SE	
P104766	609695	7058112	99L7	8	B	40	ST	GRY	N	10	SP	TF	CPC	0	26/7	SE	
P104767	609624	7058185	99L7	8	B	35	MOD	ORG	N	20	SP	TF	CPC	5	26/7	SE	
P104768	609649	7058299	99L7	8	B	40	MOD	ORG	N	20	SP	TF	CPC	5	26/7	SE	
P104769	609583	7058389	99L7	8	B	40	SL	ORG	N	10	SP	TF	CPC	10	26/7	SE	
P104770	609525	7058483	99L7	8	B	40	SL	BRN	N	10	SP	TF	CPC	10	26/7	SE	
P104771	609485	7058562	99L7	8	B	30	SL	BRN	N	10	SP	TF	CPC	0	26/7	SE	
P104772	609470	7058690	99L7	8	B	40	SL	ORG	N	30	SP	TF	CPC	0	26/7	SE	
P104773	609425	7058784	99L7	8	B	30	SL	BRN	N	10	SP	TF	SH	20	26/7	SE	
P104774	609419	7058884	99L7	8	B	40	SL	BRN	N	20	SP	TF	SH	10	26/7	SE	
P104775	609393	7059002	99L7	8	B	40	SL	BRN	N	10	SP	TF	SH	10	26/7	SE	
P104776	605229	7059491	99L3	8	B	35	ST	BRN	N	30	BB	CV		5	28/7/99	SE	SOME TILL
P104777	605190	7059388	99L3	8	B	40	ST	BRN	N	40	BB	CV		10	28/7/99	SE	SOME TILL
P104778	605169	7059274	99L3	8	B	55	ST	BRN	N	30	PINE	CV		5	28/7/99	SE	SOME TILL
P104779	605143	7059171	99L3	8	B	40	ST	BRN	N	30	PINE	TF	SH	5	28/7/99	SE	SOME TILL
P104780	605178	7059063	99L3	8	B	30	ST	ORG	N	40	PINE	TF	SH	5	28/7/99	SE	SOME TILL
P104781	605179	7058982	99L3	8	B	40	ST	ORG	N	60	PINE	TF	SH	5	28/7/99	SE	SOME TILL
P104782	605230	7058833	99L3	8	B	45	ST	BRN	N	40	PINE	TF	SH	5	28/7/99	SE	SOME TILL
P104783	605244	7058748	99L3	8	B	45	ST	ORG	N	30	PINE	TF	SH	5	28/7/99	SE	SOME TILL
P104784	605238	7058657	99L3	8	B	20	ST	BRN	N	20	PINE	TF	SH	5	28/7/99	SE	SOME TILL
P104785	605183	7058564	99L3	8	B	30	ST	BRN	N	20	PINE	TF	SH	5	28/7/99	SE	INCREASING SILICIFICATION
P104786	605110	7058461	99L3	8	B	30	ST	BRN	N	40	PINE	TF	SH	5	28/7/99	SE	INCREASING SILICIFICATION
P104787	605078	7058379	99L3	8	B	40	ST	BRN	N	40	PINE	TF	SH	5	28/7/99	SE	INCREASING SILICIFICATION
P104788	605099	7058282	99L3	8	B	50	ST	BRN	N	20	PINE	TF	SH	5	28/7/99	SE	INCREASING SILICIFICATION
P104789	605134	7058162	99L3	8	B	50	ST	BRN	N	20	BB	TF	SH	5	28/7/99	SE	INCREASING SILICIFICATION
P104790	605086	7058077	99L3	8	B	50	ST	ORG	N	10	BB	TF	SH	5	28/7/99	SE	BLK SHALE FRAGMENTS
P104791	605119	7058001	99L3	8	B	30	ST	ORG	N	10	BB	TF	SH	5	28/7/99	SE	BLK SHALE FRAGMENTS
P104792	605100	7057903	99L3	8	B	30	ST	BRN	N	30	BB	TF	SH	20	28/7/99	SE	BLK SHALE FRAGMENTS
P104793	605105	7057749	99L3	8	B	30	ST	BRN	N	20	BB	TF	SCH	10	28/7/99	SE	BLK SHALE FRAGMENTS

P104794	605019	7057711	99L3	S	B	20	ST	BRN	N	30	BB	TF	SCH	5	28/7/99	SE	BLK SHALE FRAGMENTS
P104795	604972	7057614	99L3	S	B	20	ST	ORG	N	20	BB	TF	PHY	5	28/7/99	SE	BLK SHALE FRAGMENTS
P104796	604869	7057646	99L3	S	B	30	ST	ORG	N	10	BB	TF	SH	10	28/7/99	SE	BLK SHALE FRAGMENTS
P104797	604784	7057556	99L3	S	B	35	ST	ORG	N	10	PINE	TF	SH	10	28/7/99	SE	BLK SHALE FRAGMENTS
P104798	604680	7057504	99L3	S	B	30	ST	BRN	N	5	PINE	TF	SH	5	28/7/99	SE	BLK SHALE FRAGMENTS
P104799	604587	7057535	99L3	S	B	30	ST	ORG	N	20	PINE	TF	SH	5	28/7/99	SE	BLK SHALE FRAGMENTS
P104800	604585	7057407	99L3	S	B	20	ST	ORG	N	10	PINE	TF	SH	10	28/7/99	SE	BLK SHALE FRAGMENTS
P104851S	607433	7057002	99L5	S	TF	35	ST	BLK	N	30	TD	COL	BLK SH	0	26/7/99	CS	
P104852S	607112	7058121	99L5	S	TF	40	ST	DK GR	N	40	TD	COL	BLK SH	<5	26/7/99	CS	
P104853S	606997	7058121	99L5	S	TF	30	MOD	BLK	N	50	NV	TA	BLK SH	0	26/7/99	CS	
P104854S	606933	7058105	99L5	S	TF	30	ST	BLK	N	50	TD	TA	BLK SH	0	26/7/99	CS	
P104855S	606862	7058300	99L5	S	TF	35	MOD	BLK	N	60	TD	TA	BLK SH	<5	26/7/99	CS	
P104856S	606852	7058389	99L5	S	TF	40	MOD	BLK	N	40	TD	COL	BLK SH	<5	26/7/99	CS	ABNT. QUARTZ FRAGMENTS
P104857S	606713	7058394	99L5	S	TF	30	GEN	BLK	N	45	TD	COL	BLK SH	<5	26/7/99	CS	
P104858S	606688	7058449	99L5	S	TF	15	MOD	BLK	N	50	TD	COL	GR SH	<5	26/7/99	CS	SPARSE SOIL
P104859S	606633	7058541	99L5	S	TF	45	GEN	BLK	N	40	TD	COL	BLK SH	<5	26/7/99	CS	NEAR RIDGELINE
P104860S	606586	7058654	99L5	S	TF	35	GEN	BLK	N	35	TD	COL	BLK SH	<5	26/7/99	CS	NEAR RIDGELINE
P104861S	606578	7058738	99L5	S	TF	15	ST	BLK	N	50	TD	TA	BLK SH	<5	26/7/99	CS	STABILIZED TALUS
P104862S	606668	7058911	99L5	S	TF	10	ST	BLK	N	60	TD	TA	BLK SH	<5	26/7/99	CS	
P104863S	606782	7058969	99L5	S	TF	35	GEN	BLK	N	50	CON	TA	BLK SH	5	26/7/99	CS	
P104864S	606820	7058960	99L5	S	C	35	GEN	GR-BRN	N	40	CON	TILL	GR SH	5	26/7/99	CS	
P104865S	606831	7059091	99L5	S	C	35	GEN	BLK	N	40	CON	COL	BLK SH	5	26/7/99	CS	WEATHERS RED-BROWN
P104866S	606891	7059218	99L5	S	B	25	MOD	BRN	N	30	BB	RCROP	CPC	5	26/7/99	CS	
P104867S	606927	7059261	99L5	S	B	25	MOD	RD-BRN	N	30	BB	RCROP	CPC	5	26/7/99	CS	N. SIDE OF MOUND
P104868S	607033	7059424	99L5	S	C	30	GEN	GR-BRN	N	10	CON	RCROP	CPC	10	26/7/99	CS	
P104869S	607119	7059401	99L5	S	B	25	GEN	GR-BRN	N	45	CON	TILL	CPC	5	26/7/99	CS	
P104870S	600419	7061325	99L1	S	B	20	MOD	BRN	N	50	TD	TA	SH	20	28/7/99	CS	POOR SAMPLE, LIMITED SOIL
P104871S	600469	7061218	99L1	S	C	30	ST	BLK	N	40	TD	TA	BLK SH	<5	28/7/99	CS	BLK SHALE FRAGMENTS
P104872S	600539	7061242	99L1	S	B	20	ST	BRN	N	60	TD	TA	SH	20	28/7/99	CS	POOR SOIL DEVELOPMENT
P104873S	600584	7061336	99L1	S	B	15	ST	BRN	N	50	TD	TA	SH	20	28/7/99	CS	POOR SOIL DEVELOPMENT
P104874S	600664	7061442	99L1	S	A	30	MOD	BRN	N	40	TD	TA	SLT	25	28/7/99	CS	STABILIZED TALUS
P104875S	600737	7061427	99L1	S	C	35	MOD	GRY	N	35	TD	TA	SH	5	28/7/99	CS	TALUS + COLLUVIUM
P104876S	600829	7061456	99L1	S	C	30	MOD	LT BRN	N	45	TD	COL	SH	5	28/7/99	CS	POOR SOIL DEVELOPMENT
P104877S	600843	7061636	99L1	S	C	30	MOD	BRN	N	35	TD	COL	SH	10	28/7/99	CS	LT GRY SHALE, WK ARG DEV.
P104878S	600835	7061720	99L1	S	C	25	ST	BRN	N	30	TD	COL	SH	5	28/7/99	CS	YEL-BRN WEAKLY CHLOR. SH
P104879S	600879	7061847	99L1	S	C	30	ST	BRN	N	35	TD	COL	SH	5	28/7/99	CS	RED-BROWN SOIL
P104880S	600838	7061899	99L1	S	C	30	MOD	TAN	N	40	TD	COL	SH	10	28/7/99	CS	POOR SOIL DEVELOPMENT
P104881S	600909	7062034	99L1	S	B	10	ST	BRN	N	40	TD	TA	SH	10	28/7/99	CS	POOR SOIL DEVELOPMENT
P104882S	601063	7062060	99L1	S	B	15	ST	BRN	N	35	ST. CON	TA	SH	10	28/7/99	CS	POOR SOIL DEVELOPMENT
P104883S	601137	7061984	99L1	S	B	10	ST	BRN	N	50	TD	TA	SH	25	28/7/99	CS	POOR SOIL DEVELOPMENT
P104884S	601194	7061872	99L1	S	TF	10	ST	TAN	N	60	NV	TA	SH	<5	28/7/99	CS	TALUS FINE SLOPE
P104885S	601334	7061961	99L1	S	TF	25	ST	GRY	N	60	SC	TA	SH	5	28/7/99	CS	STAB. TALUS, POOR SAMPLE
P104886S	601421	7061937	99L1	S	C	20	ST	BRN	N	60	CON	TA	SH	10	28/7/99	CS	POOR SAMPLE, THIN BRN LAYER
P104887S	601486	7061967	99L1	S	B	25	ST	GR-BRN	N	10	CON	TA	SLT	5	28/7/99	CS	E. SIDE OF GULCH - WELL DEVEL.

4b) SOIL SAMPLE GEOCHEMICAL RESULTS

Sample No.	Au	Ag	Cu	Pb	Zn	As	Sb	Hg	Mo	Tl	Bi	Cd	Co	Ni	Ba	W	Cr	V	Mn	La	Sr	Zr	Sc	Ti	Al	Ca	Fe	Mg	K	Na	P
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%	%	%
N329801	13	2	37	16	9	20	7	<3	15	<10	<2	0.7	2	6	3782	<5	22	82	7	6	344	3	2	0.01	0.47	0.01	0.34	0.01	0.07	0.01	0.27
N329806	8	4.1	50	26	132	94	12	<3	17	<10	<2	<0.1	5	22	693	<5	27	169	185	14	145	1	1	0.01	1.79	0.1	4.03	0.2	0.11	0.01	0.3
N329807	<5	1	41	24	261	60	5	<3	9	<10	<2	1	6	28	341	<5	21	93	221	15	43	1	2	0.01	1.27	0.05	4.3	0.18	0.09	0.01	0.08
N329808	<5	0.3	8	33	13	29	<5	<3	14	<10	<2	<0.1	<1	<1	254	<5	4	36	11	3	38	1	<1	<0.01	0.22	0.01	1.31	0.01	0.11	0.01	0.02
N329809	5	0.3	41	30	77	47	5	<3	10	<10	<2	0.3	3	15	250	9	13	35	56	6	44	1	2	0.01	0.63	0.02	2.86	0.12	0.1	0.01	0.05
N329810	<5	0.5	60	24	314	50	<5	<3	7	<10	<2	<0.1	12	56	245	9	19	52	174	8	42	1	3	0.01	1.21	0.03	4.94	0.29	0.07	0.01	0.1
N329811	8	1	33	23	113	49	<5	<3	12	<10	<2	<0.1	5	19	299	<5	14	64	167	12	68	1	1	0.01	0.77	0.07	3.18	0.11	0.08	0.01	0.18
N329812	7	0.9	30	39	142	64	9	<3	17	<10	<2	<0.1	4	26	353	<5	14	57	54	7	86	2	1	0.01	0.62	0.01	4.19	0.1	0.09	0.01	0.09
N329813	10	1.4	25	39	119	54	6	<3	25	<10	<2	0.7	6	39	667	<5	11	52	374	12	157	1	1	<0.01	0.61	0.19	2.96	0.16	0.13	0.01	0.12
N329814	48	2.9	35	66	61	94	<5	<3	12	<10	<2	<0.1	5	21	753	<5	22	74	117	10	94	3	2	<0.01	1.31	0.04	4.67	0.09	0.11	0.01	0.11
N329816	12	4.2	20	22	58	76	5	<3	6	<10	<2	0.4	4	18	243	<5	26	88	105	17	23	1	2	0.03	1.79	0.03	2.74	0.2	0.06	0.01	0.04
P103551	14	7.3	63	41	211	74	30	<3	27	<10	<2	3.1	2	27	122	5	16	187	28	10	257	1	1	0.01	0.89	0.16	2.77	0.1	0.14	0.01	0.31
P103552	16	7.2	73	65	303	76	50	<3	33	<10	<2	3.5	2	32	335	<5	15	157	47	7	142	1	<1	<0.01	0.95	0.1	3.03	0.19	0.15	0.01	0.23
P103556	10	2.3	48	22	106	43	29	<3	22	<10	<2	0.4	1	10	306	<5	8	104	20	18	215	1	1	<0.01	0.41	0.03	1.7	0.09	0.13	0.01	0.06
P103557	10	1.8	52	25	123	55	20	<3	22	<10	<2	1.6	4	22	256	<5	16	120	121	15	158	1	2	0.02	0.99	0.18	2.41	0.22	0.14	0.01	0.13
P103558	12	2.7	36	17	74	52	5	<3	10	<10	<2	1.1	3	18	539	9	18	87	139	9	72	1	<1	0.01	1.18	0.08	2.3	0.16	0.09	0.01	0.17
P103559	13	1.1	55	19	74	43	<5	<3	5	<10	<2	0.6	3	13	1135	<5	17	49	86	10	116	<1	<1	<0.01	1.21	0.14	1.8	0.19	0.08	0.02	0.17
P103560	8	0.2	30	22	122	64	<5	<3	3	<10	<2	0.4	11	23	251	<5	26	63	427	14	26	1	2	0.03	1.83	0.19	2.96	0.44	0.07	0.02	0.11
P103561	5	0.5	46	21	92	27	<5	<3	6	<10	<2	0.1	2	17	671	<5	12	70	57	12	99	<1	<1	<0.01	0.64	0.02	1.97	0.04	0.05	0.01	0.09
P103562	15	0.7	35	18	62	46	<5	<3	4	<10	<2	0.6	4	17	501	<5	23	64	153	9	57	<1	<1	0.01	1.58	0.06	2.56	0.19	0.07	0.01	0.11
P103563	8	0.1	31	20	57	38	<5	<3	2	<10	<2	<0.1	3	15	207	<5	18	57	151	9	23	<1	<1	0.02	0.98	0.04	2.47	0.13	0.04	0.01	0.05
P103564	10	0.9	29	34	60	37	<5	<3	2	<10	<2	0.3	4	15	302	<5	20	73	105	8	28	1	1	0.04	0.93	0.03	3.98	0.1	0.05	0.01	0.06
P103565	8	0.3	31	23	93	47	<5	<3	2	<10	<2	<0.1	7	24	171	<5	25	67	285	9	17	1	2	0.03	1.66	0.05	3.45	0.27	0.05	0.01	0.05
P103566	6	0.9	41	23	75	44	<5	<3	2	<10	<2	<0.1	5	19	273	<5	23	71	250	9	25	1	2	0.02	1.53	0.04	3.93	0.17	0.05	0.01	0.07
P103601	11	3.3	15	25	46	35	<5	<3	5	<10	<2	<0.1	3	5	418	6	24	135	101	9	21	1	1	0.02	1.14	0.03	4.9	0.08	0.06	0.01	0.28
P103602	6	1.6	28	15	62	45	<5	<3	6	<10	<2	0.4	4	12	405	<5	17	79	107	10	30	1	2	0.02	1.17	0.04	2.63	0.1	0.04	0.01	0.17
P104751	<5	0.9	7	19	17	10	5	<3	12	<10	<2	<0.1	2	2	90	<5	4	29	11	16	4	<1	<1	<0.01	0.24	0.01	0.59	0.01	0.04	0.01	0.01
P104752	10	0.6	25	28	71	77	7	<3	10	<10	<2	<0.1	3	9	208	<5	9	59	33	7	47	1	1	<0.01	0.48	0.02	2.19	0.03	0.07	0.01	0.07
P104753	12	1.9	36	33	106	55	16	<3	14	<10	<2	0.4	2	15	322	<5	8	50	46	13	63	1	1	<0.01	0.47	0.02	2.04	0.05	0.08	0.01	0.11
P104754	<5	1	10	5	81	18	<5	<3	16	<10	<2	<0.1	2	12	118	<5	8	106	36	29	5	<1	<1	0.01	0.34	0.01	0.93	0.02	0.05	0.01	0.02
P104755	6	0.8	26	24	107	53	6	<3	15	<10	<2	<0.1	5	21	270	<5	21	105	131	13	39	1	1	0.02	1.24	0.04	3.92	0.17	0.09	0.01	0.1
P104756	<5	0.4	21	14	73	34	<5	<3	11	<10	<2	<0.1	3	15	275	<5	13	69	52	20	23	<1	<1	0.01	0.78	0.03	1.83	0.06	0.06	0.01	0.08
P104757	<5	0.6	19	31	80	35	<5	<3	15	<10	<2	0.1	4	16	324	<5	13	86	70	14	49	<1	1	0.01	0.62	0.02	2.38	0.06	0.1	0.01	0.09
P104758	27	2.7	25	38	98	62	13	<3	30	<10	<2	<0.1	3	18	263	<5	16	104	69	16	232	1	1	0.01	0.52	0.07	3.26	0.07	0.19	0.01	0.21
P104759	11	1.4	45	24	145	90	11	<3	30	<10	<2	0.3	3	23	347	5	20	96	80	14	202	1	3	0.01	0.43	0.12	3.02	0.05	0.17	0.01	0.28
P104760	7	1	32	20	77	52	7	<3	13	<10	<2	0.6	4	21	622	<5	16	72	153	12	66	<1	1	0.01	0.77	0.07	2.39	0.08	0.08	0.01	0.18
P104761	11	1.2	36	25	117	44	<5	<3	8	<10	<2	<0.1	4	24	419	<5	17	70	89	12	45	<1	1	0.01	0.85	0.02	3.39	0.14	0.08	0.01	0.09
P104762	<5	4	28	21	123	46	<5	<3	3	<10	<2	<0.1	7	27	257	<5	29	77	234	12	29	1	2	0.03	1.35	0.06	4.21	0.28	0.1	0.01	0.17
P104763																															
P104764	<5	0.6	30	27	115	45	<5	<3	4	<10	<2	<0.1	5	18	228	<5	21	99	145	14	27	1	2	0.02	1.21	0.02	3.93	0.12	0.09	0.01	0.1
P104765	<5	0.4	12	7	38	22	<5	<3	3	<10	<2	<0.1	2	9	104	<5	10	54	39	18	8	<1	<1	0.01	0.42	0.01	1.11	0.02	0.04	0.01	0.03
P104766	6	11.2	24	27	76	76	<5	<3	8	<10	<2	0.4	7	25	155	6	27	95	200	14	13	3	3	0.04	1.71	0.04	3.53	0.21	0.07	0.01	0.04
P104767	17	1.7	16	22	49	56	10	<3	13	<10	<2	0.2	3	10	156	<5	14	79	64	14	25	2	1	0.02	0.59	0.02	2.66	0.06	0.06	0.01	0.04
P104768	5	0.8	13	15	49	27	<5	<3	5	<10	<2	<0.1	3	9	145	<5	8	57	42	19	28	1	<1	0.01	0.33	0.01	1.22	0.02	0.04	0.01	0.03
P104769	7	4	22	41	51	67	<5	<3	8	<10	<2	<0.1	2	11	269	6	15	92	44	15	120	1	1	0.01	0.79	0.01	4.15	0.02	0.23	0.01	0.17
P104770	16	0.8	17	32	59	66	<5	<3	5	<10	<2	<0.1	5	17	386	<5	24	80	174	14	47	1	1	0.02	1.13	0.04	3.65	0.22	0.12	0.01	0.08
P104771	7	0.3	32	22	113	20	<5	<3	10	<10	<2	<0.1	5	20	248	<5	9	38	124	19	41	<1	1	0.01	0.41	0.02	2.68	0.05	0.08	0.01	0.07
P104772	<5	1.1	22	20	28	36	<5	<3	24	<10	<2	<0.1	2	6	258	<5	15	106	35	19	25	1	1	0.01	0.71	0.02	2.48	0.05	0.1	0.01	0.05
P104773	6	0.3	24	23	72	40	<5	<3	10	<10	<2	0.4	3	18	256	5	17	61	68	18	41	1	2	0.02	0.95	0.02	2.82	0.12	0.07	0.01	0.05
P104774	<5	0.2	24	24	66	50	<5	<3	8	<10	<2	0.5	4	21	441	<5	21	77	101	15	32	1	2	0.03	1.4	0.04	2.36	0.18	0.07	0.01	0.05
P104775	<5	0.3	21	36	66	42	<5	<3	12	<10	<2	<0.1	5	15	231	<5	23	82	134	16	46	1	1	0.02	1.06	0.04	3.83	0.2	0.1	0.01	0.08
P104776	9	1	29	17	92	85	8	<3	8	<10	<2	<0.1	5	23	866	<5	27	124	182	10	83	3	2	0.02	1.83	0.18	3.11	0.19	0.06	0.01	0.3
P104777	9	0.1	30	16	77	33	<5	<3	4	<10	<2	<0.1	4	16	457	7	17	62	159	10	34	<1	1	0.02	0.88	0.05	2.59	0.18	0.05	0.01	0.06
P104778	7	0.2	37	19	81	29	<5	<3	5	<10	<2	<0.1	7	21	184	5	20	54	397	7	40	<1	1	0.02	0.83	0.06	3.58	0.18	0.04	0.01	0.12
P104779	25	1.6	98	20	101	58	<5	<3	10	<10	<2	<0.1	5	29	366	<5	17	49	326	10	530	1	3	0.01	1.11	0.33	3.21	0.12	0.09	0.01	0.44
P104780	17	0.2	66	25	85	66	<5	<3	2	<10	<2	<0.1	8	19	215	<5	28	55	454	8	64	1	2	0.02	1.99	0.05	4.45	0.23	0.05	0.01	0.1
P104781	5	<0.1	34	23	66	31	<5	<3	2	<10	<2	<0.1	5	15	239	<5	19	64	251	10	66	1	1	0.01	0.9	0.06	2.96	0.13	0.05	0.01	0.13
P104782	30	<0.1	56	33	96	17	<5	<3	2	<10	<2	<0.1	5	19	121	12	11	53	207	6	34	1	1	0.03	0.49	0.02	3.4	0.07	0.03	0.01	0.06
P104783	32	0.4	102	31	127	26	<5	<3	4	<10	<2	<0.1	10	29	122	<5	16	45	422	4	18	1	1	0.01	0.74	0.03	3.97	0.12	0.03	0.01	0.07
P104784	24	0.7	96	21	93	26	<5	<3	3	<10	<2	<0.1	6	21	232	<5	12	41	555	4	25	1	1	0.01	0.76	0.02	3.6	0.09	0.03	0.01	0.06
P104785	5	0.8	67	16	80	22	<5	<3	3	<10	<2	<0.1	4	15	210	6	14	57	127	5	15	<1	<1	0.02	0.53	0.02	3.19	0.05	0.03	0.01	0.06
P104786	8	1.4	42	16	64	30	<5	<3	1	<10	<2	<0.1	4	18	158	<5	21	49	200	5	9	1	1	0.02	0.93	0.02	3.24	0.13	0.03	0.01	0.04
P104787	5	0.5	38	22	69	29	<5	<3	2	<10	<2	<0.1	4	18	137	<5	21	44	145	6	13	1	1	0.02	1.04	0.03	3.35	0.18	0.03	0.01	0.05
P104788	<5	0.6	18	16	64	45	<5	<3	3	<10	<2	<0.1	4	13	160	<5	21	55	187	9	13	<1	<1	0.01	1.31	0.04	2.74	0.21	0.04	0.01	0.06
P104789	13	0.4	37	25	64	25	<5	<3	4	<10	<2	<0.1	5	19	185	<5	19	65	152	7	14	1	1	0.04	0.85	0.03	4.2	0.11	0.03	0.01	0.09
P104790	6	0.5	34	14	71	41	<5	<3	2	<10	<2	<0.1	5	16	168	<5	20	45	212	6	12	1	1	0.01	1.05	0.03	2.71	0.21	0.03	0.01	0.05
P104791	8	0.3	50	28	100	39	<5	<3	3	<10	<2	<0.1	7	27	601	<5	22	44	238	5	20	1	1	0.02	1.26	0.03	3.49	0.24	0.03	0.01	0.06
P104792	7	0.4	36	19	105	54	<5	<3	4	<10	<2	<0.1	7	24	192	10	30	67	332	7	12	2	2	0.03	1.77	0.03	4.37	0.29	0.04	0.01	0.07
P104793	<5	0.3	64	21	109	42	<5	<3	2	<10	<2	<0.1	12	23	551	<5	24	72	1329	7	8	1	2	0.02	1.32	0.03	3.87	0.18	0.04	0.01	0.04

P104794	<5	0.1	66	27	109	33	<5	<3	3	<10	<2	<0.1	8	25	222	<5	31	74	321	7	9	1	2	0.02	1.5	0.03	4.86	0.2	0.04	0.01	0.07
P104795	<5	0.3	36	20	62	17	<5	<3	2	<10	<2	<0.1	5	14	147	5	20	84	168	6	9	1	1	0.02	0.73	0.03	3.44	0.12	0.04	0.01	0.12
P104796	<5	0.2	40	19	89	16	<5	<3	2	<10	<2	0.2	5	14	590	<5	15	58	213	9	21	1	1	0.02	0.57	0.06	2.3	0.08	0.05	0.01	0.04
P104797	<5	1.3	34	25	80	24	<5	<3	5	<10	<2	<0.1	5	14	227	<5	16	60	181	12	19	1	1	0.02	0.7	0.03	3.6	0.09	0.04	0.01	0.08
P104798	7	2.8	29	20	61	46	<5	<3	9	<10	<2	<0.1	4	17	693	<5	24	89	91	9	63	1	1	0.01	1.01	0.06	3.7	0.12	0.05	0.01	0.48
P104799	5	0.4	40	17	111	40	<5	<3	4	<10	<2	<0.1	11	29	495	<5	23	40	481	7	29	1	1	0.02	1.22	0.1	3.26	0.29	0.04	0.01	0.13
P104800	6	0.6	32	20	41	16	<5	<3	3	<10	<2	<0.1	2	8	266	5	8	41	93	6	61	<1	<1	0.01	0.34	0.01	1.93	0.03	0.03	0.01	0.08
P104851S	10	1.9	56	22	194	51	9	<3	17	<10	<2	<0.1	4	20	324	<5	10	58	155	7	305	3	2	<0.01	0.36	0.08	1.77	0.05	0.08	0.01	0.2
P104852S	30	3.6	161	25	95	58	12	<3	26	<10	<2	1.4	2	16	123	8	17	94	45	11	499	1	3	<0.01	0.32	0.08	2.52	0.02	0.18	0.01	0.16
P104853S	13	7.3	94	28	169	194	45	<3	48	<10	<2	1.2	3	45	434	6	20	359	143	8	401	4	3	0.03	2.53	0.84	2.43	0.11	0.06	0.01	0.69
P104854S	21	9.5	176	28	379	200	29	<3	35	<10	<2	12.3	5	74	314	5	23	491	220	8	659	6	4	0.04	3.07	1.01	2.19	0.1	0.07	0.01	0.63
P104855S	8	4.6	200	16	134	60	14	<3	19	<10	<2	1.5	3	27	434	<5	22	136	40	12	408	1	1	0.01	0.82	0.34	1.25	0.04	0.06	0.01	0.34
P104856S	6	1.9	110	12	15	14	8	<3	8	<10	<2	0.3	1	5	566	<5	3	25	4	10	80	1	1	<0.01	0.26	0.02	0.47	0.01	0.04	0.01	0.05
P104857S	8	5	62	25	81	61	15	<3	21	<10	<2	0.2	2	12	195	<5	10	88	22	11	286	1	1	<0.01	0.59	0.11	1.87	0.04	0.12	0.01	0.24
P104858S	5	1	17	18	44	21	11	<3	19	<10	<2	<0.1	1	11	424	<5	8	73	23	6	21	<1	<1	<0.01	0.33	0.05	0.77	0.02	0.04	0.01	0.08
P104859S	6	1.3	60	9	23	36	8	<3	9	<10	<2	0.1	1	5	1046	<5	5	50	10	16	103	1	1	<0.01	0.32	0.02	0.61	0.01	0.04	0.01	0.04
P104860S	5	5	45	16	40	38	11	<3	11	<10	<2	0.4	1	10	721	<5	6	46	10	9	205	<1	<1	<0.01	0.6	0.03	1.23	0.01	0.05	0.01	0.15
P104861S	35	5.6	132	42	1051	190	40	<3	52	<10	<2	51.4	8	137	74	<5	20	295	241	5	353	2	3	<0.01	1.13	0.25	5.6	0.04	0.27	0.01	0.32
P104862S	13	4	46	30	154	67	25	<3	30	<10	<2	4.3	2	18	253	6	9	120	67	7	119	1	1	<0.01	0.41	0.02	2.96	0.02	0.17	0.01	0.14
P104863S	8	2.3	27	28	79	44	17	<3	27	<10	<2	0.5	1	8	399	<5	6	101	10	6	113	<1	1	<0.01	0.25	0.03	1.85	0.01	0.12	0.01	0.09
P104864S	6	1.1	28	28	120	32	7	<3	11	<10	<2	0.3	4	21	327	<5	13	68	95	7	93	1	1	0.01	0.54	0.02	2.94	0.09	0.07	0.01	0.1
P104865S	10	1.5	40	22	58	48	12	<3	21	<10	<2	0.4	2	14	539	7	13	118	74	14	80	1	2	0.01	0.72	0.03	2.06	0.06	0.09	0.01	0.11
P104866S	7	3	13	23	41	49	54	<3	7	<10	<2	<0.1	3	10	601	6	17	97	80	12	31	1	1	0.03	0.83	0.03	2.83	0.07	0.07	0.01	0.1
P104867S	17	1.6	10	20	33	48	55	<3	7	<10	<2	<0.1	3	6	740	<5	19	68	144	12	36	1	1	0.02	0.9	0.04	2.74	0.12	0.08	0.01	0.08
P104868S	15	1	20	23	58	53	21	<3	11	<10	<2	0.1	4	15	390	<5	16	61	111	14	40	1	1	0.01	0.79	0.03	2.38	0.1	0.09	0.01	0.08
P104869S	12	2	17	24	48	52	12	<3	14	<10	<2	0.1	3	10	361	<5	13	90	40	15	38	1	1	0.01	0.36	0.01	2.11	0.03	0.07	0.01	0.08
P104870S	21	1.9	109	43	143	39	<5	<3	4	<10	<2	<0.1	9	36	377	5	38	52	626	5	48	1	1	0.01	1.27	0.03	4.51	0.18	0.06	0.02	0.15
P104871S	14	1.2	56	49	136	34	<5	<3	2	<10	<2	<0.1	6	33	818	<5	15	20	44	5	296	7	3	<0.01	0.64	0.08	2.53	0.19	0.06	0.01	0.06
P104872S	28	0.8	199	49	169	51	<5	<3	2	<10	<2	<0.1	29	60	572	<5	27	43	1536	6	54	2	4	0.01	1.36	0.04	4.85	0.26	0.06	0.01	0.13
P104873S	25	0.7	206	44	163	36	<5	<3	4	<10	<2	<0.1	26	49	394	5	26	46	1779	6	50	1	3	0.01	1.32	0.07	4.95	0.32	0.05	0.02	0.11
P104874S	10	0.7	78	38	102	33	<5	<3	2	<10	<2	<0.1	7	31	206	<5	25	42	243	4	22	1	1	0.01	0.93	0.07	3.35	0.19	0.04	0.01	0.11
P104875S	14	1.3	93	38	166	56	<5	<3	3	<10	<2	<0.1	16	48	756	<5	32	58	495	8	45	1	3	0.02	1.48	0.06	5.32	0.33	0.07	0.02	0.12
P104876S	8	0.4	76	24	113	51	<5	<3	3	<10	<2	<0.1	11	32	344	6	28	52	528	10	32	1	1	0.02	1.58	0.1	3.32	0.38	0.06	0.02	0.11
P104877S	7	0.1	120	30	143	48	<5	<3	<1	<10	<2	<0.1	17	63	1419	<5	28	40	1286	19	24	1	2	0.02	1.82	0.09	3.37	0.58	0.05	0.01	0.1
P104878S	8	0.1	97	23	140	64	<5	<3	2	<10	<2	<0.1	18	46	589	<5	30	58	1309	16	20	1	3	0.03	1.75	0.12	3.57	0.44	0.06	0.01	0.08
P104879S	<5	0.2	42	25	85	67	<5	<3	2	<10	<2	<0.1	9	26	283	8	33	73	915	13	13	1	1	0.02	1.99	0.06	3.76	0.26	0.06	0.01	0.09
P104880S	<5	<0.1	54	26	55	30	<5	<3	2	<10	<2	<0.1	7	20	498	<5	22	48	465	15	9	<1	1	0.01	1.11	0.03	2.64	0.15	0.05	0.01	0.09
P104881S	9	0.1	77	21	67	39	<5	<3	<1	<10	<2	<0.1	3	20	230	<5	23	29	159	7	34	1	1	0.01	1.16	0.02	3.24	0.18	0.04	0.01	0.09
P104882S	14	0.4	157	40	156	45	<5	<3	4	<10	<2	<0.1	11	45	282	<5	34	39	610	7	48	1	2	0.02	1.64	0.04	5.78	0.35	0.06	0.01	0.11
P104883S	16	0.8	194	31	144	42	<5	<3	3	<10	<2	<0.1	17	44	332	<5	26	35	1437	3	58	1	2	0.01	1.3	0.03	4.31	0.27	0.05	0.02	0.14
P104884S	10	1	131	35	359	49	<5	<3	1	<10	<2	<0.1	29	136	354	<5	27	44	263	3	39	2	6	0.01	1.41	0.02	6.22	0.15	0.04	0.01	0.08
P104885S	5	2.3	53	20	75	17	<5	<3	2	<10	<2	0.1	5	18	219	<5	15	32	72	7	15	<1	1	0.01	0.58	0.01	2.38	0.04	0.05	0.01	0.06
P104886S	6	1.1	50	19	84	34	<5	<3	3	<10	<2	<0.1	6	24	697	<5	21	67	169	10	27	<1	1	0.02	0.98	0.04	2.84	0.14	0.06	0.01	0.06
P104887S	90	1.2	78	53	150	58	<5	<3	5	<10	<2	<0.1	7	39	315	<5	26	90	219	8	85	1	2	0.01	1.62	0.05	4.96	0.17	0.17	0.02	0.11