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ASSESSMENT REPORT

for the

LGC 1-129 CLAIMS

in the

SIXTY MILE RIVER/MILLER CREEK AREA

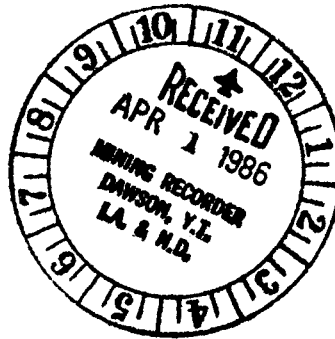
0917967

Dawson Mining District

N.T.S. 116 C/2

Latitude 64°02'N

Longitude 140°57'W



Author: Mary P. Webster

Owner: Noranda Exploration Company, Limited
(No Personal Liability)

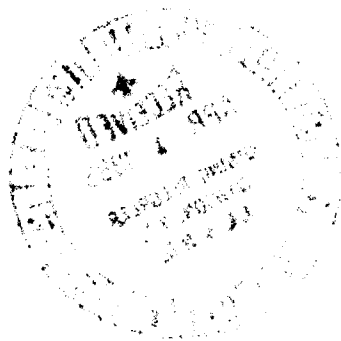
Date: March 1986

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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 \$ 16,200

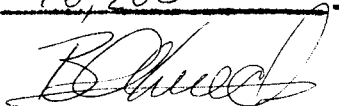

Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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CHAPTER ONE: INTRODUCTION

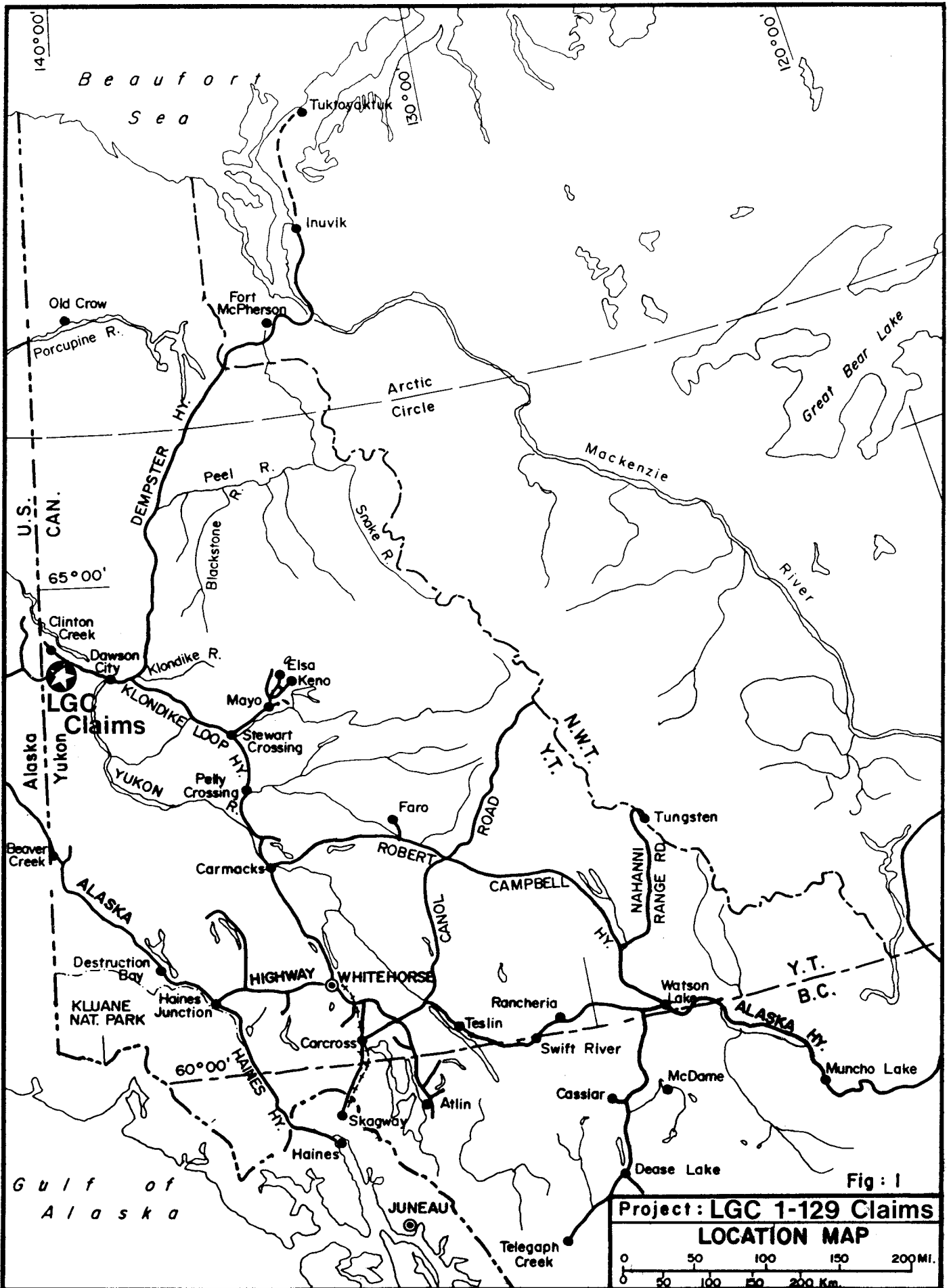
1-1: INTRODUCTORY STATEMENT

The LGC 1-129 claims were staked December, 1984 and July, 1985 to cover the presumed source of stream sediment Au, Ag, Ba, Cu, Pb, Zn and As anomalies detected in the Sixty Mile River/Miller Creek area by Ulrich Glasmacher as part of a thesis written at the University of Aachen, Germany. The area has been placer mined since the turn of the century and reports of native silver in Poker Creek and quartz veins bearing cinnebar and argentiferous galena at the mouth of Miller Creek prompted the Noranda staking.

Most anomalies reported by Glasmacher (1984) failed to be detected in the 1985 work program. Two quartz boulders anomalous in Au, Ag and Pb, and Ag-Ba soil anomalies on the LGC 1-40, 101-129 claim blocks warrant detailed follow up.

1-2: LOCATION AND ACCESS

The LGC 1-129 claims are located approximately 75 kilometres west of Dawson City at latitude 64°02'N and longitude 140°57'W on mapsheet 116 C/2 (Figures 1 and 2). The "Top of the World Highway" (Highway 3) passes within 1.5 kilometres of the LGC 1-40, 101-129 claim block at the head of Glacier



Creek. Secondary roads provide 4x4 access south from Highway 3 to the LGC 1-40, 101-129 claim block near the Yukon/Alaska border and to the project area from the "Cogasa" exit at Big Gold Creek. Highway 3 is closed during the winter due to heavy snow conditions, however helicopter service is available in Dawson year round. Numerous placer mining roads provide access to Glacier, Miller and Little Gold Creeks and 4x4 or ATV access is available directly to or within 500 metres of each claim block.

The 1985 camp was established at the mouth of Little Gold Creek at an old Queenstake campsite.

1-3: PHYSIOGRAPHY AND VEGETATION

The LGC 1-129 claims lie at elevation levels which range from 762 metres (2,500 feet) at the Sixty Mile River to approximately 1,235 metres (4,050 feet) at the head of Glacier Creek. Rolling hills, covered with alpine mosses and low shrubs to approximately 1,067 metres (3,500 feet) elevation, typify the topography of this area. Stream valleys are moderate to densely forested with conifers, poplar and willow. Major creeks such as Big Gold Creek, Miller Creek and Glacier Creek drain southeast to the Sixty Mile River and have numerous branching tributaries which provide excellent drainage of the ridges in the area. Moss cover and overburden (up to 6 metres deep in the creek bottoms) severely limits outcrop exposure in the valleys and forested hillsides of the area. Bedrock is best exposed along road cuts, in the major creek beds and above 1,220 metres (4,000 feet). The

area was not glaciated in Quaternary times.

1-4: HISTORY OF THE PROPERTY

The LGC 1-104 claims were staked December 20, 1984 to cover the presumed source areas of stream sediment Au, Hg, Ba, Cu, Pb, Zn and As anomalies detected in the Sixty Mile River area by Ulrich Glaswacher as part of a thesis written at the University of Aachen, Germany. Preliminary field work was conducted June 13 to 23, 1985. This work included rock, soil and stream geochemistry and geological mapping. The LGC 105-129 claims were staked as part of this field program.

Claims and Ownership

CLAIM NAME	GRANT (TAG) NO.	RECORD DATE	RENEWAL PERIOD (yrs)
LGC 1-40	YA85139-YA85178	Dec. 20, 1984	2
LGC 41-61	YA85179-YA85199	Dec. 20, 1984	1
LGC 62-104	YA87401-YA87443	Dec. 20, 1984	1
LGC 105-129	YA87487-YA87511	July 2, 1985	1

Noranda Exploration Company, Limited (No Personal Liability) has 100% interest in each mining claim named above. Upon acceptance of this assessment report, the claims will be in good standing to the dates listed above.

1-5: WORK PROGRAM

Preliminary field work was conducted on the LGC 1-129 claims from June 13 to 23, 1985. The work program included geological mapping at 1:31,680 scale, detailed rock, soil, silt and pan concentrate sample geochemistry.

The personnel involved in the 1985 field program are listed below:

Mary Webster	Party Chief
Hugh Copland	Senior Assistant
Stuart MacKenzie	Senior Assistant
Mary Cross	Junior Assistant

The following table summarizes the total number and type of samples taken on and in close vicinity to the LGC claim blocks.

<u>Sample Type</u>	<u>Number</u>
Soil	257
Silt	140
Rock	48
Pan Concentrate	4

CHAPTER TWO: GEOLOGY

2-1: REGIONAL GEOLOGY

The Dawson map area is cut by the northwest trending Tintina Trench which separates metamorphic sediments to the southwest and Precambrian to Tertiary sedimentary, volcanic and granitic rocks to the northeast. The Tintina Trench extends from Alaska to southeast Yukon where it is found "en echelon" to the north end of the Rocky Mountain Trench.

The metamorphic rocks southwest of the Tintina Trench underlie most of the Sixty Mile project area and have been mapped by Cairnes (1914, p. 40-44) as the Yukon Group and subsequently described as subunits A to D by Green (1972, p. 106-118 GSC map); Unit A consists of low rank metamorphosed quartzite, quartz mica schist and limestone (Nasina Series)₁; Unit B consists of sericite and minor chlorite schist and gneiss thought derived from igneous rocks (Klondike Series or Schist)₂; Unit C contains mainly

1. McConnell, R.G., 1905b. The Nasina Series were believed derived from alteration igneous rocks in comparison to similar metamorphic rocks of sedimentary origin.

2. McConnell, R.G., 1905b. pp. 10B-22B. The 'Klondike Series' was applied by McConnell to the sericite-chlorite schist and associated gneiss which underlies most of the Klondike goldfields. The Nasina and Klondike series were mapped in the study area by Cockfield (1921).

greenstone and lithologically similar rocks to those belonging to Units A and B. Dense greenstone, light to dark green gneiss, greenish quartz-feldspar mica schist and quartz-mica schist, limestone and dolomite (similar to Unit A) belong in this subunit. Regional metamorphism and contact metamorphism mask the original nature of these rocks and the units are mapped solely on the prevalence of greenstone (Green, 1972 et. al.). Unit D is found only in the Sixty Mile area, 40 kilometres west of Dawson and consists of fine to medium-grained, quartz feldspar biotite gneiss with dark varieties composed essentially of hornblende and feldspar. These gneisses appear to be formed from metamorphism of sedimentary rocks and display a gradational contact to Unit A in the same area.

East of the Tintina Trench, Proterozoic shale and quartzite grading upward to fine-grained arenaceous dolomite form part of a belt of basement rocks which crop out in northern British Columbia, the Ogilvie and MacKenzie Mountains to the Arctic Ocean. A Late Proterozoic "Grit Unit" (Green, p. 19-23), consisting of quartz pebble conglomerate, grit, quartzite and minor limestone, was deposited conformably above this unit through much of central Yukon. Ferruginous conglomerate, sandstone and siltstone, possibly equivalent to the Rapitan Group were deposited in restricted basins to the north. Carbonate sedimentation overlies this sequence at a slight angular unconformity and appears locally to have continued to Silurian times of widespread sedimentation. Locally dark shale, chert, thinly banded dolomite form distinctive marker units. Middle to Late Ordovician volcanic activity is marked by flows and tuffaceous rocks in the Nash Creek map area, 100

kilometres northeast of Dawson City. Arenaceous, carbonate and argillaceous rocks to the north and to the east, coarse clastic sediments were deposited in Devonian times. Massive Permian limestone and chert of the Tahkandit Formation is overlain at a slight unconformity by highly fossiliferous Triassic limestone and shale. A band of thinly bedded black shale of Jurassic age rests unconformably above rocks which range in age from Precambrian to Triassic. Major deformation characterized by complex folding and the intrusion of numerous diorite to gabbro sills and granitic (principally granodiorite to quartz monzonite) stocks occurred in Cretaceous times. A thick terrestrial clastic sequence, forming the core of the Monster Syncline to the north, is considered contemporaneous to the structural deformation during this period. Tertiary accumulations of lignite bearing sediments and coarse, poorly sorted conglomerate are found along the Tintina Trench although some movement post dates these sediments.

Tertiary Mt. Nansen Group andesite and dacite flows and tuffs occur in the Sixty Mile River area and may be associated with movement along the Tintina Trench. Rhyolite and quartz porphyry sills and dykes probably were intruded at this time and may be related to recent granitic intrusions as well as movement of the Tintina Trench. The Mt. Nansen volcanics at Big Gold Creek in the Sixty Mile area are overlain by alkali olivine basalts of the Quaternary Selkirk Group. During Pleistocene times most of the area northwest of the Tintina Trench was glaciated.

Although some similarity to quartz-rich sediments east of the trench has been suggested no direct relationship to the metamorphic rocks southwest

of the Tintina Trench has been identified.

2-2: GEOLOGY OF THE SIXTY MILE PROJECT AREA

The western part of the project area (including LGC claim blocks 1-40, 101-129, 83-96) is largely underlain by (Unit 1, Figure 3) Proterozoic graphitic quartzite and micaceous schist belonging to the Nasina Quartzite (Unit A as described by Green, 1972). This unit consists of low grade metamorphosed sedimentary rocks including dark grey quartzite, quartz muscovite, graphitic quartz muscovite schist, greenstone and limestone. Strong foliation occurs generally parallel to primary bedding although some S-shaped remnants indicate foliation across the original bedding. Quartz lenses occur parallel to bedding up to 20 cm wide and several metres in length. Finely disseminated pyrite occupies up to 10% of the rock and garnet, magnetite, chlorite and hornblende occur as common accessory minerals.

Unit 2 (Klondike Schist), lighter in colour, consists of sericite, quartz-feldspar-muscovite schist with varying amounts of chlorite and associated gneiss which is found in the northwest corner of the property map area and on the LGC 41-64 claim block. The Klondike Schist is best exposed on the "Top of the World Highway" north of the claims where relatively soft, beige coloured, fine-grained quartz-feldspar-muscovite schist contains minor disseminated pyrite (maximum 5%) and minor chlorite. Narrow quartz stringers commonly occur parallel to schist foliation.

The eastern part of the project area (including claim blocks LGC 41-64, 75-73, 74-82 and 97-100) is largely underlain by Tertiary Mt. Nansen Group andesite and dacite flows and tuffs. This volcanic package varies from medium green to brown-buff colour and is fine to medium-grained with moderate to pervasive silicification. Phenocrysts up to 3 mm in length are commonly clay (kaolinite, sericite) altered and occasionally narrow quartz-carbonate stringers with minor epidote and chlorite cross-cut flow patterns. Quartz veins up to 25 cm wide trend northeast and dip east near the mouth of Miller Creek and Glacier Creek. Galena, pyrite, clay minerals and minor carbonate are found in quartz veins on Miller Creek. Hydrothermal alteration is found occasionally at Miller Creek but is not as widespread and pervasive as described by Glaswacher (1984).

Quaternary volcanics described by Glaswacher as grey, black, porphyritic, alkali, olivine basalts are mapped on the PINE claims which lie 500 metres southeast from claim block LGC 41-64 on Big Gold Creek. These volcanics crop out on the road cut and are very fine-grained, black to dark greenish in colour and have clay-carbonate filled amygdules occupying up to 20% of the rock. The contact to the Tertiary volcanic package is clear with evidence of hydrothermal type alteration (silicification, kaolinization and minor pyritization) throughout the unit. Evidence of the Quaternary volcanic pile degassing CO₂ into local streams as reported by Glaswacher was not found.

Unconsolidated Quaternary and recent gravels occupy the base of narrow drainage basins and runoff streams throughout the area.

TABLE OF FORMATIONS

AGE	FORMATION	DESCRIPTION
Cenozoic Quaternary		Unconsolidated glacial and alluvial deposits
	Recent Volcanics	Grey, black to dark green porphyritic alkali-olivine basalt, very fine-grained, quartz-carbonate amygdules up to 20%, minor silicification, disseminated py 5%
Tertiary	Mt. Nansen Volcanics	Med. green to brown-buff, red coloured dacite flows and tuffs. Fine-grained with locally pervasive silicifications, clay alteration. Phenocrysts, clay altered, occasional quartz-carbonate stringers/veins, minor pyrite
Precambrian Proterozoic	Klondike Schist	Light green to buff quartz-mica-chlorite schist and associated gneiss
	Nasina Quartzite	Graphitic quartzite and micaceous schist

CHAPTER THREE: GEOCHEMISTRY

Detailed soil, rock, silt and pan concentrate sampling was done to test those anomalies cited by Glasmacher (1984). A total of 257 soil, 48 rock, 140 silt and 4 pan concentrate samples were taken during this program. Each claim block will be discussed separately below.

LGC 41-64

Target: stream sample 12,000 ppb Au, 1,691 ppb Hg, 221 ppm Pb

Stream Sampling Program: Silt samples were taken at approximate 200 metre intervals along the southeast draining stream and tributaries of this property. Of the 22 (S37651-72) silt samples taken in the immediate claim group vicinity, no gold values ran greater than 10 ppb Au, mercury ran up to 40 ppb Hg and the highest lead value was 22 ppm Pb. A slight zinc anomaly (up to 150 ppm Zn) was observed west of the claim block in six (S37667-72) silt samples taken from the main southeast draining stream, however, this anomaly may reflect a change in bedrock. Copper, arsenic, molybdenum and stibnite values are sub-anomalous. One silver high (0.6 ppm Ag, S37672) occurs west of the property.

Soil Sampling Program: Forty-three soil samples were taken at 25 metre intervals at 2,750 feet elevation along the ridge north of the central southeast draining creek on the property. The highest values in each element analyzed ran as follows: 12 ppm As, 26 ppm Cu, 80 ppm Zn, 10 ppm

Pb, 0.4 ppm Ag, 1 ppm Mo, 4 ppm Sb, 10 ppb Au and 60 ppb Hg. A slight antimony enhancement ranging from 1 to 4 ppm Sb (P67680-88) is noted at the easternmost limit of the soil line. No significant base or precious metal anomalies were found.

LGC 65-73

Target: stream sample 3,200 ppb Au and vein occurrence

Stream Sampling Program: Moss cover and overburden greater than 1.0 metres deep severely limited outcrop exposure and stream sample availability on this property. One silt sample (S20951) ran 10 ppb Au, 0.2 ppm Ag and 180 ppb Hg. The target anomaly was not located. Big Gold Creek has been severely disturbed by placer mining and sampling was not done in this area.

Soil Sampling Program: Two soil lines, 925 metres (37 samples) and 225 metres (9 samples) in length, were sampled at 25 metre intervals above the target anomaly at 2,250 feet and 2,225 feet elevations respectively. No significant anomalies were detected in the nine analyzed elements. The highest values in each element ran as follows: 72 ppm Zn, 12 ppm As, 32 ppm Cu, 6 ppm Pb, 0.2 ppm Ag, 1 ppm Mo, 1 ppm Sb, 10 ppb Au and 80 ppb Hg.

LGC 74-82

Target: stream sample which ran 23,000 ppb Hg, 168 ppm Pb, 339 ppm Zn, 80 ppb Au

Stream Sampling Program: Four silt samples (S37680-82, S37691) were taken upstream from the target anomaly. No significant anomaly was found

and the highest values obtained from these four samples ran as follows: 2 ppm As, 18 ppm Cu, 64 ppm Zn, 4 ppm Pb, 0.2 ppm Ag, 1 ppm Mo, 1 ppm Sb, 10 ppb Au and 60 ppb Hg. Soil sample P37692 was taken from the stream bed above the anomaly without anomalous results.

Soil Sampling Program: Two soil lines were sampled at 25 metre intervals above and below the target anomaly. A total of 33 soil samples were taken. The upper line, 525 metres in length, returned the highest results as follows: 12 ppm As, 20 ppm Cu, 62 ppm Zn, 6 ppm Pb, 0.4 ppm Ag, 1 ppm Mo, 6 ppm Sb, 10 ppb Au and 40 ppb Hg. The lower line, 225 metres in length, proved to be slightly anomalous in mercury in samples P37636, 37 and 38 which ran 160 ppb, 60 ppb and 120 ppb Hg respectively. There was no enhancement of other elements analyzed.

LGC 97-100

Target: stream sample 3,200 ppb Au, 310 ppb Hg thought taken north of Glacier Creek

Sampling Program: Detailed soil sampling was done above the target at approximately 2,500 feet elevation at 25 metre intervals. A total of 16 soil samples and one rock sample were taken. The highest results from the soil sampling program ran 14 ppm As, 26 ppm Cu, 60 ppm Zn, 6 ppm Pb, 0.2 ppm Ag, 1 ppm Mo, 1 ppm Sb, 10 ppb Au and 60 ppb Hg. Rock sample R48233 (float) ran 190 ppm As, 0.4 ppm Ag, 10 ppb Au, 70 ppb Hg and is comprised of pervasively silicified, dark grey andesite cross-cut by a 3 cm wide iron stained, barren quartz stringer. No source was located for this boulder as

overburden, moss and tree cover obscures all traces of outcrop on this claim block.

Float rock sample R48238 taken in the centre of the claim block is comprised of pervasively silicified dark grey andesite cross-cut by 1 cm and 3 cm wide vuggy quartz stringers. This sample ran 1.4 ppm Ag. No source has been identified.

LGC 83-96

Target: stream sample 1,600 ppm Ba, 330 ppb Au, 160 ppm As on tributary south of Miller Creek

Stream Sampling Program: Six silt samples (S48186, 87, 88, 20972, 48232, 33) and two pan concentrate samples (H48188, 89) were taken from narrow streams draining north from the LGC 83-96 claim group. Moderate silt sample anomalies ranging from 80 to 190 ppm As, 60 to 150 ppm Zn, 0.4 to 0.6 ppm Ag and 40 to 120 ppb Hg were found.

Soil Sampling Program: Three soil lines were sampled along the ridges above the target anomaly. Samples P20876-96 were taken at 25 metre intervals along the ridge immediately north of the anomalous creek. Slight arsenic enhancement was found in 3 of the soil samples ranging from 120 to 150 ppm As coincident to a weak silver anomaly of 0.6 ppm Ag (P20884). Sample P20892 ran 0.8 ppm Ag without significant increase in the other elements tested. Mercury values ranged from 20 to 60 ppb Hg and no significant barite anomalies were found. A contour line, 2,000 metres in length, was sampled at an approximate 4,000 foot elevation on the southwest

ridge of the claims. A slight arsenic-silver-mercury anomaly was detected in three samples (P67668, 70 and 71) 100 metres north of the anomalous creek. The values ran as high as 170 ppm As, 1.6 ppm Ag and 220 ppb Hg in soils overlying Nasina Quartzite. Fifty and one hundred fifty metres south of this tributary, arsenic values ran 480 ppm ~~Zn~~^{As} and 290 ppm Zn respectively. A broad arsenic anomaly occurs from samples P67630-37 which is approximately 700 metres long with values ranging from 34-560 ppm As, up to 170 ppm Zn, 180 ppm Pb, 0.6 ppm Ag and 200 ppb Hg. A third soil line sampled at 25 metre intervals at the south side of the claim group ran up to 150 ppb Hg (P67645) without significant enhancements in the remaining elements.

Rock Sampling Program: Seven rock samples were taken during this program (R20967-71, R78190-91). Float sample R20970 ran 1,300 ppb Hg, 30 ppb Au and 1.4 ppm Ag and is comprised of silicified subangular siltstone-quartzite breccia with infillings of limonite, manganese oxides, hematite and sericitic schist. Similar float material (S20771) found 50 metres downhill from sample R20791 ran 30 ppb Hg and 0.4 ppm Ag. These samples were taken on the ridge south of the claims adjacent to an outcrop of grey, fine-grained quartzite with minor limonite which was not anomalous in any element. Two soil samples (P67643,45) taken immediately north from the float samples were slightly anomalous in mercury; 120 ppb and 150 ppb Hg respectively. Two quartz float boulders were sampled in the base of the central stream of the claims. Sample R48191 ran 1.4 ppm Ag, 122 ppm Pb, 80 ppb Hg, 40 ppb Au and contains minor sericite with <10% weathered out pyrite

cubes up to 4 mm in diameter.

LGC 1-40, 101-129

- Targets:
1. Two stream samples which ran 98,000 ppb Au with moderate As, Ba, Hg and 897 ppm Pb, 465 Zn, 169 ppm Cu and 2,084 ppm Ba
 2. A prominent aeromagnetic anomaly immediately SE of the claims
 3. a NE trending lineament visible on airphotos at 1:63,680 scale along the ridge dividing Poker Creek and Glacier Creek

Stream Sampling Program: A total of 91 silt samples were taken from the major tributaries and creeks draining the LGC 1-40, 101-129 claim block. A moderate zinc-silver anomaly was found in samples S35379, 81 taken from the headwaters of Walker's Fork which drains west from the southwest corner of the claims. Poker Creek, to the west of the claims, is reported by local placer miners to carry native silver however only weak mercury anomalies ranging from 20 to 100 ppb Hg were found in this drainage basin. The headwaters of Little Gold Creek to the north of the claims was found to be moderately anomalous in silver (up to 1.2 ppm Ag) and mercury (up to 140 ppb Hg). Moderate to strong zinc anomalies which range from 92 to 300 ppm Zn (S37729-39) are found coincident to the Ag-Hg anomalies immediately north of the claims.

Coincident Zn-Ag anomalies (S21713-15) which ran 1.0 ppm Ag and ranged from 160-170 ppm Zn are found in the creek draining north from the aeromagnetic anomaly. A broad, moderate Zn-Ag anomalous zone which ranges from 60-160 ppm Zn and 0.2-0.6 ppm Ag is noted across this drainage basin.

Two gold anomalies occur on the central fork of this drainage basin. Samples S20960 and S20961 ran 160 ppb Au and 20 ppb Au respectively.

Sporadic zinc and moderate silver anomalies which range up to 260 ppm Zn and 0.6 ppm Ag occur in the headwaters of Glacier creek on the east side of the property (S20907, S20915).

Soil Sampling Program: A total of 26 soil samples were taken along claim lines of the LGC 105-129 claim block at 200 metre intervals. A moderate mercury anomaly 400 metres wide ranges from 180 to 260 ppb Hg on the ridge dividing Miller and Glacier Creeks (P48225-27). Sample P69012 taken near Miller Creek, ran 180 ppb Au. An Hg-Ag anomaly located on the ridge south of Miller Creek ran 2.8 ppm Ag and 140 ppb Hg (P69015). Moderate to weak silver values (up to 1.4 ppm Ag) are found on the central ridge of the property.

Fifty-six soil samples were taken in a mini grid along the northeast trending airphoto lineament in the centre of the property. Silver anomalies of 1.4 ppm Ag and 1.0 ppm Ag occur on the base line at 7+50E and 3+00E respectively. At 7+50E a slight lead-zinc enhancement of 66 ppm Pb and 300 ppm Zn is coincident to the silver high. A barite anomaly ranging from 1,020 to 2,460 ppm Ba peaks the base line at 6+00E. Arsenic and zinc enhancement occurs sporadically on this grid. Trenching is recommended on the two silver anomalies along the base line.

Rock Sampling Program: A total of 11 rocks were taken during this program. Sample R35377 ran 44.0 ppm Ag, 3,860 ppm Pb and 10 ppb Au and was taken from the ridge at the south end of the claims which is drained to the

west by Walker's Fork. Sample R48219, taken at the head of Glacier Creek, ran 720 ppb Au with no base metal or silver enhancement. Both of these samples are float quartz boulders, containing minor pyrite, heavy manganese stain and local laminated and vuggy silica textures. Sample R48203 ran 70 ppb Au, 0.6 ppm Ag with minor zinc (22 ppm Zn) and is comprised of a mafic schist phase of the Nasina Quartzite with pervasive silicification and >1 cm deep sericite rich weathered surface.

CHAPTER FOUR: CONCLUSIONS AND RECOMMENDATIONS

Most anomalies reported by Glasbacher (1984) were not detected by Noranda in the 1985 work program. However, quartz float boulders which proved anomalous in Au (720 ppb), Ag-Pb (44 ppm Ag, 3,860 ppm Pb) found on the LGC 1-40, 101-129 claim block warrant detailed follow up. Silver and barite anomalies found on the mini grid along the northeast trending airphoto lineament warrant trenching, possibly by backhoe, in 1986. Detailed soil sampling is recommended at 25 metre intervals extending the mini grid to the north will test the drainage basin moderately anomalous in silver on the LGC 1-40, 101-104 claims. Detailed soil sampling to the south and prospecting of the LGC 105-129 claims should be done as follow up to quartz float and sporadic soil anomalies. Work efforts should be concentrated on the LGC 1-40, 105-129 claims and along Miller Creek.

Respectfully submitted,



Mary P. Webster
Field Geologist


LIST OF REFERENCES

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- Cairnes, D.D., 1914. The Yukon-Alaska International Boundary, between Porcupine and Yukon Rivers; Geological Survey of Canada, Memoir 67.
- Cockfield, W.E., 1921. Sixty Mile and Ladue Rivers Area, Yukon; Geological Survey of Canada, Memoir 123.
- Glasmacher, U., 1984. Geochemical and Geological PhD thesis on the Miller Creek/Sixty Mile River Area. University of Aachen, Germany.
- Green, L.H., 1972. Geology of Nash Creek, Larsen Creek and Dawson Map Areas, Yukon Territory; Geological Survey of Canada, Memoir 364.
- McConnell, R.G., 1905a. Sixty Mile District; reprinted in Bostock, 1957, pp. 43-46.
- 1905b. Report on the Klondike Gold Fields; reprinted in Bostock, 1957, pp. 64-113.

STATEMENT OF QUALIFICATIONS

I, Mary P. Webster, of the City of Whitehorse, Yukon Territory do hereby certify that:

1. I have been employed as a Geologist by Noranda Exploration Company, Limited (No Personal Liability) since May 1984.
2. I am a graduate of McMaster University, Hamilton, Ontario with a B.Sc. in Geology.
3. I am a member of the Prospector's and Developers Association and the B.C. and Yukon Chamber of Mines.
4. I supervised and carried out part of the work described in this report.


Mary P. Webster
Field Geologist
Noranda Exploration Co. Ltd.
(No Personal Liability)

STATEMENT OF COSTS

PROJECT: LGC 1-40 Claims

Wages: (including report preparation, drafting
and field crew)

No. of Days	53	
Rate per day	125.00	
Total Cost	(125.00 x 53)	6,625.00

Food and Accommodation: 1,624.77

Transportation:

Vehicle Rental	1,298.47
Fuel	680.16

Sample Report

Analysis	9,986.40
Shipment	493.95

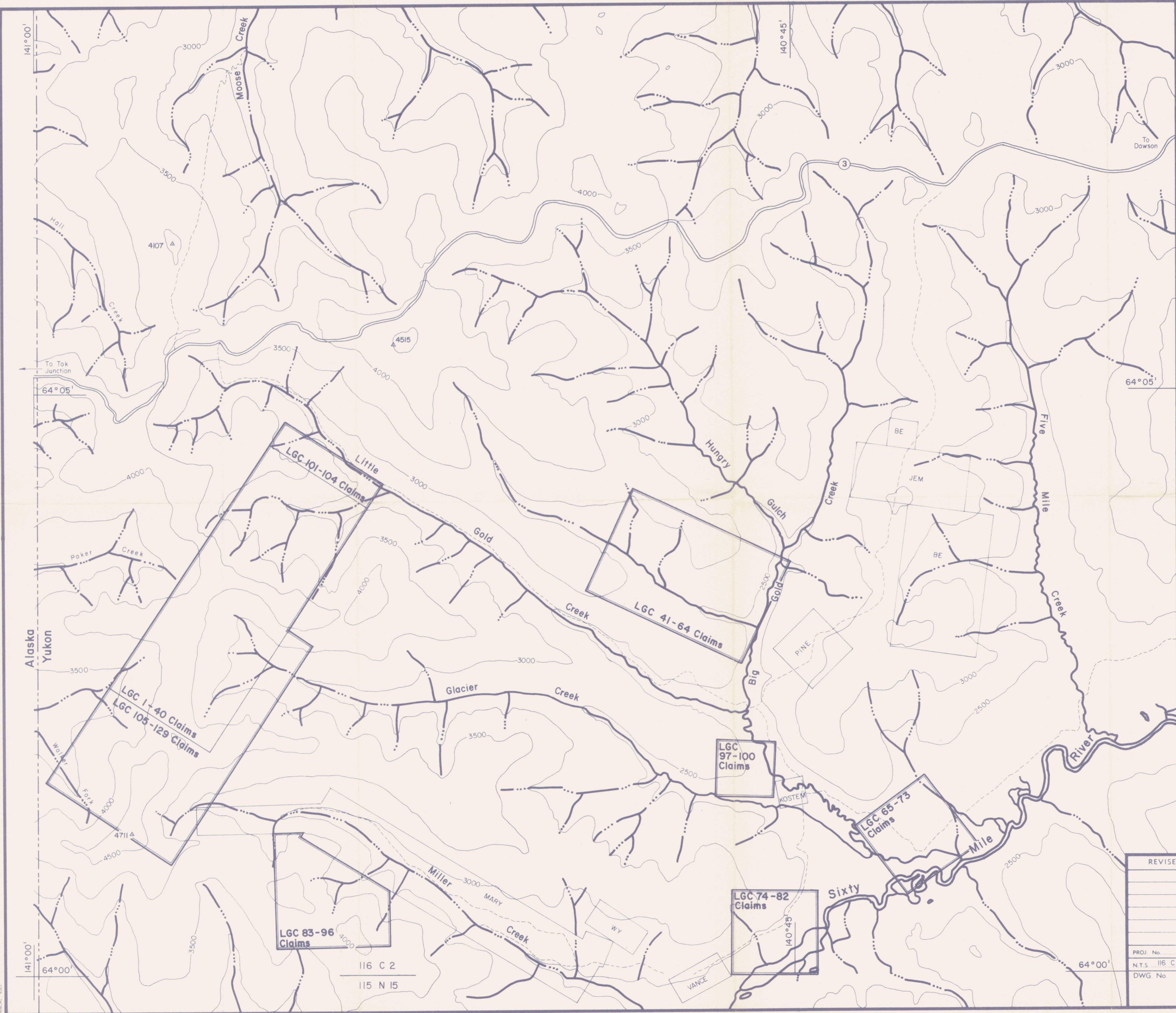
TOTAL 20,708.75

EXPENDITURE REQUIRED

CLAIMS	NO. OF CLAIMS	YEARS RENEWED	AMOUNT REQUIRED
LGC 1-40	40	2	8000.00
LGC 41-64	24	1	2400.00
LGC 64-73	9	1	900.00
LGC 74-82	9	1	900.00
LGC 83-96	14	1	1400.00
LGC 97-100	4	1	400.00
LGC 101-104	4	1	400.00
LGC 105-129	25	1	2500.00
		TOTAL	16900.00
		AMOUNT SPENT BY NORANDA	20708.75

DETAILS OF ANALYSIS COST

<u>ELEMENT</u>	<u>NO. OF DETERMINATIONS</u>	<u>COST PER DETERMINATION</u>	<u>TOTAL</u>
As	397	2.00	794.00
Sb	397	2.00	794.00
Cu	449	1.60	718.40
Zn	449	.60	269.40
Pb	449	.60	269.40
Mo	449	.60	269.40
Ag	449	.60	269.40
Au	449	4.00	1796.00
Ba	16	8.00	128.00
Hg	449	8.00	3592.00
W	36	8.00	288.00
Sample Preparation:			
Soils and Silts	397	.50	198.50
Rocks	48	2.00	96.00
Pan Concentrates	4	2.50	10.00
Data Entry	449	1.10	493.90
TOTAL			\$9986.40



091796

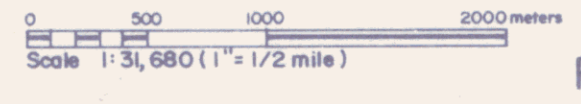


Fig. : 2

REVISED	Sixty Mile River LGC 1-129 Claims Claim Location Map	
PROJ. No.	SURVEY BY:	DATE:
N.T.S. 116 C 2	DRAWN BY: AI	SCALE: 1:31680
DWG. No.	NORANDA EXPLORATION	
	OFFICE Whitehorse	

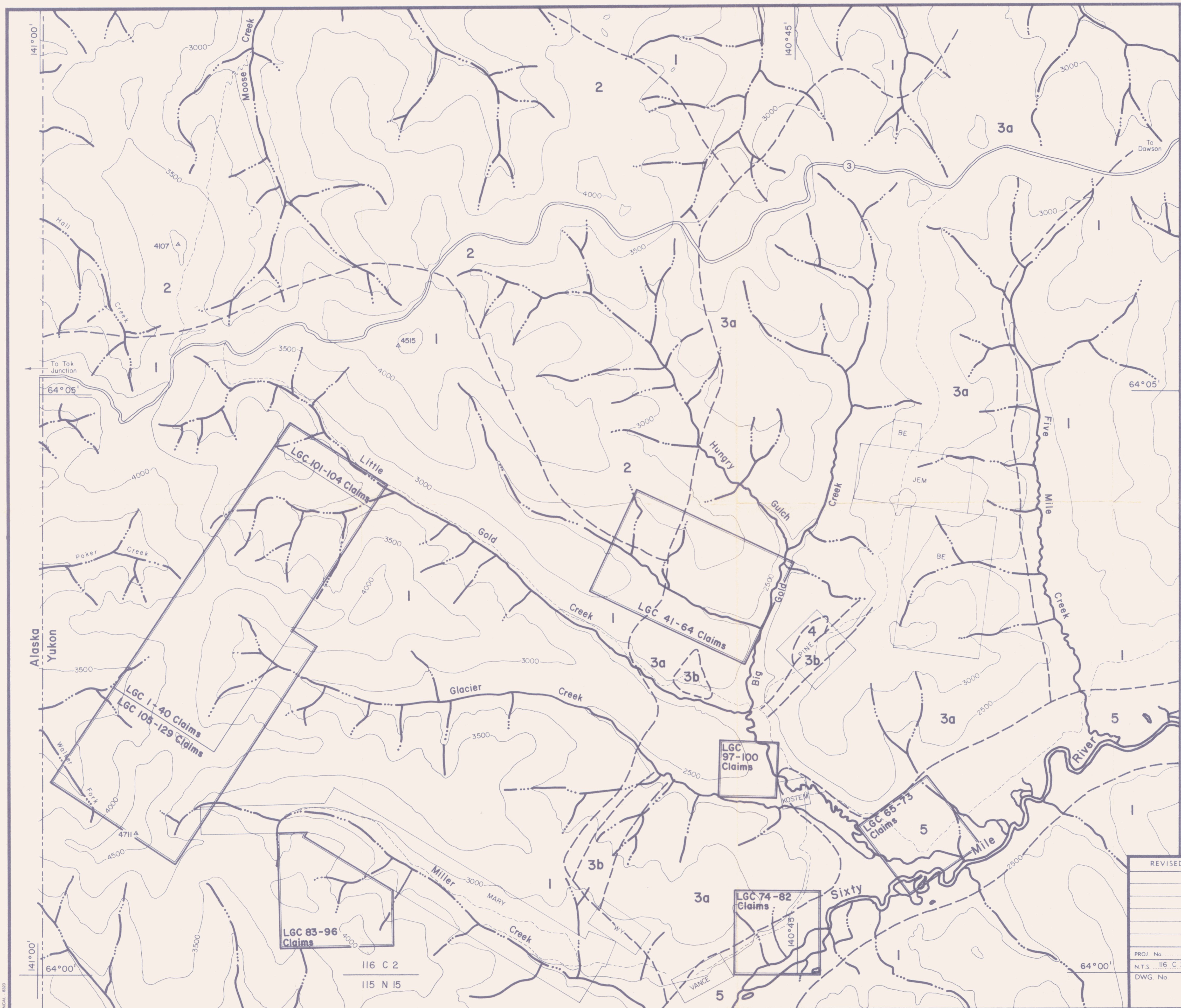
116 C 2
115 N 15

64°00'

141°00'

Alaska
Yukon

NORANDA 8320



Legend

- 5 Unconsolidated glacial & alluvial deposits.
- QUATERNARY**
- 4 Selkirk Group: Alkaline - alvive basalt.
- TERTIARY**
- 3 Mt. Nansen Group:
 - (a.) Grey, green, red and black porphyritic basic volcanic rocks, minor pyroclastics.
 - (b.) Red to grey green ash flow; lapilli tuff.
- PROTEROZOIC and OLDER**
- 2 Klondike Schist: Light green quartz - mica - chlorite schist.
- 1 Nasina Quartzite: Graphitic quartzite and micaceous schist.

Symbols

- Geological contact
- Trail
- NORANDA Claims
- Other claims

091796

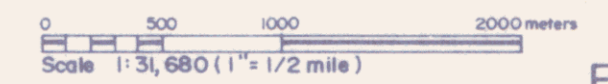


Fig. : 3

REVISED	Sixty Mile River LGC 1-129 Claims Geology	
PROJ. No	SURVEY BY	DATE
N.T.S. 116 C 2	AI	SCALE 1:31680
DWG. No	NORANDA EXPLORATION OFFICE Whitehorse	

116 C 2
115 N 15

LGC 83-96 Claims

LGC 74-82 Claims

LGC 65-73 Claims

LGC 97-100 Claims

LGC 41-64 Claims

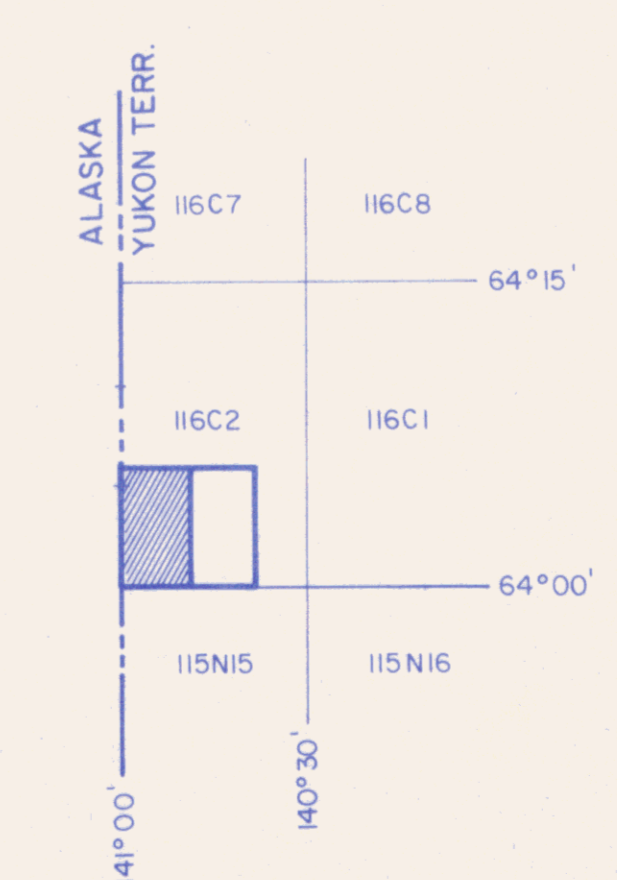
LGC 101-104 Claims

LGC 1-40 Claims
LGC 105-129 Claims



U.S. - Alaska
CANADA - Yukon Territory

64° 05' 64° 00' 141° 00' 140° 55' 140° 50'



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

0 200 400 600 800 1000metres

REVISED	Sixty Mile River (LGC Claims)		
Geochem Sample Location Map			
PRJ. No. 14	SURVEY BY: A1	DATE: JUL 85	
N.T.S. 1:16,000	DRAWN BY: A1	SCALE: 1:10,000	
DWG. No.	NORANDA EXPLORATION		
	OFFICE Whitehorse		

091796 Fig. 4

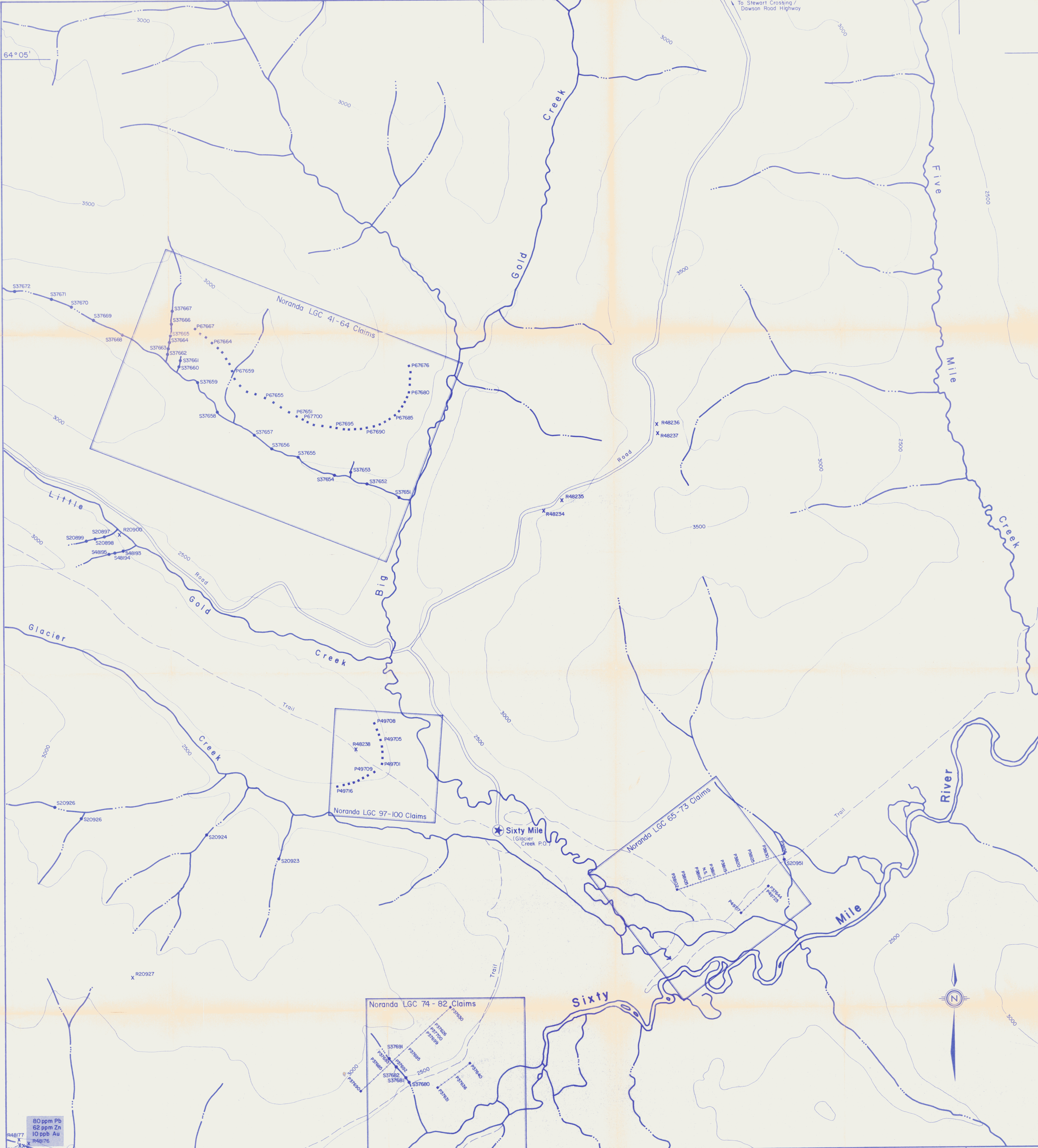
R48239
146 ppm Pb
10 ppm Zn
170 ppb Au
R48240
8 ppm Pb
12 ppm Zn
2080 ppb Au
R48241
14 ppm Pb
20 ppm Zn
560 ppb Au

122 ppm Pb
48 ppm Zn
40 ppb Au
R48190
R48191
R48192

2 ppm Pb
2 ppm Zn
720 ppb Au
R48219

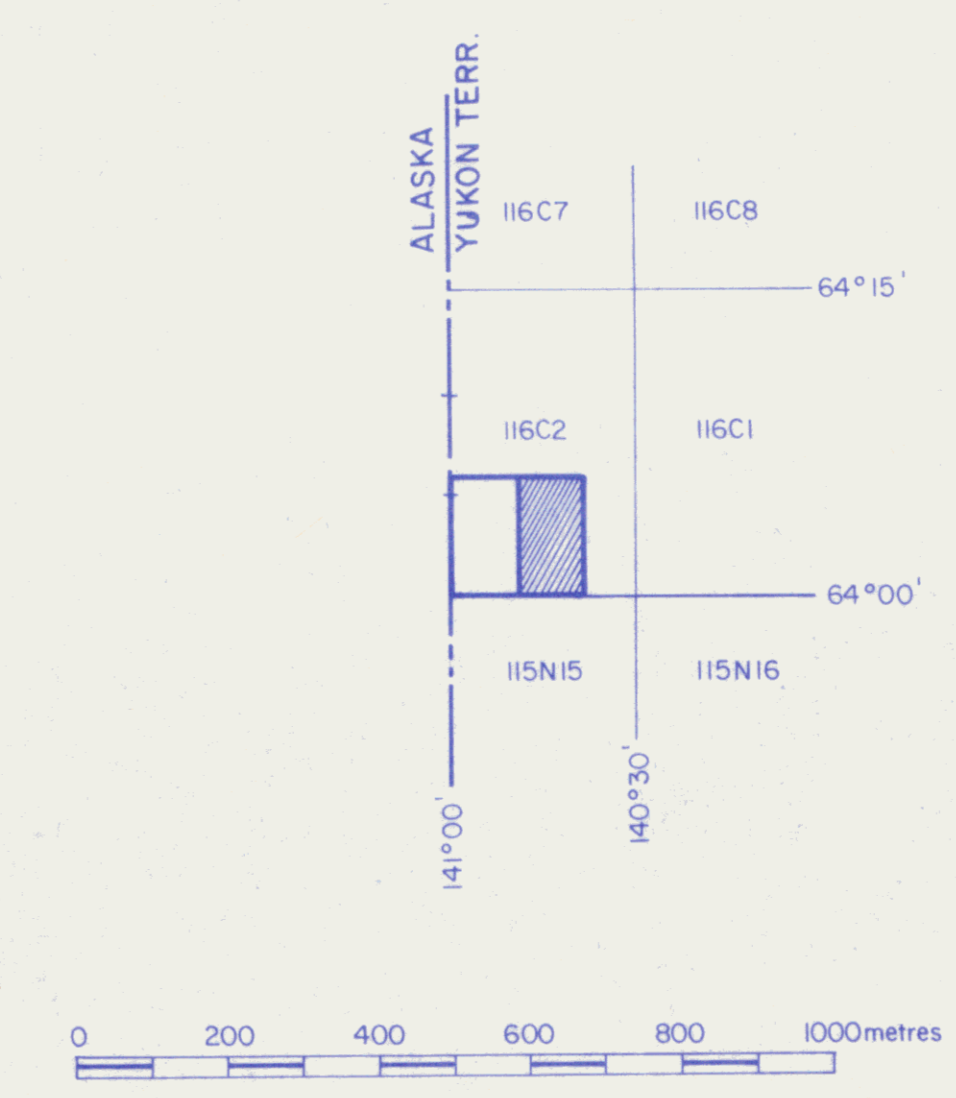
R48204
R48203
2 ppm Pb
22 ppm Zn
70 ppb Au
R48202

80 ppm Pb
62 ppm Zn
10 ppb Au
R48176
R48175
R69495
R69496



80 ppm Pb
 62 ppm Zn
 10 ppb Au
 R48177
 R69437
 R69486
 R69495
 S38146

140° 50' 64° 00' 140° 45' 140° 40'



091796 Fig. : 5

REVISED	Sixty Mile River (LGC Claims)		
Geochem Sample Location Map			
PROJ. No. 14	SURVEY BY: AI	DATE: JUL 85	SCALE: 1:10,000
NTS: IRE C 2	DRAWN BY: AI	NORANDA EXPLORATION	
DWG. No.	OFFICE Whitehorse		

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 116 C/2

PROPERTY Olacine Ck Headwaters

DATE June 20/25

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS						SAMPLED BY	
Q48215	Volcanic tuff - dark grey green fine grained, silicified, calcite vugs and narrow stringer fillings. dissem py grains < 0.3mm throughout	Grab									H.P.
Q48216	Pan										
Q48217	Quartz Boulder, manganese stain along fracture planes and in small etch on wide vugs, irregular sil crystals, silicite nodules, but no calcite - silicite?	Float	30x30cm								H.P.
Q48218	as 217	Float	20x20cm								H.P.
Q48219		Float	40x20cm								H.P.
<u>GOLD!</u>	Quartz boulder with fine gold along silicite-manganese stained fracture. Some ingrowing qtz crystals. Iron oxide throughout but less abundant than manganese, mica 1-2% muscovite.										
Q48220	Quartz boulder large qtz crystals iron stain etc. iron oxide stain, mica hematite, muscovite 6-8%	Float									H.C.

ASSAY

file

RUSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
BURNABY, B.C. V5B 3N1
TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
1050 DAVIE STREET
VANCOUVER, B.C.
PROJECT: 314 F3 8507-003
TYPE OF ANALYSIS: GEOCHEMICAL

Sixty Mile

CERTIFICATE#: 85174
INVOICE#: 5289
DATE ENTERED: JULY 4, 1985
FILE NAME: NOR85174
PAGE # : 1

PRE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPM W	PPB Au	PPB Hg
T	R-48176	1	22	5.2	62	80	1	10	60
T	48177	1	6	1.6	30	18	1	10	40
T	48178	1	8	0.8	8	12	1	10	60
T	48179	1	6	0.2	14	4	1	10	20
T	48180	1	12	0.6	30	16	1	10	10
T	48181	1	24	0.2	156	6	1	10	10
T	48182	1	4	0.6	8	22	1	30	40
T	48183	1	22	0.2	22	20	5	20	10
T	48184	1	10	0.4	40	20	2	10	10
T	R-48190	1	10	0.2	14	2		10	10
T	48191	1	4	1.4	48	122		40	80
T	48196	1	80	0.4	96	14		10	10
T	48202	1	2	0.2	4	2		10	10
T	48203	4	12	0.6	22	2		70	10
T	48204	1	2	0.2	6	4		10	10
T	48214	3	128	0.2	136	2		10	40
T	48215	1	18	0.2	68	2		10	10
T	48217	1	4	0.2	6	2		10	10
T	48218	1	12	0.2	20	2		10	10
T	R-48219	1	4	0.2	2	2		720	10
T	48220	1	6	0.2	20	4		10	10
T	48228	1	12	0.4	32	14		10	10
T	48235	1	8	0.8	74	8	1	10	10
T	48236	1	12	1.6	540	44	2	10	10
T	48237	1	6	0.8	132	28	2	10	10
T	48238	1	4	1.4	12	10	2	10	10
T	48239	1	78	0.8	10	146	INT	170	10
T	48240	1	70	0.6	12	8	INT	2080	10
T	48241	1	36	0.4	20	14	INT	560	10
T	R-69474	1	10	0.2	76	12		10	10
T	68495	1	2	0.2	8	4		10	10
T	69496	1	4	0.8	10	8		10	30
T	69497	1	190	0.2	20	4		10	10
T	69498	1	12	1.4	86	16		10	10
T	69499	1	6	0.4	66	6		10	30
T	69500	1	12	0.4	144	6		10	10
T	20900	1	26	0.2	46	4		10	10
T	20927	1	6	0.2	64	8		10	10
T	R-20967	1	28	0.2	26	6	2	10	10

CERTIFIED BY : _____

25/7/85 MW WM DP

RUSSBACHER LABORATORY LTD.

2225 S. SPRINGER AVENUE
 BURNABY, B.C. V5B 3N1
 TEL : (604) 299 - 6910

CERTIFICATE OF ANALYSIS

TO : NORANDA EXPLORATION CO. LTD.
 1050 DAVIE STREET
 VANCOUVER, B.C.
 PROJECT: 314 F3 8507-003
 TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 85174
 INVOICE#: 5289
 DATE ENTERED: JULY 4, 1985
 FILE NAME: NOR85174
 PAGE # : 2

PRE FIX	SAMPLE NAME	PPM Mo	PPM Cu	PPM Ag	PPM Zn	PPM Pb	PPM W	PPB Au	PPB Hg
T	R-20968	5	8	0.2	12	18	1	10	10
T	20969	1	4	0.2	4	16	5	10	10
T	20970	2	80	1.4	38	48	1	30	1300
T	20971	4	130	0.4	68	50	1	10	30
T	35376	1	26	0.2	18	12		10	10
T	35377	1	60	<u>44.0</u>	24	<u>3860</u>		20	10
T	35378	1	152	0.4	248	52		10	10
T	R-35382	1	12	1.8	10	14		10	10

CERTIFIED BY : _____

NORANDA VANCOUVER LABORATORY

PROPERTY/LOCATION: Sixty Mile

116/C2

CODE : 8507-002

Project No. : 314

Sheet: 1 of 8

Date rec'd: June 26

Material : Silt & Soil

Geol.: M.W.

Date compl: July 18

Remarks :

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	As	Cu	Zr	Pb	Ag	Mo	Sb	PPB Au	LGC CLAIM
2	20901	16	24	72	6	0.2	1	1	10	Hg 20 BA
3	2	18	42	66	2	0.2	1	1	10	20
4	3	1	22	72	4	0.2	1	1	10	20
5	4	24	40	78	2	0.2	1	1	10	30
6	5	16	32	76	8	0.2	1	1	10	20
7	6	16	28	88	4	0.2	1	1	10	20
8	7	1	48	260	2	0.2	1	1	10	20
9	8	14	24	70	4	0.4	1	1	10	40
10	9	20	36	78	12	0.4	1	2	10	80
11	10	12	32	90	8	0.4	1	1	10	20
12	11	22	34	120	14	0.4	1	2	10	40
13	12	14	32	120	14	0.2	1	4	10	60
14	13	6	44	160	2	0.2	1	2	10	40
15	14	18	28	80	2	0.2	1	1	10	30
16	15	34	52	220	8	0.6	1	1	10	40
17	16	8	24	94	8	0.2	1	1	10	40
18	17	I.S.	38	160	10	0.2	1	1	10	40
19	18	36	40	190	16	0.4	1	1	10	80
20	19	4	26	78	4	0.2	1	1	10	20
21	20	120	36	210	18	0.4	1	1	10	40
22	21	94	24	150	14	0.4	1	1	10	40
23	20922	60	26	140	12	0.2	1	1	10	30
24	37665	1	12	68	12	0.2	1	1	10	20
25	66	1	8	62	10	0.2	1	1	10	20
26	67	1	22	120	22	0.2	1	1	10	20
27	68	2	22	130	6	0.2	1	1	10	20
28	69	1	26	150	8	0.2	1	1	10	40
29	70	8	26	150	8	0.2	1	1	10	20
30	71	6	24	120	6	0.2	1	1	10	20
31	72	18	32	110	10	0.6	1	1	10	40
32	73	6	20	82	4	0.2	1	1	10	20
33	74	I.S.	24	90	6	0.2	1	1	10	20
34	37675	6	20	82	4	0.2	1	1	10	40
35	37651	1	12	66	6	0.2	1	1	10	20
36	52	I.S.	12	64	6	0.2	1	1	10	20
37	53	1	10	56	4	0.2	1	1	10	20
38	54	2	16	76	8	0.2	1	1	10	40
39	55	1	16	78	10	0.2	1	1	10	40
40	56	1	16	74	10	0.2	1	1	10	20
41	57	1	16	76	10	0.2	1	1	10	20
42	58	2	18	84	10	0.2	1	1	10	20
43	59	2	14	78	10	0.2	1	2	10	20
44	60	1	8	52	4	0.2	1	1	10	20
45	61	1	12	56	4	0.2	1	1	10	20
46	62	1	8	60	8	0.2	1	1	10	20
47	63	1	10	66	12	0.2	1	1	10	20
48	37664	1	10	66	10	0.2	1	1	10	20
49	B1-0.00E	46	52	68	10	1.2	1	1	10	20 1180

6 MW DP

T. T. No.	SAMPLE No.	As	Cu	Zn	Pb	Ag	Mo	Sb	PPB Au	Hg	8507-002 Pg. 2 of BA
	B1-0.50E	44	40	68	6	0.2	1	4	10	20	
51	1.00	20	8	20	2	0.2	1	1	10	20	
52	1.50	14	12	30	2	0.4	1	1	10	60	
53	2.00	40	40	72	6	0.2	1	1	40	40	1120
54	2.50	14	18	32	2	0.4	1	1	10	20	
55	3.00	26	40	32	4	1.0	1	1	10	60	
56	3.50	20	26	66	4	0.6	1	1	10	40	
57	4.00	44	56	58	2	0.8	1	1	10	80	1120
58	4.50	130	42	84	2	0.2	1	1	10	80	
59	5.00	180	48	96	1	0.2	1	1	10	40	
60	5.50	26	88	120	1	0.2	1	1	10	20	
61	6.00	14	38	62	4	0.6	1	1	10	40	2460
62	6.50	18	44	66	4	0.2	1	1	10	40	
63	7.00	8	10	24	1	0.6	1	1	10	40	
64	7.50	70	56	300	66	1.4	1	1	10	60	
65	8.00	12	22	68	6	0.2	1	1	10	20	1020
66	8.50	4	10	30	6	0.2	1	1	10	20	
67	9.00	I.S.	10	20	1	0.6	1	1	10	NSS	
68	9.50	14	16	54	6	0.2	1	1	10	20	
69	10.00	16	12	40	10	0.2	1	1	10	20	740
70	10.50	4	14	60	8	0.2	1	1	10	40	
71	11.00	4	12	58	6	0.2	1	1	10	40	
72	B1-11.50E	8	10	44	2	0.4	1	1	10	80	
73	20876	16	14	36	2	0.4	1	2	10	40	
74	77	22	12	26	2	0.2	1	1	10	20	
75	78	78	50	80	6	0.2	1	1	10	40	
	79	24	14	28	2	0.4	1	1	10	40	
77	80	120	32	70	8	0.2	1	1	10	20	
78	81	72	34	72	6	0.2	1	1	10	40	
79	82	48	32	62	4	0.2	1	1	10	40	
80	83	50	30	66	4	0.2	1	1	10	20	
81	84	120	40	70	10	0.6	1	1	10	20	
82	85	150	34	78	6	0.2	1	1	10	20	
83	86	64	26	54	4	0.4	1	1	10	20	
84	87	52	44	86	6	0.2	1	1	10	20	
85	88	40	36	74	4	0.2	1	1	10	20	
86	89	32	30	66	4	0.2	1	1	10	20	
87	90	50	36	80	8	0.2	1	1	10	20	
88	91	50	40	80	6	0.2	1	1	10	20	
89	92	44	42	86	8	0.8	1	1	10	20	
90	93	24	34	72	10	0.2	1	1	10	20	
91	94	36	32	66	8	0.6	1	1	10	40	
92	95	44	40	78	8	0.2	1	1	10	60	
93	20896	32	34	60	4	0.4	1	1	10	20	
94	37676	4	18	64	2	0.2	1	1	10	20	
95	77	10	26	78	4	0.2	1	1	10	20	
96	78	10	32	180	32	0.8	1	1	10	200	
97	37679	1	24	62	4	0.2	1	1	10	20	
98	37683	4	14	44	4	0.2	1	1	10	20	
99	37684	1	16	42	4	0.2	1	1	10	40	
100	CHECK NL-5	54	26	66	70	1.4	12	8	-	20	
101	37685	8	14	72	8	0.2	1	1	10	20	
102	86	10	10	60	8	0.2	1	1	10	20	
103	87	1	20	66	12	0.2	1	1	10	20	
104	88	1	14	70	18	0.2	1	1	10	20	
105	89	1	10	150	50	0.2	1	1	10	20	
106	37690	1	16	72	10	0.2	1	1	10	40	

T. T. No.	SAMPLE No.	As	Cu	Zn	Pb	Ag	Mo	Sb	PPB Au	8507-008 Pg. 3 of B.A
1	5.50E-1.00S	14	62	80	2	0.4	1	1	10	20
108	0.75	26	46	76	6	0.2	1	1	10	20
109	0.50	24	30	72	10	0.2	1	1	10	60
110	0.25S	4	58	44	12	0.4	1	1	10	20
111	0.25N	6	94	110	1	0.2	1	1	10	30
112	0.50	64	24	130	1	0.2	1	1	10	40
113	0.75	2	16	48	1	0.2	1	1	10	40
114	5.50E-1.00N	34	62	120	8	0.2	1	1	10	40
115	7.50E-1.00S	1	18	50	1	0.6	1	1	10	40
116	0.75	8	24	78	6	0.2	1	1	10	20
117	0.50	64	50	250	22	0.2	2	1	10	20
118	0.25S	20	34	120	22	0.2	1	1	10	20
119	0.25N	30	72	180	8	0.2	2	1	10	20
120	0.50	6	32	76	6	0.2	1	1	10	40
121	0.75	6	60	140	6	0.2	2	6	10	40
122	7.50E-1.00N	1	42	130	6	0.4	2	1	10	40
123	38102	1	26	72	2	0.2	1	1	10	20
124	3	6	30	64	4	0.2	1	1	10	20
125	4	2	26	60	4	0.2	1	1	10	40
126	5	1	28	62	4	0.2	1	1	10	20
127	6	6	26	58	4	0.2	1	1	10	40
128	7	1	32	64	4	0.2	1	1	10	40
129	8	1	28	60	4	0.2	1	1	10	20
130	9	1	30	62	2	0.2	1	1	10	20
131	10	1	26	60	2	0.2	1	1	10	20
132	11	2	26	60	2	0.2	1	1	10	20
133	12	12	30	66	4	0.2	1	1	10	30
134	13	8	20	54	4	0.2	1	1	10	80
135	38114	18	34	72	4	0.2	4	1	10	40
136	20973	24	30	88	14	0.4	1	1	10	120
137	20974	48	22	56	40	0.8	1	1	10	20
138	20980	16	46	160	8	0.4	2	1	10	20
139	48205	46	58	96	8	0.2	2	1	10	20
140	6	56	54	90	8	0.2	2	4	10	100
141	7	4	24	62	4	0.2	1	1	10	20
142	8	12	26	60	2	0.2	1	1	10	40
143	9	8	24	62	2	0.2	2	1	10	40
144	10	10	24	62	4	0.2	1	1	10	20
145	11	1	24	62	4	0.2	1	1	10	80
146	12	8	24	64	4	0.2	1	1	10	60
147	48213	16	30	64	4	0.2	1	4	10	40
148	35379	24	44	120	12	0.6	2	1	10	40
149	35381	22	52	140	14	0.8	2	1	10	60
2	37626	12	20	56	2	0.4	1	1	10	20 74-82
3	27	4	12	40	2	0.2	1	1	10	30
4	28	1	10	44	4	0.2	1	1	10	20
5	29	2	12	52	4	0.2	1	1	10	20
6	37630	1	12	58	4	0.2	1	1	10	30
7	49701	2	22	58	4	0.2	1	1	10	20 97-100
8	2	1	22	60	4	0.2	1	1	10	30
9	3	1	18	54	4	0.2	1	1	10	20
1	4	1	20	56	4	0.2	1	1	10	20
11	5	1	18	56	4	0.2	1	1	10	20
12	6	6	18	54	4	0.2	1	1	10	40
13	7	14	16	60	4	0.2	1	1	10	40
14	8	6	16	54	4	0.2	1	1	10	40
15	49709	1	24	56	4	0.2	1	1	10	20

T. T. No.	SAMPLE No.	As	Cu	Zn	Pb	Ag	Mo	Sb	PPB Au	MS	SS07-002 Pg. 4 of 8
	49710	8	22	54	4	0.2	1	1	10	30	
17	11	6	20	56	4	0.2	1	1	10	60	
18	12	8	24	56	4	0.2	1	1	10	20	
19	13	6	20	60	4	0.2	1	1	10	20	
20	14	6	22	54	4	0.2	1	1	10	40	
21	15	4	22	52	6	0.2	1	1	10	20	
22	49716	10	26	60	4	0.2	1	1	10	20	
23	67656 31	4	8	46	2	0.2	1	1	10	20	41-64
24	32	4	10	54	2	0.2	1	1	10	20	
25	34	4	10	32	2	0.2	1	1	10	20	
26	35	4	12	50	2	0.2	1	1	10	20	
27	36	1	10	38	2	0.2	1	1	10	20	
28	37	10	18	54	2	0.2	1	1	10	60	
29	38	8	16	52	2	0.2	1	1	10	40	
30	39	12	24	44	1	0.2	1	1	10	60	
31	40	10	14	50	4	0.2	1	1	10	20	
32	41	4	14	36	2	0.4	1	1	10	20	
33	42	12	18	52	2	0.2	1	1	10	20	
34	67667 43	2	10	56	10	0.2	1	1	10	20	
35	37692	2	16	50	4	0.2	1	1	10	40	74-82
36	93	4	18	48	6	0.2	1	1	10	30	
37	94	8	14	48	4	0.4	1	1	10	40	
38	95	6	16	50	2	0.2	1	2	10	20	
39	96	6	14	62	2	0.2	1	1	10	20	
40	97	4	14	60	2	0.2	1	1	10	20	
41	98	8	16	52	2	0.2	1	2	10	20	
42	37699	1	20	56	1	0.2	1	1	10	20	
43	37700	4	12	54	2	0.2	1	6	10	20	
44	67676 to 7667 1	8	14	66	4	0.2	1	1	10	40	41-64
45	2	4	12	66	4	0.2	1	2	10	20	
46	3	1	16	38	4	0.2	1	1	10	40	
47	4	8	14	68	2	0.2	1	1	10	20	
48	5	6	20	56	6	0.2	1	4	10	60	
49	6	1	16	48	4	0.2	1	4	10	40	
50	7	2	22	36	2	0.2	1	1	10	20	
51	8	1	12	32	2	0.2	1	1	10	20	
52	9	1	14	50	4	0.2	1	2	10	20	
53	10	4	16	60	4	0.2	1	2	10	20	
54	11	2	10	32	2	0.2	1	1	10	20	
55	12	1	18	54	4	0.2	1	1	10	20	
56	13	8	20	80	6	0.2	1	2	10	20	
57	14	4	16	62	4	0.2	1	1	10	20	
58	15	4	18	34	4	0.2	1	1	10	20	
59	67691 16	8	18	38	4	0.2	1	1	10	60	
60	37680	1	14	60	4	0.2	1	1	10	60	74-82
61	81	1	14	58	2	0.2	1	1	10	40	
62	37682	1	18	62	4	0.2	1	1	10	60	
63	37691	2	18	64	4	0.2	1	1	10	20	
64	38125	6	20	58	4	0.2	1	1	10	20	65-73
65	26	4	30	62	4	0.4	1	1	10	20	
66	27	12	28	62	6	0.2	1	2	10	20	
67	28	16	28	64	6	0.4	1	1	10	20	
68	29	6	22	56	4	0.2	1	1	10	40	
69	30	4	24	58	2	0.2	1	1	10	30	
70	31	2	24	60	4	0.2	1	1	10	40	
71	32	I.S.	14	54	4	0.2	1	1	10	50	
72	38133	8	22	62	4	0.2	1	1	10	40	

T. T. No.	SAMPLE No.	As	Cu	Zn	Pb	Ag	Mo	Sb	PPB Au	Hg	8507-002 Pg. 5 of 8A
	38134	10	16	56	4	0.2	1	1	10	40	
74	35	1	18	60	4	0.2	1	1	10	40	
75	38136	1	24	68	4	0.2	1	1	10	20	
76	49717	1	14	54	4	0.2	1	1	10	20	65-73
77	18	1	18	56	4	0.2	1	1	10	20	
78	19	8	18	50	4	0.2	1	1	10	40	
79	20	8	20	54	4	0.2	1	1	10	20	
80	21	1	18	52	4	0.2	1	1	10	20	
81	22	1	14	54	4	0.2	1	1	10	20	
82	23	2	14	52	1	0.2	1	1	10	20	
83	24	2	16	50	6	0.2	1	1	10	20	
84	49725	2	20	58	4	0.2	1	1	10	20	
85	37644	1	20	58	4	0.2	1	1	10	40	65-73
86	37631	2	20	46	6	0.2	1	1	10	40	74-82
87	32	1	20	90	32	0.4	1	1	10	20	
88	33	1	8	18	4	0.2	1	1	10	40	
89	34	1	16	40	4	0.2	1	1	10	20	
90	35	1	16	52	4	0.2	1	1	10	20	
91	36	2	18	62	14	0.2	1	1	10	100	
92	37	1	50	76	12	0.2	1	1	10	20	
93	38	1	24	12	1	0.2	1	1	10	20	
94	39	1	20	20	1	0.2	1	1	10	20	
95	37640	1	12	32	1	0.2	1	1	10	20	
96	20951	1	26	66	8	0.2	1	1	10	20	65-73
97	37729	1	28	92	6	0.4	1	1	10	20	65-73
	30	12	30	110	8	0.6	1	1	10	20	
98	37731	10	34	130	6	1.2	1	1	10	20	
100	CHECK NL-5	52	24	64	80	1.4	8	10	-	60	
101	37732	12	32	130	6	1.0	1	1	10	60	
102	33	22	32	120	6	0.6	1	1	10	60	
103	34	14	30	150	4	0.4	1	1	10	60	
104	35	12	38	140	6	0.4	1	1	10	60	
105	36	8	40	160	6	0.4	1	1	10	100	
106	37	1	34	210	6	0.6	1	1	10	140	
107	38	4	30	230	4	0.6	1	1	10	40	
108	39	1	34	300	6	0.8	1	1	10	140	
109	37740	2	26	150	6	0.6	1	1	10	80	
110	48186	90	38	140	16	0.4	1	1	10	60	83-96
111	87	90	38	140	12	0.4	1	1	10	20	
112	48188	80	40	150	16	0.6	1	1	10	40	
113	67692	1	14	42	4	0.2	1	1	10	20	41-64
114	18	1	16	48	2	0.2	1	1	10	20	
115	19	1	20	56	4	0.2	1	1	10	60	
116	20	1	10	28	1	0.2	1	1	10	30	
117	21	1	22	68	2	0.2	1	1	10	20	
118	22	1	14	54	2	0.2	1	1	10	20	
119	23	1	12	60	4	0.2	1	1	10	20	
120	24	1	14	52	2	0.2	1	1	10	20	
121	67700	1	14	52	2	0.2	1	1	10	20	
122	67651	1	16	62	2	0.2	1	1	10	20	
123	27	1	14	60	2	0.2	1	1	10	20	
124	28	10	26	62	1	0.2	1	1	10	40	
125	29	4	14	52	2	0.2	1	1	10	20	
126	67655	6	18	58	2	0.2	1	1	10	20	
127	21701	12	16	54	2	0.2	1	1	10	20	1-40
128	2	1	32	72	6	0.2	1	1	10	60	
129	21703	1	16	78	4	0.2	1	1	10	60	

T. T. No.	SAMPLE No.	As	Cu	Zn	Pb	Ag	Mo	Sb	PPB Au	Hg	8507-002 Pg. 6 of 8
1	21704	6	14	72	4	0.2	1	1	10	60	
131	21705	12	14	74	4	0.2	1	1	10	60	
132	48221	26	34	70	6	0.2	1	1	10	180	1-40
133	22	34	38	78	6	0.2	1	1	10	40	
134	23	24	42	76	6	0.2	1	6	10	60	
135	24	26	38	80	8	0.2	1	8	10	20	
136	25	26	34	76	6	0.2	1	6	10	180	
137	26	12	12	26	4	0.2	1	12	10	220	
138	48227	8	10	20	1	0.2	1	12	10	260	
139	P67668 1	8	20	30	1	0.2	1	16	10	80	Miller
140	2	28	34	52	6	1.6	1	10	10	180	1
141	3	170	48	94	8	0.4	1	18	10	220	20
142	4	16	16	38	1	1.0	1	20	10	120	1
143	5	26	28	52	2	0.4	1	10	10	60	2
144	6	480	26	84	28	0.4	1	6	10	40	
145	7	26	16	32	2	0.2	1	10	10	80	
146	P67675 8	290	30	84	8	0.4	1	8	10	40	
147	P67624 9	14	12	18	1	0.2	1	10	10	80	
148	10	66	32	50	1	0.8	1	12	10	100	
149	11	30	14	24	1	0.6	1	1	10	70	1
2	12	18	4	14	1	0.2	1	4	10	20	1
3	13	160	16	36	12	0.2	1	2	10	40	5
4	14	380	58	170	180	0.2	1	2	10	60	70
5	15	450	56	88	12	0.6	1	1	10	60	45
6	16	34	40	72	4	0.2	1	2	10	30	35
7	20972	160	40	88	14	0.6	1	10	20	60	
8	38146	36	32	120	10	0.2	1	4	20	40	
9	P17	560	42	150	24	0.2	1	4	10	80	
10	18	270	22	38	14	0.2	1	6	10	60	
11	19	230	36	56	12	0.4	1	4	10	200	
12	20	180	28	54	4	0.2	1	1	10	40	
13	21	40	24	60	6	0.2	1	6	10	40	20
14	22	14	16	30	1	0.4	1	6	10	40	
15	23	130	26	62	10	0.2	1	4	10	40	
16	24	28	12	36	4	0.2	1	4	10	60	
17	P67642 25	34	34	54	8	0.2	1	1	10	30	
18	P67643 26	22	20	46	6	0.2	1	6	10	120	
19	27	12	20	40	8	0.2	1	10	10	60	30
20	28	18	22	48	8	0.2	1	8	10	150	
21	29	22	20	56	8	0.2	1	4	10	40	
22	30	12	22	56	6	0.2	1	10	10	40	
23	31	20	30	46	18	0.2	1	2	10	60	30
24	P67649 32	16	20	36	8	0.2	1	12	10	30	20
25	20887	18	24	76	4	0.2	1	2	10	40	1-40
26	20888	24	20	74	4	0.4	1	1	10	40	30
27	20889	36	22	78	4	0.4	1	10	10	100	30
28	21713	22	48	170	10	1.0	1	2	10	60	
29	14	16	52	170	14	1.0	1	4	10	60	
30	15	20	46	160	12	1.0	1	6	10	40	
31	16	22	26	92	6	0.6	1	1	10	60	
32	17	6	20	68	4	0.2	1	1	10	40	
3	18	12	20	70	4	0.2	1	2	10	20	
34	19	8	20	76	4	0.2	1	1	10	40	
35	20	6	16	62	4	0.2	1	1	10	40	
36	21	10	24	78	4	0.4	1	2	10	40	
37	22	12	32	90	4	0.2	1	1	10	200	
38	21723	10	32	120	4	0.4	2	2	10	80	

T. T. No.	SAMPLE No.	As	Cu	Zn	Pb	Ag	Mo	Sb	PPB Au	8507-00a Pg. 7 of 10
	21724	18	28	86	4	0.2	2	1	30	80
40	21725	10	28	84	4	0.4	2	1	10	40
41	0.00E-1.00S	30	36	58	4	0.2	1	4	10	40
42	0.75	40	28	60	10	0.2	1	2	10	40
43	0.50	36	18	38	8	0.2	1	6	10	40
44	0.25S	34	36	56	12	0.2	1	4	10	40
45	0.00E-1.00N	24	36	64	4	0.2	1	1	10	40
46	0.75	40	46	68	6	0.2	1	8	20	60
47	0.50	26	46	62	6	0.2	1	6	10	40
48	0.00E-0.25N	46	54	72	4	0.2	1	10	10	60
49	38115	16	24	56	4	0.2	1	6	10	60
50	16	16	20	46	4	0.2	1	8	10	40
51	17	6	26	56	2	0.2	1	1	10	40
52	18	4	26	54	4	0.2	1	1	10	40
53	19	8	24	54	4	0.2	1	4	10	40
54	20	10	24	58	4	0.2	1	6	10	60
55	21	8	22	62	2	0.2	1	1	10	60
56	22	6	22	38	2	0.2	1	1	10	40
57	23	10	26	54	2	0.2	1	1	10	40
58	38124	14	30	60	4	0.2	1	1	10	60
59	20953	20	38	130	4	0.6	1	1	10	60
60	54	26	34	92	2	0.4	1	1	10	40
61	55	18	36	120	8	0.4	1	1	10	60
62	56	18	30	96	6	0.4	1	2	10	40
63	57	18	26	82	6	0.4	1	8	10	40
64	58	26	32	86	6	0.2	1	1	10	50
65	59	14	32	140	8	0.6	1	8	10	60
66	60	16	24	88	8	0.4	1	1	160	40
67	61	20	40	160	10	0.8	1	4	20	50
68	62	14	22	78	8	0.6	1	12	10	40
69	63	6	26	82	10	0.8	1	6	10	40
70	64	1	22	72	8	0.8	1	1	10	40
71	65	4	20	76	6	0.6	1	1	10	50
72	20966	10	22	60	6	0.4	1	1	10	50
73	20923	1	14	54	4	0.2	1	1	10	40
74	24	1	14	64	8	0.2	1	1	10	40
75	25	24	18	82	8	0.2	1	1	10	40
76	20926	20	20	62	10	0.2	1	1	10	50
77	11.50E-1.00S	1	14	48	8	0.2	1	1	10	40
78	0.75	2	34	68	8	0.2	1	1	10	40
79	0.50	8	36	70	10	0.4	1	1	10	80
80	0.25S	6	18	48	8	0.2	1	1	10	40
81	0.25N	2	14	56	8	0.2	1	1	10	60
82	0.50	2	16	34	8	2.0	1	1	10	140
83	0.75	24	52	240	28	0.8	2	1	10	80
84	11.50E-1.00N	10	28	140	16	0.6	1	1	10	30
85	48193	4	20	72	6	0.2	1	1	10	40
86	94	4	18	70	6	0.2	1	1	10	40
87	95	2	20	74	6	0.2	1	1	10	70
88	97	4	22	80	8	0.4	1	1	10	40
89	98	24	24	88	12	0.4	1	1	10	40
90	48199	10	14	68	6	0.2	1	1	10	40
91	48200	14	18	88	12	0.4	1	1	10	40
92	48201	8	14	70	8	0.2	1	1	10	30
93	48229	670	36	84	12	0.2	1	1	10	30 Miller
94	30	830	42	94	16	0.4	1	4	80	4
95	48231	280	30	70	10	0.2	1	2	10	40

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I. I. No.	SAMPLE No.	As	Cu	Zn	Pb	Ag	Mo	Sb	PPB		8507 Pg. 8 of
									Au	Hg	
	48232	80	24	60	16	0.4	1	1	10	60	
97	48233	190	26	66	12	0.4	1	1	10	70	
98	37741	2	24	150	8	0.4	1	1	10	70	
99	37742	4	22	70	6	0.4	1	1	10	100	
100	CHECK NL-5	58	26	74	72	1.4	10	4	-	100	
101	37743	2	22	76	8	0.6	1	2	10	100	
102	44	8	20	64	8	0.4	1	1	10	100	
103	45	1	20	92	6	0.6	1	2	10	100	
104	46	2	24	60	8	0.6	1	2	10	100	
105	47	8	32	74	10	0.4	1	2	10	100	
106	48	8	28	62	8	0.2	1	2	10	100	
107	37749	16	22	40	12	0.6	1	1	10	100	
108	69001	32	38	66	8	0.2	1	1	10	100	
109	2	34	32	80	8	1.4	1	1	10	100	
110	3	30	28	70	8	0.4	1	1	10	100	
111	4	16	28	76	8	0.4	1	1	10	100	
112	5	26	22	40	8	0.2	1	1	10	100	
113	6	38	38	48	10	0.6	1	4	10	100	
114	7	34	28	44	10	0.4	1	2	10	100	
115	8	32	34	36	12	0.4	1	2	10	100	
116	9	24	26	52	10	0.2	1	4	10	100	
117	10	18	22	60	16	0.4	1	1	10	100	
118	11	30	26	68	16	0.2	1	1	10	100	
119	12	32	28	68	10	0.4	1	1	180	100	
120	13	1	22	66	1	0.4	1	1	10	100	
121	14	1	50	70	2	0.8	1	1	10	100	
122	15	1	50	60	6	2.8	1	1	10	100	
123	69016	60	38	96	4	0.6	1	1	10	100	