Assessment Report

on the

Tatsamenie Property

Claims: Tut Extention, LCZ, The Tatsam Claim,
Enie, Tats, Tatsam Lake 2

Atlin Mining Division

NTS 104K/08

Latitude 58° 17' 43" N
Longitude 132° 19' 10" W

Owner:

Nash Megjhi

2262 Berkley Avenue,
Vancouver, British Columbia
V7H 1Z7

Authored by

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Submitted: August 3, 2007

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1.0 SUMMARY

The Tatsamenie Project claims lie within rocks of the Stikine Terrane along the western margin of the Intermontane Belt. The stratigraphy is dominated by the Stikine Assemblage, which is basal to the Stikine Terrane, and in the property area comprises Permian limestones; Upper Carboniferous felsic to mafic volcanics, phyllite and limestone; and Lower Carboniferous rocks consisting of pyroxene-phyric mafic flows and tuffs, as well as intercalated sediments which include limestone, black, carbonaceous, slightly fetid calcsiltite and argillite. Large areas of the region are intruded by plutons that are Triassic, Jurassic, Cretaceous or Eocene and which are overlain by Tertiary volcanic rocks. Faulting in the area is dominated by north to northwest-trending high-angle, strike-slip faults, which are significant in representing first order structural controls on gold mineralization. The Ophir Break is an economically important fault zone that extends at least 15 kilometres from Bearskin Lake to Tatsamenie Lake. This structure diverges into two main strands, the eastern Black fault and the western Fleece fault in the area of the Golden Bear deposit. The Fleece fault is called the West Wall fault north of Sam Creek. This fault zone is defined by areas of intense fracturing with abundant slickensiding; areas of carbonaceous and siliceous black siltstone and gouge; and linear quartz-carbonate alteration zones.

The area presently held as the Tatsamenie property received substantial exploration from 1981 to 1994 by Chevron Canada Resources Ltd. and several partners. An important phase of drilling in 1987 targeted the West Wall fault every 200 metres with 30 drillholes (including one on the Nie 3 occurrence). Gold-bearing silicified limestone on the western component of the Tatsamenie property also received considerable exploration in this time period including 3 holes drilled in 1987 and 4 in 1990. At least 12 documented areas of significant mineralization were defined by previous work:

1) **Nie** (2 Oz Notch) **–** two north trending quartz veins about 3 metres apart exposed in a 14.6 metre long trench along the West Wall fault. The easternmost vein is 30 centimetres thick and the westernmost vein is about 60 centimetres thick. Mineralization consists of disseminated and massive pyrite and minor pyrrhotite. Up to 14.0 grams per tonne gold were obtained from across the 0.3-metre vein (Shaw, 1984).
2) **Misty –** minor gold mineralization is associated with pyrite and occurs within tuff near the West Wall fault. A sample assayed over 10.0 grams per tonne gold (Brown and Walton, 1983).
3) **Nie 3** (Spire) **–** a mineralized 1987 drillhole intersected carbonaceous, graphitic siltstones interbedded with grey limestone. Mineralization consists of disseminations, blebs and stringers of pyrite and sphalerite associated with calcite and quartz veins. A 1.5 metre sample of drill core assayed 0.37 per cent zinc (Walton, 1987). The nearby Spire grid examined quartz-carbonate breccia zones with pyrite, sphalerite, chalcopyrite and galena in an area of mafic volcanics and siliceous to calcareous sediments and carbonate units. Up to 2.71 grams per tonne gold, 13.77 per cent zinc and 1.71 per cent lead were reported from three different samples (McBean, 1990).

4) **Honk –** a shear hosted quartz pyrite vein with local chalcopyrite hosted in sheared mafic volcanic rock along a north-trending splay of the Ophir Break. A grab sample assayed 18.07 grams per tonne gold and 64.80 grams per tonne silver (McBean, 1990).

5) **Barron –** pods of semimassive pyrite, pyrrhotite and chalcopyrite occur within strongly sheared, silicified and pyritized diorite and mafic volcanic rock that are cut by a north-trending fault. A grab sample assayed 1.48 per cent copper and 6.0 parts per million silver (Bradford and Brown, 1993).

6) **Patella –** a carbonate vein, at least 100 metres long, averaging 0.55 metre wide and containing up to 15 per cent sphalerite and galena. Hosted in intermediate to mafic volcanic rocks near and west of the Ophir Break fault zone.

7) **Backbone –** local high gold and polymetallic anomalies occur in discontinuous massive quartz veins in mafic volcanics as well as along north-northwest trending faults. A rock chip of a massive quartz vein pod yielded 9.8 grams per tonne gold (Zuran, 1994).

8) **Shoulder –** two parallel quartz veins, about 2 metres apart and traceable for 40 metres, are hosted in chloritized mafic volcanics. The smaller, 5 centimetre wide vein contains up to 50 per cent sulphides consisting of pyrite, galena, stibnite, and trace sphalerite. The second vein is 30 centimetres wide and consists of massive white quartz with 4 per cent pyrite and a trace of chalcopyrite. Up to 15.3 grams per tonne gold were obtained from grab samples (McBean, 1990). Further veining was reported to have been encountered in follow-up work.

9) **Tatsamenie Lake –** asbestos and talc mineralization related to the Ophir Break fault zone.

10) **Tut –** this zone occurs within a 900 metre long belt of dolomitized and silicified Permian limestone, approximately 100 to 150 metres wide, between strong east-northeast trending faults. R-37 was a 1987 drillhole drilled into the south bounding fault which contains abundant scorodite and silica. Only anomalous values were obtained from drill core. The best values came from near the north bounding fault where trenched dolomitized limestone yielded up to 3900 ppb gold over 1.1 metres (Bruaset, 1984).

11) **LCZ (Limestone Contact Zone) –** a 1.5 kilometre long zone of silicification and brecciation within Permian limestone along an overlying thrust contact with a Carboniferous phyllite unit. One significant drillhole interval from 1987 yielded 2.10 grams per tonne gold over 1.75 metres (Moffat and Walton, 1987). Much of this zone remains untested.

12) **LCZ Extension –** mineralization in silicified limestone outcrop near a contact with overlying phyllites consists of sparse, fine grained, euhedral pyrite with a trace of very fine dark grey sulphides. The phyllites host narrow, silicified, pyritic shear zones with minor quartz veining. While the silicified limestone yielded only anomalous values in gold, the phyllite-hosted shears assayed up to 2000 ppb gold over 1.8 metres (Hamilton, 1994). The significance of this zone is that it promises to add a further 1 kilometre to the length of the LCZ zone.

Based on the potential for discovery of Golden Bear-type carbonate-hosted mineralization, a first phase program of detailed geological mapping and sampling of existing and new mineral showings is recommended as well as locating anomalous areas along the West Wall fault that may be indicative of deeper mineralization. Exploration soil sampling and VLF-EM surveying is recommended to investigate the relatively unexplored area north of the Nie 3 mineral occurrence and along the southern extension of the LCZ zone. The budget for Phase 1 recommendations totals C$50,000. A second phase of exploration should include further definition of any anomalies highlighted in Phase 1 through additional rock and soil geochemical sampling and VLF-EM surveying. A small exploration drill program is recommended as part of the Phase 2 program in order to test the drill targets developed in Phase 1 and further defined in the early stages of Phase 2. The budget for Phase 2 is estimated to be C$150,000.

2.0 INTRODUCTION

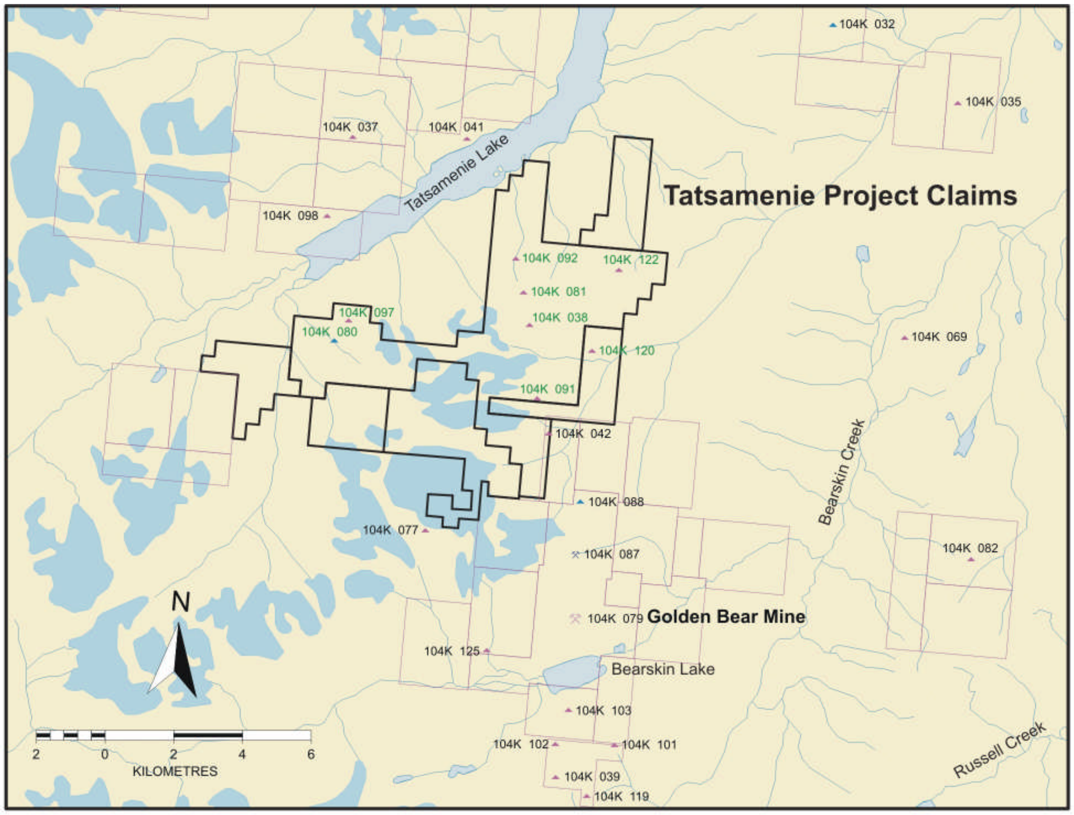
The 2006 Tatsamenie property work program is a Landsat 7 image study that displays significant areas of iron oxide and/or hydroxyl (clay) alteration. The Landsat 7 image maps were provided by PhotoSat Information Ltd. and registered to a 1:50,000 base by TerraCAD GIS Services Ltd showing additional property data (Appendix A). The areas of alteration will be priority targets for future program investigation.

The property is about 6 kilometres north of the past producing Golden Bear Mine and covers eight mineral showings documented in the British Columbia provincial mineral database, MINFILE, and four others not yet in the database. These showings are the Nie (MINFILE 104K 081), Nie 3 (MINFILE 104K 092), Misty (104K 091), Tut (104K 097), LCZ (104K 080), Honk (MINFILE 104K 122), Tatsamenie Lake (MINFILE 104K 038) and Barron (MINFILE 104K 120) (Figure 1). The four occurrences not yet in MINFILE are the Patella, Shoulder, Backbone and LCZ Extension showings.

This report is partly based on published fieldwork reports carried out by various private sector mining company personnel and public sector government personnel which are listed in the References (Section 10.0). Geological, geochemical, geophysical and drilling data compiled by the author has led to recommendations for work on the Tatsamenie Project mineral claims. Results from previous exploration have been positive and a two phase program of detailed geological mapping, geochemical sampling, VLF-EM surveying followed up by a drill program with a proposed budget of C$200,000 is recommended.

3.0 PROPERTY DESCRIPTION AND LOCATION

The Tatsamenie Project area is situated in the Atlin Mining Division in northwest British Columbia, 160 kilometres south of the community of Atlin or 136 kilometres west of the community of Dease Lake. The village of Telegraph Creek is 82 kilometres southeast



MINFILE OCCURRENCES

104K 032	MC
104K 035	Bing
104K 037	Tot 2
104K 038	Tatsamenie Lake (on property)
104K 039	Oro
104K 041	MB
104K 042	Sam
104K 069	Tatsamenie Limestone
104K 077	Thor
104K 079	Golden Bear
104K 080	LCZ (on property)
104K 081	Nie (on property)
104K 082	Slam
104K 087	Fleece Bowl
104K 088	Totem Silica
104K 091	Misty (on property)
104K 092	Nie 3 (on property)
104K 097	Tut (on property)
104K 098	Tot
104K 101	Tan 3
104K 102	Tan 4
104K 103	Tan
104K 119	Muse
104K 120	Barron (on property)
104K 122	Honk (on property)
104K 125	Dot

MINFILE Status

- Developed Prospect
- Past Producer
- Prospect
- Showing

Figure 1. MINFILE Occurrences in Tatsamenie Project Area.

(Figure 2). The property is located on NTS mapsheet 104K/08 (TRIM mapsheets 104K.029, 039, 028) at a latitude of 58˚17'43" N and longitude 132˚19'10" W (Figure 3). Access to the property is by helicopter from Atlin, Telegraph Creek or Dease Lake. The terminus of the past producing Golden Bear Mine road is 6 kilometres south of the property and helicopter access can be staged from here.

The Tatsamenie property consists of five claims named The Tatsam Claim, Tats, Tatsam Lake 2, Enie and LCZ, totalling 4865.373 hectares. The claim area is about 12 kilometres east-west by 6 kilometres north-south. Table 1 lists the claims which are 80% owned by Nakina Resources Inc.

The Tatsamenie property has not been legally surveyed. The author is not aware of any planned or existing land use that would adversely affect development of mineral resources on the property.

TABLE 1. CLAIMS OWNED BY NAKINA RESOURCES INC.

Tenure Number	Claim Name	Good Until	Area (ha)
549659	TUT EXTENTION	20080115	850.983
534852	LCZ	20070806	391.582
533124	THE TATSAM CLAIM	20070806	3232.011
533111	ENIE	20070806	408.551
533110	TATS	20070806	407.862
522344	TATSAM LAKE 2	20070806	425.367

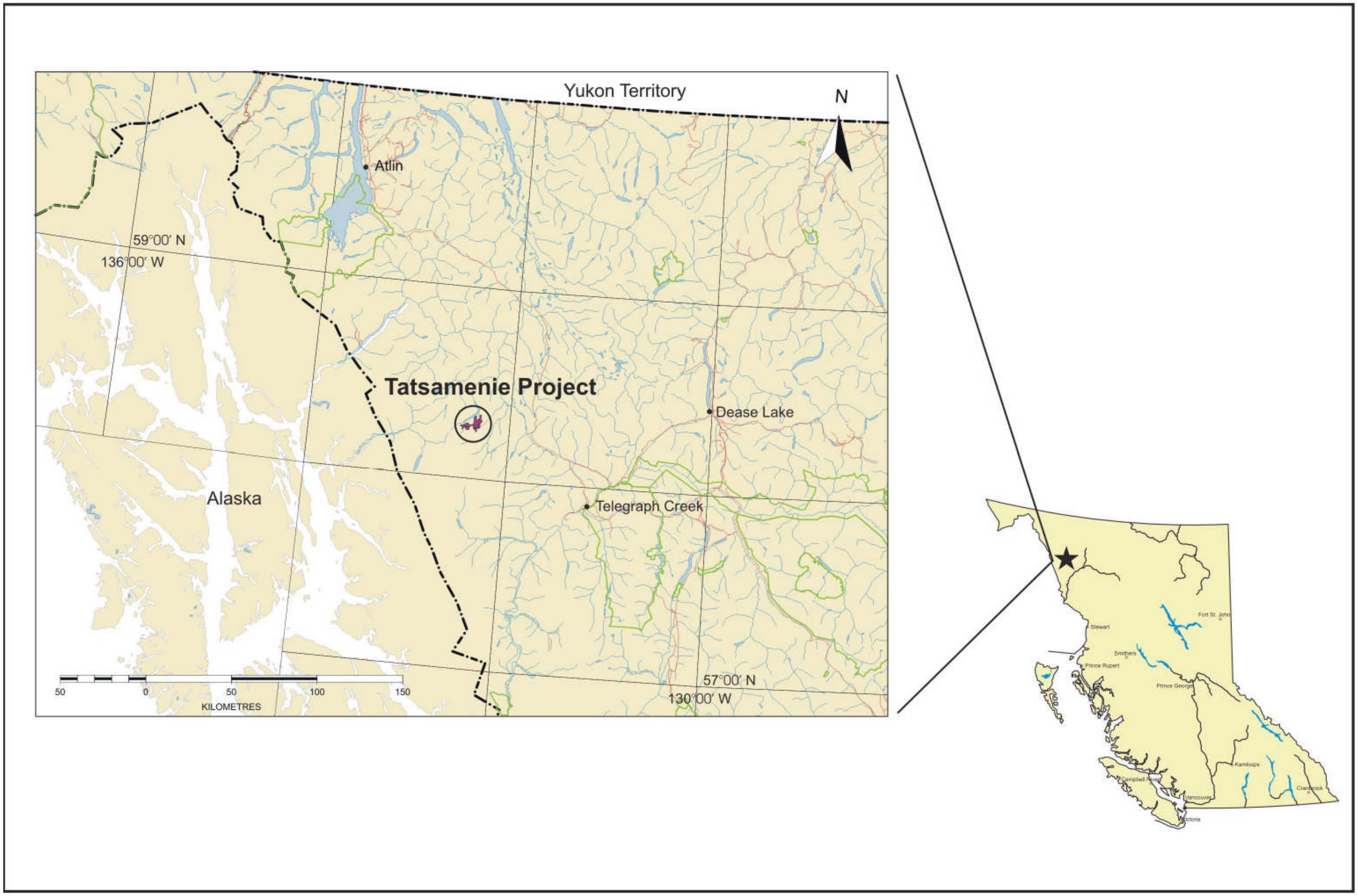


Figure 2. Location Map, Tatsamenie Project.

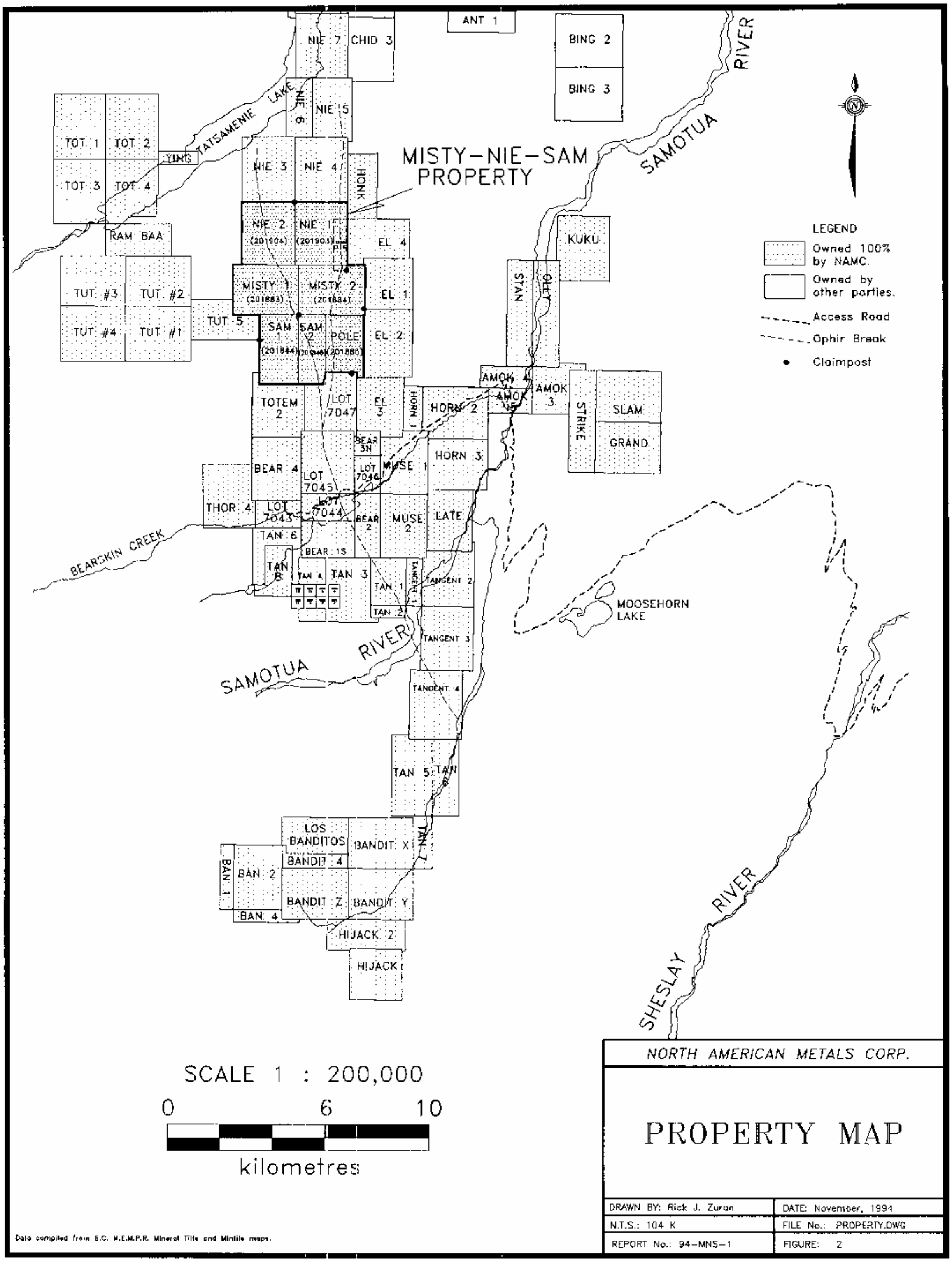
4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Tatsamenie property is generally in mountainous, rugged and steep terrain. Topography consists of steeply sloped bluffs incised by numerous streams and creeks. Elevations range from 800 metres in the northern part of the claim where it borders Tatsamenie Lake, to glaciers in the south and southwest part at 2360 metres elevation. Most of the property is above treeline except in the northern portion where it is wooded along the slopes down to Tatsamenie Lake. The property is located in the Northern and Central Plateaus and Mountains climatic zone. This region in northwestern British Columbia has much colder winters and cooler summers. Summers are short and fairly cool, though the long days partially compensate for these conditions. In Dease Lake, for example, the average maximum temperature in January is minus 13°C and in July is 19°C. Precipitation, though quite light, is distributed evenly throughout the year. Higher elevations get heavy snowfall in the winter.

Access to the property is generally via helicopter either from the communities of Atlin, Dease Lake and Telegraph Creek, or staged from the terminus of the Golden Bear Mine road. There is no significant infrastructure on the property. The community of Dease Lake, population 700, is 136 kilometres east of the property and is a government centre, supply and service point for fuel, groceries, accommodation, etc. Dease Lake is located on Highway 37, often referred to as the Stewart-Cassiar Highway, and is the largest settlement on the highway. Dease Lake is also the cut-off for Telegraph Creek, population 450, a historic village 98 kilometres to the southwest. The 155 kilometre, two wheel drive private haul road to the Golden Bear Mine joins the Dease Lake-Telegraph Creek road. There is also an airstrip that can accommodate fixed wing aircraft at the Golden Bear Mine. The Golden Bear Mine road is gated/locked and one must contact the Telegraph Creek Tahltan band office about access to the road and to obtain a key. Atlin, population 450, is 160 kilometres north of the property and is accessed via Highway 7, also referred to as the Atlin Road. Atlin is a government centre, supply and service point for fuel, groceries, accommodation, etc. There are charter flights to Dease Lake, Telegraph Creek and Atlin.

5.0 HISTORY

Exploration history is documented from 1959 to the present and summarized according to years worked. Mineralization that was the focus of historical work on the now lapsed Nie 1-4, Tut and Ram claims staked by Chevron in the early 1980s is now found within the boundaries of Nakina Resources' "The Tatsam Claim", Tatsam Lake 2 and LCZ claims. Chevron's Misty, Sam and Pole claims occur adjacent to the immediate south of Nakina's Tatsamenie Project area (Figures 3 and 6). The history of Chevron's Ram-Tut area is defined separately from that of Chevron's Nie area as they were historically explored as separate claim groups. In general, the old Ram-Tut group was just over 2 kilometres to the southwest of the Nie group. The relationship of the old claims can be seen on Figure 4 which is derived from Zuran (1994).


MISTY–NIE–SAM PROPERTY
LEGEND
Owned 100% by NAMC.
Owned by other parties.
Access Road
Ophir Break
Claimpost
SAMOTUA RIVER
BEARSKIN CREEK
MOOSEHORN LAKE
SHESLAY RIVER
TATSAMENIE LAKE
SCALE 1 : 200,000
0 6 10
kilometres
Data compiled from B.C. M.E.M.P.R. Mineral Title and Minfile maps.
NORTH AMERICAN METALS CORP.
PROPERTY MAP
DRAWN BY: Rick J. Zuran
DATE: November, 1994
N.T.S.: 104 K
FILE No.: PROPERTY.DWG
REPORT No.: 94-MNS-1
FIGURE: 2

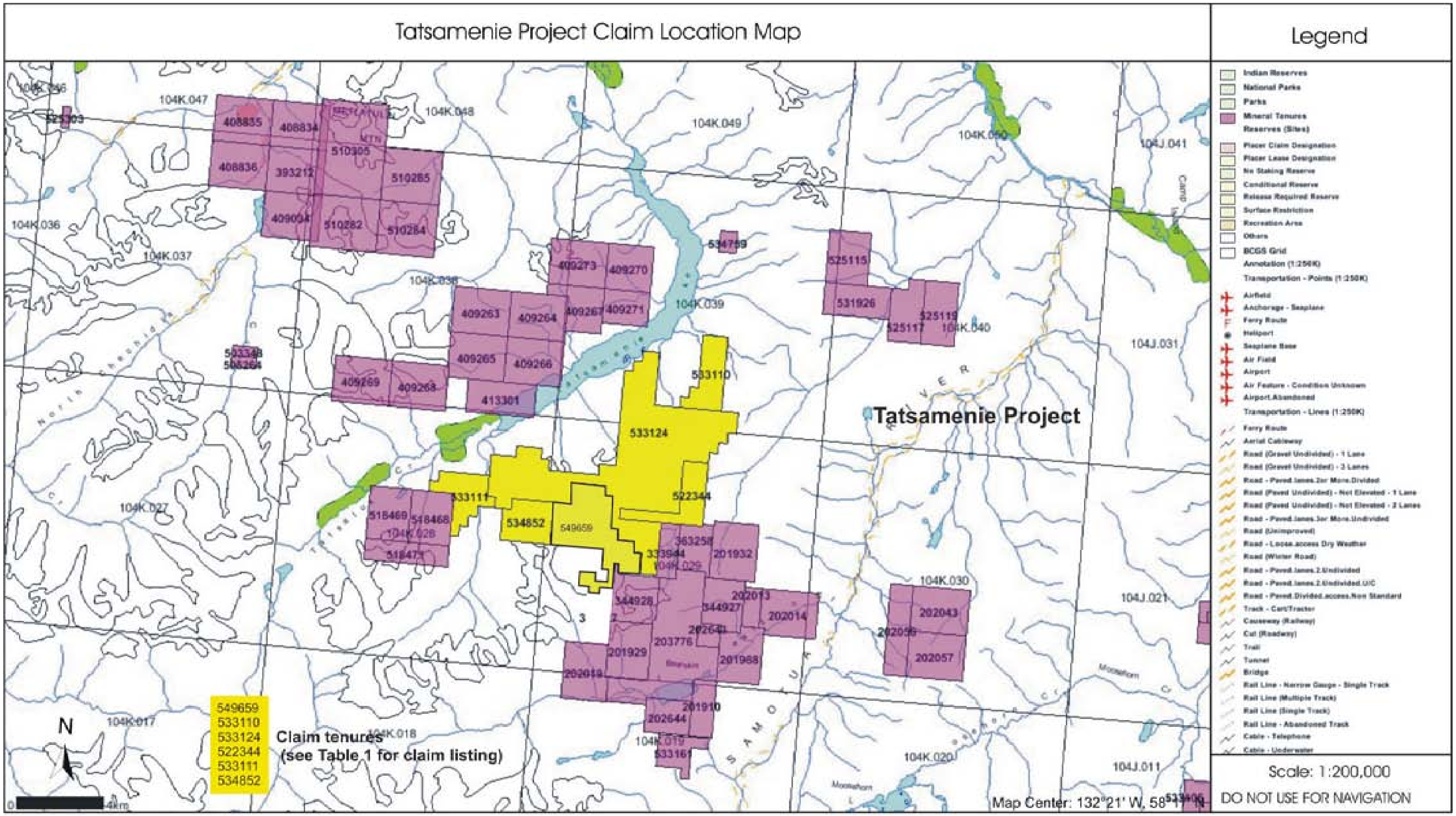


Figure 3. Mineral Claims Map.

5.1 NIE-MISTY

1959 Regional stream sediment geochemical and water sampling conducted by Kennco Explorations Ltd. The program targeted copper-molybdenum porphyry-type mineralization.

1981 Staking of Misty 1, 2; Nie 1, 2; Pole and Sam 1, 2 by Chevron Canada Resources Ltd.

1982 Misty and Nie claims: reconnaissance contour soil and rock sampling and prospecting at 1:10,000 scale (37 rocks, 76 soils). Sam and Pole claims: rock, soil and silt sampling, and prospecting at 1:10,000 scale.

1983 Misty and Nie claims: reconnaissance rock and soil sampling, and geologic mapping at 1:10,000 scale. Detailed rock sampling on ridge west of Shoulder Vein (103 rocks, 20 soils) was carried out. Pole and Sam 2 work included geophysics (VLF-EM and magnetometer).

1984 Misty and Nie claims: grid soil sampling, trenching, geophysics, and geologic mapping. "Nie Grid" established (68.2 kilometres covering Nie 3 and 4 as well). One trench (DS-337) 14.6 metres long was blasted on ridge exposing the Nie (2 Oz Notch) mineral occurrence. VLF-EM and magnetic surveying on grid were carried out. Geologic mapping at 1:10,000 scale was conducted.

1985 Misty claims: reconnaissance rock and contour soil sampling completed. Confirmation of previous anomalies (109 soils, 31 rocks) done. Sam 1 work included reconnaissance rock sampling (6 rocks).

1987 Misty and Nie claims work included: diamond drilling, geophysics, detailed geologic mapping and sampling. The West Wall fault was targeted every 200 metres with 30 drillholes (including one on Nie 3); 940 drill core samples, 15 overburden samples. Geophysics included 15.7 kilometres of VLF-EM. Detailed geologic mapping at 1:2000 scale was done in two blocks: 250 x 600 metres and 250 x 1600 metres. Sam 1 work included: geologic mapping at 1:5000 scale on orthophotos. Rock and silt sampling (12 rock, 4 silt). The work was conducted by the Chevron-Dia Met Joint Venture.

1988 Shannon Energy Ltd. enters into Chevron-Dia Met Joint Venture - some field work done by Stetson Resource Management Corporation but no reports are available.

1990 In 1990, Homestake Mineral Development Company, under contract to North American Metals Corp., performed: reconnaissance mapping and sampling on the Misty and Nie claims under an option agreement with Chevron to earn 50 per cent interest in the property. The Shoulder Vein and Honk occurrence were discovered and Spire (Nie 3) showings were explored.

1991 Work was completed on Misty and Nie claims by Homestake Mineral Development Company under contract to North American Metals Corp. under an option agreement with Chevron Canada Resources Ltd. Geophysics included 6.9 line kilometres of VLF-EM and magnetometer surveys. Detailed geologic mapping around the Shoulder Vein and 2 Oz Notch (1:2000) was done and the northwest corner of the Nie 3 claim was mapped at 1:10,000 scale. Five of the 1987 diamond-drill holes in the 2 Oz Notch (Nie) zone were relogged. Seventy-two silt samples, 361 soil samples and 182 rock samples were collected from the property for analysis. The Honk (Ultramafic Vein showing) was trenched using a high pressure water pump. Sixty-five metres in 8 trenches were reported excavated on the property.

1992 Sam claims: A new grid established over 1982 grid with mine grid coordinates. Soil sampling on grid occurred. Geologists John Bradford and Derek Brown of the provincial Geological Survey Branch map the area at a 1:50,000 scale and discover new showings such as the Barron.

1994 The owner/operator is North American Metals Corp. Activities during the 1994 exploration on the Misty-Nie-Sam Property which encompasses much of the eastern portion of the present Tatsamenie property included: establishing mine grid survey control stations, establishing the Backbone and Shoulder grids, grid and reconnaissance soil sampling, rock sampling, grid geophysics, 1:5000 scale geologic mapping, and prospecting. Eight mine grid survey stations were established on the property.

Grid soil sampling was done on the Backbone and Shoulder grids at 25 metre intervals along lines spaced every 100 metres. Stations between pickets were located by compass bearing and hip chain. Soil sampling on the Backbone grid was incomplete due to snow cover. Soil sampling on the Shoulder grid was selective. Reconnaissance-style contour soil sampling includes lines S-I to S-7.

Geophysics comprising a magnetometer and VLF-EM survey was conducted on the Backbone and Shoulder grids. A total of 19.0 line kilometres of each survey were completed.

Geologic mapping at 1:5000 scale was conducted on and around the Backbone and Shoulder grids covering an area of approximately 3.5 square kilometres. Detailed mapping at 1:500 scale was conducted on the Patella Vein.

2005 On September 21st, 2005 Garry Payie, P.Geo., along with two assistants, flew via helicopter onto the Tatsamenie Project property of Nakina Resources Inc. from Atlin, B.C. Sampling and geological examination was conducted in the area of the Nie and Honk showings.

5.2 RAM-TUT

1981 The Ram-Tut-Tot property was first staked in 1981 by Chevron Minerals Ltd. The Tut 1-4 claims covered an area of anomalous silt geochemistry discovered during a reconnaissance program south of the east end of Tatsamenie Lake.

1982 Chevron completed a program of mapping and rock sampling on the property in 1982, when 16 rocks and 96 soils were collected; the previous year 68 rocks and 237 soils were taken (Shannon 1982, Brown and Shannon, 1982).

1983 A more thorough program of detailed geological mapping, rock and soil sampling, and minor trenching was conducted (Brown and Walton, 1983). The property was expanded in 1983 with the addition of the Tot 1-4 claims on the north side of Tatsamenie Lake but do not cover the area of present interest south of the lake in the Ram-Tut area. The Snow 1-6, adjacent to the east the Ram-Tut claims, were staked by Chevron and 207 soils and 24 rock samples were collected (Thicke and Shannon, 1983).

1984 Further trenching and sampling was completed by Chevron Canada with 294 rock chip samples taken (Bruaset, 1984).

1985 A student from the University of British Columbia completed a study of the albitized unit on the Tut claims (Hewgill, 1985a,b).

1987 In 1987, Chevron conducted a 674 metre diamond drill program to test the silicified limestone contact mineralization on the Ram-Tut claims, and a narrow shear zone on the Tot 4 claim (Walton et al., 1987, Walton, 1987). A total of 434.65 metres in 3 NQ drillholes were drilled on the Tut claims. The Ying claim was staked in 1987 to hold tenure in the area of the Tatsamenie Lake Base Camp.

1988 The Ram claim was optioned to Shannon Energy Ltd., and on behalf of Shannon Energy, Stetson Resource Management Corp. carried out an exploration program in 1988. Seven heavy mineral stream sediment samples were taken and geological mapping was conducted. Anomalous gold concentrations were obtained from one of the heavy mineral samples.

1989 The Ram Baa claim was staked.

1990 Chevron and Armeno Resources Inc. entered into an option agreement. Between July and September 1990, Armeno drilled 437.78 metres in four BQ diamond-drill holes to further evaluate the silicified limestone mineralization on the Tut claims (Allen, 1990). Further work included an 11.6 kilometre VLF-EM survey, a 7.2 kilometre ground magnetics survey and the collection of 35 silt, 110 soil and 30 rock samples.

1992 North American Metals Corp. (NAMC) acquired 100% interest in the property, as part of the Asset Sale Agreement between Chevron and NAMC, prior to the 1992 field season. Homestake Canada Ltd. was contracted by NAMC to carry out the 1992 exploration program during which several known zones were re-evaluated and several new showings were discovered and evaluated (Howe and Reddy, 1993). In 1992, 184 rock and 185 soil samples were collected for analysis. Geologists John Bradford and Derek Brown of the provincial Geological Survey Branch mapped the area at a 1:50,000 scale.

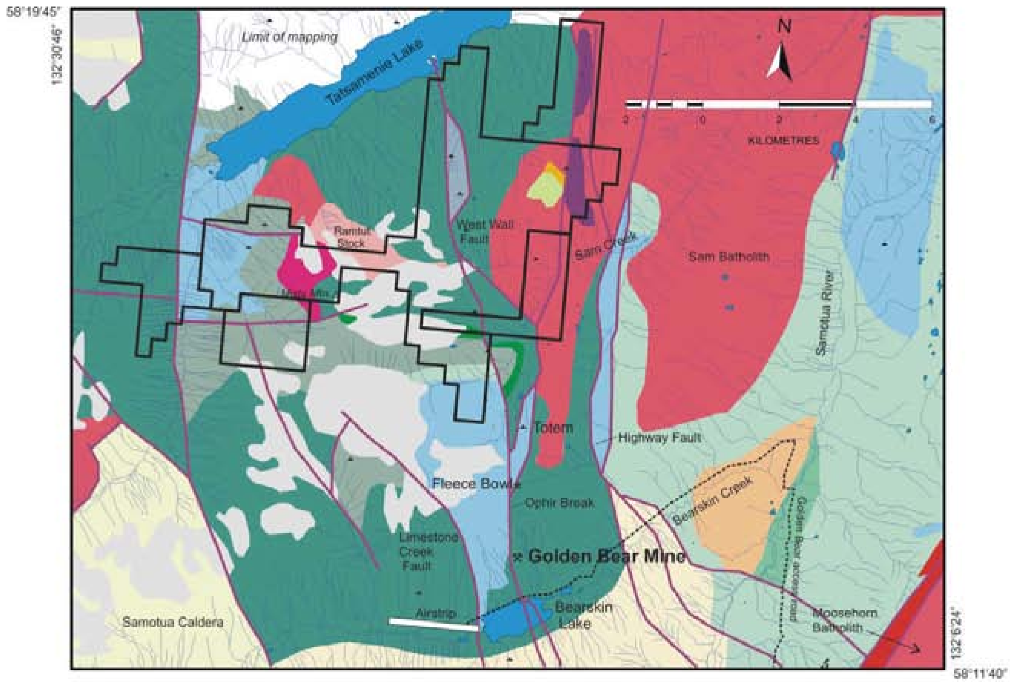
1994 In 1994, work on the Tut claims consisted of soil sampling, rock chip sampling and limited geological mapping at a scale of 1:10,000 by owner/operator, North American Metals Corp. (Hamilton, 1994). A total of 19 soil samples and 45 rock samples were collected from the Tut claims. The work was not applied for assessment. The Ram Baa 4 claim was added in 1994 to cover a fraction between the Tot 4 and Ram Baa claims.

6.0 GEOLOGICAL SETTING

The following regional geology was largely derived in whole or in part from Bradford and Brown (1993). Minor nomenclature revisions have been made in accordance with the more recent northwest British Columbia geological compilation by Mihalynuk et al., 1996. A more up-to-date compilation of the geology was completed by the British Columbia Ministry of Energy, Mines and Petroleum Resources and is available online at the MapPlace website (www.mapplace.ca).

6.1 REGIONAL GEOLOGY

The area covered by this regional geological description is that defined by Bradford and Brown in their investigation of the region surrounding the Golden Bear Mine (Figure 5). The area is situated along the western edge of the Intermontane Belt and lies within the Stikine Terrane. Previous mapping at 1:250,000 scale by Souther (1971) identified an extensive unit of Triassic and older volcanic and sedimentary rocks containing Permian limestone in structural culminations. This unit was subdivided by Bradford and Brown into Upper Triassic Stuhini Group and Paleozoic Stikine Assemblage, however, the Stuhini rocks north of Bearskin lake were later reassigned to the Stikine Assemblage by Mihalynuk et al. (1996). These rocks are intruded by Triassic to Eocene plutons and are overlain by Tertiary volcanic rocks. The only Jurassic stratigraphy in the project area consists of a small, fault-bounded wedge of elastic sedimentary rocks of the Takwahoni Formation.



GEOLOGICAL LEGEND

STRATIFIED ROCKS

MIOCENE

Mb — **LEVEL MOUNTAIN GROUP:** Basalt - flat lying, columnar jointed

EOCENE

ESv — **SLOKO GROUP:** Intermediate to felsic volcanic breccia, tuff and lesser flows

TERTIARY

Tcg — Polymictic conglomerate - poorly indurated

LOWER JURASSIC

lJTs — **TAKWAHONI FORMATION (LABERGE GROUP):** Sandstone, siltstone, polymictic conglomerate

UPPER TRIASSIC

uTrSv — **STUHINI GROUP:** Volcanics, volcaniclastics
uTrSp - megacrystic, "bladed" plagioclase porphyry
Hbgb - hornblende gabbro

LOWER TO MIDDLE TRIASSIC

lmTrlm — Limestone, marble, calcareous sedimentary rocks

PERMIAN AND OLDER

STIKINE ASSEMBLAGE

Lower Permian

PSls — Limestone - variably recrystallized

UPPER CARBONIFEROUS

uCSvsl — Felsic to mafic volcanics, phyllite, limestone

CARBONIFEROUS (?)

CSs — Slate, siltstone, limestone

CSvs — Andesitic tuff, argillite, tuffaceous sandstone

CSv — Foliated, chloritic metavolcanic rocks containing lithologies similar to Stuhini Group

LOWER CARBONIFEROUS

lCSv — Pyroxene-phyric mafic flows and tuffs; intercalated sediments include limestone, black, carbonaceous, slightly fetid calcsiltite and argillite

DEVONIAN

DSv — Undivided volcanic rocks

INTRUSIVE ROCKS

EOCENE

Egr — Biotite hornblende granite, plagioclase porphyritic granite, bioite hornblende granodiorite, quartz plagioclase porphyritic rhyolite, plagioclase porphyritic and felsite dikes (Sloko-Hyder Plutonic Suite)

LATE CRETACEOUS

lKqm — Quartz monzonite (Ramtut Stock)

EARLY TO MIDDLE JURASSIC

emJqm — Hornblende biotite quartz monzonite, albitic granodiorite, gabbro to diorite, granodiorite, diorite

MIDDLE TO LATE TRIASSIC

mlTrqd — Quartz diorite, hornblende diorite, monzodiorite

lTrcpx — Clinopyroxenite

Fault

Glacier

MINFILE Occurrence

Tatsamenie Project Claim Boundary

Geological map and legend compiled from:

Bradford, J.A. and Brown, D.A. (1993): Geology of the Bearskin Lake and Southern Tatsamenie Lake Map Areas, Northwestern British Columbia (104K/1 and 8); in Geological Fieldwork 1992, *B.C. Ministry of Energy, Mines and Petroleum Resources*, Paper 1993-1, pp. 159-176.

Mihalynuk, M., Bellefontaine, K., Brown, D., Logan, J., Nelson, J., Legun, A. and Diakow, L. (1996): Digital Geology, Northwest British Columbia (94/E, L, M; 104/F, G, H, I, J, K, L, M, N, O, P; 114/I, O, P); *B.C. Ministry of Energy, Mines and Petroleum Resources*, Open File 1996-11.

Figure 5. Regional Geology Map.

STIKINE ASSEMBLAGE (DSV - PSLS)

A **Devonian Stikine Assemblage (DSv)** unit consisting of undivided volcanic rocks occurs in an east-west trending belt just southeast of Misty Mountain. This belt of rocks was previously included in the CSv unit of Bradford and Brown.

Carboniferous Stikine Assemblage (CSv) rocks consisting of foliated, chloritic metavolcanic rocks contain lithologies similar to Stuhini Group in part, but distinguished from them by the following criteria:

- strong, penetrative flattening foliation (especially evident in lapilli tuffs and pillow basalt) and phyllosilicate fabrics;
- well-developed mullions and stretching lineations;
- a "chloritic" green weathering colour, lacking the distinctive red-brown weathering of Stuhini rocks;
- in general, more andesitic compositions;
- greenschist metamorphic grade;
- bright green colours on fresh surfaces.

The dominant pre-Upper Triassic volcanic lithologies include: andesitic ash to lapilli tuff; feldspar and lesser augite-phyric tuff and flows; massive andesitic flows; laminated green and white, locally calcareous tuff; maroon and green tuff and flows; rare pillow basalt and argillite. In places, thin to thick-bedded grey and white recrystallized limestone up to 25 metres thick is present. A phyllitic foliation is common, but strain is variable and some outcrops have only a very weak foliation. Southeast of the Samotua antiform, relatively unstrained tuff and massive flows locally resemble Stuhini Group, and transitions from phyllitic to very weakly foliated rocks are abrupt. In some cases, massive diabasic rocks may represent Stuhini feeder dikes and sills.

The age of the Stikine Assemblage metavolcanic rocks is poorly constrained. Chloritic metavolcanic rocks at Sam Creek (Figure 5) structurally overlie Upper Carboniferous (Moscovian) felsic volcanic rocks in what could be an inverted structural sequence; if so, a Moscovian or older age is implied.

A distinctive **Carboniferous Stikine Assemblage (CSvs)** unit of well-bedded tuff and sedimentary rocks crops out along the Samotua River south of the mouth of Bearskin Creek. Similar rocks are exposed east of the Samotua Glacier in the south-central part of map sheet 104K/1. The unit consists of thin to medium bedded felsic to intermediate ash tuff, tuffaceous sandstone and argillite. Interbedded volcaniclastic rocks and argillite are characterized by graded bedding, flame structures and argillite rip-ups. Heterolithic pebble conglomerate with abundant chert and metavolcanic clasts is present locally. Minor limestone, calcareous ash tuff and foliated pyroxene-phyric sills also occur within the sequence.

Strongly deformed **Carboniferous Stikine Assemblage (CSs)** argillaceous sedimentary rocks occur within the Stikine Assemblage metavolcanic sequence near the mouth of Bearskin Creek. They consist dominantly of slate to argillaceous phyllite with minor ash tuff, siltstone, and brown-weathering limestone beds and lenses up to 0.5 metre thick. The contact with overlying foliated volcanic rocks appears to be stratigraphic.

A unique stretched-pebble conglomerate occurs near the top of the sediment package and is exposed along the Golden Bear mine road. This matrix-poor pebble to cobble conglomerate consists almost entirely of subrounded felsic volcanic clasts, with minor black chert or cherty argillite and black silty limestone. Volcanic clasts include well-laminated felsic tuffs and plagioclase-phyric dacite. All volcanic clasts are intensely altered to an assemblage of fine-grained quartz, sericite and pyrite. The conglomerate coarsens upward over a thickness of about 5 metres. Clasts have undergone marked ductile strain. The source of the felsic volcanic clasts is unknown.

An **Upper Carboniferous Stikine Assemblage (uCSvsl)** heterogeneous section of foliated felsic to mafic volcanic rocks, argillaceous phyllite and limestone structurally overlies thick Permian limestone at the head of Sam Creek. Similar felsic phyllite and carbonate can be traced to the west side of Misty Mountain where they also overlie a thick limestone package.

All those rocks essentially north of Bearskin Lake and south of Tatsamenie Lake that were included with the Upper Triassic Stuhini Group by Bradford and Brown have subsequently been reassigned (Mihalynuk et al., 1996) to a Lower Carboniferous, primarily volcanic package of the Stikine Assemblage (lCSv). An attempt has been made here to assign the descriptive notes to each unit but some common passages are included.

South of Tatsamenie Lake, **Lower Carboniferous Stikine Assemblage (lCSv)** rocks consist predominantly of pyroxene-phyric mafic flows and tuffs. Intercalated sediments include white to grey limestone, black, carbonaceous, slightly fetid calcsiltite and argillite. Buff to grey ribbon chert was noted at one locality. At Sam Creek, weakly foliated pyroxene and plagioclase-phyric volcanic rocks overlie polydeformed chloritic phyllite, dolomitic limestone, argillaceous phyllite and siliceous phyllite along a foliation-parallel disconformity. Pillow basalt was observed in the Golden Bear pit area overlying Permian limestone and was also mapped between Tatsamenie Lake and the Sam batholith.

Volcaniclastic sequences comprise intercalated massive to finely laminated ash tuff and crystal tuff, lapilli tuff and block and ash tuff, as well as more massive greenstones which could be flows or sills. Lapilli tuff commonly contains augite and or plagioclase crystals as well as mafic lithic clasts. Augite phyric lithic clasts are common while intermediate to felsic volcanic, plagioclase-phyric hypabyssal intrusive and chert clasts are rare. Massive, homogeneous, crystal tuff or tuffaceous sandstone units can be mistaken for dioritic intrusive bodies, but locally contain thin beds of finer crystals, ash laminae, or scattered lithic clasts. Intercalated sedimentary rocks suggest that the volcaniclastic sequences are submarine.

At Sam Creek, Lower Permian limestone is overlain by a thin (100 metres) unit of chloritic metavolcanic rocks with intercalated pink marble. This is in turn overlain by a thick section (300-400 metres apparent thickness) of pale grey, tan or brown-weathering varicoloured (green, grey, brown, pink), thin bedded to laminated felsic phyllite (felsic metatuff). Intercalated with the felsic rocks are lesser dark green, chloritic, intermediate to mafic metavolcanic rocks, tan to orange-weathering dolostone and dolomitic phyllite, argillaceous phyllite and blue-grey to white and pinkish marble. A sericite and/or chlorite foliation is characteristic of the felsic unit, but lithologies can be massive to fissile. Thin, potassium feldspar-quartz layers occur in some laminated felsic rocks. Plagioclase and quartz-phyric rhyolite is present locally.

A **Permian Stikine Assemblage (PSls)** unit consisting of massive to thin bedded, white to dark grey limestone underlies an 8 square kilometres area between Bearskin Lake and Sam Creek. This and smaller limestone bodies scattered throughout the map area have been assigned a Permian age on the basis of poorly preserved fossils found within. Limestone exposed in structural culminations in the Samotua River valley and along the western margin of the Moosehorn batholith provisionally thought to be Carboniferous have more recently been assigned a Lower Permian age (Mihalynuk et al., 1996). In general, carbonate is less fossiliferous than in other areas of Stikinia, possibly due to more intense deformation and metamorphism.

Internal stratigraphy of the Bearskin Lake limestone has been described as dark grey, carbonaceous limestone and black siltstone occurring near the top of the unit above Bearskin Lake. A black chert described in the Fleece Bowl could be a silicified correlative unit. The carbonaceous limestone overlies tan to orange-weathering dolomitic limestone, which also occurs near the top of the section at Sam Creek.

A **Lower to Middle Triassic (lmTrlm)** unit consisting of limestone, marble and calcareous sedimentary rocks is mapped along the Ophir Break within a few kilometres of Tatsamenie Lake. This unit was previously included by Bradford and Brown with the Stuhini Group but has not been reassigned to the Stikine Assemblage.

The **Upper Triassic Stuhini Group (uTrSv)** consists mainly of red-brown weathering, plagioclase and augite-bearing volcaniclastic rocks. Flows are subordinate to clastic rocks. At the Bandit showing (MINFILE 104K 086), gently northeast dipping pyroxene crystal-lithic lapilli tuff unconformably overlies strongly folded and foliated metavolcanic rocks, argillaceous phyllite and limestone.

Volcaniclastic sequences comprise intercalated massive to finely laminated ash tuff and crystal tuff, lapilli tuff and block and ash tuff, as well as more massive greenstones which could be flows or sills. Lapilli tuff commonly contains augite and or plagioclase crystals as well as mafic lithic clasts. Augite phyric lithic clasts are common while intermediate to felsic volcanic, plagioclase phyric, hypabyssal intrusive and chert clasts are rare. Massive, homogeneous, crystal tuff or tuffaceous sandstone units can be mistaken for dioritic intrusive bodies, but locally contain thin beds of finer crystals, ash laminae, or scattered lithic clasts. Intercalated sedimentary rocks suggest that the volcaniclastic sequences are submarine.

Epiclastic rocks comprise at least 10 per cent of the Stuhini Group south of Bearskin Lake. Epiclastic sequences include thin to medium bedded, dark green-grey volcanic siltstone and sandstone, locally interbedded with argillite and minor limestone. Crossbedding and graded bedding occur within sandstone-argillite sections, which may be turbiditic deposits.

A continuous, west-facing section, about 4 kilometres north of the Bandit showing, has a thickness of about 2000 metres. It includes a thick, lower, dominantly epiclastic sequence of well bedded, graded tuffaceous sandstone, ash tuff and lesser argillite. Within this is a conglomerate unit with fine-grained basalt and rare felsic clasts. The epiclastic sequence is overlain by massive to well-bedded ash and crystal tuff with lesser pyroxene-phyric flows which are overlain by lapilli tuff with lesser ash and crystal tuff, coarsening upward into block and lapilli tuff with amygdaloidal basalt clasts.

Sills, dikes and plugs of megacrystic, bladed plagioclase, augite porphyry (±hornblende?) porphyry intrude Stuhini volcanic rocks east of the Samotua Glacier and north of the Bandit showing. Plagioclase crystals range up to 4 centimetres in length. These hypabyssal intrusions are interpreted as subvolcanic bodies within the Stuhini section.

Brittle/ductile shear fabrics are locally present in Stuhini rock throughout the map area. Bedding-parallel schistose fabric, augen-like sheared feldspar phenocrysts and flattened and stretched lapilli are evident north of the Golden Bear airstrip. This area is interpreted as a contractional zone related to strike-slip faulting. Elsewhere, shear fabrics in Stuhini rocks are generally confined to steeply dipping, sharply delimited shear zones. Within these zones, intensely foliated chloritic schists contain layers and lenses of unfoliated rock. A series of such zones east of the Samotua Glacier contains steeply plunging lenses of unsheared rock and steeply plunging shear-related folds with dextral asymmetry.

A fault-bounded block of elastic rocks, 18 kilometres southeast of Tatsamenie Lake and along the northern contact of the Moosehorn batholith, is correlated with the **Lower Jurassic Takwahoni Formation (lJTs) (Laberge Group)**. The sedimentary rocks consist of dark grey to pale brown weathering, thin to medium bedded, turbiditic, fine to coarse grained arkosic wacke and interbedded shale and siltstone, coarse-grained arkosic wacke and interbedded shale and siltstone. Graded bedding, flame structures and argillite rip-ups are common. Belemnoids and small, poorly preserved ammonites and carbonized plant stems were collected from the unit. A facies of subangular to subrounded polymictic pebble to cobble conglomerate containing felsic to intermediate volcanic chert, granodiorite and limestone clasts is intercalated with the finer sediments. Subrounded limestone clasts up to a metre in diameter occur. Structure within the fault wedge is complex, with well exposed folds and complex high and low-angle faults. Outcrops are locally strongly sheared and fractured and a spaced cleavage is evident in places. Clasts in the conglomerate unit are unstrained.

Eocene Sloko Group (ESv) volcanic rocks are exposed in fault-bounded blocks along the western part of the map area and in isolated areas below Miocene basalts along its eastern edge. The Sloko Group consists primarily of rhyolitic to dacitic pyroclastics, including heterolithic tuff breccia to lapilli tuff, welded crystal-vitric tuff and ash tuff. Minor andesitic tuff is also present. Flow rocks are less common, but include plagioclase and hornblende-phyric massive or columnar jointed dacite. Very coarse breccias (clasts 1 metre across) occur close to the bounding faults and contain a variety of volcanic and granitoid clasts, quartz, feldspar and hornblende crystals, ash and vitric fragments. An extensive section of brown, rhyolitic volcanic glass with abundant drusy cavities is exposed north-northwest of Tatsamenie Lake.

A poorly indurated, **Tertiary polymictic conglomerate (Tcg)** forms an isolated subcrop under Miocene flows several kilometres south of Tatsamenie Lake. It resembles unconsolidated gravel, however, some clasts are cemented to each other and medium grained wacke talus was also found. The clasts include dacite, felsite and plagioclase porphyritic andesite, believed to be derived from Sloko Group. Granitoid and pre-Stuhini phyllite clasts are also present. The poor induration and the abundance of Sloko-derived clasts suggests that this unit is Eocene or younger.

Subhorizontal, columnar jointed **Miocene olivine basalt flows (Mb)** occur about 20 kilometres east-southeast of Tatsamenie Lake and as a small erosional remnant southwest of Tatsamenie Lake. These basalt flows have been correlated with the Level Mountain Group. Some evidence suggests a possible Eocene age.

6.11 INTRUSIVE ROCKS

Middle to Late Triassic (mlTrqd)
Two large plutons, called the Moosehorn and Sam batholiths by Bradford and Brown, underlie large areas south of Tatsamenie and Bearskin lakes. They are part of a quartz dioritic intrusive suite characterized by massive, grey weathering, variably foliated rock that is Middle to Late Triassic in age.

Elongate ultramafic bodies called the Sam Ultramafite by Bradford and Brown occur along the southwestern edge of the Sam batholith and represent a Late Triassic marginal phase. A marginal zone of pyroxenite and hornblendite blocks and irregular blobs within the diorite grades outward into fine to coarse grained olivine clinopyroxenite, locally with minor interstitial plagioclase. The western contact of the largest of the ultramafites is faulted, with serpentinite along the fault.

Jurassic (emJqm)
Several small bodies of Jurassic age occur south of Tatsamenie Lake. These include gabbroic to dioritic plutons and granodioritic and dioritic stocks. The albitic western phase of the Ramtut stock is still defined as being Middle Jurassic while the gabbroic bodies are Early Jurassic.

Late Cretaceous (lKqm)
A quartz monzonitic stock, originally part of the Ramtut stock of Bradford and Brown, underlies a triangular peak northeast of Misty Mountain. It has recently been redefined by the British Columbia Geological Survey as Late Cretaceous in age. The stock is massive and unfoliated, with sharp discordant contacts. The albitic, granodioritic phase, the western part of the Ramtut stock as originally defined by Bradford and Brown, is actually part of an earlier Middle Jurassic intrusive suite.

Tertiary (Egr)
Two small granitic plugs in the area and numerous plagioclase porphyritic and felsite dikes are probably related to the Paleocene to Eocene Sloko-Hyder plutonic suite.

6.12 STRUCTURE

Inversion of stratigraphy beneath the basal Stuhini unconformity, and a significantly greater amount of strain in rocks of the Stikine Assemblage is consistent with at least one and possibly two pre-Late Triassic phases of deformation, followed by an erosional interval. Post-Stuhini, Early Jurassic deformation is consistent with an Early to Middle Jurassic age for mineralization at Golden Bear. Faulting is complex and dominated by a strike-slip regime.

6.13 FAULTS

Faulting in the Golden Bear area is dominated by north to northwest trending high-angle, strike-slip faults, which are significant in representing first order structural controls on gold mineralization. A northeast trending, dextral fault (Moosehorn fault) bounds the west side of the Moosehorn batholith, and postdates the north to northwest-trending faults. Eocene normal faults bound the Samotua caldera, and coeval faults affect older units to the east.

Ophir Break

The “Ophir Break” is an economically important fault zone that extends at least 15 kilometres from Bearskin Lake to Tatsamenie Lake, and possibly another 10 kilometres south to the Samotua River. The break is the primary structural control for the Golden Bear deposit. In the mine area, it comprises several anastomosing fault strands across a width of 50 to 100 metres or more. Fault dips within the zone range from 65 degrees to the east through vertical to locally overturned to the west. Small-scale flats along fault bends are believed to constitute dilational zones significant in localizing gold deposition suggesting local reverse slip. Faults in the mine area typically comprise up to several metres of brecciated pyritic rock and sulphide-rich gouge.

Fault strands in the deposit area bound at least two major silicified carbonate lenses. The main carbonate lens in the pit is up to 50 metres wide, and is in contact across the Bear fault with carbonate-altered mafic volcanic rocks to the east. About 1.5 kilometres north of the mine in the Fleece Bowl area, the break diverges into two main strands, the eastern

Black fault and the western Fleece fault. The Fleece fault is called the West Wall fault north of Sam Creek.

Fault grooves and slickensides on faults along the Ophir Break have dominantly shallow plunges.

Faults West of the Ophir Break

Northwest trending, left-stepping en echelon dextral faults bound a contractional zone northwest of Bearskin Lake. The Limestone Creek fault juxtaposes Permian limestone on the east with Carboniferous Stikine volcanic rocks on the west at the west end of the lake. Feldspar-phyric basalt west of the fault contains a strong, south-dipping shear fabric with asymmetrical porphyroblasts indicating top-to-the-north shear. Shear fabrics die out down-section to the north. About 4 kilometres to the north, felsic phyllites correlated with unit uCSvsl overlie mafic to intermediate metavolcanics along a steep reverse fault. Feldspar and augite-phyric tuffs and diorite in the footwall of this fault are also strongly sheared, with asymmetric feldspar porphyroblasts again indicating top-to-the-north motion. Steeply plunging fault lineations along the Limestone Creek fault indicate probable late (Eocene?) normal slip.

Highway Fault

The Highway fault trends subparallel to the Ophir Break and dips steeply to the northeast. East of Golden Bear mine in the Fleece Creek area, the Highway fault has an apparent reverse sense of motion, putting hangingwall Stikine Assemblage foliated volcanic rocks, phyllite and limestone on Stuhini Group mafic ash tuff. North of Sam Creek, the Highway fault forms a prominent linear of brecciated iron carbonate altered rock where it cuts through the Sam batholith. The partially fault bounded sliver of limestone south of Sam Creek may represent the sheared-out limb of an F_2 fold. South of Bearskin Creek, the Highway fault appears to split into several splays with an apparent reverse sense of motion while changing in orientation from north to northwest. This is consistent with dextral slip.

Moosehorn Fault

The Moosehorn fault is a north-northeast trending zone of brittle and brittle-ductile shearing intruded by numerous dikes along the west side of the Moosehorn batholith. Iron carbonate and hematitic alteration, silicification and brecciation affect some of the intrusive rocks along the fault. Copper mineralization associated with intense quartz-carbonate alteration and quartz veining occurs within the fault zone west of Moosehorn Lake. South of Shark Peak, the fault curves toward a more easterly orientation. Dextral slip is inferred by preservation of a downdropped block of Takwahoni sediments in an extensional fault-bend graben in this area, and by the northeast trending dike swarm south of Moosehorn Lake.

6.2 PROPERTY GEOLOGY

The Tatsamenie Project property is described in two parts: an eastern portion, previously held as the Nie-Misty property which includes the Backbone and Shoulder grid areas, and the recently lapsed Ram-Tut property now encompassed by the western extension of the Tatsamenie Project claims. The Nie-Misty description is in whole or in part from Zuran, 1994 (Assessment Report 23621 by North American Metals Corp.). The Ram-Tut description is sourced from Hamilton, 1994 (Assessment Report 23552 by North American Metals Corp.). In keeping with more recent reassignment of Stuhini rocks in the property area to the Stikine Assemblage and the age determination of the quartz monzonite phase of the Ramtut stock as Late Cretaceous, modification has been made.

NIE-MISTY

The geology of the property is comprised primarily of rocks of the Paleozoic Stikine Assemblage. These are dominated by Lower Carboniferous augite porphyry**,** thin bedded tuffs, lapilli tuff, and chlorite schist overlain by Upper Carboniferous felsic to mafic volcanics and Permian limestone. These are intruded by four distinct plutonic suites which include: weakly foliated diorites of the Triassic Sam batholith, on and near the eastern part of the property; Jurassic albitite sills and dikes; Cretaceous non-foliated diorites, and porphyritic diorite in the central to southern part of the property; and local occurrences of feldspar porphyry, rhyolite-rhyodacite dikes/sills **,**and basalt dikes of the Tertiary Sloko Group. Recent Miocene Level Mountain Group plateau basalts cap rocks in the easternmost part of the property. Late Triassic clinopyroxenite ultramafic rocks are found locally in the north-central and the southeast parts of the property. The Paleozoic to Jurassic rocks have been deformed by several north to north-northwest trending, steep dipping, deep crustal faults - the Ophir Break. The west margin of this structural zone is bounded by the West Wall fault which occurs through the northwest and south-central part of the Tatsamenie property.

More detailed geological mapping was carried out by North American Metals Corp. in two areas that are now part of the Tatsamenie Project property: the Shoulder grid and the Backbone grid. The following detailed descriptions of these two areas are derived from Zuran (1994).

BACKBONE GRID

The Backbone grid area occurs along the southern extent of the Tatsamenie Project property (Figure 6). The main lithologies consist of plagioclase augite porphyritic to massive flows, tuffs, and sericite-chlorite schist; weakly foliated diorite; nonfoliated diorite; limestone; rhyolite-rhyodacite; and clinopyroxenite.

The volcanic rocks cover 60 per cent of the area. Dark green outcrops of plagioclase augite porphyry and massive flows are blocky weathering, generally non-foliated to weakly foliated. They are interbedded with the tuffaceous facies. Dark to moderate

Tatsamenie Project Property

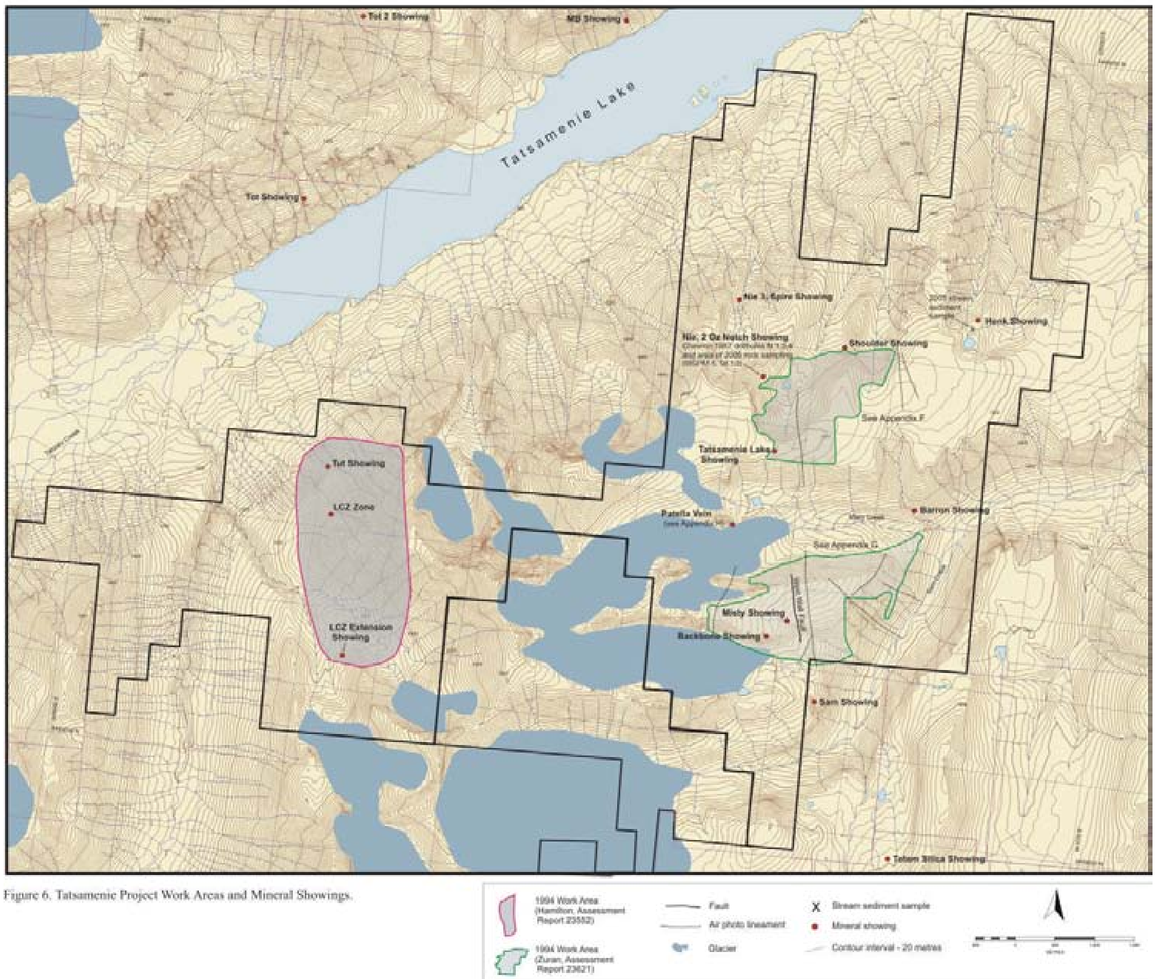


Figure 6. Tatsamenie Project Work Areas and Mineral Showings.

green weathering outcrops of tuff are thin bedded, moderately to strongly foliated and are locally calcareous along the cliffs in the south part of the map. Dark green weathering outcrops of sericite-chlorite schist are strongly foliated and found locally sheared within an incised gully in the southeast part of the area. The volcanic rocks form a non-conformable contact with the western margin of the diorite batholith in the northeast part of the area.

The weakly foliated diorite in the northeast covers 25 per cent of the area. Outcrops weather dark grey and form blocky talus. The western margin of the diorite contains local xenoliths of volcanic rocks averaging 25 centimetres in diameter. The north-south contact in the northeast corner of the area is strongly sheared. Volcanic and ultramafic rocks outcrop to the east of the fault zone.

The non-foliated diorite forms a series of northeast trending dikes discordant with Lower Carboniferous Stikine volcanics in the northwest corner of the grid area. The dikes range from one half to several metres wide and outcrop along steep north-facing bluffs.

Several limestone lenses 0.5 to 3 metres thick by up to 300 metres strike length, outcrop along steep south-facing bluffs in the south. A small local altered outcrop is exposed on the east-facing slope. These rocks are light grey to off-white weathering, thin to moderately bedded, and locally strongly foliated. They are interbedded and gradational with the tuffaceous unit.

Three rhyolite-rhyodacite north-northwest trending dikes, 1 to 3 metres wide, and up to 900 metres long, are spaced 400 to 700 metres apart across the area. Several smaller dikes are noted branching out towards the north on the north-facing slope. Two small dikes averaging 1 by 50 metres outcrop on the south-facing slope. These rocks are beige weathering, flaggy to well jointed, and discordant with Paleozoic to Jurassic rocks.

Dark green, black to gossanous weathering outcrops of clinopyroxenite and gabbro(?) outcrop in two areas, the northeast corner and the southwest corner of the grid area. The clinopyroxenite in the northeast corner is within a fault zone and is locally sheared. A gabbro(?) dike, 50 centimetres wide by 400 metres long, is parallel to the fault. The clinopyroxenite, in the southwest corner of the area, occurs as a plug intruding the volcanic rocks.

Structure in Backbone Grid Area

Stratigraphy on the Backbone grid dips moderately to the northeast. Local polyphase deformation in the intermediate to mafic volcanic rocks is subparallel to bedding. Strong deformation is noted locally subparallel to the major faults. The dominant cleavage is a compaction cleavage or a bedding-parallel cleavage.

Three major faults that cross the map area include: the West Wall fault and two faults in the northeast part of the grid area. All are prominent airphoto linears.

The West Wall fault trends north-northwest, dips steeply to the east and averages 2 metres wide. An undeformed rhyolite dike is emplaced in the fault and postdates movement. Several subparallel shears are noted within 100 metres to the east and west of this zone in the south of the map area. The fault crosscuts non-foliated diorite dikes in the north. Displacement is unknown.

The next major fault to the east trends north, dips steeply to the east and averages 1.5 metres wide. The fault crosscuts the western margin of the weakly foliated diorite batholith.

The furthest fault in the northeast corner of the grid area trends north, dips moderately to steeply east and is 10 metres wide at Misty Creek. Volcanic rocks intruded by clinopyroxenite are noted east of the fault. Volcanic and diorite rocks are found west of the fault.

Other faults include northeast to northwest trending normal block faults located in the southwest part of the map area. Displacements under 5 metres are observed.

SHOULDER GRID

The Shoulder grid is located near the centre of the Tatsamenie Project property (Figure 6). The main lithologies consist of: intermediate to mafic massive flows, bedded tuffs plagioclase augite porphyry; weakly foliated diorite; non-foliated diorite, and porphyritic andesite.

The volcanic rocks cover 50 per cent of the map area. These rocks are much the same as described on the Backbone grid. The bedded tuffs on the Shoulder grid are less calcareous and no gradational limestone interbeds were observed. A nonconformable, north-trending contact separates the volcanic rocks on the west, from the weakly foliated diorite on the east of the area. This contact is emplaced by an unaltered, steep dipping, dark green porphyritic andesite dike.

The diorite in the east covers 40 per cent of the map area. Outcrops are dark grey weathering, massive, jointed and form blocky talus. The unit is weakly foliated to non-foliated. A north trending, strongly gossanous nonconformable contact separates Level Mountain Group basalt to the east.

The non-foliated diorite occurs as two intrusive swarms; a northeast trending dike swarm approximately 100 metres wide in the southwest part of the map area; and a series of sills 100 metres wide hosted in bedded tuffs in the centre of the area. Both intrusive swarms are associated with gossans. There is also a small plug intruding the intermediate to massive flows 200 metres north of the dike swarm.

Structure in Shoulder Grid Area

Stratigraphy on the Shoulder grid dips moderately to steeply east and northeast. The dominant cleavage is a compaction cleavage subparallel to bedding. Bedding is represented by 1 to 50 centimetre thick beds in the tuffs. Three faults on the Shoulder grid include: a northwest-trending fault in the centre of the area; a divided north to northwest-trending fault also in the centre of the area; and a north-northwest trending fault in the southwest part of the area. The first fault is coincident with a snow filled, incised gully. This fault displaces the second fault by a dextral strike slip distance of approximately 75 metres. Judging from the diorite sill on both sides of the fault, there is also a rotational component calculated at 32 degrees. The third fault has an attitude of 317°/82° northeast dip and crosscuts the western margin of a diorite intrusion. This fault contains a yellowish soil.

RAM-TUT

The recently lapsed Ram-Tut property (Figure 4), now encompassed by the western extension of Nakina's Tatsamenie Project claims, is predominantly underlain by a tightly folded package of clastic, carbonate and volcanic rocks of the pre-Upper Triassic Stikine Terrane. These lithologies are locally cut by diorite to quartz diorite intrusions of Triassic age. A detailed description of each lithology, largely from Hamilton (1994) is given below.

This package (Unit 2) is comprised of Pennsylvanian phyllitic siltstone and felsic to mafic metavolcaniclastics of the Stikine Assemblage. Howe and Reddy (1993) divided the local section into 100-200 metres of well-bedded siltstone overlain by approximately 800 metres of poorly bedded volcaniclastics with minor interbedded clastic units including carbonate layers. Folding and/or faulting may have artificially increased the thickness of this unit which typically exhibits a well developed penetrative fabric relative to overlying units. Most of the package has a phyllitic texture and an alteration assemblage dominated by quartz, sericite and chlorite. The volcanic rocks vary from light buff to medium to pale green in colour and contain very fine grained euhedral pyrite and specular hematite as disseminations. Bedding parallel and crosscutting quartz veins and sweats are common throughout the unit and locally contain coarse potassic feldspar, specularite and muscovite.

Much of the property work has treated this unit as being stratigraphically younger than the limestone unit. Regionally however, this package has been identified as being stratigraphically lower than the limestones (Oliver and Gabites, 1993), therefore the phyllite and metavolcanic unit must have been thrust over the carbonates. Bradford and Brown (1993) have mapped the limestone-phyllite contact as a thrust and have a zircon date of 302 Ma from a felsic unit from within the package. Oliver (1993) obtained U-Pb zircon dates very close to this number. In addition, Bruaset (1984) mapped outcrops of this unit in the core of the Tatsamenie anticline on the Tot 3 claim to the north, underlying the limestones as well as above the limestones. These observations were confirmed in the field by Hamilton (1994).

Overlying the phyllites and metavolcaniclastics is a distinct mafic to intermediate volcaniclastics package (Unit 4), tentatively included here with the Stikine Assemblage based on more recent assignations by Mihalynuk et al. (1996) but previously assigned to the Upper Triassic Stuhini Group. These mafic volcaniclastic rocks appear to be andesitic in composition. Textures vary from fine grained ash tuff to coarse crystal-lithic tuff and coarse grained, augite porphyritic flows. This unit is typically medium to dark green, unfoliated and weakly chloritized with primary textures and mineralogy well preserved. Trace amounts of fine grained, euhedral pyrite are disseminated throughout the volcaniclastics. Iron carbonate alteration occurs locally as fracture controlled veins or weak to moderate replacement of the pyroclastic matrix. Bedding attitudes are usually shallow dipping towards the east. Well bedded volcaniclastics can be seen in the eastern portion of the lapsed Tut 2 claim.

A Permian limestone unit (Unit 3) has an estimated thickness of 100 metres (Howe and Reddy, 1993) and has been folded into a north-northwest trending antiform. Two varieties of limestone have been mapped: massive, white, thick bedded, grey weathering, recrystallized limestone or marble in the core of the antiform, and an overlying grey weathering, carbonaceous thin bedded limestone. Conodont samples from the limestone age dated by Brown and Bradford (1993) confirm the unit's Permian age.

Triassic diorite (Unit 6a) outcrops in several locations on the Ram-Tut property and is typically unaltered, unfoliated coarse-grained hornblende +/- plagioclase porphyritic in a plagioclase matrix. Narrow contact zones of intense iron carbonate alteration are common near these contacts. Middle Jurassic albitite (Unit 6b) outcrops only on the old Tut 2 claim. Fine grained mafic sills intrude the phyllites below their contact with the volcaniclastics on the Tut claims.

The oldest structural feature is the Tatsamenie antiform which trends roughly north-northwest through the property. The bedding on the eastern limb is shallowly east dipping and may have been truncated by the thrust fault at the limestone/phyllite contact on the lapsed Tut 2 claim (Bradford and Brown, 1993). Northeast trending extensional faults exist along Tatsamenie Lake and a graben structure is developed along Tatsamenie Lake valley. Very late east-northeast trending structures crosscut the extensional faults and are the locus for some silicification at the north end of the LCZ zone on the lapsed Tut claims.

7.0 MINERALIZATION

The Ophir Break fault zone is an economically important system that extends at least 15 kilometres from Bearskin Lake to Tatsamenie Lake, and possibly another 10 kilometres south to the Samotua River. This fault zone is thought to act as a conduit for the mineralizing fluids that created the deposits such as those at the Golden Bear mine, about 6 kilometres south of the Tatsamenie Project property. The Ophir Break diverges into two main strands, the eastern Black fault and the western Fleece fault in the area of the Golden Bear deposit. The Fleece fault is called the West Wall fault north of Sam Creek. This fault zone is defined by areas of intense fracturing with abundant slickensiding; areas of carbonaceous and siliceous black siltstone and gouge; and linear quartz-iron carbonate-pyrite-fuchsite(?) (listwanites) and quartz-dolomite alteration zones. The listwanites occur in the tuffs.

Four gold-bearing showings occur along the Ophir Break fault zone and are encompassed by the Tatsamenie Project property claim boundaries: Nie (MINFILE 104K 081); Misty (MINFILE 104K 091), Nie 3 (MINFILE 104K 092) and Backbone. These four showings occur in areas underlain primarily by Lower Carboniferous volcanic and sedimentary rocks of the Stikine Assemblage. Lower to Middle Triassic limestone, marble and calcareous sedimentary rocks also occur along the Ophir Break, most significantly along the eastern contact of the West Wall fault in the Nie 3 area. The Honk (MINFILE 104K 122) and Barron (MINFILE 104K 120), in the eastern part of the property, occur along northeast trending splays of the Ophir Break. Asbestos and talc mineralization of the Tatsamenie Lake showing (MINFILE 104K 038) is also related to the Ophir Break fault zone. Three mineral occurrences not documented in the MINFILE provincial database are the Patella, Shoulder and Backbone showings.

Gold mineralization on the recently lapsed Ram-Tut property, now held as part of the Tatsamenie Project claims by Nakina Resources, is strongly associated with silicification. Two primary modes of mineralization in this area were reported by Hamilton (1994) and much of the Ram-Tut mineralization description is derived from that source:

1. Pervasively silicified and locally brecciated limestone with pyrite, arsenopyrite, anomalous silver and antimony, and localized gold mineralization.

2. Quartz veining and/or silicified shear zones with stibnite, arsenopyrite plus/minus base metal mineralization

Work to 1994 outlined two main zones of mineralization: the LCZ (Limestone Contact Zone) (MINFILE 104K 080) and the Tut zone (MINFILE 104K 097) (the silicification surrounding the fault at the north end of the LCZ). The LCZ Extension shows the potential for expanding the dimensions of the LCZ zone to the south.

Please refer to Figure 6 for plotted locations of all occurrences.

The **Nie** or "**2 Oz. Notch**" showing appears to consist of two north trending, 60 degree east dipping quartz veins about 3 metres apart. The veins were exposed in a 14.6 metre long trench in 1984. The easternmost vein is 30 centimetres thick and the westernmost vein is about 60 centimetres. Mineralization consists of abundant disseminated and massive pyrite and minor pyrrhotite adjacent to a hornblende feldspar porphyry dike within siltstone and limestone. The dike occurs along the trace of the West Wall fault. Dating of hornblende from the dike gave an apparent age of 156 Ma +/- 5 Ma, suggesting mineralization may have occurred during the Upper Jurassic (Schroeter, 1987). A 0.3-metre sample across the narrower eastern vein assayed 14.0 grams per tonne gold and 1.7 grams per tonne silver (Shaw, 1984).
At the **Misty** showing, minor gold mineralization is associated with pyrite and occurs within tuff near the West Wall fault. A sample assayed over 10.0 grams per tonne gold (Brown and Walton, 1983).

The **Nie 3** showing is documented as the result of a mineralized 1987 drillhole intersection (hole N-38) of black carbonaceous, graphitic siltstones interbedded with grey limestone. Tuff and altered feldspar porphyry dike rocks also occur in the hole. Mineralization consists of disseminations, blebs and stringers of pyrite and sphalerite associated with calcite and quartz veins. A 1.5 metre sample of drill core assayed 0.37 per cent zinc (Walton, 1987). The Spire grid was established within a few hundred metres to the northeast in 1990. The rocks in this area are reported to be mafic volcanics

along with siliceous to calcareous sediments and minor carbonate units. Mineralization is reported to consist of quartz-carbonate breccia zones with pyrite, sphalerite, chalcopyrite and galena. Up to 2.71 grams per tonne gold, 13.77 per cent zinc and 1.71 per cent lead were reported from three different samples (McBean, 1990).

The **Honk** occurrence is a shear-hosted quartz-pyrite vein with local chalcopyrite mineralization in sheared, chloritized mafic volcanic rock. The fragmented vein and accompanying limonite alteration is up to 3 metres wide and can be traced along strike for 70 metres and is open in all directions. Post-mineralization shearing has produced pods of solid vein material surrounded by yellow limonitic gouge containing quartz fragments. A grab sample assayed 18.07 grams per tonne gold and 64.80 grams per tonne silver; other grab samples yielded as much as 0.87 per cent copper (McBean, 1990).

The **Barron** showing consists of strongly sheared, silicified and pyritized diorite and mafic volcanic rock that are cut by a north trending fault. Pods of semimassive pyrite, pyrrhotite and chalcopyrite occur within the shear zone. A grab sample assayed 1.48 per cent copper, 6.0 parts per million silver. Gold assays are not available due to high pyrrhotite content of the sample (Bradford and Brown, 1993).

The **Patella** showing is an east-northeast trending yellow-brown weathering, carbonate vein, at least 100 metres long, averaging 0.55 metre wide and containing up to 15 per cent sphalerite and galena. This vein is hosted in intermediate to mafic volcanic rocks within several hundred metres to the west of the Ophir Break fault zone. The area is underlain by volcanic and sedimentary rocks of the Stikine Assemblage. Contact with a Late Cretaceous quartz monzonitic pluton (formerly the Ramtut stock) occurs to the immediate west of the vein area. The vein structure is reported to intersect a north-south diorite-volcanic contact approximately 100 metres to the west. Skarn-like mineral assemblages are noted in altered limy tuffaceous interbeds within the volcanics. The best result out of 9 rock samples taken on the vein in 1994 was 0.15 gram per tonne gold, 38.0 grams per tonne silver, 0.84 per cent lead, >1 per cent zinc and 1.13 per cent mercury (Zuran, 1994).

The **Backbone** occurrence is associated with three north-northwest trending faults that have associated subparallel structures. The faults crosscut a thick package of intermediate to mafic volcanics interbedded with limestone lenses of the Stikine Assemblage. The faults are host to rhyolite dikes, with probable Eocene Sloko Group affinity, averaging 1 metre in width and 500 metres in length. Local high gold and polymetallic anomalies were discovered in discontinuous massive quartz veins in the volcanics as well as along the north-northwest trending structures. The limestone is locally mineralized with skarn-like assemblages. The best analysis results include: 9.8 grams per tonne gold rock chip of a massive quartz vein pod (0.3 by 1 metre) (Zuran, 1994). A 50 by 800 metre soil grid gold anomaly ranging from 100 to 325 parts per billion gold is subparallel to the north-northwest trending structures. The plotted location of the 9.8 grams per tonne gold quartz vein sample is approximately 350 metres southwest of the Misty showing.

The **Shoulder** occurrence consists of two parallel quartz veins, hosted in chloritized mafic volcanics, about 2 metres apart. The veins trend northeast and dip 55 to 60 degrees to the southeast. The smaller, 5 centimetre wide vein contains up to 50 per cent sulphides consisting of pyrite, galena, stibnite, and trace sphalerite. The second vein is thirty centimetres wide and consists of massive white quartz with 4 per cent euhedral pyrite and a trace of chalcopyrite. One grab sample yielded 15.26 grams per tonne gold, 128.23 grams per tonne silver, 5.53 per cent zinc and 0.24 per cent lead (McBean, 1990). Further veining was reported to have been encountered in follow-up work.

The **Tut** zone occurs within a 900 metre long belt of dolomitized and silicified Permian limestone, approximately 100 to 150 metres wide, between strong east-northeast trending faults, the southern fault acting to truncate the LCZ zone at its north end (Figure 7). Surface samples from the Tut zone have yielded values of up to 1.6 grams per tonne gold (Walton, 1987) from within silicified limestones and up to 3900 ppb gold over 1.1 metres (Trench #2, sample KB4T 1-325) from trenched dolomitized limestone located near the north bounding fault (Bruaset, 1984). The trenched zone is open to the north and west. The intensity of dolomitization increases in the direction of the bounding faults. Stockwork veinlets of silica are common. Traces of tetrahedrite occur in fractures in the dolomitized limestone. In 1987, Chevron drilled a single hole (R-37) through the south bounding east-northeast trending fault, which contains abundant scorodite and silica. Drillhole R-37 yielded assays up to 275 ppb over 0.95 metre from a 10.0 metre intersection of silicified limestone (Moffat and Walton, 1987). The core was also reported to be mineralized with fine arsenopyrite.

The **LCZ** (Limestone Contact Zone) is a 1.5 kilometre long zone of silicification and brecciation within the Permian limestone (Figure 7). The zone follows the limestone/phyllite thrust contact on the Tut 2 claim and consists of a multilithic tectonic breccia with fragments of tuff, limestone and siltstone in a matrix of silica, pyrite and fine black sulphides (Reddy, 1993). Gold values of up to 7020 ppb were obtained from samples collected by Bruaset (1984).

A 900 x 400 metre gold, arsenic, antimony soil anomaly originates in the phyllitic siltstone above the contact and is caused, in part, by quartz-sulphide veins within the siltstone. Chevron geologists hypothesized that a manto-like silicified zone was fed by fluids from a vertical feeder zone within the limestones and that there was leakage of fluids into the overlying phyllites. The thrust itself may also have acted as a fluid conduit

Chevron Canada Resources Ltd. (1987) and Armeno Resources Inc. (1990) drilled a total of 6 holes to partly test the LCZ. Analytical results from drill core yielded 1.38 grams per tonne gold over 4.76 metres, 2.10 grams per tonne gold over 1.75 metres, and 1.30 grams per tonne gold over 2.0 metres (Moffat and Walton, 1983; Allen, 1990). None of the holes have tested very far downdip and drill spacing is at least 200 metres.

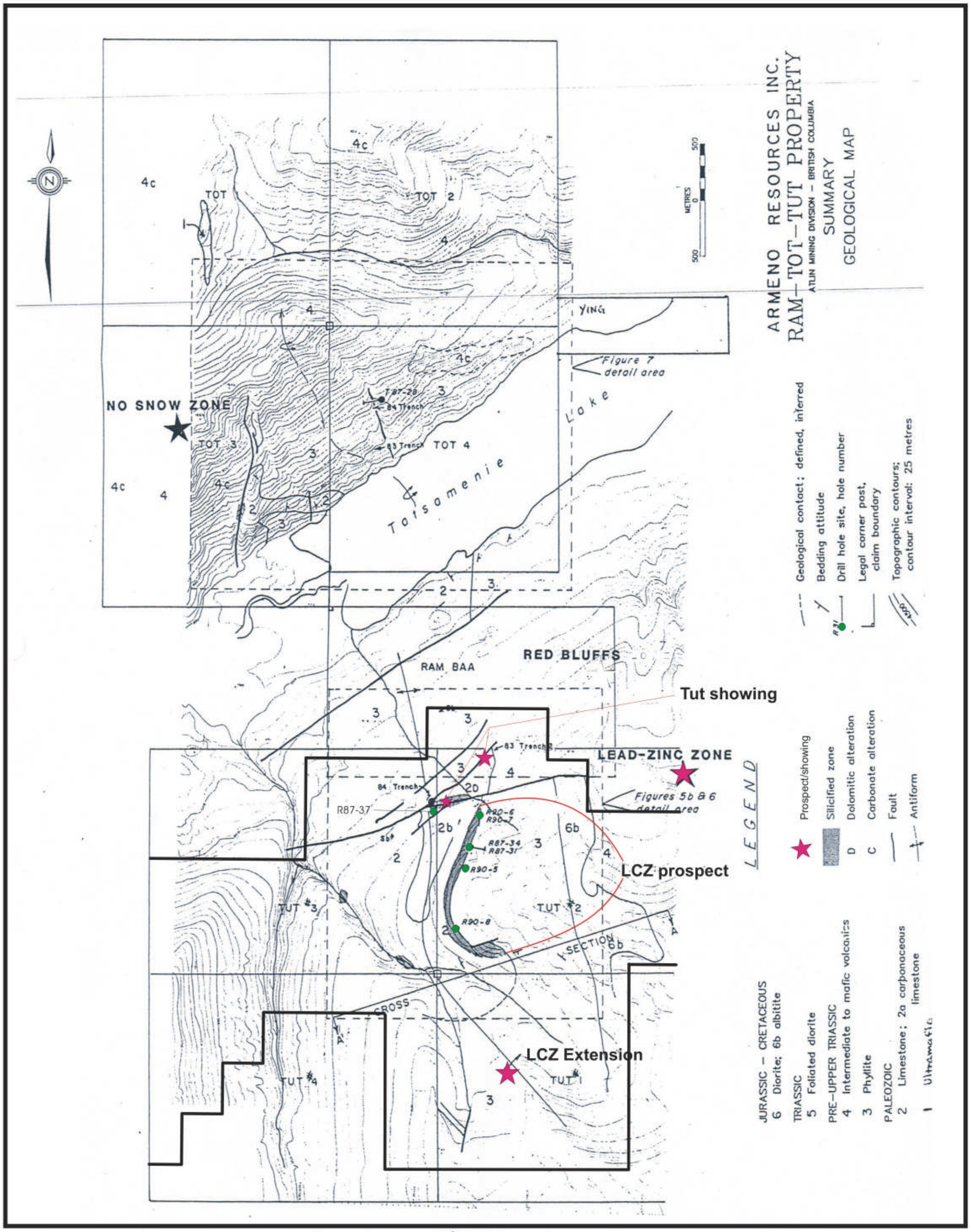


Figure 7. LCZ and Tut Zone Location Map.

The LCZ zone is truncated at its north end by an east-northeast trending fault around which there exists an area of silicification and dolomitization in limestones that is known as the Tut zone.

During 1994**,** prospecting less than a kilometre to the south of the LCZ zone located a silicified limestone outcrop with overlying phyllites containing silicified shears and limestone lenses. This area is referred to as the **LCZ Extension** (Figure 7). Mineralization in the limestones consists of sparse, fine grained, euhedral pyrite with a trace of very fine dark grey sulphides. The phyllites host narrow, silicified, pyritic shear zones with minor quartz veining. Several of the limestone lenses were found to be silicified and carrying strongly disseminated pyrite, lesser chalcopyrite and tetrahedrite, and malachite. Rock samples of LCZ Extension silicified limestone failed to yield any significant gold, the highest value being 75 ppb, however, very limited outcrop exists in this area. Of seventeen samples collected from silicified shears in the phyllites three yielded strongly anomalous results (Hamilton, 1994):

1) 2000 ppb gold over 1.8 metres (Sample #1154)
2) 1130 ppb gold weighted average over 3.0 metres (samples 1144 and 1145)

A single, short contour soil line of nineteen samples at 10 metres spacing, aimed at tracing the silicified limestone yielded seven values between 70 and 225 ppb gold, however, it is not clear if these anomalous results represent the contact zone or downhill dispersion from mineralization in the overlying phyllites.

8.0 INTERPRETATION AND CONCLUSIONS

The Tatsamenie project area claims of Nakina Resources covers the northern extension of the same fault system, in a similar stratigraphic setting, to that which hosts the Golden Bear mine, about 6 kilometres south of the claim boundary. Several documented mineral prospects occur along the fault system within the limits of the property. Nakina's property also covers the Ram-Tut occurrences just west of the Ramtut stock, in an area of Permian limestone. The LCZ zone in this area is a gold-bearing silicified limestone occurrence that is of considerable importance because of its similarities to the Golden Bear mine and its largely untested exploration history. These mineral occurrences are described in Section 7 (Mineralization) and highlight the potential for further deposits along these structures.

If the nearby Ramtut stock was the source for mineralizing fluids as far away as the Golden Bear deposit, as was postulated by Bradford and Brown (1993), it is reasonable to conclude given the similar geological setting of the Golden Bear deposit that significant potential exists for carbonate-hosted gold deposits on the Tatsamenie Project property. While the property has seen several years of exploration including 37 diamond-drill holes, prospective areas of the zone remain untested and further assessment is required.

A 2005 property visit by the author confirmed the geological setting underlying portions of the property and provides important information on the logistical concerns relevant to future exploration. The iron oxide satellite image (Appendix A) provides important data to be followed by future on-the-ground programs.

9.0 RECOMMENDATIONS

The economic viability and potential of Golden Bear-style mineralization on the Tatsamenie property should be further evaluated. Previous literature reports that the prospective West Wall fault is associated with an antimony-arsenic±gold-in-soil anomaly, a distinctive VLF feature and sporadic gold-in-rock samples. The area north of the 1987 drillhole N-38 at the Nie 3 showing to Tatsamenie Lake was not previously targeted for drilling and is considered to be underexplored.

The entire southern extent of the LCZ mineralized trend, a length of about 1 kilometre, has yet to be tested by drilling to determine economic potential. The distance between the southern limit of the LCZ trend and the relatively new LCZ Extension is a further one kilometre to the south. This represents a distance of approximately 2 kilometres of potential gold bearing mineralized structure that, with the preliminary success of defining targets through geochemical and/or geophysical means, should be drilled.

Based on the significant potential for discovery of Golden Bear-type carbonate-hosted mineralization, a first phase program of geological mapping, geochemical sampling, including stream silt, soil and rock, and VLF-EM surveying is recommended. These exploration techniques should especially be focused on the relatively unexplored area north of the Nie 3 mineral occurrence where anomalous areas along the West Wall fault may be indicative of deeper mineralization, and along southern limits of the LCZ trend where gold-bearing silicified limestone indicates Golden Bear-type mineralization. The budget for phase 1 totals C$50,000.

Contingent on the results of phase 1 a second phase of exploration should include further definition of any anomalies highlighted in phase 1 through additional rock and soil geochemical sampling and VLF-EM surveying. A small exploration drill program is recommended as part of the phase 2 program in order to test the drill targets developed in phase 1 and further defined in the early stages of phase 2. The budget for phase 2 is estimated to be C$150,000.

PHASE 1
A geological mapping and geochemical sampling program on new showings and the northern extension of the West Wall fault-related mineralization is recommended to outline targets for Golden Bear-style type mineralization.

PHASE 2
Contingent on the results of phase 1 further sampling, VLF-EM surveying and a drill program on the West Wall fault-related mineralization is recommended to examine for Golden Bear-style type mineralization.

PROPOSED BUDGET - PHASE 1

Item	Description	Amount (Cdn$)
Personnel:		
Geologists (x2)	16 days x $500/day	8000
	16 days x $500/day	8000
Field supplies		1000
Accommodation, food, travel, fuel, rental vehicle, helicopter, expenses		13,500
VLF-EM surveying		8000
Analytical – rock, soil, stream sediment samples	200 samples @ $30/sample	6000
Communication – telephone, fax, mobile/satellite phone		1000
Report and drafting		4500
Total		50,000

Total Phase 1 = $ 50,000

PROPOSED BUDGET - PHASE 2

Item	Description	Amount (Cdn$)
Personnel:		
Geologists (x2)	25 days x $500/day	12,500
	25 days x $500/day	12,500
Equipment, saws, field supplies		1800
Drilling, includes site preparation, helicopter support and related costs	500 metres @ $175/metre	87,500
Analytical – core, soil, rock samples	150 samples @ $30/sample	4500
VLF-EM surveying		3000
Accommodation, food, travel, fuel, rental vehicle, helicopter, expenses		18,200
Communication – telephone, fax, mobile/satellite phone		2000
Report and drafting		8000
Total		150,000

Total Phase 2 = $ 150,000

TOTAL PHASE 1 AND 2 = $ 200,000

In the author's opinion, the proposed recommendations are warranted as envisaged, and phase 1 and 2 should be completed within the calendar years of 2007 and 2008.

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11.0 STATEMENT OF QUALIFICATIONS

GARRY PAYIE
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Tel: 250.479.2299
Email: garry@tessco.ca

I, Garry Payie, am a self-employed Professional Geoscientist residing in the city of Victoria, British Columbia and do hereby certify that:

1. I graduated with a Bachelor of Science degree in Geological Sciences from the University of British Columbia, Vancouver, British Columbia in 1983.
2. I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
3. I have worked as a geologist in British Columbia for twenty-four years since my graduation from 1983 to present, having been employed by the BC Geological Survey Branch and several junior to senior resource companies as both a contract employee and as a consultant.
4. This report has been prepared from a review of the 3-D maps and satellite imagery provided by Terracad Ltd.
5. I maintain no interest in the Tatsamenie property claims that are the subject of this report.

Dated this 3rd day of August 2007.

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Garry Payie, P.Geo.

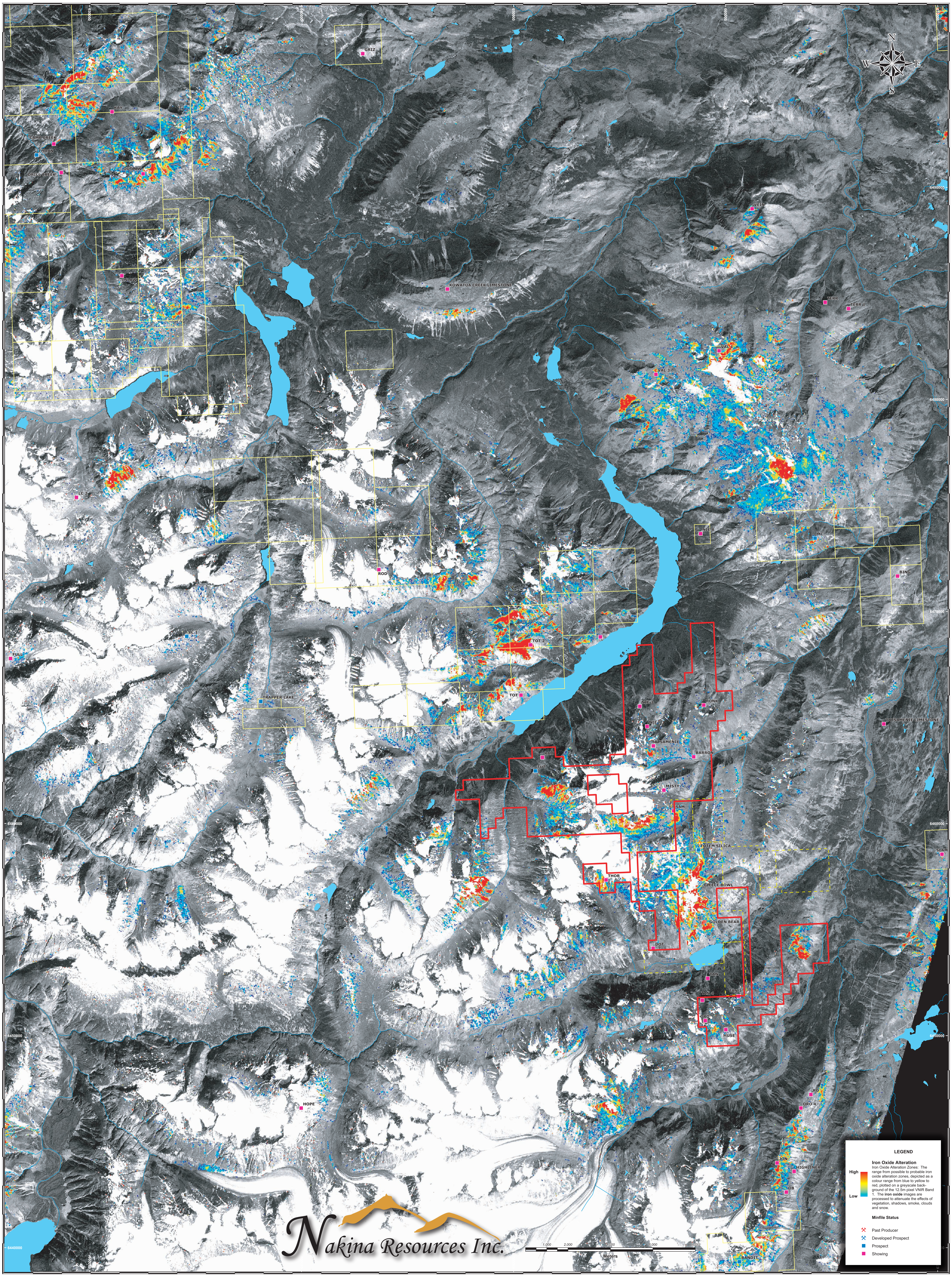
12.0 Statement of Cost

Expenses	Rate	Total ($)
Iron Oxide Satellite Imagery	$5,512	$5,512
Preparation of Report	$3,000	$3,000
TOTAL:		$8,512
Amount Claimed for Assessment		**$8,512.00**

Remainder to PAC account.

APPENDIX A

LANDSAT IMAGE SHOWING IRON OXIDE ANOMALIES



N
S
E
W
GRIZ
KOWATUA CREEK LIMESTONE
TOT 2
TOT
ROD
TRAPPER LAKE
BING
NIE 3
HONK
NIE
TATSAMENIE
BARRON
MISTY
SAM
TOTEM SILICA
THOR
FLEECE BOWL
GOLDEN BEAR
DOT
TAN
TAN 3
TAN 4
ORO
MUSE
HOPE
Nakina Resources Inc.
Meters
LEGEND
Iron Oxide Alteration
Iron Oxide Alteration Zones: The range from possible to probable iron oxide alteration zones, depicted as a colour range from blue to yellow to red, plotted on a greyscale background of the 12.5m pixel VNIR Band 1. The iron oxide images are processed to attenuate the effects of vegetation, shadows, smoke, clouds and snow.
High
Low
Minfile Status
Past Producer
Developed Prospect
Prospect
Showing