

004709



2004 & 2005 Assessment Report

on the

Goldstar and Glen Property

Augusta (15494); Margarete (15505); Goldstar (15519); Peerless (15549);
Shearzone 1-2 (60420-21); Vindicator 1-2 (60422-23), Liberty (63638);
Excelsior 1 (63639); Greenstone 5 (91056), Greenstone 6F (Y21094);
Goldstar (Y80600); Cabage 1-4 (YA92757-60); Cabage 18 (YA92771);
Cabage 21-23 (YA92774-76); Pauline (YB37987);
Glen 1-4 (YC30062-65), Glen 9-16 (YC30070-77);
Rick 11 (YA92092); Rick 13 (YA92094)

NTS 115 I/06
Lat. 62°17'N, Long. 137°09'W
Whitehorse Mining District

For: Midnight Mines Ltd.
Box 31293
Whitehorse, YT
Y1A 5P7

By: Ronald C. R. Robertson, P.Geol.
July 26, 2005

Period of Work: September - October, 2004; June - July, 2005

Costs associated with this report have been approved in the amount of \$ 10,400.00 for assessment credit under Certificate of Work No. QW27738, QW27798

H. Sautwick
Mining Recorder
Whitehorse Mining District

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Summary

The Goldstar and Glen Properties consist of 76 mineral claims and 36 mineral claims respectively, located approximately 68 km northwest of Carmacks, Yukon, along the Freegold Road. Mineralization was first discovered on Mount Freegold in 1930 and the property has been explored by a number of companies and individuals since that date. Exploration programs have included geological mapping, geochemical sampling, geophysical surveys, trenching, reverse circulation drilling and diamond drilling.

This report describes work carried out on the Goldstar and Glen properties of Midnight Mines Ltd. in September – October, 2004 and June – July, 2005. An Application for a Certificate of Work was filed in February, 2005, for work carried out on the Goldstar property in September – October, 2004. A separate Application for a Certificate of Work was filed in July, 2005 for work carried out on the Goldstar property (June – July, 2005) and on the Glen property (September, 2004 and June – July, 2005).

On the Goldstar property, the prospecting and sampling described in this report has focused on areas which have received little recent work and lie outside the main zones (Augusta, Margarete, Kirsteen, etc.) which have been intensively explored by trenching and drilling. This preliminary program is the initial step towards completing a property compilation and generating new targets for future detailed exploration. Four areas of the Goldstar property were examined; the Porcupine Road zone, 1935 shafts area near Liberty Gulch, Cabin zone and Vindicator zone.

All rock samples collected from the Goldstar and Glen properties between September, 2004, and July, 2005, have been submitted to Eco Tech Laboratory Ltd. in Kamloops, BC, for analysis. Analytical results will be reported in a brief supplement to the present report.

Introduction

Introduction

This report describes work carried out on the Goldstar and Glen properties of Midnight Mines Ltd. in September – October, 2004 and June – July, 2005. An Application for a Certificate of Work was filed in February, 2005, for work carried out on the Goldstar property in September – October, 2004, and a separate Application was filed in July, 2005 for work carried out on the Goldstar property in June – July, 2005 and on the Glen property in September, 2004 and in June – July, 2005.

Work was carried out on the Augusta, Margarete, Goldstar (15519), Shearzone 1-2, Vindicator 1-2, Liberty, Excelsior 1, Progress 1-2, Cabage 2, 4, 18, 22, 23, Pauline claims and Glen 1-4, 9-16 claims in September and October, 2004 by B. Harris of Bushmaster Exploration Services Ltd., Ronald Robertson, P. Geol., and M. Bindig. In June and July of 2005, B. Harris, R. Robertson, M. Bindig and A. Pulido carried out work on the Glen 1-4, 9-16, Rick 11 and 13, Augusta, Liberty, Pauline, Cabage 1-4, 21-22, Vindicator 1-2, Peerless, Goldstar (Y80600), Greenstone 5 and 6F claims.

This report is based on the writer's observations, and information from previous reports and publications listed under References.

Location and Access

The Goldstar and Glen properties are located on the summit of Mt. Freegold and a broad rounded ridge extending west from it, approximately 68 km northwest of Carmacks, Y.T. on NTS Map Sheet 115 I-06 at latitude 62°17'N and longitude 137°09'W (Figure 1). The government - maintained Mount Freegold gravel road provides year round access to the property (Figure 2). A road follows the west side of Porcupine Gulch and allows 4 x 4 vehicle access to the properties during the exploration season. This road forks at approx. 1005 m elevation; the west fork goes to the Cabin Zone and the east fork goes up to the Augusta Zone and the system of roads along the Mount Freegold ridge crest. The mining roads on the hilltops and ridges of the claim group are in generally good condition.

Physiography

The property is located within the Dawson Range of the Yukon Plateau, with typical large, rounded hills and ridges, often flat and swampy valley floors, with steep slopes rising sharply to the upland areas. The claims are situated along both sides of a broad, gently sloping ridge, which extends west from the summit of Mt. Freegold, and separates Seymour Creek to the south and west, and Stoddart Creek to the north. Seymour Creek occupies a deep V-shaped valley and the south-facing part of the property adjacent to this valley is much steeper than the rest of the property, with slopes locally exceeding 30°. Elevations range from 850 metres along Seymour Creek at the southwestern edge of the claims, to 1453 metres (4,766 feet) at the Mount Freegold summit in the east-central portion of the Goldstar property.

Vegetation on valley floors is dominated by white and black spruce, with some poplar groves below 1200 m elevation. At higher elevations stunted trees and buck brush form locally thick ground cover. This vegetation thins out on the higher areas to alpine grasses, heath and moss. Some of the higher water courses are marked by a dense growth of

willow. Drainage of the claims is via tributaries of Stoddart Creek to the north and Seymour Creek to the south. Valley floors and north- and west-facing slopes are underlain by permafrost, which hinders trenching and road building. Outcrop and talus are restricted to ridge crests and steep south east-facing slopes.

Goldstar/Glen Property
 Yukon Location Map
 Figure 1

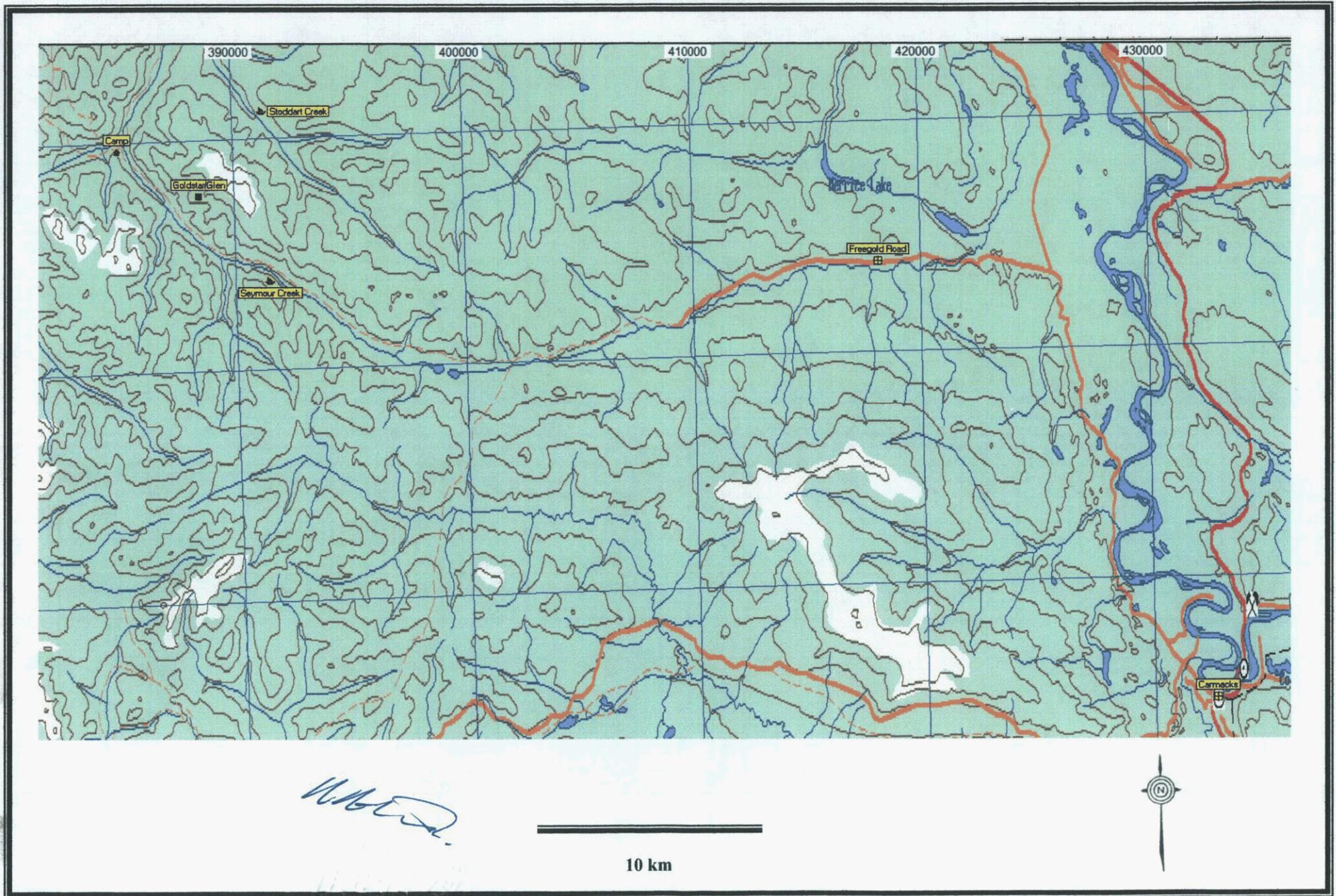


150 km

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Goldstar/Glen Property Regional Location Map
Figure 2 NTS 115 I



Property and Claim Status

The Goldstar and Glen Properties consist of 76 and 36 claims respectively. Figure 3 shows the location of these claims relative to each other, with the Goldstar property shown alone in Figure 4, and the Glen property in Figure 5. During the 2004 & 2005 field season, work was carried out on the claims listed in the table below.

Table 1: Claims Worked On

<i>Claim Name</i>	<i>Grant Number</i>
Augusta	15494
Margarete	15505
Goldstar	15519
Shearzone 1	60420
Shearzone 2	60421
Vindicator 1-2	60422-23
Liberty	63638
Excelsior 1	63639
Greenstone 5	91056
Greenstone 6F	Y21094
Progress 1-2	73464-65
Cabage 1-4	YA92757-60
Cabage 18	YA92771
Cabage 21-23	YA91774-76
Pauline	YB37987
Glen 1-4	YC30062-65
Glen 9-16	YC30070-77
Rick 11	YA92092
Rick 13	YA92094

The table below updates the claim status following this work being applied.

Table 2: Claim Status following 2004 Filing

<i>Claim Name</i>	<i>Grant No.</i>	<i>Expiry Date</i>	<i>New Expiry Date*</i>	<i>Registered Owner</i>
Augusta	15494	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Margarete	15505	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Goldstar	15519	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Peerless	15549	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Protection	15677	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Shearzone 1	60420	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Shearzone 2	60421	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Vindicator 1	60422	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Vindicator 2	60423	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Liberty	63638	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Excelsior 1	63639	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Excelsior 2	63640	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Excelsior 3	63641	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Greenstone 1	90465	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Greenstone 2	90466	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Greenstone 3	90467	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Greenstone 4	90468	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris

<i>Claim Name</i>	<i>Grant No.</i>	<i>Expiry Date</i>	<i>New Expiry Date*</i>	<i>Registered Owner</i>
Goldstar	Y80600	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 2	YA92758	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 4	YA92760	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 18	YA92771	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 19	YA92772	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 20	YA92773	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 22	YA92775	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 23	YA92776	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Cabage 24	YA92777	29-Jan-05	29-Jan-06	Eric Weinecke/Bill Harris
Pauline	YB37987	29-Jan-05	29-Jan-06	Bill Harris

*following approval of filing

Table 3: Claim Status following 2005 Filing

<i>Claim Name</i>	<i>Grant Number</i>	<i>Expiry Date</i>	<i>New Expiry Date*</i>	<i>Registered Owner</i>
Augusta	15494	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Margarete	15505	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Goldstar	15519	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Shearzone 1	60420	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Shearzone 2	60421	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Vindicator 1	60422	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Vindicator 2	60423	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Liberty	63638	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Excelsior 1	63639	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Excelsior 2	63640	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Excelsior 3	63641	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Rick 1	YA92082	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Rick 2	YA92083	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 1	YA92757	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 2	YA92758	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 3	YA92759	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 4	YA92760	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 5	YA92761	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 6	YA92762	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 7	YA92763	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 8	YA92764	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 9	YA92765	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 10	YA92766	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 11	YA92767	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 13	YA92768	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 14	YA92769	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 17	YA92770	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 18	YA92771	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 19	YA92772	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 20	YA92773	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 21	YA92774	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 22	YA92775	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 23	YA92776	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Cabage 24	YA92777	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Bynordac 1	YB05903	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris

<i>Claim Name</i>	<i>Grant Number</i>	<i>Expiry Date</i>	<i>New Expiry Date*</i>	<i>Registered Owner</i>
Bynordac 2	YB05904	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Bynordac 3	YB05905	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Bynordac 4	YB05906	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Bynordac 5	YB05907	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Bynordac 6	YB05908	29 Jan 2006	29 Jan 2007*	Eric Weinecke/Bill Harris
Pauline	YB37987	29 Jan 2006	29 Jan 2007*	Bill Harris
Glen 1	YC30062	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 2	YC30063	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 3	YC30064	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 4	YC30065	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 5	YC30066	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 6	YC30067	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 7	YC30068	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 8	YC30069	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 9	YC30070	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 10	YC30071	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 11	YC30072	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 12	YC30073	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 13	YC30074	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 14	YC30075	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 15	YC30076	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 16	YC30077	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 17	YC30078	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 18	YC30079	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 19	YC30080	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 20	YC30081	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 21	YC30082	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 22	YC30083	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 23	YC30084	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 24	YC30085	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 25	YC30086	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 26	YC30087	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 27	YC30088	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 28	YC30089	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 29	YC30090	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 30	YC30091	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 31	YC30092	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 32	YC30093	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 33	YC30094	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 34	YC30095	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 35	YC30096	17 Sept 2005	17 Sept 2006*	Bill Harris
Glen 36	YC30097	17 Sept 2005	17 Sept 2006*	Bill Harris

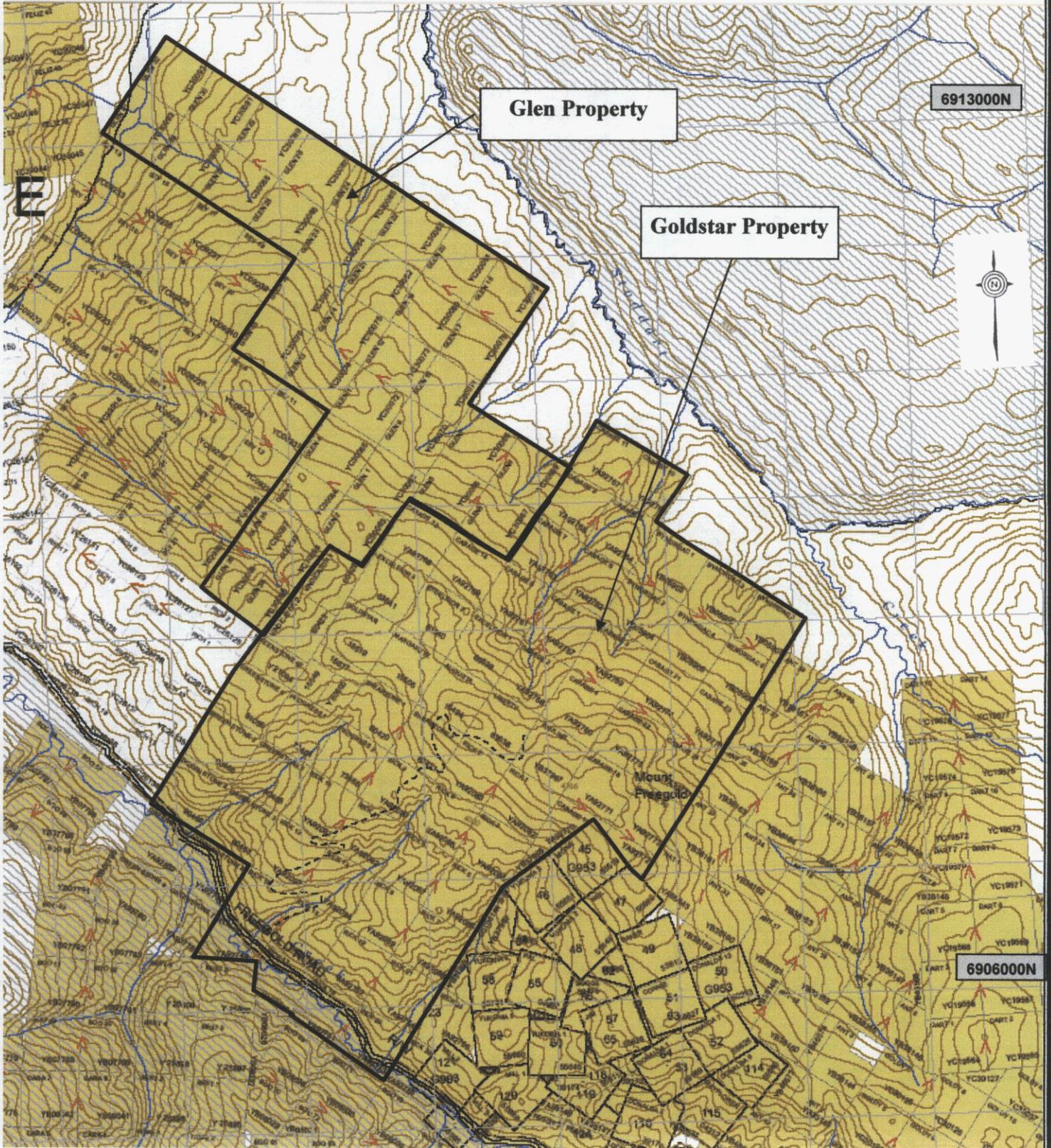
*following approval of filing

Goldstar/Glen Properties Claim Location Map

Figure 3
NTS 115 I/6

387000E

394000E



One kilometre

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Goldstar Property Claim Location Map

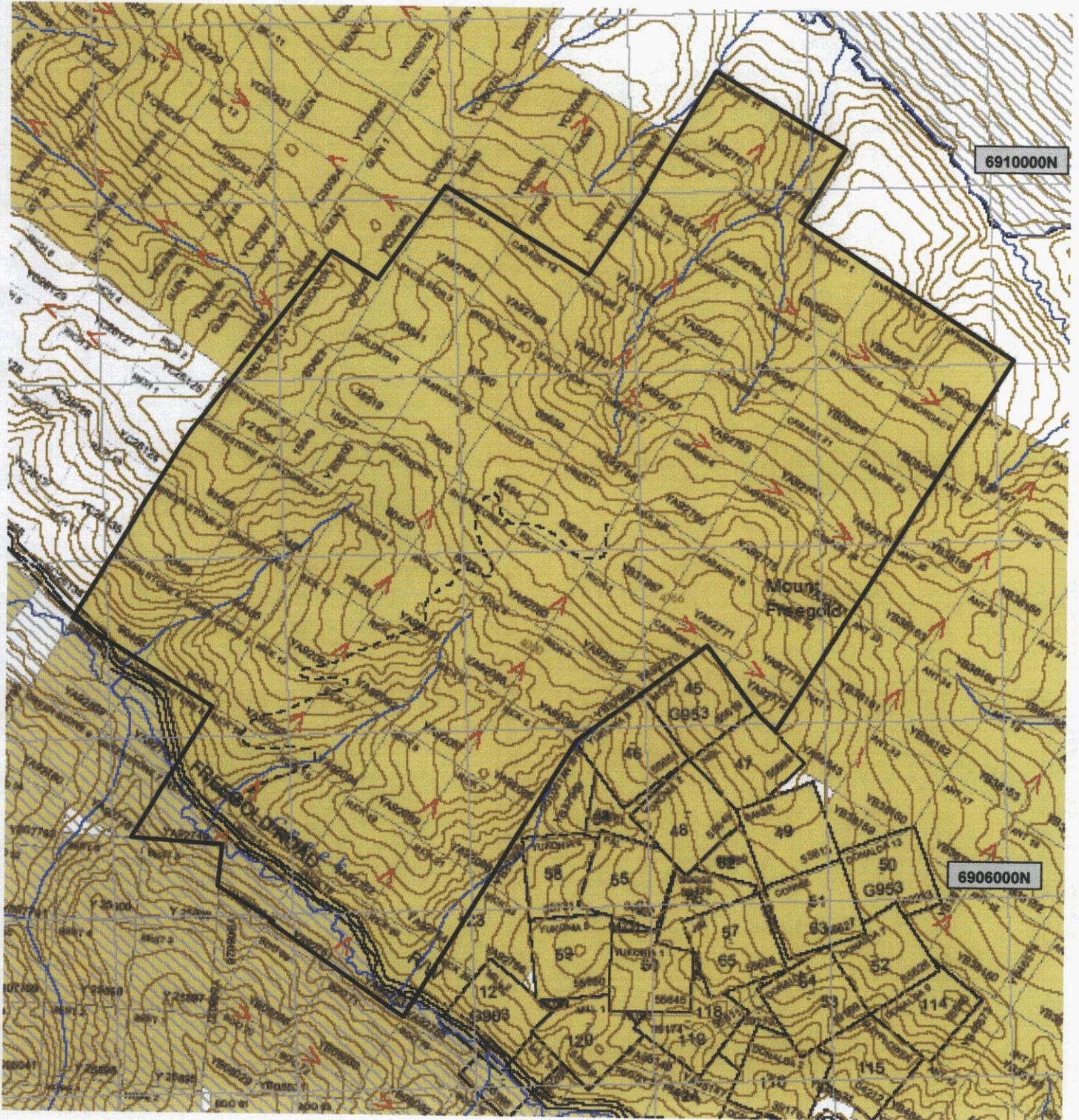
Figure 4
NTS 115 1/6

387000E

392000E

691000N

690600N

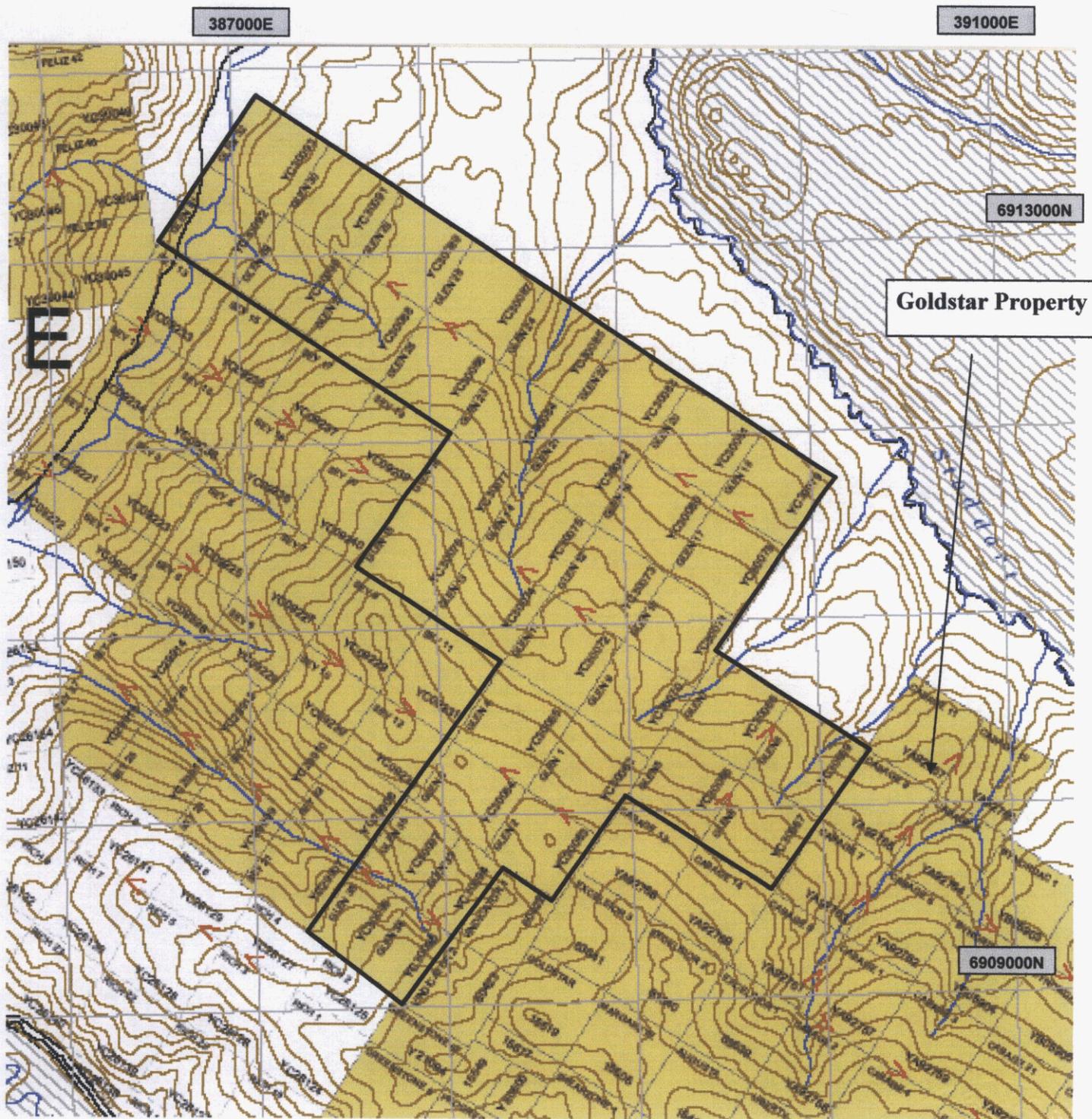


One kilometre



Glen Property Claim Location Map

Figure 5
NTS 115 I/6



Goldstar Property

One kilometre



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Geology and Mineralization

Regional Geology

Regional geology of the area is shown in Figure 6 (from Gordey and Makepeace, 2000).

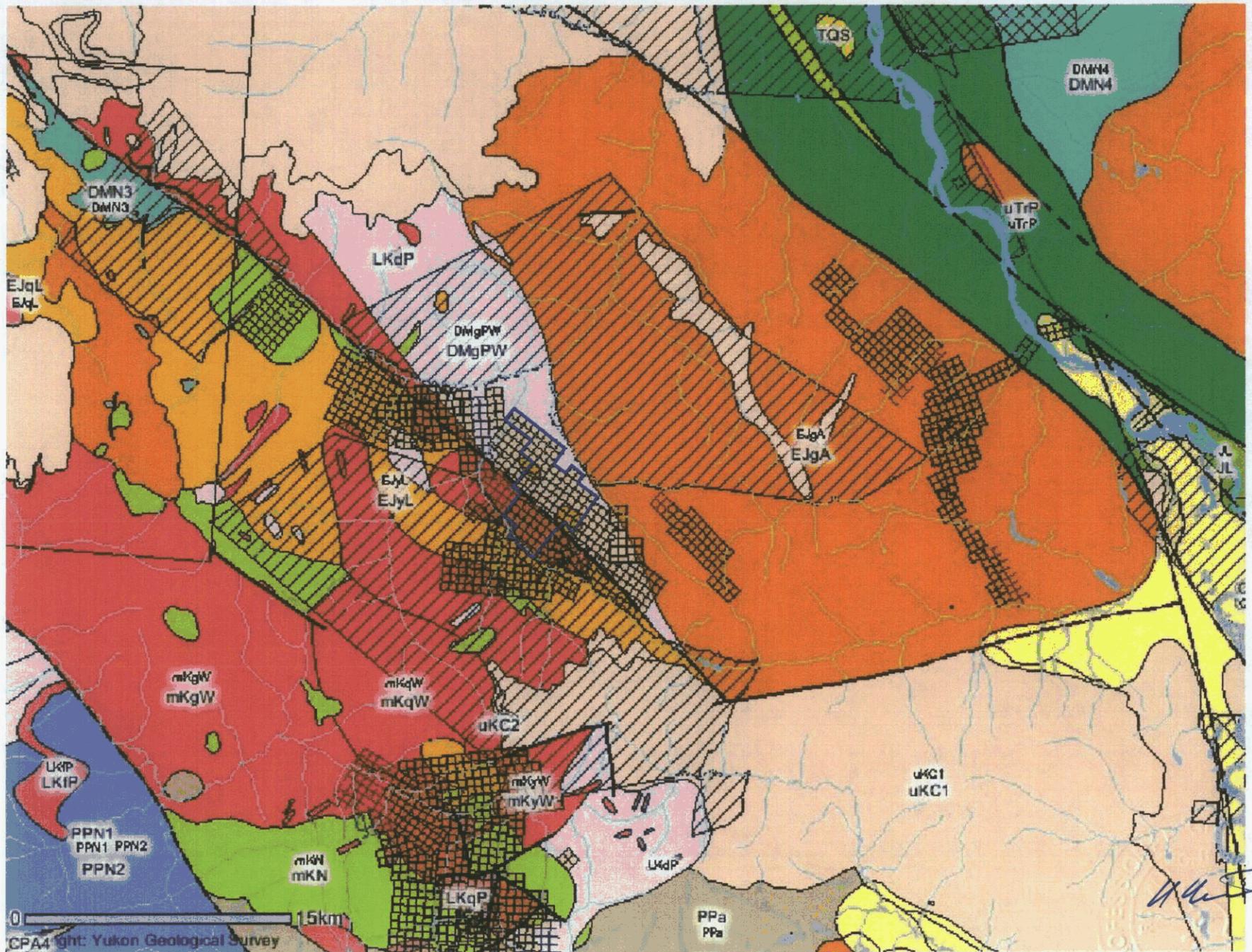
The area of the Carmacks map sheet includes parts of the Intermontane Superterrane (Stikinia) and the Yukon-Tanana Terrane, overlain by younger volcanic and sedimentary rock units and intruded by later felsic plutonic suites (Hart, 2002).

The Goldstar and Glen properties are located in the Dawson Range which lies within the Yukon-Tanana Terrane, and is underlain by a complex of schists and gneisses (Pelly gneiss, Nasina assemblage quartzites and marble, etc.) intruded by suites of plutonic rocks ranging in age from early Jurassic to late Cretaceous. The Big Creek Fault extends from near Mount Freegold to the Casino copper-gold-molybdenum deposit in the northwest, a distance of 100 km. This regional structure appears to separate schists and gneisses of Devonian-Mississippian age (symbol DMPW on Figure 6) intruded by Upper Triassic (210-180 Ma), Klotassin suite plutonic rocks north of the fault from younger plutonic rocks, such as the early Jurassic Big Creek syenite (symbol EJyL) of the Long Lake suite of intrusions, south of the fault. The mid-Cretaceous Mount Nansen group (symbol mKN) is primarily intermediate to felsic pyroclastic rocks dated at 105-100 Ma; related dykes and small intrusions show a close spatial association with mineralization. Carmacks Group basalts, andesites and basal felsic volcanic rocks (symbol uKC) are of Upper Cretaceous age (75-70 Ma).

Mineralization is associated with small plugs and breccia bodies that have intruded within an extensional rift environment, bounded by northwest trending faults that are referred to in the literature as splays of the Big Creek Fault. The Big Creek Fault has been documented to cut through the Big Creek valley northwest of Freegold Mountain, with a minimum of 14 km of dextral displacement. No physical evidence of the continuation of this major fault system has been seen in the Freegold Mountain area (McInnes et al., 1988b). The Camp and Pal Faults (on the Laforma property) may be splays or offset extensions of the Big Creek fault. Some published maps show the fault following the Seymour Creek valley. Other workers have suggested that the Big Creek Fault has been offset to the north along the Bow Creek valley and that the southern extension of the fault lies along the Stoddart Creek valley, north of the Goldstar and Glen properties.

McInnes et al (1988b) also emphasise the structural controls of vein and breccia types of mineralization. Their work showed the importance of northwesterly and north-northeasterly trends of fracture and fault planes. The predominant orientation of rhyolite dykes (dated at 77.5 Ma by K/Ar) between 0° and 20° was interpreted to represent emplacement of the dykes along secondary extensional fracture zones, and they suggested that a northerly oriented extensional fracture system may have persisted throughout the Dawson Range during Late Cretaceous to Tertiary.

Goldstar/Glen Regional Geology—Figure 6



GOLDSTAR/GLEN REGIONAL GEOLOGY LEGEND (p. 1 OF 2)

TERTIARY(?) AND QUATERNARY

TQS

TQS: SELKIRK - resistant, brown weathering, columnar jointed, vesicular to massive basalt flows; minor pillow basalt; basaltic tuff and breccia

LATE CRETACEOUS TO TERTIARY

LKP

LKP: PROSPECTOR MOUNTAIN SUITE grey, fine to coarse grained, massive, granitic rocks of felsic (q) intermediate (g) rarely mafic (d) composition and related felsic dykes (f)

UPPER CRETACEOUS

uKC

uKC: CARMACKS

a volcanic succession dominated by basic volcanic strata (1), but including felsic volcanic rocks dominantly (?) at the base of the succession (2) and locally, basal clastic strata (3) (70 ma approx)

mKN

MID-CRETACEOUS

mKN: MOUNT NANSEN

massive aphyric or feldspar-phyric andesite to dacite flows, breccia and tuff; massive, heterolithic, quartz- and feldspar-phyric, felsic lapilli tuff; flow-banded quartz-phyric rhyolite and quartz-feldspar porphyry plugs, dykes, sills and breccia (**Mount Nansen Gp., Byng Creek Volcanics, Hutshi Gp.**)

mKW

mKW: WHITEHORSE SUITE

grey, medium to coarse grained, generally equigranular granitic rocks of felsic (q), intermediate (g), locally mafic (d) and rarely syenitic (y) composition

EJL

EARLY JURASSIC

EJL: LONG LAKE SUITE

mostly felsic granitic rocks (q) but locally grading to syenitic (y)

EJgA

EJgA: AISHIHIK SUITE

medium- to coarse- grained, foliated biotite-hornblende granodiorite; biotite rich screens and gneiss schlieren; foliated hornblende diorite to monzodiorite with local K-feldspar megacrysts; may include unfoliated monzonite of the Long Lake Suite

UPPER TRIASSIC, CARNIAN AND OLDER (?)

uTrP

uTrP: POVOAS

augite or feldspar phyric, locally pillowed andesitic basalt flows, breccia, tuff, sandstone and argillite; local dacitic breccia and tuff with minor limestone; greenschist, chlorite schist, chlorite-augite-feldspar gneiss, amphibolite (**Povoas**)

GOLDSTAR/GLEN REGIONAL GEOLOGY LEGEND CONT'D (P. 2 OF 2)

DMPW

LATE DEVONIAN TO MISSISSIPPIAN

DMPW: PELLY GNEISS SUITE _ SOUTHWEST - variably deformed granitic rocks of predominantly felsic (q) to intermediate composition(g) southwest of Tintina Faulta

DMN

DEVONIAN, MISSISSIPPIAN AND (?) OLDER

DMN:NASINA graphitic quartzite and muscovite quartz-rich schist (1), (3)-(5), and(?) (6) with interspersed marble (2) and probable correlative successions (7) - (9)

DMN2

LATE PROTEROZOIC AND PALEOZOIC

PPN

PPN:NISLING

assemblage characterized by mica quartz feldspar schist (1) and abundant locally thick limestone members (2); (3) includes possibly equivalent strata northeast of Tintina Fault

PPN2

PPa

PROTEROZOIC AND PALEOZOIC

PPa: AMPHIBOLITE

metamorphosed mafic rocks including amphibolite (1) and ultramafic rocks (2) of unknown association; i.e.) may belong in part or entirely to Nisling, Nasina, and Slide Mountain assemblages and (3), mafic-ultramafic intrusions within Nasina assemblage

Property Geology

The first property scale geological mapping of part of the present project area was the work of Johnston (1937) who produced a coloured map at a scale of 1 inch to 1000 feet based on outcrop, subcrop and careful estimates of the movement of coarse rock fragments on north- and south-facing slopes. Johnston estimated that less than 6% of the bedrock surface is exposed. This is likely still the best map of the property, although there are more detailed geological maps of the main areas of mineralization based on recent trenching and drilling (e.g. Main, 1989).

The units present on the property are as follows (after Main, 1989);

Mid-Cretaceous

Mount Nansen Volcanic Suite

a) Grey quartz-feldspar porphyry (rhyolite?). This unit has 3 to 10% subrounded quartz phenocrysts in a fine grained matrix of quartz and feldspar. Typically it contains 1 to 3 % pyrite as fine disseminations, often oxidized at surface to limonite. Alteration typically includes silicification, sericitization and kaolinization. The unit is spatially associated with gold mineralization on the Goldstar property as well as with arsenic soil geochemical anomalies.

b) Pink (hornblende) quartz-feldspar porphyry. This is a porphyritic rock with 20-80% feldspars, and minor quartz phenocrysts with smaller hornblende crystals (3 to 15 % of the rock), often altered to chlorite. The matrix is aphanitic and often pale pink. Chlorite alteration imparts a green colour. At Goldstar this unit occurs to the north, well away from gold mineralization.

Dawson Range Batholith

Hornblende-biotite potassic quartz diorite and Casino granodiorite

Medium grained equigranular rock. Alteration ranges from weak epidote and quartz veining on fractures to locally intense kaolinization.

Early Jurassic

Big Creek syenite

This unit is seen as several scattered outcrops in the central portion of the property and a large mass to the east of the Augusta showing. It is unaltered and consists of phenocrysts of pink orthoclase, up to 10 cm across (commonly 1-3 cm), set in a very coarse matrix of hornblende and plagioclase. A weak foliation is present in some outcrops. On the south slopes of the property McInnes (1988b) mapped a hornblende cumulate phase of the syenite with sharp contacts to the main, non-cumulate, phase above.

Paleozoic

Devonian, Mississippian and possibly older rocks of the Basement Metamorphic Complex

a) Hornblende-biotite granodiorite

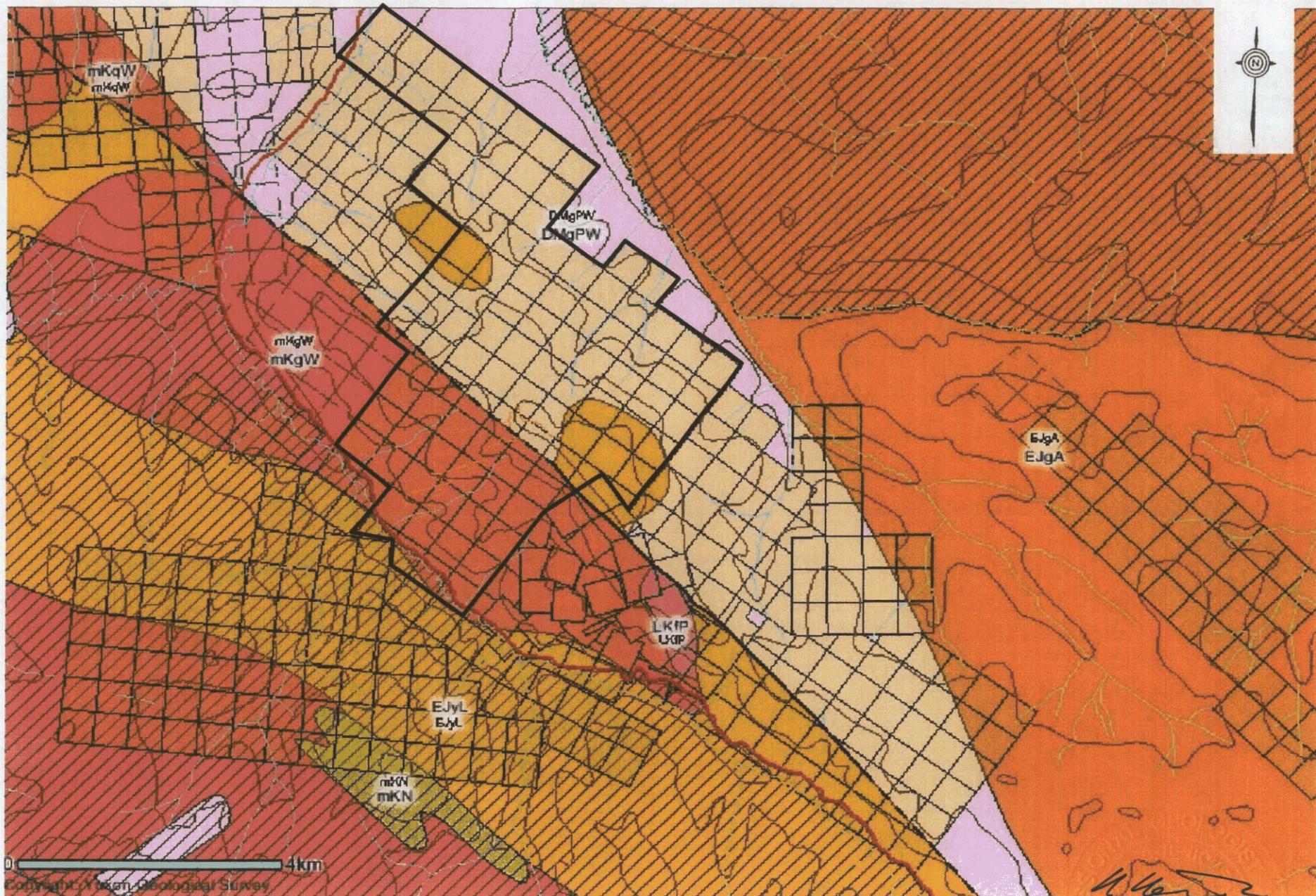
This is a medium grained granitic rock with thickly banded gneissic textures. Foliation ranges from well-developed to absent.

b) Metasedimentary Rocks

This is a highly variable suite of metamorphosed rocks including grey marble, banded quartz-feldspar-mica schists and gneiss, chlorite schist, amphibole-rich schist, amphibolite, grey micaceous quartzite and dark graphitic quartzite. The quartzites and marble are probably part of the Nasina assemblage (Gordey and Makepeace, 2000). All rock types exhibit a penetrative foliation oriented northwest and dipping steeply to the northeast. Limy members of this unit have been locally altered to skarn. Skarns are also spatially associated with amphibolite horizons. Metasomatism is probably related to emplacement of the Jurassic syenite body which lies to the north and east. Skarn bands can be up to 70 m wide but usually average 20 to 30 m, trend northwesterly parallel to the foliation of the host schists and dip steeply northeast. Primary skarn minerals include quartz, magnetite, epidote, diopside, red and brown garnets and calcite. Magnetite occurs as intergrowths with quartz and as zones of massive magnetite. The primary skarn minerals are overprinted by an assemblage of retrograde skarn minerals which include quartz, actinolite, chlorite after actinolite, and chlorite. Oxidation of the magnetite has converted some of the magnetite to hematite ("martite"). The development of the retrograde assemblage (and possibly the primary skarn development as well) appears spatially related to zones of structural weakness. Coarse grained muscovite occasionally occurs in a wide potassic alteration halo around both primary and retrograde skarns. Precious metal mineralization and minor amounts of copper appear to be spatially related to zones with retrograde skarn assemblages.

Most of the higher part of the property is unglaciated resulting in the formation of a surface cap of weathered material. Oxidized gold mineralization found within this weathered cap is probably amenable to heap leaching.

Goldstar/Glen Property Geology—Figure 7



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Goldstar/Glen Property Geology Legend

LATE CRETACEOUS TO TERTIARY

LKP

LKP: PROSPECTOR MOUNTAIN SUITE

grey, fine to coarse grained, massive, granitic rocks of felsic (q) intermediate (g) rarely mafic (d) composition and related felsic dykes (f)

- f. quartz-feldspar porphyry

MID-CRETACEOUS

mKW

mKW: WHITEHORSE SUITE

grey, medium to coarse grained, generally equigranular granitic rocks of felsic (q), intermediate (g), locally mafic (d) and rarely syenitic (y) composition

- g. biotite-hornblende granodiorite, hornblende quartz diorite and hornblende diorite; leucocratic, biotite hornblende granodiorite locally with sparse grey and pink potassium feldspar phenocrysts
- q. biotite quartz-monzonite, biotite granite and leucogranite, pink granophyric quartz monzonite, porphyritic biotite leucogranite, locally porphyritic (K-feldspar) hornblende monzonite to syenite, and locally porphyritic leucocratic quartz monzonite (

EARLY JURASSIC

EJgA

EJgA: AISHIHIK SUITE

medium- to coarse- grained, foliated biotite-hornblende granodiorite; biotite rich screens and gneiss schlieren; foliated hornblende diorite to monzodiorite v local K-feldspar megacrysts; may include unfoliated monzonite of the Long Lake Suite

EJL

EJL: LONG LAKE SUITE

mostly felsic granitic rocks (q) but locally grading to syenitic (y)

- y. resistant, dark weathering, massive, coarse- to very coarse- grained and porphyritic, mesocratic hornblende syenite; locally sheared, commonly fractured and saussuritized; locally has well developed layering of aligned pink K-feldspar tablets

LATE DEVONIAN TO MISSISSIPPIAN

DMPW

DMPW: PELLY GNEISS SUITE - SOUTHWEST

variably deformed granitic rocks of predominantly felsic (q) to intermediate composition (g)

- g. foliated medium grained, homogeneous biotite granite gneiss to biotite or hornblende granodiorite gneiss; massive to strongly foliated dioritic to granodioritic gneiss; includes interfoliated amphibolite, quartz-mica schist and phyllite

Mineralization

Early prospecting and exploration in the district was described by Bostock in a series of annual reports on mining activity in the Yukon beginning in 1931 (eg. Bostock, 1936a, 1936b). Johnston (1937) described the geology, structure and mineralization of Freegold Mountain based on detailed geological mapping and examination of prospects carried out in the summer of 1936.

The Mount Freegold district hosts a variety of styles of gold mineralization, such as high grade, low tonnage gold-quartz vein deposits (La Forma and Rambler Veins); low grade, high tonnage gold-bearing breccia zones (Antoniuk Breccia), gold-bearing magnetite skarn zones (Augusta zone), gold in stibnite-barite-breccia veins (Emmons Hill (Dart-Goldy) prospect) and the nearby Tinta Hill veins where gold occurs with silver, copper, lead and zinc.

Carlson (1987) described the principal controls on mineralization in the district as: proximity to major regional structures such as the Big Creek Fault, importance of local structures on trends ranging from northwesterly to northeasterly as hydrothermal channelways and vein sites, presence of suitable host rocks including Mount Nansen volcanics, siliceous metasediments and Casino Granodiorite (part of the Lower Cretaceous Dawson Range Batholith), proximity to porphyry stocks or quartz-feldspar porphyry dykes.

Porphyry, breccia and vein –type gold mineralization occurs adjacent to the northwesterly trending Big Creek and related faults (Camp Fault, Pal Fault, etc.) and their northeasterly trending counterparts.

A close spatial relationship is apparent between rhyolite or quartz-feldspar porphyry dykes and gold mineralization in the district. It has long been assumed that fracturing, alteration and mineralization were related in time as well as space to emplacement of these dykes. Carlson (1987) pointed out that “veins and breccias cut basement rocks, foliated plutonic rocks and the unfoliated batholithic rocks but they rarely cut Mount Nansen volcanics and have not been observed cutting Carmacks Group volcanics. The porphyry dykes... appear to be younger than the Mount Nansen volcanics and may be as young as, and related to, the felsic, basal, Carmacks event.”

Smuk et al., 1997, discussed age determinations for Mount Nansen volcanic and subvolcanic rocks (consistent mid-Cretaceous ages of 70 Ma) and Carmacks Group volcanic and intrusive rocks (consistent Late Cretaceous ages of 105 Ma), and showed that altered Mount Nansen dyke samples give reset ages between 94 Ma and 61 Ma. They proposed that a regional hydrothermal event of Late Cretaceous age related to Carmacks igneous activity altered the Mount Nansen porphyritic dykes and formed base and precious metal veins.

More recent age dating (Mortensen et al., 2003) has shown that mineralization in the nearby Mount Nansen district is associated with mid-Cretaceous emplacement of high-level felsic intrusions (Mt. Nansen volcanic suite).

There is probably a district-wide metal zoning, with a variety of associations, including Cu-Mo-W-Bi-Te, Au-Ag, Cu-Au, Au-As-Sb, and peripheral Cu-Pb-Zn veining which can carry high Au and Ag values (eg. at Tinta Hill). There are high mercury values in a number of outlying occurrences. This simple pattern of metal associations and zoning has probably been complicated by post-mineral faulting. This would also explain why apparently shallow/low-temperature styles of mineralization are sometimes seen at the same elevations as deeper/higher-temperature styles. Some of these metal associations and mineralization styles are similar to those seen in intrusion-hosted and intrusion-related deposits and exploration targets in the Tintina Gold Belt.

Exploration History

Goldstar Property

The exploration history of the Goldstar property is summarized below (largely from Main (1989) and Christopher (1991)).

The initial lode gold discovery in the Mount Freegold area was a gold-bearing magnetite skarn found by prospector P. F. Guder in 1930 near the summit of Mount Freegold. The discovery is now part of the Augusta showing on the Goldstar Property. Guder's discovery started a small staking rush in the spring of 1931 which resulted in the discovery of the G-3 (LaForma) and Rambler veins. Many small hand-dug pits, trenches and shafts were excavated by Guder and other prospectors of the 1930s.

In 1959, Conwest optioned Guder's claims and drilled five holes totaling 1,014 feet (309 meters). Although recoveries were poor, four assays yielded an average of 0.14 oz Au/Ton over 7 feet (2.1 m) (Roberts, 1974).

In 1969, Yukon Revenue Mining Ltd. optioned the Gold Star Group and carried out bulldozer trenching and geological mapping which outlined an intensely bleached zone along Cabin Creek. The Cabin Creek zone was evaluated by Yukon Revenue as a porphyry copper target.

In 1973, Prism Resources Ltd. optioned the Goldstar Property and carried out a ground magnetic survey and geological mapping. In 1974 Dynasty Exploration Ltd. completed detailed geological mapping, linecutting, soil geochemistry, a magnetometer survey, bulldozer trenching and 8 diamond drill holes totaling 653 metres.

The Goldstar property then reverted back to Guder who reoptioned the property to Arctic Red Resources Corp. In the period 1980 to 1982, Arctic Red completed geochemical surveys and following Guder's death in 1981, the property ownership was transferred to Guder Mining Exploration Ltd. controlled by E. Wienecke. Guder Mining conducted bulldozer trenching in 1982 and 1983.

In the spring of 1986, Chevron Minerals Ltd. optioned the Goldstar property and assigned the option to the Freegold Joint Venture. A program of geological mapping, prospecting, grid soil geochemistry and test EM-16 surveys was conducted to define bulk tonnage gold targets associated with altered felsic breccia. The Cabin zone, mapped in 1981 as an intensely weathered and leached felsic porphyry breccia, was shown to have anomalous gold geochemical expression but Chevron dropped the option without trenching or drilling the zone.

In April 1987, the Big Creek Joint Venture (Big Creek Resources Ltd. and Rexford Minerals Ltd.) optioned the property and completed a \$416,000 exploration program. The program included 13.86 line kilometers of VLF-EM and proton magnetometer surveys, 5800 meters of bulldozer trenching, 1460 meters of excavator trenching and 17 HQ diamond drill holes totaling 741.1 meters. The initial 9 holes, totaling 292.5 meters

concentrated on the Margarete vein and a later program of 8 holes totaling 448.6 meters tested both the Augusta showing and Kirsteen zone.

Northwesterly to westerly trending vein faults in the Margarete vein were reported by Main (1989) to “give good assays of up to 150 g/t (4.5 opt) gold over narrow widths (0.3m) although average grades across the vein zone are about 4.1 g/t (0.12 opt) gold and 48.0 g/t (1.4 opt) silver over 3.3 m”. Following the 1987 drill program, Main (1989) calculated a mineral inventory, to a 60 m depth for the 250 m interval that was drill-tested, to be 123,800 tonnes grading 0.12 opt gold and 1.4 opt silver. Five of the nine drillholes tested the vein system and returned the following intersections (Christopher, 1991):

DDH	Interval (m)	Length (m)	Gold g/t	Gold oz/t	Silver g/t	Silver oz/t
87-1	29.3-32.3	3.0	6.65	0.19	10.0	0.29
87-2	16.7-18.3	1.6	4.77	0.14	98.0	2.81
87-4	20.6-27.7	2.2	9.77	0.28	96.0	2.80
87-5	26.2-27.7	1.5	3.60	0.11	83.0	2.42
87-6	14.3-17.7	3.4	5.42	0.16	13.5	0.39

Main (1989) reports assays of 366 g/t (10.67 oz/t gold) and 106 g/t (3.0 oz/t silver) over 5 meters across a skarn zone in one of the trenches on the Augusta showing. Drilling on the Augusta Zone returned 3.4 m of 2.40 g/t (0.07 oz/t) gold and 26.1 g/t (0.75 oz/t) silver in hole 87-11, and 6.0 m of 4.45 g/t (0.13 oz/t) gold and 463. g/t (1.35 oz/t) silver in hole 87-15.

Gagan Gold Corp. optioned the property in late 1990. During November and December of that year a stripping and trenching program was conducted on the Cabin Creek Porphyry Gold target. In August 1991 three long bulldozer trenches were excavated in the Cabin Porphyry zone, and 6 rotary percussion drill holes were completed on the Margarete and Augusta zones (1000 feet; 305 metres).

Redell Mining Corp. optioned the Goldstar Property and performed prospecting, soil sampling, rock sampling and bulldozer trenching from 1994 to 2001. Anomalies indicated by these programs were not followed up.

The Goldstar Property reverted to the present owners who performed prospecting, soil and rock sampling, and bulldozer trenching on the claims between 2001 and 2004 in an effort to expand the areas of interest on the property.

Glen Property

The central portion of the property covers the northwest extension of the Margarete vein system of the Goldstar Property as it strikes downslope into Guder Gulch. Numerous boulders of magnetite carrying free gold have been recovered from active placer mining operations in this gulch suggesting the possible occurrence of an Augusta-type magnetite skarn in the headwaters. Soil geochemical anomalies range up to 2200 ppb gold, 5.8 ppm silver and 2560 ppm arsenic; the source of these anomalies has not yet been located.

The claims also cover a large 300 gamma aeromagnetic anomaly overlying the Castle porphyry body located on the north side of Freegold Mountain. The soil anomaly over this area returned values up to 500 ppb gold with anomalous copper values. Geochemical anomalies discovered in 1970 have not been followed up.

A number of gold, silver, copper soil anomalies were identified by surveys conducted in 1981; very little follow-up work has been carried out in these areas. Additional exploration in 1986 and 1987 defined gold-arsenic anomalies in soil samples. In part, these anomalies overlie an under-explored porphyry body located on the south flank of Freegold Mountain, west of the Cabin Porphyry zone (of the Goldstar property). In the Rage claims (which form part of the Glen property), samples from a roadcut (along the Freegold road) assayed up to 4.3 oz/t gold and a chip sample over a 36 foot (11 metre) interval assayed 0.054 oz/t gold. A drill hole in 1987, planned to intersect this zone, defined two 1.0 m wide intersections grading 0.135 and 0.057 oz/t gold respectively.

2004 & 2005 Work Program

Goldstar Property

On the Goldstar property, the exploration described in this report has focused on prospecting and sampling of areas which have received little recent work and lie outside the main zones (Augusta, Margarete, Kirsteen, etc.) which have been intensively explored by trenching and drilling (Eaton, 1986; Main, 1989; Christopher, 1991; Schulze, 2000). This preliminary program is a first step towards completing a property compilation with emphasis on the types of mineralization, alteration styles and geological controls in order to prioritise future detailed exploration of the property. In the property visits carried out between September, 2004 and July, 2005, four areas of the Goldstar property were examined. These are described below as the Porcupine Road zone, "1935 shafts area", Cabin Zone and Vindicator Zone.

Porcupine Road Zone

A large area of veined outcrops exposed in roadcuts was prospected and sampled (locations B1 to B2 on Figure 8). Zones of alteration and veining of fractured and altered granodiorite (?) strike approximately 110° with near vertical dip. Quartz veins range from 2 mm to 20 cm wide; wider veins result from repeated fracturing and vein filling. Angular wallrock clasts are present in areas of wider, more pervasive veining. Thin dark grey-green chalcedony veins are often present on quartz vein margins. Vein centres have coxcomb textures, with occasional grains of pink barite in open spaces. Wallrock is soft except where silicified, pale brown weathering, with minor amounts of fine pyrite and some hematite staining, but little limonite or manganese. A few zones of narrow propylitic altered rhyolite or quartz feldspar porphyry are probably dykes, but their relation to fracturing and alteration is not clear.

At approx. 1070 m, at a large hairpin bend in the road, are large, angular, blocks of pale, unfoliated quartz monzonite. From this point, prospecting continued across the slope to the east, where there are a series of small, old pits and trenches attributed to P. F. Guder. Note that most old pits and trenches in the Freegold area are attributed to Guder because of his many years of intensive prospecting here. However Bostock (1936a) noted that in 1935 "over forty men were prospecting the slopes of Freegold mountain and vicinity....a dozen or more planned to carry on through the winter....The writer...was amazed to see the number of cabins that had been built, particularly along the north side of Seymour creek". Clearly, at least some of the old prospect pits encountered here may have been started by other prospectors, although Guder may well have worked many of them after the initial excitement had died down. This is also an area where the geochemical compilation map (Eaton, 1986) showed areas of anomalous (>50 ppb) gold values in soil samples around the head of Porcupine Gulch.

Several old pits and sloughed-in trenches were located (locations B3 to B4 on Figure 8). Some were very mossy and overgrown and had apparently not been examined for many years. Samples were collected from trenches and pits, and from dump material nearby. Most of the areas prospected and sampled showed fractured, altered intrusive rocks (granodiorite or quartz monzonite) with some silicification and quartz and limonite, or hematite, veining. Pale felsic dyke rocks are present at some locations. Typically these are not porphyritic and carry minor amounts of fine disseminated pyrite.

"1935 shafts area"

The Archer, Cathro geochemistry compilation map (Eaton, 1986) on the Goldstar project shows several areas of anomalous (>50 ppb) gold values in soil samples on the ridge to the north east of the 1935 shafts and also across the slope to the north west, apparently all in areas underlain by Jurassic Big Creek Syenite (although there is very little outcrop here). Most rocks exposed in trenches or seen in dumps in the 1935 shafts area look like granodiorite or gneiss rather than syenite. This is a north-facing slope underlain by permafrost and the anomalies seem to be limited to areas with relatively thin overburden cover. The locations described below are shown as A1 through A 5 and C1 to C3 on Figure 8; sample descriptions are in Appendix III.

Along the rough cat trail from the Augusta Zone to the area of the 1935 shafts (Bostock, 1936a), outcrops of typical coarse grained Jurassic syenite (Big Creek Syenite), with large K-spar phenocrysts, are present at approx. 1400 m elevation, where the cat trail diverges from the ridge top road. Blocks of the same rock type are seen in the upper section of the cat trail, with a few pieces of dark grey-green, fine grained, intermediate volcanic or dyke rocks. This trail cuts subcrop of platy weathering pale felsic volcanic rocks (flows or tuffs, or possibly flow banded dyke rocks) at approx. 1280 m elevation before the trail crosses the upper left fork of Liberty Gulch. (Note that similar felsic volcanic rocks ("rhyolite") are present in the area of the "Guder pit and trench" on the ridge top road above this point; as described below). Sample 206201 (milky quartz vein material) was collected from float pieces in the cat trail a little way below the area of felsic volcanic rocks.

The two 1935 shafts were described by Bostock (1936a) as being part of development on claims held by Mr. A. Morrison and associates, which also included a number of trenches. Bostock's description of the shafts is as follows:

"Two shafts referred to here as the east and west shafts were examined. The west shaft was 8 feet deep and showed a vein 12 to 16 inches wide striking north 80 degrees west and dipping very steeply south. The wallrock is an altered granitic rock. The vein matter is quartz containing finely crystalline pyrite, but most of the sulphide originally present in the vein appears to have been leached out. Some limonite and some copper stain are also present. A small fault fracture along the vein contains gouge from which gold is said to have been panned. Fifty feet to the south of the west shaft is a parallel vein of blue-grey, fine-grained quartz and pyrite. The east shaft is approximately 300 yards east of the west shaft. At the time of the writer's visit the east shaft was filled with water. It is said to show a vein 7 feet 10 inches wide, striking approximately east. The vein matter on the dump is blue-grey quartz with pyrite."

Two small, old, sloughed-in shafts were located in the approximate area described by Bostock. There are also three fairly recent shallow bulldozer trenches in the immediate area; these trend northwest and range in length from 25 to 45 metres. One trench is located between the two shafts and the others are positioned to the north and south of the shafts, approximately 75 metres apart. The two shafts are better described as a north shaft

and a south shaft (rather than Bostock's east and west shafts) and are only some 35 metres apart. Thus it is not clear how the shafts which were recently visited correspond to the shafts Bostock examined in 1935. The shafts were not accessible when Johnston (1937) visited this zone in 1936.

Much of the south trench has outcrop and subcrop of pale pink, medium to fine grained intrusive rocks (granodiorite or syenite). In the north trench, the rocks often look like fractured Big Creek Syenite (but without the distinctive large K-spar phenocrysts), with thin dark chlorite-magnetite fracture fillings. Wallrocks in the central trench, and seen on the shaft dumps, are usually sheared and fractured, with weak to moderate limonite and manganese staining. The precursor rock type is difficult to identify. Some pieces look like fine grained felsic volcanic rocks, with quartz eyes. Zones of friable, clay and limonite altered fragments in trenches seem to be narrow felsic dykes. Locally, the rocks have a gneissic appearance, partially obscured by later fracturing.

Johnston (1937) says:

“The main geological feature in this area is an elongate, northwest-trending body of albite granite which intrudes metamorphic rocks and syenite porphyry. The granite grades into granodiorite along its southwest contact and most of the prospect openings are in this contact phase.”

Samples were collected from the shaft dumps, from float of quartz vein material on the slope just above the south shaft and from the middle cat trench (see Appendix III: Sample Descriptions). Mineralization consists of quartz veining with associated alteration and locally heavy limonite and manganese staining. Dark thin veinlets of chalcedony are common. Quartz veins often show coxcomb textures. Minor malachite staining is seen in places, and occasional scorodite staining after arsenopyrite. Some samples from the central trench show fine pyrite and sericite alteration of the matrix, with minor arsenopyrite.

This area certainly warrants further exploration. At least one of the shafts described by Bostock (1936a) has not yet been recognized. The vein of blue-grey quartz and pyrite he describes (“fifty feet south of the west shaft”) should be looked for (this could be the area of our “south shaft?”), as this type of vein often carries good gold values in other parts of the Freegold district. The cat trenches are not well-placed to intersect veins trending north 80 degrees west. The anomalous gold values in soil reported in Eaton (1986) cover a much more extensive area than that prospected to date, and the source of these anomalies should be sought. The difficulty in defining the nature of the host rocks may indicate that, as at other similar zones in the district, fracturing, alteration and mineralization took place close to the contacts of Mount Nansen age felsic dykes which intrude older granodiorite or gneiss or may, in part, have intruded along the granodiorite-gneiss contact zone.

On the way back from the 1935 shafts towards the ridge crest, above the cat trail and east of the head of the left fork of Liberty Gulch, there are areas of float of milky quartz veining and a wet, sloughed-in cat trench.

On the edge of the ridge crest road, east of the Augusta zone trenches, there is a small pit and nearby shallow trench, ascribed to P. F. Guder, and a short, modern, bulldozer trench. The cat trench exposes intrusive rocks similar to the more mafic phases of granodiorite or syenite seen in parts of the Augusta zone. The old pit and trench have manganese stained rhyolite or felsite, with some malachite. A large block beside the pit is pale brown fine grained rhyolite (?), with quartz and hematite in fractures and a 5 cm wide quartz-rich band with abundant malachite and some azurite. (sample 71875).

Cabin Zone

The Cabin zone has been extensively trenched in earlier exploration programs (principally in the late 1980s). The three long bulldozer trenches excavated by Gagan Gold Corp in 1991 (Christopher, 1991) were not re-examined. The series of Cabin zone trenches leads uphill and northwest into the Vindicator zone described below.

A total of 18 rock samples were collected during prospecting of some of these trenches in July, 2005 (locations D1 through D18 on Figure 8). Sample descriptions are in Appendix III. Additional prospecting combined with detailed GPS mapping will be required to define the geology in this area and connect it to adjacent areas. Host rocks are mainly granodiorite, with some felsic dykes. Locally extensive fracturing and alteration are present, with quartz veining and silicification, sericite, limonite and goethite, siderite and some development of tourmaline as alteration and in veins. More strongly altered rocks have fine quartz-sericite-pyrite in the matrix. Pyrite is locally abundant as patches to 1 cm across, with minor arsenopyrite. Malachite staining was not recorded. One sample (51001) with abundant magnetite may indicate the presence of Augusta-type magnetite skarn mineralization in the upper Cabin zone, trending towards upper Guder Gulch where boulders of magnetite carrying free gold have been recovered from placer mining operations.

Vindicator Zone

In this zone three trenches were examined (locations B5 through B B13 on Figure 8). On the way down hill from the access road there is float and subcrop of felsic to intermediate medium grained intrusive rocks, some finer grained felsic volcanic or dyke rocks, occasional pieces of quartz vein material and abundant banded dark grey and light grey quartzose gneisses. Some of the darker bands are quite sooty and carbonaceous; these rocks are similar to some outcrops on the Caribou Creek claims, south of Seymour Creek.

The upper trench is a bulldozer trench approximately 350 metres in length. At the north end, the last few metres of the trench expose fresh, medium grained hornblende-plagioclase gneiss. Going south, there is a zone of skarny, calc-silicate gneisses with locally abundant epidote, and then a 30 metre section with loose blocks and float of magnetite-rich skarn, with some epidote and quartz veining. Approx. 100 metres farther south (after a section with little exposure) there is a 25 metre zone of fractured and limonite stained rhyolite, with some quartz veining and manganese staining. This is probably a dyke intruding quartzose gneisses and dark, carbonaceous quartzites. The gneiss and quartzite continue south to the end of the trench, with a few narrow zones of alteration, silicification and limonite/manganese staining, which may indicate faults or dykes.

Downhill from the long cat trench there are two short trenches initially excavated by bulldozer and later deepened with an excavator. The upper excavator trench has dark carbonaceous quartzites and quartzose gneisses, with a few pale, fine grained rhyolite or felsite dykes. There is only minor quartz veining in this trench. The lower excavator trench exposes steeply dipping quartzites, quartzose metasedimentary rocks and dark carbonaceous quartzites, cut by occasional steep narrow felsic dykes. There is often a narrow zone of rust staining around the margins of the dykes. Near the west end of the trench, there are two narrow (10-20 cm) zones of rusty fault gouge. Sample 71926 has goethite and barite crystals on fracture faces of a quartzose metasedimentary rock.

One kilometre

Goldstar Property Sample Location Map

Figure 8

NTS 115 I/6



387000E

392000E

6910000E

6906000E



Label	Sample No.	Label	Sample No.	Label	Sample No.	Label	Sample No.	Label	Sample No.	Label	Sample No.
A1	206201	B3	71916	B10	71924	D1	51001	D8	51008	D15	51015
A2	206202-03	B4	71917-18	B11	71925	D2	51002	D9	51009	D16	51016
A3	206204	B5	71919	B12	71927	D3	51003	D10	51010	D17	51017
A4	206205	B6	71920	B13	71926	D4	51004	D11	51011	D18	51018
A5	206206 & 71912	B7	71921	C1	71870-72	D5	51005	D12	51012		
B1	71914	B8	71922	C2	71873	D6	51006	D13	51013		
B2	71915	B9	71923	C3	71874-75	D7	51007	D14	51014		

Glen Property

Prospecting in the Glen claims was limited to examination of outcrops along the road through the claims and a series of long bulldozer trenches which cross the ridge crest. In general, these trenches are wide but shallow, and have little rock exposed. They are often grassy, and partly overgrown with brush. In places, trenching exposed a locally thick ash layer and dark organic muck below. Float and subcrop in the trenches are commonly of various types of gneiss and schist near the ridge top and down the northern slope (grey and dark grey, well-foliated biotite-quartz-feldspar gneiss and hornblende-quartz-feldspar gneiss, with lesser amounts of amphibolite and biotite schist). Typical coarse grained Jurassic syenite is present lower in the trenches on the south side of the ridge. Occasional narrow zones of float of altered, fractured and limonite stained rocks suggest that there are thin felsic dykes in the trenches. In general, fracturing and alteration are weak.

Rock sample locations are shown on Figure 9. Descriptions of rock samples are presented in Appendix III.

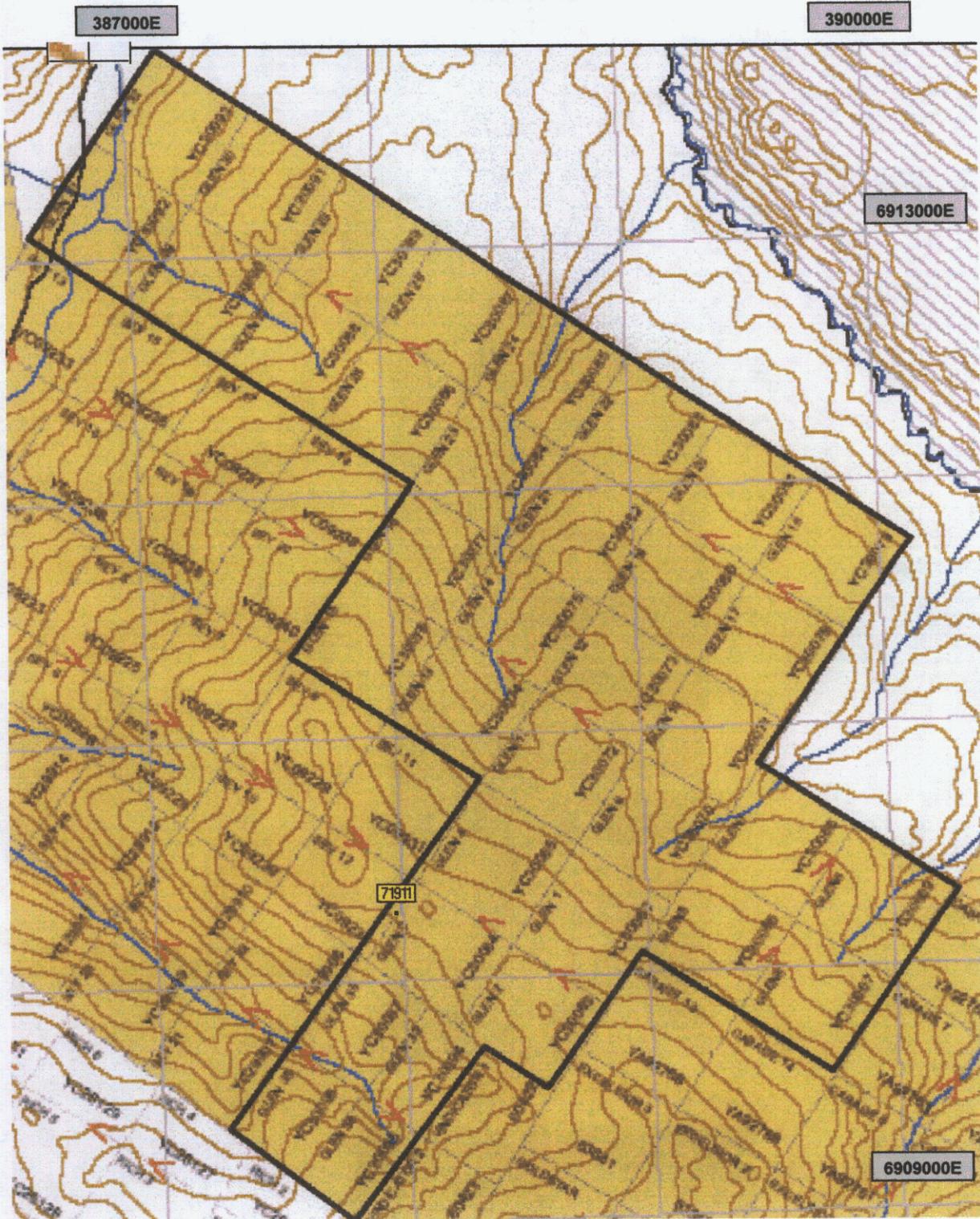
Sample Preparation and Analysis

All rock samples collected from the Goldstar and Glen properties between September, 2004, and July, 2005, have been submitted to Eco Tech Laboratory Ltd. in Kamloops, BC, for analysis.

After crushing and pulverizing, a 30 g split will be analysed for gold by fire assay with atomic absorption finish, and another sample split will be analysed for 28 minor and trace elements (including base metals, silver, arsenic, antimony, etc.) by ICP. Overlimit analyses of the principal elements of economic interest will be assayed.

Analytical results will be reported in a brief supplement to the present report.

Glen Property Sample Location Map
Figure 9
NTS 115 I/6



One kilometre



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Conclusions and Recommendations

Detailed conclusions will have to await the results of rock sample analyses. These results may change the emphasis given to individual showings but they are not likely to change the main recommendations for future work on the Goldstar and Glen properties. The preliminary work described in the present report was intended as an initial step towards compilation of available information on the properties in order to generate targets for future detailed exploration. Property-wide, GIS-based compilations of topographic, geological and geochemical data need to be completed. Available air photos (preferably colour), satellite images and public domain airborne geophysical data should be acquired and interpreted with a view to identifying geological contacts and structural features which could help to focus surface exploration programs (soil geochemistry, geophysics), on favourable areas of dyking or structural intersections.

Soil geochemical sampling is known to be difficult in this area, because of the locally thick ash layer and the presence of permafrost on north- and west-facing slopes. Some soil geochemical anomalies seem to correlate with areas of thin overburden cover: these anomalies can probably be extended and defined using a power auger for sampling in areas of thicker overburden. As mentioned in several sections of this report, there are a number of large soil geochemical anomalies (with values in gold, silver, copper, or arsenic) where no follow-up work has been carried out. These areas require additional sampling and prospecting, with excavator trenching of the best targets.

The Liberty Gulch area of the Goldstar property clearly deserves additional exploration. A large grid should be established to cover the areas of old trenches and anomalous gold in soils identified in previous exploration. Detailed soil sampling, prospecting and a ground magnetometer survey should be completed. Follow-up by trenching may have to be carried out in two stages. Initial exposure by bulldozer should be followed by excavator trenching after permafrost has thawed.

Continuing exploration in the Porcupine Creek area should involve sampling of soil and rock in roadcuts, as well as prospecting and soil sampling across the slopes to the west (towards Cabin Creek) and to the east past Porcupine Creek towards Major Gulch. Northwest trending zones of alteration and veining on these slopes may correlate with the Camp Fault of the Laforma property or with parallel structures.

At the Cabin zone, additional mapping and sampling of the extensive trench system should be carried out. In the area of the upper Cabin zone, Vindicator zone and the Guder Gulch portion of the Glen property, ground magnetometer and VLF-EM surveys may help to define the northwest extension of the Margarete vein system as it strikes downslope into Guder Gulch, and to locate the source of magnetite skarn rocks found in Guder Gulch and in parts of the Cabin zone.

At the Glen property, the Castle Porphyry zone and the under-explored porphyry body on the south flank of Freegold Mountain are the principal targets at this time. In the south part of the property (Rage claims) the roadside gold anomalies need to be relocated by detailed sampling, and then followed up by trenching and drilling, if warranted.

References

- Bostock, H. S., 1936a. "Mining Industry of Yukon, 1935", Geological Survey of Canada Memoir 193.
- Bostock, H. S., 1936b. "Carmacks District, Yukon", Geological Survey of Canada Memoir 189.
- Christopher, P. A., 1991. "Rotary percussion drilling and trenching assessment report on the Goldstar property, Whitehorse mining district, Freegold Mountain Area, Yukon", for Gagan Gold Corp. Assessment Report # 093019, October, 1991.
- Carlson, G. G., 1987. "Geology of Mount Nansen (115 I/3) and Stoddart Creek (115 I/6) Map Areas, Dawson Range, Central Yukon". Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 1987-2.
- Davidson, G. S., 1985. "Report on the Gold Star group, Freegold Mountain", June, 1985.
- Davidson, G. S., 1994. "Exploration report on the Freegold Mountain project", for Harris & Assoc. Explorations, February, 1994.
- Davidson, G. S., 1996. "Exploration report on the Glen 1-30, 35-40, Castle 1-14, Rag 1-28 and Elephant 1-20 Claims, Freegold Mountain Area", December, 1996.
- Davidson, G. S., 1997. "Geological evaluation report on the Glen 1-30, 35-40, Castle 1-14, Rag 1-29, May 1 and 3, and Elephant 1-20 Claims, Freegold Mountain Area", for La Rock Mining Corp., February, 1997.
- Eaton, W. D., 1986. "Report on geological mapping and geochemical and geophysical surveys done on the Goldstar property", for Archer, Cathro & Associates Ltd., Assessment Report # 091896, December, 1986.
- Gordey, S. P. and Makepeace, A.J., 2000. "Yukon Digital Geology", Geological Survey of Canada, Open File D3826, and Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 1999-1(D).
- Hart, C. J. R., 2002. "The Geological Framework of the Yukon Territory", in Yukon Geological Survey website.
- Johnston, J. R., 1937. "Geology and Mineral Deposits of Freegold Mountain, Carmacks District, Yukon", Geological Survey of Canada Memoir 214.
- Main, C. A., 1989. "Trenching program on the Goldstar Property, Big Creek Joint Venture, Mount Freegold, Yukon", Archer, Cathro & Associates Ltd., Assessment Report # 092699, February, 1989.
- McInnes, B. I. A., 1987. "Geological and precious metal evolution at Freegold Mountain, Dawson Range, Yukon", M. Sc. Thesis, Mc Master University, Hamilton, Ontario, 230 p.

McInnes, B. I. A., Goodfellow, W. D. and Crocket, J. H., 1988(a). "Role of structure in the emplacement of gold-quartz veins and rhyolite dykes at Freegold Mountain, Dawson Range, Yukon", in Current Research Part E, Geological Survey of Canada, Paper 88-1E, p. 153-157.

McInnes, B. I. A., Goodfellow, W. D., Crocket, J. H. and McNutt, R. H., 1988(b). "Geology, geochemistry and geochronology of subvolcanic intrusions associated with gold deposits at Freegold Mountain, Dawson Range, Yukon", in Current Research Part E, Geological Survey of Canada, Paper 88-1E, p. 137-151.

Mortensen, J. K., Appel, V. L., and Hart, C. J. R., 2003. "Geological and U-Pb age constraints on base and precious metal vein systems in the Mount Nansen area, eastern Dawson Range, Yukon", in Yukon Exploration and Geology 2002, D. S. Emond and L. L. Lewis (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 165-174.

Schulze, C., 2000. "Geochemical survey and trenching program completed at the Mt. Freegold Property, Yukon Territory", for FM Resources Corp., May, 2000.

Smuk, K. A., Williams-Jones, A. E., and Francis, D., 1997. "The Carmacks hydrothermal event: An alteration study in the southern Dawson Range, Yukon", in Yukon Exploration and Geology 1996, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 92-106.

Tempelman-Kluit, D. J., 1984. "Geology of the Laberge and Carmacks map sheets", Geological Survey of Canada Open File 1101.

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Ronald C. R. Robertson, certify that:

I am a self-employed consulting geologist with office address at 56 Dalroy Crescent NW, Calgary, Alberta, T3A 1G3.

I obtained a Bachelor of Science degree with First Class Honours in Geology from the University of Aberdeen, Scotland, in 1970 and subsequently carried out graduate studies in economic geology at Queen's University, Kingston, Ontario.

I am registered as a Professional Geologist (number M54692) by the Association of Professional Engineers, Geologists & Geophysicists of Alberta.

I have been engaged in mineral exploration and development on a full-time basis for over 30 years, of which twelve have been spent on programs in the Yukon Territory, Northern British Columbia and Alaska. I participated in the exploration described in this report on the Goldstar and Glen property of Midnight Mines Ltd. in October 2004 and in June – July, 2005.

SIGNED at Whitehorse Yukon Territory, on July 26, 2005



Ronald C. R. Robertson, P. Geol.

APPENDIX II

STATEMENT OF COSTS

2004 Work – Goldstar filing

Prospecting/Sampling

Bill Harris, 1.5 days @ \$300/day	\$450
Ron Robertson, 1 day @ \$400/day	\$400
Matthias Bindig, 0.5 days @ \$250/day	\$125

Travel Days

Bill Harris, 1.5 days @ \$225/day	\$338
Ron Robertson, 1 day @ \$300/day	\$300
Matthias Bindig, 0.5 day @ 188/day	\$94

Transportation

Truck Rental, 2 days @ \$100/day	\$200
Quad, 1.5 days @ \$75/day	\$113
Fuel	\$50

Food

3 mandays @ \$35/day	\$105
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Samples

6 rocks @ \$28/sample	\$168
Shipping	\$40

Subtotal \$2,420

Report Preparation

\$1,000

Total: \$3,383



Statement of Costs

2005 Work - Goldstar and Glen Filing

Prospecting/Sampling

Bill Harris, 4.5 days @ \$300/day	\$1,350
Ronald Robertson, 2 days @ \$400/day	\$800
Matthias Bindig, 1.5 day @ \$250/day	\$375
Alejandro Pulido, 2 days @ \$200/day	\$400

Travel Days

Bill Harris, 2.5 days @ \$225/day	\$563
Ronald Robertson, 1 day @ \$300/day	\$300
Matthias Bindig, 1.5 day @ \$188/day	\$282
Alejandro Pulido, 1 day @ \$150/day	\$150

Transportation

Truck Rental, 8 days @ \$100/day	\$800
Quad, 4.5 days @ \$75/day	\$338
Fuel	\$200

Food

10 mandays @ \$35/day	\$350
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Samples

40 rocks @ \$28/sample	\$1120
Shipping	<u>\$80</u>

Subtotal \$7,108

Report Preparation

\$600

Total: \$7,708



APPENDIX III

SAMPLE DESCRIPTIONS

Sample List: Goldstar and Glen Properties 2004 - 2005

Sample No	Date	Area	Description
206201	22-Sep-04		WP-BH-051 Rx: float on cat trail to 1935 shafts area, milky quartz vein, small patches of chlorite (or green clay?), trace limonite and magnetite
206202	22-Sep-04	1935 shafts	WP-BH-52 Rx: grabs from dump at shaft #1. Altered, fractured "granodiorite", almost gneissic texture, abundant glassy quartz eyes, buff altered matrix, heavy Mn stain, some quartz veinlets, abundant malachite on some fracture faces.
206203	22-Sep-04	1935 shafts	WP-BH-52 Rx: grabs from dump at shaft #1. Altered, fractured gneissic (?) rocks, altered matrix, dark grey cherty veinlets (1 to 5 mm), vuggy texture in places, heavy limonite and goethite staining, trace scorodite.
206204	22-Sep-04	1935 shafts	WP-BH- 53 Rx: grabs from dump at shaft #2. Strongly fractured gneissic (?) rocks, heavy limonite stain, abundant dark grey cherty veinlets (more than 206203), minor chlorite alteration, some open coxcomb quartz veinlets, possible minor galena.
206205	22-Sep-04	1935 shafts	WP-BH--54 Rx: near lower end of cat trench #2. Grabs, fractured, altered granodiorite or qz-fsp gneiss, glassy quartz eyes, (weaker alteration than 206202/3/4), feldspars altering to clays or sericite, few thin dark cherty veinlets, minor disseminated pyrite (sericite-pyrite alteration?), possible trace arsenopyrite.
206206	22-Sep-04	1935 shafts	WP-BH-55 Rx: near upper end of cat trench #2. Grabs, brown weathering, pale grey, strongly fractured qz-fsp intrusive rock or gneiss, very altered matrix (sericite-pyrite), some thin sericite veinlets and thin chalcedony veinlets.
71911	28-Jun-05	Glen Claims	WP-MB-G7 Rx: south section of long cat trench. Small zone of float with limonite staining and limonite veinlets
71912	28-Jun-05	1935 shafts	WP-BH-55 Rx: near upper end of cat trench #2 (close to 206206). Grabs, quartz veining, Mn stain, few grains of pyrite, arsenopyrite
71914	29-Jun-05	Porcupine Ck Rd	WP-RR-01 Rx: roadcut outcrop, composite grab, fractured, altered granodiorite (?), quartz veins with angular wallrock clasts, coxcomb quartz, possible minor pink barite between coxcombs, trace pyrite, some greenish cherty veinlets
71915	29-Jun-05	Porcupine Ck Rd	WP-RR-03 Rx: roadcut outcrop, composite grab, fractured, altered granodiorite (?), quartz veins with angular wallrock clasts, trace pyrite, local hematite stain (no lim or Mn stain)
71916	29-Jun-05	"Guder Pits"	WP-RR-07 Rx: composite from old trench, altered granodiorite, some quartz veining and limonite veinlets
71917	29-Jun-05	"Guder Pits"	WP-RR-09 Rx: composite from dump below old trench, limonite and quartz veining
71918	29-Jun-05	"Guder Pits"	WP-RR-09 Rx: grabs from trench, fine-grained fresh rhyolite, trace disseminated pyrite
71919	29-Jun-05	Vindicator	WP-RR-15 Rx: long cat trench, composite grab of epidote-bearing skarny metasediments
71920	29-Jun-05	Vindicator	WP-RR-16 Rx: long cat trench, composite grab of magnetite-rich rock types (some martite?), minor epidote
71921	29-Jun-05	Vindicator	WP-RR-17 Rx: long cat trench, composite grab of magnetite-rich rock types (some martite?), minor epidote and some quartz veining
71922	29-Jun-05	Vindicator	WP-RR-18 Rx: long cat trench, composite grab of pale fine-grained rhyolite or felsite, strong fracturing and Mn staining, some quartz veining
71923	29-Jun-05	Vindicator	WP-RR-19 Rx: long cat trench, composite grab of altered, friable rhyolite or felsite, Mn and limonite staining, some fine quartz veinlets and stringers
71924	29-Jun-05	Vindicator	WP-RR-20 Rx: long cat trench, composite grab of altered metasedimentary rock (?), siliceous matrix, Mn and limonite staining, fine disseminated pyrite, Mn and limonite staining, some fine quartz veinlets and stringers
71925	29-Jun-05	Vindicator	WP-RR-22 Rx: in road, composite grabs from large blocks with heavy quartz veining and hematite staining
71926	29-Jun-05	Vindicator	between WP-RR-25 and RR-26 Rx: in lower cat/hoe trench, 15m in from east end (approx. coords 0387979/6909167) composite grabs of fractured quartzose metasedimentary rocks, with goethite and barite in fractures
71927	29-Jun-05	Vindicator	WP-RR-27 Rx: in road, composite grabs, from large blocks and outcrop, of carbonaceous quartzites, minor folding and some quartz veining
71870	28-Jun-05	1935 shafts	East shaft
71871	28-Jun-05	1935 shafts	East shaft
71872	28-Jun-05	1935 shafts	East shaft
71873	28-Jun-05	1935 shafts	just upslope from west shaft
71874	28-Jun-05	Guder Pit	"Guder trench" just north of pit
71875	28-Jun-05	Guder Pit	"Guder trench" just north of pit

Sample List: Goldstar and Glen Properties 2004 - 2005

Sample No	Date	Area	Description
51001	15-Jul-05	Cabin	GSBHR1; float - trench above old cabin, magnetite, limonite
51002	16-Jul-05	Cabin	GSBHR2; float - vuggy, siliceous, replacing hbl-feldspar porphyry? limonite
51003	16-Jul-05	Cabin	GSBHR3 - vuggy, siliceous, goethite veinlets, (and siderite?), limonite stain, small quartz crystals in open spaces. Trench
51004	16-Jul-05	Cabin	GSBHR4 - fairly fresh, fine grained intrusive rock, small fresh biotite phenos, disseminated pyrite, (pyrite often with chlorite replacing hornblende)
51005	16-Jul-05	Cabin	GSBHR5 - vuggy, leached, limonite stained, siliceous altered intrusive rock (gdi?) with thin open quartz veins
51006	16-Jul-05	Cabin	GSBHR6 - strongly altered intrusive rock (?), siliceous, limonite, sugary, vuggy matrix with sericite after feldspar and minor tourmaline. Near end of trench
51007	16-Jul-05	Cabin	GSBHR7 - very pale fine grained rock (qfp?) with thin chlorite-sericite veinlets and fine pyrite. From 120 degree trench
51008	16-Jul-05	Cabin	GSBHR8 - medium grained intrusive rock, moderate alteration (matrix very altered), small quartz eyes, limonite, disseminated pyrite and small tourmaline rosettes
51009	16-Jul-05	Cabin	GSBHR9 - medium grained intrusive rock (gdi?), fractured, pale buff matrix, altered feldspars, weak limonite and Mn stain. From south end of 1 m deep trench running 340 degrees,
51010	16-Jul-05	Cabin	GSBHR10 - medium grained intrusive rock (gdi?), with 2-3 cm milky quartz vein, fractured matrix, not strongly altered. From trench
51011	16-Jul-05	Cabin	GSBHR11 - coarse grained intrusive rock, strongly fractured, pink feldspars, grey-green matrix (quartz-sericite-chlorite) with patches of pyrite
51012	16-Jul-05	Cabin	GSBHR12 - strongly altered intrusive rock (?), quartz grains in greenish sericite matrix, abundant disseminated pyrite, some arsenopyrite (?)
51013	16-Jul-05	Cabin	GSBHR13 - strongly altered intrusive rock (?), fine quartz-sericite-pyrite matrix, patches of pyrite to 1 cm, some arsenopyrite (?)
51014	16-Jul-05	Cabin	GSBHR14 - vuggy, siliceous, reddish stained, sugary quartz, fine sericite in matrix, limonite and goethite
51015	16-Jul-05	Cabin	GSBHR15 - pale brown altered qfp (?), fine grained siderite/ankerite veinlets and as matrix replacement
51016	16-Jul-05	Cabin	GSBHR16 - open, coxcomb quartz veins (1-4 cm), limonite stain, pale greenish altered wallrock (quartz-sericite). South end of trench trending 10 degrees
51017	16-Jul-05	Cabin	GSBHR17- fractured, altered, dark brown, with voids and siliceous matrix, thin dark chalcedony veinlets, sericite and weak scorodite stain
51018	16-Jul-05	Cabin	GSBHR18 - coarse grained, fractured, large quartz patches, pale buff altered matrix, coarse tourmaline in veins