SUMMARY REPORT

TOG AND BUG PROPERTIES

YUKON

NTS 105/C5-D8

of

Dunvegan Exploration Ltd.

April, 1989

Introduction

Dunvegan Exploration Ltd. holds three groups of mineral claims located near Marsh Lake - Little Atlin Lake, southwestern Yukon. These comprise the Tog, Bug and Phil properties, totalling 180 mineral claims.

Quartz veins and alteration zones developed along north-northeast and north-northwest trending structures have returned significant gold values from grab trench samples. These structures and associated alteration zones extend for several kilometers along strike, beyond the confines of the properties. One grab sample from a trench on the Tog property assayed 31.651 oz/t Au (metallics assay). Although anomalously high, Government geologists (Department of Indian and Northern Affairs and the Geological Survey of Canada) have confirmed that the presence of native gold in the area is not uncommon.

The region within which the claim groups are located has undergone only limited geological exploration in the past and consequently the potential for new discoveries is favourable. The showings exhibit structural and geological similarities to other gold camps, such as Muddy Lake and Atlin in northern British Columbia and the Motherlode district in California. Further work is highly recommended on these properties.

Location and Access

The Tog-Got-Pot group of claims are located between Squanga, Summit and Dalayee Lakes (Figure 1) and lie 70 km southeast of Whitehorse, Yukon (NTS Map Sheet 105/D8). The claims cross the Alaska highway in two locals and the main showings on the claim are accessible by 4-wheel drive road.

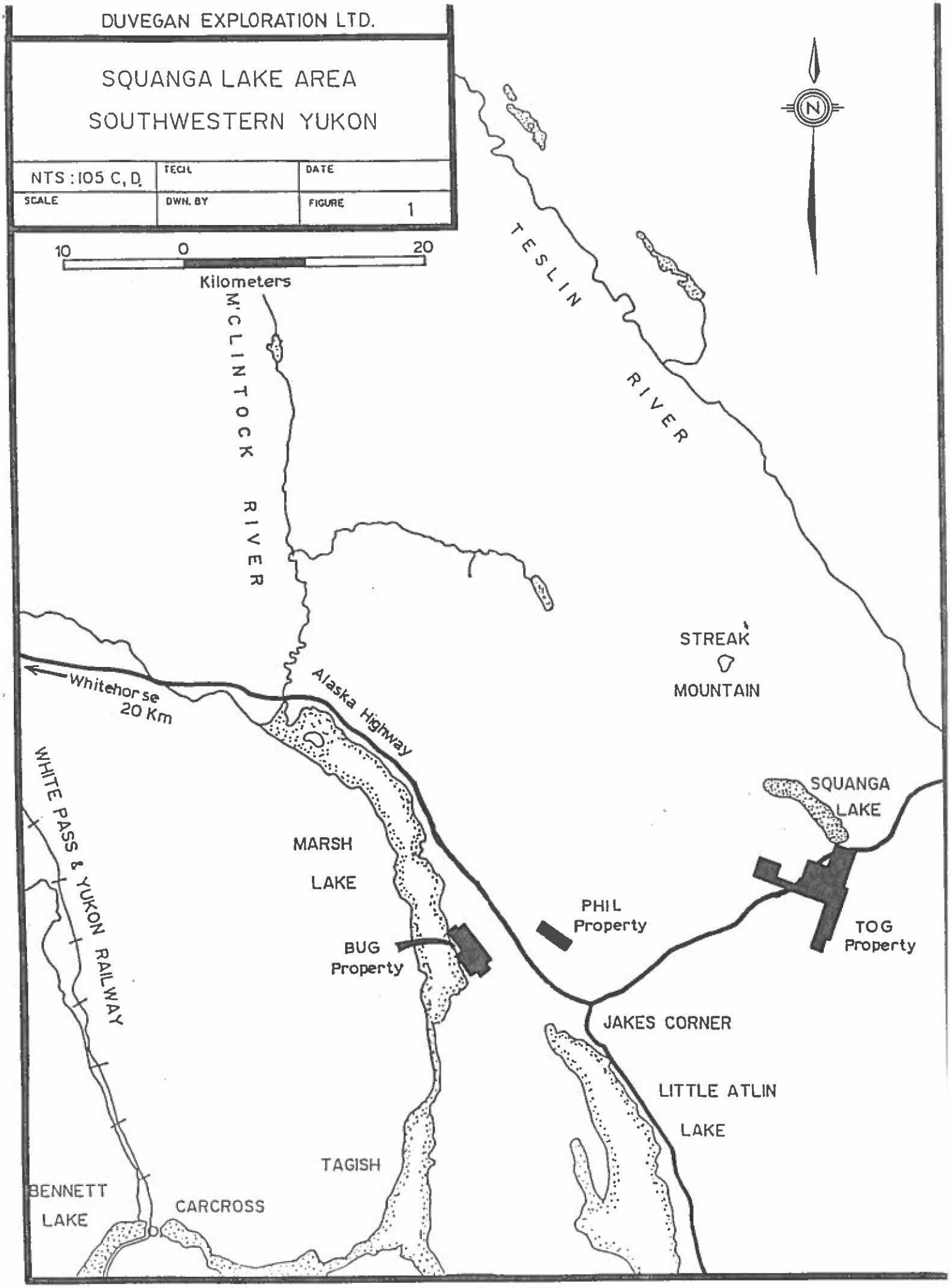
The Bug claims are located 30 km west of the Tog property and lie 5 km west of the Judas Creek campground on the Alaska Highway. Access to the claims is via a two-wheel drive road, which branches off the Alaska Highway approximately 100m south of Judas Creek.

The Phil claims are along Judas Creek, approximately 4 km east of the Bug group.

DUVEGAN EXPLORATION LTD.

SQUANGA LAKE AREA
SOUTHWESTERN YUKON

NTS : 105 C, D.	TECIL	DATE
SCALE	DWN. BY	FIGURE 1



Property

The Dunvegan Exploration Ltd. holdings consist of 180 mineral claims. These are summarized in Table 1.

Table 1

Claim	Grant Numbers	Expiry Date
Tog 1 - 10	YA82536 - YA82545	July 3, 1991
Tog 11 - 24	YB20446 - YB20459	July 18, 1989
Tog 25 - 44	YB24638 - YB24657	Dec 13, 1989
Tog 45 - 73	YB25431 - YB25459	Feb 28, 1990
Got 1 - 16	YB20460 - YB20475	July 18, 1989
Got 17 - 29	YB25460 - YB25472	Feb 28, 1990
Pot 1 - 16	YB20476 - YB20491	July 18, 1989
Bug 1 - 4	YA87163 - YA87166	May 25, 1991
Bug 5 - 12	YA94879 - YA94886	May 25, 1991
Bug 13 - 16	YA95186 - YA95189	May 25, 1991
Bug 17 - 20	YA97369 - YA97372	May 25, 1991
Bug 21 - 24	YA98074 - YA98077	July 2, 1991
Bug 25 - 50	YB12869 - YB12894	Feb 18, 1990
Phil 1 - 12	YA96636 - YA96647	Jan 14, 1990

History

Tog Claims

Work on the Tog claims has been limited to brief property examinations, road construction and cat trenching.

G. Yeo of Noranda Exploration visited the claim area in 1982. Yeo noted visible gold in a sample of pyrite-fuchsite/mariposite granitoid rock (Property Examination Report, September, 1982). The major structural control on the gold mineralization was interpreted to be the distribution of ultramafic bodies along the Teslin suture.

In 1986, S. Balantyne of the Geological Survey of Canada examined the property and collected several gold-quartz samples from exposures in pits and trenches. He determined the fineness of the gold to be 939.7 (93.5% Au and 6.0% Ag), suggesting the showing is vertically high in the vein system. Samples collected returned gold values to 0.262 oz/t Au. Comparisons were made with mineralization in the Atlin camp in northern British Columbia and with the Motherlode district in California (Letter to Mr. G. McLeod, August 7, 1986).

T. Bremner of the Department of Indian and Northern Affairs sampled several pits, which had been excavated in the vicinity of the main showing. A north-northwest and east-west trending, 10m wide vein system with a talc schist hangingwall contained disseminated galena, chalcopyrite, malachite, azurite and possible visible gold. Grab samples from this system returned up to 0.244 oz/t Au (Property Examination Report, July, 1987).

D. Shaw, Ph.D. (see enclosed technical report), was retained by the company and spent 3 days examining the main showing on the Tog property in October, 1988. An 8m thick, northwest striking, steep northeast dipping quartz-carbonate alteration and fracture zone exposed in trench 1 was mapped and sampled. This is underlain by a 4m zone of quartz veining that dips at a moderate angle (40^{o}) to the northeast. Underlying this a 0.5m zone of grey quartz veins, hosting pyrite, malachite, azurite and native gold, separates the altered lithologies from the footwall volcanics. Grab samples collected by G. McLeod, from this basal quartz zone, returned values from 0.039 oz/t Au to 31.651 oz/t Au.

Areal photography suggests this northwest fracture zone is just one of a number developed along a major north-northeast trend. This structural setting is similar to the Golden Bear project at Muddy Lake in northern British Columbia.

Bug claims

The Bug property was originally staked in 1898 as the Cooper Bell claim and then restaked in 1964 and 1966. Between 1964 and 1971, the claims were explored by hand trenching, a 1.5m adit and a 4.6m packsack drill hole. Two holes totaling 208.8m were drilled at the site of the old adit, in 1972.

The claims were restaked in 1982 by G. McLeod, who re-analyzed several of the core samples. Two of these returned 1430 ppb Au and 1800 ppb Au.

Noranda Exploration examined the claims in 1986 (Assessment Report #091860). A small soil survey revealed an isolated gold/arsenic geochemical anomaly (750 ppb Au/540 ppm As).

In 1987, G. Davidson supervised a limited trenching program. A D8K cat was used to upgrade 4 km of road and excavate 4 trenches. All trenches exposed quartz-carbonate alteration (listwanite) with or without quartz veining. Trench 1 (located in the vicinity of the 750 ppb Au soil anomaly) returned 1790 ppb Au over 0.5m and 500 ppb over 4.0m from brecciated and altered pyrite rich sediments. A felsic dyke ran 1010 ppb Au (Evaluation Report for Dunvegan Exploration Co. Ltd.).

G. Abbott and T. Bremner of the Department of Indian and Northern Affairs visited the property in 1987. They noted quartz-carbonate - fuchsite alteration (listwanite) zones up to 12m in width, within or along the margins of serpentinized peridotite. A 1-2m talc schist separates the listwanite from the serpentinite. These alteration zones form prominent ridges that can be traced for up to 2.4 km (Property Examination Report, July, 1987).

Newmont Exploration of Canada Ltd. re-sampled trench 1 and trench 2 in 1987. Several 1m chip samples of quartz veining, quartz stockwork, quartz fault breccia and altered shear zones returned values to 992 ppb Au by neutron activation. The Property was thought to have merit, but no option agreement was ever signed (Letter to G. McLeod, November 26, 1987).

Phil Claims

Limited soil and prospecting surveys were conducted on the Phil claims in 1982. Two areas of elevated gold values (510 ppb Au and 242 ppb Au) were outlined, but these were not continuous along parallel sample lines. One area was resampled in detail, but the previous anomalous values could not be duplicated (Assessment Report - G. Davidson, April, 1988).

Mineralization

Gold mineralization in the area of the three claim groups is hosted by a series of quartz veins developed at contacts between ultramafics, andesites-greenstones or dykes. The dominant fracture or shear control on the vein systems appears to be either north-northwest (Bug claims) or north-northeast (Tog claims).

Alteration associated with mineralization is characterized by pervasive silicification plus iron and magnesium carbonate flooding, with the development of quartz (locally chalcedony)-carbonate veins and stockwork. Fuchsite/mariposite is also present. Listwanites and talc schists have been noted locally. Pyrite is present in varying amounts, but does not make up a significant percentage of the altered rock.

Galena, chalcopyrite, malachite, azurite, tetrahedrite and native gold occur within and marginal to quartz veins associated with these alteration zones. Pathfinder elements include Au, Pb, As, Bi and to a lesser extent Ag, Sb and Te. Mercury may define a somewhat broader halo.

Significant gold values from grab samples have been returned from quartz veining associated with these systems.

Summary and Recommendations

Significant gold values have been returned from grab trench samples collected on the Tog property and highly elevated gold values are associated with silica - carbonate alteration zones on the Bug claims. Grab samples collected from a 0.5m quartz vein system, basal to a 12m quartz vein and alteration zone exposed in trench 1 on the Tog property, returned gold values ranging from 0.039 oz/t Au to 31.651 oz/t Au.

Mineralization appears to be developed along north-northwest and north-northeast fracture zones, marginal to altered serpentinized ultramafics. The geological and structural setting can be compared to the Golden Bear deposit at Muddy Lake in northern British Columbia, the Atlin camp in northern British Columbia and the Motherlode district in California. In particular, the Motherlode district was noted for its spectacular 'pocket' bonanza concentrations of gold within the vugs in quartz veins.

Geological exploration and trenching conducted to date, combined with a brief areal photographic study, suggest the presence of gold within the main structural trend is probably not limited to the Tog showing. There is potential along the length of the main northwesterly and northeasterly trending structures, which extend for several kilometers beyond the claims.

Further evaluation of these structures is highly recommended, especially in light of the fact that most of the favourable ground remains to be tested.

Modest first phase exploration programs have been proposed for both the Tog ($47,500.00) and Bug claims ($17,500.00). These programs include geological mapping, geophysical and geochemical surveys and the systematic sampling of the existing showings. Details of these programs are included in the accompanying technical report by D. Shaw.

Gregory G. Crowe, M.Sc., P.Geol.
Director, Dunvegan Exploration Ltd.

Property Examination

Squanga Lake Property

Yukon Territory

for

Dunvegan Exploration

March, 1989

by

David A. Shaw, Ph.D.

Introduction

At the request of Mr. Gordon McLeod of Dunvegan Exploration Ltd, the author visited the Tog property near Jades Corner in the Yukon Territory during October, 1988. The purpose of the visit was to review the showing and outline an exploration and/or development programme. Three days were spent examining the showing; the work was hampered by snow, which necessitated repeated sweeping of the outcrop.

Mr. Mcleod had staked the prospect himself and had commenced to explore the property by building a 'cat' road onto the property and removing a large part of the overburden and weathered rock from the showing. At the time of the author's visit, a northerly sloping face approximately 12 metres long and 4 metres high was exposed.

Geology

The showing consists of a zone of fracturing, alteration and quartz veining that strikes northwest-southeast and dips at a steep angle towards the northeast.

The structurally highest part of the zone is composed of a grey-brown quartz and iron-carbonate altered rock. Within the 'massively' bedded rock there is a planar fabric, defined by quartz-carbonate stringers that strikes northwest-southeast and dips towards the northeast at 70 degrees. A thickness in excess of eight metres is visible, the degree of alteration diminishes with distance into the hangingwall.

Underlying the above is a zone of quartz veining approximately four metres thick There is a main quartz "vein" that is oriented with a northwest-southeast strike and dips towards the northeast at an angle of forty degrees. The quartz is segmented by fractures that have a similar orientation to that of the main "vein". Within the quartz mass are slivers of baked, fine grained black volcanics. These slivers are bounded by the fractures that segment the quartz vein. It appears that there has been considerable shearing along the fractures and that the quartz has intruded a sheared contact between the black volcanics and the structurally higher quartz-carbonate zone. Both the quartz and the shear fractures are crossed by a younger set of closely spaced fractures/joints that strike northeast-southwest and dip steeply towards the southeast.

Underlying the quartz vein are the black volcanics, the degree of baking decreasing with increasing distance from the contact. Along the contact between the quartz mass and the volcanics there is a thin (thickness less than 0.5m) zone composed of dirty grey quartz veins. The grey colour is probably a result of sulphide content; pyrite, malachite and azurite were observed in association with gold. Grab samples collected from this location by G. McLeod have returned assay results from 0.039 oz/t Au to 31.651 oz/t Au.

Interpretation

The alteration and mineralization appear to be controlled by a northwest-southeast striking fracture. When viewed on an aerial photograph it can be seen that this fracture is just one of a number that are located along a north-northeast trend. In addition to a northwest-southeast fracture strike there are also fracture orientations that are east-west and northeast-southwest. These fractures are interpreted to be part of a set that is located within a tensile fracture zone that trends north-northwest - south-southeast. Such a structural situation is similar to that at Muddy Lake (the Golden Bear project) located in northern British Columbia.

Along strike to the south of the Squanga Lake showing, at the north end of Dalayee Lake, the stream that drains the lake flows in a northeasterly direction before turning to the east. At the bend of the stream, where stream flow velocity will decrease and part of the stream load will be deposited, the gravels are reported to have been processed for placer gold (G. McLeod, pers. comm.). The stream and the lake are both aligned parallel to, and within, the main structural trend i.e. north-northeast-south-southwest. The sediment load in the lake and its outflow are presumably derived from rocks contained within or adjacent to the main structure, within which the Squanga Lake showing occurs. The presence of a "ribbon" style lake at this location is due to the structural boundary hereafter referred to as the Dalayee Lake Fracture (D.L.F.). This fracture separates Pennsylvanian and Permian Cache Creek limestone on the west from Cache Creek argillaceous and arenaceous sediments on the east and can be traced for a distance in excess of 50 kilometers along strike.

Comment

It would appear then that the presence of gold within the main structural trend is not limited to the 'showing' discovered by G. McLeod and that there is potential along the length of the structure. The length of the main north-northeasterly trending structure is measured in kilometers. At this point in time Dunvegan Exploration Limited has a very interesting showing from which high grade gold values have been assayed. The next phase of exploration should be aimed at defining the number and extent of other gold bearing sub-structures within the main structure. Once other 'showings ' have been identified they can be prioritized and a second phase programme of more detailed examination (trenching and possibly drilling) may be rationally proposed.

The Bug Claims

Dunvegan owns 50 claims adjacent to Marsh Lake. A brief review of the available data indicates that a limited programme is required in order to extend the known anomalies and to test for other ones.

David A. Shaw, Ph.D.

Proposed Budget for Phase One Programme on the Tog Claims

Mobilization				$ 1,500.00
Supervision		10 @ 400/day		4,000.00
Mapping	Geologist	20 @ 350/day		7,000.00
	Assistant	15 @ 175/day		2,625.00
Prospecting		6 @ 200/day		1,200.00
Geophysics (Mag and VLF)				2,500.00
Sampling	Sampler	15 @ 150/day		2,250.00
	Rock	150 @ 20/sample		3,000.00
	Soil	300 @ 15/sample		4,500.00
Room and Board		55 @ 60/manday		3,300.00
Airfares		5 @ 750/person		3,750.00
Equipment				1,500.00
Vehicle		20 @ 35/day		700.00
Fuel				500.00
Report				3,000.00
Contingency 15%				6,175.00
			Total	**$ 47,500.00**

David A. Shaw, Ph.D.

Proposed Budget for Phase One Programme on the Bug Claims

Mobilization				$ 500.00
Supervision		3 @ 400/day		1,200.00
Mapping	Geologist	7 @ 350/day		2,450.00
	Assistant	7 @ 175/day		1,225.00
Prospecting		3 @ 200/day		600.00
Geophysics (Mag and VLF)				600.00
Sampling	Sampler	6 @ 150/day		900.00
	Rock	75 @ 20/sample		1,500.00
	Soil	150 @ 15/sample		2,250.00
Room and Board		20 @ 60/manday		1,200.00
Equipment				750.00
Vehicle		9 @ 35/day		315.00
Fuel				250.00
Report				1,500.00
Contingency 15%				2,260.00
			Total	**$ 17,500.00**

David A. Shaw, Ph.D.