### 2000-2001 BRITISH COLUMBIA PROSPECTORS ASSISTANCE PROGRAM

By Garry Payie<sup>1</sup>

#### **HIGHLIGHTS**

Prospectors in this year's program were successful at finding a number of new mineral occurrences in BC. Six prospectors have entered into agreements with exploration companies that will see the following properties explored further.

- Alley a platinum-palladium-gold-copper prospect near Okanagan Falls. Optioned to Santoy Resources by Adam Travis in early 2001.
- Bell a copper-zinc-lead-silver-gold property found in the Prince Rupert area by Shawn Turford. Optioned by Doublestar Resources in May 2001.
- Broken Hill a new lead-zinc deposit discovered by Leo Lindinger near Avola. Optioned to Cassidy Gold Corp. in late 2000.
- Fox a promising skarn prospect near 100 Mile House discovered by Dave Ridley. Optioned to Starcore Resources Ltd. in 2001
- Peg a beryl crystal occurrence staked by Peter Klewchuk near Kimberly was optioned to Chapleau Resources Ltd. for its potential as a beryllium-rubidium-Rare-Earth-Element-tantalum-niobium prospect.
- Silver Lynx Bruce Doyle discovered a new silver-lead-zinc deposit southwest of Nelson. Optioned to Cassidy Gold Corp. in 2001.

Prospectors funded by the 2000-2001 program made several other significant new discoveries that also have excellent potential for being optioned. There is also ongoing exploration on Prospectors Assistance discoveries made in previous years. For example, a total of \$850,000 was spent on the Lottie Lake property since its discovery in 1997.

#### INTRODUCTION

Energy and Mines Minister Dan Miller announced the renewal of the 2000-2001 Prospectors Assistance Program (PAP) on April 5, 2000. The \$500,000 program was designed to promote grassroots prospecting for new mineral deposits in British Columbia. The program continued in 2001-2002 with a report planned for next year's Exploration in BC. The Prospectors Assistance Program was cancelled in January 2002 as part of a government-wide initia-

tive to eliminate subsidies that favour particular individuals or companies.

The Program was available to individual prospectors who hold a valid British Columbia Free Miners Certificate. Successful applicants were allotted a maximum of \$10,000 to cover 75% of their eligible expenses. The grant was paid in 2 installments, an initial 50% award on approval of the project proposal and a final 50% award upon approval of the final report.

#### PROSPECTING PROGRAMS

Deadline for applications was set for the third Monday in April - this year, April 20, 2000. A total of 135 applications were received by the deadline. This is a similar total to last years, which was up significantly from the 102 received in 1998. This may reflect the downturn in the mineral industry sector, the general lack of work and the difficulty that prospectors have in selling their properties.

The Victoria office initially reviewed all applications to ensure that they met the criteria as outlined in the guidebook. Qualifying applications were then sent to the appropriate Regional Geologist by May 15 where they were to be rated according to the following distribution:

- 45% Quality and documentation of proposal
- 25% Financial commitment of applicant
- 10 % Experience and training of applicant
- 20% References and past performance

Evaluation guidelines were adhered to during this process.

Grant amounts were determined by allowing the 20 highest rated applicants 100 per cent of their maximum allowable grant (to a maximum of \$10,000) and the following 34 applicants, 75 per cent of the maximum allowable grant (up to \$7,500). A total of 54 grants averaging \$8,104 were approved in fiscal year 2000/2001

The most significant change to the program this year was the reduction of the minimum number of prospecting days required from 30 days to 21. This change was made to enable high cost programs to occur that might otherwise have been discouraged by a long-term requirement. An example of this would be helicopter-only accessible prospecting in remote areas.

The prospecting programs were distributed throughout the province as shown in Figure 1. Of the 135 applicants, 63

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(47%) had never received a grant before. Of the 54 applicants receiving grants, 19 (35%) had never received grants before.

Final prospecting reports were due in the Victoria office no later than January 31, 2001. These reports were logged in and sent to the specified regional geologist for evaluation. The quality of the program was assessed by the regional geologist in terms of the commitment and ability of the grantee to carry out his or her program as originally proposed. Program elements looked for in the report included the plotting of sample locations and other data on suitable maps, a good diary of day to day prospecting activity, a summary of overall results and a list of actual expenditures along with major receipts

The final report evaluation form was returned to Victoria where a final payment cheque was issued to those grantees who had successfully completed their program.

Thirty-Five of the 52 active grantees staked mineral claims while working under the terms of their grant. A total of 898 units were staked (Table 1). When measured against the number of grantees in the program, this is up more than 20 per cent from the last two years (*see* Figure 2). This may

indicate a recovery to staking levels by program participants to those of the 1980s.

#### RESULTS TO DATE

The following notable developments and prospecting discoveries are an indication of the program's value in the search for untapped mineral wealth, the first step towards developing tomorrow's mines for British Columbia.

#### NEW DISCOVERIES AND DEVELOPMENTS

Steve Bell located a significant copper-lead-zinc soil anomaly that warrants further work. Bell staked the Stardust and Palamino claims near Houston.

**Dave Bennett** located several unstaked gold anomalies west of Avola during the 1999 field season and followed up in 2000 by staking the **Readymix** claims to cover a new intrusion-related(?) gold prospect. Till sampling outlined a 3.5 by 2 kilometre gold anomaly, which occurs northeast of several mineralized, angular float samples. This float yielded gold values of 8.54 to 29.35 grams per tonne.

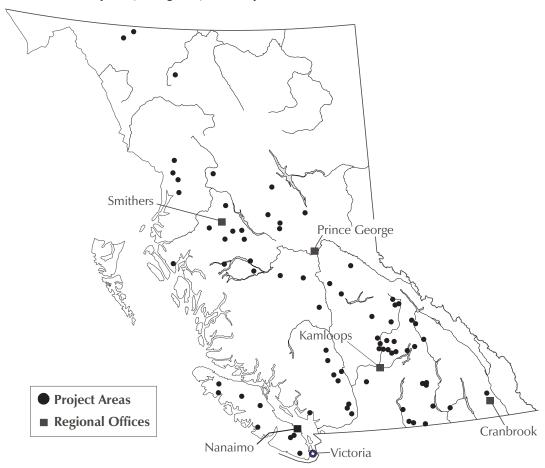


Figure 1. Distribution of year 2000 projects. Some programs have multiple prospecting locations and have been assigned more than one plot symbol.

## TABLE 1 SUMMARY OF PROSPECTING ACTIVITIES

Item	1988-89	1989-90	1990-91	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-2001
Total Prospecting days in the field	4709	3414	2672	2816	2440	3102	1846	2459	2704	2247
Average prospecting days in the field, active grantees	37	46	35	45.4	41.3	51.7	45	50	55	43
No. of Active Grants	128	74	76	62	59	60	41	49	49	52
No. of claim units staked during/after prospecting activity	1860	1483	1843	816	604	759	403	672	687	898
No. of Units Staked/Active Grantees	14.5	20	24	13	10.2	12.6	9.8	13.7	14	17.3
No. of Option agreements	23	8	6	15	16	14	2	8	6	6

Arne Birkeland conducted an exploration program on the Tofino Nickel (Deer Bay) gabbroid Cu-Ni-Co-Au-Ag-PGE property near Tofino. A grab sample from a small massive sulphide zone, taken at the previously known Main showing, containing pyrrhotite, chalcopyrite, pyrite, magnetite, violarite, and millerite yielded greater than 10% Cu, 0.30% Ni, 612 ppm Co, 487 ppm Cr, 20 g/t Ag, 1 g/t Au, 2 g/t Pt and 12 g/t Pd. A magnetometer survey conducted by Birkeland established significantly larger exploration targets than previously known. Birkeland also discovered a new gold showing southwest of the Main showing that yielded 3.48 g/t gold from a pyritic, chloritic diorite outcrop.

**David Bridge** discovered gold-bearing fault breccia with tetrahedrite and chalcopyrite near Prince George.

**Linda Caron** discovered a silicified zone in altered intrusive rocks that yielded 61 g/t silver and high base metals values. The new **Holy** showing is located in the Arrow Lakes region.

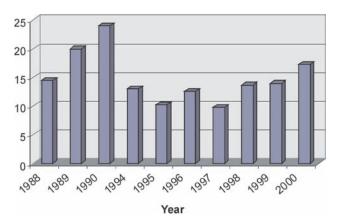


Figure 2. Claim units staked by grantee.

Warner Gruenwald discovered several new pegmatite-related Au-W-Cu-Bi skarn occurrences northeast of Shuswap Lake in 1999 and staked the GQ claims. His 2000 program was successful in locating numerous additional float and narrow bedrock showings. One float sample yielded 3.5 g/t gold.

Dave Haughton discovered a new magmatic nickel-copper showing in 1999 near Harrison Lake while prospecting with a PAP grant. The Jason claims were subsequently staked over the area, which was underlain by previously unidentified outcrops of ultramafic rock and hornblendite. Polished sections showed net texture sulphide consisting of pyrrhotite, pyrite, chalcopyrite and exsolved pentlandite. Maximum values obtained from float and outcrop include 0.22% nickel, 0.20% copper and 0.14% chromium. In 2000, Haughton used geophysics to further define targets with massive sulphide potential. Anomalous values in platinum and palladium were obtained from rock samples in 2000. An option was pending in early 2002.

John Hope staked the Malachite claims in the Dease Lake area to cover an east-west structure in granodiorite that assayed 1.9 per cent copper over 0.3 metres. The Sphinx claims were staked on Pyramid Mountain to cover pyritic mafic volcanics near diorite that yielded 0.066 per cent copper and 1.8 g/t gold. The Northwest claims were staked when Hope located rock assaying 271 ppb (Pt plus Pd) in brecciated Stuhini mafic volcanics. This rock was located as a result of a follow-up to a Pt-Pd silt anomaly obtained in his1999 PAP program.

**John Kemp** found several new showings and 8 new mag/VLF anomalies on his new **Snowshoe** claims near Greenwood. One mineralized quartz vein yielded 2.64 g/t gold, 693.8 g/t silver, 25.8% lead and 13.4% zinc over narrow widths. A rusty shattered zone, about 1.5 metres in width yielded grades of up to 5.85 g/t gold, 96.6 g/t silver, 4.78% lead, 1.57% zinc and 2.92% arsenic.

Cleve Lowry discovered a few small vein occurrences with Cu-Pb-Zn sulphides in the Adams Lake area and staked the Plateau and Anomaly claims.

**Brian Malahoff** identified a copper-in-soil geochemical anomaly on his **Malachite** claims in the Merritt area. The anomaly appears to be related to a north-trending fault.

Murray McClaren discovered a new potential gabbroid-associated sulphide deposit near Harrison Lake. McClaren staked the Sable claims to cover the ground. A sample of sulphidic quartz amphibolite schist yielded 0.19% copper, 0.31% nickel, 293 ppm cobalt, 319 ppm chromium, and 80 ppb palladium.

Anton Nijhuis discovered and evaluated a number of occurrences of marble, dimension limestone and flaggy sandstone on Vancouver Island. Nijhuis staked the **Oys** and **Boo** claims to cover his prospects.

Gary Polischuk was able to define five new target areas where gold is indicated on his Dave claims near Lillooet. One channel sample yielded 3.28 g/t gold over 1.5 metres. A very prominent swarm of 10-100 cm wide, sheeted quartz veins occur in altered diorite at the Payday zone. Visible gold was discovered in the Cavalier zone during the 2000 work, and is associated with arsenopyrite and galena in narrow quartz veins. Most of the other occurrences also have arsenopyrite, pyrite and traces of chalcopyrite in quartz and altered diorite.

**Frank Renaudat** discovered pyritic massive sulphides in volcanic rock near Greenwood and staked the **Storm** claims. On sample assay 0.135% copper, 0.15% lead and 0.64% zinc.

**Mikkel Schau** discovered a new gold occurrence on northern Vancouver Island and staked the **Flan** claim. Samples from a narrow quartz vein in a gabbro sill yielded up to 61 g/t gold.

Lorne Warren discovered a high-grade porphyry/magmatic copper showing on his Bor claims, just east of Tchentlo Lake in northern BC. Chloritically altered and brecciated diorite hosts coarse-grained chalcopyrite, pyrite and magnetite in fractures and as centimetre-scale patches.

**Paul Watt** located an area of attractive pyroxenite southwest of Little Fort and staked the **Mirrorball** claims to cover this potential dimension/decorative stone. A "US sale" was reported and a bulk sample permit was to applied for. Watt also discovered gold-bearing quartz-chalcopyrite float on his **Spide**r claims.

#### PROPERTIES OPTIONED

#### Allev

The Alley claims were staked by **Adam Travis** in early 2001 to cover an alkalic porphyry property in the Allendale Lake area east of Okanagan Falls and subsequently optioned to **Santoy Resources Ltd**. Unusual syenite-related PGM mineralization was the focus of a small exploration program by Santoy in 2001. The alkalic Allendale Lake stock is approximately 2.5 kilometres in diameter and includes megacrystic syenite porphyry and

shonkinite phases. A grab sample of a malachite stained mafic rock (the **Spoon** showing) assayed 0.31% copper, 0.93 g/t palladium, 0.19 g/t platinum and 0.70 g/t gold.

#### Bell

A high-grade volcanogenic massive sulphide discovery by Shawn Turford was made near Kitkiata Lake toward the southern end of the Ecstall VMS belt, south of Prince Rupert. The property was briefly optioned to **Doublestar Resources Ltd.** in May of 2001. The company was attracted by the high precious metals component, particularly silver, occurring within the copper-lead-zinc mineralization. One sample yielded a best assay of 0.710% copper, 7.16% lead, 19.24% zinc, 368.9 g/t silver and 2.40 g/t gold.

#### Broken Hill

Three sulphide occurrences discovered near Avola by Leo Lindinger are presumed to be from the same exhalative horizon. They occur over a distance of five kilometres. The Vista showing sample assayed 24.3 per cent zinc, 4.89 per cent lead and 62.74 grams per tonne silver. The Navan showing, located approximately 1.5 kilometres southeast of the Vista showing, yielded a sample that assayed 23.6 per cent zinc, 4.05 per cent lead and 16.22 grams per tonne silver. The Mike showing, located approximately five kilometres to the south-southeast of the Vista occurrence, consists of a number of angular float boulders with mineralization visually similar to the Vista and Navan. Collectively known as the Broken Hill property, these occurrences were optioned in late 2000 to Cassidy Gold Corp. Following a small program of gravity, soil and geological surveys, Cassidy drilled the main showings in January 2001. Despite the presence of numerous outcrops of thin (20-40 centimetre wide) flat-lying, massive sulphide, Cassidy's best drill hole hit only 2.52% zinc over 3.9 metres, with an estimated true width of 2.2 metres. Cassidy returned the claims to Lindinger in late 2001.

#### **Fox**

In 1999, with PAP funding, Dave Ridley discovered the **Fox** molybdenum-tungsten property just east of 100 Mile House. He was able to further advance this promising skarn property in 2000 with a second grant and subsequently optioned the property to Starcore Resources Ltd. in July 2001. The prospect is located about 25 kilometres east of the former producing Boss Mountain molybdenum mine. Mineralization has been traced over a strike length of more than two kilometres: it is hosted by Paleozoic metasedimentary rocks near the contact with the Cretaceous Deception stock. Starcore reported that scheelite (up to 0.69% tungsten) and molybdenite (up to 4.9% molybdenum in grab samples) appear to occur in separate areas. Garnet, diopside, vesuvianite, quartz and calcite have been identified in the skarn. Soil and rock geochemistry has also identified local anomalous Au and Zn values on the property. Starcore has agreed to spend \$240,000 on the property over three years.

#### Peg

This beryl crystal occurrence near Kimberly was staked by Peter Klewchuk and optioned to Chapleau Resources Ltd. for its potential as a beryllium-rubidium-Rare-Earth-Element-tantalum-niobium prospect. The Peg is a large granitic pegmatite body containing abundant (3 to 5 per cent by volume) beryl crystals in surface outcrops. Four diamond drill holes (totaling 98.7 metres) drilled on the Peg revealed the continuity of this gently dipping pegmatite body along strike for over 60 metres and down dip for over 421 metres. The thickness was found to vary from 5 to 21 metres, increasing to the southwest and down dip. Highlights of the drilling include up to 6 metres grading 1133 grams per tonne BeO, including 1 metre grading 2908 grams per tonne BeO, and up to 4 metres grading 66 grams per tonne Ta2O5. The pegmatite body remains open along strike and down dip. Subsequent to the drill program, the property was returned to the vendors, Supergroup Holdings Inc., who are now seeking a new joint venture partner for the property.

#### Silver Lynx

This is a new volcanogenic massive sulphide occurrence discovered by Bruce Doyle in 2000 just southwest of Nelson. Mineralization consists of sphalerite, galena, chalcopyrite and pyrrhotite (silver-lead-zinc-copper) located near the contact between felsic volcanic rocks and black argillaceous sediments, possibly as part of an exhalative horizon. Doyle completed a soil geochemical program in 2000 with results delineating highly anomalous polymetalic values over 800 metres long, open on both ends, and up to 300 meters wide with an average width of 125 metres. An individual selected grab sample from road cut materials assayed 24.59% zinc, 22.35% lead, 0.21% copper and 556.4 grams per tonne silver. The Silver Lynx was optioned to Cassidy Gold Corp. in November 2000 who plan to spend \$350,000 over four years. Four diamond-drill holes totaling 643 metres as well as geophysical and geochemical surveys were completed by December 2001. The trend of the mineralized rocks was tested over a strike length of 265 metres. Two distinct horizons with disseminated to semi-massive sphalerite, galena, chalcopyrite, and arsenopyrite were encountered in 3 of the holes, as well as widely distributed sphalerite stringers; the fourth hole encountered a thick mafic intrusive. Assays graded up to 6.87% zinc, 1.13% lead, and 42.5 g/t silver over 0.6 metre. The company is planning a follow-up program in 2002.

## ACTIVE PROPERTIES DEVELOPED THROUGH PREVIOUS PAP GRANTS

The following are the known properties picked up or worked by companies during 2000-2001 because of work done by PAP grantees under previous programs dating from 1988 to 1999. The actual amount of exploration activity flowing from PAP sponsored discoveries is likely to be far greater than that captured below. Table 3 provides a listing of these active properties and a partial listing of other presently non-active PAP-related properties that were optioned to companies for further work.

#### Bizar/Goldstrike

Located near Blue River, the Bizar prospect is a gold-bismuth-copper prospect discovered by Leo **Lindinger** during the execution of his 1998 PAP program. Quartz-sulphide veins cut micaceous quartzite and mica schist. A chip sample across a 20-centimetre wide vein yielded 56 g/t gold, 0.5% bismuth and 0.34% copper, along with anomalous silver, cobalt, molybdenum, nickel, selenium, tellurium and tungsten. Cassidy Gold Corp. optioned the Bizar claims in 1998 and renamed the property **Goldstrike**. Cassidy drilled five short holes in late 1999, intersecting several narrow veins with anomalous gold values. The best was 6 g/t over 20 centimetres. The company reported \$46,762 in expenditures in 1999. A total of \$500,000 was to be spent by the end of the fourth year. The property was returned to Lindinger who did some work on it in 2001.

#### Carbonado

The Carbonado claim was staked by **Dave Javorsky** to cover the **Jack** alkaline diatreme near Golden. Javorsky was able option the property in early 2000 to **Icefield Diamond Mines**. In 1983, treatment of seven bulk samples from an upper breccia portion of the diatreme produced

TABLE 2
OPTION AGREEMENTS RESULTING FROM YEAR 2000 PROGRAMS

Р#	Grantee	Optionee	Amount	Property	
46	Bruce Doyle	Cassidy Gold Corp.	\$350,000 over 3 years	Silver Lynx	
59	Peter Klewchuk	Chapleau Resources Ltd.	\$200,000 over 2 years	Peg	
62	Leo Lindinger	Cassidy Gold Corp	\$300,000 over 3 years	Broken Hill	
65	Dave Ridley	Starcore Resources Ltd.	\$240,000 over 3 years	Fox	
103	Adam Travis	Santoy Resources Ltd	undisclosed	Alley	
21	Sean Turford	Doublestar Resources	undisclosed	Bell	
		TOTAL	>\$1,000,000		

pyrope garnets, ilmenites and chromites. More significantly, one 29.5-kilogram bulk sample of sandy marl from the diatreme breccia was reported to have produced an excellent quality octahedral microdiamond weighing 0.00037320 carats. Further sampling and analysis and diamond drilling in 1985 and 1986 failed to confirm the presence of macro or microdiamonds. Icefield spent approximately \$100,000 on the property in 2000. More work was planned for 2001.

#### Mark

Dave Javorsky staked the Mark 2000 and Mark 2001 claims to cover the Mark alkaline diatreme near Golden and was later able to option the property to Kootenay Diamond Mines in early 2000. In 1983, a 30-kilogram portion of a 160-kilogram bulk sample of the diatreme produced one ilmenite and thirteen chromites and one 0.00015820-carat microdiamond fragment. Further examination, sampling, processing and analysis in 1986, 1988 and 1990 has identified ilmenite, chromite and garnet but failed to reveal or substantiate the presence of macro or microdiamonds. However, scanning electron microscope (SEM) studies identified corundum - several blue sapphires were present in the fused concentrates of three samples of diatreme material. Kootenay spent \$46,000 on the property in 2000. Some sampling work was done in 2001.

#### Demers (Crazy Fox)

Robert Bourdon located an interesting 10-kilometre long, linear Zn-Cu-Cd-As-Sb-Ba-Hg anomaly in till and soil. This discovery was a follow-up of high geochemical values from a Geological Survey Branch till survey northwest of Little Fort. Bourdon and partner Lloyd Addie staked the Demers claims to cover the prospect. They spent about \$14,000 on the property before optioning it in the summer of 2000 to Inmet Mining Corporation. Inmet spent \$17,600 dollars on a geophysical program in early 2001 but dropped the option later in the year. Cassidy Gold Corp picked up the property and drilled one hole. More work is planned.

#### Dominion Creek

Allan Raven's 1998 prospecting grant provided funding that was instrumental in acquiring the additional data necessary to promote the property and finally option it in 2000 to Gold City Industries Ltd. The Dominion Creek property, northeast of Wells, hosts a series of auriferous quartz-sulphide vein, stringer and replacement zones. Mineralization is lithologically and structurally controlled and occurs within argillaceous limestone of the upper Isaac Formation. A bulk sample comprised of material from the 2B and 3B veins totaled 1180 tonnes and averaged 14.1 g/t Au. In 2000, Gold City carried out a regional prospecting, mapping and stream sediment sampling program followed by a 17 hole, 1100-metre drill program on the South Zone discovery. Expenditures by Gold City in 2000 totaled \$220,000. No work was done in 2001.

#### Hardy Island

Prospecting for dimension stone in 1998 led Helgi **Sigurgeirson** to the waters near Jervis Inlet where he restaked the Hardy Island quarry on Hardy Island (last worked in the 1920s). This quarry was originally one of the Jervis Inlet Granite quarries, a group of quarries which supplied most of the granite for numerous historic buildings in the province erected during the early part of the century. Landmarks of note using stone from the Hardy Island quarry include the breakwater at Ogden Point (Victoria) and the Lions at the old courthouse in Vancouver. Sigurgeirson applied for and received a quarry permit in 1999. Approximately 1600 tonnes of blocks were shipped from the guarry in 1999, and a further 2500 tonnes is expected to be shipped in 2000, much of which will be exported to the United States. Most of the blocks are processed into split facing, but some is used for custom sizes such as coping. Hardy Island Granite Quarries Ltd. has also recently supplied the stone for work on the Lions Gate Bridge. Though there are subtle differences between the stones from the quarries on Nelson, Kelly, Fox and Hardy islands, all are light grey, medium grained, biotite hornblende granodiorite. The stone at Hardy Island has excellent splitting qualities and well developed jointing.

#### Jasper

The Jasper property comprises 3 showings and there are three styles of sulphide mineralization present: massive, fracture-filling and, disseminated. The property is located between Caycuse Creek and Jasper Creek, 7 kilometres northeast of the north end of Nitinat Lake on Vancouver Island. Hudson Bay Mining and Smelting staked and conducted geological mapping, soil and rock geochemistry and an induced polarization (IP) geophysical survey in 1970 and 1971. Further work on the property was completed by various concerns in the early and mid 1980s. **Arne Birkeland** relocated the property in 1994 with the aid of a Prospectors Assistance grant. Geological mapping and sampling consisting of 39 rocks, 40 silts and 133 soils was carried out in 1994 with further geological and geochemical surveys following in 1995. Birkeland optioned the property to Consolidated Taywin Resources Inc. (later renamed **Inspiration Mining Corporation**) in 1995 and from December 1995 to June 1996, a work program was carried out consisting of 84 soil samples, a 1.2 kilometre IP survey, a 3 kilometre VLF and Horizontal Loop survey and a 2.1 kilometre ground magnetics survey. In 1998, Inspiration's exploration program consisted of rock chip sampling of showings and mineralized float. The 2000 exploration program extended the 1998 grid 650 metres northward and geochemical sampling continued. An estimate of expenditures since 1994, based on Assessment Reports, is approximately \$126,000. Preliminary work was done on the property in 2001 in advance of a planned \$500,000 exploration program.

#### Lottie Lake

Located just north of the town of Wells, the Lottie Lake property consists of two originally separate properties

within the Antler Formation that were both discovered and/or worked by PAP grantee Martin Peter. The Bow property was created in 1997 when Martin Peter staked two areas of copper±zinc±gold±silver float. Samples of massive fine-grained pyrite with faint bands of chalcopyrite, yielded up to 7% copper, 1% zinc, 4 g/t gold and 7 g/t silver. Eureka Resources Inc. optioned Peter's Bow and Tow claims in December 1997 and identified two prominent airborne EM conductors in 1998. Estimates of expenditures in 1998 were \$140,000. In 1998, funded by another PAP grant Peter staked the nearby Lottie claims to cover another new discovery of massive sulphide float. Boulders of mineralized chert and altered volcanic rock were found to occur over a distance of about 75 metres. A sample from one boulder assayed 24.3% copper, 0.4 gram per tonne gold, 19.6 grams per tonne silver, 0.06% cobalt, 0.12% molvbdenum. 0.02% lead and 0.04% zinc. The Lottie was optioned to Eureka Resources Inc. early in 1999 who then spent about \$70,000. Both the Bow and Lottie properties were subsequently optioned to Hudson Bay Mining and Smelting in May 2000 and this group of 850 contiguous claims became known as the Lottie Lake property. In the five-month 2000 field season, Hudson Bay spent approximately \$650,000 and conducted property wide stream and moss matt geochemical and sampling programs; as well as extensive till fabric studies and till geochemical sampling. The eastern one-third of the property was flown with Hudson Bay's proprietary Spectrem airborne geophysical system. A total of 81.5 kilometres of line was cut in grids covering nine targets selected from new and past geochemical and geophysical anomalies. Max-min ground electromagnetic surveys were conducted on all grids and the anomalies were confirmed. This was followed by 709.4 metres of drilling in six holes. Four holes were drilled to test the Lottie target in the area of high-grade float previously discovered in 1998 by Eureka, one hole tested an older Dighem anomaly, and one hole tested a Spectrem anomaly. The Lottie holes intersected volcanic rocks with intercalated chert and graphitic siltstone, and Hudson Bay concluded that the graphitic units satisfactorily explain the geophysical responses. No source was found for the high-grade copper boulders seen in past trenches. Eureka announced in January 2001 that Hudson Bay was dropping its option. Eureka subsequently announced its plans to spend \$100,000 in 2001 in order to investigate a considerable number of geophysical and geochemical anomalies located in 2000 and in previous programs. Unspecified work was done by Eureka in 2001.

#### McNeil Creek

The McNeil Creek property is located 18 kilometres southwest of Cranbrook. Frank O'Grady explored the area in 1995 and 1996 after being funded by a PAP grant in each of those years. Underlain by Moyie intrusive rock and Middle Aldridge sediments, O'Grady's Phantom, Mar and Cubby claims represent a Sullivan-type massive sulphide target. In 1996, O'Grady optioned his claims to Sedex Mining Corp. In 1998, Sedex drilled a hole to a point just below the Lower-Middle Aldridge contact, encountering minor sulphides. Sedex subsequently optioned the property in 1999 to Webb Bay Resources Ltd, later re-named Na-

**tional Gold Corp.** which has committed to spend \$1,000,000 over four years. National Gold Corp. drilled a 2000-foot hole on their McNeil Creek Group of claims (some of which are not part of the O'Grady option). While no work was done in 2001, National Gold continues to hold the property.

#### **McPhee**

**Bruce Doyle** discovered several gold-bearing quartz veins east of Castlegar in 1999 and staked the McPhee claims. The property hosts gold-bearing veins in weakly altered, fractured granitic rocks. A chip sample from one vein assayed 202 grams per tonne gold and 127 grams per tonne silver over 0.3 metres. Visible gold can be seen in several locations along this steeply dipping vein. Other gold-bearing veins have been located more than 50 metres from the discovery site. Cassidy Gold Corp. optioned the property in December 1999 and agreed to make staged cash payments totaling \$100,000, issue 200,000 common shares, and spend at least \$500,000 in exploration and development work on the property over a period of four years. Borehole numbers 4 and 5 of a 600-meter, 5-hole drill program conducted during August/October 2000 tested the down dip extension of these veins. Drill hole number 4 found that the entire vein set was faulted off. Although more work had been planned by Cassidy in 2001, the property was returned to Doyle with no additional work done.

#### Red Mountain

Prospector Charles Kowall discovered significant gold-silver mineralization on Willoughby Creek east of Stewart while prospecting under a PAP grant received in 1988. Kowall was able to option the property to Bond International Gold Inc. who spent several hundred thousand dollars on the property. The Company subsequently made further significant discoveries on nearby Red Mountain. North American Metals, which is 89%-owned by Wheaton River Minerals, acquired the property in 1999 from Royal Oak Mines. Wheaton River spent some time reexamining the core in 2001. The property was then optioned to Seabridge Resources in the spring of 2002. Close to \$10,000,000 has been spent on the Red Mountain property since Kowall's initial find at Willoughby Creek.

#### **GRANTS FOR TRAINING COURSES**

Grants were issued to the following groups at the beginning of the fiscal year to assist them in the delivery of prospector training courses:

BC & Yukon Chamber of Mines · · · · · · \$	5,000
BC Museum of Mining · · · · · · · · \$	5,000
Smithers Exploration Group · · · · · · \$	5,000
Omineca Mining Group · · · · · · · \$	5,000
Chamber of Mines of Eastern BC · · · · · \$	5,000
Kamloops Exploration Group · · · · · · \$	5,000
Boundary Mining Association · · · · · · \$	5,000
East Kootenay Chamber of Mines · · · · · \$	5,000

# TABLE 3 PAP ASSOCIATED PROPERTIES SINCE 1996

Property	Prospector	Grant Year	Ownership and Work	Expenditures to Date	Planned Expenditures
Alley	Adam Travis	2000	Santoy Resources Ltd. did some work in 2001.	unknown	undisclosed
Allin	John Kemp	1996	Worked 1996-1998 by Hudson Bay Mining.	\$370,000	nil
Ample-Goldmax	Dave Javorsky Gary Polischuk	1995	Inactive since Gold Ore Res. work of 1999.	\$850,000	nil
Babs	Ralph Keefe	1995	1996 work by Pacific Sentinel Gold Ltd.	\$360,000	nil
Bizar/Goldstrike	Leo Lindinger	1998	Cassidy Gold Corp. Worked in 1999 and 2000. Returned to vendor.	\$47,000	nil
Broken Hill	Leo Lindinger	2000	Cassidy Gold Corp.	\$220,000	nil
Carbonado	Dave Javorsky	1999	Operated by Icefield Diamond Mines in 2000.	\$100,000	undisclosed
Cam-Gloria	Camille Berube	1997	Inactive since Teck Corp. work of 1999.	\$100,000	nil
Demers	Bob Bourdon	1999	Operated by Inmet Mining Corp. in 2000. Option picked up by Cassidy Gold Corp in 2001.	\$72,000	undisclosed
Dominion Creek	Allan Raven	1998	Worked in 2000 by Gold City Industries.	\$220,000	undisclosed
Findlay Creek	Tim Termuende	1995	Worked from 1996 to 1999.	\$2,000,000	nil
Fox	Dave Ridley	1999 2000	Optioned in 2001 to Starcore Resources Ltd.		\$240,000
Hen/Ledge	Dave Ridley	1997	Mandaly Resources Corp. Optioned 1998, worked 1999 and 2000. Dropped in 2001.	\$130,000	nil
Jasper	Arne Birkeland	1994 1995	Work by Inspiration Mining Corp. 1996, 1998 and 2000.	\$126,000	\$500,000
Joe	John Kemp	1996	Inactive since Pender Gold Corp option of 1996.	\$83,000	nil
Ladybug	Leo Lindinger	1996	Worked in 1998 and 1999 by Cross Lake Minerals Ltd.	\$102,000	unknown
Lottie Lake	Martin Peter	1997 1998	Operated by Hudson Bay Mining and Smeltin in 1998, 1999 and 2000. Option reverted to Eureka Resources in 2001.	\$930,000	unknown
Mark	Dave Javorsky	1999	Operated by Kootenay Diamond Mines in 2000.	\$46,000	undisclosed
McNeil Creek	Frank O'Grady	1995 1996	1998 work by Sedex Mining Corp. Optioned by National Gold Corp. in 1999.	\$85,000	\$1,000,000
McPhee	Bruce Doyle	1999	Cassidy Gold Corp in 2000. Option dropped in 2001.	\$55,000	nil
Peg	Peter Klewchuk	2000	Chapleau Resources Ltd. Option later dropped.	\$40,000	nil
Quill	Allan St. James	1998	Worked in 1999 by Petra Res.	\$120,000	nil
Red Mountain	Charles Kowall	1988	Wheaton River Minerals.	>\$200,000*	undisclosed
Silver Lynx	Bruce Doyle	2000	Cassidy Gold Corp.	\$100,000	\$250,000
Zymo	Robin Day	1996 1997 1998	Worked in 1999 by Freeport Copper Company.	\$200,000	nil
TOTAL					\$1,990,000

<sup>\* 10</sup> million dollars spent on follow-up program on Red Mountain

#### **CONCLUSIONS**

The year 2000 program produced immediate benefits for the province including options and claim staking. Program funded prospectors were able to option 6 recently discovered mineral occurrences to mining companies for further exploration that has the potential to generate at least \$1,000,000 worth of exploration activity over the next few years. The grants played a critical role in allowing these prospectors to find and then develop their discoveries to a level that excited corporate interest.

A number of other new mineral occurrences were discovered by grantees in 2000 that will see further exploration over the coming years, and in all likelihood lead to more company investment. As well, work done by grantees in previous program years continues to generate corporate exploration investment in the province. Some of these PAP-related properties that were discovered after 1995 have since generated a minimum of 6.35 million dollars worth of activity with a further \$2 million planned (Table 3).

The overall performance of the active grantees in 2000 was excellent. The average number of prospecting days per grantee was 43. While this is the lowest total number of prospecting days to occur in five years, the lower value was to be expected with this year's lowering of the required minimum number of prospecting days to 21 days from the previous 30 days. In 2002, a total of 898 claim units were staked by the 52 active grantees. What is surprising is that there was an actual 24% increase in the number of claim

units staked per grantee over last year even with the fewer total prospecting days (Table 1). This continues a trend of increased claim staking that started in the mid 90s (Figure 2) and may be an indication of a more buoyant exploration community.

The final report evaluations were high with 35 (67%) of the active grantees scoring 8 out of 10 or higher and only 4 (7.7%) scoring 5 or lower. The average score was 8.2.

The decline in the number of option deals made by BC's prospectors in the late 1990s (Table 1) is an indication of the difficult times that BC's prospectors have had to endure. Many good prospectors have been sustained through these difficult times with the help of the grant program and a number of new mineral prospects have been discovered with the aid of PAP grubstakes. Some of these, as previously documented, have been optioned to exploration companies, whose subsequent work and financial investment has helped sustain BC's important mining industry.

It was announced on January 16, 2002 that the Prospector Assistance program would not be funded in the future. The program was cancelled after a government wide review of all subsidy programs.

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