

104M.081

020006

GRANITE

INTRUSIVE



4000

4500

SKARN - SCHIST

CRINE VEIN

0.017, 17.0
0.002, 102.0

0.23, 0.95

0.077, 0.47
along 1300'

0.78 oz Au

CRINE 3

0.47, 2.75
along 2300'

0.21, 1.4
along 800'

SCOTIA VEIN

1.04, 2.22

6000


CRINE 1

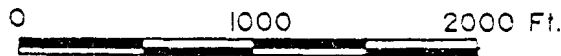
0.42, 19.0
along 400'

0.77, 9.22

5500

0.32, 7.0
along 250'

 CYPBUS GOLD (Canada) Ltd.	
TEEPEE PROJECT	
CRINE/ SCOTIA VEIN LOCATIONS	
<small>DRAWN BY</small>	<small>SCALE</small>
<small>DATE JULY 989</small>	<small>FIG. No. 5.</small>



⊗ ROCK SAMPLE (grab)
Au, Ag (oz/ton)

Ass Rpt 19438

4.4 Rock Geochemistry

Grab samples and chip samples of interesting and visually mineralized zones were taken throughout the property with a larger concentration of sampling performed over known exposures and sub outcrop of the Crine veins and Scotia Zone. A total of 336 rocks were analyzed for Au, Ag, As, Cu, Pb, Zn, Sb (and other elements), most of which are float grab samples and the remainder outcrop grabs and chips. Results of this survey indicate there is a strong correlation between Au, Ag, As, Pb, Zn, (Cd) and lessor with Cu and Sb.

4.4.1 Crine Vein (Au, Ag, As, Pb)

This arsenopyrite rich vein was found in late 1988 by B.C.D.M and Cyprus field crews. Investigation of this new vein found it to pinch and swell from a few centimetres up to 4 metres in width, although at numerous times it disappeared all together. This photograph shows the Crine Vein location in the right centre of the picture trending north across the cirque and up the other side of the hill.



Crine Vein, looking towards northwest.

The vein includes massive zones of arsenopyrite (+scorodite), pyrite and disseminated galena with small and limited amounts of dark brown sphalerite. The known strike length is 650 metres and possibly as much as 900 metres. It strikes consistently at 150 degrees.

Fourteen chip samples of 1-3 metres wide, over a strike length of 650 metres average: 0.13 oz/ton Au
0.87 oz/ton Ag
5.45% As

(samples CR-0+50S thru CR-7+00S)

Although very strike persistent the vein is highly podiform and seems to occupy a young fracture zone along the cirque face. The vein becomes larger (1-3m) where ever cross cutting and sometimes paralleling andesitic dykes occur. These dykes are thought to have occurred contemporaneously with the mineralization and suggest they have acted as a damming feature for the ore. Although this vein dips to the west into the cirque face making it risky and expensive to drill, it can serve as an example of typical vein material found else where on the property.

4.4.2 Crine #1 and #3 Veins (Au,Ag,As,Pb,Zn)

The two newly found arsenopyrite veins strike to the northwest at 150 degrees and from a continuous string of float samples these veins are thought to be strike persistent over 700 metres if not more. There are no outcrop exposures of these veins although where the veins are cut by andesitic dykes (float exposures) the amounts and size of float boulders increase. This is particularly evident on the Crine #1 Vein at L-4+50S,2+75E and possibly the Crine #3 Vein at L-3+75S,1+00E. A damming effect of the ore may have occurred and the final settling of the ore, besides being along a northwesterly bearing of 150 degrees, it may have also accumulated along the boundaries of these northeasterly striking andesitic dykes. This does show up on the geology map as continuous float samples along the dyke boundaries. Surface sampling of the arsenopyrite rich float material gave the following results:

<u>Crine #1 Vein</u>	0.42 oz/ton Au
(along 125 metres)	19.0 oz/ton Ag
	5.9% As

<u>Crine #3 Vein</u>	0.47 oz/ton Au
(along 700 metres)	2.75 oz/ton Ag
	11.8% As

The ores are consistently rich in arsenopyrite and its weathering product scorodite. Small pods of massive to disseminated dark brown sphalerite and silvery galena are found (assays up to 15% combined Pb,Zn), although these are not common components of the surface sampling. Pyrite is also found as highly weathered blebs and disseminations through most samples. A characteristic Crine #1 Vein and to a lessor extent Crine #3 Vein

L2N

0.012, 14.7
0.017, 16.9
0.011, 16.9

CRINE 3

L1N

⊗ 0.199, 0.29

⊗ 0.875, 2.06

⊗ 0.002, 101.8

⊗ 0.19, 0.12

L0

⊗ 0.228, 0.95

⊗ 0.058, 0.06

⊗ 0.141, 0.34

⊗ 0.373, 0.72

L1S

⊗ 0.113, 0.09

⊗ 0.028, 0.37

⊗ 0.397, 0.82

⊗ 0.163, 0.18

0.47, 2.75
along 2300'

⊗ 0.875, 3.65

⊗ 0.75, 11.3

⊗ 0.82, 0.87

⊗ 0.368, 2.31

0.082, 37.7

CRINE 1

0.127, 3.62

0.163, 14.06

0.35, 15.7

0.239, 26.8

0.047, 13.01

L4S

⊗ 0.63, 3.15

⊗ 0.919, 2.58

⊗ 0.181, 21.7

⊗ 1.08, 0.52

⊗ 0.683, 1.36

⊗ 0.199, 0.13

⊗ 0.251, 0.18

⊗ 0.513, 0.58

⊗ 0.385, 5.05

0.08, 0.47

0.62, 19.4

0.33, 1.23

0.171, 45.8

0.255, 6.01

0.149, 8.6

0.106, 1.35

2.10, 11.2

0.56, 1.45

0.72, 12.3

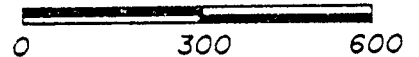
0.236, 11.4

0.088, 8.05

⊗ ROCK SAMPLE (grab)
Au, Ag (oz/Ton)

0.42, 19.0
along 400'

feet



L6S

L7S

CYPBUS GOLD (Canada) Ltd.	
TEEPEE PROJECT ROCK SAMPLING RESULTS CRINE 1, 2, 3 VEINS	
DRAWN D.S.	SCALE
DATE JULY 1989	FIG. No. 5

are small turquoise coloured, mm scaled chalcedonic veinlets in the ore float. These occur as random and cross cutting quartz stockworks and suggest a late stage of silica emplacement. It is not known whether these veinlets are anomalous in gold and silver. They are particularly evident where float samples are more numerous and the small andesitic dykes have possibly dammed the mineralization.

Of interest is the grab sample JC-R-104 taken along the footwall or hangingwall of the Crine #1 Vein. This graphitic rich quartz phyllite is well mineralized (0.22 oz/ton Au, 16.6 oz/ton Ag) and suggest mineralized wall rock along these vein systems.



Crine Veins #1 and #3 (looking southeast at float samples)

4.4.3 Scotia Vein (Au, Ag, As, Pb, Zn)

Another arsenopyrite rich vein system was found during the 1989 field season. The Scotia Vein, located approximately 550 metres west of the Crine #3 Vein is identical in mineralogy to that of the previously discovered precious metal veins. It trends at 160 degrees and size of the float samples indicate it pinches and swells over 700 metres of strike length. The float samples found on the surface are generally very small though, except at L-2+75S, 5+75W. Here the float samples are large and numerous and

include assays up to 19% combined lead zinc and over 1 ounce per ton gold. This was the site of diamond drill hole TP-89-10. From surface sampling of the float the average assay of all sampling is as follows:

<u>Scotia Vein</u>	0.52 oz/ton Au
(over 700 metres)	3.41 oz/ton Ag
	7.3% As

4.4.4 Quartz Zone (Au,Ag,As)

Float samples found here form a linear zone trending generally at 290 degrees from L-8+00S,6+00W. The float samples are highly weathered vuggy quartz material with locally high graphite content. Only minor pyrite has been seen although some samples are heavily coated with limonite. Arsenopyrite is present but limited to only a few float exposures of the ore. Sample JC-R-079 (4.43 oz/ton Au) is perhaps slightly different. It is a rusty quartz boulder, heavily pitted with weathered and remnant boxwork and suggests originally a high percent of sulphide content. A lot of white vuggy quartz float found on the surface may well be weathered and washed varieties of underlying sulphide rich vein material. This area deserves closer field examination for additional float indications along strike to the west.

4.4.5 BX Zone (Ag,Cu,Pb,Zn)

This vein is the best exposed outcrop of any of the precious metal vein systems found on the property. Located in the middle of a steep and narrow draw on the south side of the cirque north of the grid, the BX Zone is thought to be a continuation of the strike persistent Crine #1 Vein from the south.



(Looking south at BX Zone)

The vein outcrops over a distance of 100 metres and varies in width from 50 cm to 1.8 metres. Vuggy yellow quartz and silicified aplite dyke are the primary hosts for the disseminated tetrahedrite, chalcopyrite, galena, sphalerite, arsenopyrite and pyrite mineralization. The zone exhibits intense quartz stockwork and brecciation within the aplite dyke. The yellow quartz (found as the hangingwall) is usually pitted with boxwork sulphide weathering and vuggy open cavity quartz growth.

The zone is primarily a silver vein with virtually no gold at all. Assays from chip samples vary from 1.0 oz/ton to 11.0 oz/ton Ag over widths of 1.0 metre to 1.8 metres. Approximately 100 metres to the south of this area up on the ridge top at L-2+00N,3+00E are numerous float samples with higher silver assays. They are as follows:

JC-R-031	16.9 oz/ton Ag
JC-R-032	14.7 oz/ton Ag
JC-R-033	16.9 oz/ton Ag
JC-R-084	10.1 oz/ton Ag and 0.14 oz/ton Au

This area needs to be drilled to test its full potential.

4.4.6 Other Zones (float samples)

Several other areas with precious metal mineralization exist within the property boundary and will require additional field follow up.

There are several inferred buried arsenopyrite rich veins forming linear zones of float along the ridge top to the east of L-1+00N,6+00E. These represent similar ore types (Au,Ag,As,Pb,Zn) to that of the Crine Veins. Little else is known as to their occurrence or strike lengths. Much of the area is covered by large talus boulders making it difficult to locate outcrop.

At L-10+75S,1+25E float samples anomalous in silver and arsenic may represent the southerly extension of the Crine #1 Vein. They are generally highly silicified quartz phyllite to yellowish vuggy quartz vein material without any visible sulphide.

To the east and northeast of Iceberg Lake located in the southeast corner of the property are several samples (AS-R-067,068,MC-R-006,007) that are anomalous in either gold, arsenic or lead. It is not known whether these samples are local or the result of glacial transport.

Approximately 750 metres to the west of the Quartz Zone is one float sample (JC-R-004) that assayed 0.14 oz/ton Au. The sample was taken from a rusty float pile of felsic material. Its source is unknown but is thought to be local.

Heavy graphite occurs along the flanks of the Crine #3 Vein and shows up as a very strong anomaly coincident with the vein float material. The size and strength of this anomalous horizon was later confirmed by drilling, to be graphite.

5.3 Magnetic Survey

The entire grid was covered by proton magnetometer and results were later corrected for diurnal variation. Results isolated distinct mag high linears corresponding to highly magnetic feldspar porphyry dykes. These structures prove helpful to isolate ore material as these dykes usually occupy or are in close association with the known vein zones. Further prospecting along any of these north northwest striking linear mag high zones may indeed locate additional Crine type ore material, be it float or outcrop.

5.4 VLF-EM-16 Survey

A small survey by a Geonics EM-16 was conducted over the Phantom Zone to help isolate any sign of a possible drill target. Several spot anomalies were located, but these did not correspond to any continuous linear trend or to the strong geochemical anomaly. The survey was proved inconclusive.

6.0 DRILLING

6.1 Logistics and Current Program

Thirteen NQ diamond drill holes tested five different mineralized zones during the 1989 drill program. From August 12/89 to September 19/89 1371.69 metres were drilled by Caron Diamond Drilling of Whitehorse, the core of which is stored securely at the base camp on the property. Two holes (205.8m) were drilled on the Crine #3 Vein, seven holes (771.38m) on the Crine #1 Vein, one hole (99.0m) on the Phantom Zone, one hole (102.11m) on the Scotia Vein and two holes (203.4m) on the Quartz Zone.

6.2 Crine #3 Vein (TP-89-1,TP-89-2)

These first two holes of the drill program were spotted on the Crine #3 Vein due to the strong and coincident CEM shootback anomaly over the known location of the gold bearing arsenopyrite rich float and the strong gold geochemical anomaly.

The conductors proved to be concentrated zones of graphitic phyllite which may have very well acted as a geochemical trap for the large gold soil anomaly found at L-4+00S,0+25E to 2+00E. The holes did

intersect narrow vein material (up to 50cms) and results are as follows:

	Au(opt)	Ag(opt)	As%	Pb%	Zn%
TP-89-1 (L4+00S,0+25E) (44.00m to 45.00m) 1.0 metre **(vein from 44.78 -45.00, 22 cms)	0.081	0.58	2.92	0.43	0.39
TP-89-2 (L-1+80S,0+20E) (50.00m to 51.00m) 1.0 metre **(vein from 50.50m to 51.00m, 50 cms)	0.023	0.59	0.92	0.78	1.46

Dips of the vein are steep to the west between 69 and 73 degrees.

6.3 Crine #1 Vein (TP-89-3 to TP-89-8, TP-89-13)

The first drill holes on this vein were spotted over areas with large boulders of ore float. TP-89-3,4 drilled from L-3+62S,2+75E at -48 and -65 degrees to the east intersected the best width of vein material. The remainder of the holes were drilled from three more setups to the south along 188 metres of projected strike of the vein. This vein proved to be the most interesting for continued follow-up as widths of the vein are up to 4.11 metres wide. The zone remains open to the north and south. Limited drilling suggests this vein to be fairly shallow, tabular in form and possibly mineralogically zoned towards the south, becoming more silver rich (as seen in TP-89-8). To the north of TP-89-3,4 large amounts of surface float exists suggesting the vein continues. These samples are gold rich and indicate excellent potential of an underlying vein system. Assays are as follows for all the holes drilled through the Crine #1 Vein:

	Au(opt)	Ag(opt)	As%	Pb%	Zn%
Set-up #1 TP-89-3 (-48) (over 4.11 metres) Section 3+62S from 39.00 to 43.11m 1.08m hangingwall	0.108	9.53	3.45	0.67	2.30
** this is the widest intersection of vein material encountered in drill core. Very impressive brecciation and silicification. Intermittent zones of massive sulphide nature to vein.	0.230	18.67	4.16	2.41	6.90
Set-up #1 TP-89-4 (-65) (over 1.42 metres) Section 3+62S from 41.10m to 42.52m	0.132	2.98	1.60	1.03	1.60
** this vertically deeper hole under TP-89-3 shows the Crine #1 Vein to get smaller with depth at that section.					

		Au(opt)	Ag(opt)	As%	Pb%	Zn%
Set-up #2	TP-89-5 (-44) (over 0.81m) Section 4+80S from 38.45m to 39.26m	0.161	43.46	4.69	1.90	0.62
Set-up #2	TP-89-6 (-65) (over 3.1m) Section 4+80S from 40.20 to 43.30m 1.0m hanging wall	0.114	3.82	1.37	0.71	0.31
	** this hole has low grade Au,Ag,As,Pb,Zn mineralization indicated over a total of 9.0 metres from 39.20 to 48.20m Results are:	0.222	8.31	2.06	1.52	0.54
		0.076	2.85	0.93	0.61	0.37
Set-up #2	TP-89-7 (-90) (over 2.98m) Section 4+80S from 64.09 to 67.07m ** this vertical hole has the best overall assays and width encountered in the drill program	0.385	2.22	11.28	0.40	1.03
Set-up #3	TP-89-8 (-65) (over 1.00m) Section 5+50S from 46.90m to 47.90m ** this hole is the most southerly hole drilled to date. It has become very silver rich suggesting a mineral zonation within the vein towards the south.	0.053	35.29	3.40	1.00	0.28
Set-up #4	TP-89-13 (-70) (over 2.10m) Section 4+80S from 116.20m to 118.30m ** drilled under TP-89-7 to check depth and continuation of higher grade material found in that drill hole. Vein mineralization still present but precious metal content very low. Crine #1 Vein may be more tabular to rectangular in shape and may not extend to depth.	0.014	0.26	0.98	0.31	0.32

This vein is the typical arsenopyrite rich quartz hosted vein material found on the property. It is highly brecciated and silicified in most cases, and commonly includes fragments of silicified schistose wall rock, small quartz stockwork, and bull quartz. Massive and disseminated arsenopyrite galena, sphalerite, and lesser pyrite are common constituents of the vein. Contacts of the vein are usually very sharp and it dips from 43 to 50 degrees to the west. A closely associated feldspar porphyry dyke and its varieties occurs commonly as footwall marker horizons. This rock type is found in all holes drilled on the Crine #1 Vein and can accurately locate position of the vein both on surface and in drill holes. Drilling to date has indicated there exists higher grade silver assays nearer the surface intermixed and overlying gold enriched pods within the vein. This vein is highly podiform in nature and will require an accurate and patient drill program to isolate mineable shoots in the vein system.

6.4 Phantom Zone (TP-89-9)

One drill hole tested this strong and consistent geochemical anomaly, spotted at the point with the highest gold soil results. The core was very disappointing, both visually and assay wise, and no concrete explanation for this geochemical zone can yet be made. A small fault zone intersected 23 metres down hole is anomalous in Ag,As,Pb,Zn, although it is not sure whether this is responsible for the surface contamination or not.

6.5 Scotia Vein (TP-89-10)

This hole was spotted behind an area where large amounts of arsenopyrite float occurs on the Scotia Vein. Surface samples in the immediate area assayed up to 1.1 oz/ton Au, 42.5 oz/ton Ag and 15% combined Pb Zn. Drilling indicated the vein to be narrow and dip at 69 degrees to the west. Results are as follows:

	Au(opt)	Ag(opt)	As%	Pb%	Zn%
TP-89-10 (-45) (over 0.95m) from 20.45m to 21.40m	0.233	0.41	8.70	0.13	0.84

** speculation arises as to whether this drill hole has missed a thicker pod of the Scotia Vein or indeed tested its true nature. To continue a drill program here would be very risky unless one could develop better targets over a known thicker part of the vein system.

6.6 Quartz Zone (TP-89-11,12)

Two holes were drilled here under a gold bearing graphitic rich quartz boulder train with a corresponding subtle and weak CEM anomaly. The anomaly and float train both trend at 290 degrees and indicate a possible strike length of 250 metres for this zone. Strangely enough when the two holes were drilled, one under another, it was hoped a true indication of the dip would be obtained. The two holes drilled at -45 and -60 degrees intersected the graphitic quartz zone at virtually the same depth, suggesting a flat lying zone. This does not correlate to the identical graphitic rich quartz float found on the surface, where its location on surface and its intersection in drill core would suggest the system dips steeply to the west. No explanation is seen for this except for the possibility of a fault displacing the vein. Results from the drilling are as follows:

	Au(opt)	Ag(opt)	As%	Pb%	Zn%
TP-89-11 (-45) (over 3.0m) from 44.25 to 47.25m	0.139	0.44	0.69	0.09	0.09

** differs from other veins with its very low base metal assays

	Au(opt)	Ag(opt)	As%	Pb%	Zn%
TP-89-12 (-60) (over 3.05m) from 43.15 to 46.20m	0.206	0.37	0.49	0.26	0.29

There remains several drill targets within the Quartz Zone, located along projected strike to the west of these drill holes.

7.0 CONCLUSIONS

Prospecting, rock sampling and to a lesser extent soil geochemistry isolated five new mineralized zones (Crine #1 and 3, Phantom, Scotia, and Quartz Zones) on the TEEPEE mountain project during the 1989 field season. Drill targets were best defined by linear expression of gold bearing float samples suggesting underlying vein systems. These mineralized zones can also be identified by subtle but strike persistent CEM anomalies suggesting the possibility of semi-massive ores within the veins. Magnetite rich feldspar porphyry dykes are commonly found striking parallel to these ore zones and consequently the surface magnetic survey is very useful in the location of these veins when outcrop is not visible. Four out of five anomalous zones have similar rock geochemical expressions. Gold, silver, arsenic, lead and zinc are rarely found alone, although in some locations silver rich ores have no ore grade gold credit. This may represent a mineral zonation along strike within the veins and is expressed by the rock samples taken on the Crine #1 Vein from the BX Zone to L-11+00S in the south. A slightly different case is the Quartz Zone where float samples of ore are gold, silver and arsenic rich. No appreciable amounts of lead or zinc are seen. Both this zone and the Phantom Zone indicate a strike direction of 270 - 290 degrees and differ from the commonly found strike direction of 150 to 160 degrees found at the Crine and Scotia Veins. Drilling proved some of these veins (Scotia and Crine #3 Veins) to be narrow (<1.0m),. The veins have a tendency to pinch and swell along strike and possibly down dip, but it is here the best chance lies to isolate a potential orebody. The Crine #1 Vein is up to 4.1m wide and includes excellent gold silver mineralization over hangingwall and footwall portions of the vein. Drill holes in the future must be accurately spotted on this vein to adequately test for the plunge of these wider zones of the vein, be it down dip or along strike.