REPORT ON 1991 EXPLORATION DJ 3 CLAIM, RECORD NO. 2208 GOLDEN MINING DIVISION<br>NTS MAPSHEET 82K/8W<br>$50^{\circ} 25.6$ MINUTES NORTH, $116^{\circ} 28.7$ MINUTES WEST

SuBnemetr
water
$!$
007291991
MR. ${ }^{\text {on }}$ $\qquad$ B $\qquad$

AUTHOR: R. JORDAN, P.ENG.
OPERATOR: R. JORDAN
OWNERS: R.JORDAN $50 \%$, W.R. READER $50 \%$

> GEOLOGICAL BRANCH ASSESSMENT REPORT

OCTOBER 1991
21,789

## LIST OF TABLES AND FIGURES

| FIGURE 1 | LOCATION MAP | Frontispiece |
| :---: | :---: | :---: |
|  | 1:250,000 |  |
| FIGURE 2 | CLAIM LOCATIONS AND TOPOGRAPHY $1: 12,500$ | In pocket |
| FIGURE 3 | SAMPLE LOCATIONS AND TRAVERSES $1: 12,500$ | " |
| FIGURE 4 | geoldgical map $1: 12,500$ | " |
| TABLE I | SAMPLE DESCRIPTIONS AND ASSAYS | Page 12\%13 |
| TABLE II | SURVEY CALCULATIONS AND NOTES | Page 14-16 |

## TABLE OF CONTENTS

## Page No.

| 1.0 | SUMMARY | 4 |
| :---: | :---: | :---: |
| 2.0 | INTRODUCTION |  |
|  | 2.1 Location, Access, and Physiography | 5 |
|  | 2.2 Previous History and Exploration | 5 |
|  | 2.3 Claim Description | 6 |
|  | 2.4 1991 Exploration | 6 |
| 3.0 | GENERAL GEDLOGY | 6 |
| 4.0 | FIELD PRDGRAM | 7 |
| 5.0 | CONCLUSIONS AND RECOMMENDATIONS | 8 |
| 6.0 | REFERENCES | 9 |
| 7.0 | STATEMENT OF EXPENDITURES | 10 |
| 8.0 | AUTHOR' 5 QUALIFICATIONS | 11 |

### 1.0 SUMMARY

The BJ 3 claim was staked on July 31 st 1990 to cover possible open ground to the north and east of the old Tattler, or Phoenix, crown grant claims and the Tat 1 claim which had been staked, following the March 1990 crown grant sale,in April 1990.

Intermittent exploration on the Tattler claims has been carried out since the early 1900 s until the mid 1960 s , mostly concentrated on spotty low grade copper mineralization in barite and quartz filled fractures and bedding planes in Mount Nelson dolomitic limestones occurring in the east half of the Tattler group; and on a narrow steeply dipping quartz vein with good galena, tetrahedrite and freibergite mineralization, on the Great Northern-World's Fair crown grants in the northwest corner of the Tatler group. After a fairly intensive exploration program in the mid sixties, the operator (Jumbo Mines Ltd.) did nothing further and the claims were allowed to lapse until, at the March 1990 sale of Crown Grant two post claims, the Tattler claims generated relatively high bids by Cominco and by Mr. Ken Hicks of Vancouver.

1991 work on the BJ 3 claim consisted of brush clearing and a Brunton and hip chain survey of the old mining road from the BJ 3 LCP up to the old workings on the Phoenix, Great Northern/World's Fair crown grants; collection of a number of stream sediment and rock chip samples; two reconnaissance traverses into the upper east Farnham Creek basin and across the ridge south and east of the Butler, Imperial, North Light, Copper King and White Bear crown grants. A number of panoramic photographs along with selected rock samples were taken to help in a preliminary assessment of the very complex local geology.

As might be expected, all of the obvious mineralized showings are covered by the Tatler crown grants, however there is potential for an extension of copper mineralization in the Mt.Nelson formation into the east and north-east parts of the BJ 3 claim , and on the west side of the claim for silver, lead and copper bearing epigenetic vein deposits in the complexly folded and faulted Mt. Nelson/Toby and Horsethief Creek rocks. A large portion of these latter areas on the BJ 3 claim is covered by a thick mantle of talus, scree and glacial detritus. Geochemical soil sampling is not expected to be an effective exploration tool over much of the area. Geophysical methods are likely to be hampered by very steep and rough terrain and the large amounts of snow cover which persists until late summer.

Results of stream sediment sampling, and favorable geology, indicate that detailed mapping and exploration is warranted in the upper east Farnham Creek basin.


### 2.0 INTRODUCTION

### 2.1 Location, Access and Phsiography

The BJ 3 claim is located in mapsheet $82 \mathrm{~K} / 8 \mathrm{~W}$, in the upper Farnham Creek basin between elevations of 1800 and 2900 metres, and is a half hour helicopter trip 35 kilometers west-south-west of the Invermere airport. Summer access is via 40 kilometers of good logging access road west from Wilmer on the Columbia River up Horsethief Creek to the junction with Farnham Creek.From here ten kilometers of disused logging and mine access road lead south up Farnham Creek to the property. The mine access road is in fair to poor condition but could be made passable for small 4WD vehicles with a modest amount of bridge and cat work.

Terrain is generally steep, rough and often precipitous. Travel in the heavily spruce-forested and bushy avalanche-strewn valley bottoms can be difficult.Foot access near and above tree 1 ine (at about 1900 meters) is relatively easy but even in mid summer and autumn terrain can be heavily snow covered. Crevasses are common in the glacier areas and in some of the permanent snow packs, and mountaineering equipment should be available. The alpine areas offer excellent recreational potential for hikers, climbers and skiers. One of the hazards to prospectors is the presence of unexploded avalanche bombs in the upper basins which are heavily used by helicopter skiers during the winter and spring months.

### 2.2 Previous History and Exploration

Sporadic work was reported on these claims during the period 1902 through to 1924. On the Great Northern-World's Fair claims at the northwest corner of the Phoenix (Tatler) crown grants, work was concentrated on a northwesterly-striking narrow quartz vein with reported galena and tetrahedrite mineralization. Early work on the Phoenix propoerty consisted of a 30 -foot shaft and 40 feet of drift, as well as a 225- foot long tunnel (B.C.Minister of Mines 1902 p. 137) as well as several trenches along strike. (We found a cross cut and shaft some 80 metres southwest of the shaft and a showing in a trench 60 metres to the northwest and a number of shallow cuts and trenches up to 175 metres north of the shaft-all of the latter were caved in to some extent and no sign of the vein was noted). Walker (GSC Memoir 148) reported that at the time of his visit an adit was being driven from down on the west side of the steep ridge on which the shaft is located to inntersect the vein at depth). This may be the same adit reported in 1902.

On the eastern claims Copper King, Imperial, North Light, etc.) work was concentrated on trenching, and on driving several short adits into copper showings in
fractured Mt. Nelson carbonate rocks. A relatively long adit was driven on the northeast corner of the Master crown grant, in a eastnortheast direction, and a sample from 'a streak'in this adit was reported to have assayed 13.8 ozs . Ag and $3.6 \% \mathrm{Cu}$.
Work on these showings is described, in some detail, in Assessment report 1614.

In September 1967 geological mapping and geochemical sampling was done on the Great Northern/World's Fair (Phoenix) prospect, and an examination of the copper showings in the area of the Copper King claim was done. This report and maps are included in Assessment Report 1614. Subsequently, in July 1969, a VLF eloectromagnetic survey was carried out across the Iron Mask, Broken Hill and portions of the Copper King and Imperial crown grant claims and into the area covered by the southeast part of the BJ 3 claim. This work is recorded in Assessment Report 1977.

The B.C.Minister of Mines Annual Report for 1968 (p.266) reported a total of 1456 feet of diamond drilling on the Copper King and Great Northern (Tatler) claims and construction of ten miles of road.

Since 1969 there have been no reports of any additional work having been done.

### 2.3 Claim Description

The BJ 3 claim consists of 15 units $(5$ east, 3 south), staked by R. Jordan on July 31 st 1990 and recorded in Golden on August $3 r d$. W.R. Reader aquired a $50 \%$ interest in Dec. 1990. The claim record number is 2208. Two additional claims, BJ 4 and BJ G, staked at the same time, have been allowed to lapse. Status of the overlapping Tat 1 claim is not known at this time, but it will have some effect on the eventual outline of the BJ 3 claim.
2.4 1991 Exploration

Work was carried out during the period from July 21 st to July 27 th. A tent camp was set up along the west branch of Farnham Creek just below timberline mear the south boundary of the BJ 3 claim. Access was via Frontier Helicopters Ltd. from Invermere.

### 3.0 GENERAL GEDLOGY

The latest geological compilation is covered by GSC Memoir 369, published in 1973, and based for the most part on mapping done by J.E. Reesor between 1953 and 1957, and by Walker in 1922 and 1923. A large part of the mapsheet between Toby Creek on the south, Horsethief Creek on the north, east of a line from Lake of the Hanging Glaciers and Earl Grey pass, and west of the Forster syncline, has not been mapped since Walker's work, nearly seventy years ago.

The area covered by this report occupies a position near the axis of the north plunging Purcell Anticlinorium, six kilometers east of the small Lake of the Hanging Glaciers stock and 15 kilometers south of the larger Horsethief Creek batholith.

Rocks in the immediate area of the report consist of Proterozoic age Windermere and Purcell series which include a complex assemblage of grey and black slates and schists,argillites, feldspathic and dolomitic quartzites, conglomerates, and limestones and dolomitic limestones of the Dutch Creek, Mount Nelson, and Toby Formations and the Horsethief Creek group. In the Farnham Creek basin a thick sequence of rocks, identified as Dutch Creek formation outcrop on the upper and middle slopes of The Cleaver and Mt. McCoubrey above a relatively narrow belt of folded and faulted rocks of the Horsethief Creek, Toby and Mt. Nelson formations. This puzzling sequence has been interpreted as a complexly faulted north-south striking graben however an explanation involving some overthrusting of the Dutch Creek Formation is also possible. (see x-section A-A'Fig.4, and $x$-section $M-N$, GSC memoir 369).

Figure 4 is a geological map showing approximate geological outlines based on a compilation from GSC Memoirs 148 and 369, Assessment Report 1614 and from outcrop and sample information collected during this summer's work.

### 4.0 FIELD PROGRAM

Work was carried out from a tent camp located at timber line on the west branch of Farnham Creek near the south boundary of the BJ 3 claim, between July 21 st and 27th. Two and a half days were spent clearing brush and running a Brunton and hip-chain traverse along the 1960-s mining road from the BJ 3 LCP up to the old workings on the Great Northern-World's Fair crown grants, and collecting four stream sediment samples along the way. One day was spent running an exploratory traverse from the road crossing on Farnham Creek north-east across the base of the cliff outcrops and large slide talus blocks of sheared argillites, quartzites and black rusty weathering schists of the Horsethief Creek formation immediately to the northeast of the Great Northern claim.From this point the traverse continued up the east branch of Farnhan Creek where four stream sediment samples were collected, one from the 'barium' creek which flows out of a moraine in the upper north-east Farnham creek basin. Two rock chip grab samples were collected- RC1O from pyritized quartz stringers in a shear zone in rusty weathering schists at the first outcrop and RC9 from an outcrop of light grey dolomitic quartzite, probably from either the Horsethief Creek or Mt. Nelson formation, above the 'barium' creek moraine. The traverse continued across the base of steep, buff weathering Mt. Nelson limestone and/or dolomite cliffs, with occasional azurite staining, on the North Light claim. Another traverse
was run across the south boundary of the claim, on the Master, Butler, Imperial and Copper King crown grants, primarily to examine the old adit on the northeast corner of the Master claim and to examine copper mineralization on the ridge above these claims. The adit portal is caved in, and nothing of any interest was noted in the dump except for large quantities of black slates and schists. Much of the $r i d g e$ was covered by snow however there were outcrops of Mt. Nelson carbonate and quartzite rocks with quartz and barite in fractures and bedding plane lenses accompanied by very sparse azurite staining. Three very old claim posts were found, and although the markings have long since been weathered off, the plotted positions are coincident with the north-east and southeast corners of the White Bear crown grant which was surveyed in 1925. It seems likely that the most northerly of these three posts was one used in locating the EM survey of AR 1977.

### 5.0 CONCLUSIONS AND RECOMMENDATIONS

Assay results from the stream sediment
samples taken from the gullies above Farnham Creek in the north west corner of the BJ 3 claim were unremarkable. All of the samples taken from the east branch of the creek and including the older sample reported in OF 1990-11, assayed anomalously high in barium. Results from STS 6 show anomalously high barium and lead values. Assay results for RC 9 showed anomalous values for copper and lead. These anomalies indicate that detailed mapping and sampling should be concentrated in the upper east and north-east farnham Creek basin.

Results of mapping and sampling in the area north and east of the old Phoenix prospects are encouraging, and detailed geological mapping and rock and soil sampling should be carried out in the triangle between the east and south branches of Farnham $\mathrm{Cr} e \mathrm{e}_{\mathrm{k}}$.

Lack of adequate survey control is an obvious problem, especially in the western half of the BJ 3 claim where it is unlikely that any of the old 1902 crown grant survey posts will be found. Fortunately the 1902 survey plats show stream crossings and these agree quite well with the claim boundaries on the NTS 82K/8 1:50,000 topog sheet.

## 6.0

REFERENCES

- B.C. Minister Of Mines Annual Reports- 1901 p.1014, *1902 p. 137, 1903 p.245, *1920 p.114, 1923 p.199, *1924 p.181, 1968 p.266, and 1969 p. 343.
- Reesor, J.W. GSC Memoir 369. Geology of the Lardeau Map Area, East Half, British Columbia.
- Walker J.F. and Bancroft M.F. GSC Memoir 161. Lardeau Map-area, British Columbia.
- Open File 1990-11. Stream Sediment Geochemistry of the Purcell Wilderness Conservancy Area.
- Assessment Reports 1614, 1977


### 7.0 STATEMENT OF EXPENDITURES

Transportation Nelson-Invermere and return 694 kilometers @ \$0.30 ..... \$ 20日
Helicopter Invermere to site and return ..... 911
Camp expenses and food 14 man days @\$27 ..... 378
Planning and Supervision ..... 350
Labor 96 hours @ $\$ 13.25$ ..... 1272
Maps, reports, xerox, aerial photos etc. ..... 145
Assay costs 15 @ $\$ 16,2$ @ 229 ..... 298
Report preparation, drafting ..... 875
Total ..... $\$ 4437$

I, Robert P. Jordan, hereby certify that $I$ am currently registered as a Professional Engineer (Geological) with the Association of Professional Engineers and Geoscientists of B.C.,Registration No. 04707.


TABLE 1 SAMPLE DESCRIPTIONS AND ASSAYS (page 1 of 2)

+ Revised 91/10/28 äp/


| 5586300 | 535560 | RS-0 | 1890土 | Massive,dk gry.wx,lt.buff to brwn qtzt.w.siderite/qtz.fine veins Horsethief Fm? |
| :---: | :---: | :---: | :---: | :---: |
| 5586040 | 536215 | RS-1 | 2069 | Med.grd,gry grn to buff argillite w.fr.diss.py. Some gry schisose w.distictive lt.brwn siderite mottling. Horsethief Creek? |
| 5585240 | 535935 | RS-2 | 2000 $\pm$ | F.gr'd.sericitic,conglomeritic schist,lt.gry to tan w.clear rounded qtz. grains up to 30 mms . Toby Conglomerate. |
| 5585810 | 536090 | RS-3 | 2000 | Thick bedded massive lt.gry to wh.gtzt,fine to med.grd. Mt.Nelson |
| 5585790 | 536150 | RS-4 | 1985 | Gry to white mottled f.gr'd.gtzt.sparse galena, chp, py min see RC BJ-1.Mt.Nelson |

773259 Open File 1990-11 Stream Sediment Geochemistery of the Purcell Wilderness Conservancy.
RC BJ-1 Grab sample from 3'in cliff band above sta.CP30.Rusty dol.qtzt.w.qtz \&sid.stringers.Tetr.,py min.sparse.
STSBJ-1 From south gully of 3,steep,intermittent,across 1m-fair fine detritus between gravel,boulders.
STSBJ-2 From middle gully-steep,intermittent flow sample as above.
STSBJ-3 From large north gully,flowing stream on south side of outwash debris fan-good fines.
RC-5 Grab sample from bulldozer cut west of.cp38二wh. qtz.in brecc.dk.gry ls. sid.veining-malachite/az.stain sparse tetr.min.strike $325^{\circ}$ dip vertical $\pm$.
RC-6 Selected sample of galena w.minor tetr.from Phoenix north shaft dump
RC-7 Selected sample of wh.rusty qtz.w.goodgalena/tetr.min-east end of old trench 60m @N30W from shaft.
RC-8 Chip sample across 12 "rusty wh.qtz.vein exposed at west end of pit 13 m north of shaft-good gal., tetr,py min.
RC-9 Small grab sample from ot'c.in McCoubry cirque above 'barium'crk.-Lt.gry qtzt w. scattered tetr, py min.
RC-10 Selected grab sample from cliff ot'c.rusty sheared slates and schists N43E fm.CP30.Good py min.in qtz.str.
RC-11 Selected grab sample across $30^{\prime}$ good py min in qtz.stringers in sheared blk.shale.
STS-1 Pan concentrate from fine gravel and sand in creek above camp
STS-2 From bar on west side E branch Farnham Creek below sta.CP 29
STS-3 From bar fines north side of E branch of Farnham Creek
STS-4 From south branch of above creek in basin
STS-5. From north branch of creek in basin-med. to coarse stream detritus
STS-6 From small centre branch (barium creek)in basin.med.to coarse detritus.

FARNHAM TRAVERSE - JULY 1991

| ETATION | ELEV. | $\begin{aligned} & \text { ELEV } \\ & \text { CORR } \end{aligned}$ | $\begin{aligned} & \hline \text { FROM } \\ & \text { STN. } \\ & \hline \end{aligned}$ | $\begin{array}{r} \text { TO } \\ \text { STN. } \\ \hline \end{array}$ | AZIM. | DIST. | $\begin{array}{\|c\|} \hline \text { NORTH- } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { EAST- } \\ \text { ING } \\ \hline \end{array}$ | $\begin{aligned} & \text { NORTH } \\ & \text { CO-ORD } \\ & \hline \end{aligned}$ | $\begin{array}{c\|} \text { EAST } \\ \text { CO-ORD } \\ \hline \end{array}$ | $\begin{aligned} & \text { CORR. } \\ & \text { ELEV. } \end{aligned}$ | NOTES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | m | m |  |  | deg. | m | m | m | m | m | m |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{CP}-0$ | 1812 | -3 |  |  |  |  |  |  | 0.0 | 0.0 | /1809 | BJ3 LCP |
| CD-1 | 1821 | -3 | CP-0 | CP-1 | 62 | 25.5 | 12.0 | 22.5 | 12.0 | 22.5 | -1818 | up creek to road |
| CP-2 | 1827 | -4 | CP-1 | CP-2 | 190 | 48.6 | -47.9 | -8.4 | -35.9 | 14.1 | $\checkmark 1823$ | on road |
| $\mathrm{CP}-3$ | 1826 | -4 | CP-2 | CP-3 | 210 | 45.0 | -39.0 | -22.5 | -74.9 | -8.4 | $\checkmark 1822$ | on road. Bushy! |
| CP-4 | 1830 | -5 | CP-3 | CP-4 | 188 | 23.2 | -23.0 | -3.2 | -97.8 | -11.7 | 1825 | bushy! |
| CP-5 | 1831 | -5 | CP-4 | CP-5 | 185 | 45 | -44.8 | -3.9 | -142.7 | -15.6 | 4826 | gully wash at 30m. Bushy! |
| CP- 6 | 1840 | -5 | CP-5 | CP-6 | 163 | 13 | -12.4 | 3.8 | -155.1 | -11.8 | 4835 |  |
| CP- 7 | 1845 | -6 | CF-6 | CP- 7 | 128 | 10.9 | -6.7 | 8.6 | -161.8 | -3.2 | 4839 | major gully (see air photo). On N edge gully on road. |
| CP-8 | 1849 | -6 | CP- 7 | CP-8 | 80 | 44.5 | 7.7 | 43.8 | -154.1 | 40.6 | $\checkmark 1843$ | on S edge gully |
| CP- 9 | 1860 | -6 | CP-8 | CP-9 | 73 | 43.4 | 14.2 | 46.3 | -139.9 | 85.9 | $\checkmark 1854$ | on S edge gully at switcroack |
| CP-10 | 1863 | -7 | CP-O | CP- 10 | 149 | 34 | -29.1 | 17.5 | -169.1 | 104.4 | $\checkmark 1856$ | on road |
| CP-11 | 1868 | -7 | CFP-10 | CP-11 | 116 | 21.8 | -9.6 | 19.6 | -173.6 | 124.0 | 7861 | $260^{\circ}$ to gtzt. otc. 'W side creek |
| CP-12 |  | -7 | CP- 11 | CF- 12 | 118 | 22.7 | -10.7 | 20.0 | -189.3 | 144.1 |  | in clear! |
| CP-13 | 1881 | - | CP- 12 | CP-13 | 121 | 37.8 | -19.5 | 32.4 | -203. 8 | 175.5 | $\underline{1873}$ | angular float (large) grey to tan rusty schistose is. |
|  |  |  |  |  |  |  |  |  |  |  |  | w. narrow ( $1-2^{\prime \prime}$ ) qtz. Some tireccia. |
| CP-14 | 1885 | - 8 | CFP-13 | CF- 14 | 156 | 60.2 | -5.5. | 24.5 | -26.3.7 | 201.0 | V1877 |  |
| CP-15 | 1891 | - 8 | CF'-14 | CF-15 | 167 | 703 | -63.5 | 15.8 | -332.2 | 216.8 | 1883 | creel 4 (miv |
| CP-16 | 1911 | -9 | CP- 15 | CF-16 | 150 | 119 | -102.5 | 59.3 | -434.9 | 275.0 | 4002 | grey sithistus, is fleat w . barren rust $/$ quartz. |
| CP-17 | 1928 | -9 | CF- 16 | CF- 17 | 142 | 95.0 | -7.4.9 | 58.5 | -509.7 | 334.5 | 4919 | switchback on E side creek |
| CP-18 | 1950 | -9 | CF- 17 | CF-18 | 17 | 120.9 | 115.6 | 35.3 | -394.1 | 367.9 | 1041 | on switchtacks |
| CP-19 | 1954 | -10 | CF'-18 | CP-19 | 15 | 70.1 | -6.3.) | 30.7 | -457.1 | 400.5 | $\checkmark 1944$ | large outcrop above road $125 \mathrm{~m} \pm$ |
| CP-20 | 19E: | -10 | CF-19 | CF-20 | 144 | 24.2 | -19.5 | 14.2 | -476.7 | 414.8 | Y050] |  |
| CP-21 | 1971 | -19 | CF-20 | CFP-21 | 185 | 52.1 | -51.3 | -4.5 | $-523.5$ | 410.3 | 1961 | larje erratios fromrozk slide to E. Lt ary limey |
|  |  |  |  |  |  |  |  |  |  |  |  | sitistrese w acrasional quartzveins-irregular 6" $\pm$ |
|  |  |  |  |  |  |  |  |  |  |  |  | Sorne fyr. + Irin diss. in groundriass. |
| CP-22 | 1979 | -11 | - FF-2 | CF-22 | 163 | 759 | -73.5 | 22.5 | -602. 11 | 432.8 | TG63 |  |
| CP-23 | 198.1 | -1: | CF-22 | 1F-23 | 170 | 232 | -27.3 | 4.9 | - 62.9 | 437.7 | 1070 |  |
| CP-2 4 | 198.6 | -1! | CFE23 | CFF-24 | 125 | 613 | -43.3 | 43. | - 6.73 .31 | $\leq 81.0$ | 1975 |  |
| CP-25 | 198.8 | -120 | CF-24 | iF-25 | 124 | 215 | -12.9 | 17.8 | -6.85.31 | 493.6 | 1976 | drk orvioliated schist flcar cin roed |
| CP-26 | 19c8 | -12 | CF-25 | -FF-25 | $1 \in 1$ | 351 | -34.1 | 11.8 | -719.4 | 5105 | 1085 |  |
| CP-2? | 1958 | -12 | CF-26 | SF-27 | 127 | 322 | -19.4 | 25.7 | -733.31 | 535.3 | 1985 | ack slatey schist float on road. |


| STATION | ELEV. | $\left\lvert\, \begin{array}{l\|} \hline \text { ELEV } \\ \text { CORR } \end{array}\right.$ | $\begin{aligned} & \text { FROM } \\ & \text { STN. } \end{aligned}$ | $\begin{gathered} \text { TO } \\ \text { STN. } \\ \hline \end{gathered}$ | AZIM. | DIST. | $\begin{array}{\|c\|} \hline \text { NORTH- } \\ \text { ING } \end{array}$ | $\begin{gathered} \text { EAST- } \\ \text { ING } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { NORTH } \\ \text { CO-ORD } \end{array}$ | $\begin{array}{\|c\|} \hline \text { EAST } \\ \text { CO-ORD } \end{array}$ | $\begin{array}{\|l\|} \hline \text { CORR } \\ \text { ELEV. } \end{array}$ | NOTES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | m | m |  |  | deg. | m | m | m | m | m | m |  |
| CP-28 | 2001 | -13 | CP-27 | CP-28 | 147 | 51.8 | -43.4 | 28.2 | -782.2 | 564.5 | $\sqrt{1988}$ | $S$ side of creek crossing and on E side of creek to sou |
|  |  |  |  |  |  |  |  |  |  |  |  | Toby fm. |
| CP-29 | 1998 | -13 | CP-28 | CP-29 | 163 | 25.4 | -24.3 | 7.4 | -806.5 | 571.9 | 1985 |  |
| CP-30 | 2020 | -13 | CP-29 | CP-30 | 291 | 72.1 | 25.8 | -67.3 | -780.7 | 504.6 | 2007 | large ot'c to W. It. gry. dense Is. W. quartz stringers |
|  |  |  |  |  |  |  |  |  |  |  |  | slicp, py min. Site of 1990 chip sple (brecc, fract) |
|  |  |  |  |  |  |  |  |  |  |  |  | CP-30 to Black Diamond: $111^{\circ}$ |
|  |  |  |  |  |  |  |  |  |  |  |  | to Mt. Hammond: $177^{\circ}$ |
| CP-31 | 2023 | -14 | CP-30 | CP-31 | 305 | 48.3 | 27.7 | -39.6 | -75.3.0 | 465.1 | 2009 | end of ot'c on E side of ridge |
| CP- 32 | 2029 | -14 | CP-31 | CP-32 | 245 | 25.9 | -10.9 | -23.5 | -76.3.9 | 441.6 | 2015 | $W$ branch 35 mW of $\triangle 32$. Lti. gry dense dol. |
|  |  |  |  |  |  |  |  |  |  |  |  | No vis. min. |
| CP-33 | 2041 | -14 | CP- 32 | CP- 33 | 165 | 36.0 | -34.8 | 9.3 | -798.7 | 450.9 | 2027 |  |
| CP-34 | 2061 | -15 | $\mathrm{CP}-33$ | CF- 34 | 157 | 67.3 | -6.3.8 | 27.1 | -862.5 | 473.0 | 2046 | str. $145^{\circ}$ dip $50^{\circ} \mathrm{W}$ fine gtz veiring buff wx . |
| CP-35 | 2068 | -15 | CP-34 | CP- 35 | 202 | 33.6 | -31.2 | -12.6 | -893.6 | 465.4 | $\sqrt{20} 53$ |  |
| CP-36 | 2072 | -15 | CP-35 | CP- 36 | 229 | 42.0 | -27.6 | -31.7 | -921.2 | 433.7 | 2057 |  |
| CP-37 | 2080 |  | CP-36 | CP- 37 | 170 | 548 | -54.0 | 9.5 | -975.2 | 443.2 | 2080 | junction |
| CP-38 | 2097 |  | CP-37 | CP-38 | 130 | 363 | -23.3 | 27.8 | -098.5 | 471.0 | 2097 | an rack |
| CP- 39 | 2104 |  | CP-38 | CP-39 | 133 | 52.1 | -35.5 | 38.1 | -1034.0 | 509.1 | - 2104 | old cabin. |
| CP- 40 | 2100 |  | CF-39 | CP-40 | 149 | 473 | -40.5 | 24.4 | -1074.5 | 533.5 | 2100 |  |
| CP- 41 | 2093 |  | CF- 40 | CF- 41 | 183 | 342 | -34.2 | -1.8 | -1108.7 | 531.7 | 2103 | extensive blk. schist (old core shack) Shale float to 3 or |
|  |  |  |  |  |  |  |  |  |  |  |  | E side of creek. |
| CP- 42 | 2098 |  | CP-41 | CF-42 | 310 | 535 | 37.6 | -44.8 | -1071.1 | 485.9 | 21.93 |  |
| CP- 43 | 2089 |  | CP- 42 | CF- 43 | 178 | 475 | -47.5 | 1.7 | -1118.5 | 483.5 | 2189 | on E side of creak - abund. blk. schist float ot co. in creek |
|  |  |  |  |  |  |  |  |  |  |  |  | 10 ms Lats of giz. flat in creek |
| CD- 44 | 2097 |  | IFP-43 | CP-44 | 298 | 36.1 | 16.9 | -31.9 | -:101.7 | 455.7 | $\xrightarrow{2} \times 197$ |  |
| CD-45 | $20 \leq 9$ |  | CF'-44 | CF- 45 | 263 | 17.4 | -2.1 | -17. | -1103.3 | 439.4 | 2 C 93 |  |
| CP-46 | 2104 |  | CF- 45 | CF-46 | 315 | 539 | 41.5 | -41.6 | -1062.1 | 397.3 | 2104 | estersive di. gry 3chist, rust). Somp rusty ls. (?) |
|  |  |  |  |  |  |  |  |  |  |  |  | fioat |
| CP-4? | $\underline{21011}$ |  | -FF- 46 | 1FP-47 | 5 | 32.5 | 32.4 | 2.8 | -1029.7 | 40. 5 | 201 |  |
| CP-48 | 2101 |  | -F- 47 | CFI- 48 | 327 | 556 | 46.6 | $-303$ | -983.1 | 27.3 | 201 |  |
| CP-49 | $\underline{2} 10$ |  | CF- 48 | VF- $\triangle 9$ | 316 | 499 | 3.5 .3 | -34.7 | - 0 47.2 | 335.5 | $\cdots$ | fioat - buff coft wx. Lt.jry dol gtet ?? |
|  |  |  |  |  |  |  |  |  |  |  |  |  |


| STATION | ELEV. | $\begin{array}{\|c\|} \hline \text { ELEV } \\ \text { CORR } \end{array}$ | $\begin{aligned} & \hline \text { FROM } \\ & \text { STN. } \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { TO } \\ \text { STN. } \\ \hline \end{gathered}$ | AZIM. | DIST. | $\begin{gathered} \mathrm{NORTH}- \\ \mathrm{ING} \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline \text { EAST- } \\ \text { ING } \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \text { NORTH } \\ \text { CO-ORD } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { EAST } \\ \text { CO-ORD } \\ \hline \end{array}$ | $\begin{aligned} & \text { CORR. } \\ & \text { ELEV. } \end{aligned}$ | NOTES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | m | m |  |  | deg. | m | m | m | m | m | m |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| CP-50 |  |  | CP-49 | CP-50 | 338 | 58.5 | 54.2 | -21.9 | -893.0 | 313.7 |  | sta. 49.2 good ot'c of it. gry. micacenus gneissic rusty |
|  |  |  |  |  |  |  |  |  |  |  |  | rock. Buff wx. strike $330^{\circ}$. Vertical? DDH at CP-50: |
|  |  |  |  |  |  |  |  |  |  |  |  | $63^{\circ}$ at $45^{\circ}$ collared in It. gry. conglomeratic gneiss as |
|  |  |  |  |  |  |  |  |  |  |  |  | abcve. Similar to ot'c (boulder?) at $\triangle C P A-2$. |
|  |  |  |  |  |  |  |  |  |  |  | / |  |
| CPA-1 | 2072 |  | CP- 37 | CPA-1 | 311 | 97.5 | 64.0 | -73.6 | -911.2 | 369.6 | 2072 | qtx. float in creek. Occ. tetrahedrite, mostly barren, |
|  |  |  |  |  |  |  |  |  |  |  |  | white. Dk. ary dense soft ls. float at CFA-1. Some |
|  |  |  |  |  |  |  |  |  |  |  |  | maiachite staining. |
| CPA-2 | 2068 |  | CPA- 1 | CPA-2 | 336 | 48.2 | 44.0 | -19.6 | -867.2 | 350.0 | 2068 | DDH. $239^{\circ} 45^{\circ} \mathrm{SW} 8 \mathrm{~m}$ at $275^{\circ}$ from station CPA-1 |
|  |  |  |  |  |  |  |  |  |  |  |  | Qtz. flt. W. malachite, azurite stain (minor). |
|  |  |  |  |  |  |  |  |  |  |  |  | tetrahedrite? |
| CPA- 3 | 2072 |  | CPA-2 | CPA- 3 | 180 | 25.0 | -25.0 | 0.0 | -892.2 | 350.0 | 2072 | on spur road. Ot'c of buff wx. It.gry dense dolomite (?) |
|  |  |  |  |  |  |  |  |  |  |  |  | similar to exposure on E side of ridge ( 1390 sample). |
|  |  |  |  |  |  |  |  |  |  |  |  | Is this stuff dolomitic qtzt? Soft buff wx. |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| CPB-1 | 2085 |  | CF- 38 | CPB-1 | 210 | 18.3 | -15.8 | -9.1 | -1014.3 | 461.9 | 2085 | qtz. ot'c. in bulldozer cut. |
| CPB-2 | 2085 |  | CP- 38 | CPB-2 | 225 | 26.5 | -18.7 | -18.7 | -1017.2 | 452.3 | 2085 | - |
|  |  |  |  |  |  |  |  |  |  |  |  | Wh. qtz. in brecc. dk. gry. Is. Some siderite? yeining. |
|  |  |  |  |  |  |  |  |  |  |  |  | Occ. abundant malachite stain, sparse tetrahedrite. |
|  |  |  |  |  |  |  |  |  |  |  |  | Outcrops in creak below. Strike 3 \% $5^{\circ}$ (?). Dip uriknown. |
|  |  |  |  |  |  |  |  |  |  |  |  | Grab sample from W exposure - rusty glz. \& brecc. Is. |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

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[^0]:    91-09-17

