

Assessment Report

on

## Percussion and Diamond Drilling Geological Mapping

at Mount Polley Mine Cariboo Mining Division

N.T.S. 93A/12E Latitude 52<sup>0</sup> 33' N Longitude 121<sup>0</sup> 38' W

Owner: Mount Polley Mining Corporation Box 12 Likely, B.C. VOL 1N0

> GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT



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### 1.0 Summary

Several mineralized zones in and adjacent to the Cariboo and Bell Pits were tested with a program of geological mapping, core relogging, short percussion drilling, and diamond drilling during 1999. A total of 4,067.3 metres in 18 diamond drillholes were completed in 3 separate areas. A total of 41 diamond drillholes from the Bell and South Cariboo Extension areas were relogged. Thirty-three short percussion holes were completed, mainly in the South Cariboo Extension, totaling 1,385.5 metres.

Work in the Bell Pit consisted of geological mapping, core relogging, and diamond drilling. Mapping and relogging of 30 diamond drillholes provided a framework of alteration, structure, and lithology. Eight diamond drillholes totaling 1946.5 metres collared along the east and north margins of the known Bell deposit were unsuccessful in adding significant economic resources.

A percussion testhole program was successful in discovering a new zone of mineralization, the C-2, south of the Cariboo Pit. Four diamond drillholes were subsequently completed in 1999, totaling 773.9 metres. Detailed geological mapping and core relogging (11 ddh's) linked the southwest corner of the pit to the C-2 and 207 Zones. A spring 2000 diamond drill program has further expanded and defined the C-2 Zone. Recent evaluation of exploration results suggests that the zone is not economic at the present time.

A percussion testhole confirmed high-grade mineralization initially discovered in R-86-22 and MP-207. One diamond drillhole, 99C-1, totaling 236.8 metres in length, intersected low-oxide, ore-grade mineralization, 35 metres south of MP-207. A second zone, possibly the downdip extension of the C-2 Zone, was intersected near the bottom of the hole. Several diamond and percussion drillholes were completed during the spring 2000 program, further expanding the zone. Evaluation is ongoing.

Five diamond drillholes, totaling 1110.1 metres, tested a deep zone of mineralization within the south end of the Cariboo Pit. Results indicate that mineralization at depth is not continuous hosting intermediate grades that are unlikely to be economic. High-grade intersections higher in the holes have better defined so-called "super high-grade" zones along the south end of the pit.

A series of short (45 metre) percussion testholes were completed in three separate areas in and around the Cariboo Pit. A majority of the holes, 25 in all, tested the South Extension of the Cariboo Pit. They confirmed that near surface high-grade mineralization extends at least 125 metres south of the current pit design. Six holes were drilled to better define the East Knob Zone, immediately north of East Cariboo. Results suggest that distribution of ore grades is somewhat spotty and restricted to a central north-northwest trending section of the monzonite breccia. Two holes were completed near the western edge of 1170 Bench failed to intersect significant mineralization in an area of intense structural disruption.

### 2.0 Introduction

The Mount Polley Mine, near Williams Lake, B.C., is a low-grade, alkalic copper-gold porphyry deposit put into production in mid-1997 by Mount Polley Mining Corporation, a joint venture between Imperial Metals Corporation and SC Minerals Inc., at a capital cost of \$123.5 million. The operation consists of a 20,000 tonne per day mine and concentrator complex with a remaining life of approximately 8 years. Reserves prior to production were published at 82.3 million tonnes at an average grade of 0.30% copper and 0.47% grams per tonne gold. The deposit will be mined sequentially from 3 pits: Cariboo, Bell, and Springer.

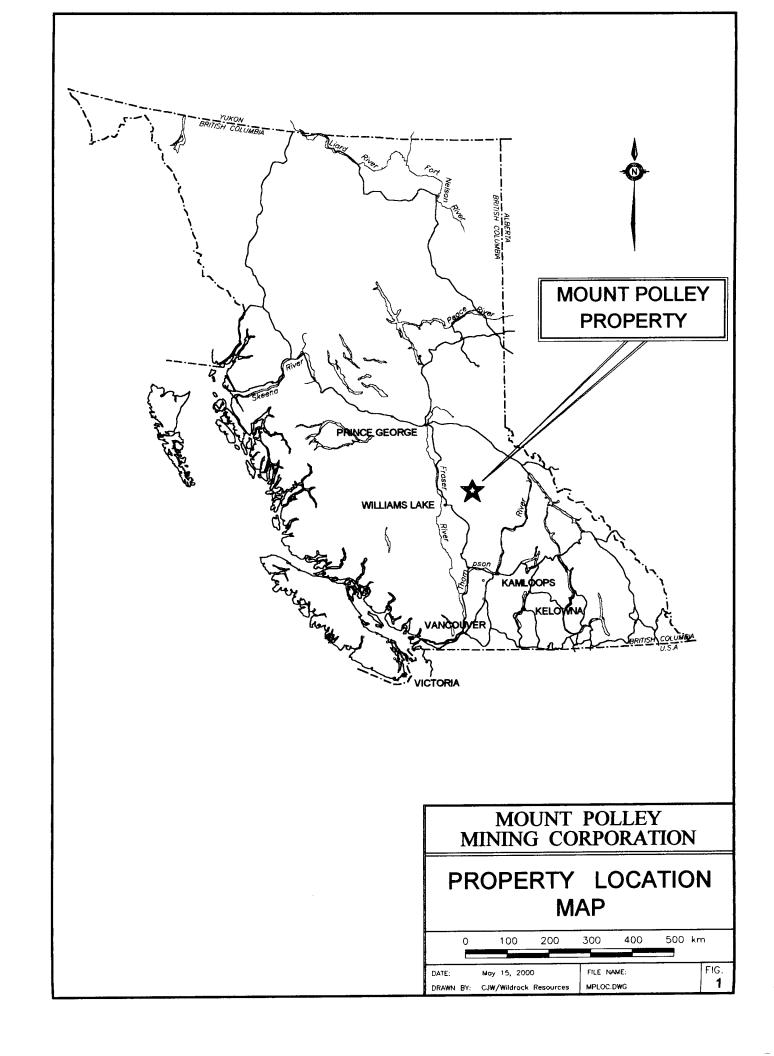
Exploration activity in 1999 concentrated on targets in and adjacent to the Cariboo Pit and the Bell Pit area immediately to the north. In March 1999, a percussion testhole program was initiated for the Cariboo South Extension with the purpose of determining the potential for near-surface ore reserves southeast of the current pit. In June, a program of geological mapping and core relogging focused on the Bell Pit area. A diamond drill program then tested possible extensions of Bell Pit mineralization to the east and north. Two targets in the Cariboo South Extension were also tested, resulting in the discovery of the C-2 Zone. Geological mapping and core relogging assisted in targeting two more holes into the C-2 Zone. Within the Cariboo Pit, two holes were drilled to define a high-grade zone. In December, another diamond drillhole was completed into the C-2 Zone and 3 more tested deep high-grade targets at the south end of the Cariboo Pit.

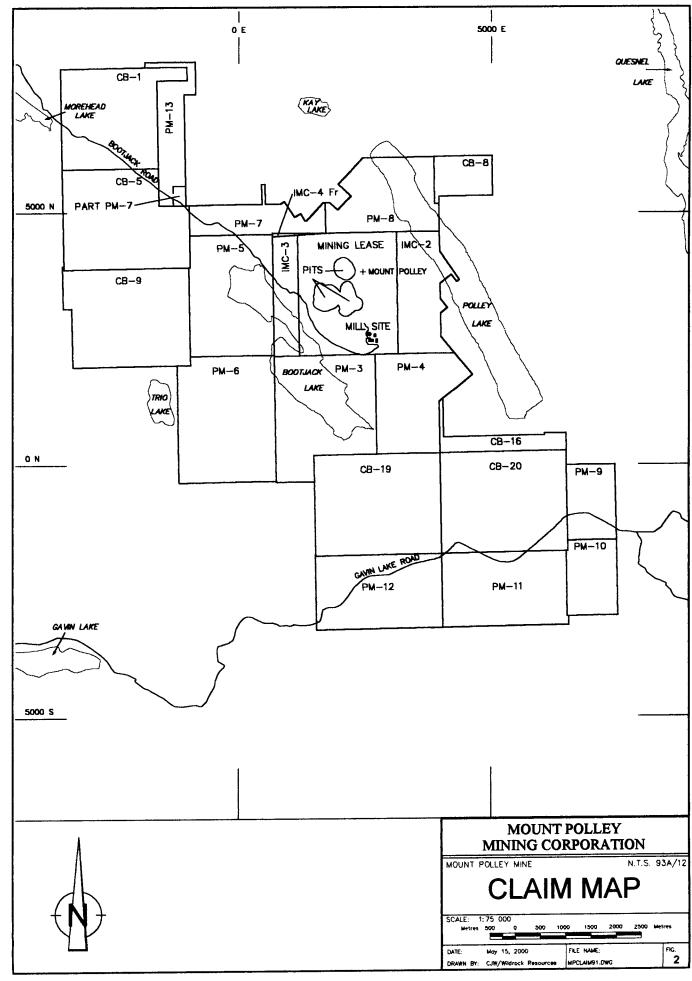
### 2.1 Location and Access

Mount Polley Mine is located in south-central British Columbia, 8 kilometers southwest of the village of Likely and 56 kilometers northeast of Williams Lake (Figure 1). There is excellent access to the property via the Likely Road from Highway 97 at 150 Mile House, 76 kilometers to Morehead Lake, and 12 kilometers along the Bootjack Forest Access Road to the minesite. Other forestry and mining roads afford good access to most parts of the property.

### 2.2 Physiography

The property sits near the eastern edge of the Fraser Plateau physiographic subdivision, characterized by rolling topography and moderate relief. Elevations range from 920 metres at Polley Lake to 1266 metres at the summit of Mount Polley. Forest cover consists of western red cedar, Douglas fir and sub-alpine fir, with lesser black cottonwood, trembling aspen and paper birch. Commercial logging has clear-cut much of the area over the last several years. Mean monthly temperatures range from  $13.7^{\circ}$ C in July to  $-10.7^{\circ}$ C in January. Precipitation averages 856 mm with around 350mm falling as snow.





### 2.3 Claim Status

The Mount Polley property consists of 20 mineral claims, one fractional claim, and one mining lease (Figure 2). Area covered totals approximately 8,575 hectares including 483.16 hectares covered by Mining Lease 345731. Table 1 lists claims currently in good standing by claim name, number, units, and expiry date after application of 1999 assessment. All these claims are owned by *Mount Polley Holding Company Limited*.

# Table 1 Mount Polley Mining Claims

Claim Name	Record No.	Units	Area (ha)	Explry Date	NTS
CB 1	204470	20	500	04-May-08	93A/12E
CB 5	204472	20	500	04-May-08	93A/12E
СВ 8	204473	8	200	04-May-08	93A/12E
CB 9	204474	20	500	04-May-08	93A/12E
CB 16	204475	20	500	04-May-09	93A/12E
CB 19	204476	20	500	04-May-09	93A/12E
CB 20	204477	20	500	04-May-09	93A/12E
PM-3	206448	20	500	17-Sep-09	93A/12E
PM-4	206449	20	500	14-Sep-09	93A/12E
PM-5	206450	20	500	29-Sep-09	93A/12E
PM-6	206451	20	500	29-Sep-09	93A/12E
PM-7	206452	12	300	17-Sep-09	93A/12E
PM-8	206453	20	500	17-Sep-08	93A/12E
PM-9	206798	6	150	23-Feb-08	93A/12E
PM-10	206799	6	150	23-Feb-08	93A/12E
PM-11	206800	15	375	23-Feb-09	93A/12E
PM-12	206801	15	375	21-Feb-05	93A/12E
PM-13	207244	12	300	26-Sep-08	93A/12E
IMC 2	340018	15	375	21-Sep-08	93A/12E
IMC 3	340019	5	125	22-Sep-08	93A/12E
IMC 4 fr.	340020	1	25	22-Sep-09	93A/12E
ML 345731	345731		483	22-Aug-00	93A/12E
		Total	8,558	Ha	

### 2.4 Property History

The Mount Polley Deposit was first discovered as a result of follow-up prospecting of an aeromagnetic anomaly highlighted on a government aeromagnetic map sheet issued in 1963. Claims were first staked in 1964 by Mastodon Highland Bell Mines Ltd. and Leitch Gold Mines. In 1966, the two companies formed Cariboo-Bell Copper Mines Ltd. The property was mapped, soil and rock geochemical surveys and airbome and ground-based geophysical surveys were conducted, followed by bulldozer trenching

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and drilling. A group of Japanese companies joined Cariboo Bell but later withdrew over concerns about the metallurgy. In 1969, Teck Corporation took over control of Cariboo Bell.

During the period from 1966 to 1972, a total of 18,341 metres of diamond drilling and 8,533 metres of percussion drilling were completed in 215 holes. In 1970, magnetic, seimic, and induced polarization (IP) surveys were conducted on the property. Teck continued to work the property in 1972, 73, and 75. In 1978, Highland Crow Resources, an affiliate of Teck, acquired control of Cariboo Bell. The following year, Teck completed 6 percussion holes totalling 354 metres.

In 1981, E&B Explorations Inc. optioned the property from Highland Crow and completed 1,746 metres of diamond drilling, 1,295 metres of rotary drilling, and soil geochemical and ground control surveys. The following year, E&B acquired 100% interest and continued to work on the property with joint venture partners Geomex Partnerships and Imperial Metals Corporation. From 1982 to 1987, E&B completed soil geochemistry, magnetic, VLF-EM and IP surveys; geological mapping; 3,585 metres of diamond drilling and 4,026 metres of reverse circulation drilling.

In 1987, Imperial Metals merged with Geomex Partnerships and purchased the remaining interest in the property from Homestake Canada and others. (E&B had merged with Mascot Gold Mines which subsequently merged with Corona Corporation and finally became Homestake Canada).

During the period between 1988 and 1990, Imperial Metals Corporation conducted a comprehensive exploration program consisting of 238 NQ diamond drillholes totalling 27,566 metres, the collection of 6 bulk samples totalling 130 tonnes from surface trenches, geological mapping and IP surveys. A positive feasibility study incorporating new ore reserve calculations, metallurgical testing, geotechnical evaluations, and environmental impact assessments was completed in 1990 by Wright Engineers Ltd.

In 1993/94, Theresa Fraser from the University of British Columbia completed a Masters thesis on the geology, alteration, and origin of hydrothermal breccias on the deposit. The focus of the study was to document data important to aspects of the genesis of the deposit, particularly breccia distribution, breccia types, distinctive matrix minerals and alteration.

In 1994, Gibraltar Mines Ltd., under an option agreement with Imperial Metals, carried out 1,216 metres of diamond drilling in 7 holes on the deposit. Upon evaluation of the project, Gibraltar declined further participation. Following a merger with Bethlehem Resources Corporation in 1995, Imperial completed an in-house feasibility study and arranged financing with Sumitomo Corporation through a joint venture with SC Minerals Canada, culminating in the formation of Mount Polley Mining Corporation in April 1996.

In 1995, 5 HQ diamond drillholes totaling 883.92 metres were completed on the south end of the Cariboo Zone for metallurgical testing. An additional 11 NQ holes totaling 1,773.33 metres were completed on various targets around the property. Of the 11 holes, 2 were in the Kay Lake Basin area, 4 on the Road Zone, 1 immediately northwest of the design Springer Pit, and 4 south of the design Cariboo Pit. Seven 6" diameter rotary holes totalling 932.38 metres were also drilled. The primary purpose of the holes was to source and monitor groundwater, but cuttings were also collected, logged and sampled over 10 foot (3.05 metre) intervals. Sites included the southeast end of the design Cariboo Pit, three immediately southeast and southwest of the millsite, one immediately east of the north end of the Cariboo Pit, one between the East Rock Disposal Site and Polley Lake, and one between the proposed Springer Pit and Bootjack Lake. Also, a soil geochemical survey was conducted over 6.175 kilometers of grid between an old E&B grid and the north claim boundary. Lines were spaced at 100 metres, stations at 25 metres.

In 1996, 7 NQ diamond drillholes totalling 991.51 metres were completed peripheral to the Mount Polley orebody. Three holes totalling 483.11 metres were drilled on the Road Zone, three more totalling 369.72 metres were completed on the Northwest Zone, 800 metres northwest of the design Springer Pit, and a single inclined hole totalling 138.68 metres was completed on the S Zone west of the Road Zone. In addition, a very limited program of rock geochemistry was conducted on new rock exposures within the mine property, including the last 2 km of the mine access road, Southeast Sediment Pond, Perimeter Ditch, S Zone, and Gavin Lake.

The 1997 exploration program focused on defining mineable limits on the east and south margins of the Cariboo Pit. Diamond drilling consisted of 15 NQ holes totalling 1,614.0 metres along the East and South Cariboo mineralized trends. Additionally, 17 short (average 40 metres) percussion holes totalling 702.1 metres were drilled along the East Cariboo Zone to better define mineralization for mine planning. To better understand and classify the geology, a short program of detailed (1:500 scale) geological mapping was initiated along this eastern trend (Read, 1997), in conjunction with ongoing wall mapping in the Cariboo Pit. Three percussion water well holes totalling 350.5 metres were drilled south of the mill complex, immediately south of the Cariboo Pit and at 10 kilometre on the Bootjack Road in an attempt to source groundwater for mining and milling operations. Drill cuttings were collected and inspected for each 30 foot interval. Miscellaneous exploration included rock chip samples collected from new blast exposed outcrops at 9.5 kilometre on the Bootjack Road.

During the summer of 1998, a total of 792.18 metres of diamond drilling were completed in three holes around the Cariboo Pit. The three holes tested three zones; Cariboo North, Southeast Zone, and Cariboo South to an elevation of 900 metres, approximately 230 metres below current mining. The objectives of

the drill program were to test the continuity of the orebody to depth; to define the relationship between mineralization, alteration and rock type; to refine the current rock classification system to ensure consistency; and to assess rock quality to assist in pit design. A program of detailed geological mapping and core relogging was initiated to determine the distribution of major rock units and their relationship to ore mineralization within the Cariboo Pit.

In December of 1998, a second stage of diamond drilling consisting of 6 holes totaling 1,200.8 metres was completed along the west and south sides of the Cariboo Pit. Four holes were designed to fill significant gaps in the geological and ore reserve model along the southern half of the west side of the Cariboo Pit. One hole tested the orientation of the southern limit of mineralization, also on the west side. Finally, one hole tested the central part of the East Cariboo Zone to depth. Also, between September 1<sup>st</sup> and November 30<sup>th</sup>, geological mapping within the Cariboo Pit was completed. In conjunction with this mapping program, core from approximately 60 diamond drillholes from within the Cariboo Pit, was relogged and re-interpreted.

### 2.5 1999 Program

Exploration activity in 1999 concentrated on targets in and adjacent to the Cariboo Pit and the Bell Pit area immediately to the north. In March, a percussion testhole program totaling 1,385.5 metres in 33 holes, was initiated for the Cariboo South Extension with the purpose of determining the potential for near-surface ore reserves southeast of the current pit. In June, a program of geological mapping and core relogging focused on the Bell Pit area. A diamond drill program consisting of 1,946.45 metres in 8 holes then tested possible extensions of Bell Pit mineralization to depth and to the east and north. Two targets in the Cariboo South Extension were also tested, resulting in the discovery of the C-2 Zone. Geological mapping and core relogging assisted in targeting two more holes into the C-2 Zone. Within the Cariboo Pit, two holes were drilled to define a high-grade zone. In December, another diamond drillhole was completed into the C-2 Zone and 3 more tested deep high-grade targets at the south end of the Cariboo Pit. Five holes, totaling 1,010.72 metres, tested the C-2 Zone with another 5 totaling 1,110.08 metres were completed into the Deep South Cariboo targets. Diamond drilling totaled 4067.25 metres in 18 holes.

As mentioned above, geological mapping and relogging of old diamond drillcore was completed for the Bell Pit area and most of the South Cariboo. A total of 30 core holes from the Bell Pit area, drilled in 1982, 1988-89, and 1996, were relogged during the spring and summer. In the South Cariboo, 11 old core holes from 1988-89 were relogged in the fall. In relogging, emphasis was placed on identifying alteration type and scoring the intensity to compare with copper and gold grade distribution. In the fall, a second stage of percussion drilling began in the South Cariboo and is ongoing.

### 3.0 Geological Setting

### 3.1 Regional Geology

The Mount Polley deposit is hosted in an alkalic intrusive complex within the Central Quesnel Belt (CQB), a part of Quesnellia extending along the eastern margin of the Intermontane Belt in south-central British Columbia. The CQB is comprised of Upper Triassic to Lower Jurassic sedimentary and volcanic rocks of island arc and oceanic origin extending along the western margin of the Omineca Crystalline Belt. These Nicola Group rocks are thought to have formed in a Late Triassic volcanic arc, east of a subduction-accretion complex.

Stocks within the CQB are interpreted to be coeval with the more broadly distributed volcanic rocks, likely as volcanic centres. Northwest trending faults appear to control the emplacement of these centres. The Polley Stock is made up of syenite, monzonite, monzodiorite, and diorite, dated around 202 Ma, intruding polylithic volcanic breccia and alkali basalt of the Nicola Group.

### 3.2 Deposit Geology

The Mount Polley deposit is hosted in the Polley Stock, a 5.5 by 4 kilometre intrusive body largely comprised of diorite. The orebody is hosted within intrusion and hydrothermal breccias related to the monzonite intrusions along the north-northwest striking Polley Fault. This fault separates the deposit into the Central Zone (Cariboo and Bell Pits) and the West Zone (Springer Pit), each with distinctive characteristics of mineralization, alteration and breccia types.

### 3.2.1 Lithology

Deposit lithologies are chiefly diorite, monzonite, plagioclase porphyry, and intrusion breccia consisting of diorite or monzonitic clasts in a plagioclase porphyry or monzonite matrix. Other important lithologies include volcanic breccias and tuffs, common along the east side of the deposit, porphyritic augite monzodiorite, potassium feldspar phyric monzonite, augite porphyry, and biotite lamprophyre dykes. These units are interpreted as dykes, although a stock of phyric monzonite breccia also occupies the summit of Mount Polley.

The diorite host is fine grained, equigranular to weakly porphyritic, and composed of plagioclase, minor pyroxene, and accessory minerals including magnetite, sphene and apatite. Plagioclase porphyry and monzonite intrude diorite and form the matrix of much of the intrusion breccia. The porphyry is crowded with plagioclase phencrysts up to 5 millimetres in length and variably sericitized. Mafics include primary biotite, hornblende and magnetite although the unit is commonly strongly altered.

Polymictic volcanic breccias and tuffs form part of the eastern margin of the central zone becoming more dominant to the south and east. Blocks of volcanics form xenoliths in the diorite and occasional clasts in intrusion and hydrothermal breccias. In the southeast part of the Cariboo Pit, a unit of magnetite-rich rock, possibly skam related, occupies an area up to 100 by 100 metres. This unit is in sharp contact with both diorite and plagioclase porphyry, and may replace volcanics. Locally, this unit appears to be well mineralized and coincident with possible supergene mineralization.

### 3.2.2 Structure

The Polley Fault, trending north-northwest with a steep easterly dip, is the largest structure in the deposit area. In the southwest comer of the Cariboo Pit, the fault consists of gougy fault breccia, clay gouge, and highly sheared and fractured rock over a maximum thickness of over 50 metres and likely represents late movement along an older regional fault structure. The fault zone appears to narrow both to the north and south where it forms the western limit of the C-2 Zone, indicating a significant zone of dilation. Several other faults follow the same northerly trend, including the Cariboo Pit Fault.

A second set of northwest-trending faults transects the Cariboo, Bell, and C-2 deposits. The structures, including the Oxide Boundary Fault, C-2 Fault, and Knob Fault, tend to be highly fractured and gougy over several metres thickness. A third set, complementary but subordinant to the second set, tends to be subtler in expression and may be focal points for late-stage plagioclase porphyry (monzonite) dykes. Examples include lan's Fault and Bell North Fault.

### 3.2.3 Breccia Types and Alteration

Hydrothermal (crackle) brecciation is superimposed on diorite, plagioclase porphyry, monzonite, intrusion breccia and, more rarely, volcanic tuff/breccia. Fraser (1994) divided the hydrothermal breccias into four types; actinolite, biotite, magnetite, and albite, based on the dominant matrix mineralogy. In mapping these differences in alteration around the Cariboo-Bell area in outcrop, pit walls, and drill core, it was recognized that the intensity of the main components; potassium feldspar, actinolite/biotite, and magnetite, correlated well with copper grade. Thus, an alteration scoring system was devised to account for variations in the proportions of each of these constituents. Each of the constituents is scored on a relative scale from 0 to 5, 5 being most intense, with the 3 scores adding to a total out of 15.

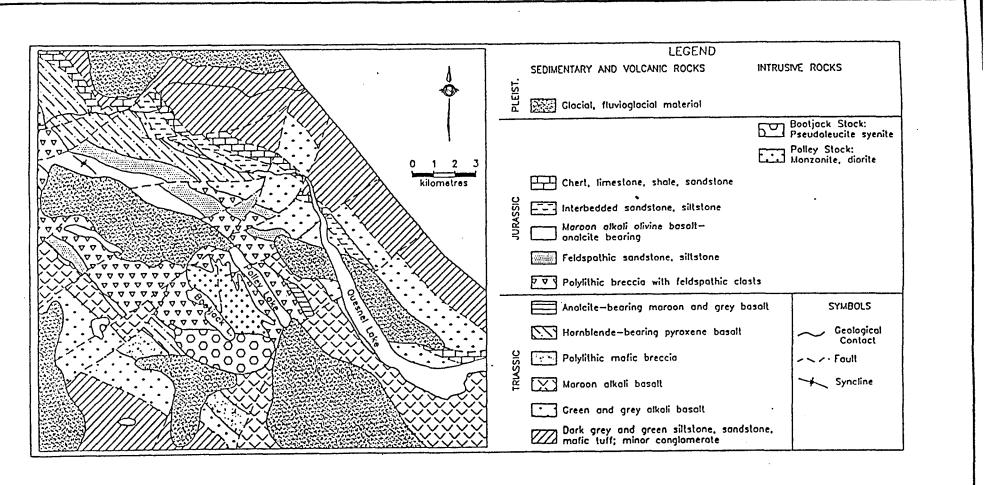
Actinolite breccia, mapped in the central zone east of the Polley Fault, consists of subangular clasts in a matrix of fibrous dark green actinolite and potassically altered material. Biotite breccia is identified only in the southern part of the central zone by the presence of hydrothermal biotite flakes locally altered to chlorite. Magnetite breccia is much less abundant and localized. Albite breccia dominates only in the Springer Pit area, west of the Polley Fault, and is identified by the presence of prismatic albite crystals in

vugs in the breccia matrix commonly with secondary biotite. The effects of albitization often make it difficult to distinguish clasts.

Alteration at Mount Polley, typical of alkalic porphyry systems, is dominated by a central potassic zone defined by potassium feldspar-albite, biotite, and actinolite, with phyllic/argillic alteration generally restricted to areas of post-mineralization faulting and fracturing. The potassic core is coincident with hydrothermal and intrusive brecciation as well as copper-gold mineralization. The propylitic zone is characterized by albite, epidote, chlorite, carbonates, garnet, pyrite and zeolites. A pyrite halo has been identified northeast and southwest of the deposit within the propylitic zone.

### 3.2.4 Mineralization

The deposit contains chalcopyrite, pyrite, and bornite as primary sulphides associated with magnetite. Concentrate polished grain mounts reveals rare tetrahedrite, galena, sphalerite, and molybdenite. Secondary or supergene sulphides are also rare but include chalcocite, covellite, and digenite. Oxides include malachite, azurite, magnetite, hematite, and limonites likely goethite and minor jarosite. Chrysocolla is a relatively rare secondary copper mineral. Native gold is present as 5 to 30 micron inclusions in chalcopyrite. Ore mineralogy is hosted primarily in hydrothermal and intrusion breccias, with lesser amounts in plagioclase porphyry, monzonite, diorite, and volcanics.



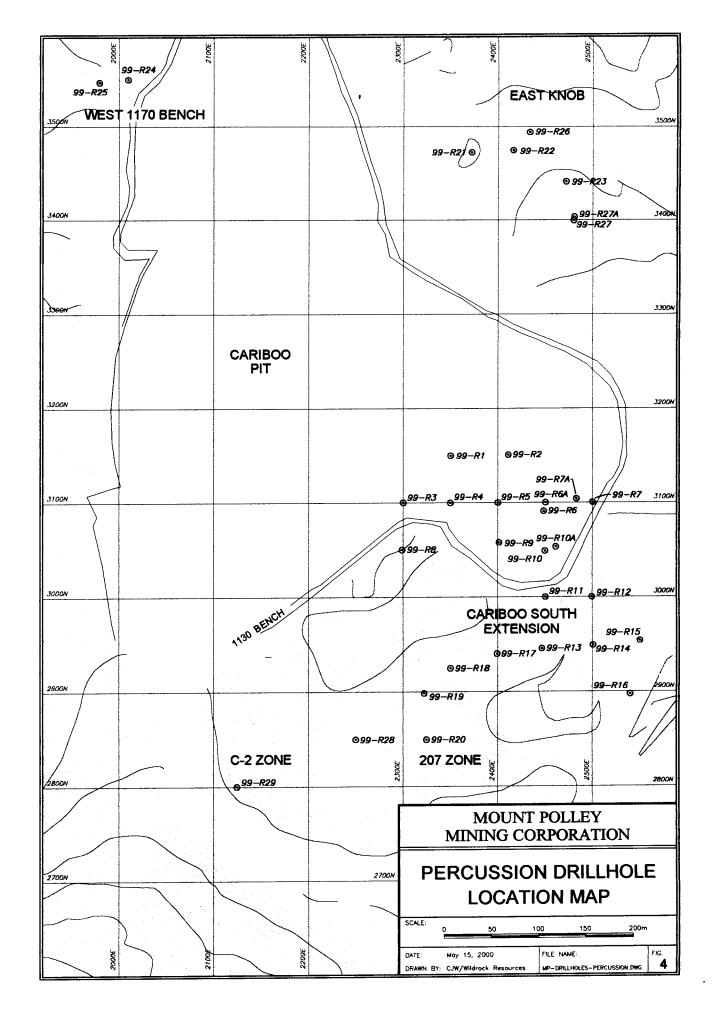
	POLLEY RPORATION	
SIMPI REGIONAL	LIFIED GEOLOG	Y
DATE: January 1998 DRAWN BY: CJW/rjw		FIG. 3

### 4.0 Percussion Drilling

A total of 33 percussion testholes totaling 1,385.5 metres were completed between March 2<sup>nd</sup> and April 22<sup>nd</sup>, 1999. Paramount Drilling was contracted to drill the holes using a Driltech D25K Hammer Drill on a nominal drill spacing of 50 metres. Most of the holes achieved their target depth of 45 metres – those that did not were redrilled nearby.

Hole	No.	Date	Northing	Easting	Elevation	Depth (m
99r	1	9,10-Mar	3,150.39	2,350.12	1,150.31	45.0
	2	10-Mar	3,151.24	2,410.98	1,155.03	45.(
	3	9-Mar	3,100.18	2,300.11	1,144.95	45.0
	4	9-Mar	3,099.87	2,349.86	1,148.92	45.0
	5	2-Mar	3,100.05	2,400.04	1,148.93	33.5
<u></u>	6	10-Mar	3,090.94	2,448.33	1,149.13	45.0
	6A	10-Mar	3,100.14	2,450.25	1,149.60	15.0
	7	13-Mar	3,100.26	2,500.13	1,149.57	6.0
	7A	18-Mar	3,104.14	2,482.97	1,149.06	45.0
	8	11-Mar	3,050.02	2,299.00	1,150.17	45.0
	9	11-Mar	3,057.76	2,401.13	1,146.62	45.0
	10	10,11-Mar	3,048.84	2,449.75	1,147.71	45.0
	10A	17-Mar	3,053.17	2,461.20	1,147.02	45.0
	11	13-Mar	3,000.10	2,450.28	1,148.09	45.0
	12	13-Mar	3,000.08	2,499.40	1,146.37	45.0
	13	15-Mar	2,945.91	2,446.51	1,148.47	45.0
<del></del>	14	16-Mar	2,949.32	2,500.57	1,146.63	45.0
	15	16-Mar	2,954.10	2,550.17	1,144.73	45.0
	16	16-Mar	2,897.42	2,539.88	1,143.51	45.0
	17	15-Mar	2,940.32	2,399.24	1,145.03	38.0
	18	13,15-Mar	2,925.06	2,350.13	1,142.17	45.0
	19	17-Mar	2,898.61	2,322.25	1,136.62	45.0
	20	17-Mar	2,849.53	2,324.71	1,138.35	45.0
	21	12-Mar	3,472.29	2,371.96	1,189.74	45.0
	22	12-Mar	3,474.60	2,415.83	1,181.56	45.(
	23	12,13-Mar	3,440.95	2,471.53	1,178.36	45.0
	24	19-Mar	3,549.79	2,009.53	1,169.43	45.(
	25	<b>19-Mar</b>	3,546.60	1,979.14	1,174.62	45.0
	26	2-Apr	3,493.98	2,433.20	1,185.95	45.0
	27	2-Apr	3,399.60	2,479.67	1,173.03	33.0
	27A	8-Apr	3,403.29	2,480.38	1,173.33	45.0
, <u>.</u>	28	22-Apr	2,849.82	2,249.98	1,140.25	45.0
	29	22-Apr	2,800.48	2,124.57	1,132.53	45.0
	33	holes				1,385.

# Table 2 1999 Percussion Testholes



### Mount Polley Mine - 1999 Assessment Report

A majority of the holes, 25 in total, were designed to test the South Extension of the East Cariboo Zone. Previous mapping and drilling data show a number of significant subparallel zones of hydrothermally brecciated and mineralized volcanics and intrusion breccia with an interpreted south-southeast trend. Zones range from strongly oxidized moderate-grade to unoxidized, high-grade copper and gold. Early trenching noted a continuous breccia body extending to the south and west from the East Cariboo Zone (Lee, 1970). These breccias could form a significant mineable resource within an expanded Cariboo Pit or in a separate satellite pit. Six holes were drilled to better define the East Knob Zone, immediately north of East Cariboo. Finally, two holes were completed on the west side of 1170 Bench to try to define the western limit of a small ore zone trending outside the original pit design (Figure 4).

Drill cuttings were collected for each 3-metre interval and submitted to the Mount Polley assay lab for analysis. Prior to sample preparation, geology staff collected a small split of each sample. The split was divided into a sieved or washed sample and an unsieved or unwashed sample and stored in chip storage trays for logging. Chip trays are stored on-site as a permanent record of the geology.

460 samples were collected and assayed on-site for total copper, non-sulphide copper, gold, and iron. Samples were dried, split to approximately 250 grams and dried again for 2 hours prior to pulverizing. Total copper and iron were determined with HNO<sub>3</sub>/HCl digestion with atomic absorption finish. Copper oxide was determined using a 2.5% cold  $H_2SO_4$  leach, shaken for 2 hours with atomic absorption finish. Gold was analyzed with a 20-gram Fire Assay and atomic absorption finish.

### 4.1 South Cariboo Extension

Drilling on the Cariboo South Extension was arranged on east-west sections beginning at 3150N within the current pit design in an area generally lacking drill data. A 50-metre grid was used to step testholes to the south to section 2850N (Figure 4). The presence of the High Grade Stockpile limited testing south 2950N. The area under the stockpile remains a prime target.

### 4.1.1 Section 3150N

Two holes, 99R-1 and 2 were drilled on section 3150N at 2350E and 2410E. Both holes were well mineralized to 36 metres depth where a transition from breccia to grey, weakly altered monzonite was noted. 99R-2 exhibits very strong grades, particularly copper, with abundant magnetite and low levels of oxidation. On the other hand, 99R-1 contains less magnetite, lower copper and gold grades, and significantly higher oxidation (see Table 1). Ore grades extend into the underlying monzonite. These holes correlate well with grades and geology in MP-91 and R-39, immediately to the north.

Table 3Section 3150N: Significant Intersections

Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
99R-1	0	18	18	0.210	0.126	59.8%	0.258
and	24	36	12	0.263	0.097	36.9%	0.333
99R-2	0	36	36	0.928	0.062	6.7%	0.623
incl	6	18	12	1.548	0.056	3.6%	0.922

### 4.1.2 Section 3100N

A fence of 7 testholes, including 2 redrills, were drilled on section 3100N, from 2300E to 2500E. The hole furthest west, 99R-3, encountered monzonite with weak hydrothermal brecciation throughout. Low copper and gold values are present. Fifty metres east, in 99R-4, breccia predominates with close to oregrade copper, high gold, and strong oxidation. Another 50 metres east, in 99R-5, copper grades are higher and oxidation much lower, also in breccia. Continuing east, 99R-6 also encountered mainly breccia, changing to porphyritic monzonite at 27m. Grades are lower than in 4 and 5, but oxidation is very low. Interestingly, 99R-6A, only 10 metres north of R-6, intersected very high grades, up to 3.39% copper and 2.39 gpt Au over 3 metres at the top of the hole. Unfortunately, the hole was stopped due to a lack of return at 15 metres. Both R-5 and R-6A encountered high magnetite coincident with very high grades. Forty metres further east, in 99R-7A, grades have dropped significantly, hosted in monzonite porphyry with lesser breccia and minor grey-green volcanics

Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
99R-4	3	27	24	0.251	0.183	71.7%	0.521
99R-5	3	18	15	0.561	0.186	30.7%	0.536
99R-6	15	27	12	0.390	0.043	17.2%	0.385
99R-6A	0	12	12	1.617	0.773	60.3%	0.930
99R-7A	27	33	6	0.218	0.054	24.8%	0.215

Section 3100N: Significant Intersections

### 4.1.3 Section 3050N

Table 4

A fence of 4 testholes, including one redrill, was completed on section 3050N to complement previous diamond drillholes, R-018, 97-6, and 97-8 (Figure 5). As on section 3100N, the hole at 2300E, 99R-8, encountered low grades in weakly altered monzonite. Stepping 50 metres east, 97-8 encountered more breccia with spotty grades over the top 96.6 metres before entering higher grades over the bottom 30 metres. Another 50 metres east, 99R-9 went through 12 metres of low grades in monzonite before encountering breccia and volcanics hosting ore-grade mineralization and low oxidation in the rest of the hole. R-018, drilled as a well hole in 1982, also encountered relatively high grades and high oxide in volcanics over the top 38 metres. Volcanics give way to a mix of breccia and monzonite with breccia and copper and gold grades decreasing somewhat with depth. 99R-10, 50 metres east of R-9 and 25 metres east of R-82-18, was terminated at 18 metres after return was lost. The hole did intersect some moderate grades over 9 metres in breccia before entering monzonite at 12 metres. Another hole, 99R-10A was

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collared 12 metres further east and intersected some very high grades in breccia between 15 and 21 metres, corresponding to a zone of high magnetite (Fe > 14%). Oxide ratios here are very low. 97-6 is approximately 37 metres east of R-10A and intersects breccia, volcanics, and minor monzonite. Grades are low and the Au/Cu ratio is significantly lower than the deposit average. Volcanics interlayered with breccia are a common feature of the east side of the orebody.

May 15, 2000

Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
97-8	96.6	125.0	28.4	0.255	0.050	19.7%	0.570
99R-9	12	45	33	0.400	0.033	11.2%	0.294
R-82-18	3.0	51.8	48.8	0.271	0.125	46.2%	0.334
99R-10	3	12	9	0.334	0.101	29.8%	0.233
99R-10A	12	27	15	0.970	0.014	1.7%	0.528
97-6	38.1	65.1	27.0	0.198	0.025	12.6%	0.169

Table 5	
Section 3050N:	Significant Intersections

### 4.1.4 Section 3000 N

Table 6

Two testholes were drilled to fill-in previous drilling on the section. An old (1966) diamond drillhole, S-037, was drilled around 2313E and returned low copper grades hosted in weakly altered, fine-grained to weakly porphyritic monzonite, very similar to 99R-3 and R-8 on sections 3100N and 3050N, respectively. Ddh's 97-10 and 9 were drilled from the same set-up, 10 to the west and 9 to the east, both at  $-60^{\circ}$  dip. At least two mineralized intervals are apparent, a low-grade section near the top of 97-10 and a short but high-grade zone deeper. Most of the hole is logged as breccia. In contrast, 97-9 encountered mainly porphyritic monzonite and no definable zones of mineralization. Two mineralized zones are then encountered in S-038 that correlate well with those in 97-10, including an 82.3m interval running 0.259% copper and 0.398 gpt gold. This lower interval is likely low-oxide. Most of S-038 was logged as hydrothermal breccia. Due to incomplete and unreliable gold assays from these early holes, gold values are estimated by calculating the average gold/copper ratio for the area and multiplying the ratio by the copper assays. 99R-11 was collared less than 20 metres east of S-038 and encountered breccia with minor volcanics. Grades are low with considerable oxidation. Another 35 metres to the east, 95-16 hit monzonite with minor volcanics over the top two-thirds of the hole, giving way to volcanics over the bottom third. Grades were very low throughout. Finally, 99R-12 tested another 20 metres to the east, encountering weak to moderate grades and oxide ratio in breccia and volcanics over a 21-metre interval.

Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
97-10	6.1	15.1	9.0	0.220	0.174	79.8%	0.229
and	59.2	66.1	6.9	0.480	0.088	18.3%	0.775
97-9	24.7	30.7	6.0	0.170	0.017	9.6%	0.192
S-038	24.4	48.8	24.4	0.254			0.260
and	88.4	170.7	82.3	0.259			0.398

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99R-11	0	27	27	0.248	0.151	62.9%	0.248
95-16	65.5	73.1	7.6	0.278			0.158
99-R12	12	33	21	0.208	0.077	34.9%	0.289

### 4.1.5 Section 2950 N

A fence of 5 testholes was completed on a section between 2925 – 2950N, immediately north of the current High Grade Stockpile. Two previous holes, R-86-40 and MP-212, are on section 2950N, with strong gold grades at or near the top of both (see Table 7). 99R-18 is located approximately 33 metres southeast of R-86-40 in apparent pink breccia and monzonite. The top 30.5 metres (100 feet) of R-86-40 are logged as syenite and pink intrusion breccia. While gold grades are strong, averaging 0.432 gpt, copper remains weak and is likely strongly oxidized. Gold remains elevated between 41.1 – 53.3 metres, before stronger mineralization is encountered between 68.6 – 74.7 metres (see Table 7). Breccia dominates to 105 metres depth where diorite becomes common. Fourteen metres east, 99R-18 also encountered high gold grades and weak, oxidized copper at the top. Faults, which result in low chip return, were hit in 2 places. A further 50 metres east, 99R-17 hit weakly altered breccia and low grades. MP-212, another 30 metres east, was also in breccia with high-grades extending from surface to 45.7 metres. Oxidation decreases abruptly between 12 - 13 metres depth. Stepping 20 metres east to 99R-13, breccia remains dominant but grades are sub-ore. Fifty metres east, at 2500E, breccia is limited to a 9-metre interval in 99R-14, surrounded by weakly mineralized plagioclase porphyry. Finally, in 99R-15 at 2550E, weak to moderately altered plagioclase porphyry dominates. Grades are very low.

Hole	From	Το	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
R-86-40	1.5	30.5	29.0	0.173	-	-	0.432
incl	1.5	9.1	7.6	0.226		-	0.728
and	68.6	74.7	6.1	0.508		-	0,681
99R-18	0	27	27	0.183	0.140	77.1%	0.621
99R-17	3	6	3	0.203	0.175	86.2%	0.380
and	33	38	5	0.158	0.031	19.4%	0.205
MP-212	3.1	45.7	42.6	0.337	0.050	23.3%	0.504
99R-13	6	12	6	0.238	0.151	65.3%	0.255
99R-14	3	12	9	0.350	0.031	9.5%	0.703

### Section 2950N: Significant Intersections

### 4.1.6 Section 2900 N

Table 7

In contrast to grades on sections 2950N and 2850N, grades on section 2900N are very weak. The top of 97-12 and all of 99R-19 are dominated by virtually unmineralized plagioclase porphyry. Further downhole, 99-12 encounters breccia hosting only weak mineralization. 95-13 was drilled at -45 to the east and is dominated by intermittent plagioclase porphyry and breccia. Toward the bottom of the hole, lithic tuff occurs with breccia. 99R-16 was drilled east of the High Grade Stockpile, 50 metres south of

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99R-15, in porphyritic monzonite. In contrast to R-15, R-16 hit two mineralized intervals with the best assay at 0.416% Cu and 0.86 gpt Au. The closest diamond drillhole, 97-11, approximately 100 metres west-northwest of R-16 intersected mainly breccia and plagioclase porphyry with increasing volcanics to depth. Most of the hole is weakly to moderately mineralized with grades clearly sub-ore. This hole is very similar to 95-13.

Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
97-12	38.1	48.1	10.0	0.128	0.029	19.7%	0.211
99R-19	0	45	45	Dead -			
95-13	65.5	77.7	12.2	0.145			0.309
99R-16	6	24	18	0.236	0.064	33.6%	0.462
and	33	45	12	0.174	0.033	19.2%	0.273

# Table 8 Section 2900N: Significant Intersections

### 4.1.7 Section 2850 N

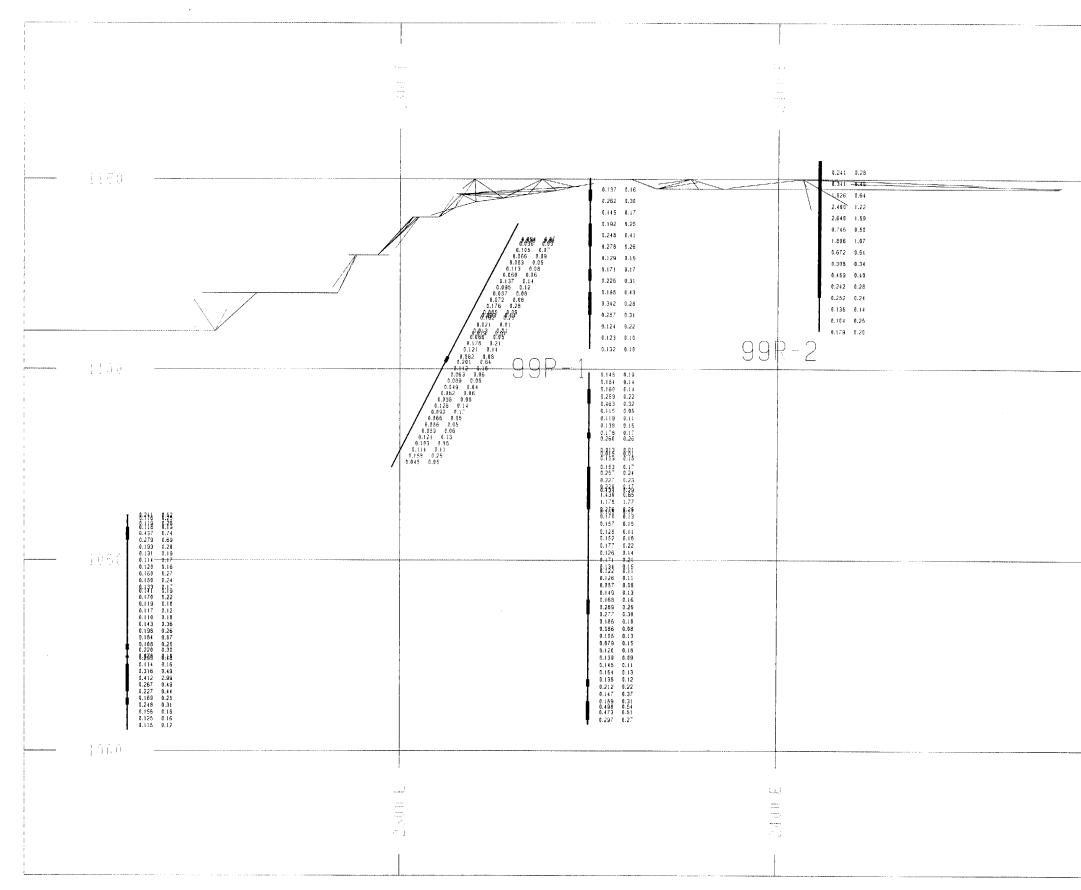
High-grade mineralization is present in several holes on this section in a number of intervals. High-grade is found at a depth of 59.4 metres in the easternmost hole, MP-207, and at 21 metres in testhole 99R-20, 32 metres west. Four high-grade intervals are found in R-86-22, another 42 metres west. Mineralization is mainly hosted in breccia and strongly altered plagioclase porphyry (monzonite) with grades running up to 1.16% Cu and 4.78 gpt Au over 1.5 metres in MP-207 and 0.682% Cu and 1.94 gpt Au over 1.5 metres in R-86-22. The grade at the bottom of 99R-20 is 0.384% Cu and 0.70 gpt Au over 3.0 metres. Breccia and monzonite to the east give way to more dioritic phases to the west with decreasing brecciation and alteration largely restricted to breccias. Grades in 99R-28 are spotty. Continuing west, section 2800N and 2125 E (approximately 125 metres west of 99R-28), mineralized breccia is seen throughout most of 99R-29. Grades are spotty over the top 30 metres, and oxidation is very strong to 39 metres. Over the bottom 6 metres oxidation decreases sharply and gold grades increase to 0.67 gpt Au.

Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
99R-291	39	45	6	0.222	0.085	40.6%	0.670
99R-28	0	3	3	0.176	0.114	38.3%	0.220
R-86-22	0	9.1	9.1	0.169			0.365
And	32.0	51.8	19.2	0.280			0.652
And	70.1	85.3	15.2	0.303			0.779
And	94.5	121.9	27.4	0.159			0.396
99R-20	21	45	24	0.240	0.044	17.8%	0.503
MP-207	59.4	79.3	19.9	0.530	0.095	25.0%	1.792
And	93.0	103.6	10.6	0.285	0.002	0.9%	0.584

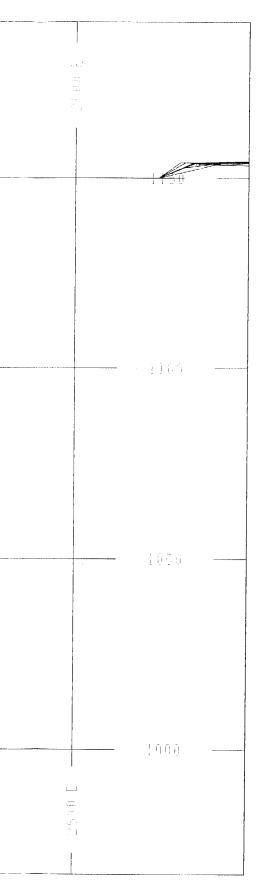
Section 2850N: Significant Intersections

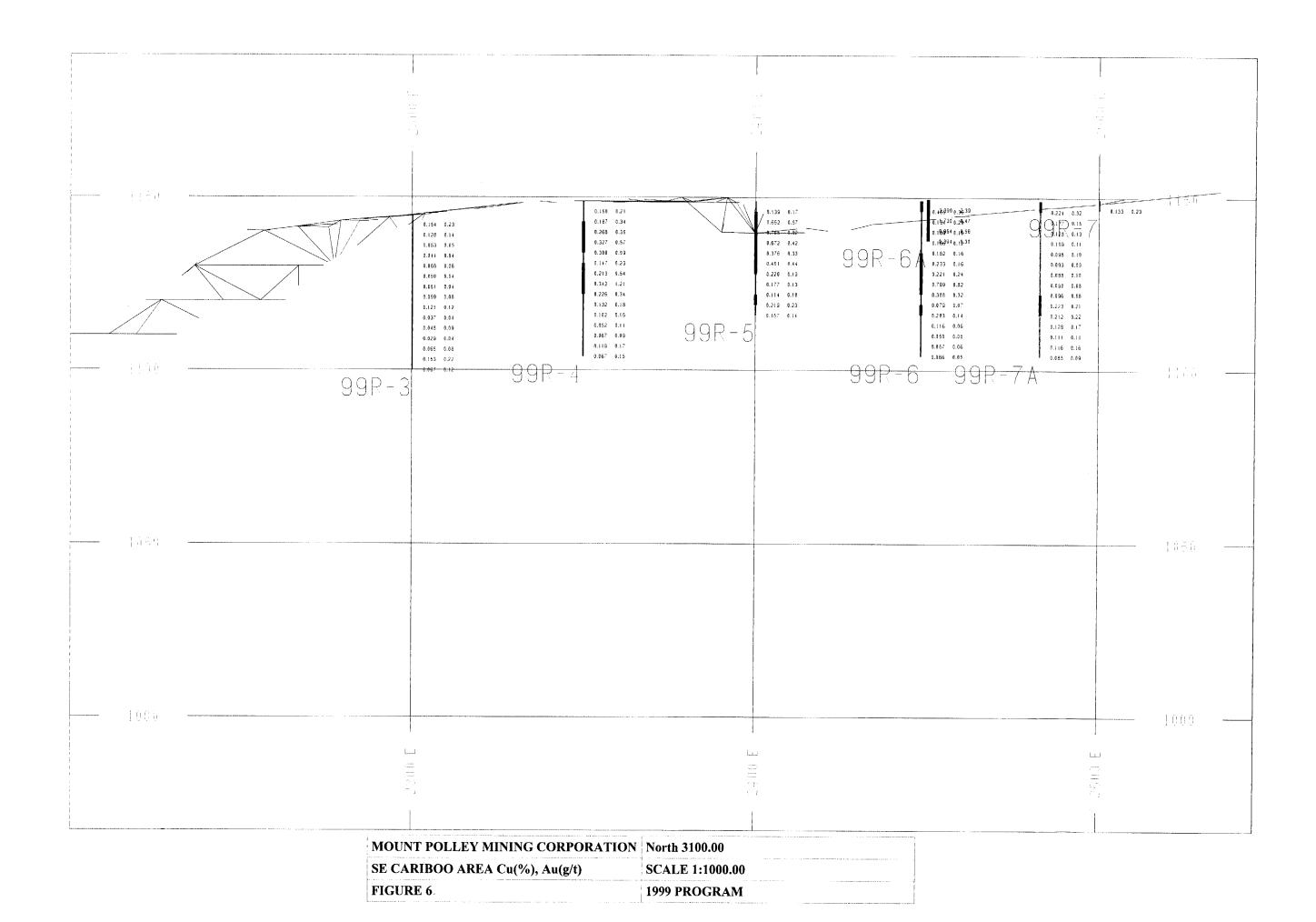
1 Section 2800N

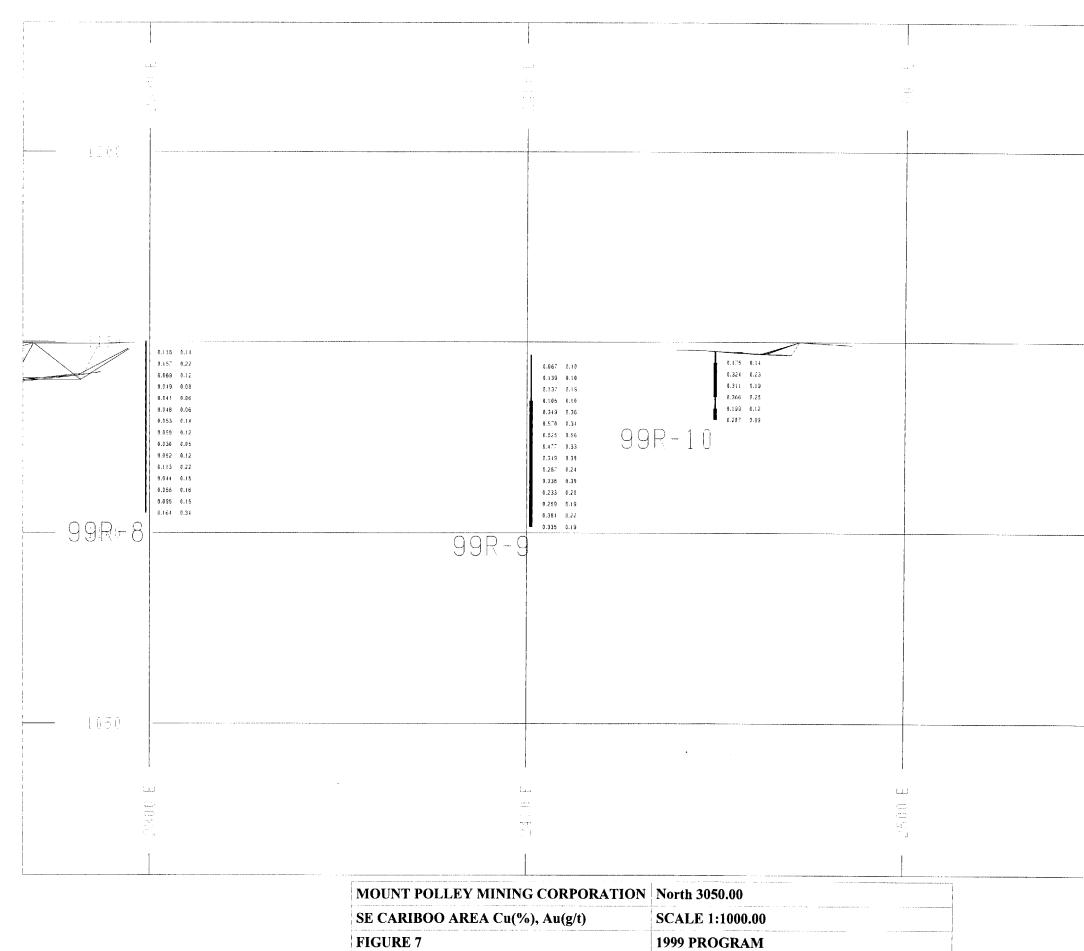
Table 9



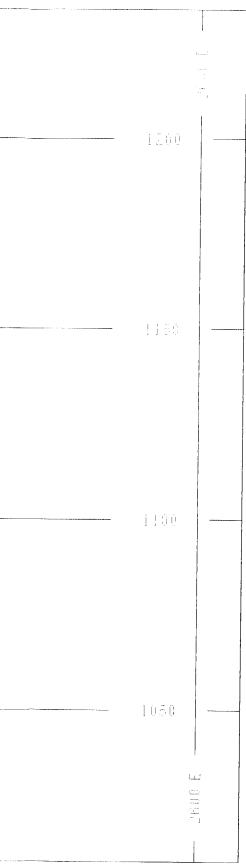
MOUNT POLLEY MINING CORPORATION	
SE CARIBOO AREA Cu(%), Au(g/t)	SCALE 1:1000.00
FIGURE 5	1999 PROGRAM



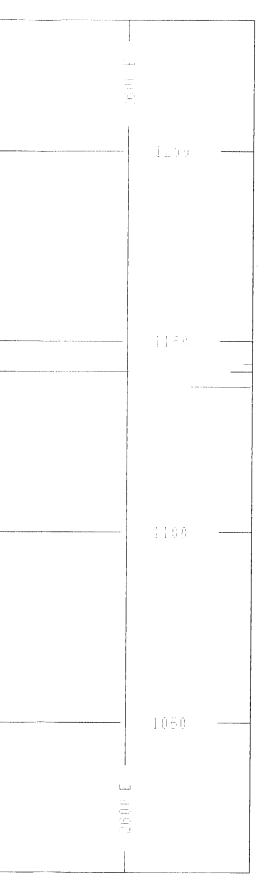




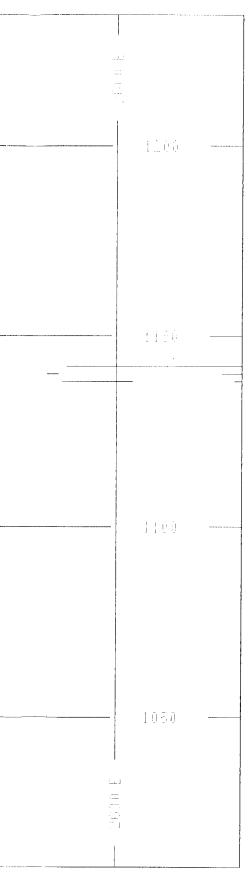
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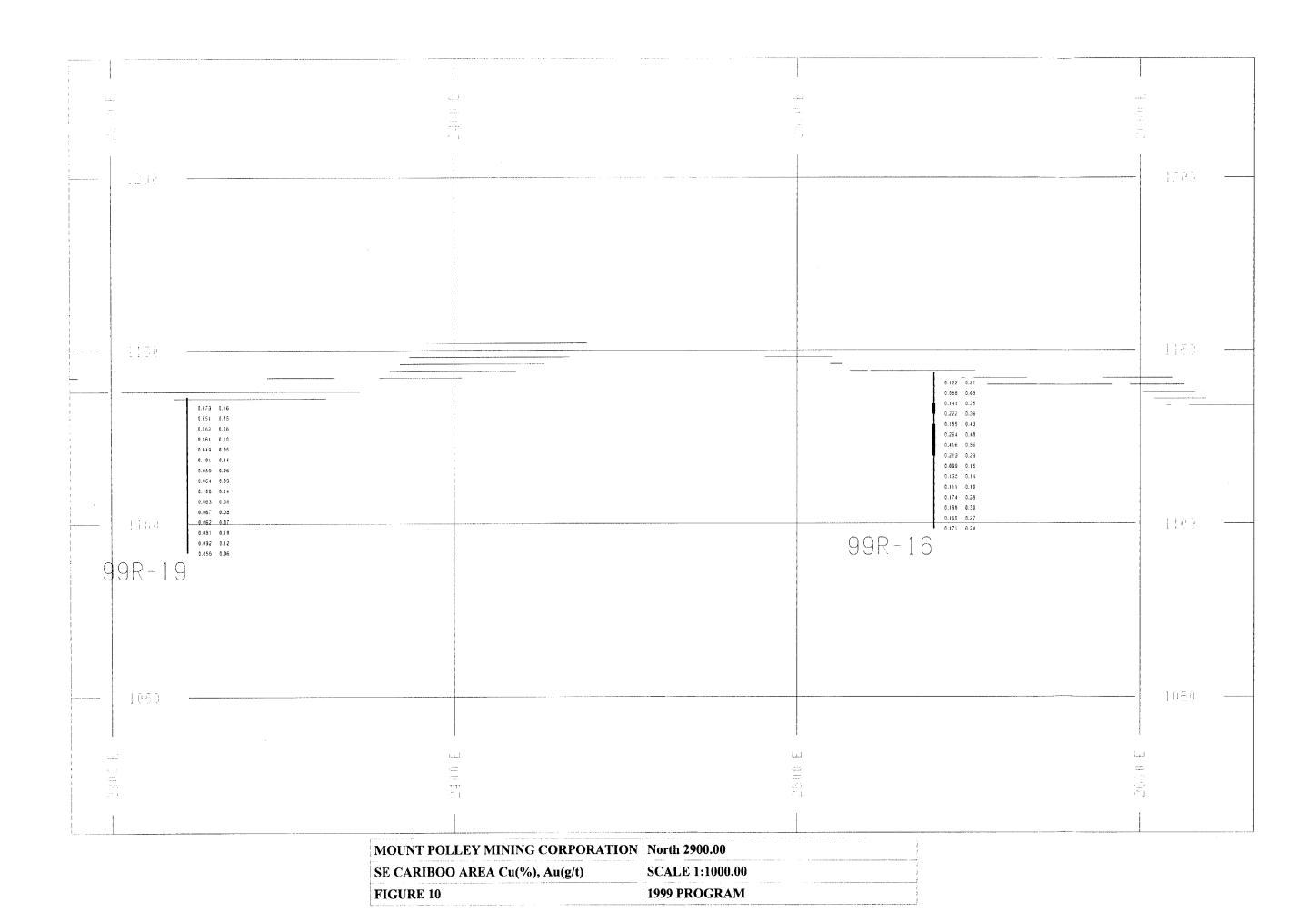


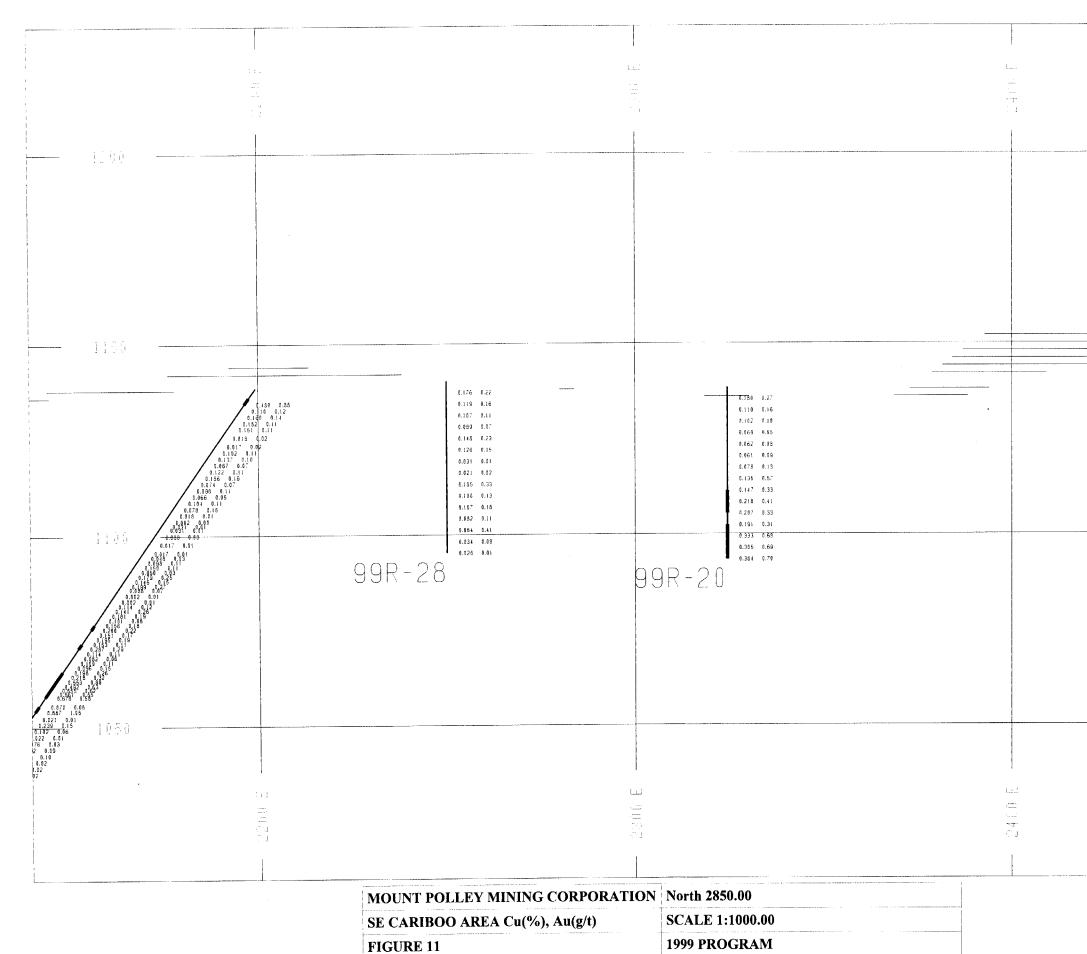
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		0.067 0.01 0.144 0.11 0.125 0.09 0.171 0.16	0.662 0.66 0.990 0.11 0.995 0.14 0.166 0.15
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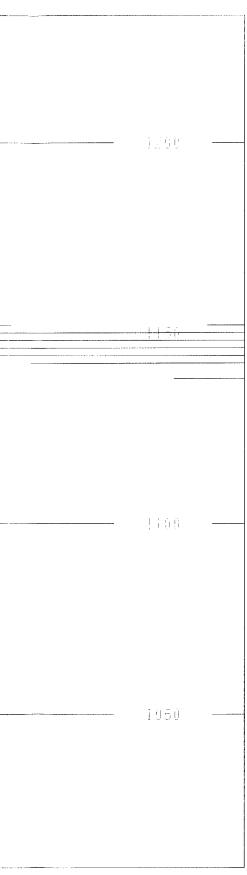


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2 2 2		99R-17	0,154 0.19 0.161 0.22		0.030 0.11 0.099 0.10 0.102 0.13		0.121 0.21 0.129 0.36 0.092 0.15	0.027 0.02 0.053 0.04 0.056 0.04
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### 4.2 East Knob (Cariboo East)

### 4.2.1 North Section

Mineralization is common but spotty north of the East Cariboo and east of the North Cariboo. Testholes drilled in 1997 showed potential for economic grades in the East Knob between 3350N and 3500N. Three 45-metre testholes were completed around 3475N and show a relatively weak mineralized zone up to 75 metres wide, hosted in breccia and monzonite. Weathering on top of the knob (99R-21) oxidized copper sulphides to a depth of around 15 metres. Oxidation is less evident in 99R-22 but with low copper grades and elevated gold grades. 99R-26, drilled 26 metres northeast of 22, encountered little mineralization in very weakly altered diorite and monzonite.

Table 10	
East Knob North	h: Significant Intersections

Hole	From	To	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
99R-21	0	18	18	0,167	0.099	63,9%	0.342
and	18	- 30	12	0.139	0.005	4,3%	0.205
and	30	45	15	0.261	0.006	2.3%	0.380
99R-22	9	27	18	0.142	0.006	4.0%	0.447
99R-26	0	45	45	Dead -	=		

### 4.2.2 East Section

Three testholes, including a redrill, were completed along the eastern margin of the mineralized zone to determine the eastern extent of the zone and the nature of that contact. 99R-23 hit weakly altered porphyritic monzonite and possible breccia. Grades were very low indeed. Both 99R-27 and 27A hit a mineralized zone, near surface and weakly oxidized, in breccia.

Table 11	
East Knob East:	Significant Intersections

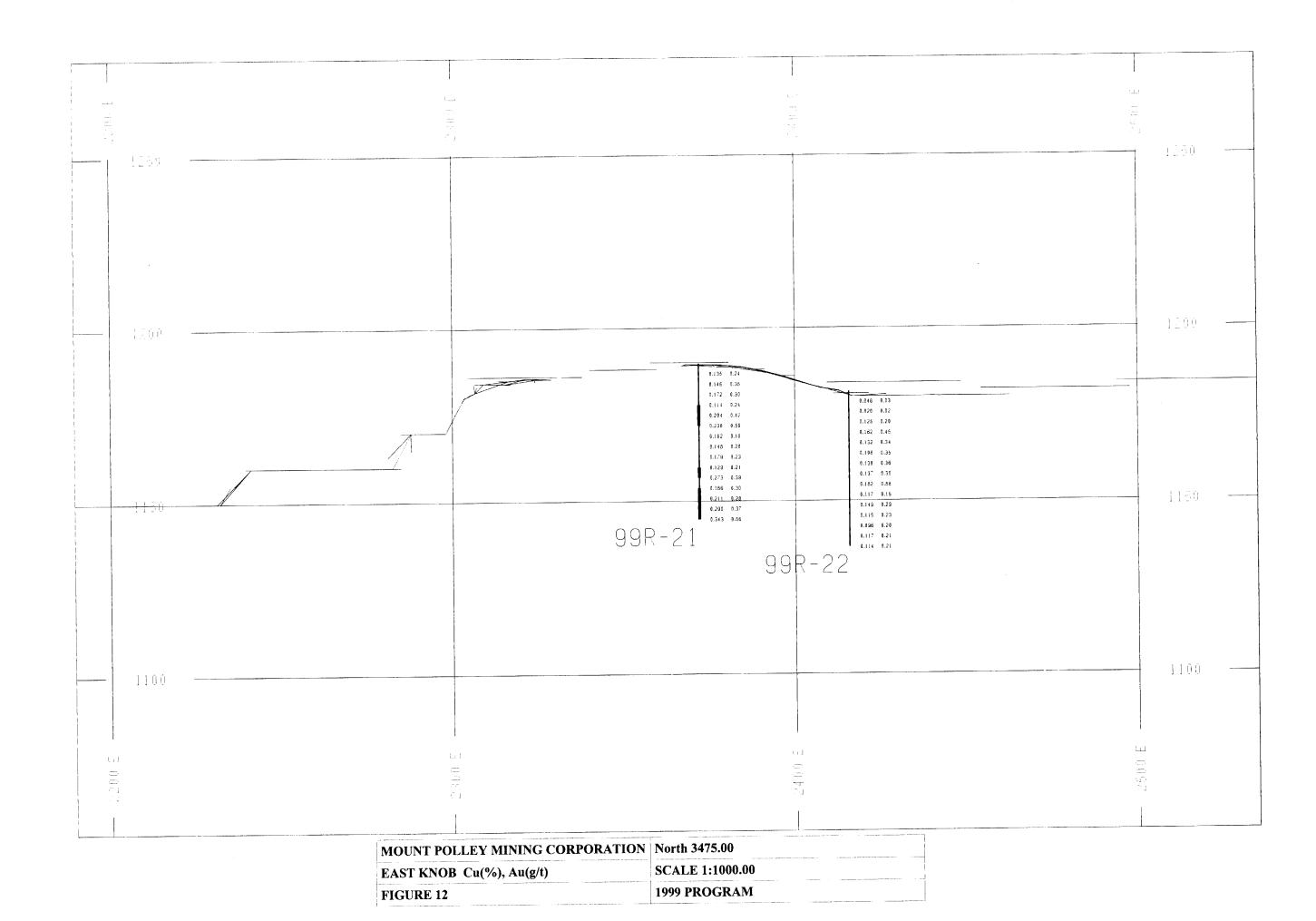
Hole	From	To	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
99R-23	0	45	45	Dead -			•
99R-27	6	21	15	0.227	0.010	4.7%	0.304
99R-27A	3	12	9	0.221	0.012	6.2%	0.300

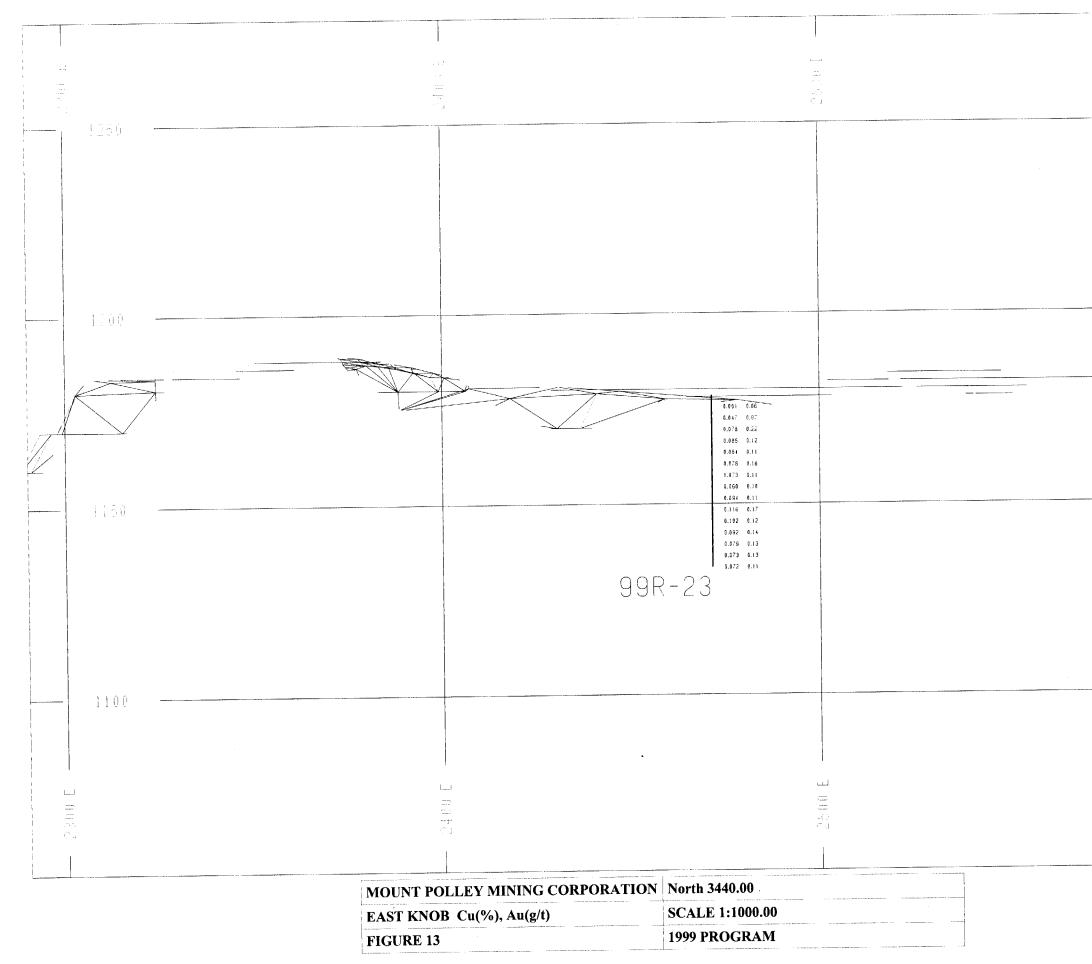
### 4.3 West 1170 Bench

Two 45-metre testholes were completed on the west side of 1170 Bench, at approximately 3550N, in an attempt to define the western ore boundary for the next several benches. A series of 5 26-metre testholes had been drilled south to north and had defined limits in those directions. 99R-24 was drilled at 2010 E within the high-grade zone defined in the shorter holes. However, neither R-24 nor R-25, 30 metres further west, encountered significant mineralization, although gold grades were clearly anomatous. However, assuming that the intersections are the same zone, the dip on that mineralization is only 28°. Production blastholes and the shorter testholes do not support that interpretation.

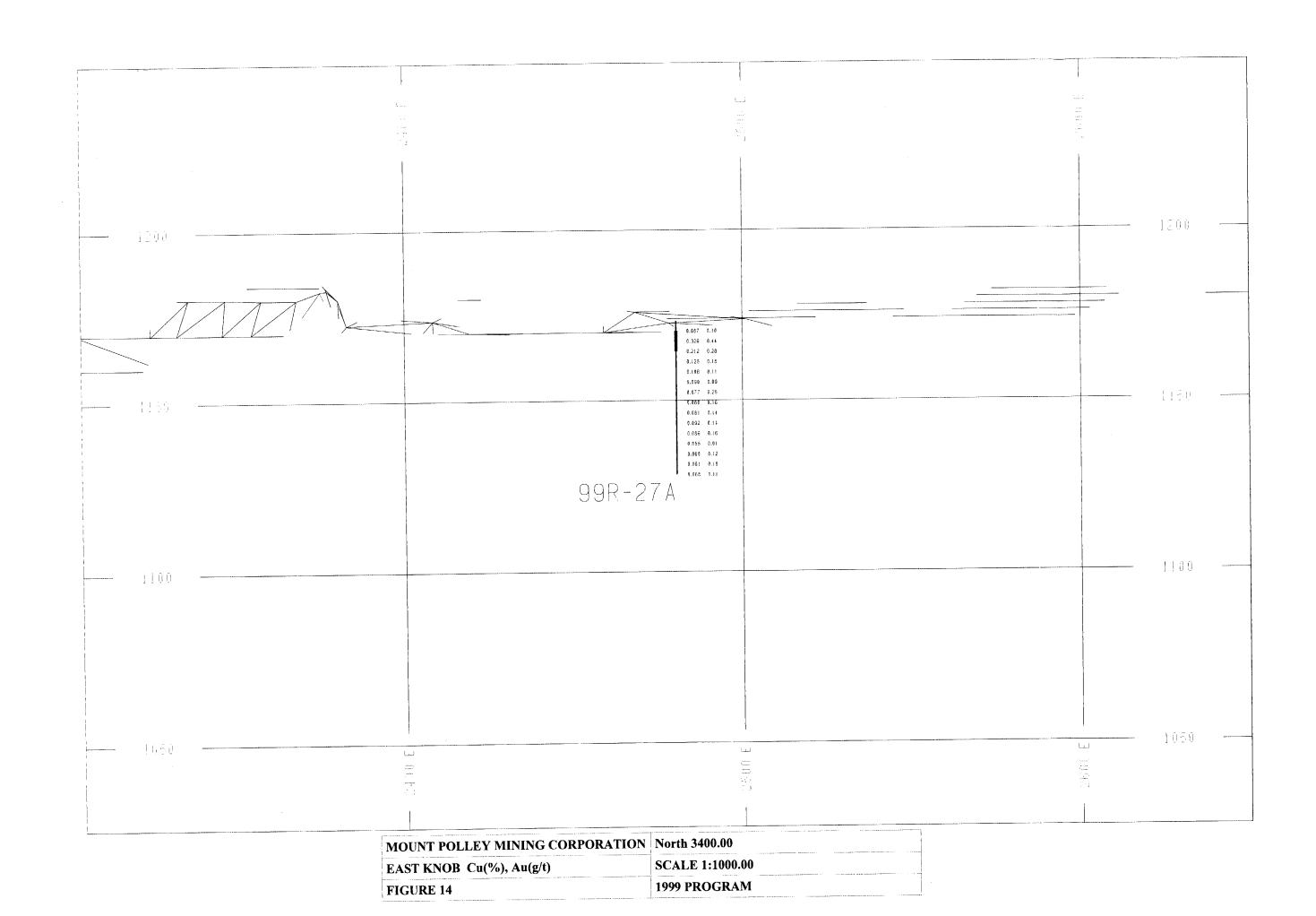
Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (ppb)
99R-24	18	24	6	0.193	0.039	20.8%	0.305
99R-25	3	12	9	0.129	0.085	65.8%	0.283

# Table 12West 1170 Bench: Significant Intersections





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# 5.0 Core Relogging and Geological Mapping

Geological mapping and relogging of old diamond drillcore was completed for the Bell Pit area and most of the South Cariboo. Mapping looked at pit walls, blast material in Bell Pit, and outcrops. A total of 30 core holes from the Bell Pit area, drilled in 1982, 1988-89, and 1996, were relogged during the spring and summer (Figure 18). In the South Cariboo, 11 old core holes from 1988-89 and four 1999 percussion holes were relogged in the fall (Figure 27). In relogging, emphasis was placed on identifying alteration type and scoring the intensity to compare with copper and gold grade distribution.

#### 5.1 Bell Pit

The Bell orebody lies immediately north of the Cariboo Pit along a continuous north-trending zone of breccia-hosted mineralization. Geological mapping concentrated on distribution of rock units and alteration types and intensities, lithologic contacts, and faults (Figure 16, in pocket). Control was achieved with compass and chain and surveying of roads and stations. The top of the ridge, above 1210 metres elevation, had been drilled and blasted prior to mapping, improving the degree of exposure.

Mineralized breccia is limited to the west by a sharp diorite contact that trends north down a prominent ridge. The contact, steeply east-dipping and weakly sheared, is visible in the top few north bench faces of the Cariboo Pit and is clearly defined by the breccia and diorite outcrops to around 4100N. Lack of exposure limits geological interpretation north of 4100N. The contact is displaced in a right-lateral sense along two northwest trending faults and may be displaced in a left lateral sense along a northeast-trending fault. Diorite is generally medium-grey, medium-grained, with well-developed salt and pepper texture. It tends to be blocky to massive in outcrop with only weak chloritic (propylitic) alteration and little to no copper mineralization. Pyrite is minor (<<1%).

On the east side, mineralization appears to be limited in part by a broad, steeply east-dipping, fracturefault zone - the northern extension of the Cariboo Pit Fault. Breccia exposed east of the fault is weakly to moderately potassically-altered and weakly mineralized. The fault consists of a number of narrow gouge zones between wide stretches of highly fractured breccia. Maximum width is in the order of 50 metres. The zone appears to weaken to the north, possibly terminating against a northeast-trending fault.

A block of dark green, fine-grained, massive to weakly porphyritic volcanic rock sits fault-bounded in the centre of the proposed Bell Pit. While this block is easily outlined on surface, it is not clearly limited by diamond drilling and does not appear to depth. Copper-gold mineralization is present in volcanics but is generally weak and sporadic. Similar volcanic breccias at the south end of the Cariboo Pit can host very high grades with local supergene enrichment.

Two series of post-mineralization dykes cut the breccia. The most important from a waste standpoint are unmineralized grey coarse-grained plagioclase porphyry dykes (PPg). Occasionally, these dykes exhibit weak potassic alteration with somewhat anomalous copper grades. PPg dykes range in thickness from less than 1 metre to over 50 metres, averaging 10-15 metres, and strike northwest, dipping moderately to the northeast. PPg dykes are much more common in the Bell Pit area than in the Cariboo Pit. The other common dykes are late, unmineralized, dark green, fine to medium-grained augite porphyry and lamprophyre dykes. These dykes range up to 3-4 metres thick and trend to the north, dipping moderately to the east. Frequency of mafic and ultramafic dykes appears to decrease to the north.

The character and intensity of hydrothermal brecciation and alteration associated with mineralizing events was mapped in outcrop and diamond drillcore. Alteration mineralogy consists of potassium feldspar (orthoclase), magnetite, and actinolite (likely including diopside, hedenbergite, and minor biotite). Chlorite, epidote, calcite, and pyrite constitute the propylitic assemblage that often forms proximal to the potassic assemblage, sometimes with a retrograde overlap. Intensity was scored on a relative scale for each of potassium feldspar, magnetite and actinolite out of 5, with the score for each added for a total out of 15. Total alteration score contours of 7 and 10 indicate zones of moderate and strong potassic alteration, which correlate quite well with moderate (low-grade) and strong (high-grade) copper and gold grades (Figure 16).

Two areas of strong alteration, defined as greater than 10 in the alteration-scoring scheme, are outlined within the Bell Pit. The largest lies between 3900N and 4050N adjacent to the diorite contact. This zone shows up clearly in drill sections with locally very high copper and gold grades associated with strong alteration scored in relogs. A second poorly defined zone lies between 4025N and 4180N, approximately 100 metres east of the diorite contact. Moderate alteration, defined as greater than 7 on the alteration scoring scheme, lies within a contour enclosing both high alteration zones, not including the volcanic block and generally confined by the Cariboo Pit fault to the east and the diorite contact to the west. Also, the divide between the Cariboo and Bell Pits scores below 7 reflecting lower grades in that area.

## 5.2 South Cariboo Extension (C-2 Zone)

The discovery of the C-2 and 207 Zones south of the Cariboo Pit prompted detailed geological mapping and core relogging in the area. Geological mapping concentrated on distribution of rock units and alteration types and intensities, lithologic contacts, and faults (Figure 17, in pocket). Alteration, lithologic units and structural tenor are all the same as in the Bell Pit area. Control was achieved with compass and chain from surveyed field points such as drill collars, stretching from the southwest wall of the Cariboo Pit to the 1140 Haulroad. Exposure to the east is limited by a soil stockpile and high-grade

stockpile.

Approximately 100 metres of the southwest walls on 1120 and 1130 Benches were mapped in detail to provide a link between the Cariboo orebody and the C-2 Zone. Both faces display a steep contact between PPg and moderately altered breccia, but the contacts do not line up, indicating left-lateral displacement of 35 metres along a fault that must trend to the northeast along the 1120 Bench. Three narrow lamprophyre and one augite porphyry dyke, all trending north, are continuous across this fault.

The PPg-breccia contact was mapped to approximately 50 metres south of the wall before disappearing under till cover. Immediately south, the same contact is mapped 45 metres to the east indicating a leftlateral displacement along another inferred northeast-trending fault. Several outcrops of moderatelyaltered breccia and pink plagioclase porphyry lie east of the contact and represent a largely untested target, possibly a fault displaced portion of the C-2 Zone. The contact runs south to a large northwesttrending fault, dubbed the C-2 Fault, clearly marked by topography and confirmed (with a moderate to steep southwest-dip) in testhole drilling. Thus, the area north of the C-2 Fault and east of the Polley Fault is dominated by PPg.

South of the C-2 Fault, the geology is dominated by a prominent knob of moderately-altered and weakly mineralized breccia consisting mainly of plagioclase porphyry, cut by occasional augite porphyry and PPg dykes. The strongly altered and well-mineralized C-2 Zone is projected to come to surface immediately east of the Polley Fault, under the current 1140 Haulroad. The PPg block that dominated north of the C-2 Fault, has likely been displaced to the west in a right-lateral sense, and has been caught up in the Polley Fault zone. To the immediate east, PPg becomes dominant, likely separating the C-2 Zone from the 207 Zone likely comes to surface 50 metres east of the knob.

# 6.0 Diamond Drilling

18 diamond drillholes totaling 4,067.3 metres (13,344 feet) were completed in three separate zones in and adjacent to the Cariboo and Bell Pits. F. Boisvenu Drilling of Delta, B.C. was contracted to drill NQ2 (thin-wall NQ) core using a BBS 56 diamond drill. The program ran from August 24<sup>th</sup> to September 27<sup>th</sup> and November 29<sup>th</sup> to December 9<sup>th</sup>, 1999.

All core from the 1999 program was split with a rock saw with half the core retained as a permanent record. Sample lengths varies from 0.5 - 3.0 metres, depending on geology. A total of 2,314 samples were collected and assayed on-site for total copper, non-sulphide copper, gold, and iron. Samples were crushed, dried, split to approximately 250 grams and dried again for 2 hours prior to pulverizing. Total copper and iron were determined with HNO<sub>3</sub>/HCI digestion with atomic absorption finish. Copper oxide was determined using a 2.5% cold H<sub>2</sub>SO<sub>4</sub> leach, shaken for 2 hours with atomic absorption finish. Gold was analyzed with a 20-gram Fire Assay and atomic absorption finish.

#### 6.1 Bell Pit

Table 13

A total of 1,946.5 metres (6,386 feet) in 8 holes were drilled along the east and north sides of the Bell orebody, testing the higher grade sections at depth. All 8 holes were drilled at moderate angles to the west to best cut interpreted ore zones and major structures. In general, grades were weak and discontinuous along the east and north margins of the deposit, thus limiting the extent of possible oregrade mineralization. Detailed logging of alteration clearly shows that alteration intensity drops below a level recognized with ore-grade mineralization outside a central core adjacent to the western diorite contact.

Hole No	Collared	Finished	Northing	Easting	Elevation (m)	Length (m)	Dip	Azimuth
99 <b>8</b> -1	06-Sep-99	10-Sep-99	3890.75	2281.95	1190.326	323.70	-65	270
99B-2	10-Sep-99	12-Sep-99	3960.59	2227.43	1175.261	257.86	-60	270
998-3	12-Sep-99	15-Sep-99	4050.21	2216.09	1164.200	257.86	-50	272 10
998-4	31-Aug-99	03-Sep-99	4099.07	2149.07	1158.140	309.98	-60	270
998-5	29-Aug-99	31-Aug-99	4150.48	2208.65	1153.490	245.97	-67	270
99 <b>B</b> -6	15-Sep-99	17-Sep-99	4124.88	2054.36	1162.710	194.16	-55	270
99 <b>B</b> -7	26-Aug-99	29-Aug-99	4200.08	2146.79	1148.472	258.17	-60	270
998-8	24-Aug-99	26-Aug-99	4250.65	2107.08	1142.803	98.76	-60	270

# 1999 Diamond Drillholes - Bell Pit Area

# 6.1.1 East Side: 99B-1, 99B-2, 99B-3

Three holes were collared on the east side of the Cariboo Pit Fault, east of the main part of the Bell deposit, to test the extension of the central high grade zone to the east and to depth. All three holes

encountered very similar geology over the 160-metre strike length tested. Generally, the top 50 metres consists of highly fractured, weakly gougy, faulted breccia. Within the fault, the breccia is moderately to weakly-altered resulting in a mottled pink and green with porphyritic texture. In 99B-1 and 99B-2, alteration scoring achieved between 4 - 7, with very low copper and gold grades. In contrast, 99B-3 contained sections of bright orange to pink breccia through the fault that scored 10 with a short 6m ore-grade interval. Below the faults, moderately altered breccia is cut by PPg dykes, narrow AP and andesitic dykes. In general, alteration intensity increases downhole with a corresponding increase in copper and gold grades (see Table 14). None of the holes intersected the diorite contact as anticipated, suggesting that the contact is steeper than indicated in earlier drilling or that it has been displaced further west at depth.

Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (gpt)
99B-1	117.2	123.8	6.6	0.228	0.026	11.9%	0.224
	208.2	224.7	16.5	0.238	0.006	2.7%	0.137
	241.7	311.8	70.1	0.188	0.006	3.2%	0.426
incl	243.3	289.3	46.0	0.195	0.007	3.4%	0.533
and	304.3	311.8	7.5	0.214	0.005	2.0%	0.280
99B-2	40.9	44.9	4.0	0.243	0.008	3.3%	0.255
	48.9	52.9	4.0	0.272	0.012	4.1%	0.200
	109.4	228.7	119.3	0.235	0.014	6.6%	0,178
incl	109.4	125.5	16.1	0.292	0.013	4.8%	D.193
and	133.4	138.1	4.7	0.282	0.009	3.1%	0.288
and	144.1	149.4	5.3	0.251	0.013	5.0%	0,181
and	158.3	198.4	40.1	0.294	0.020	7.3%	0.186
and	210.9	228.7	17.8	0.276	0.020	7.0%	0.276
99B-3	6.7	12.7	6.0	0.247	0.006	2.3%	0.190
	22.7	28.7	6.0	0.241	0.011	4.5%	0.377
	51.5	58.5	7.0	0.157	0.010	6.3%	0.186
	72.2	79.3	7.1	0.217	0.007	3.3%	0.114
	95.8	98.8	3.0	0.256	0.019	7.4%	0,155
	241.3	244.3	3.0	0.287	0.005	1.7%	0.105
	250.3	257.9	7.6	0.246	0.005	2.1%	0.199

Table 14 Bell East Side: Significant Intersections

Copper and gold grades were very weak along the Cariboo Pit Fault, with only short, discontinuous intervals of near ore-grade present in 99B-2 and 99B-3. The high-grade central zone showed better continuity to depth but grades are still generally low. Gold grades are low relative to copper, especially in 99B-2 and 99B-3. Subsequent pit optimization work confirmed that grades are insufficient to pay for the increased waste stripping that would be required to mine this zone to depth.

### 6.1.2 North Central: 99B-4, 99B-6

Two holes, 99B-4 and 99B-6, were drilled on an east-west fence between 4100N and 4125N. 99B-4 was collared around 2150E, drilling to the west. 99B-6 was collared approximately 100 metres to the west, again drilling to the west. 99B-4 was collared next to a subcrop of breccia containing pyrite and chalcopyrite, part of the north-trending eastern high-grade zone. Table 15 highlights intersections of reasonably good copper grades but, as in 99B-2 and 99B-3, gold grades are quite low. Most of the hole consists of moderately altered breccia cut by four shallowing east-dipping PPg dykes and an AP dyke. Brecciation is weaker, with significant intervals of pink plagioclase porphyry (PPp). The hole ended in monzonite separated from the breccia by a fault hosting a mafic dyke.

99B-6 was collared in dark pyritic volcanic breccia moving downhole into breccia, a 26-metre interval of monzonite and an 18 metre thick PPg dyke. The middle third of the hole is moderately well mineralized breccia cut by an AP dyke. Once again, gold grades are weak relative to copper (see Table 15). The bottom third consists of weakly to moderately altered PPp that runs into the same fault hit in 99B-4. Below the fault lies a monzonite that appears to be in fault contact with diorite 15 metres further downhole. 99B-4 was stopped before this second fault. These faults do not coincide with the diorite (monzonite) – breccia contact mapped on surface. Monzonite outcrops on surface may correlate with the 26-metre interval of monzonite near the top of 99B-6.

Hole	From	70	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (gpt)
99B-4	4.3	41.8	37.5	0.285	0.011	3,8%	0.194
incl	4.3	31.3	27.0	0.314	0.012	4.1%	0.227
	171.0	284.7	113.7	0.209	0.010	4,8%	0.154
incl	269.0	284.7	15.7	0.291	0.015	5.3%	0.199
99B-6	13.6	17.5	3.9	0.246	0.011	4.3%	0.171
	77.3	80.3	3.0	0.210	0.013	6.2%	0.100
	102.1	130.6	28.5	0.235	0.043	17.3%	0.154
ind	124.6	129.1	4.5	0.381	0.057	16.5%	0.283

### Table 15 Bell North Central: Significant Intersections

#### 6.1.3 North End: 99B-5, 99B-7, 99B-8

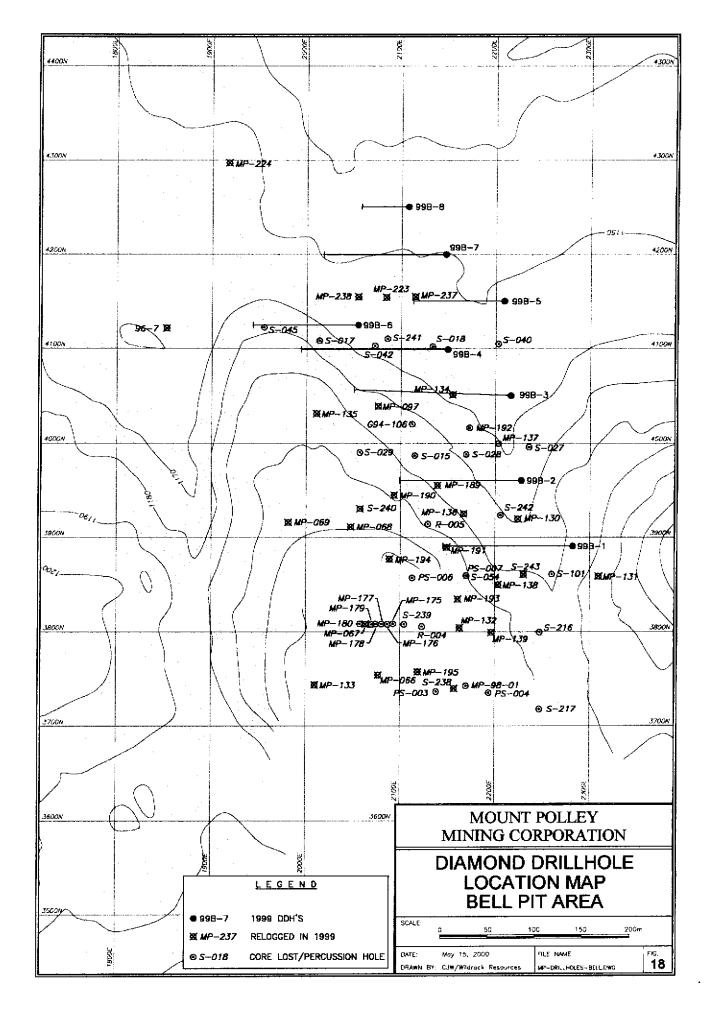
99B-5 was drilled to test the downdip extension of ore-grade mineralization in MP-223, MP-237, MP-238 on section 4150N. Strong alteration relogged in breccias in the MP holes was not evident in 99B-5, collared only 94 metres to the east. However, a 31 metre thick PPg dyke at the top of the hole, a 51 metre thick PPg dyke 130 metres down and a 36 metre section of volcanic breccia may have displaced some of the mineralized zone. Breccias are fingered with grey and pink plagioclase porphyries. Copper grades are very low throughout, generally less than 0.1%. Two short sections were anomalous in gold (Table 16).

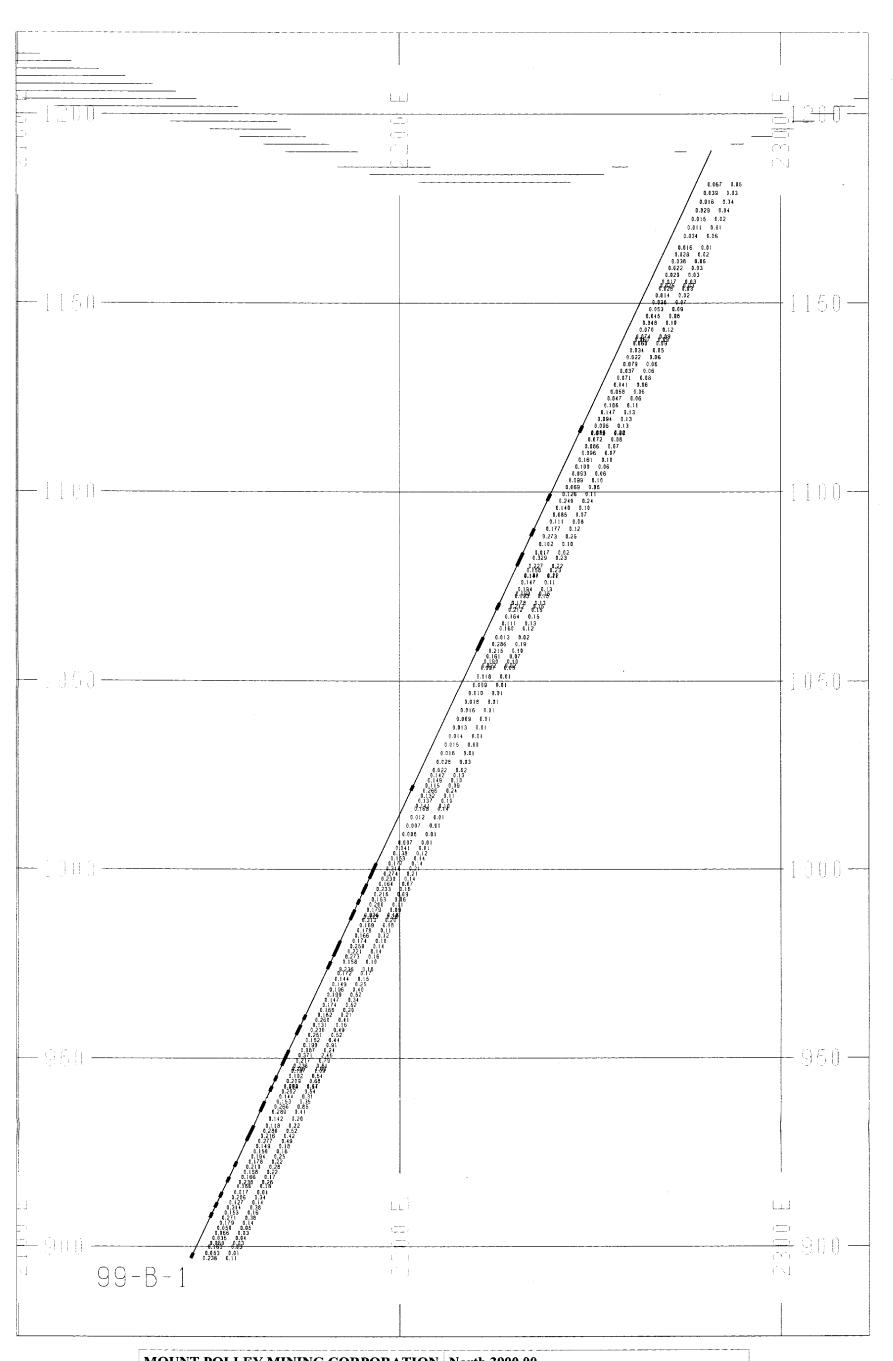
99B-7 was drilled 50 metres north of 99B-5, on section 4200N. It also encountered a 46 metre thick PPg dyke approximately 87 metres downhole, several AP dykes, and a 35-metre interval of volcanic rocks, all interlayered with moderately altered breccias. The hole terminated in a large, gougy fault zone interpreted to be the North Bell Fault. Grades again were very disappointing throughout.

99B-8 was drilled on section 4250N, encountering 91 metres of weakly altered and brecciated pink plagioclase porphyry before hitting the North Bell Fault. Rods became jammed in the gougy fault zone and the hole was lost. Copper grades were generally less than 0.1%, gold less than 0.05 gpt. The orientation of the North Bell Fault, based on a strong topographic expression and the intersections in 99B-7 and 99B-8 is 056/66-79SE.

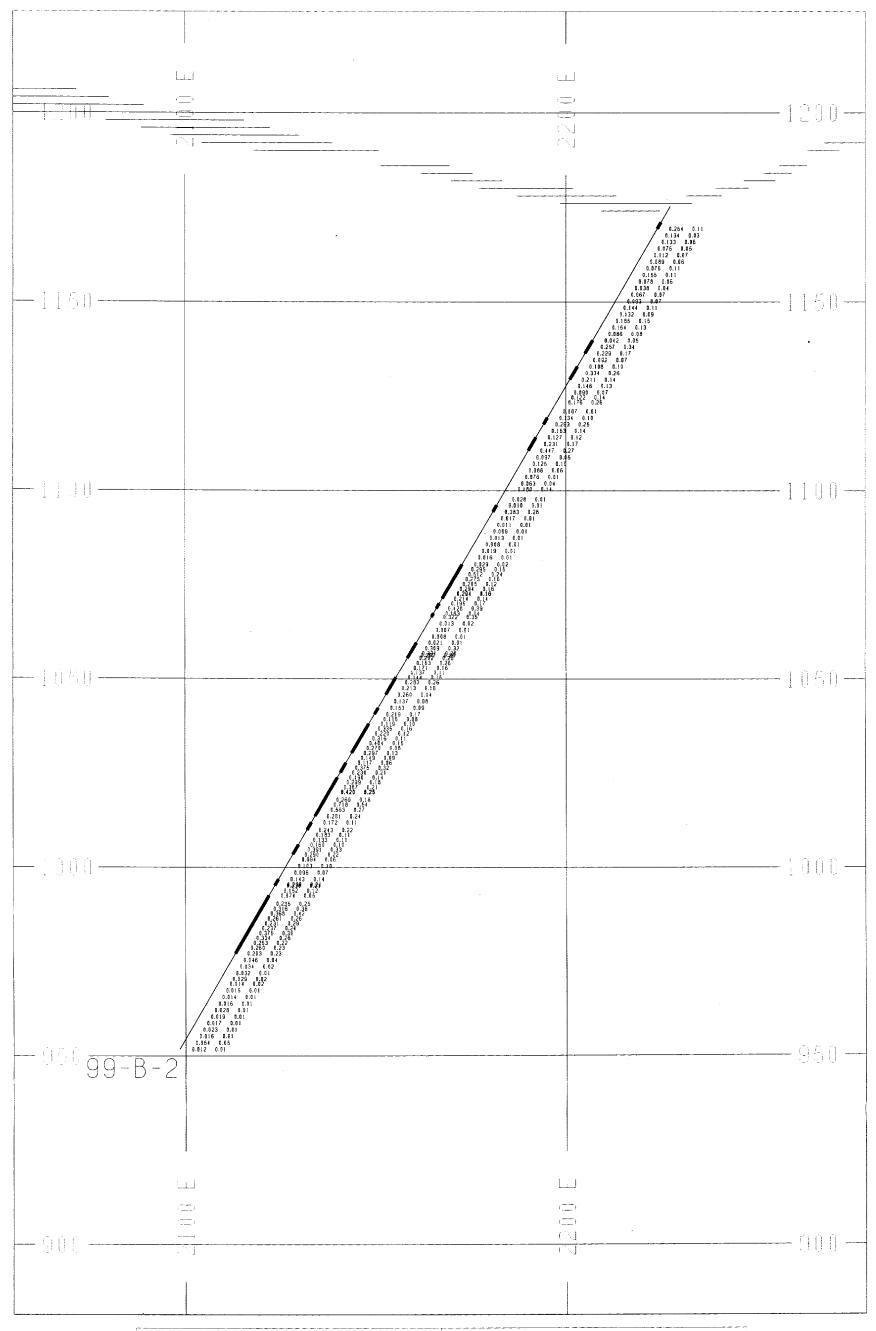
Table 16		
Bell North End:	Significant Intersection	ons

Hole	From	To	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (gpt)
99B-5	115.3	128.1	12.8	0.078	0.007	8.3%	0.297
	197.2	203.3	6.1	0.087	0.008	9.4%	0.348
998-7	41.3	46.4	5.1	0.214	0.003	1.3%	0.239
	79.5	82.5	3.0	0.240	0.004	1.7%	0.150
998-8				Dead	·		•

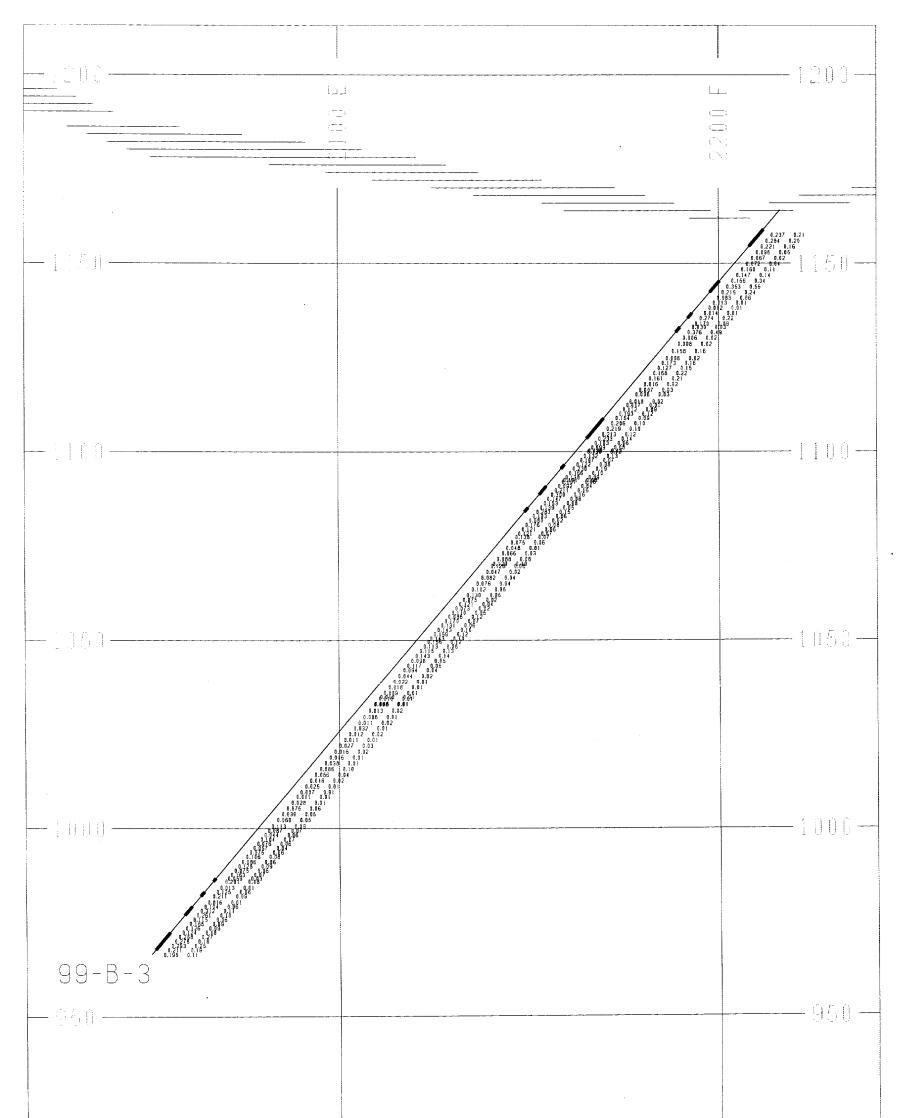


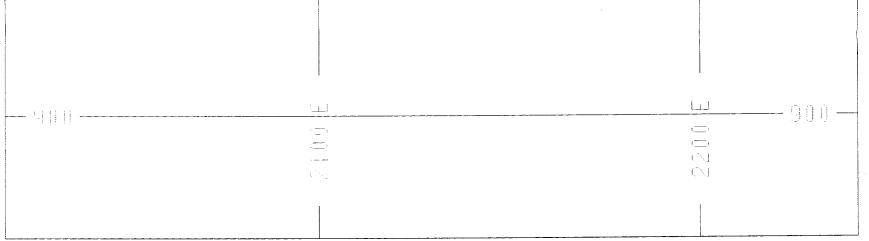


MOUNT POLLEY MINING CORPOR	RATION North 3900.00
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00
FIGURE 19	1999 PROGRAM

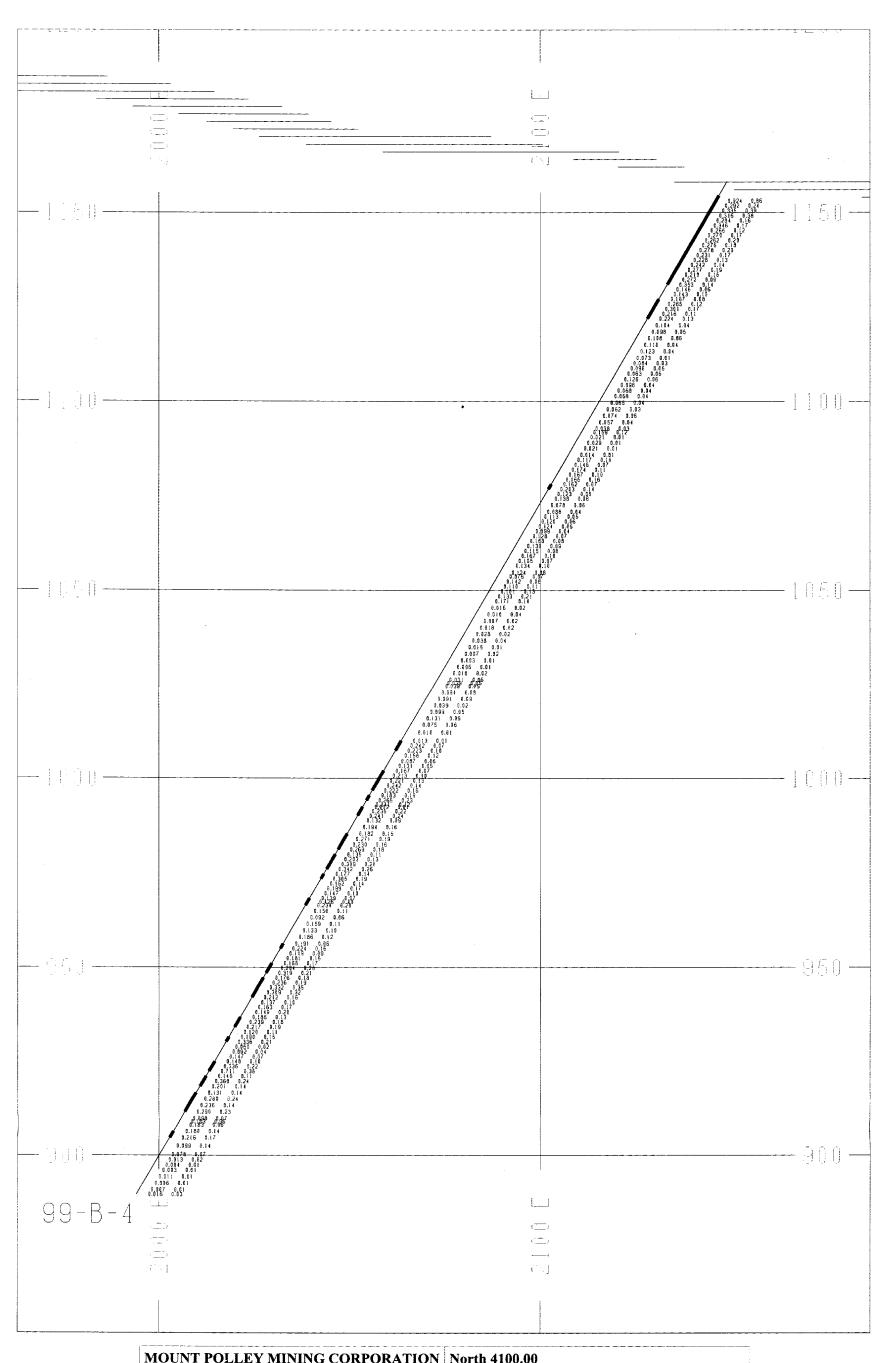


MOUNT POLLEY MINING CORPORATION	North 3950.00
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00
FIGURE 20	1999 PROGRAM

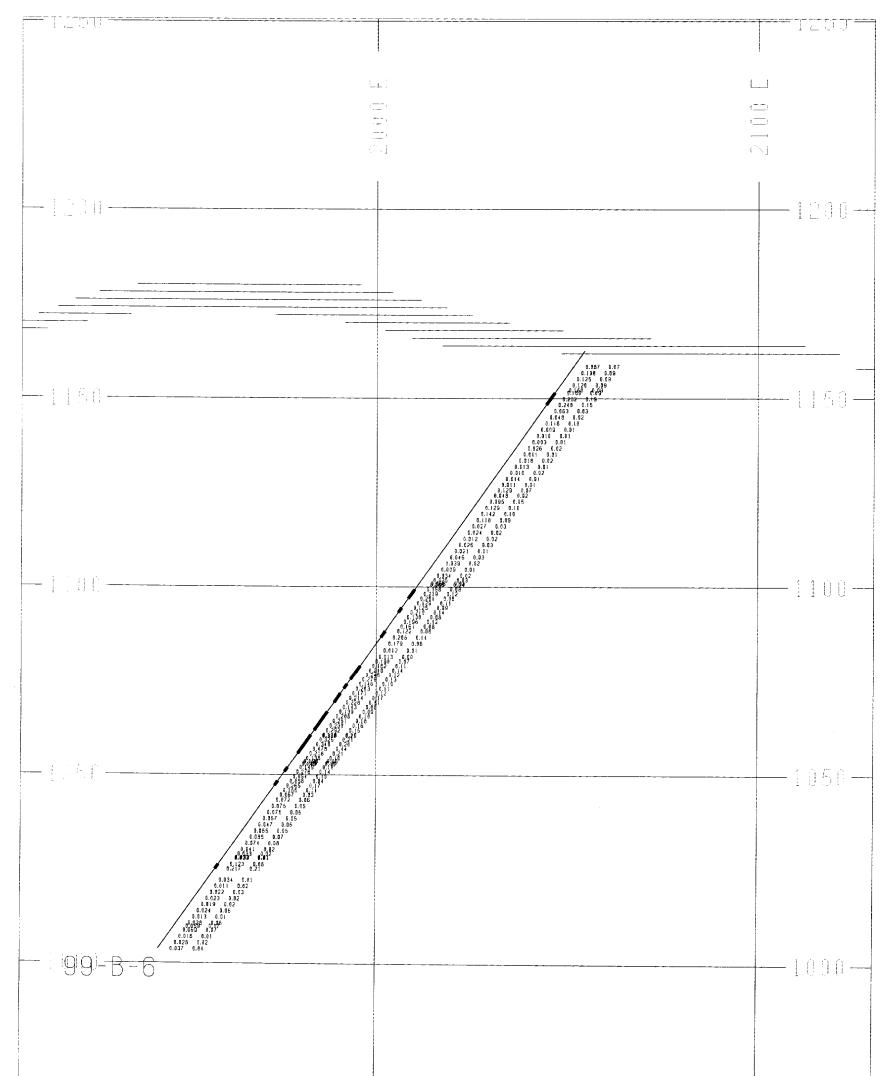


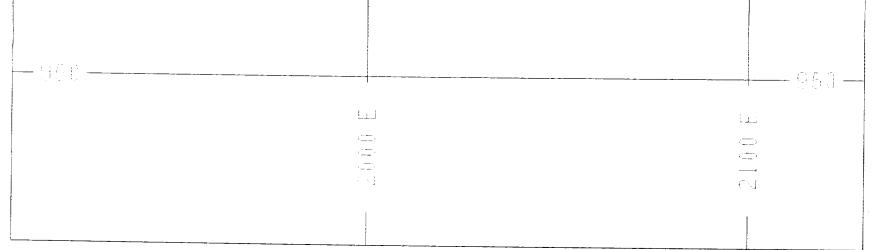


MOUNT POLLEY MINING CORPORATION	North 4050.00
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00
FIGURE 21	1999 PROGRAM

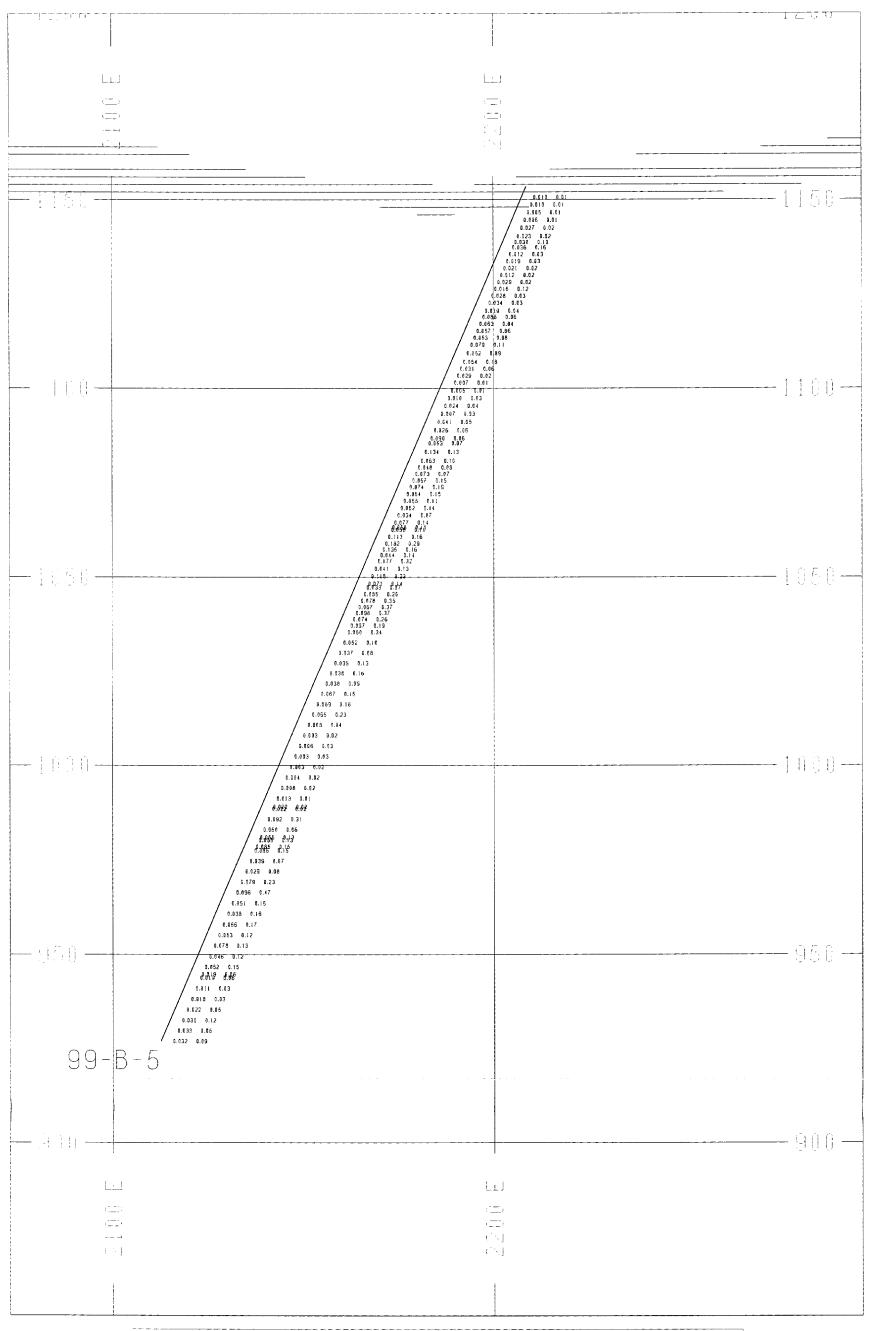


MOUNT POLLEY MINING CORPORATION	North 4100.00
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00
FIGURE 22	1999 PROGRAM

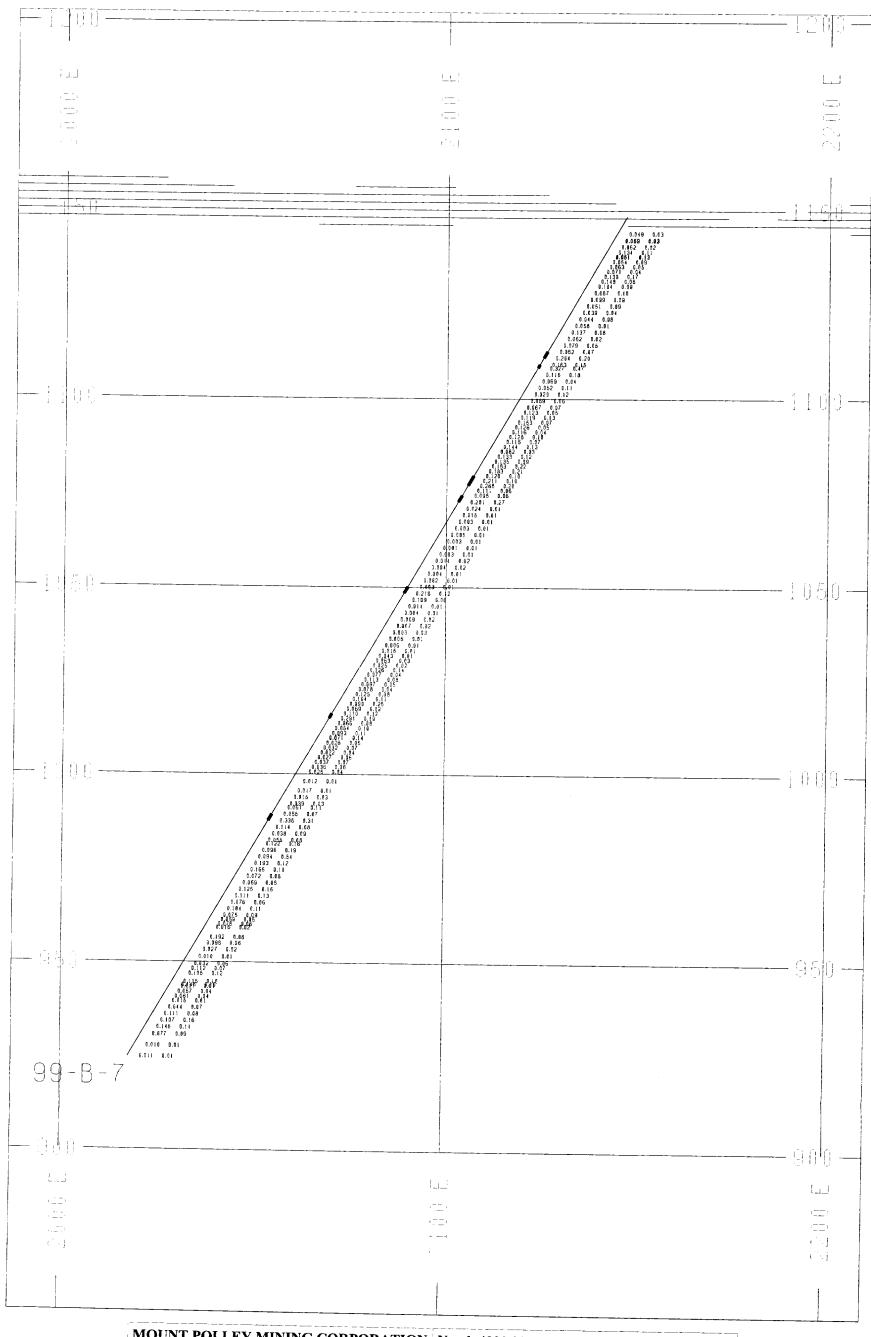




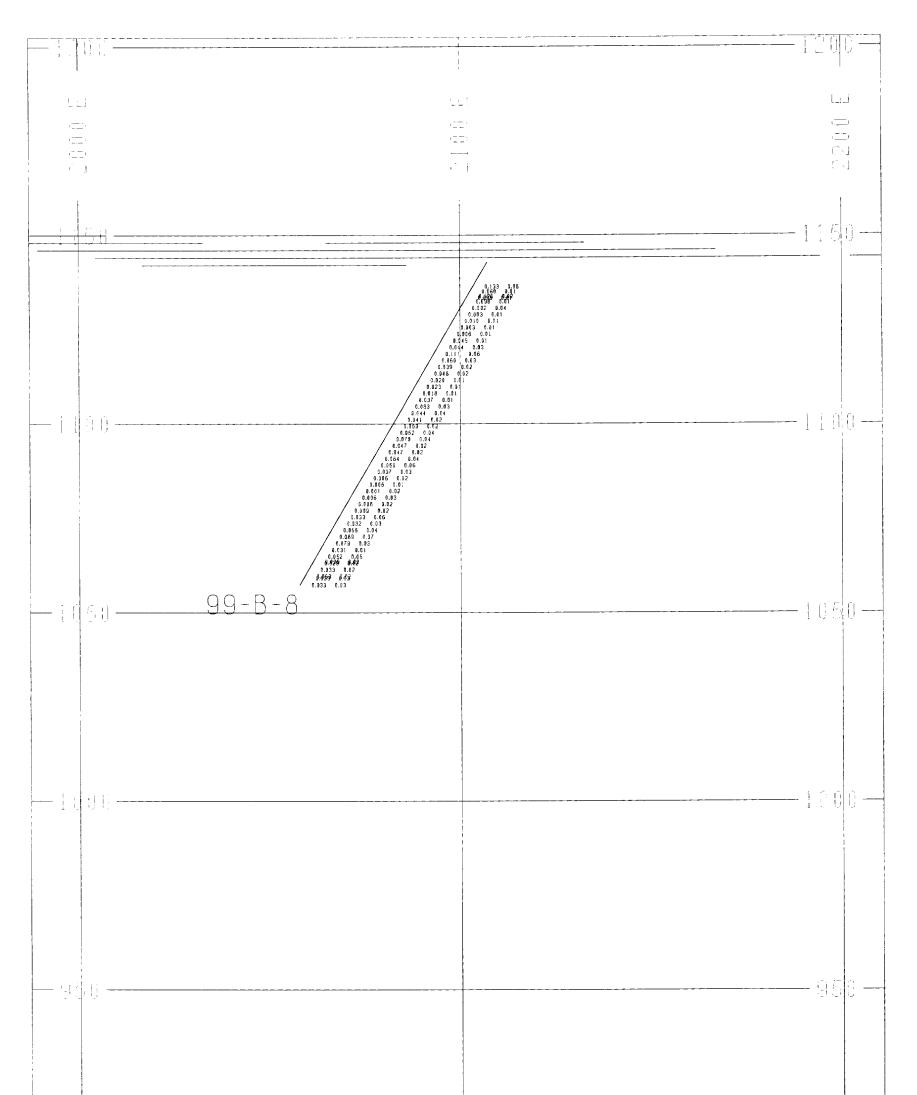
MOUNT POLLEY MINING CORPORATION	North 4125.00
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00
FIGURE 23	1999 PROGRAM

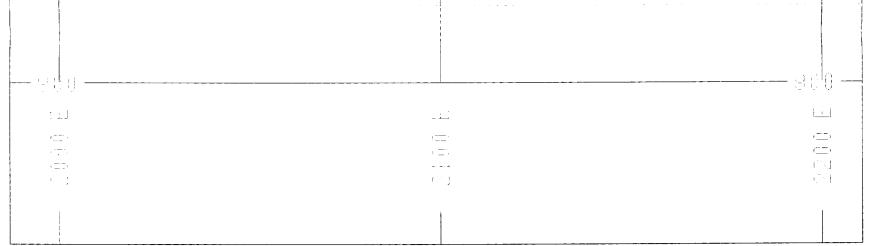


MOUNT POLLEY MINING CORPORATION North 4150.00				
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00			
FIGURE 24	1999 PROGRAM			



MOUNT POLLEY MINING CORPO	PRATION North 4200.00
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00
FIGURE 25	1999 PROGRAM





MOUNT POLLEY MINING CORPORATION	North 4250.00
BELL PIT Cu(%), Au (g/t)	SCALE: 1:1000.00
FIGURE 26	1999 PROGRAM

# 6.2 South Cariboo Extension

A total of 1,010.7 metres (3,316 feet) in 5 holes were drilled to follow up significant intersections turned up in two 1999 percussion testholes. One hole, 99C-1, followed up a high-grade intersection in 99R-20, in the 207 Zone. The next hole, 99C-2 tested a gold hit at the bottom of 99R-29 and hit a 53.3 metre ore-grade intersection in discovering the C-2 Zone. The other 3 holes stepped to the north, south, and downdip of the C-2 intersection.

Table 17		
1999 Diar	nond Drillholes – South Cariboo Extension	

Hole No	Collared	Finished	Northing	Easting	Elevation (m)	Length (m)	Dłp	Azimuth
99C-1	03-Sep-99	05-Sep-99	2800.19	2399.25	1129.615	236.83	-8	285
99C-2	05-Sep-99	06-Sep-99	2811.82	2172.36	1143.116	166.73	-55	270
990-5	22-Sep-99	24-Sep-99	2839.73	2199.32	1138.547	215.49	-55	270
99C-6	24-Sep-99	26-Sep-99	2775.03	2163.24	1135.115	146.91	-55	270
99C-7	03-Dec-99	06-Dec-99	2795.20	2224.60	1140.200	244.75	-60	270

## 6.2.1 207 Zone: 99C-1

One hole, 99C-1 was designed to test a long, very high-grade intersection in MP-207, under the western edge of the High Grade Stockpile and a similar high-grade intersection in 99R-20, open to depth. The best intersection in MP-207 consisted of 19.8 metres grading 0.53% total copper and 1.73 grams per tonne (gpt) gold, with a low level of oxidation of primary copper minerals. The bottom 24 metres in 99R-20 ran 0.24%% total copper and 0.50 gpt gold with oxide copper totaling 18.3% of the total copper. A portion of the stockpile was reclaimed to allow the hole to be collared reasonably close to MP-207.

The top 91 metres of 99C-1 consisted of moderately altered, lightly faulted breccia, with low copper and gold grades. The strongly mineralized zone, hosted in a strongly mottled breccia runs only 4.5 metres, but lines up very well with the 207 intersection. The bottom half of the hole consists of alternating monzonite, breccia, AP dyke, and PPp. A second mineralized zone, hosted in moderately to strongly altered breccia, was discovered near the bottom of the hole. This lower zone is gold-rich but copper-poor with a gold to copper ratio of 3.0, well above the deposit average of 1.4. This zone may be continuous with the C-2 Zone, discussed below.

Hole	From	To	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (gpt,
99C-1	91.1	125.5	34.0	0.180	0.013	8.1%	0.414
Inci 96,6 103.1	4.5	0.516	0.034	7.4%	1.390		
	169.5	172.5	3.0	0.169	0.010	6.3%	0.595
	214.3	232.3	18.0	0.165	0.002	1.4%	0.498

# Table 18 207 Zone: Significant Intersections

### 6.2.2 C-2 Zone: 99C-2, 99C-5, 99C-6, 99C-7

99C-2 was drilled to test relatively high-grade gold encountered at the bottom testhole 99R-29, south of the southwestern corner of the Cariboo Pit on section 2800N. The top 44.7 metres consisted of two PPg dykes and a 4.7 metre thick AP dyke cutting moderately to strongly altered breccia with modest copper-oxide mineralization. Alteration intensity and mineralization began to increase below 44.7m, becoming ore-grade between 93.7 – 147.0 metres in strongly altered breccia. At 147.0m, the zone is cut off by the steep, east-dipping Polley Fault.

In response to the discovery of the new "C-2 Zone", two more holes, 99C-5 and 99C-6, were drilled with modest step-outs north and south along the apparent strike of the zone. 99C-5 was collared 28 metres north of 99C-2. The top 88.8 metres consists of mainly moderately altered breccia cut by a 5.4 metre dyke of PPg near the top and two AP dykes near the middle. High-grade copper and gold grades are hosted in breccia with mineralization terminating at an AP dyke. Less than 2 metres below the dyke lies a 35.3 metre dyke or block of PPg, where high-grade breccia was expected. Grades are reasonably good in breccia below the PPg, but the proximity to the Polley Fault has strongly oxidized the primary copper. The hole penetrated the fault, discovering minor malachite in breccias within the fault zone. More PPg, brownish in colour, makes up the footwall of the fault.

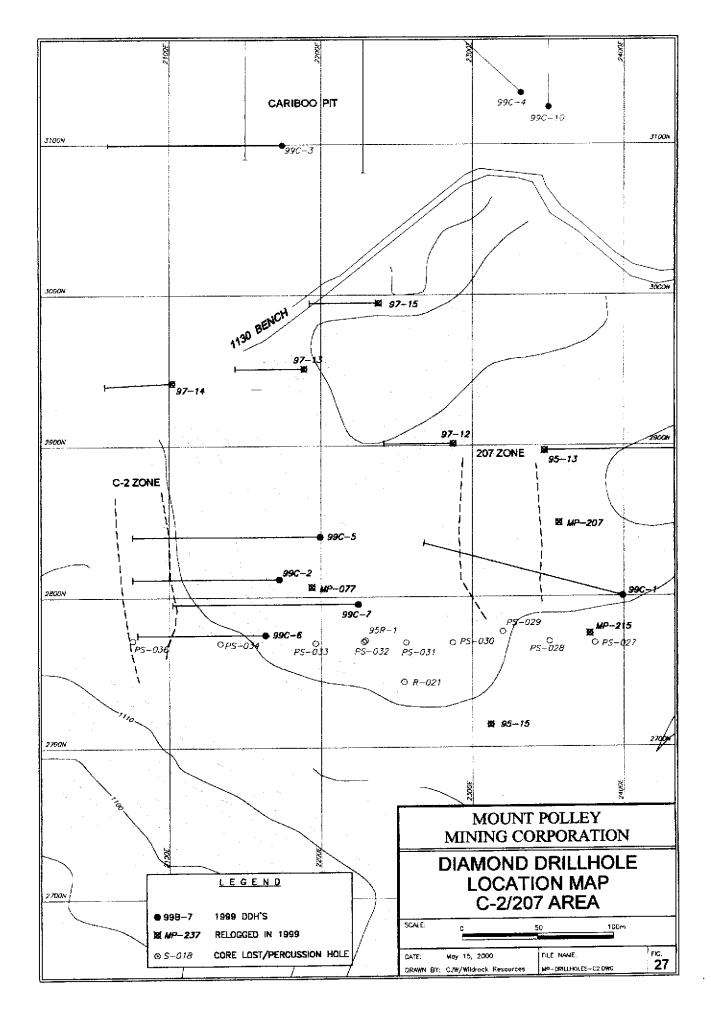
99C-6 was collared 37 metres south and 9 metres west of 99C-2, downslope and closer to the Polley Fault. Proximity to both the surface and the Polley Fault, left the core distinctly more oxidized than the first two holes. Most of the hole consists of moderately altered breccia with reasonably good grades (Table 19). No PPg was found but breccia within the Polley Fault was weakly mineralized.

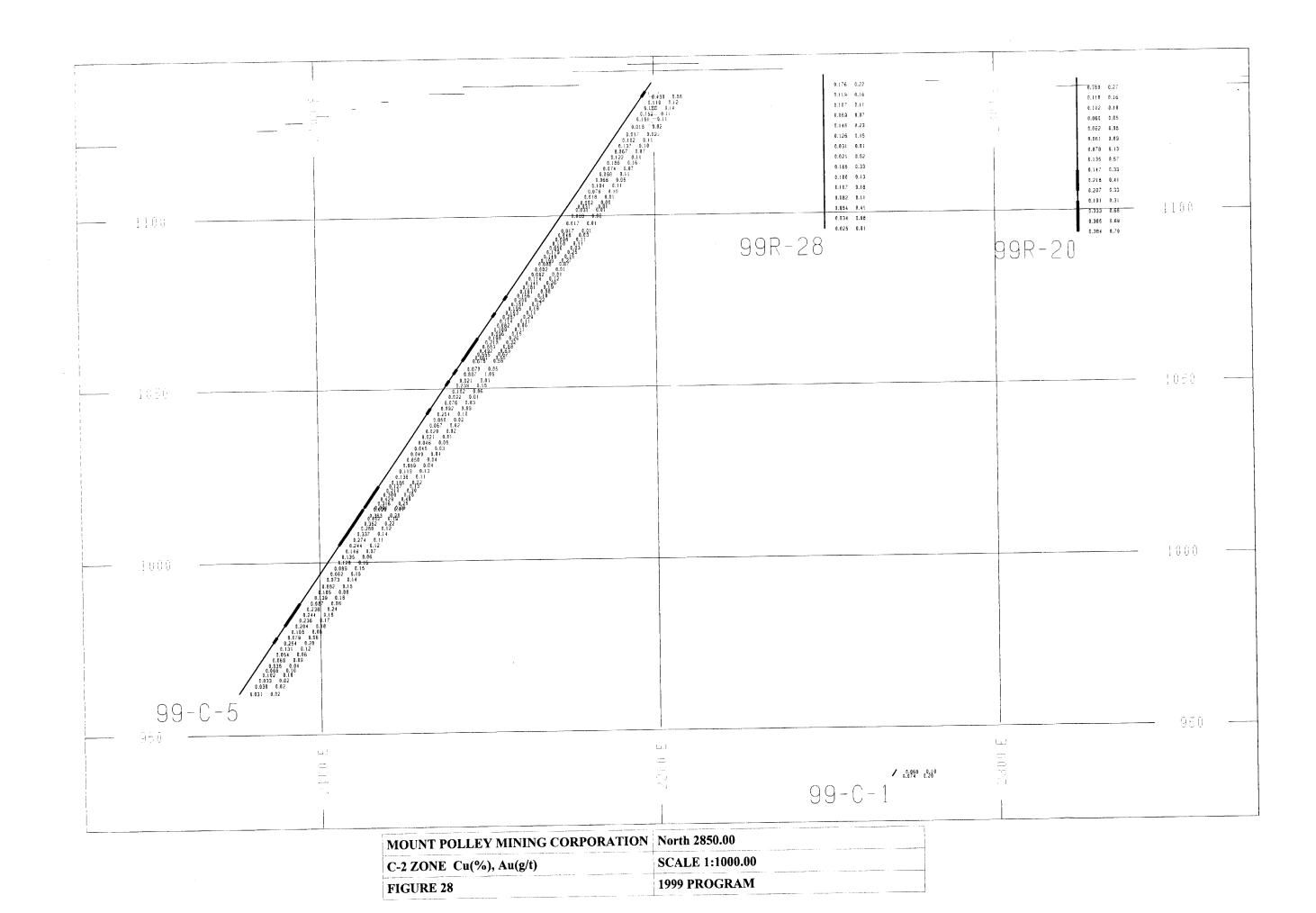
One more hole, 99C-7, was collared approximately 50 metres east of 99C-2 later in December to test the downdip extension of the C-2 Zone. The top 117.3 metres consists of moderately altered breccia cut by 3 PPg dykes and by 2 augite porphyry/lamprophyre composite dykes. No significant grades were encountered in the upper section of the hole to correlate with oxidized mineralization near the top of 99C-2. However, ore-grade mineralization was intersected over the next 54.0 metres in strongly altered (mottled) breccia that correlates very well with the lower interval of 99C-2. Surprisingly, the hole then entered a 42.3 metre section of PPg cut off by the Polley Fault. Breccia and plagioclase porphyry make up most of the rock in the fault zone.

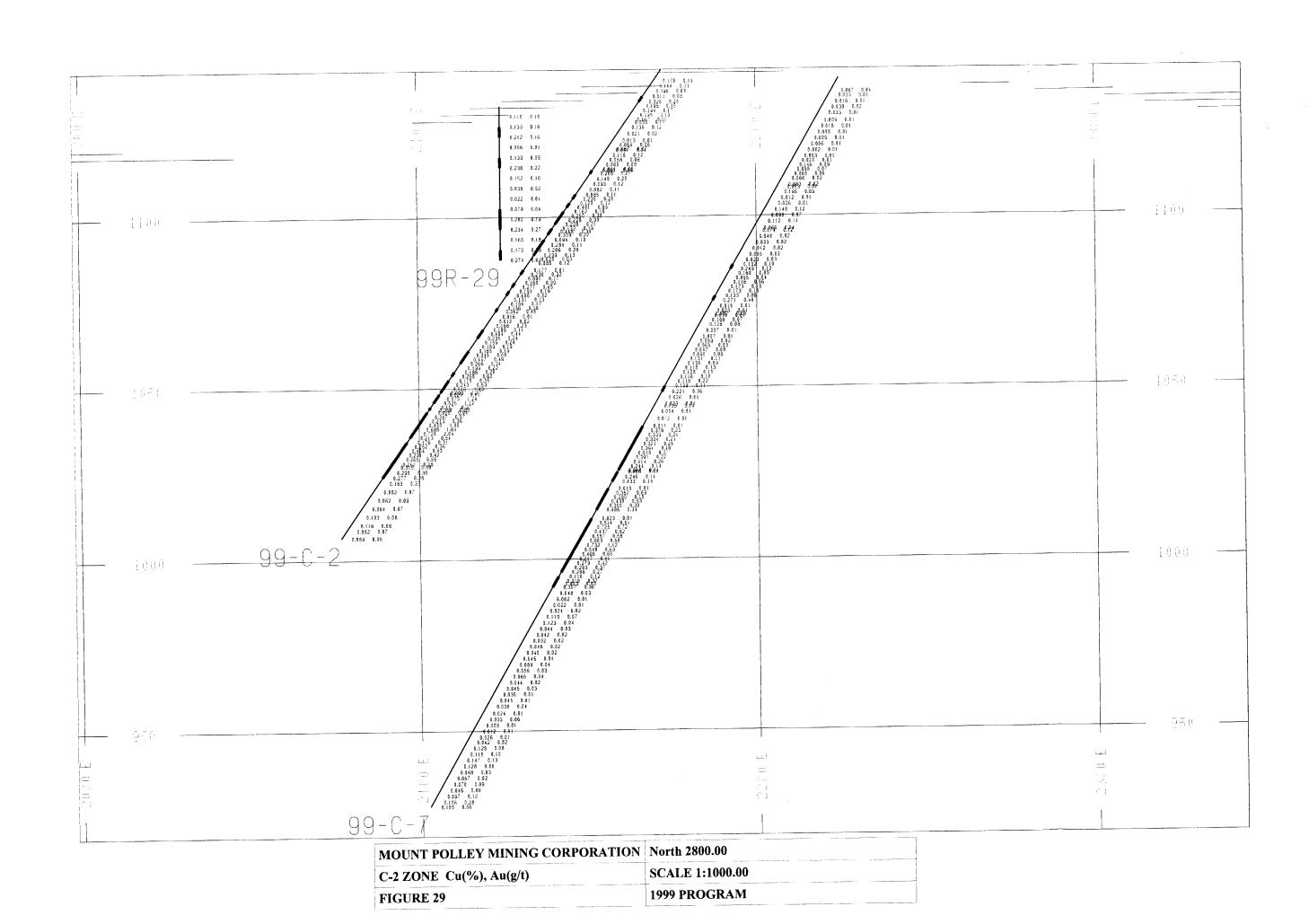
Hole	From	То	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (gpt)
99C-2	9.9	16.5	6.6	0.233	0.134	62.3%	0.179
	44.7	147.0	101.3	0.252	0.067	32.3%	0.402
incl	44.7	80.5	34.8	0.214	0.092	44.7%	0.252
and	93.7	147.0	53.3	0.308	0.052	20.3%	0.564

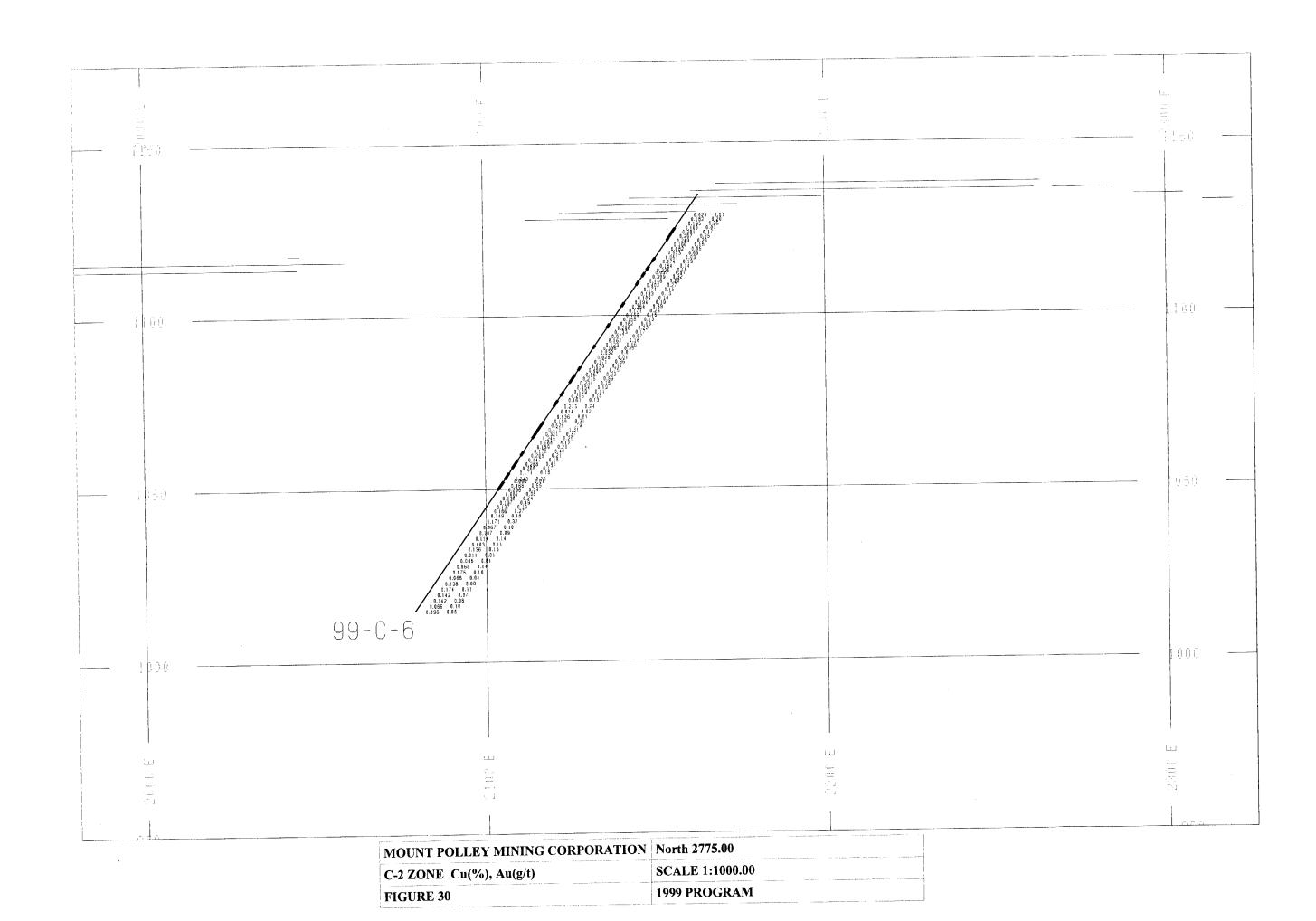
# Table 19C-2 Zone: Significant Intersections

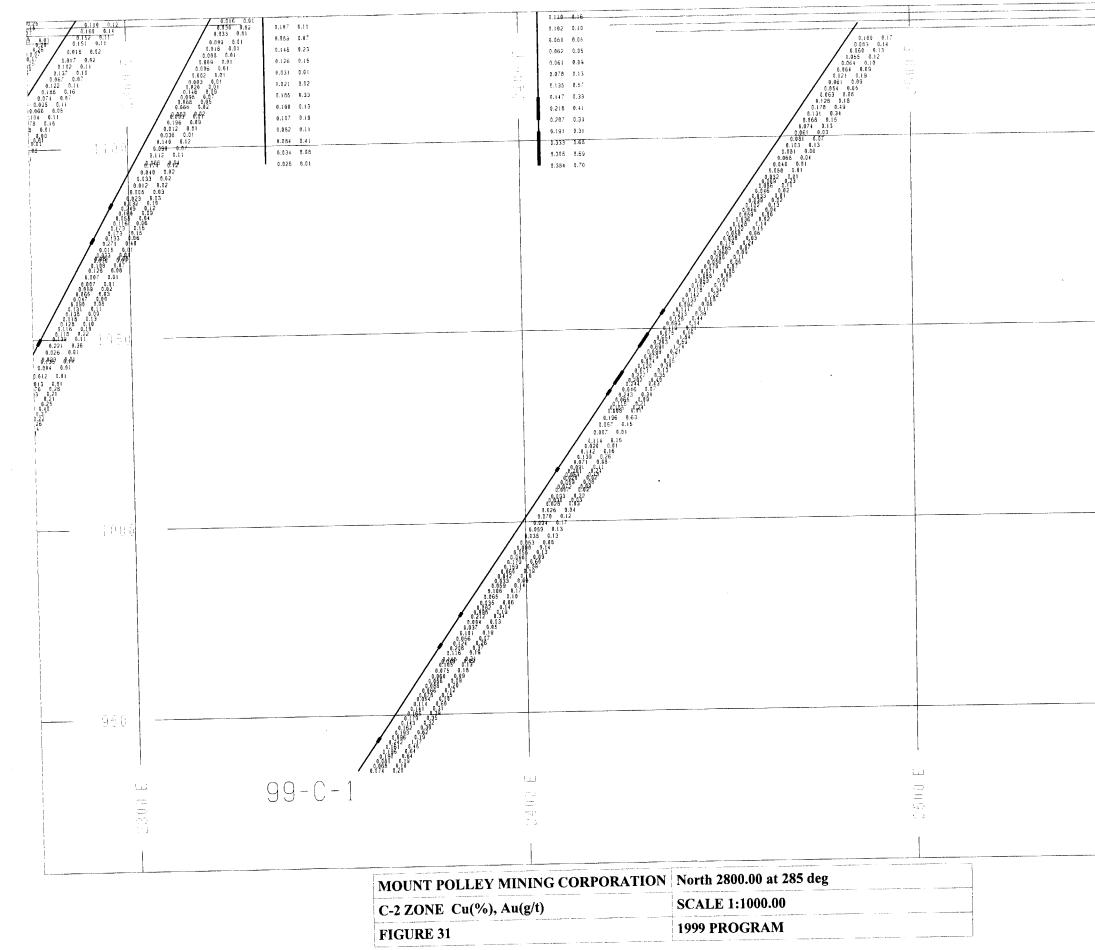
		the state of the s					
99C-5	88.8	103.0	14.2	0.432	0.042	8.8%	0.512
	142.3	163.2	20.9	0.313	0.199	63.6%	0.212
99C-6	7.5	32.2	24.8	0.186	0.143	74.8%	0.172
	60.7	68.2	7.5	0.257	0.199	76.1%	0.386
	78.6	104.1	25.5	0.260	0.149	51.7%	0.424
99C-7	117.3	171.3	54.0	0.350	0.029	9.2%	0.328
inci	117.3	<b>132</b> .1	14.8	0.373	0.010	2.6%	0.247
and	148.2	160.2	12.0	0.576	0.046	8.4%	0.654











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# 6.3 Deep South Cariboo

A total of 1,110.1 metres (3,642 feet) in 5 holes were drilled to test the grade and continuity of a deep zone of mineralization at the south end of the Cariboo Pit. 99C-3 was collared into the west side of the South Cariboo between 98-5 and 98-7. 99C-4 was collared in the East Cariboo and drilled to the northwest into the magnetite-rich super high-grade zone at depth. Both 99C-8 and 99C-9 were drilled to the south to expand high-grade mineralization trending into the current south pit wall, discovered in 98-6. Finally, 99C-10 was drilled to the north in the East Cariboo to check for deeper high-grade mineralization in the east zone (Figure 32).

Hole No	Collared	Finished	Northing	Easting	Elevation (m)	Length (m)	Dip	Azimutti
990-3	17-Sep-99	19-Sep-99	3099,76	2174.24	1109.424	200.25	-55	270
99C-4	19-Sep-99	22-Sep-99	3134,53	2331.70	1139.541	264.26	-55	312 45
990-8	30-Nov-99	01-Dec-99	3175.00	2150.00	1100.000	169.47	-60	180
<b>99</b> C-9	01-Dec-99	03-Dec-99	3185,44	2227.76	1100.200	221.28	-62	180
990-10	06-Dec-99	08-Dec-99	3125.00	2350.00	1130.000	254.81	-72	0

Table 20 1999 Diamond Drillholes – Deep South Cariboo

99C-3 was successful in delineating ore-grade mineralization from near the top of the hole down to the Polley Fault. Most of the hole is strongly altered breccia, locally magnetite-rich cut by two augite porphyry dykes. A section of weakly porphyritic monzonite between 88.4 – 108.0 metres is very weakly altered and mineralized. Gold – copper ratios are typically around 2.

Table 21	
Deep South Cariboo: Significant Intersec	tions

Hole	From	To	Length (m)	Cu (%)	Cu-ns (%)	Ox Ratio	Au (gpt)
99C-3	18.5	88.4	69.9	0.285	0.011	4.7%	0.622
	110.0	166.6	56.6	0.228	0.022	9.5%	0.397
inci	121.0	137.2	16.2	0.329	0028	8.6%	0.565
And	161.8	166.6	4.8	0.309	0.034	11.2%	0.721
99C-4	94.0	152.0	58.0	0.199	0.063	34.5%	0.364
Incl	122.0	134.0	12.0	0.288	0.50	20%	0.590
	193.0	251.0	58.0	0.261	0.011	6.2%	0.321
inci	196.0	200.5	4.5	1.069	0.023	2.1%	0.997
And	225.5	236.0	10.5	0.287	0.014	4.8%	0.442
99C-8	3.0	41.0	38.0	0.468	0.042	9.4%	1.469
	66.0	75.5	9.5	0.215	0.023	10.9%	0.367
	85.3	90.0	4.7	0.426	0.040	9.6%	0.598
99C-9	3.0	162.0	159.0	0.255	0.016	6.57%	0.454
incl	3.0	51.0	48.0	0.415	0.025	5.9%	0.875
And	88.0	100.0	12.0	0.273	0.007	2.8%	0.828
And	124.8	152.0	27.2	0.294	0.028	9.1%	0.325

99C-10	37.0	70.0	33.0	0.303	0.183	49.3%	0.293
inci	58.4	70.0	11.6	0.553	0.406	72.5%	0.565
	117.0	128.1	11.1	0.281	0,066	28.2%	0.355
	150.0	156.0	6.0	0.277	0.011	3.8%	0.251
	173.0	183.0	10.0	0.241	0.042	18.5%	0.216

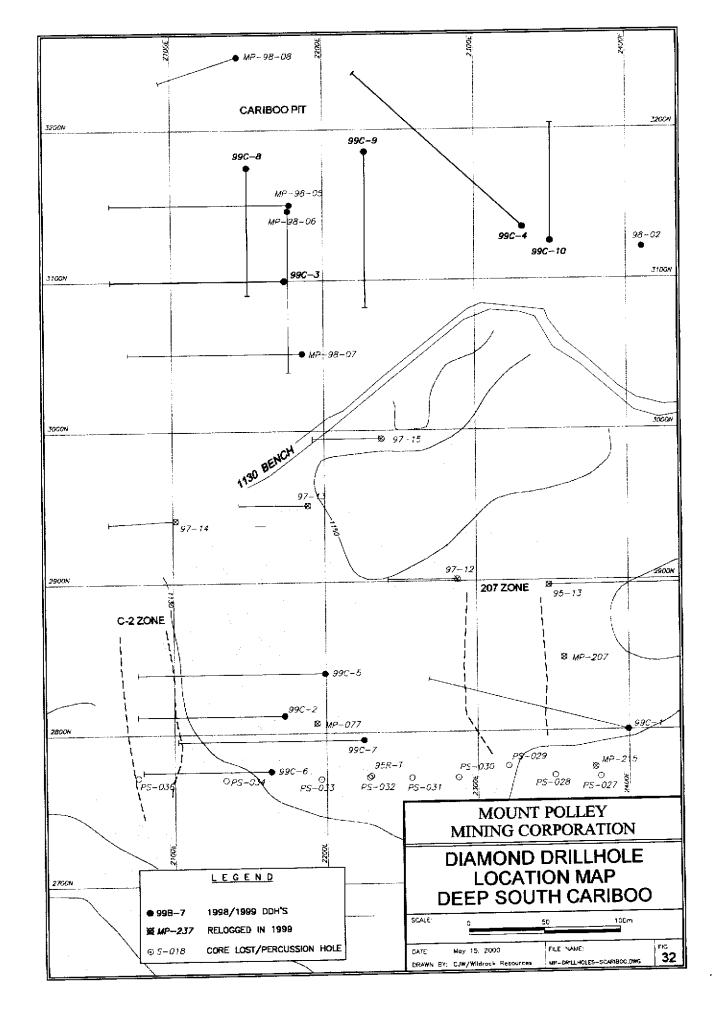
99C-4 was also moderately successful in outlining ore-grade mineralization, particularly in the middle and lower portions of the hole. Locally, grades can be very high, but on average, they are lower than the rest of the South Cariboo zone. Mineralization is hosted in moderately to strongly altered breccia cut by 5 augite porphyry dykes between 0.5 – 5.9 metres thick (not true width). Breccia over the top 94 metres is only weakly mineralized. Narrow sections of unbrecciated plagioclase porphyry occur in the middle of the hole. The hole ends in a large fault zone with weakly mineralized monzonite on the footwall side.

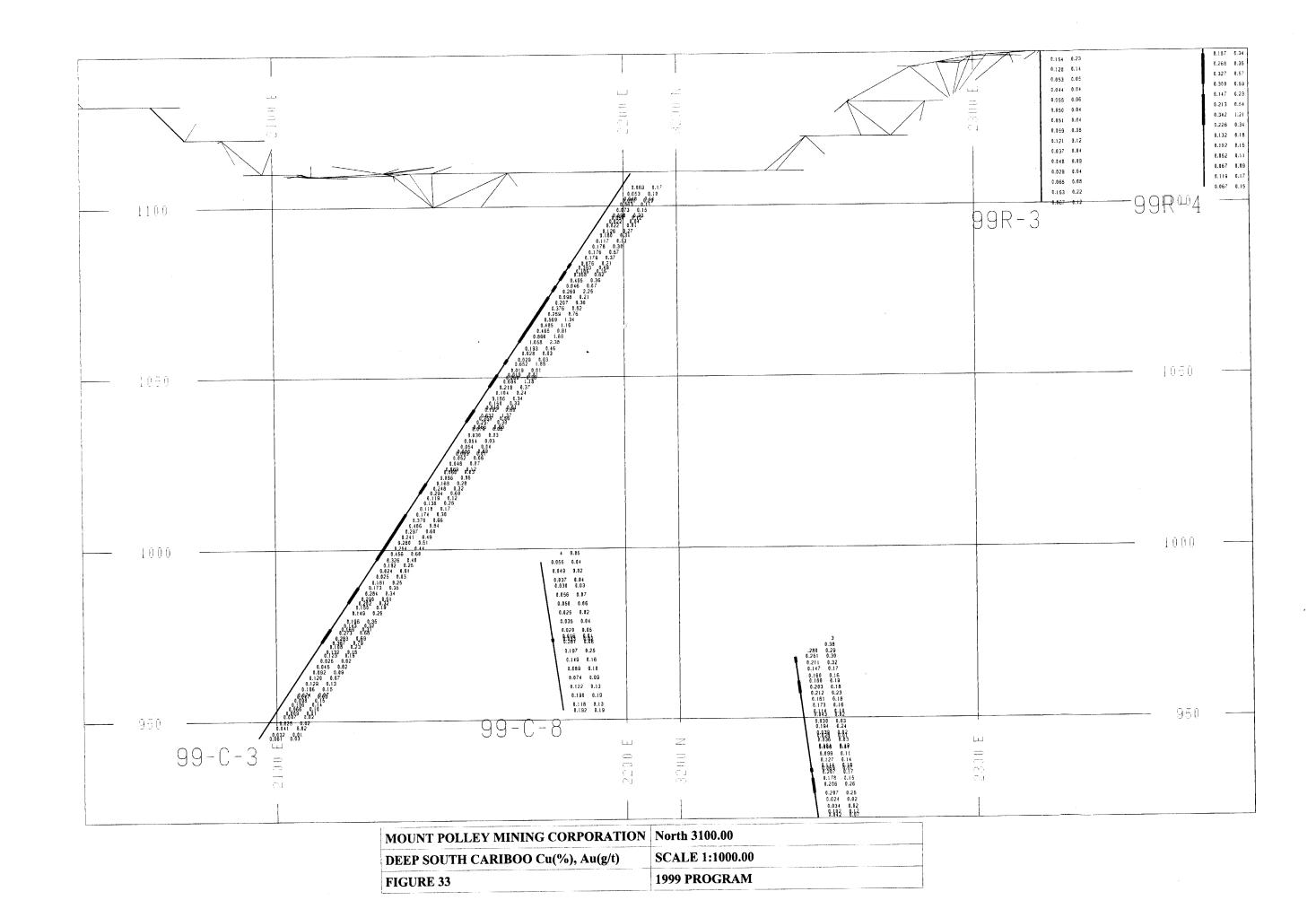
99C-8 was collared in ore near the southern ore-waste boundary and drilled to the south along the projected ore contact. The hole passed through strongly altered breccia into a fault around 35.0-43.3 metres and into 22.9 metres of weakly mineralized pink plagioclase porphyry. The top 38 metres returned very high grades including several samples over 1.0 gpt gold and two greater than 2.0 gpt. The hole hit a few minor sections of breccia before entering a thick section of PPg. The hole ended in 23.1 metres of diorite or monzonite.

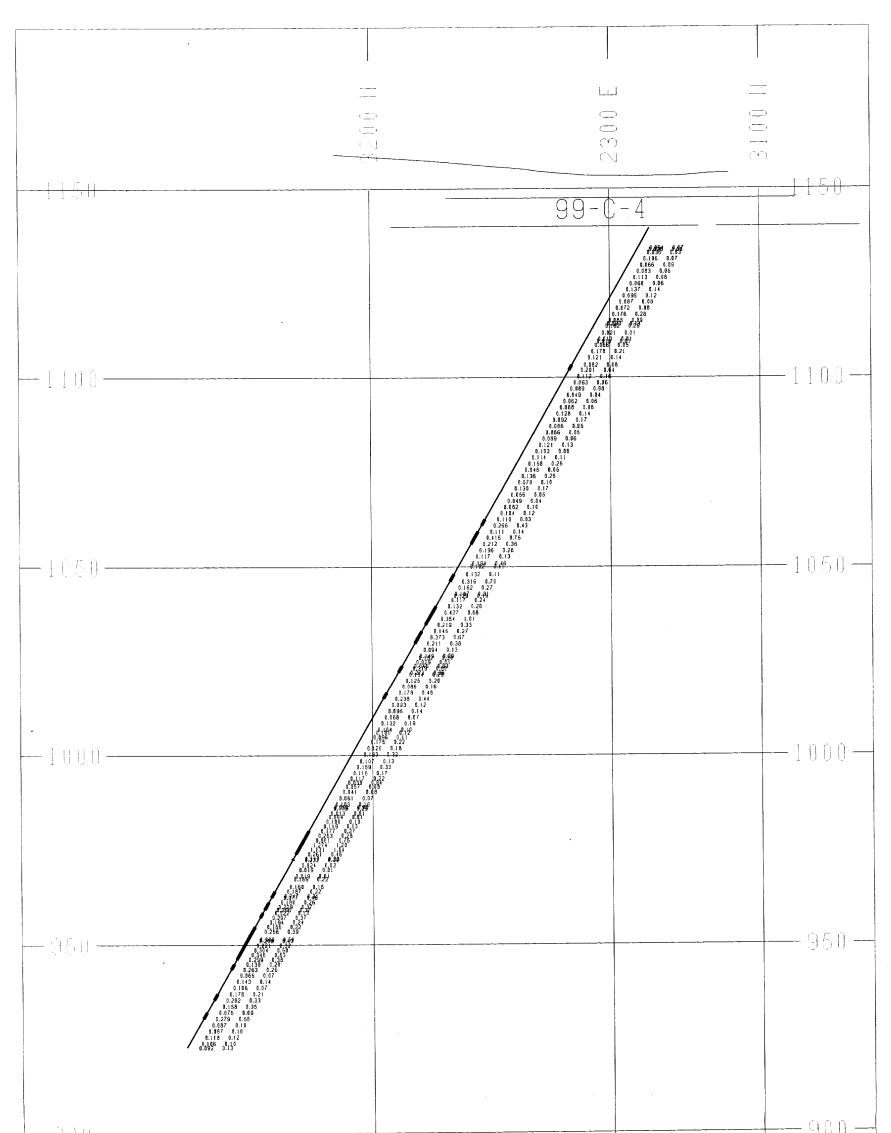
99C-9 was collared 75 metres east of 99C-8 and was somewhat more successful in finding ore-grade mineralization at depth. The hole hit very high-grade mineralization in strongly altered breccia over the top 51.0 metres. Breccias dominate to around 169.1 metres before giving way to mainly grey and pink plagioclase porphyries over the bottom 52 metres. The lower mineralized zone, between 124.8 – 152.0 metres, is much lower grade than the high-grade upper zone.

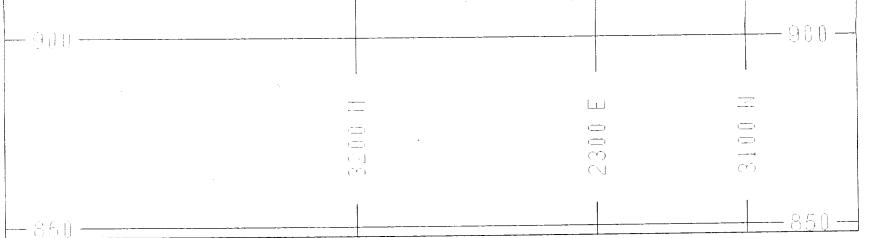
99C-10, drilled steeply to the north in the centre of the Cariboo East zone, encountered mainly moderately altered and mineralized breccia down to 128.1 metres. Grades throughout the breccia are generally low and the zone is moderately oxidized. Below 128.1 metres, monzonite dominates, punctuated by a few zones of intermediate grade (low oxide) breccias. The hole was largely unsuccessful in defining economic mineralization near surface or at depth.

In general, drilling could not confirm the presence of a continuous deep zone of high-grade mineralization, but did show the strong potential for very high-grade zones in the south wall of the current design Caribou Pit. More drilling is required to delineate these zones more clearly to better optimize the south wall design.

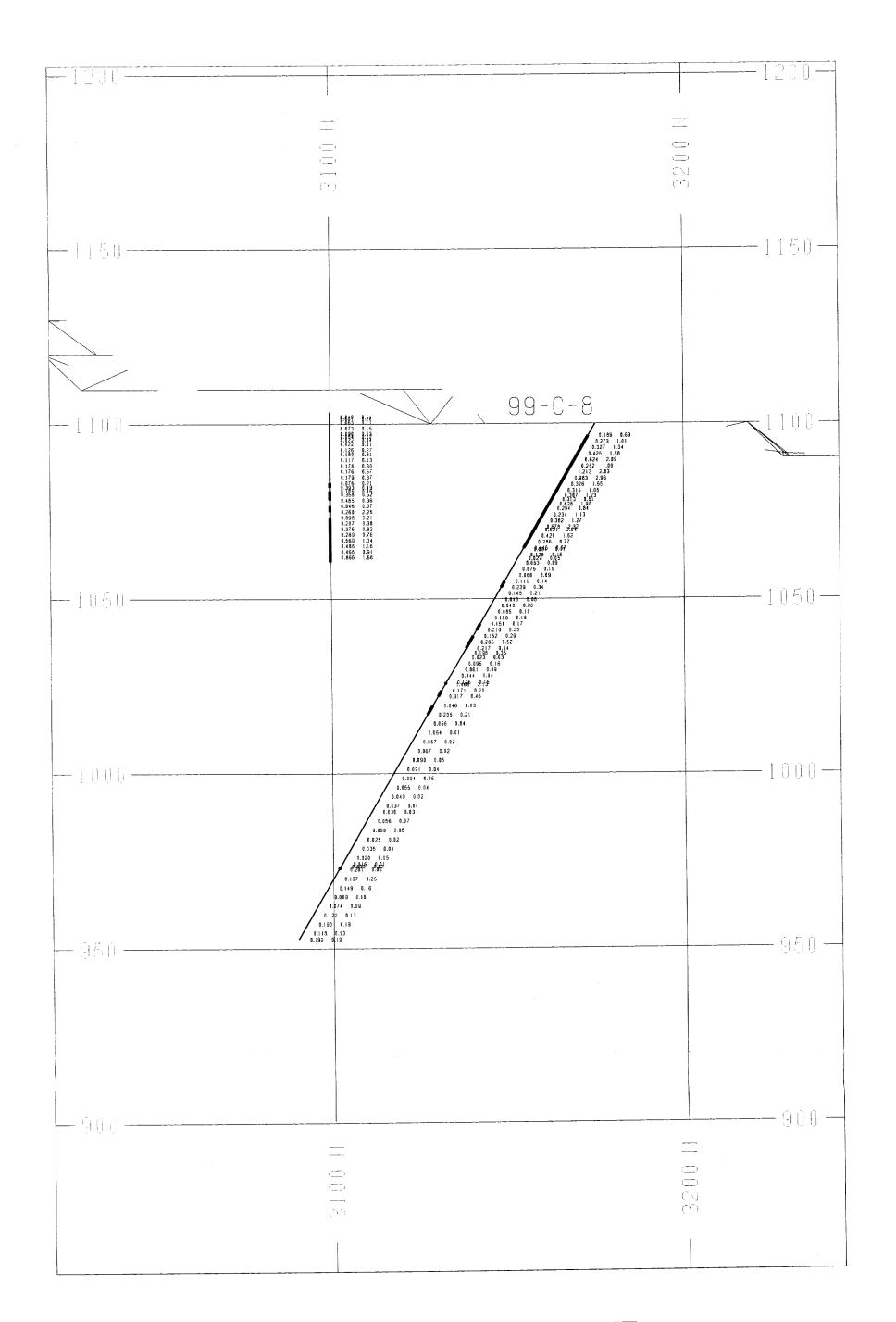




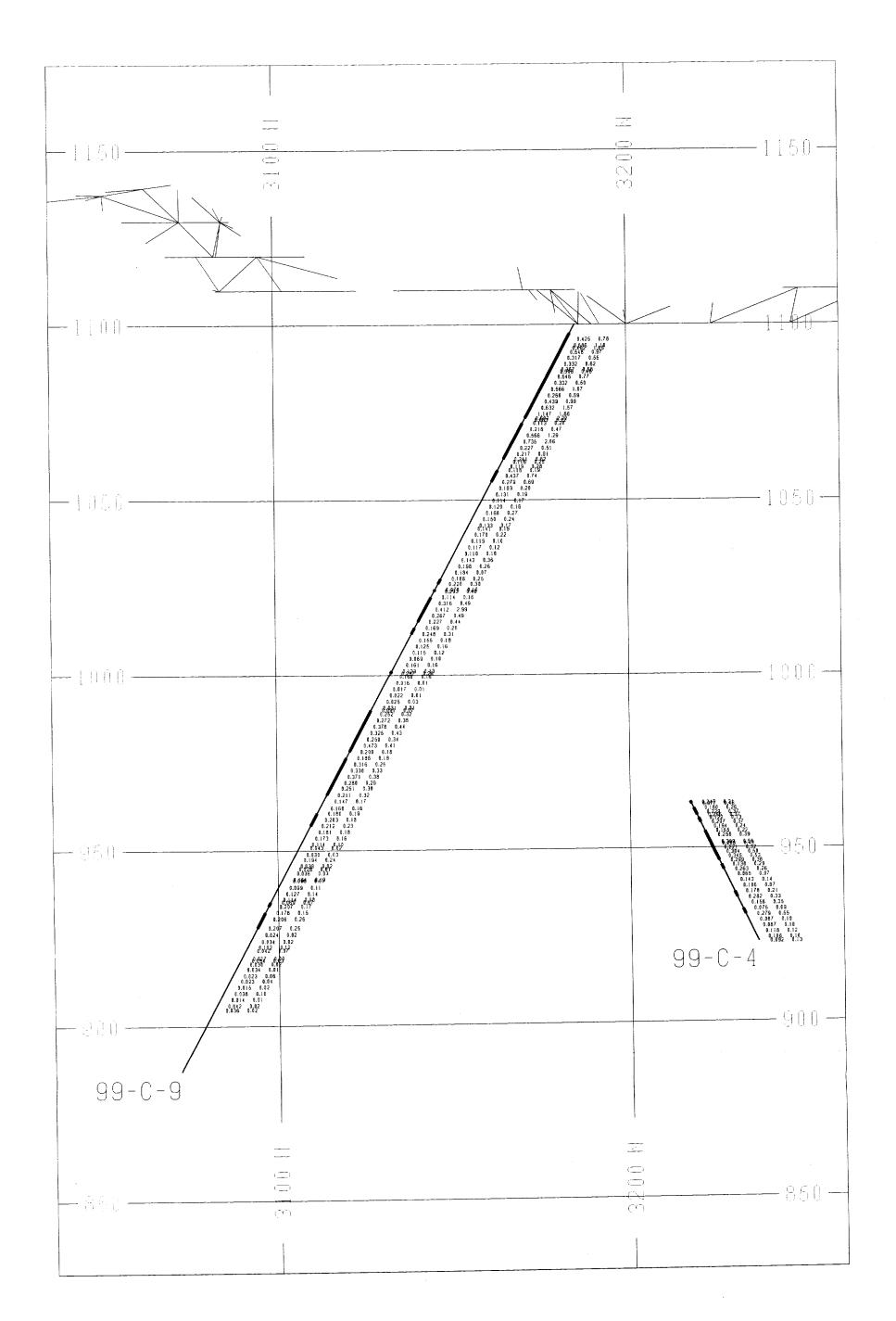




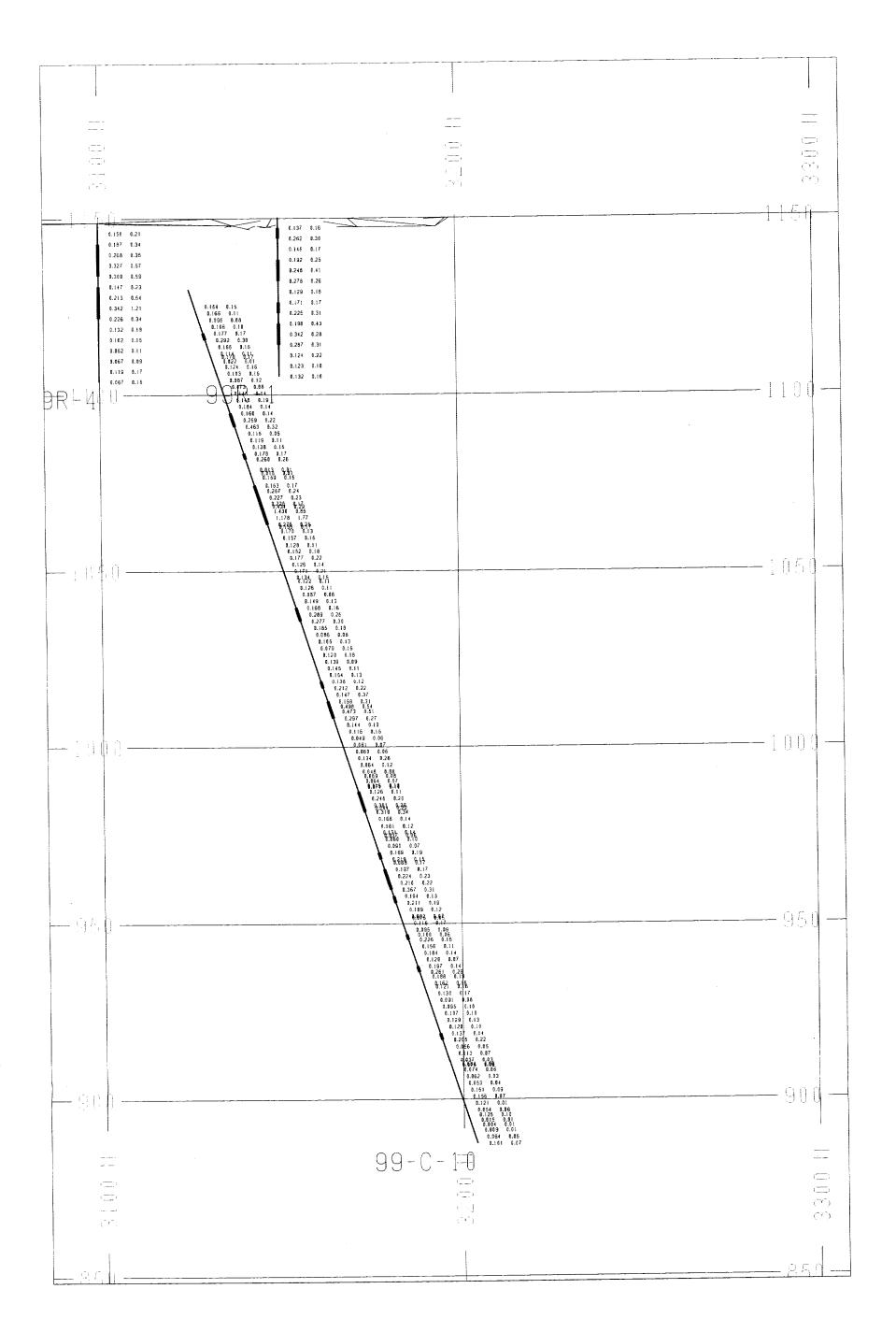
MOUNT POLLEY MINING CORPORATION	North 3100.00 at 312 deg
DEEP SOUTH CARIBOO Cu(%), Au(g/t)	SCALE 1:1000.00
FIGURE 34	1999 PROGRAM



MOUNT POLLEY MINING CORPORATION	East 2155.00
DEEP SOUTH CARIBOO Cu(%), Au(g/t)	SCALE 1:1000.00
FIGURE 35	1999 PROGRAM



MOUNT POLLEY MINING CORPORATION	East 2225.00
DEEP SOUTH CARIBOO Cu(%), Au(g/t)	SCALE 1:1000.00
FIGURE 36	1999 PROGRAM



MOUNT POLLEY MINING CORPORATION	East 2355.00
DEEP SOUTH CARIBOO Cu(%), Au(g/t)	SCALE 1:1000.00
FIGURE 37	1999 PROGRAM

# 7.0 Conclusions

## Bell Pit Area

- Geological mapping has been effective in outlining the distribution of lithologic units, alteration type and intensity, and structure. Two zones of moderate to strong potassic alteration continued to the northern outcrop limit.
- A program of 8 diamond drillholes, totaling 1946.5 metres, drilled around the east and north margins
  of the defined deposit, indicated weakening potassic alteration in both directions, suggesting a less
  robust hydrothermal system associated with the Bell deposit. Drilling failed to add significant
  economic resources to the Bell Pit.
- A program of geological mapping is recommended for the Bell North area, including the S-Zone, 71-Zone and Road Zone. Condemnation percussion drilling is recommended for the area between the Bell Pit and the Bell North.

#### C-2 Zone

- 4. A new zone of mineralization initially discovered in the last 6 metres of 99R-29, was confirmed and expanded by 99C-2. Four diamond drillholes were completed in 1999, totaling 773.9 metres.
- 5. Detailed geological mapping conducted after the initial diamond drilling outlined the surface distribution of host breccias, degree of alteration, and structural framework for the zone. The zone is limited to the north by the C-2 Fault, to the west by the Polley Fault, and to the east by a large block of PPg, remaining open to the south and southeast.
- The zone exhibits strong continuity over the area tested, hosted in a strongly altered, mottled breccia. Magnetite is an important alteration component. Sulphide mineralization is strongly oxidized near surface and adjacent to the Polley Fault.
- 7. A spring 2000 diamond drill program has further expanded and defined the C-2 Zone. Recent evaluation of exploration results suggests that the zone is not economic at the present time.

### 207 Zone

- 8. A distinct ore-grade zone is evident in MP-207, R-86-22, and 99R-20 on section 2850N. Grades reach 0.6% Cu and 1 gpt Au with low oxide ratios. The zone is limited by 99R-19, 50 metres to the north, and to the west by 99R-28.
- One diamond drillhole, 99C-1, intersected low-oxide ore-grade mineralization, 35 metres south of MP-207. A second zone, possibly the downdip extension of the C-2 Zone, was intersected near the bottom of the hole.
- 10. Several diamond and percussion drillholes were completed during the spring 2000 program, further expanding the zone. Evaluation is ongoing.

# Deep South Cariboo

11. Five diamond drillholes, totaling 1,110.1 metres, tested a deep zone of mineralization within the south end of the Caribou Pit. Results indicate that mineralization is not continous at depth with intermediate grades that are unlikely to be economic. High-grade intersections higher in the holes have better defined so-called "super high-grade" zones along the south end of the pit.

# Cariboo South Extension - East Side

- Testholes confirm that near-surface high-grade mineralization in the East Cariboo Pit continues at least 125 metres further south (to 2950N) than previous thought. Near ore-grades are found in 99R-16, another 50 metres south.
- 13. Geological units appear to have a steep easterly dip, but ore-grade mineralization does not necessarily follow these units. Mineralization is generally hosted in hydrothermal breccias dominated by either monzonite porphyry or volcanics. Breccias with a strong volcanic component appear to host lower gold values with the volcanic component increasing to the east. Oxidation is strongest on the west side of the zone, near an interpreted north-trending fault zone at 2300E. Plagioclase porphyry (monzonite) dominates outside these limits.
- 14. Further evaluation of the potential near-surface resource between the south end of the East Cariboo and the crusher is required.

# East Knob

15. A north-northwest trending zone of intermediate grade mineralization was identified north of East Cariboo. Testholes drilled in the spring of 1999 appear to limit the zone to the north and east. Distribution of ore grades is somewhat spotty. No further work is recommended at the present time.

# West 1170 Bench

16. Two testholes drilled at the anticipated western ore boundary failed to intersect significant mineralization. Geology of the area is complex with weakening brecciation in a plagioclase porphyry host and numerous fault structures offsetting mineralization.

Respectfully submitted,

Christopher J. Wild, P.Eng. Consulting Geological Engineer

May 15, 2000



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Mount Polley Mine - 1999 Assessment Report

Appendi	x 1						
1999 Prog	ram Expenditures						
Drilling							
Diamond Dr	tiling						
		4.067.3	metres @	\$	47.16 per metre	\$	91,805.46
Percussion	Delling	-1951.16	e	•		•	
	J	102.5	hours @	\$	250.00 per hour	\$	18,450.00
		11.0	hours @	ŝ	35.00 per hour	s.	385.00
Bulidozer/E		11.97	noors @	*	Soloo per noar	ų	
BUNGUZ9I/E)	tcavalor	40	6 a		100.00		0.4 m m
		18	hours @	\$	120.00 per hour	\$	2,160.00
Assaying						•	
		2,314	samples @	\$	6.00 per sample		13,884.00
		460	samples @	\$	6.00 per sample	\$	2,760.00
Personnel							
	Geologist - C. Wild	47	days 🕲	\$	300.00 per day	\$	14,100.00
	Geologist - G. Gillstrom	27	days @	\$	300.00 per day	\$	8,100.00
	Sampler - R. Ney	85	days @	\$	154.00 <i>per day</i>	\$	13,090.00
Reporting, k	faps, etc.						
	Chris Wild	10	days @	\$	300.00 per day	\$	3,000.00
Room and B	loard						
		85	mandays @	\$	71.53 per day	\$	6,079.73
Transportati	ion						
-	Airfare - Vancouver to Williams L	ake, return x 3	2			\$	900.00
Miscellaneo	us						
	Supplies, saw blades, etc.					\$	2,251.83
	Travel expenses					\$	161.50
				Totals		\$ 2	77,127.52
				GST no	included	<u> </u>	<u>_</u>
Geology							
Personnel							
	Cons Geol - P. McAndless	23	days 🕲	\$	350.00 per day	\$	8,050.00
	Geologist - Chris Wild	8	days (Q	Ś	300.00 per day	\$	2,400.00
	Assistant - Richard Ney	5	days @	s	154.00 per day	\$	770.00
Room and B	•	0		•		•	
NOVII) dint D	Morehead Lake Resort	5	days @		\$71.53 per day	\$	357.65
					\$80.00 per day	\$	1,840.00
	Fraser Inn	2 <b>3</b>	days 🕲		gooloo per oay		1,0-0.00
Reporting, N	raps, eic.			_	·		4 500 00

### Transportation

Chris Wild

Airfare - Vancouver to Williams Lake, return x 7

	\$ 3,150.00
Total	\$ 18,067.65
GST not included	

\$ 1,500.00

Program Total	\$	295,5	519.52
	 _		

5 days @ \$ 300.00 per day

# Appendix 2

Statement of Qualifications

- I, Christopher J. Wild, do hereby certify that:
- 1 I am a consulting geological engineer currently residing at 307 Lexington Road, Williams Lake, British Columbia.
- 2 I was employed by Mount Polley Mining Corporation as Mine Geologist until January 2000 and now provide geological services to Mount Polley Mine as a consultant.
- 3 J am a graduate of the University of British Columbia, Geological Engineering, Mineral Exploration Option (1984).
- 4 I have worked in mineral exploration and mine geology in Canada and Argentina on a full-time basis since 1985.
- 5 I am Registered Member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia (1994), and am a member of the Canadian Institute of Mining and Metallurgy (CIM).
- 6 I supervised all exploration activity documented in this report.

Christopher J. Wild, P.Eng. Consulting Geological Engineer

May 15, 2000



