

ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 92.09.23

ASSESSMENT REPORT 21984

MINING DIVISION: Clinton

PROPERTY: Bluff
LOCATION: LAT 51 07 00 LONG 123 22 00
UTM 10 5662644 474334
NTS 092003W

CAMP: 035 Taseko - Blackdome Area

CLAIM(S): Bluff 1-2
OPERATOR(S): Asarco Ex.
AUTHOR(S): Lambert, E.
REPORT YEAR: 1991, 37 Pages

COMMODITIES

SEARCHED FOR: Gold, Copper

KEYWORDS: Cretaceous, Coast Plutonic Complex, Kingsvale Group, Granodiorites
Diorites

WORK

DONE: Drilling, Geochemical, Physical
DIAD 424.4 m 2 hole(s);NQ
LINE 2.6 km
ROCK 3 sample(s) ;ME
SAMP 70 sample(s) ;ME
SOIL 79 sample(s) ;ME

LOG NO: DEC 30 1991 RD.
ACTION:
FILE NO:

1991 DIAMOND DRILLING AND SOIL
SAMPLING PROGRAM

of the

BLUFF PROPERTY

**SUB-RECORDER
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M.R. #.....\$.....
VANCOUVER, B.C.

Report for:

WESTMIN RESOURCES LIMITED

and

HOMESTAKE CANADA LTD.

Clinton Mining Division, B.C.

NTS 920/3

Latitude 51°07' Longitude 123°22'W

by

ELLEN LAMBERT
Project Geologist
Westpine Metals Ltd.

December 16, 1991

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,984

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SUMMARY

Property - The Bluff Property is located 225 km north of Vancouver in southwestern British Columbia along the eastern flank of the Coast Range. The property consists of 51 units and is in the Clinton Mining Division. Access is by four-wheel drive vehicle from Williams Lake (270 km), by helicopter from Pemberton or Goldbridge, or by float plane to Taseko Lakes.

History - Gold was discovered at the Taylor-Windfall mine in the 1920's. The area around the Bluff Property was actively explored between 1969-1976 for porphyry copper-molybdenum targets, and again in 1985 for epithermal gold potential. From 1988 to the present a new phase of exploration has been carried out in the area to test for copper-gold porphyry deposits. In May, 1991, Westpine Metals Ltd. and ASARCO Exploration Company of Canada Limited entered into an option agreement with Westmin Resources Limited and Homestake Canada Ltd. to explore for copper-gold mineralization on the Westmin-Homestake Bluff Property.

Property Geology - The property occurs along a contact between Cretaceous-age felsic intrusives of the Coast Plutonic Complex to the south and a thick sequence of volcanic strata of the Kingsvale Group to the north. An intense, advanced-argillic alteration zone, up to 300+ m in width on the Bluff Property, occurs as an east-trending linear belt within the volcanic assemblage north of the pluton.

Mineralization - The Bluff Property contains gold mineralization in shear zones cross-cutting strongly silicified tuffaceous units at Taylor Windfall mine. Anomalous copper values have been returned from soil samples west of the mine.

1991 Program and Results - Diamond drilling, soil and rock sampling comprised the 1991 exploration program. 1,451 feet (442.4 m) of drilling were completed in two holes, and 79 soil and 3 rock samples were collected on 8640' (2634 m) of established grid. The drill holes were spotted over magnetic and resistivity geophysical anomalies as defined by an airborne geophysical survey funded by ASARCO in the fall of 1990. Drilling failed to intersect significant mineralization, but did encounter strong quartz-sericite-chlorite-pyrite-tourmaline alteration of selected stratigraphic units. Soil sampling in the area of the drill holes (Bluff 3 claim) returned spotty and low copper values, but significant copper (greater than 800 ppm Cu) was returned from a soil line located 1 km east of the drilling area on the Bluff 1 claim (this area was selected to confirm high copper soil values reported in 1983).

Conclusions and Recommendations - Extend the soil sampling grid west and north of the line that returned greater than 800 ppm copper values on the Bluff 1 claim. Attempt to find the source of the anomalous copper in the soil. Follow up the soil sampling results with drilling if warranted.

INTRODUCTION

In May, 1991, ASARCO Exploration Company of Canada Limited and Westpine Metals Ltd. entered into an option agreement with Westmin Resources Limited and Homestake Canada Ltd. to earn a 50% participating interest in the Taseko Bluff Property. Under the terms of the agreement, ASARCO-Westpine must spend \$400,000 in exploration by December 31, 1995, and not less than \$50,000 during the calendar year 1991. This report summarizes the work performed on the Bluff claims from September 12 to September 26, 1991, to satisfy the 1991 option commitment.

The author was engaged by Alpine Exploration Corporation (operator for ASARCO-Westpine) to supervise a diamond drilling and soil sampling program on the property. The program consisted of 1,451 ft (442.4 m) of diamond drilling in 2 holes, and the collection of 79 soil and 3 rock samples. Notable references pertaining to previous work include Lane (1985) and Britten (1984).

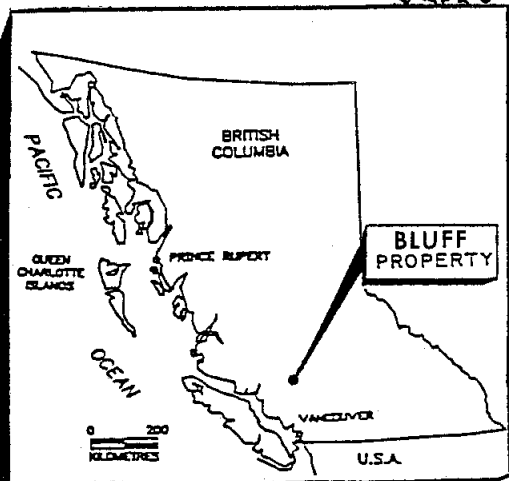
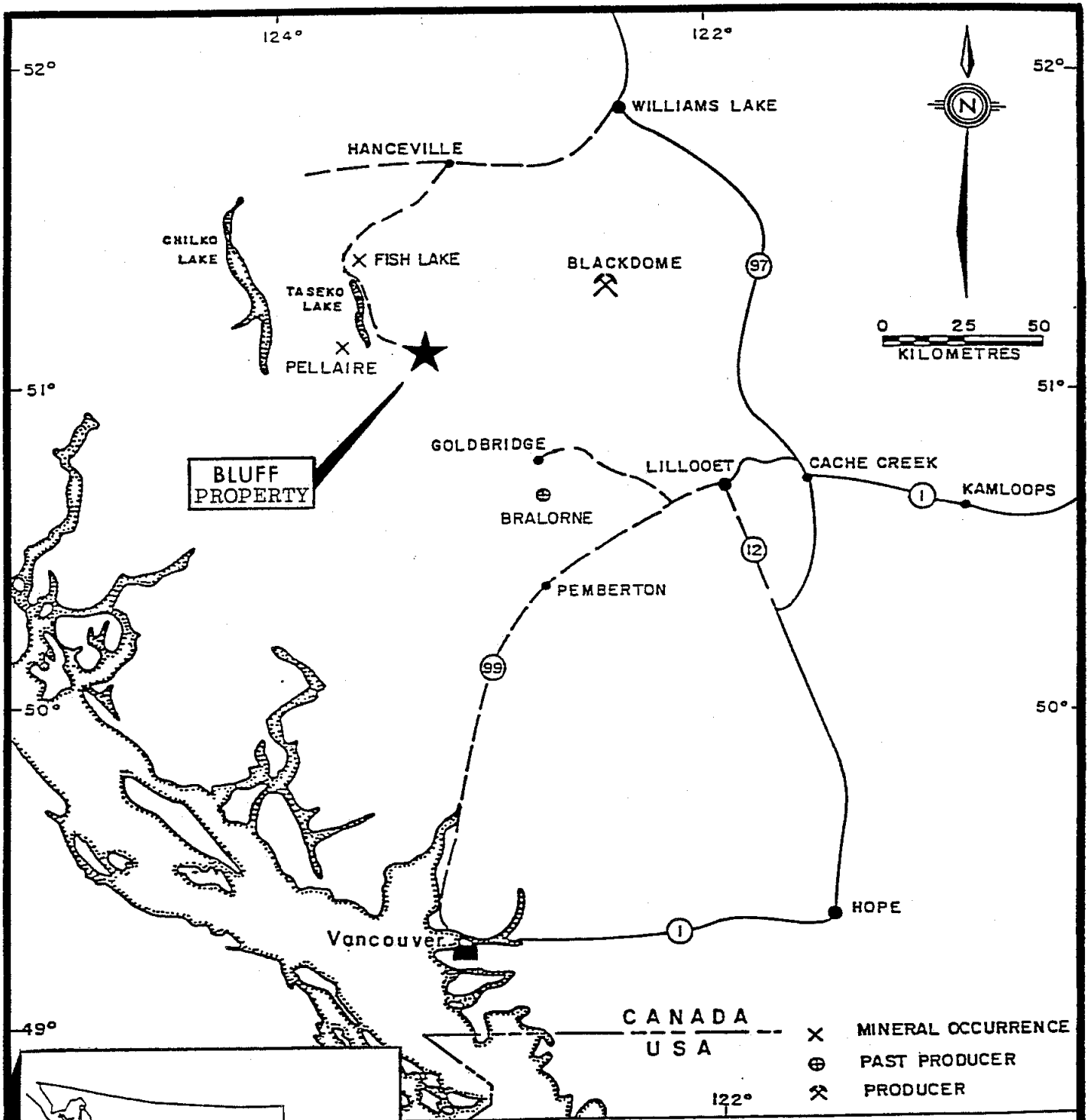
Location - The Bluff Property is located 225 km north of Vancouver, British Columbia, in the Clinton Mining Division (Figure 1). It lies 13 km southeast of the southern end of Upper Taseko Lake along the Taseko River, at 51°07' latitude and 123°22' west longitude, NTS Map 920/3.

Access - The property can be reached by road from Williams Lake (270 km) or by helicopter from Gold Bridge (48 km), Pemberton (100 km), Lillooet (120 km) or Williams Lake (215 km). Access to the property from Williams Lake is via Route 20 west to Hanceville on paved road, then southwesterly onto dirt roads to the Taseko Lakes, then southeasterly along the Taseko River to the claim area. Four-wheel drive vehicles are necessary for sections of the road south of Hanceville, and approximate travel time from Williams Lake is 6 hours. A 600 m long, remote airstrip in reasonable condition is located 1 km west of the property, and float planes can land at Taseko Lakes 13 km to the west.

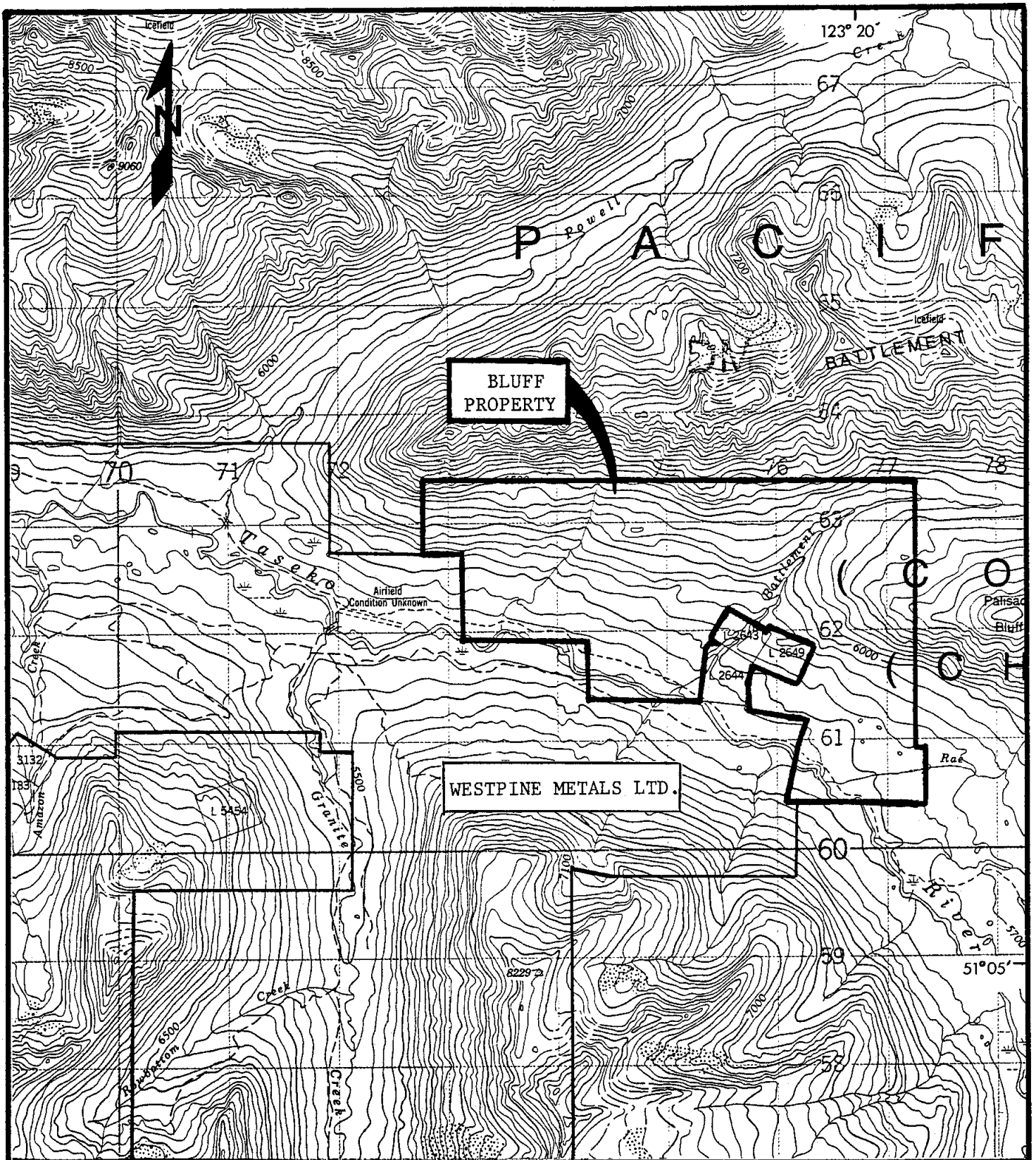
Physiography - Physiography in the claims area consists of a broad, U-shaped valley occupied by the Taseko River and its numerous tributaries. Elevation on the property ranges from 5200' (1585 m) in the valley to 7000' (2134 m) at the upper levels. The terrain is covered by lodgepole pine trees, with balsam fir and white pine occurring at higher elevations. Glacial cover consists of morainal deposits and glacial drift that appear to be relatively thin but extensive (typical depth is 3-8 m). Rock exposures are scarce and generally confined to creeks and steep slopes.

CLAIMS INFORMATION

The property under the option agreement is comprised of 3 four-post and 5 two-post mineral claims totalling 51 units held by Westmin Resources Limited and Homestake Canada Ltd. The claims are as follows (Figures 2A & 2B):



WESTPINE METALS LTD.		
LOCATION MAP AND MINERAL DEPOSITS		
E.E. LAMBERT, P.GEOL.		
N.T.S. 92 0/3W	SCALE: 1:1,852,000	FIG.
DATE: Dec. 1991	DRAWN: E.L./dw	1



0 1 km

FIGURE 2A:
CLAIM MAP

Dec. '91

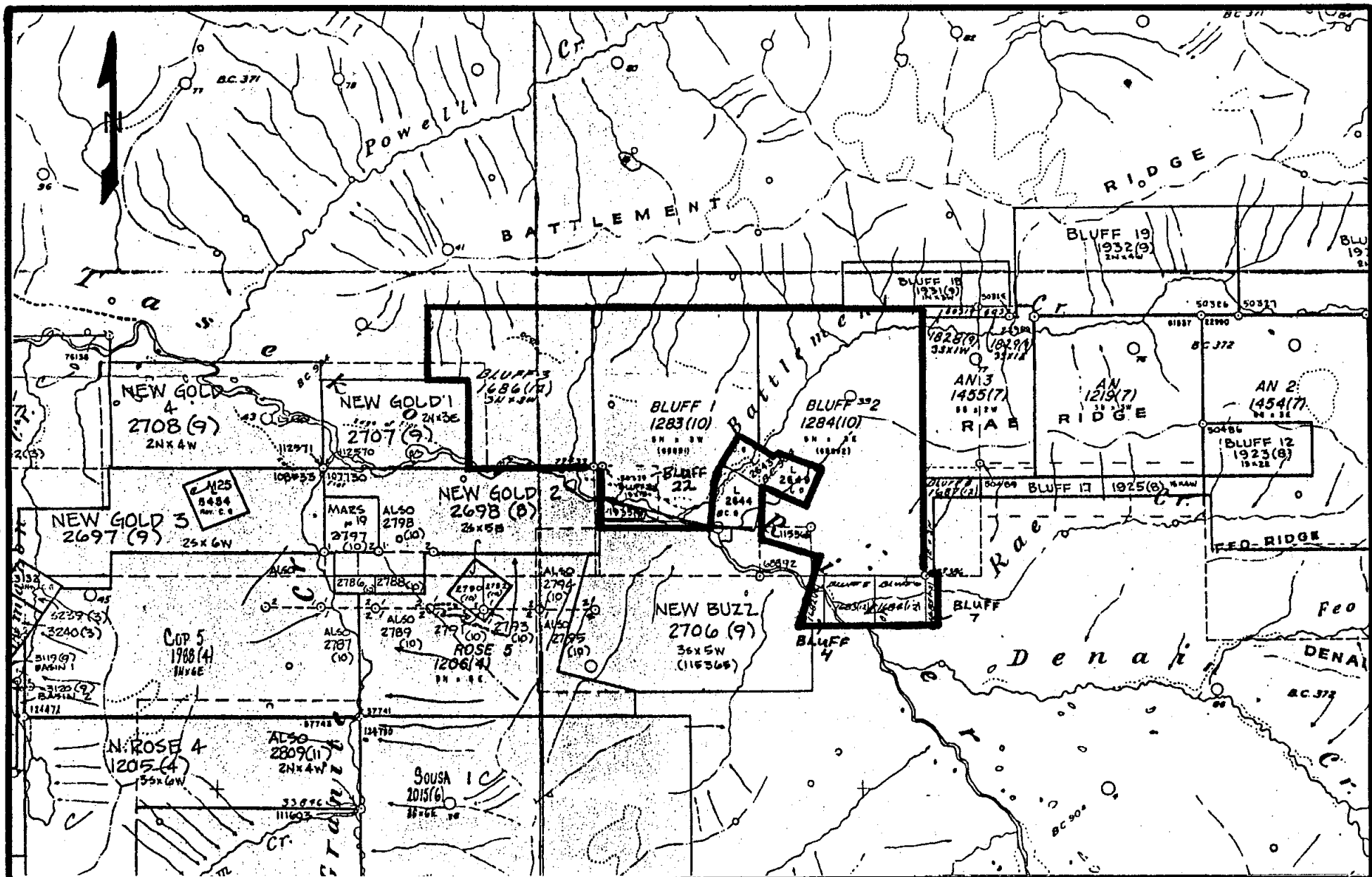


FIGURE 2B:

CLAIM MAP

<u>Claim Name</u>	<u>Units</u>	<u>Record #</u>	<u>Expiry Date</u>
Bluff 1	15	208074	Oct. 25, 1996
Bluff 2	15	208075	Oct. 25, 1996
Bluff 3	16	208152	Dec. 12, 1994
Bluff 4	1	208148	Dec. 12, 1994
Bluff 5	1	208149	Dec. 12, 1994
Bluff 6	1	208150	Dec. 12, 1994
Bluff 7	1	208151	Dec. 12, 1994
Bluff 22	1	208199	Sep. 23, 1994

PROPERTY HISTORY

1910's-1920's - Between 1909 and 1920, many large, bog-iron deposits were discovered by prospectors in the Taseko Lakes area. These deposits, consisting of bedded limonite, formed as a result of erosion and oxidation of heavily pyritized volcanic rocks (Crossland, 1920). In the early 1920's, copper-molybdenum mineralization was discovered in the area, and gold was produced from the Taylor Windfall mine (see Figure 4) from eluvial and near surface lode deposits (Quadros, 1981; Lane, 1985).

1930's-1950's - Exploration work was carried out on copper showings by Taseko Motherlode Gold Mines Ltd. (1933-1935) and Canadian Explorations Ltd. (1956). Underground development was undertaken at Taylor Windfall with minimal production. It was later rehabilitated in 1952-1953, again with limited production.

1960's-1970's - Prospects in the Taseko River area were extensively explored for Cu-Mo porphyry potential by numerous companies, including Phelps Dodge, Scurry Rainbow Oils Ltd., Sumitomo Metals Mining Canada Ltd., and Quintana Minerals Corp. Extensive geochemical, geophysical and drilling programs were implemented during this period.

1980's - Westmin Resources Limited staked the Bluff claim group around the Taylor Windfall mine in the early 1980's, and entered into a joint venture agreement with Esso Minerals Canada Limited in 1984. Geological, geochemical, and geophysical surveying work was carried out on the ground, and diamond drilling accompanied the work conducted on the Westmin ground. The thrust of their exploration attempts was to locate economic concentrations of epithermal gold mineralization. In 1989, Homestake Canada Ltd. took over all of Esso Minerals Canada's interest in the joint venture agreement between Westmin and Esso.

1990's - Westpine Metals Ltd. and ASARCO Exploration Company of Canada Limited optioned the ground south of the Bluff Property from new owners after Scurry Rainbow dropped their claims. They then optioned the Bluff Property from Westmin in early 1991.

REGIONAL GEOLOGIC SETTING AND MINERALIZATION

Regional Geology

The Bluff Property occurs along the northeastern margin of the Coast Plutonic Complex of Jurassic to Cretaceous age (Figure 3; Tipper, 1969 & 1978). Granitic magma of the Coast Plutonic Complex intruded sedimentary and volcanic rocks of Triassic to Cretaceous age. The oldest rocks of the area are basalts, pyroclastics and argillites of the Pioneer Formation, a subdivision of the upper Triassic Cadwallader Group, which outcrop 8 km north of the property. Overlying the Cadwallader Group are shales, siltstones, conglomerates, intermediate to mafic flows and pyroclastics of the lower Cretaceous Taylor Creek Group. These rock units are exposed roughly 8 km to the north, east and west of the property. Triassic to lower Cretaceous strata are tightly folded in NW trending folds.

Gently folded upper Cretaceous volcanoclastic sandstones, tuffs and breccias that correlate with the Kingsvale volcanics unconformably overlie the older, deformed strata, and are the predominant units both within and bordering the property to the north, east and west. Facies changes along northwest trending normal or strike-slip faults suggest that volcanic and sedimentary activity occurred within a northwest-trending trough coincident with faulting.

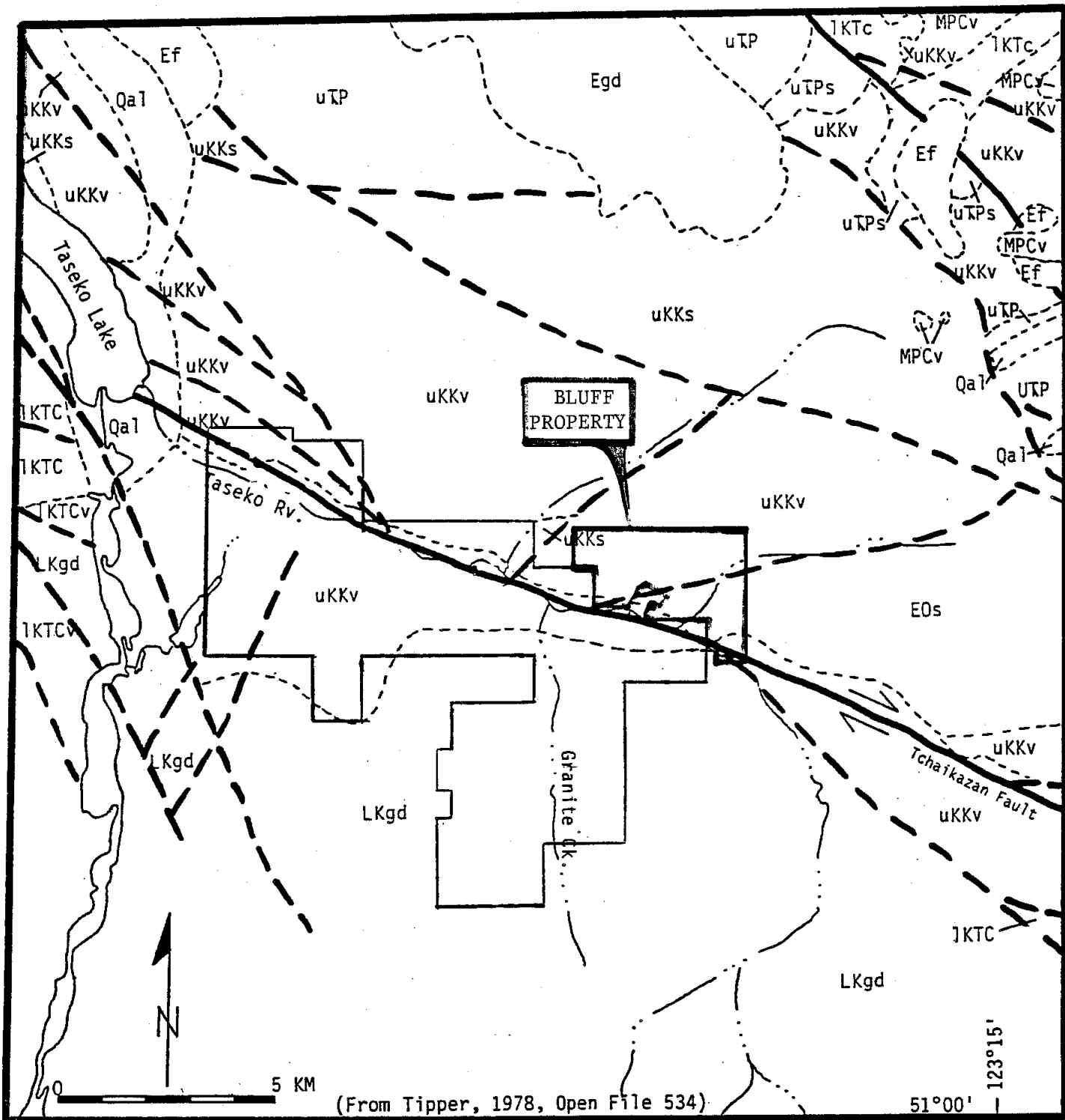
Upper Cretaceous strata are unconformably overlain by rhyolite, dacite and basalt flows and pyroclastic rocks of Eocene age. Locally interstratified conglomerates suggest the Eocene volcanics were erupted synchronously with block-fault graben development. The youngest rock units of the area are andesite and basalt flows and pyroclastics of the upper Miocene and/or Pliocene Chilcotin Group, occurring 10 km northeast of the property.

Intrusive rocks in the Taseko area include quartz diorite to quartz monzonite of the Coast Plutonic Complex (86 Ma), and later stocks and dikes that intrude the Complex and adjacent volcanic-volcanoclastic units.

Regional Mineralization

Significant mineral deposits in the region east of the Coast Range and within 100 km of the Bluff Property are plotted on Figure 1 and include the following (data from MMEPR, 1987, and Taseko Mines Limited 1991 news releases):

- (1) Blackdome: 254,000 tons: 0.739 oz/ton Au, 2.41 oz/ton Ag
- (2) Bralorne: 740,000 tons: 0.286 oz/ton Au
- (3) Fish Lake: 600,000,000 tons: 0.32% Cu, 0.016 oz/ton Au,
- (4) Pellaire: 67,100 tons: 0.669 oz/ton Au, 2.34 oz/ton Ag



(From Tipper, 1978, Open File 534)

- Qa1 Quaternary Sediments
- MPCv Miocene-Pliocene Chilcotin Gp. Volcanics
- EOs Eocene-Oligocene Sheba Group Volcanics
- Ef Eocene Felsic Intrusives
- Egd Eocene Granodiorite
- uKkv Upper Cretaceous Kingsvale Group Sediments & Volcanics
- TKTC Lower Cretaceous Taylor Creek Group Sediments & Volcanics
- LKgd Late Cretaceous Granodiorite Coast Plutonic Complex (CPC)
- uTPs Upper Triassic Cadwallader Gp. Pioneer Formation
- Fault
- Geologic Contact

WESTPINE METALS LTD.		
REGIONAL GEOLOGY		
E.E. LAMBERT, P. GEOL.		
DRAWN: E.E.L./dw	SCALE:	FIG.
DATE: 12/91	N.T.S. 920/3W	3

PROPERTY GEOLOGY

Lithologies

The Bluff Property and surrounding area has been mapped in detail by a number of company and government geologists. Because of an extensive blanket of glacial till covering most areas below treeline, outcrops are sparse and geologic mapping has been confined to exposures in creeks and the upper parts of ridges and mountain tops.

The property consists of Upper Cretaceous volcanic strata of the Kingsvale Group intruded on the south by Late Cretaceous granodiorite and quartz diorite of the Coast Plutonic Complex (Figure 4; Glover and Schiarizza, 1986; Allen, 1991). An intense alteration zone up to 3 km in width occurs adjacent to the northern perimeter of the batholith and can be traced from 500 m west of Honduras Creek to Big Creek, 10 km to the east (P. Schiarizza, personal comm.). The alteration zone narrows to 300+ m in width on the Bluff Property.

Unaltered volcanic strata occur north of the alteration zone and consist of andesitic pyroclastic rocks (mainly lithic tuffs with lesser amounts of ash and lapilli tuffs), massive to porphyritic andesite flows, and minor sediments (Lane, 1985). The volcanic strata trend NE to NW and dip between 15-35° north.

Structure

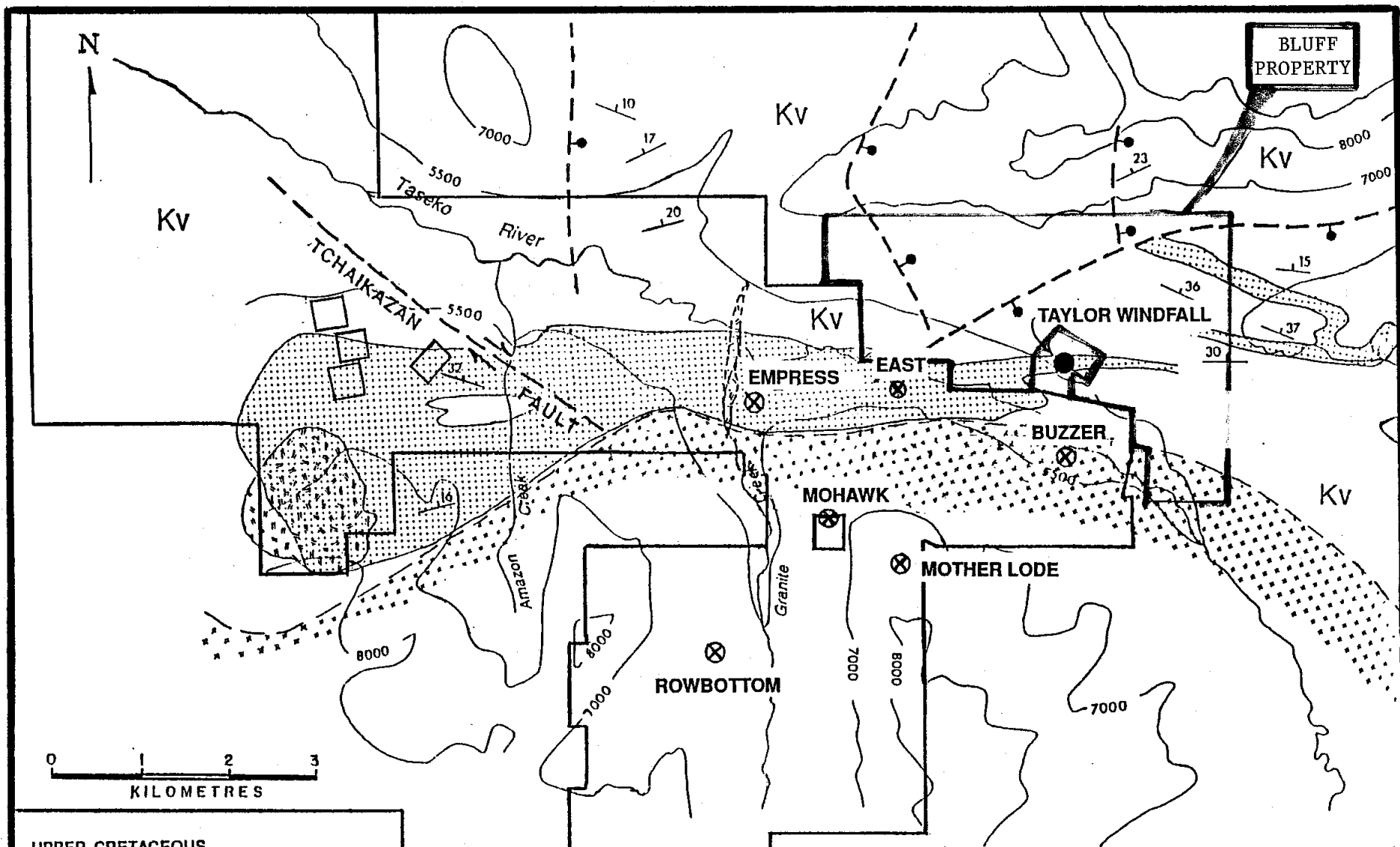
The property is bound on the south by a major strike-slip fault, the Tchiakazan fault, whose trace is thought to roughly coincide with the Taseko River valley. Normal faults have been identified on the Bluff Property, one being the Battlement Creek Fault which subparallels Battlement Creek and trends 070°. Smaller faults and fractures are visible in outcrop and as linears on airphotos.

Alteration

Two dominant types of alteration occur on the Bluff Property. The first is propylitic alteration which is widespread over the property and is recognized by the presence of chlorite, carbonate, epidote, sericite and pyrite. The second is advanced argillic alteration, and it occurs in two major zones on the property: the Taylor Windfall Zone (a 300+ meter wide zone that trends approximately 100° through the Taylor Windfall mine (see Figure 4), and the Rae Spur Zone, a zone covering an area 2000 m by 6000 m, the western edge of which occurs on the Bluff 2 claim (Lane, 1987).

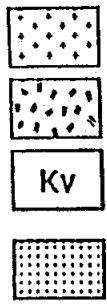
The advanced argillic alteration assemblage consists primarily of quartz, pyrophyllite-sericite and chlorite, with accessory corundum, tourmaline, plagioclase, andalusite, rutile, barite, dumortierite, dickite, apatite, alunite, montmorillonite, and kaolinite (Lane, 1985).

Structure and bedding lithology were the dominant factors influencing where alteration occurred within the volcanic-sedimentary package. Favourable stratigraphic horizons appear to be permeable sedimentary units with cross-cutting shears, fractures and faults.

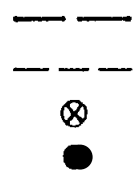


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UPPER CRETACEOUS



Granodiorite (CPC)
 Porphyritic Intrusives
 Volcanic rocks
 (Kingsvale Group)
 Hydrothermal alteration
 quartz-sericite-clay
 ± pyrite, magnetite



Fault
 Geologic contact
 Prospect
 Past producer

Geology after Glover et al, 1986

WESTPINE METALS LTD.

PROPERTY GEOLOGY AND
 MINERAL SHOWINGS

E.E.LAMBERT, P.GEOL.

DRAWN: E.E.L./dw

SCALE:

FIG.

DATE: December 1991

N.T.S.920/3W

4

Mineralization

Pyrite is a common mineral occurring as a major constituent in the advanced argillic alteration zone, and as a more minor phase in propylitically altered rock.

At Taylor Windfall mine, gold mineralization occurs along northeast to east trending shears and fractures that dip 75-90° to the southeast. Mineralization is also found across narrow widths in stratigraphic beds cut by shears. Gold mineralization occurs in two distinct deposit types: the Siliceous Zone Type, where free gold occurs with tourmaline, quartz, tetradymite (Bi_2Te_3), limonite, and pyrite in silicified tuff; and the Shaft Shear Type, where free gold occurs in a soft gangue of chloritized amphibole, sericite and iron, copper, zinc and lead sulphides within a quartz vein (Lane, 1985). Silver has been recovered along with the gold.

In the Rae Spur Zone, four target areas were defined and are characterized by coincident anomalous soil and rock geochemistry, VLF conductors, and favourable geology (alteration and structure).

1991 WORK PROGRAM AND RESULTS

1991 Program

The basic goal of the ASARCO-Westpine 1991 exploration program of the Bluff Property was to drill coincident resistivity and magnetic anomalies (as defined by an airborne geophysical survey conducted by Dighem in the fall of 1990) in an attempt to locate new zones of copper-gold mineralization. Soil sampling and reconnaissance rock sampling were conducted over the area where the drill holes were spotted, and also along a soil line previously sampled by Westmin in 1983 to see if high copper values could be duplicated.

A total of 1,451 feet (442.4 m) of NQ core in two holes was drilled by Newmac Industries Ltd. of Kamloops, B.C., and 71 split and crushed core samples were sent for analysis to Vangeochem Laboratories Ltd. in Vancouver, B.C.

8640 ft (2634 m) of grid was established over two areas: one was on the Bluff 3 claim (Figure 6) in the area of the diamond drill holes, and the other was 1 km east on the Bluff 1 claim (Figure 7). 79 soil and 3 rock samples were collected and sent in for analysis.

Standard 25-element ICP analysis and gold by fire assay with atomic absorption finish were performed on all samples. The core is stored on the property. Details of drilling results, summary drill logs, rock descriptions and assay certificates appear in the appendix.

Results

Drilling

Two holes were spotted over magnetic-resistivity geophysical anomalies to test for "Empress look-alike" targets (or, contact-metamorphic copper-gold deposits in volcanic host rocks; refer to Lambert's 1991 report for a description of the Empress deposit located on Westpine's Taseko Property). The location of these holes are indicated on Figure 5.

Hole W91-52 was drilled to a depth of 732 feet (223.2 m) and intersected variably altered mafic tuffs and flows(?). Lithic tuffs are interbedded with feldspar porphyry units and a gabbroic unit (sill?). Alteration intensity varies from minor to total, and from propylitic to quartz-pyrophyllite-chlorite-pyrite alteration.

Propylitic alteration consists of chlorite, hematite, magnetite, calcite and pyrite within mafic lapilli tuffs and feldspar porphyries. Associated minerals include black tourmaline (in radiating clusters), epidote, sericite (or pyrophyllite) and a bluish clay occurring on fractures.

The more intense alteration consists of abundant quartz + pyrophyllite (or sericite) with associated chlorite, pyrite, tourmaline and cross-cutting gypsum veining. This alteration appears to have occurred within tuffaceous units, possibly controlled by stratigraphic boundaries. Red-orange jasper occurred from 278-320' as veins with white chalcedony and pyrite, and as a pervasive flooding.

Only minor copper and gold mineralization was encountered in hole W91-52. Most intersections returned values less than 0.01% Cu and 20 ppb Au. The highest values were 0.05% Cu from 352 to 358 feet, and 80 ppb Au from 352 to 364 feet.

Hole W91-53 was drilled to a depth of 719 feet (219.2 m) and intersected propylitically altered mafic lapilli tuffs and flows. Minor sericite (pyrophyllite?), pyrite and jasper occurs in some sections.

Chalcopyrite + bornite were rarely intersected in hole W91-53, with most values less than 0.02% Cu and 20 ppb Au. The highest values returned were 0.12% Cu and 60 ppb Au from 141 to 147 feet.

Soil and Rock Geochemistry

Bluff 3 soils (Figure 6) returned spotty anomalous copper-gold values. Of 62 samples collected, only four assayed greater than 100 ppm Cu and 30 ppb Au. The highest values come from sample BL24N, 52E, the westernmost sample of this grid, with 259 ppm Cu and 240 ppb Au. Only one rock sample was collected and returned minimal copper-gold values.

Bluff 1 was the site of a 1983 Westmin soil survey which returned highly anomalous copper values (greater than 800 ppm Cu) from the western edge of

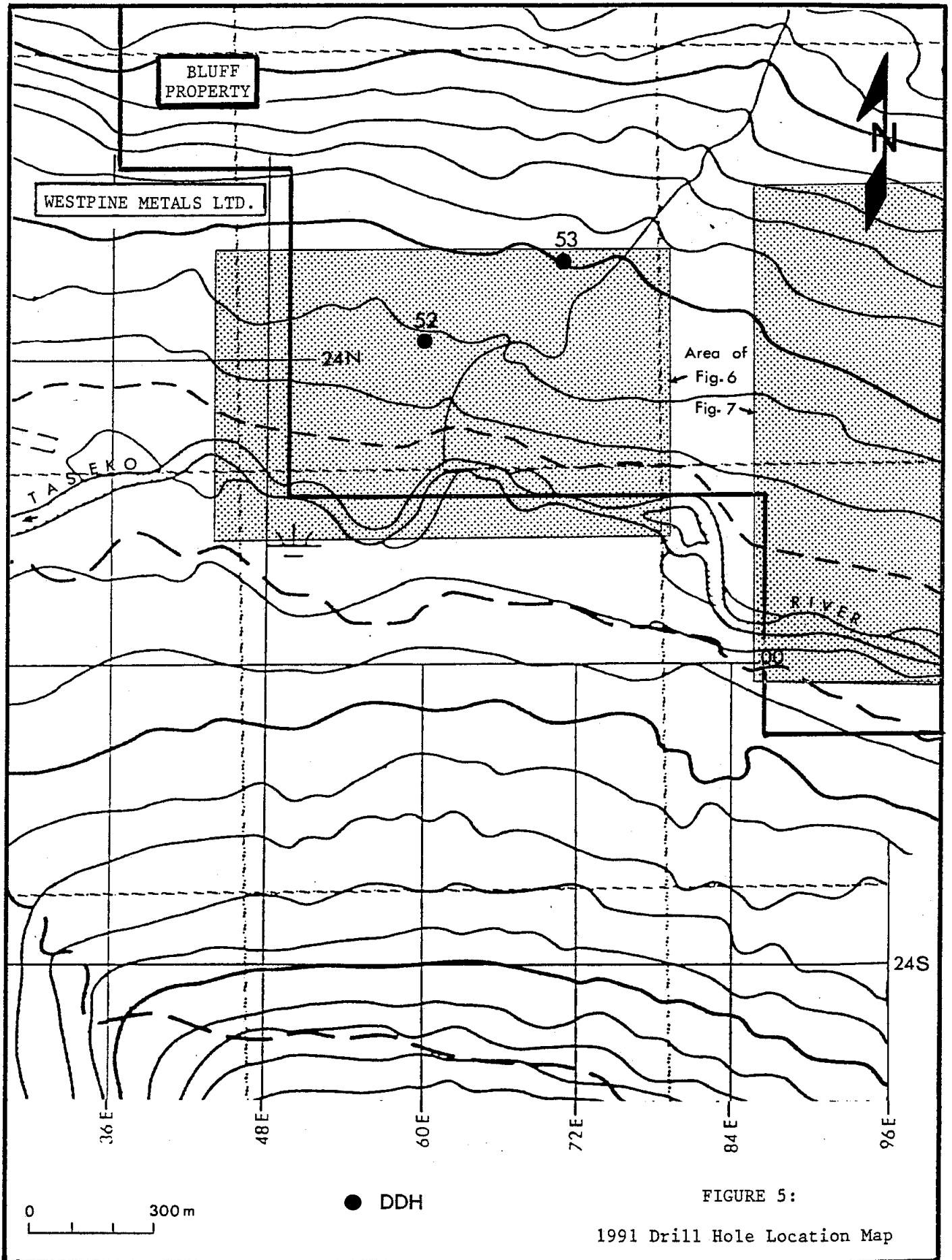
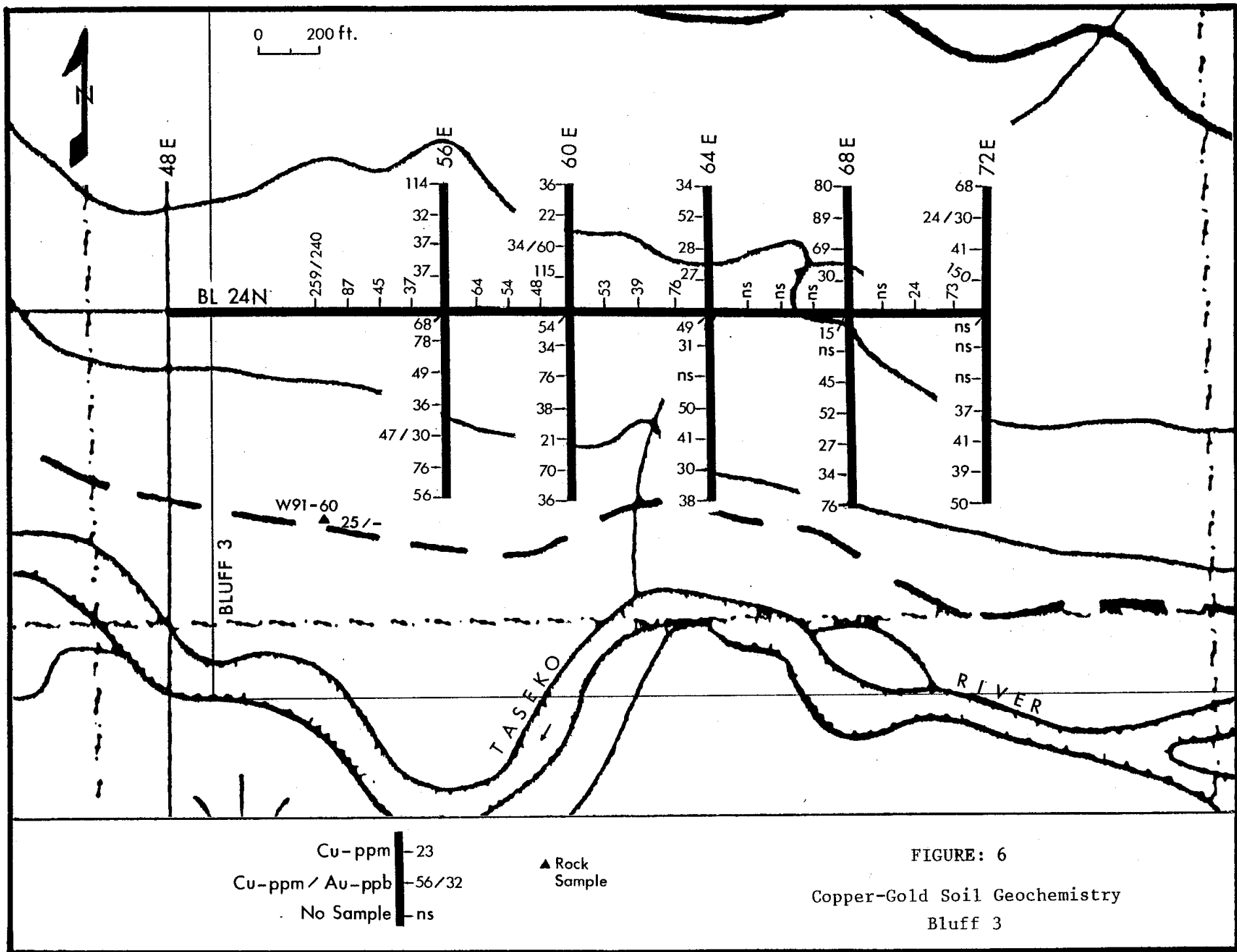


FIGURE 5:

1991 Drill Hole Location Map



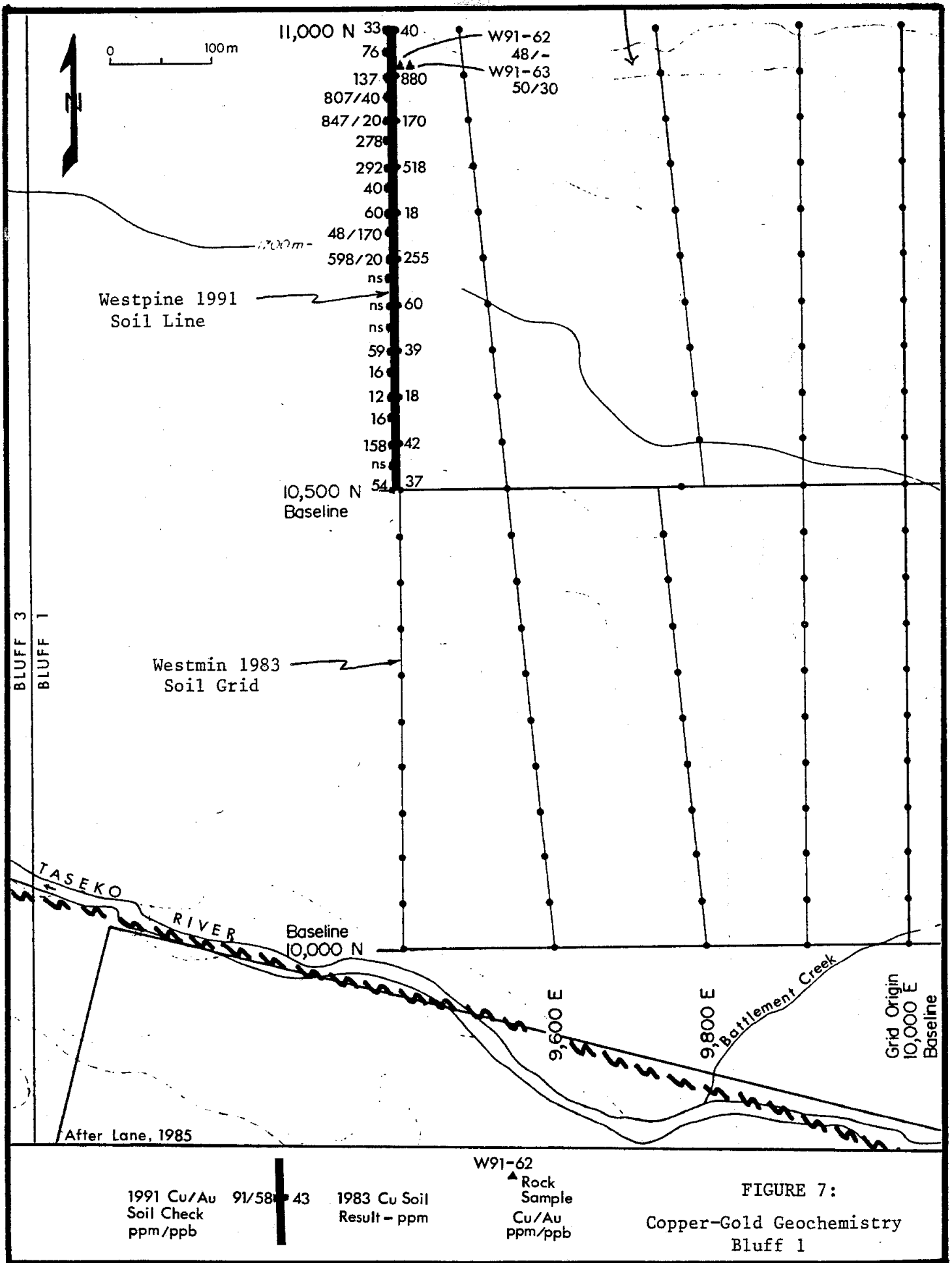


FIGURE 7:
Copper-Gold Geochemistry
Bluff 1

the grid area. The westernmost line was resampled in 1991 to try to duplicate the 1983 results. Seven out of seventeen samples assayed greater than 100 ppm Cu, and four samples were greater than 20 ppb Au. Two samples returned values greater than 800 ppm Cu and 20 ppb Au in the area of the 1983 anomalous samples. The highest values were 847 ppm Cu and 170 ppb Au (from two different samples). Two rock samples were collected from this area but assayed less than 60 ppm Cu. One rock sample assayed 30 ppb Au.

CONCLUSIONS AND RECOMMENDATIONS

Drilling failed to intersect significant copper-gold mineralization on the Bluff 3 claim. However, rock intensely altered to quartz-pyrophyllite-chlorite-pyrite-tourmaline was intersected and indicates mineralization is possible in the area.

Highly anomalous soils in both copper and gold from the Bluff 1 claim require an extension of the grid to see if the anomaly occurs over a larger area. If so, the anomaly should then be drill tested.

REFERENCES

- Allen, D.G., 1991, Geological and Geochemical Report on the Taseko Alteration Zone; private report for ASARCO Exploration Company of Canada, Ltd. and Westpine Metals Ltd.
- Britten, R., 1984, Field Work at Taseko Joint Venture Project: Esso Minerals Canada Ltd. report.
- Crossland, F.J., 1920, Taseko Valley Iron-Ore Deposits: in Annual Report of the Minister of Mines 1920, British Columbia.
- Glover, J.K., Schiarizza, P., Unhoefer, P., and Garver, J., 1986, Geology of the Warner Pass area, NTS 920/3; B.C.G.S. Open File map 1987/3.
- Lambert, E.E., 1991, 1990 Diamond Drilling Program of the Taseko Property; Westpine Metals Ltd. Assessment Report, currently unpublished.
- Lane, R., 1985, Taseko Project, Year End Report - 1984; Westmin Resources Limited company report.
- Lane, R., 1987, Taseko Property: Summary Report; Westmin Resources Limited company report.
- MMEPR, 1987, Producers and Potential Producers, Mineral and Coal; Ministry of Mines, Energy and Pet. Res. Preliminary Map 65.
- Quadros, A.M., 1981, The Spokane Prospect: A Review of the History, Geology and Economic Potential of a Gold-Silver-Copper Prospect on Amazon Creek; Consulting report for Mr. Felix Reyes.
- Tipper, H.W., 1969, Mesozoic and Cenozoic Geology of the Northeast Part of Mount Waddington Map Area (92N), Coast District; B.C., Geological Survey of Canada, Paper 68-33.
- Tipper, H.W., 1978, Taseko Lakes (920) Map Area; 1"=4 miles Open File Map 534, Geological Survey of Canada.

STATEMENT OF COSTS

Field Personnel		\$ 8,745
W.Osborne, geologist	- 7 days @ \$383	\$ 2,681
E.Lambert, geologist	- 9 days @ \$275	2,475
P.Wilkinson, cook	- 8 days @ \$166	1,328
D.Sutherland, asst.	- 6.5 days @ \$154	1,001
C.Soby, assistant	- 10 days @ \$126	1,260
Diamond Drilling		28,405
Diamond Drilling (1,451 ft. x \$18/foot)		26,118
Preparation of Drill Sites		1,560
Core Boxes		574
Core Racks		153
Laboratory Analysis		2,295
Core		1,065
Soil		1,185
Rock		45
Food and Accommodation		2,868
Field: food (74 man days x \$9.55)		707
camp (74 man days x \$12.30)		910
camp construction		1,133
Town: motel, meals, transportation		118
Transportation		2,501
Helicopter		980
Vehicle Rentals		681
Work on Access Road		840

Equipment and Supplies

130

Field Supplies
Office Supplies

109
21

Report Preparation

1,050

Report Writing
Reproduction

800
250

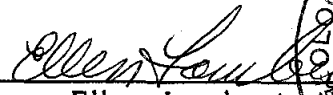
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TOTAL PROJECT COST \$ 45,994
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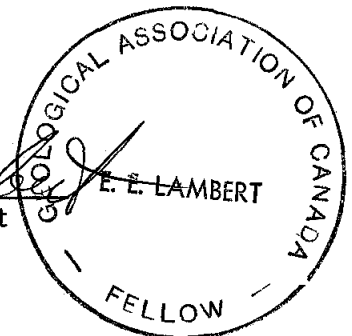
STATEMENT OF QUALIFICATIONS

I, Ellen Lambert, of 900-475 Howe St., Vancouver, British Columbia, hereby certify that:

1. I am a Fellow of the Geological Association of Canada.
2. I have a Bachelor's degree in Geology from the University of Washington (1979) and a Master's degree in Geology from the University of New Mexico (1983).
3. I have practised as a geologist part time since 1979 in the United States and Canada, and full time in mineral exploration in Canada and the U.S. since 1986.
4. This report is based upon soil sampling and core logging from Sept. 12-26, 1991.
5. I have no interest, direct or indirect, in the properties or securities of Westmin Resources Limited or Homestake Canada Ltd., nor do I expect to receive any such interest.

December 16, 1991


Ellen Lambert
M.Sc., FGAC



APPENDIX

Rock Descriptions
Summary Drill Logs
Assay Results and Intervals
Assay Certificates

ROCK DESCRIPTIONS

W91-60: Quartz-plagioclase rock with tourmaline, pyrophyllite ,
magnetite and pyrite.

W91-62: Olivine basalt.

W91-63: Andesite tuff.

1991 SUMMARY DRILL LOGS

ABBREVIATIONS

Q	=	Quartz
Chl	=	Chlorite
Pyro	=	Pyrophyllite
Epi	=	Epidote
Mag	=	Magnetite
Py	=	Pyrite
Cpy	=	Chalcopyrite

* NOTE * All drill log summaries and assay results are given in feet. To convert to meters, use the following conversion factor:

1 foot = 0.305 meters

SUMMARY DRILL LOG

HOLE 91-52

Azimuth: -
Dip: -90°
Depth: 732 ft. (223.2 m)

<u>INTERVAL</u> (feet)	<u>DESCRIPTION</u>
0 - 15	OVERBURDEN
15 - 154	MAFIC LAPILLI TUFF: dark green, magnetic rock containing chloritized rock fragments from <0.1 inches to >10 inches. Locally py-black tourmaline altered. 15-38 = strongly broken core, some core lost 48-87 = py + tourmaline alteration, where tourmaline occurs in radiating clusters 117-140 = strongly broken core, some core lost
154 - 257	FELDSPAR PORPHYRY: abundant (50%) feldspar phenocrysts and chloritized mafic phenocrysts in a strongly magnetic groundmass. Local calcite + epi veining. 181-253 = local zones of strongly faulted core
257 - 322.5	QUARTZ-PYROPHYLLITE-CHLORITE ROCK: altered feldspar porphyry to these minerals plus py and tourmaline. Gradational contact. Local red jasper. 278-322 = veins and flooding of red jasper and white chalcedony + py
322.5 - 354	FELDSPAR PORPHYRY: gradational upper contact over 2 ft.
354 - 418.5	GABBRO: strongly magnetic, medium grained gabbro. Possibly related to feldspar porphyry. Finer grained on both edges. Local cpy, disseminated and as veinlets.
418.5 - 454	QUARTZ-PYROPHYLLITE-CHLORITE ROCK: altered feldspar porphyry or gabbro; gradational contact over 1 ft. Associated py, tourmaline, chalcedony and gypsum veining.
454 - 650	LAPILLI TUFF: variably altered to Q-pyro-chl-py. Minor alteration to 461 ft., then alteration intensity varies from 10 to 100% to 650 ft. 458-482 = local strongly broken core

(Cont'd)

91-52, CONTINUED

<u>INTERVAL</u> (feet)	<u>DESCRIPTION</u>
650 - 678.5	MAFIC TUFF: chloritized mafic phenocrysts in a black and dark green mottled rock that is strongly magnetic. Associated epidote, calcite and gypsum veining.
678.5 - 732	QUARTZ-PYROPHYLLITE-CHLORITE ROCK: altered mafic tuff with associated py, tourmaline, gypsum veining, and minor mag.
732	EOH

SUMMARY DRILL LOG

HOLE 91-53

Azimuth: -
 Dip: -90°
 Depth: 719 ft. (219.2 m)

<u>INTERVAL</u> (feet)	<u>DESCRIPTION</u>
0 - 10	OVERBURDEN
10 - 263	<p>LAPILLI TUFF: greyish-maroon rock with conspicuous chloritized fragments(?) ranging in shape from circular to square and in size from 0.25 inches to 1 inch, and making up about 20% of rock. Some fragments weathered out near top of hole. Variably magnetic rock. Associated py, chl, black tourmaline and rare cpy.</p> <p>180 = 4 inch gouge zone, dipping 65° 247-261 = fault zone</p>
263 - 268	MAFIC TUFF: fine grained, dark greenish grey rock; weak to moderate propylitic alteration.
268 - 719	<p>BASALT: top 2 ft. appear to be a flow-top breccia. Strongly magnetic rock, propylitized. Feldspar laths locally accentuated due to sericite alteration; local xenoliths.</p> <p>346-352 = minor, disseminated cpy 382-426 = minor, disseminated cpy, rare bornite 433-482 = zones of strongly broken core 511-560 = slight brecciation to basalt where matrix consists of massive hematite + calcite. 620-719 = local jasper veining, minor cpy + bornite</p>
719	EOH

ASSAY DRILL LOG FOR DDH 91-52

COORDINATES 60+08E
25+35N

BEARING: -
INCLINATION: -90
COLLAR ELEVATION: 5415'
TOTAL DEPTH: 732'

LABORATORIES: Vangeochem Laboratories

Taseko Hole No.	Sample	Footage			% Cu	Assays	
		From	To	Interval		ppb Au	ppm Ag
91-52	NS	0.0	50.0	50.0			
"	91855	50.0	56.0	6.0	0.0025	0	0.0
"	NS	56.0	101.0	45.0			
"	91856	101.0	107.0	6.0	0.0055	0	0.0
"	NS	107.0	170.0	63.0			
"	91857	170.0	176.0	6.0	0.0001	0	0.0
"	NS	176.0	215.0	39.0			
"	91858	215.0	221.0	6.0	0.0003	0	0.0
"	NS	221.0	250.0	29.0			
"	91859	250.0	256.0	6.0	0.0040	0	0.0
"	91860	256.0	262.0	6.0	0.0132	0	0.0
"	91861	262.0	268.0	6.0	0.0007	0	0.0
"	91862	268.0	274.0	6.0	0.0003	0	0.0
"	91863	274.0	280.0	6.0	0.0003	0	0.0
"	91864	280.0	286.0	6.0	0.0005	20	0.0
"	91865	286.0	292.0	6.0	0.0005	0	0.0
"	91866	292.0	298.0	6.0	0.0007	0	0.0
"	91867	298.0	304.0	6.0	0.0003	0	0.0
"	91868	304.0	310.0	6.0	0.0008	20	0.0
"	91869	310.0	316.0	6.0	0.0005	0	0.0
"	91870	316.0	322.0	6.0	0.0005	0	0.0
"	91871	322.0	328.0	6.0	0.0022	0	0.0
"	91872	328.0	334.0	6.0	0.0030	0	0.0
"	91873	334.0	340.0	6.0	0.0000	0	0.0
"	91874	340.0	346.0	6.0	0.0014	0	0.0
"	91875	346.0	352.0	6.0	0.0002	0	0.0
"	91876	352.0	358.0	6.0	0.0523	80	0.0
"	91877	358.0	364.0	6.0	0.0182	80	0.0
"	NS	364.0	418.0	54.0			
"	91878	418.0	424.0	6.0	0.0029	10	0.0
"	91879	424.0	430.0	6.0	0.0029	0	0.0
"	91880	430.0	436.0	6.0	0.0029	0	0.0
"	91881	436.0	442.0	6.0	0.0025	10	0.0
"	91882	442.0	448.0	6.0	0.0140	10	0.0
"	91883	448.0	454.0	6.0	0.0042	0	0.0
"	NS	454.0	494.0	40.0			
"	91884	494.0	500.0	6.0	0.0091	0	0.0
"	NS	500.0	538.0	38.0			
"	91885	538.0	544.0	6.0	0.0094	10	0.0
"	NS	544.0	594.0	50.0			
"	91886	594.0	600.0	6.0	0.0021	0	0.0
"	NS	600.0	640.0	40.0			
"	91887	640.0	646.0	6.0	0.0012	0	0.0
"	NS	646.0	696.0	50.0			
"	91888	696.0	702.0	6.0	0.0010	0	0.0
"	NS	702.0	722.0	20.0			
"	91889	722.0	728.0	6.0	0.0009	0	0.0
"	NS	728.0	732.0	4.0			

ASSAY DRILL LOG FOR DDH 91-53

COORDINATES 70+65E
31+51N

BEARING: -
INCLINATION: -90
COLLAR ELEVATION: 5530'
TOTAL DEPTH: 719'

LABORATORIES: Vangeochem Laboratories

Taseko Hole No.	Sample	Footage			% Cu	Assays	
		From	To	Interval		ppb Au	ppm Ag
91-53	NS	0.0	10.0	10.0			
"	91890	10.0	16.0	6.0	0.0081	0	0.0
"	91891	16.0	22.0	6.0	0.0045	10	0.0
"	91892	22.0	28.0	6.0	0.0006	0	0.0
"	NS	28.0	68.0	40.0			
"	91893	68.0	74.0	6.0	0.0005	0	0.0
"	NS	74.0	124.0	50.0			
"	91894	124.0	130.0	6.0	0.0025	0	0.0
"	NS	130.0	141.0	11.0			
"	91895	141.0	147.0	6.0	0.1163	60	0.0
"	NS	147.0	196.0	49.0			
"	91896	196.0	202.0	6.0	0.0089	0	0.0
"	NS	202.0	340.0	138.0			
"	91897	340.0	346.0	6.0	0.0017	0	0.0
"	91898	346.0	352.0	6.0	0.0448	0	0.0
"	91899	352.0	358.0	6.0	0.0132	0	0.0
"	NS	358.0	396.0	38.0			
"	91900	396.0	402.0	6.0	0.0007	0	0.0
"	91901	402.0	408.0	6.0	0.0058	0	0.0
"	91902	408.0	414.0	6.0	0.0076	0	0.0
"	91903	414.0	420.0	6.0	0.0130	0	0.0
"	91904	420.0	426.0	6.0	0.0030	0	0.0
"	91905	426.0	432.0	6.0	0.0055	0	0.0
"	NS	432.0	471.0	39.0			
"	91906	471.0	477.0	6.0	0.0088	0	0.0
"	NS	477.0	531.0	54.0			
"	91907	531.0	537.0	6.0	0.0007	0	0.0
"	NS	537.0	576.0	39.0			
"	91908	576.0	582.0	6.0	0.0000	0	0.0
"	NS	582.0	620.0	38.0			
"	91909	620.0	626.0	6.0	0.0317	0	0.0
"	91910	626.0	632.0	6.0	0.0061	0	0.0
"	91911	632.0	638.0	6.0	0.0132	20	0.0
"	91912	638.0	644.0	6.0	0.0166	0	0.0
"	91913	644.0	650.0	6.0	0.0008	0	0.0
"	91914	650.0	656.0	6.0	0.0026	40	0.0
"	91915	656.0	662.0	6.0	0.0178	20	0.0
"	91916	662.0	668.0	6.0	0.0009	0	0.0
"	91917	668.0	674.0	6.0	0.0002	0	0.0
"	91918	674.0	680.0	6.0	0.0000	0	0.0
"	91919	680.0	686.0	6.0	0.0002	0	0.0
"	91920	686.0	692.0	6.0	0.0008	0	0.0
"	91921	692.0	698.0	6.0	0.0000	0	0.0
"	91922	698.0	704.0	6.0	0.0000	10	0.0
"	91923	704.0	709.0	5.0	0.0016	0	0.0
"	91924	709.0	714.0	5.0	0.0022	10	0.0
"	91925	714.0	719.0	5.0	0.0045	0	0.0

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: 

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REPORT #: 910250 PA

ALPINE EXPLORATION CORP.

PROJECT: BLUFF PROPERTY

DATE IN: OCT 01 1991

DATE OUT: OCT 08 1991

ATTENTION: MR. BILL OSBORNE

Sample Name	Ag	Al	As	*Au	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sn	Sr	U	W	Zn
	ppm	%	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
91855	<0.1	3.45	26	<5	109	<3	0.89	1.1	40	122	25	5.29	0.53	1.69	826	<1	0.21	38	0.02	<2	<2	<2	55	<5	<3	120
91856	<0.1	3.33	<3	<5	103	<3	1.43	<0.1	19	114	55	6.85	0.67	1.96	520	<1	0.23	41	0.01	<2	<2	<2	87	<5	<3	60
91857	<0.1	2.93	<3	<5	61	<3	1.83	<0.1	25	119	1	4.47	0.57	1.18	490	<1	0.56	18	0.02	<2	<2	4	178	<5	<3	53
91858	<0.1	3.06	21	<5	62	<3	1.95	1.1	26	139	3	5.09	0.61	1.49	856	<1	0.49	13	0.02	<2	<2	6	150	<5	<3	75
91859	<0.1	3.36	<3	<5	88	<3	1.95	0.9	22	101	40	4.55	0.53	1.53	564	<1	0.53	15	0.01	<2	<2	<2	176	<5	<3	44
91860	<0.1	2.83	<3	<5	45	16	1.36	<0.1	37	129	132	5.76	0.56	1.55	491	<1	0.24	15	0.03	<2	<2	<2	83	<5	<3	77
91861	<0.1	2.11	<3	<5	33	16	2.79	0.6	34	88	7	5.34	0.64	1.41	339	<1	0.17	12	0.02	<2	<2	<2	139	<5	<3	
91862	<0.1	1.96	<3	<5	35	17	2.74	<0.1	33	112	3	5.45	0.68	1.23	305	<1	0.13	16	0.02	<2	<2	<2	104	<5	<3	18
91863	<0.1	2.74	<3	<5	52	24	3.52	1.4	28	114	3	4.34	0.72	1.79	371	<1	0.23	17	0.02	<2	<2	<2	154	<5	<3	22
91864	<0.1	2.04	<3	20	32	27	3.00	<0.1	36	118	5	6.39	0.75	1.46	280	<1	0.15	14	0.02	<2	<2	<2	116	<5	<3	21
91865	<0.1	2.30	<3	<5	41	<3	4.15	<0.1	46	140	5	6.20	0.81	1.66	303	<1	0.10	20	0.02	<2	<2	<2	130	<5	<3	23
91866	<0.1	1.69	<3	<5	35	8	3.96	0.7	36	155	7	4.68	0.76	1.26	235	<1	0.13	19	0.01	<2	<2	<2	161	<5	<3	16
91867	<0.1	1.75	<3	<5	27	34	3.34	0.5	35	108	3	4.74	0.71	1.43	192	<1	0.09	11	0.01	<2	<2	<2	113	<5	<3	15
91868	<0.1	2.47	<3	20	42	22	4.82	<0.1	58	234	8	6.75	0.96	1.79	219	<1	0.13	20	0.02	<2	<2	<2	233	<5	<3	83
91869	<0.1	2.71	<3	<5	31	24	5.58	<0.1	42	132	5	5.67	0.96	2.23	255	<1	0.15	22	0.02	<2	<2	<2	131	<5	<3	33
91870	<0.1	2.67	<3	<5	35	7	4.71	1.1	31	128	5	3.72	0.81	2.23	277	<1	0.14	20	0.02	<2	<2	<2	166	<5	<3	29
91871	<0.1	2.67	<3	<5	42	<3	3.06	0.5	14	114	22	5.12	0.71	1.67	366	<1	0.27	20	0.01	<2	<2	<2	154	<5	<3	37
91872	<0.1	3.35	<3	<5	67	<3	2.54	<0.1	23	150	30	5.73	0.70	1.62	656	<1	0.49	20	0.01	<2	<2	4	187	<5	<3	50
91873	<0.1	2.81	<3	<5	38	<3	2.35	0.5	28	129	<1	4.61	0.63	1.25	635	<1	0.43	12	0.01	<2	<2	<2	148	<5	<3	72
91874	<0.1	3.22	<3	<5	38	<3	2.58	1.0	28	131	14	5.03	0.61	1.26	663	<1	0.48	13	0.01	<2	<2	<2	179	<5	<3	69
91875	<0.1	3.78	10	<5	73	<3	2.90	0.4	30	172	2	5.50	0.66	1.30	649	<1	0.59	44	0.02	<2	<2	10	227	<5	<3	59
91876	<0.1	2.91	<3	80	28	<3	2.41	0.5	23	105	523	5.97	0.64	1.48	592	<1	0.32	17	0.01	<2	<2	<2	125	<5	<3	75
91877	<0.1	2.60	<3	80	16	<3	2.38	<0.1	20	80	182	6.39	0.65	1.66	558	<1	0.17	17	0.02	<2	<2	<2	64	<5	<3	101
91878	<0.1	1.95	<3	10	41	4	4.41	0.7	44	151	29	5.25	0.86	1.22	435	<1	0.24	17	0.01	<2	<2	<2	212	<5	<3	49
91879	<0.1	2.33	<3	<5	48	29	4.23	0.5	27	101	29	4.39	0.79	1.83	440	<1	0.15	17	0.01	<2	<2	<2	196	<5	<3	
91880	<0.1	2.05	<3	<5	39	7	4.13	0.5	50	114	29	4.80	0.91	1.64	303	<1	0.17	13	0.02	<2	<2	<2	189	<5	<3	45
91881	<0.1	2.22	<3	10	46	<3	4.00	0.7	38	92	25	4.29	0.94	1.75	427	<1	0.16	16	0.01	<2	<2	<2	160	<5	<3	46
91882	<0.1	2.09	<3	10	44	<3	2.84	0.5	44	122	140	5.31	0.88	1.68	478	<1	0.20	27	0.01	<2	<2	<2	80	<5	<3	55
91883	<0.1	1.64	<3	<5	25	32	3.41	0.7	45	113	42	4.78	0.83	1.32	427	<1	0.14	24	0.01	<2	<2	<2	110	<5	<3	61
91884	<0.1	2.30	<3	<5	57	22	2.12	0.5	52	105	91	4.93	0.66	1.53	727	<1	0.15	34	0.01	<2	<2	<2	96	<5	<3	49
91885	<0.1	1.77	<3	10	23	24	4.05	<0.1	30	123	94	6.11	0.96	1.37	384	<1	0.15	21	0.01	<2	<2	<2	223	<5	<3	60
91886	<0.1	1.71	<3	<5	46	<3	3.16	0.6	34	141	21	4.67	0.83	1.25	438	<1	0.13	45	0.01	<2	<2	<2	139	<5	<3	27
91887	<0.1	1.40	<3	<5	40	39	4.99	0.9	38	120	12	3.74	1.00	1.22	281	<1	0.20	16	0.01	<2	<2	<2	152	<5	<3	57
91888	<0.1	1.61	<3	<5	45	10	4.62	0.5	31	159	10	4.99	0.97	1.27	345	<1	0.17	23	0.01	<2	<2	<2	231	<5	<3	28
91889	<0.1	0.78	<3	<5	32	11	5.44	0.6	29	110	9	4.41	0.98	1.19	618	<1	0.12	18	0.01	<2	<2	<2	261	<5	<3	30
91890	<0.1	1.69	<3	<5	46	41	2.95	0.9	55	125	81	3.85	0.81	0.81	511	<1	0.22	30	0.01	<2	<2	<2	59	<5	<3	46
91891	<0.1	1.76	<3	10	35	40	2.99	<0.1	10	87	45	2.42	0.78	0.90	493	<1	0.25	30	0.01	<2	<2	<2	63	<5	<3	42
91892	<0.1	1.83	<3	<5	30	19	3.00	<0.1	9	74	6	2.46	0.71	0.95	451	<1	0.22	34	0.01	<2	<2	<2	75	<5	<3	42
91893	<0.1	2.11	<3	<5	49	20	2.38	<0.1	7	65	5	3.60	0.70	0.88	297	<1	0.19	47	0.01	<2	5	<2	92	<5	<3	26

Minimum Detection: 0.1 ppm Ag, 0.01% Al, 3 ppm As, 5 ppb Au, 1 ppm Ba, 3 ppm Bi, 0.01% Ca, 0.1 ppm Cd, 1 ppm Co, 1 ppm Cr, 1 ppm Cu, 0.01% Fe, 0.01% K, 0.01% Mg, 1 ppm Mn, 1 ppm Mo, 0.01% Na, 1 ppm Ni, 0.01% P, 2 ppm Pb, 2 ppm Sb, 2 ppm Sn, 1 ppm Sr, 5 ppm U, 3 ppm W, 1 ppm Zn

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 910250 PA

ALPINE EXPLORATION CORP.

PROJECT: BLUFF PROPERTY

DATE IN: OCT 01 1991

DATE OUT: OCT 08 1991

ATTENTION: MR. BILL OSBORNE

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Sample Name	Ag ppm	Al %	As ppm	*Au ppb	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm
91894	<0.1	2.28	23	<5	90	34	1.57	<0.1	12	69	25	4.35	0.47	0.88	312	<1	0.22	43	0.02	<2	11	13	83	<5	<3	60
91895	<0.1	2.81	5	60	99	<3	1.58	<0.1	42	52	1163	4.49	0.47	0.94	332	<1	0.29	50	0.02	<2	19	2	106	<5	<3	32
91896	<0.1	3.17	<3	<5	74	<3	1.88	<0.1	44	57	89	5.09	0.47	0.97	416	<1	0.28	45	0.01	<2	7	7	121	<5	<3	38
91897	<0.1	2.89	33	<5	59	<3	2.91	<0.1	25	127	17	5.70	0.65	1.25	638	<1	0.48	41	0.01	<2	27	39	187	<5	<3	52
91898	<0.1	3.18	3	<5	47	<3	3.32	<0.1	29	110	448	7.78	0.79	2.06	816	<1	0.29	42	0.01	<2	<2	5	147	<5	<3	65
91899	<0.1	3.67	<3	<5	42	38	5.30	<0.1	31	96	132	7.78	0.90	2.44	953	<1	0.07	61	0.02	<2	<2	<2	64	<5	<3	16
91900	<0.1	2.57	26	<5	54	<3	3.48	<0.1	25	50	7	5.11	0.69	1.15	423	<1	0.25	20	0.02	<2	6	27	153	<5	<3	3
91901	<0.1	2.82	23	<5	44	<3	2.99	<0.1	26	68	58	4.89	0.66	1.03	354	<1	0.40	20	0.02	<2	6	43	189	<5	<3	31
91902	<0.1	2.69	10	<5	34	<3	3.03	<0.1	30	65	76	4.94	0.64	1.16	371	<1	0.34	25	0.02	<2	4	38	162	<5	<3	30
91903	<0.1	2.61	39	<5	37	<3	2.76	<0.1	29	64	130	4.81	0.63	1.15	361	<1	0.35	22	0.02	<2	11	41	164	<5	<3	27
91904	<0.1	2.53	36	<5	41	<3	2.74	<0.1	26	69	30	4.62	0.62	1.07	339	<1	0.35	19	0.01	<2	7	41	158	<5	<3	25
91905	<0.1	2.74	59	<5	50	<3	2.91	<0.1	29	69	55	4.99	0.66	1.31	423	<1	0.39	20	0.02	<2	10	46	179	<5	<3	31
91906	<0.1	2.75	<3	<5	39	36	2.02	4.1	26	40	88	7.35	0.60	1.72	597	<1	0.28	32	0.01	<2	10	7	115	<5	<3	53
91907	<0.1	2.18	<3	<5	191	28	2.06	<0.1	13	53	7	5.12	0.59	1.62	513	<1	0.19	7	0.01	<2	<2	<2	126	<5	<3	53
91908	<0.1	1.75	<3	<5	65	8	3.94	<0.1	10	30	<1	4.80	0.74	1.16	484	<1	0.11	9	0.01	<2	4	<2	107	<5	<3	42
91909	<0.1	2.40	16	<5	188	3	4.17	2.7	30	31	317	5.72	0.84	1.97	707	<1	0.14	6	0.01	<2	11	10	340	<5	<3	62
91910	<0.1	2.56	<3	<5	129	9	2.68	4.5	22	26	61	6.01	0.68	2.15	864	<1	0.17	3	0.01	<2	<2	7	83	<5	<3	84
91911	<0.1	2.97	<3	20	238	32	3.43	2.8	42	28	132	5.77	0.71	2.06	907	<1	0.23	4	0.02	2	10	<2	160	<5	<3	91
91912	<0.1	2.09	<3	<5	55	13	6.91	<0.1	14	66	166	4.58	0.92	1.96	733	<1	0.13	3	0.02	<2	25	<2	275	<5	<3	54
91913	<0.1	2.02	<3	<5	62	<3	6.24	<0.1	11	52	8	4.87	0.93	1.83	770	<1	0.09	6	0.02	<2	9	<2	198	<5	<3	58
91914	<0.1	1.48	6	40	135	30	2.76	<0.1	12	73	26	6.45	0.68	1.07	634	<1	0.11	28	0.02	<2	<2	2	229	<5	<3	49
91915	<0.1	1.77	<3	20	149	<3	4.19	<0.1	16	37	178	6.65	0.84	1.03	674	<1	0.17	11	0.02	<2	10	<2	178	<5	<3	57
91916	<0.1	2.43	<3	<5	218	<3	2.97	<0.1	10	56	9	5.35	0.62	1.68	655	<1	0.17	10	0.01	<2	<2	<2	147	<5	<3	57
91917	<0.1	2.09	<3	<5	76	31	2.05	1.2	10	56	2	5.35	0.58	1.63	644	<1	0.18	11	0.01	<2	14	13	96	<5	<3	50
91918	<0.1	2.06	<3	<5	78	<3	1.96	2.5	11	51	<1	5.79	0.57	1.67	655	<1	0.12	17	0.01	<2	<2	2	69	<5	<3	
91919	<0.1	2.27	<3	<5	234	14	2.59	1.7	12	61	2	6.09	0.71	1.77	744	<1	0.10	10	0.01	<2	3	13	94	<5	<3	62
91920	<0.1	2.66	7	<5	232	25	2.58	3.2	9	60	8	6.32	0.70	1.82	765	<1	0.19	14	0.01	<2	5	6	132	<5	<3	59
91921	<0.1	2.40	<3	<5	146	18	1.85	<0.1	11	60	<1	6.10	0.60	1.74	758	<1	0.18	15	0.01	<2	14	<2	101	<5	<3	60
91922	<0.1	2.02	21	10	131	<3	1.77	<0.1	12	55	<1	5.50	0.52	1.63	752	<1	0.14	14	0.01	<2	19	13	78	<5	<3	56
91923	<0.1	2.18	3	<5	134	<3	1.45	2.0	26	76	16	4.96	0.42	1.91	780	<1	0.09	13	0.01	<2	6	4	72	<5	<3	71
91924	<0.1	2.67	28	10	56	<3	1.56	<0.1	26	91	22	6.76	0.55	2.05	860	<1	0.23	11	0.01	<2	8	23	77	<5	<3	77
91925	<0.1	2.94	17	<5	83	<3	1.99	<0.1	12	99	45	5.78	0.64	1.81	561	<1	0.31	14	0.01	<2	11	<2	148	<5	<3	58

Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000

< - Less Than Minimum) - Greater Than Maximum is - Insufficient Sample ns - No Sample *Au Analysis Done By Fire Assay Concentration / AAS Finish.

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: *[Signature]*

REPORT #: 910242 PA

ALPINE EXPLORATION CORP.

PROJECT: BLUFF PROPERTY

DATE IN: SEPT 25 1991

DATE OUT: SEPT 30 1991

ATTENTION: MR. BILL OSBORNE

PAGE 1 OF 3

Sample Name	Ag ppm	Al %	As ppm	*Au ppb	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm
BL24N 52E	<0.1	1.98	<3	240	97	3	0.23	4.9	12	23	259	5.45	0.06	0.57	307	<1	<0.01	26	0.01	15	<2	<2	29	<5	<3	205
BL24N 53E	<0.1	2.59	<3	<5	205	3	0.55	1.6	21	23	87	4.94	<0.01	0.74	510	<1	0.04	26	<0.01	4	<2	<2	41	<5	<3	85
BL24N 54E	<0.1	2.36	<3	<5	101	5	0.17	1.5	13	21	45	3.70	<0.01	0.47	218	<1	0.03	25	0.02	<2	<2	<2	33	<5	<3	61
BL24N 55E	<0.1	2.93	<3	<5	93	<3	0.14	0.6	8	14	37	3.54	<0.01	0.40	185	<1	<0.01	10	0.03	<2	<2	5	29	<5	<3	62
BL24N 56E	0.1	2.97	<3	<5	114	<3	0.58	1.1	27	19	68	4.21	0.24	0.80	449	<1	0.02	18	0.01	<2	<2	14	68	<5	<3	84
BL24N 57E	<0.1	2.96	<3	<5	166	<3	0.26	<0.1	15	22	64	4.20	0.03	0.51	219	<1	<0.01	18	0.02	<2	<2	12	65	<5	<3	--
BL24N 58E	<0.1	3.32	<3	<5	95	<3	0.16	<0.1	13	24	54	4.01	0.08	0.49	234	<1	0.02	18	0.03	<2	<2	<2	30	<5	<3	--
BL24N 59E	<0.1	2.61	<3	<5	111	<3	0.16	0.6	12	22	48	4.17	0.02	0.57	261	<1	<0.01	14	0.01	<2	<2	<2	48	<5	<3	32
BL24N 60E	<0.1	2.11	<3	<5	123	<3	0.35	0.4	24	15	54	2.42	<0.01	0.50	205	<1	0.01	18	0.01	<2	<2	<2	53	<5	<3	52
BL24N 61E	<0.1	2.04	<3	<5	166	<3	0.24	0.3	11	28	53	3.77	<0.01	0.57	249	<1	0.02	8	0.01	<2	<2	<2	41	<5	<3	51
BL24N 62E	<0.1	2.35	<3	<5	106	<3	0.25	1.1	17	20	39	3.56	0.05	0.55	244	<1	0.04	18	0.01	11	7	3	38	<5	<3	60
BL24N 63E	0.1	3.33	<3	<5	176	<3	0.25	0.2	19	19	76	4.55	0.18	0.60	265	<1	0.02	21	0.01	<2	7	7	64	<5	<3	67
L24N 64E	<0.1	2.25	<3	<5	169	<3	0.36	1.6	19	12	49	3.61	0.11	0.47	803	<1	0.03	8	0.01	7	4	<2	61	<5	<3	70
L9+500E 10+500N	<0.1	2.62	<3	<5	215	10	0.56	1.0	17	27	54	3.89	0.26	0.74	385	<1	0.09	20	0.01	10	12	<2	67	<5	<3	63
L9+500E 10+550N	0.2	0.97	<3	<5	195	19	5.22	1.0	3	<1	158	0.74	0.70	0.23	264	<1	<0.01	1	0.03	3	<2	12	314	<5	<3	78
L9+500E 10+575N	<0.1	1.33	<3	<5	72	<3	0.57	0.3	10	<1	16	2.36	0.19	0.16	143	<1	0.02	3	0.01	19	<2	3	50	<5	<3	59
L9+500E 10+600N	<0.1	0.77	<3	<5	89	<3	0.81	3.6	14	4	12	1.99	0.28	0.23	164	<1	0.05	7	<0.01	13	11	9	63	<5	<3	64
L9+500E 10+625N	<0.1	1.60	<3	<5	110	<3	0.29	0.3	11	5	16	2.17	0.34	0.34	166	<1	0.03	15	<0.01	2	4	15	35	<5	<3	50
L9+500E 10+650N	0.1	0.47	25	<5	278	<3	3.59	<0.1	3	<1	59	1.0	1.08	0.13	371	<1	<0.01	<1	0.03	6	<2	<2	262	<5	<3	83
L9+500E 10+750N	0.5	3.05	<3	20	354	<3	2.01	2.2	19	12	598	4.55	1.00	0.40	588	<1	0.12	17	0.01	<2	<2	<2	152	<5	<3	77
L9+500E 10+775N	<0.1	2.39	<3	170	162	<3	0.24	0.1	17	21	48	4.20	0.47	0.59	324	<1	0.02	37	0.01	<2	2	<2	28	<5	<3	69
L9+500E 10+800N	0.1	2.51	<3	<5	186	<3	0.44	1.9	16	18	60	3.98	0.42	0.45	294	<1	0.05	20	0.01	6	3	5	40	<5	<3	66
L9+500E 10+825N	<0.1	2.28	<3	<5	132	<3	0.30	0.6	16	17	40	3.58	0.23	0.59	285	<1	<0.01	15	0.01	<2	<2	7	33	<5	<3	62
L9+500E 10+850N	<0.1	2.18	<3	<5	191	<3	0.66	1.1	20	51	292	3.05	0.36	0.81	843	<1	0.07	11	0.01	<2	3	5	39	<5	<3	56
L9+500E 10+875N	<0.1	2.43	<3	<5	293	<3	0.62	2.4	19	19	278	3.90	0.27	0.71	875	<1	0.04	21	0.01	14	<2	<2	54	<5	<3	--
L9+500E 10+900N	0.4	2.83	<3	20	564	19	2.05	<0.1	16	20	847	3.53	0.61	0.67	1713	<1	0.04	22	0.02	<2	<2	<2	151	<5	<3	87
L9+500E 10+925N	0.5	4.70	<3	40	617	<3	1.12	<0.1	17	39	807	4.95	0.68	0.96	1291	<1	0.06	39	0.02	<2	7	<2	98	<5	<3	117
L9+500E 10+950N	0.1	3.13	<3	<5	551	<3	1.63	1.1	16	20	137	3.75	0.37	0.75	1340	<1	0.01	27	0.02	<2	<2	<2	124	<5	<3	122
L9+500E 10+975N	0.1	3.55	<3	<5	225	<3	0.67	1.0	28	45	76	4.53	0.37	1.13	1884	<1	0.02	25	0.01	<2	<2	<2	47	<5	<3	110
L9+500E 11+000N	<0.1	2.23	<3	<5	129	<3	0.32	0.2	20	25	33	3.58	0.95	0.78	570	<1	0.03	23	0.01	<2	<2	<2	29	<5	<3	83
L56E 18N	<0.1	2.19	<3	<5	102	<3	0.22	<0.1	23	26	56	3.75	0.21	0.65	339	<1	0.01	24	0.01	2	<2	2	48	<5	<3	73
L56E 19N	<0.1	2.61	<3	<5	174	<3	0.27	1.5	20	29	76	4.56	0.60	0.73	542	<1	0.04	18	0.02	<2	<2	<2	77	<5	<3	96
L56E 20N	<0.1	2.41	<3	30	114	<3	0.21	1.0	25	26	47	4.24	0.61	0.60	356	<1	0.03	20	0.01	4	<2	<2	45	<5	<3	84
L56E 21N	<0.1	2.18	<3	<5	96	<3	0.17	<0.1	14	30	36	4.43	0.50	0.51	358	<1	0.03	20	0.01	4	<2	5	29	<5	<3	58
L56E 22N	<0.1	2.48	<3	<5	114	<3	0.16	0.7	14	33	49	4.78	0.72	0.55	276	<1	0.02	17	0.02	<2	3	<2	39	<5	<3	62
L56E 23N	<0.1	4.67	8	<5	183	<3	0.44	<0.1	34	34	78	5.59	0.94	0.59	1321	<1	0.02	21	0.02	<2	<2	9	76	<5	<3	67
L56E 25N	<0.1	2.36	<3	<5	83	<3	0.26	1.1	13	19	37	3.65	0.75	0.42	262	<1	0.03	18	0.01	<2	<2	12	39	<5	<3	60
L56E 26N	<0.1	3.27	8	<5	169	<3	0.27	1.2	16	26	37	5.45	0.97	0.63	300	<1	0.01	19	0.01	<2	<2	9	41	<5	<3	82
L56E 27N	<0.1	2.83	<3	<5	115	<3	0.26	1.8	18	20	32	3.59	0.94	0.50	250	<1	0.03	19	0.02	<2	3	<2	34	<5	<3	102

Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000

ICAP GEOCHEMICAL ANALYSIS

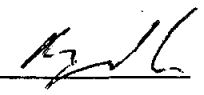
A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: 

REPORT #: 910242 PA	ALPINE EXPLORATION CORP.				PROJECT: BLUFF PROPERTY				DATE IN: SEPT 25 1991				DATE OUT: SEPT 30 1991				ATTENTION: MR. BILL OSBORNE				PAGE 2 OF 3					
Sample Name	Ag ppm	Al %	As ppm	*Au ppb	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm
L56E 28N	<0.1	2.80	<3	<5	227	<3	0.86	6.0	25	53	114	4.58	0.20	0.79	1562	<1	<0.01	26	<0.01	<2	3	<2	55	<5	<3	245
L60E 18N	<0.1	2.49	<3	<5	119	<3	0.22	1.4	18	26	36	3.81	0.12	0.50	823	<1	0.03	13	0.02	<2	10	9	34	<5	<3	102
L60E 19N	<0.1	2.52	5	<5	191	<3	0.31	0.4	15	32	70	4.21	0.39	0.72	367	<1	<0.01	11	0.01	<2	<2	<2	60	<5	<3	62
L60E 20N	<0.1	1.76	<3	<5	87	<3	0.15	3.0	13	15	21	2.93	0.15	0.41	261	<1	0.03	10	0.01	<2	3	<2	28	<5	<3	50
L60E 21N	<0.1	2.41	6	<5	97	<3	0.18	2.3	14	23	38	4.33	0.11	0.56	256	<1	0.01	14	0.02	<2	<2	<2	39	<5	<3	62
L60E 22N	0.1	3.05	<3	<5	175	<3	0.26	0.7	15	34	76	4.84	0.19	0.70	293	<1	0.03	14	0.02	<2	5	<2	60	<5	<3	<5
L60E 23N	<0.1	1.71	<3	<5	104	<3	0.26	0.9	10	16	34	2.26	<0.01	0.51	220	<1	0.01	2	<0.01	<2	<2	<2	40	<5	<3	<5
L60E 25N	0.3	3.74	<3	<5	343	<3	0.53	0.5	19	135	115	4.13	0.65	0.74	1678	<1	0.02	13	0.01	<2	2	<2	64	<5	<3	12
L60E 26N	<0.1	2.64	<3	60	143	<3	0.23	2.6	15	23	34	4.24	0.45	0.49	269	<1	<0.01	9	0.01	<2	<2	<2	42	<5	<3	58
L60E 27N	<0.1	2.06	<3	<5	114	<3	0.25	0.5	14	11	22	3.34	0.19	0.54	247	<1	<0.01	2	0.01	<2	<2	<2	38	<5	<3	86
L60E 28N	0.1	2.49	<3	<5	132	<3	0.26	0.4	18	22	36	4.31	0.61	0.62	275	<1	0.01	10	0.01	<2	<2	<2	35	<5	<3	61
L64E 18N	<0.1	2.62	<3	<5	148	<3	0.26	0.1	25	23	38	4.10	0.67	0.62	320	<1	0.01	7	0.02	<2	<2	5	51	<5	<3	195
L64E 19N	<0.1	2.16	<3	<5	106	<3	0.35	<0.1	14	23	30	3.75	0.64	0.52	278	<1	0.02	5	<0.01	<2	<2	<2	37	<5	<3	57
L64E 20N	<0.1	2.18	<3	<5	88	<3	0.17	0.9	13	29	41	3.95	0.58	0.52	313	<1	0.02	10	0.01	<2	<2	<2	31	<5	<3	57
L64E 21N	<0.1	2.80	<3	<5	80	4	0.17	1.4	11	29	50	4.52	0.46	0.53	254	<1	0.02	7	0.01	<2	<2	<2	35	<5	<3	54
L64E 23N	<0.1	2.38	<3	<5	110	<3	0.25	1.0	12	13	31	3.76	0.19	0.47	440	<1	<0.01	15	0.02	<2	<2	<2	42	<5	<3	70
L64E 25N	<0.1	1.75	<3	<5	107	<3	0.24	0.2	10	11	27	3.06	0.06	0.39	281	<1	<0.01	7	0.01	<2	<2	<2	41	<5	<3	49
L64E 26N	<0.1	2.38	<3	<5	111	<3	0.24	0.5	17	17	28	3.78	0.27	0.46	237	<1	0.01	8	0.02	<2	<2	9	39	<5	<3	63
L64E 27N	<0.1	2.90	<3	<5	116	<3	0.22	<0.1	14	18	52	4.33	0.22	0.60	276	<1	<0.01	10	0.02	<2	<2	<2	46	<5	<3	67
L64E 28N	<0.1	2.53	<3	<5	109	19	0.19	0.2	15	13	34	4.30	0.12	0.53	232	<1	<0.01	16	0.02	<2	<2	<2	29	<5	<3	63
L68E 18N	<0.1	2.35	<3	<5	175	<3	0.32	<0.1	14	36	76	4.75	0.37	0.72	302	<1	0.01	36	0.01	<2	<2	<2	59	<5	<3	59
L68E 19N	<0.1	2.21	6	<5	106	<3	0.22	<0.1	11	25	34	3.71	0.49	0.47	217	<1	0.01	13	0.01	<2	3	5	40	<5	<3	56
L68E 20N	<0.1	1.03	<3	<5	47	<3	0.55	2.3	11	1	27	2.10	0.36	0.24	221	<1	0.07	2	0.01	<2	4	<2	46	<5	<3	64
L68E 21N	<0.1	3.18	<3	<5	167	<3	0.90	0.6	14	23	52	3.99	0.12	0.85	592	<1	<0.01	10	0.01	<2	<2	9	73	<5	<3	90
L68E 22N	<0.1	3.08	13	<5	230	<3	0.90	<0.1	17	37	45	4.75	0.52	1.00	2106	<1	0.03	22	0.01	<2	<2	<2	70	<5	<3	<5
L68E 24N	<0.1	1.52	<3	<5	106	<3	0.59	0.2	12	5	15	2.26	0.13	0.33	237	<1	0.04	1	<0.01	<2	<2	<2	73	<5	<3	60
L68E 25N	<0.1	1.84	<3	<5	138	29	0.51	0.5	14	15	30	3.27	0.24	0.61	319	<1	0.04	6	<0.01	<2	2	7	61	<5	<3	53
L68E 26N	0.2	2.84	<3	<5	262	<3	0.98	0.2	21	24	69	4.67	0.21	0.57	1139	<1	0.05	13	<0.01	<2	13	<2	121	<5	<3	59
L68E 27N	0.1	2.97	<3	<5	303	<3	1.42	1.3	20	26	89	4.14	0.43	0.70	1262	<1	0.02	10	0.01	<2	13	<2	160	<5	<3	90
L68E 28N	<0.1	2.68	<3	<5	228	<3	1.45	0.4	17	21	80	3.45	0.59	0.56	477	<1	0.05	15	0.01	<2	2	2	135	<5	<3	90
L70E 24N	<0.1	2.19	<3	<5	57	<3	0.27	1.0	13	18	24	3.49	0.17	0.52	229	<1	<0.01	14	<0.01	<2	<2	<2	37	<5	<3	51
L71E 24N	<0.1	2.71	<3	<5	123	<3	0.25	0.5	14	27	73	4.29	0.25	0.75	335	<1	0.01	9	0.01	<2	<2	<2	49	<5	<3	67
L72E 18N	0.1	3.07	16	<5	206	<3	0.59	0.8	13	17	50	3.74	0.19	0.53	274	<1	0.02	14	0.01	<2	<2	9	90	<5	<3	57
L72E 19N	<0.1	2.35	<3	<5	126	<3	0.22	1.9	13	21	39	3.91	0.31	0.57	265	<1	0.01	15	0.02	<2	<2	<2	41	<5	<3	62
L72E 20N	<0.1	2.55	<3	<5	117	13	0.27	0.5	13	30	41	4.05	0.29	0.59	262	<1	0.03	8	0.01	<2	<2	<2	31	<5	<3	65
L72E 21N	<0.1	2.42	<3	<5	126	<3	0.46	1.4	11	30	37	4.26	0.17	0.75	306	<1	0.01	11	<0.01	<2	7	5	48	<5	<3	66
L72E 25N	0.2	3.01	<3	<5	245	<3	1.14	1.8	24	41	150	7.12	0.33	1.01	2517	<1	0.07	21	0.01	8	5	<2	81	<5	<3	96
L72E 26N	<0.1	2.99	6	<5	98	<3	0.59	<0.1	19	19	41	3.92	0.09	0.59	303	<1	0.03	10	0.01	<2	<2	2	65	<5	<3	81
L72E 27N	<0.1	1.95	<3	30	112	<3	0.42	1.8	15	11	24	3.05	<0.01	0.55	235	<1	0.02	11	<0.01	<2	3	<2	50	<5	<3	62
Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
 This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: 

REPORT #: 910242 PA

ALPINE EXPLORATION CORP.

PROJECT: BLUFF PROPERTY

DATE IN: SEPT 25 1991

DATE OUT: SEPT 30 1991

ATTENTION: MR. BILL OSBORNE

PAGE 3 OF 3

Sample Name	Ag ppm	Al %	As ppm	*Au ppb	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm
L72E 28N	<0.1	2.28	<3	<5	138	<3	0.45	4.9	17	4	68	3.30	<0.01	0.59	375	<1	0.01	6	<0.01	<2	<2	<2	46	<5	<3	258
Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000
< - Less Than Minimum	> - Greater Than Maximum		is - Insufficient Sample			ns - No Sample			*Au Analysis Done By Fire Assay Concentration / AAS Finish.																	

VANGEOCHEM LAB LIMITED

1630 Pandora Street, Vancouver, B.C. V5L 1L6
Ph:(604)251-5656 Fax:(604)254-5717

ICAP GEOCHEMICAL ANALYSIS

A .5 gram sample is digested with 5 ml of 3:1:2 HCL to HNO₃ to H₂O at 95 °C for 90 minutes and is diluted to 10 ml with water.
This leach is partial for Al, Ba, Ca, Cr, Fe, K, Mg, Mn, Na, P, Sn, Sr and W.

ANALYST: April

REPORT #: 910289 PA

ALPINE EXPLORATION CORP.

PROJECT: BLUFF

DATE IN: NOV 06 1991

DATE OUT: NOV 08 1991

ATTENTION: MR. BILL OSBORNE

PAGE 1 OF 1

Sample Name	Ag ppm	Al %	As ppm	*Au ppb	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sn ppm	Sr ppm	U ppm	W ppm	Zn ppm	
W91-60	<0.1	0.81	<3	<5	346	<3	0.23	2.1	19	12	25	2.64	0.40	0.24	283	<1	0.04	15	0.02	<2	<2	5	17	<5	<3	32	
W91-62	<0.1	1.51	<3	<5	69	23	2.22	3.5	24	154	48	4.15	0.68	1.33	923	<1	0.14	32	0.02	17	17	6	123	<5	<3	79	
W91-63	0.1	1.06	4	30	54	32	0.32	4.3	16	13	50	5.58	0.75	0.85	136	19	0.02	4	0.04	20	25	<2	38	<5	<3	34	
Minimum Detection	0.1	0.01	3	5	1	3	0.01	0.1	1	1	1	0.01	0.01	0.01	1	1	0.01	1	0.01	2	2	2	1	5	3	1	
Maximum Detection	50.0	10.00	2000	10000	1000	1000	10.00	1000.0	20000	1000	20000	10.00	10.00	10.00	20000	1000	10.00	20000	10.00	20000	2000	1000	10000	100	1000	20000	
< - Less Than Minimum	> - Greater Than Maximum is - Insufficient Sample ns - No Sample *Au Analysis Done By Fire Assay Concentration / AAS Finish.																										