

24736  
PART 1 of 4

**Assessment Report**  
October 1995- October 1996  
for  
Diamond Drilling, Geochemistry and Geophysics  
on the

HEARNE HILL PROPERTY

OMINECA MINING DIVISION  
BABINE LAKE AREA, B.C.

NTS 93-M-1W

Latitude 55°11'N

Longitude 126°16'W

**VOLUME 1 (OF 4)**

Claims Involved

- Hearne 1, Hearne 3, Hearne 4, Hearne 8, Hearne 9, BB 1 (Group HH 1)
- Hearne 1, Hearne 5, BB 2, BB 3, BB 4, Hearne 10, Hearne 11 (Group HH 2)
- Hearne 1, Hearne 5, Hearne 7, Cub 200, Cub 300, Hearne 12, Hearne 13 (Group HH 3)
- Hearne 1, Hearne 2, Hearne 6, Cub 100 (Group HH 4)
- Hearne 2, Hearne 7, Cub 200, Copper 100, Copper 200 (Group HH 4)
- Hearne 2, Hearne 7, Cub 200, Copper100, Copper 200 (Group HH 5)

Owner - Operator

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## 1. SUMMARY AND CONCLUSIONS

1. The Hearne Hill claims of Booker Gold Explorations Limited are situated 65 km northeast of Smithers, in the Babine Lake district of British Columbia.
2. The property is underlain by volcanic rocks belonging to the middle Jurassic Hazelton group, which consists principally of water lain grey lapilli crystal tuffs and grey andesites, with some associated sedimentary rocks. The volcanic sequence has been intruded by a dyke swarm of Biotite Feldspar Porphyry (BFP) bodies which belong to the Tertiary (Eocene) Babine Igneous Intrusive Suite.
3. Copper and gold mineral deposits in the Babine Lake district are associated with the BFP intrusions.
4. At the Hearne Hill property there are two types of copper - molybdenum - gold - silver deposits, as follows:
  - a. a stock work porphyry-copper of the general Babine type;
  - b. breccia bodies containing enriched copper-gold mineralization (known as the Chapman and Peter Bland zones) situated within a high grade core zone of the porphyry deposit.
5. In the BFP intrusives and surrounding Hazelton volcanic country rock, chalcopyrite, pyrite and molybdenite occur as fracture fillings, as disseminations and within stockwork quartz veinlets. The host rocks contain biotite and quartz - sericite alteration. Alteration zoning from fresh unaltered porphyry through propylitic, phyllic and potassic is present within the porphyry.
6. The breccia bodies are situated within and adjacent to the porphyry -copper stockwork. The Chapman and Peter Bland zones are separated by approximately 300 m, have a N 10-30E strike, and appear to dip steeply (70-80°) to the east. The breccias consist of angular clasts up to several tens of centimetres size of BFP and Hazelton volcanics. Open space in the breccia prior to mineralization is estimated at 5 to 20% of rock volume. Chalcopyrite, pyrite and lesser chalcocite were deposited in the space between the angular clasts.
7. Drilling of the Chapman breccia by Noranda (1989, 1990) intersected 22.9 m of 2.75% Cu, but Noranda concluded that the breccia was cut-out at 70 to 80 metres depth by an intrusion of bleached massive quartz-biotite-feldspar-porphyry.
8. Subsequent drilling of the breccia by David Chapman (1991) indicated that the area of mineralized breccia was more extensive than that indicated by the Noranda drilling. Of the 7 holes drilled by Chapman all intersected mineralized breccia, however only one hole was assayed. This hole contained a 50 m section of 2.3% Cu, and several 3 m sections with 0.4 - 2.0 g/t Au, including one section with 14 g/t Au.
9. Booker Gold's approach to exploration on Hearne Hill, since its acquisition in 1993, has been to explore for further breccia zones and associated high grade mineralization. Expansion of the high grade core of the deposit and surrounding porphyry stockwork

could make the difference between an eventual producing mine and a marginal grade Babine porphyry deposit.

10. Booker Gold's 1994 and 1995 diamond drilling programmes led to the discovery of the Peter Bland zone, a second breccia body of high grade copper-gold-silver mineralization. The Peter Bland zone is situated 300 m northeast of areas investigated by previous exploration programmes.
11. In 1996 Booker Gold was successful in extending the high grade core of the Hearne Hill deposit and locating additional mineralized occurrences. Trenching of a till geochemical anomaly 50 - 100 m west of the Bland zone revealed over 40 m of mineralized (>1.0% Cu) breccia. Subsequent drilling proved that this breccia occurrence was in fact part of the Bland zone and extended the zone to the southwest. Similar copper-gold geochemical anomalies remain to be investigated 100m - 300m west of the Bland zone. Till and colluvial samples in this area assay over 4000 ppm copper, and 900 ppb gold. Drilling of initial geophysical targets suggests that chargeability highs - resistivity lows along northeast trending structures near the Bland zone are areas that contain abundant chalcopyrite. Chargeability highs to the south may result from a pyritic halo as drilling encountered mostly abundant pyrite with minor chalcopyrite. Results from the geochemical and geophysical surveys and drilling suggest that further high-grade mineralization may exist both northeast and southwest of the Bland and Chapman zones.
12. A further programme of trenching and drilling is required to define the size and extent of known breccia zones, and explore new geochemical and geophysical targets. An additional major programme of grid drilling would be necessary to define the size and grade of the extended porphyry stockwork deposit.

## 1.1 SUMMARY OF WORK DONE

Geochemical Surveys - Both property scale and follow-up detailed scale geochemical surveys were completed. The property scale survey totalled 406 samples obtained at a density of 1 sample per 100 square metres. For the detailed scale survey, 153 samples were obtained at a scale of 1 sample per 25 square metres.

Geophysical Survey - A total of 33 kilometres of Induced Polarization (I.P.) lines were surveyed.

Diamond Drilling - 58 NQ diamond drill holes were drilled between October 1995 and October 1996, for a total of 14,684 metres of drilling.

## 1.2 RECOMMENDATIONS AND COST ESTIMATES

The 1996 geochemical and geophysical surveys provided adequate coverage to the north, south and west. Expanding the grid to the east is recommended in order to define the eastern extent of the geophysical and geochemical anomalies.

To complement the geochemical and geophysical IP surveys, a geophysical magnetic and VLF survey should be implemented. As magnetite is virtually absent from the copper-gold enriched breccia zones, magnetic lows may outline potential occurrences.

Trenching 50 - 300 m west of the Bland zone followed by drilling should be conducted to define the source of the large geochemical anomalies in this area. Drilling should continue along regularly spaced intervals southwest of the Bland zone to determine if the Bland and Chapman zones are connected at depth.

Exploration for further high grade mineralized occurrences should begin with trenching and drilling of geophysical and geochemical targets that are northeast of the Bland zone and southwest of the Chapman zone.

Cost estimates are as follows:

#### Phase 1

Geophysical and geochemical programs	\$200,000
Trenching and road construction	\$300,000
Drilling (10 000 m, NQ)	<u>\$1,900,000</u>
	\$2,400,000

#### Phase 2

If Phase 1 is successful in extending the high-grade core and defining further mineralized occurrences, the surrounding copper-porphyry stockwork deposit will need to be defined by extensive grid drilling leading to a recalculation of tonnage and grade. A decision could then be made whether to proceed to a feasibility study of the deposit.

Drilling (15 000 m, NQ)	\$2,900,000
<b>TOTAL: Phase 1 and Phase 2</b>	<b>\$5,400,000</b>

## 2. INTRODUCTION

Diamond drilling and exploration between October 1995 and October 1996 successfully extended the high grade core of the Hearne Hill copper-gold porphyry deposit and identified new enriched occurrences. In addition to drilling, exploration included extensive geochemical and geophysical surveys. Drilling of initial geophysical I.P. chargeability and resistivity targets suggests that sulphide mineralization extends along a northeast trend with a partial pyrite halo surrounding a chalcopyrite enriched core. Results from the till geochemical sampling survey revealed strong copper and gold anomalies in the area of the high grade core (Chapman and Peter Bland zones) with separate anomalies to the west that may represent parallel structures bearing enriched copper, silver and gold.

### 3. PROPERTY, LOCATION AND ACCESS

The Hearne Hill Property is situated as follows (Figure 1):

Latitude	Longitude	Average Elevation	NTS
55° 11'N	126° 16'W	3600 ft. (1100 m)	93-M-1W

The property consists of the following claims (Figure 2):

Claim	Tenure No.	Units	Expire Date (All claims expire in 1999)
CUB 200	341509	20	October 13
Copper 100	341512	20	October 13
Copper 200	341511	20	October 13
Hearne 1	242812	15	October 7
Hearne 2	242813	15	October 7
Hearne 3	347037	20	June 20
Hearne 4	347038	12	June 20
Hearne 5	347039	18	June 18
Hearne 6	347040	12	June 20
Hearne 7	347041	18	June 20
Hearne 8	347042	9	June 19
Hearne 9	347043	15	June 19
Hearne 10	347046	1	June 20
Hearne 11	347047	1	June 20
Hearne 12	348735	1	July 25
Hearne 13	348736	1	July 25
CUB 100	341513	10	October 13
BB 1	341551	20	October 19
BB 2	341552	20	October 24
BB 3	341553	20	October 19
BB 4	341554	20	October 24
CUB 300	341510	20	October 13

The property, consisting of 308 metric claim units, surrounds Hearne Hill, approximately 65 km northeast of Smithers in central British Columbia.



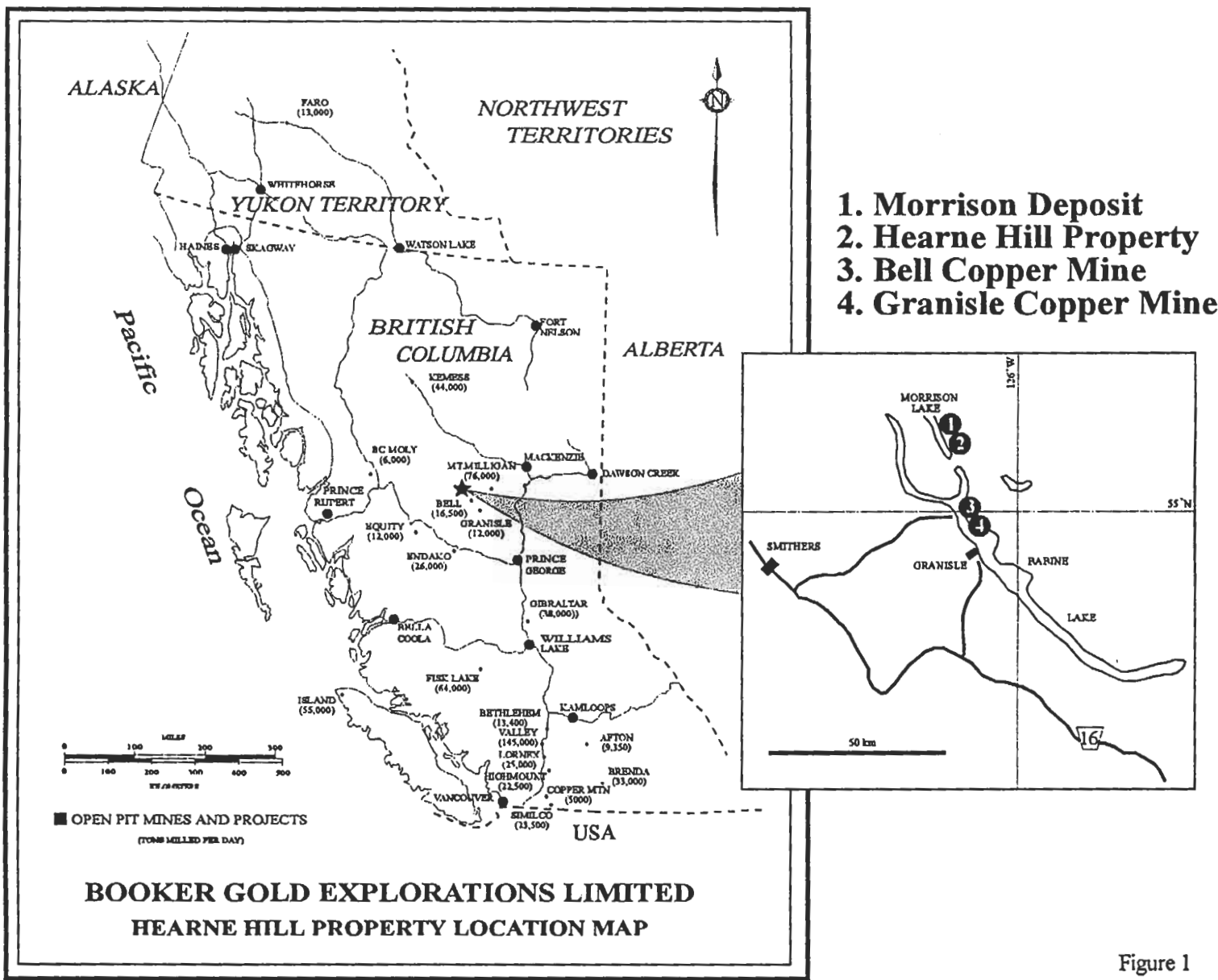
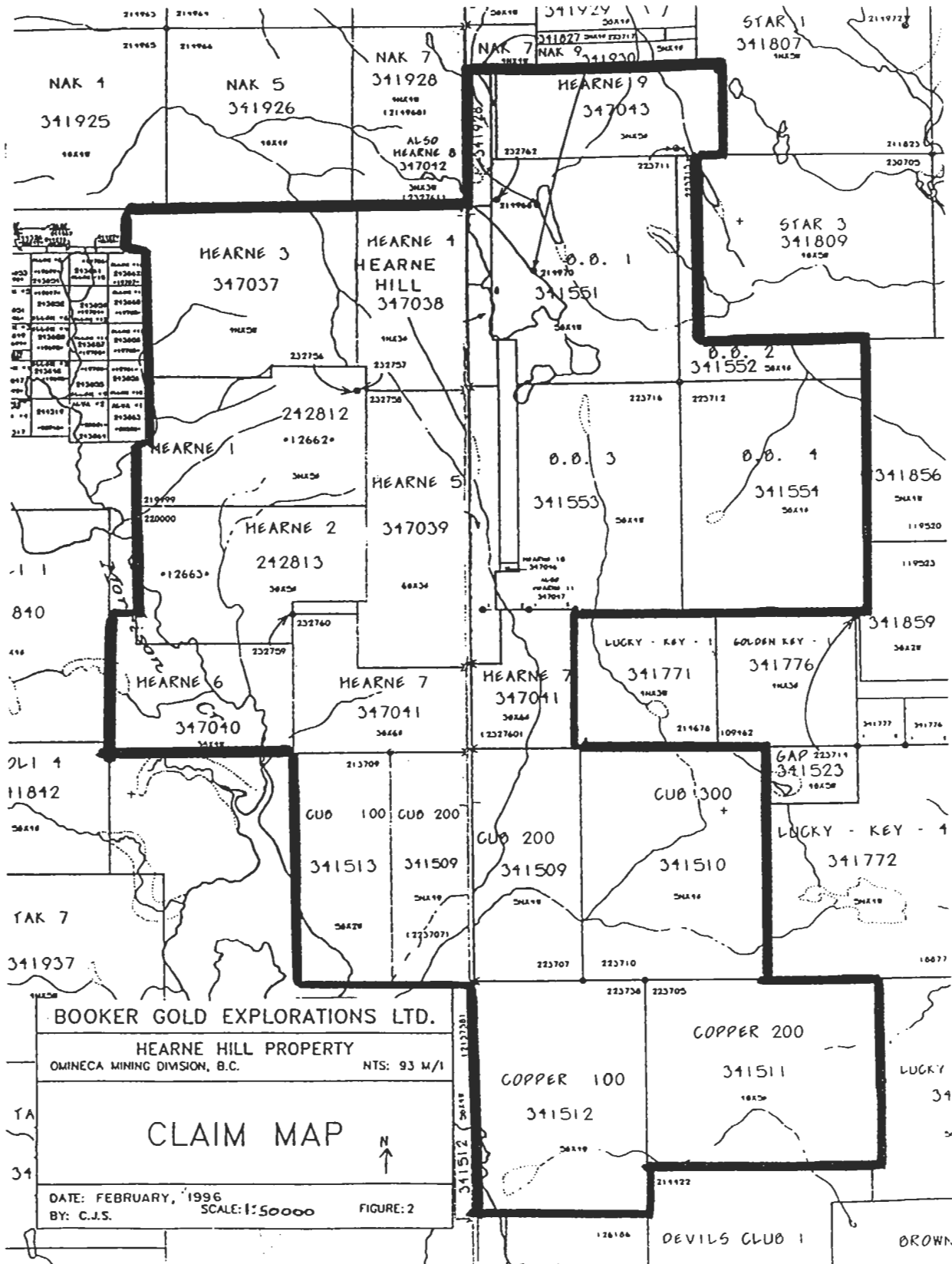
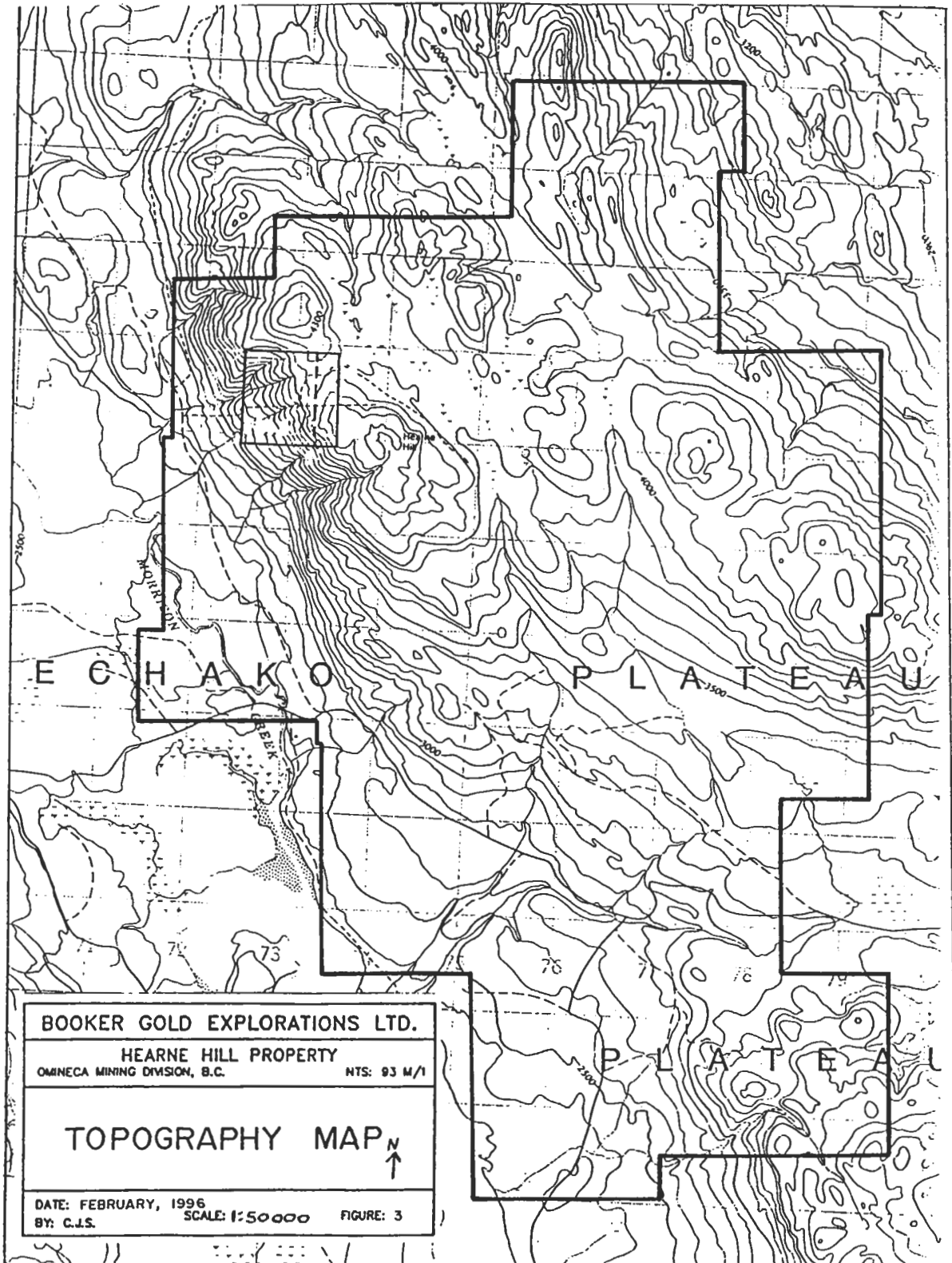


Figure 1



Access to the property is by a series of main haulage logging roads. The major access route is from Smithers to Topley Landing, then by Northwood barge across Babine Lake and via the Jinx and Hagan Forest Service roads to within 4 km of the property. A four-wheel drive exploration road to the property intersects the Hagan road at kilometre 40, 21 km north of the Bell Mine site.

The property varies in elevation from a low of 734 m. (2405 ft.) on Morrison Creek on the west side to a high point of 1350 m. (4430 ft.) on Hearne Hill. Hearne Hill forms part of a ridge trending southeast caused by block faulting in the area. The western slope of Hearne Hill is quite steep and is drained by several small creeks westward into Morrison Lake (Figure 3). A 1:10,000 Base Map / Claim Outline Map is included in the back pocket.



#### 4. EXPLORATION HISTORY

The Babine Lake area has been actively explored since the 1920s. In the 1950s and 1960s, British Columbia experienced an exploration boom for porphyry-copper deposits. The Babine Lake area was intensely explored by programmes of prospecting, geophysics and geochemistry which resulted in the discovery of many porphyry-copper deposits, two of which - Granisle and Bell - were subsequently placed into production. The Granisle Mine, was discovered by Granby (later Zapata-Granby, and eventually sold to Noranda as part of Bell Copper Division) and started production in 1955 at 5000 TPD. Before closure in 1982, production was at 14,000 TPD. The Bell Mine of Noranda Minerals was commissioned between 1972 and 1992. Production began at 10,000 TPD and was increased to 17,000 TPD by 1980.

Granisle and Bell produced 130 m. tonnes with average recovered grades of 0.40% Cu, 0.15 g/t Au and 0.75 g/t Ag (Carter *et al.*, 1995).

Copper mineralization on Hearne Hill was first discovered by Trojan Consolidated Mines and Buttle Lake Mining in 1967. Trenching of magnetic and geochemical highs unveiled mineralized boulders of volcanic breccia near the present day location of diamond drill hole #96-60.

The property was optioned by Texas Gulf Sulphur Company whose exploration programmes included induced polarization (I.P.), magnetometer and diamond drilling (12 holes totalling approx. 6,000 ft. (1942 m.) in 1968. The drill programme indicated presence of a Babine style porphyry-copper deposit on the Hearne Hill property, similar to the Bell and Granisle deposits. Texas Gulf calculated the overall grade of the porphyry deposit at 0.2% copper, however drilling apparently failed to intersect the mineralized breccia.

In 1968 the property was optioned by Canadian Superior Exploration, who completed geological mapping, induced polarization, magnetometer and geochemical sampling surveys, followed by some preliminary diamond drilling (Kahlert and Fawley 1968). Canadian Superior followed this with a programme of percussion drilling in 1969 (Kahlert 1969).

The property then lay dormant until 1989 when it was acquired by Dave Chapman. Chapman rekindled interest in the property by carrying out a limited programme of trenching on the old showings with a skidder mounted backhoe.

In July 1989 Noranda Minerals and Bell Mine (a Noranda Mines subsidiary) optioned the property. A diamond drillhole program consisting of 6 holes totalling 1537 ft. (468 m.) was established in order to determine whether the mineralization in the volcanic breccia exposed at surface had any vertical continuity and to establish the attitude of the mineralization.

As reported by Ogryzlo (January 1991) 4 holes intersected the mineralization. Hole H89-1 was lost in mineralization at 270 ft. (82 m.) when the rods stuck in a mud seam. The last core run was recovered which assayed 3.32% copper. Significant intersections from the 1989 drilling programme are summarised as follows:

### Summary of Results - 1989 Programme

Hole Number	From feet (metres)	To feet (metres)	Width feet (metres)	% Cu
H89-1	190.0 (57.9)	227.5 (69.3)	37.5 (11.4)	1.34
	227.5 (69.3)	270.0 (82.3)	42.5 (12.9)	3.61
H89-2	45.0 (13.7)	65.0 (19.8)	20.0 (6.1)	1.84
	65.0 (19.8)	85.0 (25.9)	20.0 (6.1)	2.68
	85.0 (25.9)	130.0 (39.6)	45.0 (13.7)	1.10
H89-3	60.0 (18.3)	77.5 (23.6)	17.5 (5.1)	2.11
H89-4	97.5 (29.7)	160.0 (48.8)	62.5 (19.1)	0.78

The drilling established that the overall trend of the breccia deposit is N10E to N20E with 70-80° dip to the east.

In 1990 Noranda drilled a further 5 NQ size holes, totalling 2,807 ft. (856 m) in order to test the vertical extent of the mineralized breccia.

As reported by Ogryzlo (January 1991) hole H90-3 was the only hole to intersect the full width of the breccia. Mineralization was intersected over a width of 80 ft. (24.4 m) with an average grade of 0.67% Cu, 0.05% Mo and 0.16 g/t Au. Holes H90-1 and H90-5 also intersected sections of the mineralized breccia. Much of the target area, however, was largely occupied by post-mineral intrusions of biotite-feldspar-porphyry (BFP) including a massive unit of bleached white BFP, similar to the post-mineral quartz-feldspar-porphyry (QFP) body that has replaced approximately 1/3 of the Bell ore body. Holes H90-2 and H90-4 also intersected post-mineral intrusions. Significant intersections from the 1990 drill programme are summarised as follows:

### Summary of Results - 1990 Programme

Hole Number	From feet (metres)	To feet (metres)	Width feet (metres)	% Cu
H90-1 (includes)	340.0 (103.6)	400.0 (121.9)	60.0 (18.3)	0.39
	372.5 (113.5)	395.0 (120.4)	17.5 (5.3)	0.59
H90-2	380.0 (115.8)	691.0 (210.6)	311.0 (94.7)	0.18
H90-3 (includes)	80.0 (24.4)	390.0 (118.9)	310.0 (94.5)	0.31
	305.0 (93.0)	385.0 (117.3)	80.0 (24.4)	0.67
H90-4	110.0 (33.5)	465.0 (141.7)	355.0 (108.2)	0.22
H90-5 (includes)	Weakly mineralized over minor breccia		557.0 (169.8)	0.11
			5.0 (1.5)	0.56

In 1991, David Chapman drilled 7 diamond holes, totalling approximately 550 metres in the breccia zone. All holes intersected intensely mineralized volcanic breccia but only hole 91-2 was assayed. It intersected 50.0 metres assaying 2.3% Cu. This included one 10 foot section which assayed 14 g/t gold.

Booker Gold optioned the property in late 1992, in order to explore for other breccia bodies. Booker Gold's initial exploration involved trenching and percussion drilling, followed in 1994, 1995 and 1996 by diamond drilling programmes. Extensive geochemical and geophysical surveys were carried out in 1995 and 1996.

## 5. REGIONAL GEOLOGY

The Hearne Hill area is situated on the northern edge of the Skeena Arch in a region which is underlain by volcanic and epiblastic rocks ranging in age from lower Jurassic (Telkwa) formation to lower Cretaceous (Skeena) group. This sequence of rocks has been cut by a northwest trending series of faults that have created a long linear sequence of horsts and grabens. The rocks have been intruded by a variety of intermediate to felsic stocks, plugs and dikes of Eocene age (Richards 1990).

During the Tertiary-Eocene period BFP plugs and stocks of the Babine igneous suite were emplaced along major faults in a continental magmatic arc. Two ore bodies (Bell and Granisle) and numerous sub-economic deposits occur as porphyry-copper deposits which are temporally and spatially associated with the Babine igneous suite intrusions (Carson and Jambour 1973). The Babine igneous suite is a high potassium, calcalkaline suite which shows some trace elements normally associated with alkaline porphyry copper deposits rather than calcalkaline.

The regional geology for the Babine Lake area will be updated and modified, when results are released from recent mapping by the British Columbia Geological Survey



## 6. PROPERTY GEOLOGY, MINERALIZATION AND ALTERATION

The following description of geological setting, mineralization and alteration is based on Ogryzlo (1991). A simplified geological map covering the area of the Chapman and Bland zones is presented in Figure 4.

### 6.1 Geological Setting:

Hearne Hill is underlain by volcanic rocks of the lower to middle Jurassic Hazelton Group (Richards, 1990). The volcanic rocks on the property belong to the submarine Kotsine facies of the Sinemurian Telkwa formation (Tipper and Richards, 1976). The volcanic rocks are characterised by waterlain grey lapilli-crystal tuffs and grey andesite.

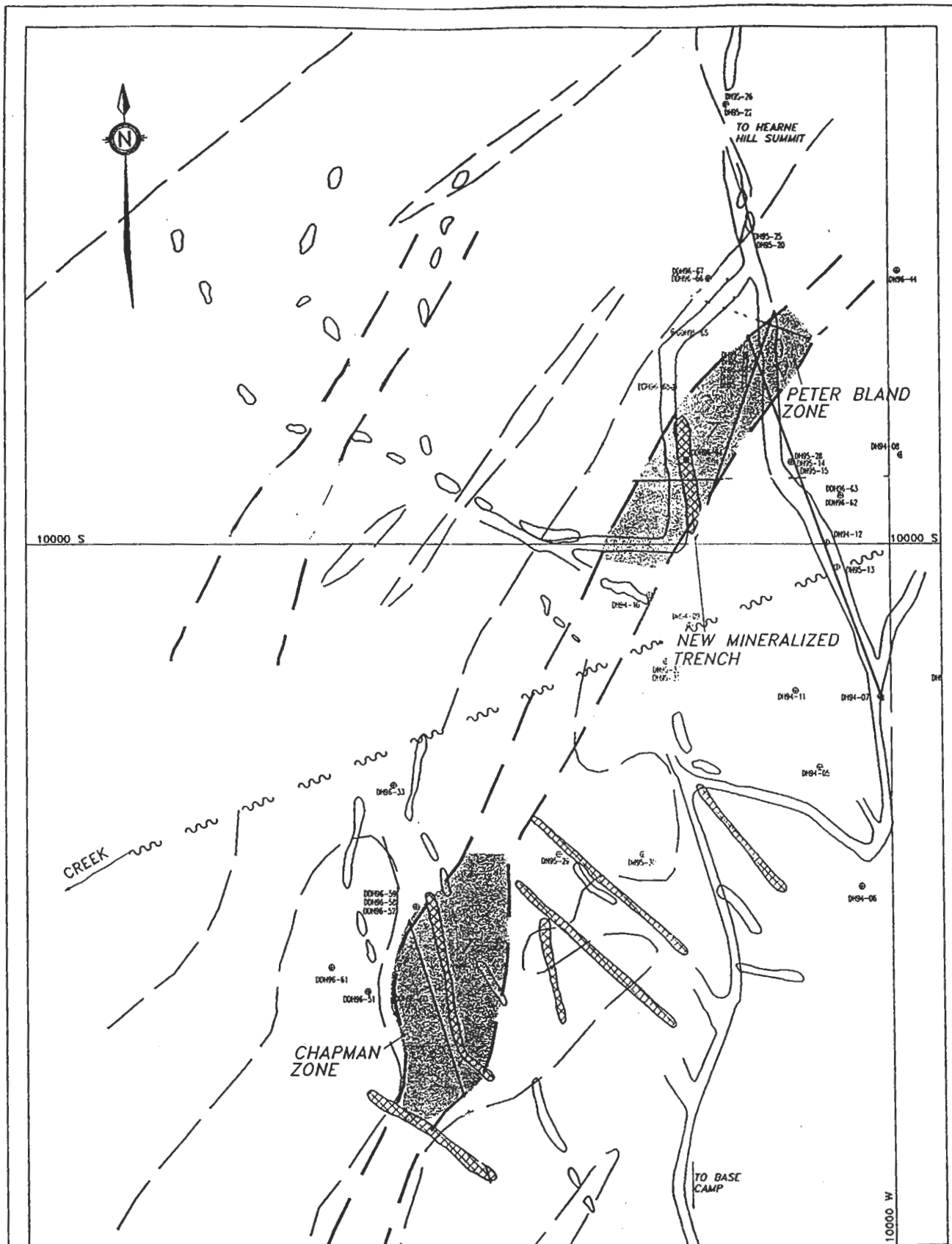
These rocks have been intruded by porphyritic rocks of the 50 my Eocene Babine igneous suite. Mapping by Booker Gold shows that the Eocene biotite-feldspar porphyry intrusives are in the form of a series of northeasterly trending dykes. The intrusives are of diorite or quartz diorite composition. There is no well defined intrusive centre of the BFP similar to the centres noted at the Bell Mine (Carson et al 1976) and at the Morrison deposit (Carson and Jambour, 1976). Porphyry copper related mineralization consists primarily of disseminated chalcopyrite with minor chalcocite and bornite filling fractures. A distinctive phase of the BFP intrusions appears to be either very late or post mineral in age. The rock is a massive white BFP with intense sericite-pyrite alteration. Plagioclase is soft, white, and completely altered to sericite. Biotite is bleached pale brown to white and is sericitized as well. The massive unbroken structures suggest that the rock was emplaced after the structural events that are evident in most of the other units observed. The rock is similar in appearance to the quartz BFP post mineral phase that occupies the southeastern portion of the Bell ore body, but lacks the quartz phenocrysts.

Ogryzlo (1990) concluded that the intrusions on Hearne Hill are multiphase, with more than one intermineral or post mineral intrusion of BFP.

### 6.2 Porphyry Copper Mineralization

Chalcopyrite, bornite and molybdenite occur as fracture fillings and disseminations in the biotite feldspar porphyry and the adjacent volcanics. This mineralization is due to a large porphyry copper system of the Cu-Mo type.

Many of the biotite feldspar porphyry units are intermineral or post mineral in age. The erratic nature of the copper distribution is caused by these late stage intrusions. The volcanic rocks, in contrast with late stage BFP, are invariably higher in grade. The volcanics (Hazelton, i.e. Jurassic) were deposited long before any mineralizing event, and have been subjected to all stages of mineralization. When the distribution of copper in the volcanics alone is examined, it appears that grades are increasing to the south and west of the Chapman breccia zone.



- GEOLOGICAL CONTACT
- ~ FAULT
- ▨ TRENCH
- ▨ BRECCIA
- ⊙ DRILL HOLE
- OUTCROP

**BOOKER GOLD EXPLORATIONS**  
**DRILLHOLE MAP**  
 BABINE LAKE AREA, B.C.  
 OCTOBER, 1996  
 IC 961002 155

**FIGURE 4**

### 6.3 Breccia Mineralization

At present, there are two known bodies of mineralized breccia. The southern body (the Chapman zone) has been known for several years and was extensively studied by Ogryzlo. The northern body (the Peter Bland zone) was found by Booker Gold during the 1995 drill programme. Results from the 1996 exploration programme extended the Bland zone to the south and identified two additional mineralized breccia occurrences to the west of the Bland zone.

The Chapman and Peter Bland breccia zones are elongated along a principal N10-20E striking fracture system. These are dilational zones of brecciation which are surrounded by areas of fracturing which carry high grade mineralization. Booker Gold's 1996 drilling has shown that these high grade areas extend to considerable depths (in excess of 500 m).

This principal N10-20E striking fracture system has been traced for up to 200 metres to the north east of the Peter Bland zone and a similar distance south west of the Chapman zone but in these areas the shallow drilling to date has encountered mostly pyrite within the breccias. There are indications that the mineralization may contain more copper and associated gold and silver values at depth.

The Chapman breccia zone is ovoid in plan, with a length of 68 m and a width of 26 m. It strikes N10-20E, dips steeply east with a southeast plunge. Clasts are angular, with the brecciated rocks having the texture of cemented rubble or talus.

The porosity of the breccia before sulphide and carbonate cementation would have been close to the theoretical maximum of around 25%. Chalcopyrite, pyrite and marcasite fill angular interstices between the breccia clasts with later cementation provided by calcite, dolomite and minor chalcedony. Porosity remains between 5% and 8%. There is little evidence of milling or attrition of clasts. Rock flour is present between clasts but is a minor constituent.

Fluids associated with the breccia mineralization were dilute epithermal chloride brines. In the breccia, fluid inclusions that are trapped in the dolomite cement homogenize at a mean temperature of 172.5°C (in a range of between 83°C and 240°C) with salinities ranging from 2% to 10% NaCl equivalent (Ogryzlo et al 1995).

Gold is enriched in the breccia pipe relative to the stockwork mineralization and averages 0.8 g/t. However, higher values (14 g/t over 3 m) have been obtained. Such values are rare in the stockwork deposits of the Babine region and indicate that suitable conditions for an epithermal precious metal deposit may be present.

The breccia clasts are lithologically identical to the enclosing wallrocks, making the breccia virtually monolithologic. Heterolithic breccia was observed in Noranda holes H90-3 and H90-1. Sericitized and bleached biotite feldspar porphyry clasts with grey andesite and tuffaceous felsic clasts form the bulk of the Chapman breccia zone. Many

clasts reveal pre-breccia mineralization consisting of sulphide and quartz sulphide veinlets.

The breccias in the Peter Bland zone are also related to a N10-20E striking principal fracture system which dips steeply to the east. As in the Chapman zone, high grade copper gold silver mineralization occurs infilling what were originally voids between the breccia clasts, but areas of high grade fracture filling mineralization also occur in altered BFP and Hazelton volcanic country rocks in close proximity to the breccia zones.

As a result of the 1996 drilling programme the Chapman and Peter Bland breccia zones have been shown to be elliptical (in plan) dilational zones centred and elongated along a principal fracture system which strikes N10 - 20E and dips steeply (approximately  $80^{\circ}$ ) east.

The breccia zones appear to have gradational contacts with their host rocks, ie. the brecciation grades into strongly fractured host rock on both foot and hanging wall sides of each of the Chapman and Peter Bland zones. These areas of intense fracturing contain high grade copper and gold values similar to those in the breccia zones themselves which gradually diminish over a distance of 10-20 m laterally away from each breccia zone. The width of the enriched core of the Hearne Hill porphyry system (fractured country rock - breccia - fractured country rock) averages approximately 50 m at surface and appears to widen at depth.

Booker Gold's drill programmes have concentrated on finding more high grade breccia and associated high grade fracturing, thus holes have not been drilled on a regular grid pattern. However, sufficient drilling has been done to date to enable an estimate of the dimensions of the enriched core with a strike length of approximately (500 m), an average width (from sections and surface expression) of 50 m and a depth in excess of 300 m.

## 7. EXPLORATION PROGRAMMES

### 7.1 Geochemistry and Surficial Geology

A surficial geochemical programme was established during the summer of 1996 in order to obtain regional geochemical coverage of the property and locate drill targets. A thorough understanding of surficial geology is necessary to accurately interpret geochemical anomalies on the steep glaciated terrain of Hearne Hill. To minimize the error associated with post-glacial hydromorphic effects in b-soil horizons, and to better identify the surficial overburden, deep samples were obtained from the c-horizon at an average depth of 1 m below the surface (Weary *et al.*, 1997). Terrain morphology of the sample location and sedimentological characteristics of the sample medium were used to identify each sample site as either a blanket (> 1 m thick) or veneer (< 1 m thick) of basal till, remobilised till or colluvium. Basal till consists of sand, silt and clay, transported and deposited directly from glacier ice. Ice flow on the Hearne Hill property during the glacial maximum was towards the south - southeast (150-160°). Colluvium appears as weathered, broken up bedrock transported down slope. The slope gradient is between 10 and 25 degrees, toward the west - southwest (250-260°).

At each site deep C-horizon samples were obtained by shovel and placed in three Kraft sample bags to dry. Samples were sent to ACME laboratories in Vancouver to be split and sieved for thirty-two element ICP (plus gold) analysis of the -230 mesh fraction. Geochemical results for each sample and sample attributes are presented in Appendix A.

A total of 406 C-horizon soil samples were collected at 100 m intervals between property grid 8500s - 9500w and 12000s - 11000w. Results from this property scale sampling programme indicate very significant copper-gold mineralization near the centre of the grid. To more accurately define the trend of these anomalies, an additional 153 samples were obtained at 25 m spacings between 9800s - 10000w and 10200s - 10400w. Results at this sample density produced areas with copper-gold concentrations 50-100 times greater than background levels. Samples obtained within the detailed grid were identified predominantly as veneers of colluvium or remobilised basal till. The sediment in these samples is likely sourced from areas a short distance up-slope and up-ice of the sample locations. Property scale and detailed scale contour maps for Cu concentrations are included in Appendix A.

Elevated copper concentrations, up to 5937 ppm, occur between 9950s - 10100w and 10000s - 10150w and between 9900s - 10200w and 10050s - 10350w. Road construction and trenching up-slope of this first area of geochemical anomalies uncovered approximately 40 m of intensely mineralized volcanic breccia that assayed over 1% Cu and 1g/t Au. Subsequent diamond drill holes in this area (96-64 to 96-70) have all produced excellent results.

The second and much larger area of high copper concentrations also has coincident anomalies for Au, As, Mo, and K. Limited trenching to the north of this area

uncovered mineralized BFP that assayed between 0.6 and 0.8% Cu. Future drilling and trenching is planned for this area.

## 7.2 Geophysics

In 1996, Geotronics Inc. surveyed 33 km's of IP lines on the Hearne Hill property. The lines extended and expanded the original kilometre square grid to the north, west and south. Plan maps of the apparent chargeability (I.P.) and apparent resistivity are included in the back pocket (Map 3 and Map 4). Instrumentation included a IRIS (BRGM) IP-6 receiver and a PHOENIX MODEL IPT-1, 2.5 kWatt Transmitter/Generator. The I.P. survey parameters included a time domain survey mode, a dipole-dipole array, a dipole length of 30 m, a dipole separation of  $n=1$  to  $n=6$ , a delay time of 240 milliseconds, an integration time of 1600 milliseconds, and a 8 second square wave charge cycle.

The geophysical survey indicates a strong northeast trend in the chargeability consistent with the strike direction of local faults in the area. The Bland zone is located over a chargeability high - resistivity low. Drilling of a large chargeability high - resistivity low target to the south revealed massive pyrite. Interpretation of the geophysics suggests that the northeast oriented chargeability highs both to the south and north of the Bland zone reflect a pyrite halo surrounding the porphyry system. Chargeability highs located along strike of the Chapman - Bland zones and within the pyrite halo may represent areas of enriched chalcopyrite mineralization.

## 7.3 Diamond Drilling

Drilling from October 1995 to October 1996, resulted in a total of 58 diamond drill holes numbered DDH 96-16 - DDH 96-72. Splits from the logged core are stored on the property at the Booker Gold Field Camp. Detailed logs and assay certificates for these holes are included in Volumes 2 - 4. Drill hole locations are plotted on a 1:1000 scale (Map 2 in back pocket). Co-ordinates, azimuth, dip length and assays are summarised for the above drill holes in Appendix B.

Drilling was successful in extending the high grade core of the Hearne Hill deposit and locating additional mineralized occurrences. Drilling 250 metres northeast of the Chapman zone resulted in the discovery of a chalcopyrite cemented breccia, now known as the Peter Bland zone. Subsequent drilling southwest of the Bland zone revealed that high-grade mineralization extends over a strikelength of 100 metres.

Drilling outside of the high grade zones revealed that chalcopyrite mineralization is replaced by pyrite over distances approximately 100 metres northwest and southeast of the Chapman and Bland zones. Chalcopyrite mineralization appears to continue along a dilational northeast strike parallel to the Chapman and Bland zones. Further drilling in this direction is required to determine the extent of mineralization on the property.

**8. ITEMIZED COST STATEMENT****Personnel**

Consulting Engineer	34.00	days	11,871.00
Expeditor	277.00	days	37,850.00
Expediting Services	69.00	hours	3,435.00
Geologists	452.26	days	123,378.90
	440.00	hours	22,900.00
Field Assistants/Supervisor	134.50	days	27,950.00
Field Assistants	412.50	days	64,364.00
Coresplitters	181.50	days	17,850.00
GPS Survey Crew	138.50	hours	11,319.00
Linecutters	58.00	days	8,695.00
Field Crew	564.00	hours	30,430.00
Camp Cook	248.00	days	53,936.00
Assistant Cook	35.50	days	5,481.00
Camp Maintenance	17.00	days	3,200.00
Building core racks	6.00	days	750.00
Payroll benefit cost			6,563.65
Workers Compensation cost			13,387.06

443,360.61

**Equipment**

Truck rental	257.50	days	15,588.62
	30.00	hours	1,800.00
Truck Purchase			1,000.00
Fuel & maintenance costs			64,060.88
Transport of equipment & camp			15,849.87
Rescue Van & Boat rental	107.00	days	4,520.00
Snowplowing	1.50	hours	127.50
Bobcat rental	29.75	hours	3,181.25
Grader rental	34.50	hours	4,060.93
Loader rental	5.00	hours	460.00
Hoe rental	91.50	hours	10,697.50
Lowbed rental	16.50	hours	1,360.00
Snowmobiles rental	34.00	days	6,644.70
Survey Equip-rental	4.00	days	160.50
GPS receiver-rental	10.00	days	1,016.50
Chainsaws-rental	34.00	days	340.00
Chainsaw			629.16
Coresplitters			321.00
Camp Appliances-rental	8.00	months	7,276.00
Copier-rental	5.00	months	1,191.66
Core Storage-rental	2.00	months	1,400.00
	15.00	days	660.00
Radio rentals-max 3 sets	29.00	months	2,005.18

144,351.25

<b>Camp Costs</b>				
Room & Board	699.00	mandays	38,786.00	
Camp food & supplies			77,331.15	
Camp Construction			182,371.84	
Roadbuilding			10,764.16	
SatPhone			6,823.90	
Diesel Generator			8,000.00	
			<u>          </u>	324,077.05
<b>Surveys, etc.</b>				
IP/Resistivity Survey			56,961.97	
Radar Survey			22,000.00	
			<u>          </u>	78,961.97
<b>Drilling</b>				
Diamond Drilling	41,733.00	feet	<u>1,023,548.37</u>	1,023,548.37
<b>Assay</b>				
Analysis of samples	5,977.00	samples	128,885.87	
Petrographic analysis & report	4.00	samples	477.00	
Storage of samples @ lab			745.00	
			<u>          </u>	130,107.87
<b>Other disbursements</b>				
<b>Travel</b>				
Airfares to property	32.00	fares	12,802.74	
Travel expenses			15,419.77	
Helicopter	43.90	hours	30,279.90	
Food & Accommodation			16,938.87	
			<u>          </u>	75,441.28
<b>Other Items</b>				
Drafting & map reproduction			24,262.89	
Field Supplies			16,081.29	
Telecommunications			12,879.05	
Freight			1,858.97	
Typing service			206.38	
Inspection & license fees			423.00	
			<u>          </u>	55,711.58
<b>TOTAL COSTS</b>			<u>          </u>	<u>2,275,559.98</u>



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**CERTIFICATE OF QUALIFICATIONS**

I, **Gordon F. Weary**, of 449 East 18th St., Vancouver, B.C. V7L 2Y1, hereby certify that:

1. I am a graduate (1996) of the University of New Brunswick, with a Master of Science degree in Geology. My thesis focussed on mineral exploration using till geochemistry. I am also a graduate (1994) of McGill University, with a Bachelor of Science degree in Geology.
2. I am enrolled as a GIT with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
3. I have been involved in the mineral exploration industry in central British Columbia for the past three years.
4. I have acted as full time project geologist for Booker Gold Explorations Ltd. since May 1996. Since that time I supervised all aspects of the Hearne Hill exploration programmes including the diamond drill hole program and geochemical sampling program.
5. The present report is based on work done on the Hearne Hill property between October 1995 and October 1996.

Vancouver, B.C.  
May 1997

Gordon F. Weary, M.Sc.  
Project Geologist

**APPENDIX A**

**Property Scale Geochemical Results and Sample Attributes**

**Property Scale Cu (ppm) Contour Map**

**Detailed Scale Geochemical Results and Sample Attributes**

**Detailed Scale Cu (ppm) Contour Map**

### Reference Guide to Till Geochemical Sample Locations and Attributes

<b>Sample</b>	<b>Sample number</b>
<b>South</b>	<b>Property Grid Southing Coordinate</b>
<b>West</b>	<b>Property Grid Westing Coordinate</b>
<b>Map Unit</b>	Surficial geology map unit Mb - Till blanket Mv - Till veneer Mf - Flow till Mbr - Remobilised till blanket R - Bedrock Cv - Colluvial veneer Ov - Organic veneer Fg - Glaciofluvial sediments Lg - Glaciolacustrine sediments s - sandy g - gravelly x/y - Unit x is more abundant than unit y x:y - Unit x occurs with unit y
<b>Depth</b>	<b>Depth to sample from surface</b>
<b>Bedrock</b>	<b>Type of bedrock at sample location</b>

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit c1 horizon	Map Unit c2 horizon	Depth cm	Bedrock
10	-10500	-11200	Mbr	Mb	50	
20	-10500	-11300	Cv	Cb:Mb	60	
30	-10500	-11400	Cv	Mbr	60	
40	-10500	-11500	Cb	Mb:Cb	180	
50	-10500	-11600	Lg	Mbr:Lg	50	
60	-10500	-11700	Lg//Mb	Lg//Mb	60	
70	-10500	-11100	Mb	Mb	70	
80	-10600	-11100	O	Lg	50	
90	-10600	-11200	Lg	Mb	60	
100	-10600	-11300	Fg	Fg	60	
110	-10600	-11400	Fg	Fg	50	
120	-10600	-11600	Fg//Lg	Fg//Lg	40	
130	-10600	-11700	Cv	Fg	50	
140	-10600	-11800	Lg	Lg	40	
150	-10500	-11800	Fg	Fg	50	
160	-10400	-11100	Mbr	Mbr	50	
170	-10400	-11200	Fg	Fg	40	
180	-10400	-11300	Cv	Mb	60	
190	-10400	-11400	Mbr	Mbr	50	
200	-10400	-11500	Mbr	Mbr	40	
210	-10400	-11600	Cb	Mb	50	
220	-10400	-11700	Lg	Lg	40	
230	-10400	-11800	Mbr	Mbr	60	
240	-10500	-10550	Cv:Mv	Mv	200	BFP
250	-10425	-10450	Mb	Mb	150	
260	-10400	-10600	Mf	Mf	180	
270	-10300	-10720	Mb	Mb	210	
280	-10200	-10800	Mb	Mb	300	
290	-10200	-10950	Mb	Mb	170	
300	-10250	-10900	Mbr	Mbr	300	
310	-10300	-10650	Cb	Mb	150	Alt. BFP
320	-10300	-10500	Cv	Mb	170	Alt. BFP
330	-10300	-10450	Cv/Mb	Mb	170	
340	-10375	-10300	Cv	Mb	150	
350	-9850	-9650	Cv	Mb		Min. Breccia
360	-10075	-9725	Cv	Mv	150	Weathered BFP
380	-9950	-10000	Cv	Mv/Cv		Min. Andesite
390	-9950	-10075	Cv	Cv:Mv	200	Min. Andesite
400	-10025	-10175	Cv	Mb	160	Min. Andesite
440	-10175	-10475	Cb	Mb	120	
450	-9900	-9700	Cv	Mv		wea. BFP

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit c1 horizon	Map Unit c2 horizon	Depth cm	Bedrock
490	-10300	-11050	Cv	Mb	70	
500	-10200	-11100	Cv	Mb	50	
510	-10200	-11200	Cv	Mb	100	
520	-10200	-11350	Cv	Mb	130	
530	-11000	-9900	Cv	Fg	220	
540	-10900	-10100	Fg	Fg	500	
550	-10900	-10200	Lg	Lg	60	
560	-10900	-10300	O	Lg	60	
570	-10900	-10400	Lg	Lg	70	
580	-10900	-10500	Cv	Mbr//Fg	100	
590	-10900	-10600	Cv	Mbr	80	
600	-10900	-10550	Mb//Lg	Mb//Lg	100	
610	-10900	-10700	Mbr	Mbr	80	
620	-10900	-10900	Lg:Mbr	Lg:Mbr	60	
630	-10900	-10800	Mbr	Mbr	70	
640	-10900	-11100	Lg	Lg	70	
650	-10900	-11000	Lg	Lg	60	
660	-11000	-11200	Lg	Lg	45	
670	-11000	-11300	Lg	Lg	40	
680	-11000	-11400	Cv	Lg/Mb		
690	-11000	-11500	Lg	Lg	80	
700	-11000	-11600	Lg	Lg	80	
710	-11000	-11700	Lg	Lg	60	
720	-11000	-11800	Lg	Lg	100	
730	-11000	-11900	Lg	Lg	60	
740	-10300	-10800	Cv	Mbr	100	
750	-11000	-11100	Lg	Lg	60	
760	-10300	-11100	Cv	Mbr//Fg	80	
770	-10800	-11100	Cv	Mb	70	
780	-10300	-11200	Mb	Mb	100	
790	-10800	-11200	Mbr	Mbr	70	
810	-10800	-11300	Mbr	Mbr	70	
820	-10300	-11400	Mb	Mb	80	
830	-10800	-11400	Lg	Lg	65	
840	-10300	-11500	Mb	Mb	100	
850	-10800	-11500	Lg	Lg	70	
860	-10300	-11600	Mb	Mb	90	
870	-10800	-11600	Lg	Lg	60	
880	-10300	-11700	Mb	Mb	50	
890	-10800	-11700	Mbr	Mbr		
900	-10300	-11800	Mb	Mb	110	
910	-10800	-11800	Lg	Lg		
920	-10300	-11900	Fg:Mbr/Lg	Fg:Mbr/Lg	100	
930	-10800	-11900	Lg	Lg	70	
940	-10300	-12000	Mb/Lg	Mb/Lg	100	
950	-10800	-12000	Lg	Lg	60	
960	-10900	-11200	Lg	Lg	80	

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit		Depth cm	Bedrock
			c1 horizon	c2 horizon		
970	-10900	-11300	Lg	Lg	70	
980	-10900	-11400	Lg	Lg	60	
990	-10900	-11500	Lg	Lg	40	
1000	-10900	-11600	Lg	Lg	70	
1010	-10900	-11700	Lg	Lg	80	
1020	-10900	-11800	Lg	Lg	50	
1030	-10900	-11900	Lg	Lg		
1040	-10900	-12000	Lg	Lg	60	
1050	-10600	-9500	R	R		
1060	-10600	-9625	Cb//Mv	Cb//Mv	80	
1070	-10600	-9700	Cv	Cv	80	
1080	-10600	-9800	Cv	Mv	70	
1090	-10600	-9900	Cv	Mb	110	
1100	-10600	-10000	Mbr	Mbr	60	
1110	-10600	-10100	Mb	Mb	90	
1120	-10600	-10200	Cv	Mb	150	Wea.BFP
1130	-10600	-10300	Cv	Mb	90	
1140	-10600	-10400	Cb//Mb	Cb//Mb	200	Min.>2%cp andesite
1150	-10600	-10500	R	R		UnMin.&wea.siltstone
1160	-10600	-10600	Mbr	Mbr	90	
1170	-10600	-10700	Mbr	Mbr		
1180	-10600	-10800	Mbr:Fg	Mbr:Fg	80	
1190	-10600	-10900	Lg:Mb	Lg:Mb	90	
1200	-10600	-11000	Lg	Lg	90	
1210	-10700	-11100	Cb	Mb	75	
1220	-10700	-11200	Mbr	Mbr	110	
1230	-10700	-11300	Mbr:Lg	Mbr:Lg	70	
1240	-10700	-11400	Mbr:Lg	Mbr:Lg	90	
1250	-10700	-11500	Mbr:Lg	Mbr:Lg	70	
1260	-10700	-11600	Lg//Mbr	Lg//Mbr	100	
1270	-10700	-11700	Lg	Lg	90	
1280	-10700	-11800	Lg	Lg	60	
1290	-10700	-11900	Lg	Lg		
1300	-10700	-12000	Lg	Lg	70	
1310	-10600	-12000	Cv	Lg	70	
1320	-10600	-11900	Lg	Lg	60	
1330	-10400	-11900	Cv	Mb	80	
1340	-10400	-12000	Cv	Mb	80	
1350	-10200	-11400	Cb	Cb	70	
1360	-10200	-11500	Cv	Mb	70	
1370	-10200	-11600	Cv	Lg	70	
1380	-10200	-11700	Cv	Mb	90	
1390	-10200	-11900	Cv	Mb:Lg	100	
1400	-10200	-12000	Lg	Lg	70	
1410	-10200	-11800	Cv	Mb	90	
1420	-10100	-10525	Cv//Mb	Cv//Mb	100	
1430	-10100	-10600	Cv	Mb	100	
1440	-10100	-10700	Cv	Mbr	70	



## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit	Map Unit	Depth	Bedrock
			c1 horizon	c2 horizon	cm	
1450	-10100	-10800	Cv	Mbr		Mafic fine-grained siltstone
1460	-10100	-10900	Cv	Mb/Lg	90	
1470	-10100	-11000	Cv	Mbr	110	
1480	-10100	-11100	Cv	Mb	100	
1490	-10100	-11200	O	Mb	80	
1500	-10100	-11300	Mb:Lg//Fg	Mb:Lg//Fg	100	
1510	-10500	-8500	Mv	Mv	40	
1520	-10500	-8600	Mv	Mv	80	
1530	-10500	-8700	Cv	Cv	30	Diorite
1540	-10500	-8800	Mb/v?	Mb/v?	70	
1550	-10500	-8900	Cv	R	15	
1560	-10500	-9000	Cv	Mb	80	
1570	-10500	-9100	O	Mb	100	
1580	-10000	-9000	R	R		
1590	-10000	-9100	Mvr	R	40	Grey Andesite
1600	-10000	-9200	Mvr	R	50	Grey Andesite
1610	-10000	-9300	Mvr	R	50	Grey Andesite
1620	-10000	-9400	Mvr	Mvr	70	
1630	-10000	-9500	Cv	Mbr	80	
1640	-10700	-9500	R	R	10	Andesite
1650	-10700	-9600	Cv	Mvr	70	Andesite
1660	-10700	-9700	Fg	Fg	90	
1670	-10700	-9800	Mvr	Mvr	70	Andesite
1680	-10700	-9900	Fg	Fg	90	
1690	-10800	-10025	Mb	Mb	90	
1700	-10700	-10000	Cv	Mb	90	
1710	-10800	-10100	Cv	Fg	100	
1720	-10700	-10100	Cv	Mb	90	
1730	-10800	-10200	Cv	Mbr	70	
1740	-10700	-10200	Cv//Mb	Cv//Mb	120	
1750	-10800	-10300	Cv	Mbr	110	
1760	-10700	-10300	Mbr	Mbr	100	
1770	-10800	-10400		O Lg	100	
1780	-10700	-10400	Cv/Mb	Cv/Mb	80	
1790	-10100	-11425	Mb	Mb	100	
1800	-10700	-10500	Cv	Mb	80	
1810	-10100	-11500	Mb	Mb	90	
1820	-10700	-10700	O	Lg	60	
1830	-10700	-10600	O	Mbr	70	
1840	-10800	-10600	Mbr	Mbr	80	
1850	-10800	-10500	Cv	Mb	70	
1860	-10800	-10700	O	Mbr	90	
1870	-10800	-10800	O	Mbr	100	
1880	-10800	-10900	Mb	Mb	100	Diorite with pyrite
1890	-10800	-11000	Cv	Mb	70	
1900	-10500	-10600	Cv	Mb	60	BFP-biotite&pyrite
1910	-10500	-10700	Cv	Mbr	90	
1920	-10500	-10800	Cv	Mbr	80	

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit	Map Unit	Depth	Bedrock
			c1 horizon	c2 horizon		
1930	-10700	-10800	Mb:Lg	Mb:Lg	80	
1940	-10700	-10900	Cv	Mbr	90	
1950	-10700	-11000	Cv	Mbr	100	
1960	-10500	-11000	Cb	Cb	90	
1970	-10500	-10900	Cv	Mb	80	
1980	-10400	-10900	Cb:Mb	Cb:Mb	90	
1990	-10400	-11000	Cv	Mbr	80	
2000	-10400	-8500	Cv	R	70	Diorite
2010	-10400	-8600	Cv	Mb	90	
2020	-10400	-8700	Cv	Cv	90	
2030	-10400	-8800	Cv	Mb		Sulphide min. in andesite
2040	-10400	-8900	Cv	Mb	60	
2050	-10400	-9000	Cv	Mb	90	
2060	-10400	-9100	R	R	20	Diorite
2070	-10400	-9200	Mb	Mb		
2080	-10400	-9300	R	R		Diorite
2090	-10500	-9200	Mb	Mb	90	
2100	-10500	-9300	R	R		Coarse grained diorite
2110	-10500	-9400	R	R	10	Coarse grained diorite
2120	-10500	-9500	Cv	Mbr	120	Coarse grained diorite
2130	-10500	-9600	Mbr	Mbr	110	
2140	-10500	-9700	Mbr	Mbr		
2150	-10500	-9800	Fg	Fg	80	
2160	-10500	-9900	Mb	Mb	110	
2170	-10500	-10000	Fg	Fg	90	
2180	-10500	-10100	Mb	Mb	80	
2190	-11000	-9500	Cv	R		
2200	-11000	-9625	Cv	R		Andesite
2210	-11000	-10000	Fg//Mbr	Fg//Mbr	60	
2220	-11000	-9700	Cv	Mv:Cv	70	Andesite&Diorite
2230	-11000	-10200	Lg	Lg		
2240	-11000	-9800	Cv	Cv:Mb		Fine grained mafic
2250	-11000	-10400	Mb//Fg	Mb//Fg	90	
2260	-11000	-10100	Cv	Fg//Mbr	100	
2270	-11000	-10600	Cv	Mb:Fg	100	
2280	-11000	-10300	Lg	Mb/Lg	100	
2290	-11000	-10800	Fg	Fg	60	
2300	-11000	-10500	Cv	Mbr//Fg	100	
2310	-11000	-10900	Lg//Mbr	Lg//Mbr	100	
2320	-11000	-10700	Mbr	Mbr	100	
2330	-11000	-11000	Lg//Mb	Lg//Mb	100	
2340	-10250	-10500	Cv/Mv	Mb	200	
2350	-10200	-10600	Cv/Mv	Mb	70	
2360	-10200	-10700	Mb	Mb	80	
2370	-10400	-10700	Cv	Mbr/Fg	80	
2380	-10400	-10800	Mbr	Mbr	90	
2390	-10300	-8600	Mb	Mb	80	
2400	-10300	-8700	Mbr	Mbr	70	

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit c1 horizon	Map Unit c2 horizon	Depth cm	Bedrock
2410	-10300	-8800	Cv	R	60	
2420	-10300	-8900	Cv	Mbr	70	
2430	-10000	-8900	Mb	Mb	80	
2440	-10300	-9000	R	R		Rhyolite
2450	-10300	-9100	R	R	15	Med.grained diorite
2460	-10300	-9200	Cv	Mb	60	
2470	-10300	-9300	R	R	7	
2480	-10300	-9400	Mb	Mb	70	
2490	-10300	-9500	Cv	R	50	
2500	-10400	-9400	Cv	R	50	Wea. diorite
2510	-10400	-9500	R	R		Wea. diorite
2520	-10200	-8500	Cv	Mb	60	
2530	-10100	-8500	Lg	R	40	Fine grained andesite
2540	-10200	-8600	Cv	Cv:Mb	70	
2550	-10100	-8600	Mv	R	60	Fine grained andesite
2560	-10200	-8700	Cv	Mb	80	
2570	-10100	-8700	Lg	R	70	
2580	-10200	-8800	Cv	Mb	80	
2590	-10100	-8800	R	R	15	
2600	-10200	-8900	Mb	Mb	70	
2610	-10100	-8900	R	R	30	
2620	-10200	-9000	Mbr	Mbr	70	
2630	-10100	-9000	Cv	Mb	60	
2640	-10200	-9100	Cv	Mb		
2650	-10100	-9100	Mb	Mb		
2660	-10200	-9200	R	R		
2670	-10100	-9200	Mbr	Mbr	90	Andesite or rhyolite
2680	-10200	-9300	R	R		
2690	-10100	-9300	Mbr	R	50	
2700	-10200	-9400	R	R		
2710	-10100	-9400	Mbr	Mbr		
2720	-10200	-9500	Cv	Mbr		
2730	-10100	-9500	R	R		
2740	-10000	-8800	Mb	Mb	70	
2750	-10000	-8700	R	R		Green andesite
2760	-10000	-8600	Cv	Mb	90	
2770	-9900	-8600	Mb	Mb	100	
2780	-10000	-8500	Fg	Fg		
2790	-9900	-8500	Mbr	Mbr	70	
2800	-9900	-8700	Mb	Mb		
2810	-9900	-8800	Mb	Mb	80	
2820	-9900	-9000	Cv	R	65	
2830	-9800	-9500	Mbr	Mbr	70	Fine grained matrix
2840	-9800	-9400	Mbr:Cv	Mb	90	
2850	-9800	-9300	Mb	Mb	70	
2860	-9800	-9200	Cv	R		
2870	-9800	-9100	Mv	R	55	
2880	-9800	-9000	R	R		

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit c1 horizon	Map Unit c2 horizon	Depth cm	Bedrock
2890	-9900	-9000	R	R		
2900	-9900	-9100	R	R		
2910	-9900	-9200	Mb	Mb	70	
2920	-9900	-9300	Mbr	Mbr	70	
2930	-9900	-9400	Mbr	Mbr	70	
2940	-9900	-9500	Cv	R		
2950	-9900	-9600	R	R		
2960	-9800	-8900	R	R		
2970	-9500	-9700	Cv	Mvr	70	
2980	-9800	-8800	Cv	R	15	
2990	-9500	-9900	O	Mb	80	
3000	-9800	-8700	Mv	R	60	Fine grained mafic
3010	-9500	-10300	Mb	Mb	75	
3020	-9800	-8600	Cv	Mb	80	
3030	-9500	-10500	Mbr	Mbr	80	
3040	-9800	-8500	Cv	Mb	110	
3050	-9700	-10475	Cv//Mvr	Cv//Mvr	80	
3060	-9700	-8500	Cv	R	25	Andesite
3070	-9700	-10300	Ov	Mb	90	
3080	-9700	-8600	Mv	R		Fine grained mafic
3090	-9700	-10100	Cv	Cv	50	
3100	-9700	-8700	Cv	R	60	Andesite
3110	-9700	-9900	Mb	Mb	70	
3120	-9700	-8800	Cv	R	25	Fine grained diorite
3130	-9700	-9700	Mvr	Mb	80	
3140	-9700	-8900	R	R	10	
3150	-9700	-9500	Mb	Mb	70	
3160	-9600	-9500	Mv	R	70	
3170	-9700	-9400	Mvr	Mvr	40	
3180	-9600	-9400	R	R	15	Andesite
3190	-9700	-9300	Cv	Mbr	50	
3200	-9700	-9100	Mv	R	60	
3210	-9700	-9200	Cv//Mvr	Cv//Mvr	60	
3220	-9600	-8500	Cv	Mbr	70	
3230	-9700	-9000	Cv	R		
3240	-9600	-8600	Cv	Mb//Lg	70	
3250	-9600	-8700	Cv	Cv	90	
3260	-9600	-8800	Cv	R	40	
3270	-9600	-8900	Cv	R	20	
3280	-9600	-9000	Cv	R	20	Fine grained andesite
3290	-9600	-9100	Cv	Mb	60	
3300	-9600	-9200	Cv	Mbr	80	
3310	-9600	-9300	Cv	R	20	
3320	-10300	-9600	Mb	Mb	80	
3330	-10300	-9700	Cb	Cb	60	
3340	-10300	-9800	Mbr	Mbr	90	
3350	-10300	-9900	Mbr	Mbr	90	

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit	Map Unit	Depth	Bedrock
			c1 horizon	c2 horizon	cm	
3370	-10200	-10000	Cv	Mbr	150	
3380	-10200	-10075	Mf	Mf	300	
3390	-10200	-10225	Mb	R	150	
3400	-10300	-10200	Cv	Cb/Mbr	70	
3410	-10300	-10100	O	Mb	75	
3420	-10300	-10000	Cb	Cb	60	
3430	-10500	-10450	Cv	Mb:Mbr	80	
3480	-10600	-8500	Cv//Mvr	R	110	Andesite
3490	-10600	-8600	Cb	Cb	80	
3500	-10600	-8700	Cv	Mbr	90	
3510	-10600	-8900	Mbr	R	70	
3520	-10600	-9000	Mb	Mb	85	
3530	-10600	-9100	Mb	Mb	70	
3540	-10600	-9200	Cb//Mbr	Cb//Mbr	70	
3550	-10600	-9300	Cb	Cb	65	
3560	-10200	-9600	Mbr	Mbr	120	
3570	-10200	-9700	Mbr	Mbr	70	
3580	-10200	-9800	Mbr	Mbr	110	
3590	-11000	-9400	Cv	R	70	Wea. Med-grained diorite
3600	-11000	-9300	Cv	R	70	Diorite with quartz, hematite
3610	-11000	-9200	Cv	Cv	70	
3620	-11000	-9100	Mbr	Mbr	80	
3630	-11000	-9000	Mbr	Mbr	100	
3640	-11000	-8900	R	R	20	Coarse grained andesite with hematite
3650	-11000	-8800	Cv	Mb	100	
3660	-11000	-8700	Mb	Mb	70	
3670	-11000	-8600	Mb	Mb	70	
3680	-11000	-8500	Fg//Mb	Fg//Mb	140	
3700	-10400	-9600	Cv	Mbr/Fg	90	
3710	-10400	-9700	Mbr	Mbr	80	
3720	-10400	-9800	Mbr	Mbr	80	
3730	-10400	-9900	Cv/Mbr	Mbr	80	
3770	-10400	-10000	Cv	Mb	70	
3780	-10400	-10100	Mbr	Mbr	120	
3790	-10400	-10200	Mbr	Mbr	80	
3800	-10500	-10200	Mbr	Mbr	80	
3810	-10500	-10300	O	Mb	80	
3820	-10500	-10400	Mbr:Cb	Mbr:Cb	70	
3830	-10900	-10000	Mbr	Mbr		
3840	-10900	-9900	Mbr	Mbr	100	

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit	Map Unit	Depth	Bedrock
			c1 horizon	c2 horizon	cm	
3850	-10900	-9800	R	R	15	
3860	-10900	-9700	R	R	10	
3870	-10900	-9600	R	R		
3880	-10900	-9500	Cv	R	70	
3890	-10900	-9400	Cv	R	40	
3900	-10900	-9300	R	R		
3910	-10900	-9200	R	R	10	
3920	-10900	-9100	Cv	Mbr/Mb	90	
3930	-10900	-9000	Cv	R	40	Andesite
3940	-10900	-8900	Cv	Cv	40	
3950	-10900	-8800	Cv	Cv	40	
3960	-10900	-8700	Mb	Mb	80	
3970	-10900	-8600	Mb	Mb	50	
3980	-10900	-8500	Mb	Mb	70	
3990	-10200	-9900	Mb	R	90	Wea. BFP
4000	-10200	-10400	Mb	Mb		
4010	-10200	-10300	Cv	Mbr	100	
4020	-10300	-10300	Mbr//Mb	Mbr//Mb	70	
4030	-10800	-9900	Mbr	Mbr	90	
4040	-10800	-9800	Cv//Mvr	Cv//Mvr	70	
4050	-10800	-9700	R	R		Diorite
4060	-10800	-9600	Cv	Mbr	70	
4070	-10800	-9500	R	R		Diorite
4080	-10800	-9400	R	R		Diorite
4090	-10800	-9300	R	R		
4100	-10800	-9200	R	R		
4110	-10800	-9100	R	R		
4120	-10800	-9000	Cv/Mvr	R		
4130	-10800	-8900	Cv	R		
4140	-10800	-8800	Cv	Mb	70	
4150	-10800	-8700	Mbr	Mbr	80	
4160	-10100	-9600	Cv	Mb/Mbr	100	
4170	-10000	-9600	Cv	Mbr	70	
4180	-10100	-9800	Cb	Mbr	80	
4190	-10000	-9700	Mbr	Mbr	80	
4200	-10100	-9900	Mb	Mb	75	
4210	-10000	-9800	Mb	Mb		
4220	-10100	-10000	Cb	Cb	60	
4230	-10000	-10100	Cv//Mvr	R	70	Andesite with py & cp
4240	-10100	-10100	Fg	Fg	60	
4250	-10000	-10300	Mbr	Mbr	80	
4260	-10100	-10200	Cv	Mb	100	
4270	-10100	-10400	Cv	Mbr	85	
4280	-10100	-10300	Mv	Mv	40	
4290	-9500	-8500	Mb	Mb	80	
4300	-9500	-8600	Mb	Mb	90	
4310	-9500	-8700	Mb	Mb	70	
4320	-9500	-8800	Mb	Mb	100	

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit	Map Unit	Depth	Bedrock
			c1 horizon	c2 horizon	cm	
4330	-9525	-8900	Cv	Mb	100	
4340	-9500	-9000	Mbr//Fg	Mbr//Fg	80	
4350	-9500	-9100	Cv	Mb	80	
4360	-9500	-9200	Mb	Mb	100	
4370	-9500	-9300	Mb	Mb	90	
4380	-9500	-9400	Mb	Mb	70	
4540	-10000	-9900	Cb	Cb	110	
4560	-9800	-10500	Cb	Cb	55	Diorite
4580	-9800	-10400	Cv	Mbr	70	
4600	-9800	-10300	Cv	R	40	Coarse grained andesite
4620	-9800	-10200	Cv	Mbr	70	
4640	-9800	-10100	Cv	R	30	Andesite
4660	-9800	-10000	Mb	Mb	60	
4680	-9800	-9900	Mbr//Cb	Mbr//Cb	70	
4700	-9800	-9800	Mb	Mb	75	
4710	-10250	-10150	Cv	Mbr	90	
4720	-9800	-9700	Mbr	Mbr	75	
4740	-9800	-9600	Mb	Mb	80	
4830	-9900	-10200	Cv//Mbr	Cv//Mbr	70	
4840	-9900	-10100	Cb	Cb	50	
4850	-9900	-10000	Cv	R	50	
4860	-9900	-9900	Cv	Mbr/Cb	70	
4870	-9900	-9800	Mb	Mb	80	
4880	-9700	-9600	Mb	Mb	90	
4890	-9700	-9800	Mb	Mb	70	
4900	-9700	-10000	Cv	Mb	70	
4910	-9700	-10200	Mb	Mb	90	
4920	-9700	-10400	Cb	Cb	60	
4930	-9900	-10500	Cv//Mbr	Cv//Mbr	85	
4940	-9900	-10400	R	R	20	Andesite w/ py
4950	-9900	-10300	Cv	Cv/R	50	Andesite w/ py& sulphides
5000	-10700	-9400	Cv	Cv/R	50	Fine grained diorite
5010	-10700	-9300	Cb	Cb	60	
5020	-10700	-9200	Cb	Cb	50	

## Property Scale C-Horizon Till Geochemical Sample Locations and Attributes

Sample	West	South	Map Unit	Map Unit	Depth	Bedrock
			c1 horizon	c2 horizon	cm	
5030	-10700	-9100	Cv	Mbr	60	
5040	-10700	-9000	Cv	Mbr/R	40	
5050	-10700	-8900	Cv	Mb	70	
5060	-10700	-8800	Mb	Mb	90	
5070	-10800	-8600	Cv	Mb	70	
5080	-10800	-8500	Mbr		60	
5090	-10700	-8500	Cv	Mb	80	
5100	-10700	-8600	Cv	Cv/R		Weathered on fracture surfaces
5110	-10700	-8700	Cv	Mbr		
Total Samples Obtained: 406						



Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
10	1	73	17	112	0.3	48	18	841	4.14	40	<5	2	32	<.2	<2	<2	65	0.45	0.044	14	35	0.58	224	0.02	3	1.72	0.01	0.1	<2	5
20	2	109	15	134	<.3	41	18	1055	5.19	16	<5	2	22	<.2	<2	<2	95	0.42	0.041	10	69	1.01	177	0.06	3	2.17	0.01	0.1	<2	139
30	2	128	11	167	0.4	45	24	1728	5.52	16	<5	2	34	0.2	<2	2	107	0.67	0.094	12	72	1.11	294	0.06	4	2.49	0.02	0.13	<2	13
40	2	92	20	120	0.3	40	23	1576	4.33	44	<5	2	36	0.2	3	<2	65	0.43	0.07	15	28	0.49	230	0.05	4	1.43	0.01	0.08	<2	10
50	1	60	12	103	<.3	32	16	1065	4.2	23	<5	2	29	<.2	2	<2	73	0.52	0.058	10	32	0.56	269	0.04	3	1.75	0.01	0.07	<2	5
60	1	51	11	91	<.3	29	12	732	4	22	<5	2	31	<.2	<2	2	67	0.42	0.093	9	28	0.43	213	0.05	3	1.39	0.01	0.06	<2	4
70	1	82	16	148	<.3	28	17	1392	4.94	16	<5	<2	58	0.2	<2	2	78	1.08	0.095	12	38	0.82	224	0.03	7	1.83	0.02	0.1	<2	5
80	1	129	9	183	0.5	35	16	1437	3.91	16	<5	<2	73	1	4	<2	72	1.65	0.091	16	55	0.89	303	0.02	5	1.79	0.02	0.08	<2	11
90	2	110	15	173	<.3	40	20	1561	5.25	15	<5	2	29	<.2	2	<2	94	0.47	0.059	17	70	0.96	230	0.06	4	2.01	0.01	0.14	<2	11
100	3	115	20	118	0.4	37	22	1152	5.89	24	<5	2	23	<.2	<2	<2	109	0.38	0.049	8	61	0.99	227	0.07	3	2.2	0.01	0.12	<2	109
110	2	111	11	150	<.3	41	21	1262	5.26	19	<5	2	23	0.2	2	<2	94	0.45	0.137	10	65	0.97	278	0.06	<3	2.07	0.01	0.11	<2	20
120	3	111	13	142	0.4	35	16	2130	5.2	19	<5	<2	50	<.2	<2	<2	91	1.02	0.082	12	51	0.91	335	0.03	4	2	0.02	0.09	<2	17
130	2	112	9	95	<.3	38	13	576	3.63	25	<5	2	32	<.2	2	<2	64	0.41	0.053	13	35	0.63	244	0.06	<3	1.5	0.01	0.06	<2	12
140	1	44	7	73	<.3	27	9	450	3.3	13	<5	2	35	<.2	<2	<2	54	0.32	0.036	11	25	0.41	181	0.05	<3	1.2	0.01	0.06	<2	8
150	2	98	25	147	0.6	53	23	1777	5.72	40	<5	2	42	0.6	<2	<2	88	0.96	0.058	33	56	0.71	717	0.01	<3	3.48	0.02	0.14	<2	5
160	2	62	11	205	<.3	32	14	715	4.47	12	<5	2	28	<.2	<2	2	75	0.58	0.091	9	34	0.61	322	0.05	3	2.22	0.01	0.08	<2	96
170	2	79	12	162	<.3	31	15	866	5.37	19	<5	2	25	<.2	<2	<2	93	0.49	0.158	9	49	0.79	285	0.04	<3	2.26	0.01	0.1	<2	10
180	2	45	9	111	<.3	31	11	509	3.68	20	<5	2	31	<.2	2	<2	63	0.38	0.045	10	28	0.5	240	0.03	<3	1.7	0.01	0.07	<2	3
190	1	39	10	88	<.3	29	11	526	3.78	29	<5	<2	21	<.2	2	<2	64	0.21	0.025	8	28	0.48	138	0.03	<3	1.46	0.01	0.06	<2	12
200	2	59	17	111	<.3	33	16	917	3.97	36	<5	<2	27	<.2	4	<2	67	0.34	0.039	9	29	0.5	179	0.04	<3	1.49	0.01	0.07	<2	6
210	1	86	11	220	<.3	40	16	882	4.33	24	<5	2	24	0.2	4	<2	85	0.48	0.047	10	49	0.91	221	0.08	3	1.99	0.01	0.13	<2	10
220	1	62	11	87	<.3	33	12	630	4.06	26	<5	2	42	<.2	<2	<2	67	0.59	0.041	12	32	0.55	329	0.02	<3	1.93	0.02	0.09	<2	4
230	1	65	12	117	0.3	34	15	871	3.95	28	<5	2	35	0.3	2	<2	67	0.5	0.048	13	32	0.55	245	0.03	3	1.61	0.01	0.08	<2	2
240	2	80	42	181	<.3	49	25	953	6.18	27	<5	3	41	<.2	<2	<2	84	0.48	0.061	16	42	0.8	266	0.04	<3	2.01	0.02	0.12	<2	6
250	2	129	18	130	<.3	42	20	1491	5.34	28	<5	2	61	0.3	2	2	87	0.63	0.07	17	40	0.87	265	0.05	<3	2.11	0.02	0.12	<2	16
260	2	266	19	131	<.3	46	25	1723	5.89	48	<5	3	53	<.2	<2	<2	91	0.55	0.081	17	52	0.93	304	0.06	3	2.14	0.02	0.11	<2	28
270	2	89	16	113	<.3	36	17	1479	4.76	31	<5	3	47	<.2	3	2	72	0.43	0.075	13	30	0.53	169	0.05	<3	1.58	0.01	0.07	<2	11
280	2	65	16	137	<.3	41	26	1633	4.58	17	<5	2	47	0.5	2	<2	80	1.31	0.074	11	34	0.86	327	0.06	3	1.78	0.02	0.08	<2	6
290	2	150	13	121	<.3	53	25	1778	5.37	24	<5	2	38	<.2	<2	<2	93	0.8	0.071	12	56	1.07	301	0.04	4	2.22	0.02	0.13	<2	19
300	2	119	13	140	<.3	32	26	1456	4.99	30	<5	2	44	0.2	<2	<2	77	2.14	0.073	11	31	0.67	248	0.06	<3	1.47	0.03	0.08	<2	8
310	2	110	16	133	<.3	41	25	1698	5.54	45	<5	2	49	0.2	2	<2	82	0.58	0.066	18	36	0.73	251	0.05	3	1.86	0.02	0.12	<2	16
320	2	113	12	138	<.3	39	19	1341	5.49	42	<5	2	55	<.2	4	<2	90	0.55	0.069	16	42	0.81	312	0.04	3	2.21	0.02	0.11	<2	45
330	3	137	10	141	<.3	41	20	1294	5.83	35	<5	2	72	<.2	<2	<2	99	0.59	0.063	14	51	1.07	218	0.05	3	2.39	0.02	0.15	<2	9
340	12	230	12	138	<.3	104	30	1575	8.34	22	<5	2	95	<.2	<2	2	137	0.87	0.067	11	256	2.33	464	0.12	<3	2.8	0.05	0.49	<2	40
350	1	136	24	126	<.3	33	30	1633	6.17	86	<5	2	36	0.4	<2	<2	106	0.53	0.07	25	34	1.02	221	0.08	<3	2.01	0.02	0.08	<2	86
360	1	52	14	92	0.3	29	14	904	4.1	18	5	2	38	0.2	3	2	76	0.32	0.03	17	27	0.57	225	0.05	3	1.68	0.01	0.06	2	5
380	2	133	18	127	<.3	44	20	1282	5.2	27	<5	2	42	0.2	3	<2	91	0.66	0.067	19	53	1.02	325	0.07	3	2.23	0.02	0.09	<2	6
390	3	180	16	96	<.3	37	21	998	5.44	33	<5	2	33	<.2	<2	<2	77	0.35	0.058	16	42	0.7	232	0.08	<3	1.5	0.02	0.09	<2	10
400	2	109	9	105	<.3	31	15	952	4.37	22	<5	2	32	<.2	<2	<2	81	0.33	0.034	14	36	0.76	228	0.06	<3	1.8	0.02	0.07	<2	5
440	5	127	22	149	1	54	31	2252	6.53	38	<5	2	64	0.5	4	2	106	0.74	0.074	14	69	1.18	569	0.06	<3	2.81	0.04	0.17	<2	27
450	2	78	10	115	0.3	31	18	516	4.74	29	<5	<2	19	0.2	<2	<2	82	0.24	0.056	7	32	0.73	146	0.05	<3	2.94	0.02	0.06	<2	11

Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
490	3	118	19	115	<.3	38	17	1079	5.13	45	<.5	<.2	43	0.2	<.2	<.2	86	0.82	0.061	14	47	0.8	346	0.05	3	2.47	0.03	0.16	<.2	19
500	4	99	12	88	<.3	28	20	1094	5.11	23	<.5	2	41	<.2	2	<.2	82	0.68	0.068	15	43	0.77	275	0.07	<.3	2.27	0.02	0.15	<.2	11
510	1	105	14	178	<.3	60	18	1069	5.39	34	<.5	2	52	0.5	2	3	94	0.94	0.056	12	83	1.37	316	0.08	4	2.98	0.07	0.19	<.2	5
520	2	102	16	145	<.3	38	16	926	5.13	36	<.5	2	37	0.3	2	2	88	0.53	0.051	14	42	0.85	254	0.05	5	2.54	0.02	0.14	<.2	7
530	1	76	15	135	0.4	36	26	3067	5.25	38	<.5	2	53	0.8	2	<.2	86	1.21	0.077	19	35	0.76	328	0.07	6	1.96	0.03	0.15	<.2	3
540	2	57	14	100	<.3	28	15	904	4.16	34	<.5	2	37	<.2	3	3	73	0.38	0.053	10	29	0.57	270	0.07	<.3	1.96	0.02	0.1	<.2	5
550	2	46	12	95	<.3	29	12	698	4.03	23	<.5	<.2	75	<.2	<.2	<.2	70	0.47	0.034	11	31	0.53	161	0.06	3	1.81	0.02	0.08	<.2	3
560	2	68	9	129	<.3	32	11	960	3.58	20	5	<.2	105	0.3	<.2	<.2	61	0.69	0.062	15	31	0.56	190	0.05	<.3	1.84	0.03	0.09	<.2	5
570	2	73	13	99	<.3	32	12	626	3.92	38	<.5	2	80	<.2	2	<.2	69	0.55	0.051	13	33	0.58	193	0.05	3	1.99	0.02	0.12	<.2	2
580	2	99	14	132	<.3	34	16	786	4.14	30	<.5	<.2	37	<.2	4	<.2	73	0.37	0.095	10	44	0.68	234	0.1	<.3	1.73	0.02	0.12	<.2	11
590	1	53	8	88	<.3	25	11	465	3.29	23	<.5	<.2	27	<.2	<.2	<.2	60	0.36	0.033	8	27	0.45	192	0.08	<.3	1.53	0.02	0.08	<.2	8
600	2	148	21	168	0.4	45	19	1062	4.8	83	<.5	2	54	0.5	3	2	78	0.71	0.064	14	47	0.68	318	0.04	4	2.24	0.03	0.15	<.2	39
610	2	68	10	108	<.3	40	15	710	4.2	27	<.5	<.2	29	<.2	<.2	<.2	77	0.4	0.039	7	51	0.81	216	0.1	<.3	2	0.02	0.1	<.2	5
620	1	130	20	119	0.4	37	15	722	4.26	89	8	<.2	66	0.2	2	<.2	70	0.68	0.06	14	34	0.59	171	0.03	5	1.93	0.02	0.12	<.2	25
630	2	57	16	118	<.3	26	12	836	3.78	46	<.5	<.2	58	0.3	2	<.2	64	0.58	0.062	12	31	0.5	167	0.05	3	1.57	0.02	0.08	<.2	4
640	1	77	12	92	<.3	27	12	619	3.31	38	7	<.2	32	<.2	<.2	<.2	56	0.44	0.042	11	21	0.44	191	0.05	<.3	1.48	0.02	0.08	<.2	7
650	2	84	18	102	0.3	30	13	651	3.6	51	<.5	<.2	31	<.2	<.2	<.2	62	0.34	0.046	12	24	0.45	180	0.06	6	1.51	0.01	0.08	<.2	10
660	<.1	89	10	136	<.3	36	10	448	3.07	19	<.5	<.2	35	0.3	<.2	2	55	0.56	0.037	13	34	0.45	284	0.03	3	1.93	0.02	0.09	<.2	14
670	<.1	33	7	79	<.3	35	13	552	3.27	15	<.5	<.2	37	<.2	<.2	<.2	56	0.29	0.025	9	27	0.55	181	0.05	<.3	1.73	0.01	0.09	<.2	4
680	1	147	13	87	<.3	34	13	647	3.5	38	<.5	2	31	<.2	<.2	<.2	58	0.32	0.043	11	27	0.43	166	0.07	<.3	1.33	0.01	0.08	<.2	16
690	1	108	14	97	<.3	31	14	857	4.16	39	<.5	<.2	37	<.2	<.2	<.2	69	0.36	0.066	13	25	0.41	199	0.06	<.3	1.43	0.02	0.06	<.2	10
700	2	91	12	92	<.3	37	12	421	3.85	40	<.5	<.2	27	<.2	<.2	<.2	66	0.23	0.053	8	24	0.4	186	0.05	<.3	1.6	0.01	0.06	<.2	13
710	1	26	9	66	<.3	30	11	501	3.11	14	<.5	<.2	33	<.2	<.2	<.2	54	0.28	0.038	9	23	0.46	183	0.06	3	1.42	0.01	0.08	<.2	3
720	<.1	37	8	64	<.3	27	9	379	3.06	15	<.5	2	33	<.2	<.2	<.2	52	0.26	0.04	9	24	0.39	160	0.06	5	1.37	0.01	0.06	<.2	4
730	<.1	47	5	83	<.3	28	9	443	2.87	10	<.5	<.2	40	<.2	<.2	<.2	51	0.41	0.042	11	23	0.48	234	0.05	4	1.63	0.01	0.09	<.2	4
740	2	62	66	532	1	38	17	718	4.54	154	<.5	<.2	33	1	6	<.2	73	0.32	0.057	10	30	0.51	144	0.06	<.3	1.56	0.01	0.1	<.2	9
750	3	82	16	162	0.3	62	17	461	5.81	14	7	<.2	34	0.6	4	<.2	135	0.78	0.119	20	153	0.32	207	0.01	6	1.8	0.02	0.12	<.2	2
760	2	87	16	79	<.3	28	16	816	4.61	26	<.5	<.2	28	0.4	2	2	80	0.45	0.057	11	35	0.63	161	0.08	<.3	1.8	0.02	0.1	<.2	5
770	1	66	15	74	<.3	25	10	469	3.13	36	<.5	<.2	30	<.2	2	<.2	56	0.29	0.029	10	24	0.44	187	0.07	<.3	1.37	0.01	0.06	<.2	6
780	1	107	12	77	<.3	31	11	663	3.78	27	<.5	<.2	54	0.4	<.2	<.2	63	0.73	0.073	14	33	0.6	244	0.04	3	1.87	0.02	0.11	<.2	5
790	1	76	12	144	<.3	29	12	657	3.57	37	<.5	<.2	23	0.4	<.2	<.2	64	0.29	0.04	11	26	0.42	241	0.05	3	1.74	0.01	0.08	<.2	35
810	<.1	100	21	179	0.7	35	12	757	3.69	55	6	2	30	0.7	<.2	<.2	65	0.48	0.055	15	38	0.41	332	0.04	3	2.17	0.02	0.1	<.2	8
820	2	73	20	95	<.3	32	16	742	4.41	40	<.5	2	30	0.5	<.2	2	75	0.39	0.046	13	30	0.59	159	0.07	4	1.73	0.02	0.09	<.2	7
830	2	75	11	86	<.3	36	12	510	3.97	17	<.5	<.2	40	0.3	<.2	<.2	72	0.56	0.037	13	37	0.69	351	0.04	3	2.38	0.02	0.13	<.2	6
840	<.1	83	17	101	0.3	37	15	721	4.25	37	<.5	<.2	45	0.5	<.2	2	73	0.65	0.055	13	31	0.7	244	0.04	4	2.09	0.02	0.11	<.2	10
850	2	97	14	104	<.3	28	11	474	3.73	16	<.5	<.2	45	0.6	3	<.2	68	0.8	0.032	11	36	0.58	206	0.05	3	1.95	0.02	0.1	<.2	12
860	<.1	70	17	98	<.3	36	18	852	4.18	34	8	<.2	38	0.4	2	2	73	0.46	0.04	13	33	0.65	216	0.05	4	1.99	0.02	0.11	<.2	5
870	<.1	25	11	90	<.3	31	10	401	3.09	12	5	<.2	33	<.2	<.2	2	55	0.31	0.044	10	26	0.51	162	0.06	4	1.57	0.01	0.1	<.2	5
880	2	56	15	97	<.3	35	15	707	3.88	34	<.5	2	27	0.4	<.2	2	69	0.4	0.026	10	34	0.51	254	0.05	5	1.86	0.02	0.1	<.2	32
890	3	79	16	96	<.3	36	13	495	3.74	76	<.5	<.2	26	0.3	3	<.2	64	0.26	0.064	9	25	0.45	173	0.06	<.3	1.58	0.01	0.07	<.2	3
900	2	63	14	97	<.3	30	15	737	3.77	39	<.5	<.2	41	0.3	2	<.2	66	0.4	0.053	13	26	0.56	183	0.06	3	1.66	0.02	0.09	<.2	20
910	1	25	7	100	<.3	29	10	439	2.95	11	5	<.2	35	<.2	2	2	52	0.31	0.06	10	23	0.44	170	0.05	<.3	1.51	0.01	0.09	<.2	3
920	1	64	17	102	<.3	30	13	910	3.84	55	<.5	<.2	41	0.3	3	<.2	67	0.42	0.065	15	26	0.51	208	0.05	<.3	1.59	0.02	0.07	<.2	7
930	1	28	7	63	<.3	26	10	393	2.91	13	7	<.2	32	<.2	<.2	<.2	52	0.29	0.03	9	25	0.45	162	0.06	4	1.38	0.01	0.07	<.2	6
940	2	75	18	98	<.3	37	17	1115	4.1	43	<.5	<.2	50	0.6	<.2	2	68	0.64	0.081	13	31	0.51	237	0.04	<.3	1.71	0.02	0.1	<.2	9
950	<.1	24	7	60	<.3	26	9	365	2.84	12	6	<.2	33	<.2	2	3	49	0.33	0.047	9	20	0.41	134	0.06	<.3	1.34	0.02	0.07	<.2	5
960	2	61	12	80	<.3	31	10	423	3.62	26	<.5	<.2	38	0.3	4	3	65	0.46	0.025	10	28	0.55	273	0.05	<.3	1.9	0.02	0.11	<.2	4

Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	
970	1	43	12	95	<.3	31	14	541	3.71	17	5	<.2	42	0.4	4	<.2	67	0.74	0.035	9	35	0.63	302	0.03	3	2.27	0.02	0.13	<.2	6	
980	1	29	6	90	<.3	29	9	327	3.04	9	6	<.2	29	<.2	<.2	<.2	53	0.25	0.036	8	24	0.56	150	0.04	<.3	1.74	0.01	0.1	<.2	3	
990	1	32	9	85	<.3	36	12	522	3.33	12	8	<.2	37	0.2	2	<.2	57	0.26	0.023	9	32	0.56	177	0.04	3	1.77	0.01	0.1	<.2	3	
1000	<.1	39	9	79	<.3	34	11	479	3.07	20	<.5	<.2	33	<.2	2	<.2	53	0.27	0.036	9	24	0.49	173	0.05	<.3	1.56	0.02	0.09	<.2	1	
1010	1	28	10	72	<.3	37	10	326	3.21	10	<.5	<.2	51	<.2	2	2	56	0.4	0.033	10	29	0.56	234	0.04	3	1.94	0.02	0.12	<.2	3	
1020	<.1	23	5	66	<.3	33	9	332	2.82	10	<.5	<.2	36	<.2	<.2	<.2	48	0.28	0.037	9	25	0.47	171	0.05	<.3	1.48	0.01	0.09	<.2	2	
1030	<.1	33	8	46	<.3	22	7	277	2.51	11	<.5	<.2	33	<.2	<.2	<.2	44	0.26	0.031	8	22	0.39	148	0.06	<.3	1.28	0.02	0.06	<.2	2	
1040	1	51	14	104	<.3	38	14	564	4.72	23	<.5	<.2	45	0.5	3	2	83	0.38	0.035	8	43	0.84	307	0.01	4	3.22	0.02	0.2	<.2	2	
1050																															
1060	1	45	17	100	<.3	36	19	961	4.19	35	<.5	<.2	41	0.6	3	<.2	78	0.4	0.058	8	39	0.66	416	0.04	4	3.14	0.02	0.09	<.2	1	
1070	4	85	22	310	<.3	14	26	1883	9.24	20	<.5	3	93	1	4	<.2	49	0.38	0.142	38	26	1.08	510	0.12	<.3	3.75	0.03	0.26	<.2	12	
1080	2	38	12	92	<.3	27	12	542	3.74	23	9	<.2	34	0.3	2	<.2	74	0.38	0.032	8	30	0.56	241	0.06	5	2.24	0.02	0.07	<.2	2	
1090	1	58	12	96	0.6	37	15	977	4.11	23	12	<.2	48	0.6	2	2	73	0.84	0.069	14	31	0.66	273	0.05	5	2.04	0.03	0.12	<.2	5	
1100	2	116	8	71	<.3	25	11	412	3.63	23	<.5	<.2	24	<.2	2	2	60	0.17	0.031	7	26	0.46	153	0.07	<.3	1.69	0.01	0.06	<.2	8	
1110	3	98	12	78	<.3	23	11	548	3.73	22	<.5	2	38	<.2	<.2	<.2	61	0.28	0.036	11	25	0.45	181	0.08	3	1.32	0.01	0.08	2	3	
1120	14	251	18	98	<.3	27	17	603	5.7	43	<.5	<.2	45	<.2	3	<.2	70	0.25	0.053	13	30	0.51	258	0.08	<.3	1.79	0.02	0.1	<.2	13	
1130	3	131	17	78	<.3	26	15	777	4.03	26	<.5	<.2	50	<.2	<.2	<.2	70	0.44	0.058	14	31	0.57	181	0.08	<.3	1.61	0.02	0.1	<.2	16	
1140	10	508	12	111	<.3	36	21	796	5.46	45	<.5	<.2	44	0.2	2	3	82	0.53	0.095	14	79	1.08	421	0.12	4	2.01	0.02	0.23	<.2	43	
1150																															
1160	2	83	14	99	<.3	28	16	778	4.01	32	<.5	<.2	27	<.2	4	3	73	0.4	0.044	14	30	0.5	177	0.09	<.3	1.43	0.02	0.09	<.2	19	
1170	1	58	10	82	<.3	23	10	560	3.21	24	6	<.2	31	<.2	<.2	<.2	57	0.37	0.037	9	31	0.41	126	0.05	5	1.42	0.01	0.07	<.2	3	
1180	1	103	17	117	<.3	32	18	1182	4.94	35	7	2	46	<.2	2	<.2	87	0.6	0.067	19	40	0.78	203	0.08	4	2.09	0.03	0.11	<.2	7	
1190	2	203	15	263	0.3	35	20	1703	5.23	35	<.5	<.2	63	1	<.2	<.2	85	0.52	0.066	18	39	0.69	205	0.04	3	2	0.02	0.11	<.2	20	
1200	1	192	15	207	0.4	36	18	1365	5.11	28	<.5	<.2	78	1	3	<.2	86	0.82	0.075	16	43	0.81	246	0.04	<.3	2.12	0.02	0.12	<.2	14	
1210	1	49	9	97	<.3	28	11	438	3.24	29	6	<.2	24	<.2	<.2	<.2	60	0.27	0.043	8	27	0.46	182	0.06	5	1.54	0.01	0.07	<.2	3	
1220	<.1	96	20	182	<.3	49	20	1187	5.11	64	<.5	<.2	33	0.3	2	<.2	93	0.55	0.116	11	47	0.94	275	0.06	4	2.76	0.03	0.14	<.2	4	
1230	1	50	9	81	<.3	25	11	473	3.23	33	5	2	25	<.2	<.2	<.2	60	0.28	0.027	8	28	0.43	161	0.07	5	1.42	0.01	0.08	<.2	2	
1240	2	69	11	126	<.3	28	15	807	3.99	25	7	2	32	<.2	2	<.2	72	0.34	0.024	11	39	0.61	140	0.08	4	1.52	0.01	0.09	<.2	11	
1250	2	64	11	108	<.3	31	14	713	3.93	24	<.5	<.2	40	0.2	2	<.2	72	0.54	0.045	12	37	0.6	230	0.05	4	1.94	0.02	0.1	<.2	7	
1260	2	106	13	114	0.3	34	15	1018	4.21	25	<.5	<.2	60	0.3	<.2	<.2	75	0.9	0.06	14	43	0.74	211	0.04	6	1.89	0.02	0.09	<.2	6	
1270	<.1	97	8	97	<.3	34	12	642	3.45	18	6	<.2	38	<.2	<.2	2	63	0.46	0.04	14	43	0.57	302	0.02	<.3	2.18	0.01	0.13	<.2	33	
1280	1	30	7	75	<.3	32	11	404	3.02	14	7	2	33	<.2	2	<.2	53	0.25	0.028	9	27	0.49	150	0.05	4	1.48	0.01	0.08	<.2	<.1	
1290	3	92	10	93	<.3	37	11	490	3.74	26	6	3	37	<.2	<.2	2	66	0.36	0.06	11	33	0.56	205	0.05	6	1.89	0.02	0.1	<.2	11	
1300	2	84	13	121	<.3	54	20	827	4.91	17	<.5	3	51	<.2	<.2	<.2	82	0.67	0.034	16	57	0.75	486	0.01	7	3.46	0.02	0.22	<.2	8	
1310	1	23	11	70	<.3	30	10	409	2.94	4	<.5	<.2	29	<.2	<.2	<.2	49	0.28	0.039	13	24	0.42	166	0.04	<.3	1.43	0.01	0.07	<.2	<.1	
1320	1	30	10	72	<.3	35	10	410	3.32	11	<.5	2	36	<.2	2	<.2	57	0.32	0.021	9	28	0.48	222	0.03	<.3	1.58	0.01	0.07	<.2	2	
1330	1	41	11	100	<.3	28	10	530	3.29	16	<.5	<.2	30	<.2	<.2	<.2	58	0.31	0.035	11	25	0.43	206	0.05	<.3	1.32	0.01	0.06	<.2	22	
1340	1	45	12	82	<.3	31	12	639	3.39	18	<.5	<.2	33	0.3	<.2	<.2	58	0.34	0.047	11	27	0.45	219	0.05	<.3	1.33	0.01	0.07	<.2	9	
1350	2	74	13	87	<.3	27	12	590	3.76	23	<.5	<.2	25	<.2	2	2	68	0.38	0.045	10	29	0.54	156	0.07	<.3	1.42	0.02	0.06	<.2	22	
1360	1	72	16	123	<.3	36	14	840	4.08	28	<.5	2	35	0.2	2	2	72	0.79	0.052	14	35	0.69	311	0.03	<.3	1.98	0.02	0.11	<.2	26	
1370	1	45	15	84	<.3	30	11	516	3.49	23	<.5	<.2	26	<.2	<.2	2	63	0.3	0.034	10	28	0.52	174	0.05	<.3	1.44	0.01	0.06	<.2	2	
1380	1	32	10	72	<.3	27	10	512	3.04	14	<.5	<.2	26	<.2	<.2	<.2	53	0.26	0.035	9	25	0.49	156	0.04	<.3	1.39	0.01	0.06	<.2	2	
1390	1	94	17	107	<.3	31	15	1160	3.88	16	<.5	<.2	49	0.6	<.2	<.2	65	0.99	0.052	16	29	0.59	370	0.01	<.3	1.9	0.02	0.07	<.2	3	
1400	1	38	10	74	<.3	25	9	392	3.39	20	<.5	<.2	33	<.2	<.2	<.2	58	0.51	0.03	9	26	0.45	237	0.03	<.3	1.39	0.02	0.07	<.2	4	
1410	1	49	13	90	<.3	30	13	639	3.48	21	<.5	<.2	31	<.2	<.2	<.2	60	0.31	0.043	11	27	0.47	191	0.04	<.3	1.37	0.01	0.06	<.2	3	
1420	3	137	27	141	<.3	21	17	862	7.19	64	<.5	<.2	72	<.2	5	2	83	0.3	0.071	12	26	0.51	202	0.04	<.3	1.42	0.02	0.17	<.2	63	
1430	1	74	13	84	<.3	27	14	764	4.05	21	<.5	<.2	24	<.2	<.2	2	74	0.33	0.034	10	30	0.56	163	0.08	<.3	1.44	0.01	0.08	<.2	9	
1440	3	80	11	95	<.3	21	14	947	4.61	14	<.5	<.2	24	<.2	<.2	<.2	80	0.33	0.038	11	27	0.65	173	0.08	<.3	1.63	0.01	0.08	<.2	4	

Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	
1450	2	85	16	90	<.3	31	18	893	4.62	25	<5	2	26	<.2	<2	<2	83	0.41	0.044	9	34	0.64	189	0.06	<3	1.74	0.01	0.11	<2	32	
1460	2	91	9	128	<.3	39	23	1160	5.73	25	<5	2	34	<.2	<2	<2	91	0.67	0.054	20	43	0.81	230	0.06	<3	2.06	0.02	0.09	<2	65	
1470	2	120	12	90	<.3	24	16	994	4.54	14	<5	2	27	<.2	<2	2	79	0.43	0.041	15	33	0.63	179	0.09	<3	1.42	0.02	0.1	<2	45	
1480	2	108	14	124	<.3	42	20	1221	5.35	25	<5	2	37	0.2	<2	<2	102	0.68	0.047	16	50	1.06	309	0.05	<3	2.28	0.02	0.11	<2	20	
1490	1	71	14	122	0.4	24	12	1431	4	14	<5	<2	36	<.2	2	<2	66	0.95	0.063	10	35	0.7	362	0.04	<3	1.77	0.02	0.08	<2	8	
1500	1	100	15	178	0.3	34	19	1564	4.39	19	<5	<2	30	0.2	<2	<2	83	0.65	0.038	12	42	0.83	306	0.05	<3	1.95	0.02	0.08	<2	6	
1510	2	162	12	120	<.3	31	14	715	4.17	10	<5	<2	21	<.2	<2	<2	84	0.4	0.025	12	37	0.72	200	0.03	<3	2.47	0.01	0.06	<2	2	
1520	1	110	14	95	<.3	27	13	802	3.89	11	<5	<2	30	<.2	<2	2	74	0.51	0.033	15	34	0.78	164	0.05	<3	2.04	0.01	0.06	<2	2	
1530	2	105	9	238	0.3	26	61	1602	7.22	28	<5	2	13	<.2	<2	2	74	0.23	0.056	13	30	0.51	202	0.01	<3	2.8	0.01	0.09	<2	1	
1540	1	36	9	76	<.3	20	12	772	3.33	11	<5	<2	36	0.2	<2	<2	64	0.51	0.035	11	25	0.57	137	0.08	<3	1.74	0.02	0.06	2	2	
1550																															
1560	9	142	8	115	<.3	22	14	596	3.4	12	<5	<2	23	<.2	<2	2	68	0.34	0.031	10	26	0.59	155	0.04	<3	1.79	0.01	0.04	<2	2	
1570	31	220	14	99	<.3	28	12	785	3.65	12	7	2	38	<.2	<2	<2	74	0.71	0.044	35	31	0.67	317	0.03	<3	2.11	0.01	0.06	<2	15	
1580																															
1590	2	39	13	137	<.3	33	12	445	4.52	10	<5	2	12	<.2	3	2	83	0.1	0.046	7	45	0.74	109	0.02	<3	4.94	0.01	0.03	3	4	
1600	1	34	13	201	<.3	37	13	362	4.32	17	<5	2	14	<.2	<2	<2	81	0.12	0.071	8	40	0.58	168	0.02	<3	4.27	0.01	0.05	<2	2	
1610	<1	27	4	131	<.3	28	12	683	4.29	23	<5	<2	25	<.2	<2	<2	86	0.27	0.052	8	35	0.69	218	0.03	<3	2.32	0.01	0.06	<2	2	
1620	1	35	15	114	<.3	30	18	1211	3.99	16	<5	<2	31	<.2	<2	2	74	0.31	0.057	11	31	0.56	155	0.04	<3	1.85	0.01	0.06	<2	2	
1630	2	84	16	110	<.3	30	18	1187	4.8	28	<5	<2	29	<.2	2	2	79	0.35	0.049	11	35	0.75	168	0.04	<3	2.38	0.01	0.05	<2	3	
1640																															
1650	1	47	10	137	<.3	34	16	599	4.23	20	<5	<2	29	<.2	<2	<2	84	0.4	0.07	9	35	0.67	305	0.03	<3	3.01	0.01	0.07	<2	6	
1660	1	46	12	97	<.3	28	16	976	3.8	19	<5	2	29	<.2	<2	<2	71	0.37	0.05	8	28	0.5	248	0.05	<3	1.9	0.01	0.06	<2	5	
1670	1	54	11	151	<.3	28	18	1217	4.33	18	<5	<2	37	<.2	2	<2	86	0.49	0.101	11	33	0.55	335	0.04	<3	2.74	0.01	0.07	2	1	
1680	1	40	24	244	0.3	31	17	1000	4.03	29	5	2	32	0.4	2	2	77	0.4	0.058	9	31	0.6	304	0.05	5	2.1	0.01	0.08	2	5	
1690	1	168	15	126	0.3	35	21	1350	4.71	31	5	2	60	0.2	2	2	97	0.58	0.044	22	40	0.9	175	0.07	6	1.95	0.02	0.12	2	5	
1700	1	54	13	91	0.3	27	13	838	3.79	22	5	2	40	0.2	2	2	71	0.45	0.04	11	30	0.57	207	0.07	6	1.52	0.02	0.08	2	4	
1710	1	64	14	79	0.3	25	11	502	3.53	22	5	2	48	0.2	2	2	67	0.29	0.03	8	27	0.45	164	0.06	4	1.41	0.01	0.07	2	2	
1720	1	49	13	87	0.3	26	12	379	3.87	20	5	2	28	0.2	2	2	65	0.18	0.034	8	27	0.49	156	0.06	4	1.6	0.01	0.06	2	1	
1730	1	123	27	236	0.3	67	43	1151	4.13	53	5	2	44	0.3	2	2	69	0.3	0.03	15	29	0.47	155	0.06	5	1.68	0.01	0.09	2	15	
1740	2	156	10	87	0.3	37	14	455	4.51	19	5	2	54	0.2	2	2	80	0.36	0.042	13	54	0.86	196	0.1	4	2.15	0.02	0.14	2	5	
1750	1	99	17	115	0.3	48	18	1056	4.84	39	5	2	71	0.2	2	2	77	0.5	0.068	16	34	0.58	187	0.05	5	1.75	0.02	0.1	2	42	
1760	1	54	41	127	0.3	39	14	622	3.89	30	5	2	51	0.2	2	2	72	0.39	0.057	9	29	0.51	157	0.08	4	1.48	0.01	0.08	2	5	
1770	4	373	19	121	0.3	30	14	970	4.21	21	5	2	107	0.2	2	2	75	0.86	0.068	14	38	0.69	212	0.06	4	1.62	0.02	0.09	2	13	
1780	3	184	17	100	0.3	78	20	1160	5.03	22	5	2	117	0.2	2	2	87	0.66	0.046	12	81	1.02	245	0.07	4	2.04	0.03	0.1	2	9	
1790	1	106	12	109	0.3	33	17	1081	4.78	29	5	2	33	0.2	4	2	87	0.64	0.054	16	39	0.78	272	0.05	5	2.01	0.02	0.1	2	13	
1800	2	174	19	209	0.5	54	18	1243	4.62	28	5	2	56	0.9	2	2	74	0.58	0.059	21	50	0.69	219	0.06	4	1.83	0.02	0.1	2	4	
1810	1	99	21	129	<.3	38	19	1308	4.61	38	<5	<2	42	<.2	<2	<2	77	0.73	0.073	12	35	0.84	248	0.04	<3	1.9	0.02	0.1	<2	20	
1820	2	40	8	73	<.3	25	8	454	3.43	23	<5	<2	63	<.2	<2	<2	52	0.49	0.024	8	23	0.43	158	0.03	<3	1.41	0.01	0.08	<2	3	
1830	2	114	40	188	0.4	57	18	910	5	64	<5	<2	77	0.5	<2	<2	72	0.58	0.054	14	35	0.58	217	0.03	<3	1.91	0.02	0.07	<2	46	
1840	3	94	17	147	<.3	41	22	2300	5.09	40	<5	<2	76	<.2	3	<2	84	0.67	0.064	15	37	0.89	247	0.03	<3	2.17	0.02	0.12	<2	3	
1850	5	321	13	147	0.4	43	15	745	4.98	21	<5	<2	116	0.2	<2	<2	81	0.8	0.061	17	72	0.88	279	0.06	<3	2.28	0.02	0.09	<2	46	
1860	2	97	12	95	<.3	28	13	1302	3.68	23	<5	<2	65	<.2	2	<2	61	0.78	0.074	12	41	0.59	191	0.03	<3	1.53	0.02	0.07	<2	17	
1870	1	86	12	83	<.3	25	11	723	3.67	38	<5	<2	57	<.2	<2	<2	55	0.62	0.053	12	26	0.39	170	0.03	<3	1.25	0.02	0.05	<2	3	
1880	1	60	14	130	<.3	25	10	708	3.46	41	<5	<2	64	0.2	<2	<2	54	0.68	0.041	9	23	0.41	176	0.02	<3	1.45	0.01	0.06	<2	4	
1890	1	117	16	101	<.3	31	12	589	3.73	50	<5	<2	32	0.2	3	2	64	0.35	0.042	16	29	0.54	221	0.05	<3	1.53	0.01	0.06	<2	62	
1900	2	71	61	341	<.3	50	21	1023	4.73	54	<5	<2	78	1.3	2	2	69	0.84	0.219	8	31	0.49	303	0.04	3	1.85	0.01	0.14	<2	12	
1910	1	68	17	109	<.3	27	14	776	4.1	32	<5	<2	28	0.2	<2	2	70	0.46	0.043	10	28	0.52	182	0.05	<3	1.48	0.01	0.09	<2	32	
1920	2	63	10	89	<.3	26	13	565	3.81	24	<5	<2	23	<.2	2	<2	67	0.34	0.034	7	27	0.5	202	0.06	<3	1.63	0.01	0.06	<2	2	



Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	
1930	1	58	10	105	<.3	31	11	685	3.97	28	<5	<2	52	<.2	<2	<2	65	0.68	0.044	13	31	0.46	256	0.02	<3	1.91	0.01	0.09	<2	3	
1940	1	67	13	89	<.3	28	11	589	3.49	65	<5	<2	28	<.2	<2	3	60	0.35	0.045	10	23	0.38	194	0.05	<3	1.39	0.01	0.05	<2	3	
1950	1	42	7	120	<.3	28	9	347	3.11	26	<5	<2	21	<.2	2	<2	52	0.29	0.079	6	22	0.37	213	0.03	<3	1.52	0.01	0.08	<2	<1	
1960	2	179	18	210	<.3	35	18	1438	5.52	36	<5	<2	60	0.3	3	<2	93	0.59	0.059	19	38	0.77	278	0.03	<3	2.01	0.02	0.09	<2	20	
1970	1	39	12	128	<.3	22	12	599	3.31	31	<5	<2	76	0.2	<2	2	59	0.49	0.018	7	26	0.53	111	0.06	<3	1.37	0.01	0.1	<2	4	
1980	2	164	38	198	0.4	32	19	1474	5.42	40	<5	<2	64	0.6	<2	<2	92	0.7	0.07	15	37	0.77	277	0.04	<3	1.86	0.02	0.1	<2	28	
1990	2	56	11	143	<.3	28	12	553	4.05	23	<5	<2	23	<.2	<2	<2	72	0.4	0.054	9	30	0.54	184	0.06	<3	1.62	0.01	0.08	<2	3	
2000	1	63	12	122	<.3	37	15	889	4.38	18	<5	<2	30	0.3	<2	<2	87	0.74	0.055	17	42	0.99	397	0.02	<3	3.08	0.02	0.07	<2	1	
2010	1	35	11	109	<.3	25	13	1071	4.21	16	<5	<2	24	<.2	<2	3	78	0.55	0.037	11	33	0.87	216	0.04	<3	2.2	0.01	0.07	<2	3	
2020	1	44	10	118	<.3	24	15	955	4.48	17	<5	<2	25	0.2	2	2	81	0.5	0.023	14	31	0.86	190	0.06	<3	2.13	0.01	0.05	<2	<1	
2030	1	42	12	100	<.3	22	13	825	3.98	23	<5	<2	26	<.2	3	<2	77	0.4	0.018	12	28	0.74	165	0.07	<3	1.74	0.01	0.05	<2	5	
2040	3	55	12	244	<.3	23	14	705	4.07	16	<5	<2	24	<.2	<2	<2	79	0.32	0.028	9	28	0.71	151	0.04	<3	2.21	0.01	0.04	<2	25	
2050	3	63	11	94	<.3	22	11	694	3.58	15	<5	<2	31	<.2	3	<2	65	0.38	0.046	8	26	0.63	146	0.03	<3	1.94	0.01	0.04	<2	<1	
2060																															
2070	25	43	12	116	<.3	24	11	494	3.63	16	<5	<2	24	<.2	4	3	75	0.36	0.034	8	28	0.65	215	0.03	<3	2.3	0.01	0.05	<2	1	
2080																															
2090	62	60	15	108	<.3	28	15	947	3.95	22	<5	<2	34	<.2	<2	<2	75	0.46	0.049	11	31	0.65	245	0.02	<3	2.55	0.01	0.06	<2	3	
2100																															
2110																															
2120	4	40	8	74	<.3	27	12	474	3.54	18	<5	<2	22	<.2	2	2	61	0.18	0.028	8	26	0.44	146	0.03	<3	1.9	0.01	0.06	<2	2	
2130	5	46	25	152	<.3	26	13	567	5.07	16	<5	<2	42	<.2	2	2	72	0.25	0.051	9	26	0.57	258	0.05	<3	2.21	0.01	0.13	<2	3	
2140	1	58	15	121	<.3	31	20	1378	4.86	30	<5	<2	43	0.3	<2	2	84	0.61	0.051	21	32	0.65	320	0.04	<3	2.09	0.01	0.11	<2	2	
2150	4	44	14	136	<.3	33	18	1305	4.4	30	<5	<2	116	0.4	<2	2	75	0.63	0.074	10	32	0.69	233	0.03	<3	2.17	0.01	0.09	<2	2	
2160	2	61	8	87	<.3	26	11	490	3.61	24	<5	2	28	<.2	<2	2	65	0.29	0.048	7	27	0.49	160	0.05	<3	1.74	0.01	0.05	<2	3	
2170	4	213	11	109	<.3	29	16	788	4.6	29	<5	<2	43	<.2	3	<2	73	0.44	0.057	16	31	0.62	262	0.07	<3	1.63	0.01	0.09	<2	5	
2180	5	89	10	78	<.3	25	12	535	3.62	22	<5	<2	44	<.2	3	<2	62	0.32	0.041	8	25	0.47	161	0.06	<3	1.25	0.01	0.07	<2	2	
2190	1	26	6	161	<.3	22	12	1185	4.7	25	<5	<2	18	<.2	<2	<2	87	0.42	0.03	8	30	0.57	308	0.04	3	1.81	0.01	0.08	<2	60	
2200																															
2210	<1	27	13	200	<.3	28	14	1422	4.21	25	<5	<2	28	0.4	<2	<2	78	0.43	0.167	8	28	0.55	426	0.05	4	2.14	0.01	0.08	<2	1	
2220	1	79	9	149	<.3	29	19	1525	5.1	27	<5	2	23	<.2	<2	3	76	0.39	0.074	12	33	0.73	366	0.04	3	2.93	0.01	0.11	<2	1	
2230	1	67	12	224	<.3	35	15	3179	3.97	20	<5	<2	62	0.6	2	<2	69	0.72	0.072	25	31	0.42	419	0.04	3	2.17	0.01	0.08	<2	15	
2240	1	394	<3	213	<.3	39	64	1718	10.11	46	<5	<2	95	0.5	5	2	209	0.97	0.054	68	44	2.23	355	0.21	<3	4.11	0.01	0.25	<2	14	
2250	1	42	9	89	<.3	20	11	626	3.5	38	<5	2	34	<.2	2	2	63	0.4	0.034	11	23	0.41	165	0.07	3	1.38	0.01	0.07	<2	7	
2260	1	48	11	192	<.3	27	13	835	4.53	31	<5	2	32	<.2	3	<2	82	0.35	0.103	9	30	0.59	231	0.06	4	1.83	0.01	0.08	<2	3	
2270	1	115	18	113	<.3	38	16	1046	4.12	57	<5	2	44	<.2	3	<2	65	0.48	0.061	16	31	0.46	235	0.04	3	1.47	0.01	0.07	<2	8	
2280	1	43	9	134	<.3	27	12	870	3.7	30	<5	<2	66	0.2	2	<2	64	0.56	0.055	17	29	0.49	227	0.04	3	1.84	0.01	0.06	<2	7	
2290	4	382	20	135	<.3	37	20	1425	4.81	38	<5	<2	51	0.5	5	2	76	0.68	0.093	12	40	0.77	267	0.08	3	1.76	0.02	0.12	<2	34	
2300	1	50	12	86	<.3	30	10	435	3.37	40	<5	2	29	<.2	<2	<2	57	0.31	0.031	9	23	0.37	173	0.05	3	1.3	0.01	0.07	<2	3	
2310	1	43	7	96	<.3	31	9	319	3.24	18	<5	2	42	<.2	2	<2	51	0.47	0.021	10	26	0.41	177	0.02	<3	1.55	0.01	0.06	<2	2	
2320	1	209	10	104	<.3	37	14	766	4.29	21	<5	2	44	0.3	2	<2	91	0.57	0.048	12	67	1.32	229	0.15	<3	1.96	0.02	0.16	<2	16	
2330	<1	33	6	123	<.3	33	11	451	3.04	9	<5	<2	29	0.2	<2	2	51	0.34	0.047	9	26	0.44	217	0.03	3	1.54	0.01	0.08	<2	1	
2340	2	178	20	202	<.3	59	43	2776	7.52	47	<5	2	94	<.2	4	3	123	0.54	0.099	18	82	1.31	495	0.07	<3	2.62	0.03	0.18	<2	27	
2350	1	116	11	104	<.3	28	15	774	4.93	35	<5	<2	41	<.2	3	<2	89	0.45	0.042	9	42	0.71	219	0.06	<3	1.58	0.02	0.07	<2	5	
2360	1	59	37	132	0.3	32	17	809	5.17	31	<5	2	33	<.2	5	<2	80	0.36	0.037	11	35	0.59	204	0.07	<3	1.51	0.02	0.11	<2	10	
2370	1	58	15	86	<.3	34	12	569	3.7	30	<5	2	42	<.2	2	<2	64	0.38	0.042	9	27	0.44	151	0.07	3	1.23	0.01	0.09	<2	4	
2380	1	57	14	109	<.3	33	14	655	3.8	36	<5	<2	37	0.2	2	3	66	0.42	0.059	8	32	0.54	186	0.05	3	1.52	0.01	0.1	<2	2	
2390	1	37	10	98	<.3	35	15	1032	4.29	17	<5	<2	23	<.2	<2	2	87	0.57	0.043	9	41	0.98	344	0.03	4	2.63	0.01	0.07	<2	2	
2400	<1	25	10	142	<.3	26	11	484	4.71	27	<5	<2	19	<.2	<2	<2	84	0.18	0.137	7	33	0.56	335	0.04	<3	2.4	0.01	0.05	<2	1	

Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
2410	2	95	10	194	<.3	32	18	588	6.51	19	<5	2	17	0.2	3	7	106	0.2	0.068	7	43	0.79	234	0.04	<3	3.03	0.01	0.08	<2	<1
2420	1	40	11	153	<.3	26	13	848	4.32	21	<5	<2	23	0.2	3	<2	76	0.3	0.045	9	31	0.76	143	0.04	3	2.34	0.01	0.05	<2	1
2430	1	24	9	94	<.3	16	6	196	3.34	8	<5	<2	16	<.2	<2	<2	74	0.09	0.033	7	28	0.38	155	0.02	<3	2.58	0.01	0.04	<2	1
2440																														
2450																														
2460	11	111	8	133	<.3	30	10	426	4.38	23	<5	2	16	<.2	<2	<2	80	0.21	0.044	7	34	0.79	115	0.03	3	2.9	0.01	0.06	<2	1
2470																														
2480	3	61	12	84	<.3	25	13	621	3.66	22	<5	<2	30	<.2	<2	<2	66	0.29	0.025	11	27	0.51	197	0.04	3	1.78	0.01	0.06	<2	2
2490	5	118	35	143	0.3	20	23	591	8.3	12	<5	5	55	0.4	3	5	98	0.54	0.085	21	23	0.91	317	0.03	<3	3.07	0.01	0.11	<2	19
2500	1	44	11	136	<.3	29	15	1073	4.48	21	<5	<2	39	<.2	<2	<2	75	0.4	0.081	19	31	0.69	305	0.02	<3	2.71	0.01	0.12	2	2
2510																														
2520	1	35	8	95	<.3	36	13	545	4.45	4	<5	<2	19	<.2	<2	<2	94	0.29	0.033	8	47	1.15	203	0.04	<3	3.16	0.01	0.05	<2	2
2530	<1	20	10	151	<.3	22	9	487	5.36	9	<5	<2	12	<.2	4	3	151	0.13	0.089	6	46	0.87	157	0.05	<3	2.53	0.01	0.06	<2	1
2540	<1	42	8	105	<.3	37	13	579	4.38	8	<5	<2	29	<.2	<2	<2	91	0.45	0.045	14	44	0.95	363	0.02	<3	3.48	0.01	0.06	<2	<1
2550	<1	46	6	136	<.3	41	18	593	5.22	8	<5	2	20	<.2	<2	<2	109	0.22	0.062	8	55	1.27	242	0.05	3	3.73	0.01	0.06	<2	4
2560	1	29	10	183	<.3	29	10	578	3.88	10	<5	<2	24	<.2	<2	<2	75	0.33	0.042	8	37	0.88	252	0.03	<3	2.39	0.01	0.06	<2	1
2570	<1	40	13	111	<.3	32	14	844	3.87	12	<5	<2	28	0.2	<2	2	72	0.48	0.039	13	34	0.73	206	0.03	3	2.26	0.01	0.06	<2	2
2580	1	28	10	100	<.3	30	16	1089	3.97	19	<5	<2	25	<.2	2	<2	84	0.42	0.041	8	38	0.94	185	0.04	3	2.42	0.01	0.05	<2	2
2590																														
2600	1	61	6	160	<.3	35	12	511	4.33	16	<5	<2	21	<.2	3	<2	77	0.25	0.046	11	40	0.86	216	0.02	3	3.28	0.01	0.05	<2	2
2610																														
2620	1	65	9	141	<.3	27	10	443	4.66	21	<5	<2	16	<.2	<2	<2	89	0.17	0.068	7	34	0.74	162	0.02	3	3.02	0.01	0.06	<2	1
2630	1	36	10	131	<.3	31	11	419	4.49	17	<5	<2	16	<.2	2	<2	83	0.14	0.053	8	38	0.73	165	0.02	3	3.29	0.01	0.05	<2	1
2640	3	48	11	126	<.3	36	13	496	4.73	21	<5	2	22	<.2	<2	<2	89	0.19	0.03	8	38	0.79	181	0.02	3	3.31	0.01	0.06	<2	2
2650	1	35	9	118	<.3	28	11	472	4.11	18	<5	<2	19	<.2	2	<2	85	0.21	0.046	8	34	0.7	177	0.02	3	2.83	0.01	0.05	<2	2
2660																														
2670	1	43	11	118	<.3	34	16	777	4.32	27	<5	<2	23	<.2	<2	2	81	0.36	0.043	11	35	0.69	249	0.02	3	2.96	0.01	0.05	<2	34
2680																														
2690	3	58	16	185	<.3	27	14	1157	5.45	29	<5	<2	21	<.2	2	<2	78	0.36	0.053	15	32	0.72	265	0.02	3	2.87	0.01	0.07	<2	3
2700																														
2710	1	45	9	169	<.3	33	22	1683	4.92	29	<5	<2	33	<.2	<2	<2	85	0.5	0.072	16	39	0.74	287	0.02	3	3.1	0.01	0.07	<2	2
2720	2	72	14	122	<.3	30	14	1148	4.86	25	<5	<2	35	<.2	<2	2	80	0.54	0.077	13	32	0.88	298	0.04	3	2.45	0.01	0.06	<2	16
2730																														
2740	1	33	7	108	<.3	27	10	514	4.07	14	<5	<2	19	<.2	<2	<2	92	0.16	0.035	9	37	0.79	291	0.02	3	2.71	0.01	0.06	<2	2
2750																														
2760	1	35	5	82	<.3	32	12	395	3.64	15	<5	<2	23	<.2	<2	<2	68	0.2	0.058	10	34	0.66	174	0.02	3	2.94	0.01	0.04	<2	2
2770	1	40	9	117	<.3	38	15	527	4.42	19	<5	2	22	<.2	<2	<2	86	0.17	0.042	8	40	0.77	219	0.02	3	3.42	0.01	0.05	<2	2
2780	1	44	10	116	<.3	33	17	819	4.4	27	<5	<2	26	0.3	<2	<2	85	0.2	0.048	8	37	0.64	249	0.03	3	2.85	0.01	0.04	<2	1
2790	2	34	68	293	0.3	32	15	538	5.32	30	<5	2	20	0.4	<2	<2	88	0.16	0.072	8	40	0.65	155	0.03	3	3.68	0.01	0.04	<2	2
2800	1	21	7	89	<.3	24	7	270	2.63	9	<5	<2	22	<.2	<2	<2	57	0.34	0.035	10	26	0.52	199	0.02	3	2.12	0.01	0.04	<2	2
2810	1	53	16	138	<.3	38	18	837	4.47	30	<5	2	19	0.2	3	2	91	0.12	0.047	10	43	0.85	249	0.03	4	3.14	0.01	0.06	<2	8
2820	1	26	9	145	1.3	31	11	457	5.77	7	<5	2	13	0.2	<2	<2	89	0.29	0.06	17	75	0.76	203	0.03	3	5.42	0.01	0.04	<2	1
2830	2	34	13	105	<.3	31	13	596	3.96	25	<5	<2	24	<.2	2	<2	74	0.22	0.031	7	32	0.68	195	0.04	4	2.37	0.01	0.05	<2	1
2840	1	56	11	114	<.3	32	15	917	4.28	29	<5	<2	31	<.2	<2	2	76	0.29	0.021	15	34	0.69	210	0.03	3	2.21	0.01	0.06	<2	3
2850	1	25	8	100	<.3	27	10	373	4.45	28	<5	<2	18	0.2	2	<2	85	0.14	0.024	7	33	0.6	147	0.04	3	2.3	0.01	0.04	<2	1
2860																														
2870	1	46	12	124	<.3	29	12	1045	4.11	14	<5	<2	27	<.2	<2	3	81	0.38	0.048	13	38	0.83	342	0.02	4	3.08	0.01	0.05	<2	2
2880																														

Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	
2890																															
2900																															
2910	2	31	11	148	0.3	27	10	399	4.35	21	<5	<2	25	<.2	<2	<2	101	0.29	0.051	12	34	0.64	292	0.03	4	2.92	0.01	0.05	<2	1	
2920	<1	32	11	99	<.3	28	11	390	3.87	26	<5	<2	21	<.2	5	<2	66	0.14	0.044	8	33	0.64	182	0.03	<3	3.24	0.01	0.05	<2	2	
2930	2	38	11	98	<.3	30	14	511	3.92	28	<5	<2	25	<.2	2	<2	63	0.22	0.093	8	35	0.57	212	0.03	3	2.83	0.01	0.06	<2	19	
2940																															
2950																															
2960																															
2970	<1	71	10	124	<.3	27	12	383	5.66	39	<5	<2	13	<.2	<2	<2	91	0.09	0.058	7	41	0.69	129	0.03	<3	4.51	0.01	0.07	<2	3	
2980																															
2990	2	59	14	120	<.3	25	16	1110	5.03	163	6	<2	24	<.2	<2	<2	87	0.47	0.039	9	40	0.79	179	0.05	<3	2.06	0.02	0.06	<2	38	
3000	1	25	14	120	<.3	23	11	493	4.99	22	<5	<2	25	<.2	<2	<2	104	0.56	0.059	8	40	0.67	264	0.02	<3	3.31	0.02	0.07	<2	1	
3010	2	149	13	126	<.3	30	19	790	5.65	46	<5	<2	18	<.2	<2	2	103	0.21	0.048	9	40	1.04	177	0.04	<3	3.51	0.02	0.06	<2	4	
3020	2	167	17	123	0.5	33	21	2195	10.98	17	<5	<2	20	<.2	2	<2	164	0.53	0.081	19	51	0.65	568	0.01	<3	3.69	0.01	0.09	<2	<1	
3030	<1	39	13	97	<.3	26	13	566	3.82	27	<5	<2	28	<.2	<2	<2	68	0.25	0.041	10	30	0.67	202	0.03	<3	2.5	0.01	0.06	<2	1	
3040	2	121	15	156	<.3	34	21	2015	4.66	17	<5	<2	30	<.2	<2	<2	88	0.91	0.078	16	58	1.02	469	0.03	<3	2.68	0.02	0.07	<2	3	
3050	4	160	15	94	<.3	69	20	512	8.03	94	<5	<2	15	<.2	<2	<2	107	0.18	0.038	8	202	2.15	118	0.08	<3	3.9	0.02	0.16	<2	28	
3060																															
3070	2	151	47	301	0.4	45	25	1194	6.77	83	5	<2	26	0.2	<2	<2	96	0.32	0.074	15	77	1.21	244	0.03	<3	3.29	0.02	0.11	<2	26	
3080	<1	276	10	201	<.3	23	10	384	3.11	10	<5	<2	16	0.6	<2	<2	75	0.2	0.09	6	35	0.88	161	0.02	<3	2.89	0.01	0.05	<2	1	
3090	3	41	18	124	0.3	16	14	423	6.3	51	<5	<2	16	<.2	2	2	82	0.09	0.16	9	31	0.43	134	0.03	<3	2.64	0.03	0.06	<2	2	
3100	2	87	14	158	0.5	26	19	2675	5.53	29	<5	<2	24	0.4	<2	<2	93	0.54	0.064	12	37	0.6	366	0.01	<3	3.06	0.01	0.07	<2	1	
3110	1	64	16	126	<.3	46	19	1017	4.42	28	<5	<2	30	<.2	<2	<2	80	0.48	0.038	12	53	0.88	325	0.03	<3	2.73	0.02	0.07	<2	7	
3120																															
3130	2	56	17	139	<.3	36	22	1233	4.94	33	<5	<2	24	<.2	<2	<2	93	0.23	0.052	11	43	0.99	212	0.05	3	3.13	0.02	0.08	<2	72	
3140																															
3150	1	29	8	126	<.3	25	12	802	3.74	22	<5	<2	28	<.2	<2	<2	70	0.29	0.029	8	35	0.68	174	0.03	<3	2.16	0.01	0.06	<2	1	
3160	1	45	14	143	<.3	32	14	654	4.81	30	<5	<2	20	<.2	<2	<2	92	0.22	0.051	7	48	0.95	169	0.02	<3	2.87	0.01	0.06	<2	6	
3170	2	32	13	143	<.3	23	12	484	4.89	27	<5	<2	11	<.2	<2	<2	98	0.07	0.099	6	41	0.68	104	0.03	<3	3.13	0.01	0.06	<2	1	
3180																															
3190	<1	37	10	164	0.3	28	12	496	4.41	27	<5	3	11	<.2	<2	<2	70	0.08	0.098	7	35	0.8	120	0.04	6	3.81	0.01	0.05	<2	1	
3200	<1	20	8	68	<.3	21	9	393	2.95	10	11	<2	23	<.2	<2	<2	57	0.28	0.041	9	28	0.71	219	0.02	<3	2.59	0.01	0.04	<2	1	
3210	1	35	14	135	<.3	26	11	441	4.53	19	<5	2	14	<.2	<2	<2	80	0.09	0.058	9	35	0.65	143	0.03	<3	3.87	0.01	0.05	<2	2	
3220	2	45	15	151	<.3	38	19	918	4.56	22	<5	<2	31	<.2	<2	<2	87	0.27	0.06	11	47	0.7	286	0.03	<3	3.46	0.02	0.04	<2	1	
3230																															
3240	1	195	14	178	0.5	37	17	1120	3.98	18	<5	<2	33	0.8	<2	<2	86	0.81	0.053	13	44	0.88	261	0.03	3	2.39	0.02	0.06	<2	3	
3250	1	163	17	168	2.4	32	16	1645	5.56	18	<5	<2	28	0.6	<2	<2	70	1.25	0.124	27	44	0.54	376	0.02	<3	5.04	0.01	0.05	<2	2	
3260																															
3270																															
3280																															
3290	2	35	13	130	<.3	25	12	649	4.2	24	11	<2	22	<.2	<2	2	74	0.32	0.034	10	32	0.74	169	0.03	<3	2.37	0.02	0.05	<2	1	
3300	2	37	13	188	<.3	29	13	668	3.92	20	10	<2	31	0.5	<2	<2	76	0.51	0.044	12	34	0.61	216	0.03	<3	2.59	0.02	0.06	<2	2	
3310																															
3320	3	48	13	94	<.3	28	13	1001	4.1	19	<5	<2	60	<.2	<2	<2	75	0.55	0.036	13	35	0.75	273	0.07	<3	1.95	0.02	0.08	<2	2	
3330	48	112	32	178	1.1	32	23	510	7.31	48	5	<2	49	0.4	<2	<2	101	0.21	0.085	17	33	0.51	262	0.04	<3	3.66	0.01	0.09	<2	17	
3340	3	48	13	92	<.3	27	13	788	3.56	16	5	<2	57	0.2	<2	<2	66	0.57	0.055	11	32	0.63	216	0.05	<3	1.58	0.02	0.09	<2	1	
3350	18	1400	18	171	<.3	63	25	336	5.5	10	<5	4	29	<.2	3	3	127	0.3	0.064	11	84	1.76	177	0.28	<3	2.68	0.02	0.29	2	28	

Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	
3370	10	867	21	289	<.3	81	21	874	6.71	17	<5	5	74	<.2	7	<2	154	0.46	0.08	25	126	2.92	454	0.53	<3	2.55	0.02	1.04	<2	34	
3380	11	1811	26	155	<.3	59	20	929	6.05	54	7	4	68	<.2	<2	2	110	0.62	0.092	20	90	1.71	488	0.27	<3	1.77	0.03	0.3	<2	51	
3390	3	177	10	106	<.3	38	11	764	4.38	22	<5	2	35	<.2	<2	<2	81	0.33	0.033	17	66	1.14	263	0.12	<3	2.09	0.01	0.13	<2	12	
3400	10	626	14	105	0.3	37	14	732	4.24	22	<5	<2	45	<.2	4	<2	72	0.33	0.053	11	36	0.71	200	0.09	<3	2.1	0.01	0.07	<2	10	
3410	4	190	12	103	<.3	32	13	716	3.64	17	<5	<2	82	0.2	<2	<2	66	0.59	0.045	12	34	0.75	252	0.05	<3	1.98	0.02	0.1	<2	2	
3420	26	4011	24	242	1	34	18	436	8.21	48	<5	4	74	0.3	<2	2	122	0.23	0.137	17	28	0.71	225	0.05	<3	2.84	0.01	0.06	<2	978	
3430	10	593	<3	159	0.7	58	25	1166	5.95	42	<5	<2	62	<.2	<2	<2	96	0.82	0.083	15	137	1.53	272	0.14	3	2.48	0.04	0.23	<2	48	
3480	1	179	8	192	1.6	33	20	1572	6.86	17	<5	<2	23	0.2	<2	2	75	0.54	0.037	20	31	0.72	273	0.02	3	2.92	0.01	0.08	<2	4	
3490	6	250	15	269	0.8	17	16	892	8.17	15	<5	<2	11	<.2	2	14	74	0.19	0.082	8	24	0.44	105	0.02	<3	2.76	0.01	0.06	<2	1	
3500	1	26	3	114	<.3	14	11	440	4.08	10	<5	<2	21	0.3	<2	<2	75	0.42	0.035	5	21	0.43	153	0.05	<3	1.86	0.01	0.07	<2	<1	
3510	8	53	5	460	<.3	24	12	418	3.86	17	<5	<2	23	0.7	<2	2	71	0.22	0.027	9	23	0.61	173	0.03	<3	2.14	0.01	0.04	<2	<1	
3520	4	34	5	84	<.3	24	13	575	3.37	22	<5	<2	29	<.2	<2	<2	66	0.36	0.011	9	24	0.54	165	0.05	<3	1.65	0.01	0.04	<2	<1	
3530	18	174	7	308	0.5	28	14	778	3.64	18	<5	<2	36	0.2	<2	<2	65	0.6	0.044	23	26	0.64	251	0.04	3	2.08	0.01	0.06	<2	1	
3540	30	366	<3	385	0.4	40	30	1424	5.16	19	<5	<2	26	<.2	<2	3	89	0.35	0.068	16	39	0.75	319	0.01	<3	4.13	0.01	0.08	<2	2	
3550	8	119	9	172	0.5	23	37	2678	7.57	22	<5	<2	17	<.2	<2	<2	85	0.36	0.168	19	29	0.6	217	0.03	<3	3.49	0.01	0.11	<2	<1	
3560	3	27	<3	96	<.3	27	14	682	3.97	20	<5	<2	30	<.2	<2	<2	68	0.27	0.046	8	27	0.46	167	0.05	3	2.02	0.01	0.05	<2	3	
3570	7	109	8	98	0.3	22	18	464	6.44	28	<5	2	37	<.2	<2	<2	104	0.37	0.048	19	31	0.7	255	0.07	<3	1.98	0.01	0.1	<2	13	
3580	31	1209	21	188	0.4	40	27	1014	6.28	31	<5	4	36	0.2	<2	<2	107	0.36	0.093	24	47	0.78	192	0.11	<3	1.76	0.01	0.14	<2	139	
3590	1	36	11	145	<.3	28	15	1670	4.88	12	<5	<2	26	0.2	<2	<2	74	0.76	0.091	13	41	0.5	432	0.03	<3	2.5	0.01	0.13	<2	3	
3600	2	238	12	130	<.3	17	12	2320	8.4	134	<5	<2	20	<.2	2	5	66	0.57	0.042	16	31	0.37	381	0.01	<3	2.16	0.01	0.08	<2	308	
3610	1	23	11	136	<.3	16	14	2425	4.53	6	<5	<2	26	0.2	<2	2	68	0.71	0.055	17	33	0.29	558	0.02	<3	2.68	0.01	0.07	<2	3	
3620	1	117	13	159	1	26	21	1128	6.62	16	<5	<2	20	<.2	<2	3	91	0.39	0.043	15	40	0.66	550	0.02	<3	3.55	0.02	0.07	<2	3	
3630	2	177	7	333	<.3	28	20	603	4.56	23	<5	<2	22	0.4	<2	<2	82	0.2	0.026	8	28	0.65	270	0.05	<3	2.25	0.02	0.05	<2	1	
3640																															
3650	2	100	11	102	<.3	25	15	780	4.77	10	<5	<2	21	<.2	<2	<2	66	0.14	0.044	10	26	0.51	157	0.03	<3	1.83	0.02	0.1	<2	3	
3660	1	73	12	141	<.3	39	20	1261	4.71	15	<5	<2	41	0.3	<2	<2	86	0.92	0.067	14	51	0.93	336	0.04	<3	2.39	0.03	0.12	<2	2	
3670	2	105	30	148	<.3	35	25	1465	5.47	35	<5	<2	44	0.6	<2	<2	83	2.5	0.055	11	44	0.73	390	0.03	<3	1.94	0.03	0.1	<2	2	
3680	1	69	23	115	<.3	31	20	1840	5.87	14	<5	<2	30	0.2	<2	<2	91	0.84	0.072	26	57	1.31	339	0.07	<3	2.48	0.02	0.15	<2	1	
3700	3	117	10	112	<.3	28	20	1068	5.73	15	<5	4	64	<.2	<2	<2	90	0.57	0.08	40	30	0.88	250	0.06	<3	2.15	0.01	0.15	<2	12	
3710	1	41	9	84	<.3	33	13	603	3.73	23	<5	<2	30	<.2	<2	<2	68	0.27	0.026	8	29	0.61	154	0.06	<3	1.71	0.01	0.07	<2	2	
3720	2	44	9	92	<.3	30	12	567	3.9	25	<5	<2	47	<.2	<2	<2	73	0.45	0.047	6	28	0.6	137	0.06	<3	2.01	0.01	0.07	<2	2	
3730	9	442	9	147	0.3	35	12	403	4.41	18	<5	2	24	0.2	<2	<2	85	0.22	0.099	10	36	0.81	166	0.09	<3	2.46	0.01	0.08	<2	7	
3770	5	238	10	89	<.3	34	15	826	4.05	24	<5	2	73	<.2	4	<2	77	0.43	0.044	13	36	0.75	234	0.1	<3	1.74	0.01	0.1	<2	30	
3780	5	686	24	116	<.3	46	20	1087	5.06	35	<5	3	98	<.2	3	<2	92	0.63	0.08	20	52	1.25	266	0.18	<3	2.01	0.02	0.18	<2	26	
3790	3	214	14	129	<.3	34	18	1049	4.88	29	<5	<2	75	0.3	2	<2	88	0.63	0.066	8	46	0.71	303	0.07	<3	2.24	0.01	0.1	<2	60	
3800	8	265	57	180	0.3	36	21	2513	4.53	42	<5	2	85	0.6	4	<2	76	0.7	0.072	13	35	0.63	313	0.06	<3	1.61	0.02	0.1	<2	7	
3810	4	59	7	106	<.3	26	11	641	3.75	19	<5	<2	99	<.2	<2	<2	65	0.69	0.045	8	29	0.57	189	0.05	3	1.82	0.02	0.08	<2	2	
3820	5	382	9	133	<.3	65	17	818	5.28	21	<5	<2	52	<.2	<2	<2	109	0.67	0.053	11	158	1.8	281	0.16	<3	2.59	0.04	0.22	<2	41	
3830	1	32	7	95	<.3	29	13	586	3.94	19	<5	<2	31	<.2	<2	<2	74	0.26	0.036	9	29	0.6	256	0.06	<3	2.02	0.02	0.07	<2	5	
3840	1	67	9	83	<.3	23	15	669	3.69	26	<5	<2	45	<.2	<2	<2	81	0.39	0.035	8	30	0.82	172	0.08	<3	1.59	0.02	0.06	<2	8	



Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	
3850																															
3860																															
3870																															
3880	2	55	6	103	<.3	20	14	880	4.11	16	<5	<2	18	<.2	<2	<2	69	0.3	0.027	10	24	0.45	179	0.04	<3	1.71	0.01	0.05	<2	4	
3890	3	62	10	279	<.3	23	20	2505	6.4	10	<5	<2	17	<.2	<2	2	76	0.46	0.103	29	37	0.64	303	0.04	<3	3.66	0.01	0.09	<2	2	
3900																															
3910																															
3920	1	48	10	79	<.3	25	14	644	3.91	16	<5	<2	26	<.2	<2	<2	71	0.3	0.031	10	26	0.53	203	0.03	<3	1.96	0.01	0.05	<2	2	
3930	2	32	7	342	<.3	18	11	1064	3.45	9	<5	<2	23	0.8	<2	<2	65	0.38	0.031	8	29	0.52	326	0.03	<3	1.66	0.01	0.04	<2	2	
3940																															
3950	5	112	15	528	0.3	14	15	1626	6.3	8	<5	<2	23	2.1	<2	<2	70	0.36	0.065	6	23	0.36	201	0.04	<3	1.8	0.01	0.08	<2	1	
3960	<1	39	12	98	<.3	25	13	757	3.73	13	<5	<2	32	<.2	<2	<2	71	0.38	0.024	10	29	0.65	163	0.05	<3	1.75	0.03	0.06	<2	3	
3970	1	82	9	103	<.3	30	14	731	3.96	15	<5	<2	43	<.2	<2	<2	72	0.8	0.051	16	40	0.75	284	0.04	<3	2.01	0.02	0.1	<2	<1	
3980	2	165	13	154	0.9	58	24	2565	5.56	15	<5	<2	50	0.5	<2	<2	88	1.37	0.068	54	64	1.04	605	0.01	<3	3.69	0.02	0.13	<2	<1	
3990	17	2305	30	417	0.4	41	23	1295	6.17	51	<5	<2	90	0.5	<2	3	99	0.71	0.067	21	43	1.06	206	0.05	<3	2.4	0.03	0.16	<2	38	
4000	4	141	15	112	<.3	34	24	1394	5.97	58	<5	<2	69	<.2	<2	<2	87	0.6	0.064	17	37	0.77	201	0.04	<3	2.09	0.03	0.12	<2	8	
4010	14	552	13	123	<.3	23	27	738	7.52	75	<5	<2	57	<.2	2	<2	70	0.28	0.084	12	36	0.62	155	0.06	<3	1.66	0.03	0.14	<2	100	
4020	16	1023	3	99	0.4	53	46	1148	9.12	<2	<5	<2	85	<.2	3	<2	76	1.04	0.214	20	92	2	293	0.19	<3	2.27	0.02	0.3	<2	130	
4030	1	39	7	96	0.3	24	8	521	3.75	13	5	2	35	0.2	2	3	71	0.35	0.041	10	28	0.47	207	0.07	3	1.62	0.02	0.08	2	2	
4040	2	80	22	200	0.4	20	9	568	9.08	31	5	2	19	0.2	2	2	104	0.18	0.081	13	62	0.94	313	0.13	3	3.16	0.02	0.23	2	4	
4050																															
4060	1	39	9	90	0.3	25	9	336	4.05	5	5	2	23	0.2	2	2	79	0.24	0.034	8	29	0.48	218	0.05	3	2.36	0.01	0.05	2	1	
4070																															
4080																															
4090																															
4100																															
4110																															
4120	2	60	7	175	0.3	35	12	408	4.89	8	5	2	21	0.4	2	2	96	0.17	0.054	9	40	0.69	222	0.03	3	4.11	0.01	0.07	2	3	
4130	5	45	5	1112	0.3	13	11	976	6.2	2	5	2	12	3.3	2	5	134	0.13	0.082	7	20	0.44	153	0.09	3	1.95	0.01	0.04	2	1	
4140	3	28	6	194	0.3	29	8	380	3.87	11	5	2	21	0.2	2	2	71	0.23	0.061	7	28	0.54	230	0.03	3	2.43	0.01	0.05	2	1	
4150	21	265	13	184	0.3	19	17	868	7.04	2	5	2	24	0.4	2	5	88	0.32	0.068	10	29	1	222	0.07	3	2.09	0.01	0.07	2	1	
4160	3	122	12	108	0.3	36	16	649	5.66	15	5	2	22	0.2	2	3	93	0.2	0.043	13	37	0.73	166	0.06	4	2.64	0.01	0.07	2	7	
4170	4	83	16	181	0.3	32	13	604	4.62	9	5	2	21	0.2	2	3	75	0.28	0.074	7	33	0.66	131	0.05	3	2.93	0.01	0.06	2	1	
4180	10	128	10	103	0.3	24	12	687	4.83	16	5	2	29	0.2	2	6	87	0.22	0.031	15	33	0.73	168	0.08	5	1.87	0.02	0.08	2	5	
4190	9	137	15	163	0.3	31	17	627	8.21	13	5	2	27	0.2	2	2	115	0.41	0.088	14	36	0.77	256	0.04	3	2.67	0.01	0.08	2	33	
4200	2	171	12	99	0.3	28	8	442	4.61	4	5	2	37	0.2	2	2	86	0.29	0.039	10	33	0.74	234	0.09	3	2.2	0.01	0.11	2	3	
4210	17	215	11	151	0.3	28	14	871	4.65	6	5	2	40	0.2	2	2	88	0.42	0.032	18	34	0.82	288	0.06	3	2.19	0.02	0.07	2	3	
4220	12	2085	21	279	0.6	24	13	544	6.52	28	5	2	22	0.2	2	5	73	0.16	0.15	16	28	0.83	320	0.14	3	2.95	0.01	0.07	2	127	
4230	6	218	11	138	0.3	29	16	771	5.42	16	5	2	39	0.2	2	4	83	0.28	0.065	7	41	0.78	175	0.06	3	2.51	0.01	0.1	2	8	
4240	3	313	9	100	0.3	29	12	603	4.73	18	5	2	29	0.2	2	2	74	0.31	0.059	10	31	0.9	218	0.12	3	2.47	0.01	0.12	2	6	
4250	3	83	6	82	0.3	23	19	640	6.64	20	5	2	49	0.2	2	5	70	0.26	0.074	8	28	0.54	234	0.06	3	2.15	0.02	0.1	2	7	
4260	2	99	16	141	0.3	54	24	2159	5	24	5	2	56	0.7	2	2	87	0.59	0.078	14	40	0.85	338	0.05	3	2.42	0.03	0.16	2	3	
4270	4	114	16	214	0.3	25	28	1710	10.17	31	5	2	97	0.8	2	2	80	0.61	0.172	11	30	0.49	339	0.04	3	2.22	0.01	0.13	2	14	
4280	4	140	12	91	0.3	24	12	651	4.35	19	5	2	31	0.2	2	2	77	0.28	0.037	9	32	0.59	172	0.06	3	1.97	0.02	0.06	2	6	
4290	1	23	4	195	0.3	15	8	965	4.38	2	5	2	17	0.6	2	2	82	0.16	0.158	9	31	0.26	197	0.04	3	2.72	0.01	0.06	2	1	
4300	1	35	10	94	0.3	35	10	688	3.75	2	5	2	42	0.2	2	2	67	0.37	0.033	14	33	0.51	277	0.04	3	1.94	0.01	0.06	2	9	
4310	1	53	9	122	0.3	37	14	1041	4.24	4	5	2	33	0.4	2	2	81	0.4	0.065	16	44	0.79	294	0.04	3	3	0.01	0.08	2	5	
4320	1	64	10	100	0.3	35	13	766	3.97	12	5	2	28	0.2	2	2	78	0.32	0.047	12	43	0.83	227	0.06	3	2.66	0.01	0.05	2	1	

Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb	
4330	1	98	12	155	0.3	24	13	1434	4.9	15	5	2	32	0.2	2	2	79	0.41	0.041	23	40	0.93	191	0.08	3	1.85	0.02	0.06	2	5	
4340	1	55	16	130	0.4	39	22	2120	4.58	16	5	2	30	0.9	2	2	83	0.64	0.08	14	36	0.62	242	0.04	3	2.63	0.02	0.06	2	1	
4350	1	55	10	291	0.6	23	9	823	4.67	26	5	2	31	0.8	2	2	65	0.87	0.104	21	35	0.64	138	0.04	3	1.88	0.02	0.06	2	3	
4360	1	41	7	94	0.3	22	10	799	4.23	4	5	2	23	0.2	2	2	75	0.24	0.065	12	30	0.72	149	0.06	3	2.33	0.01	0.08	2	3	
4370	2	88	11	162	0.5	30	16	1337	5.6	30	5	2	22	0.2	2	2	106	0.39	0.062	13	46	0.91	143	0.08	3	2.4	0.02	0.06	2	48	
4380	1	46	3	119	0.3	28	6	719	3.22	5	5	2	25	0.2	2	2	66	0.43	0.048	11	32	0.54	209	0.03	3	2.66	0.01	0.06	2	2	
4540	23	886	54	279	0.6	24	54	3267	13.89	159	< 5	< 2	31	1.6	< 2	< 2	53	0.43	0.159	25	27	0.49	832	0.04	< 3	2.27	0.01	0.13	< 2	64	
4560	2	51	8	172	< .3	34	33	806	7.97	26	< 5	2	21	0.8	2	7	167	0.53	0.055	7	67	1.61	229	0.1	3	3.06	0.01	0.11	< 2	6	
4580	2	398	10	85	< .3	23	20	548	7.33	37	< 5	2	22	0.6	< 2	3	148	0.47	0.055	5	60	1.41	185	0.09	< 3	2.19	0.01	0.05	< 2	10	
4600																															
4620	2	88	15	134	< .3	44	23	438	6.09	32	< 5	2	22	0.2	2	5	103	0.17	0.058	5	82	0.88	186	0.05	3	2.9	0.01	0.08	< 2	3	
4640																															
4660	2	168	16	134	< .3	38	35	1291	8.68	62	< 5	3	41	0.6	< 2	6	135	0.41	0.107	22	110	1.08	226	0.03	3	2.19	0.03	0.1	< 2	10	
4680	1	54	10	131	< .3	30	19	455	5.82	36	< 5	2	13	< .2	< 2	5	103	0.14	0.075	7	41	0.72	143	0.05	< 3	2.84	0.01	0.04	< 2	4	
4700	1	189	18	138	< .3	35	20	1035	5.05	32	< 5	2	22	0.3	< 2	4	105	0.27	0.044	9	39	0.86	165	0.05	< 3	2.8	0.01	0.06	< 2	6	
4710	8	550	14	99	< .3	29	13	501	4.48	23	< 5	3	26	< .2	< 2	5	81	0.22	0.041	10	41	0.86	152	0.09	< 3	1.82	0.01	0.06	< 2	17	
4720	2	51	18	133	< .3	34	21	754	5.23	31	< 5	2	20	0.3	3	5	90	0.21	0.066	8	40	0.74	199	0.04	< 3	3.23	0.01	0.05	< 2	5	
4740	1	79	13	138	0.3	38	18	906	4.87	27	< 5	2	21	0.3	< 2	5	97	0.37	0.043	9	56	1.12	175	0.05	< 3	2.39	0.01	0.06	< 2	4	
4830	7	256	14	101	< .3	34	22	452	5.85	42	< 5	< 2	27	0.2	< 2	< 2	82	0.26	0.125	9	56	0.68	192	0.07	< 3	2.54	0.02	0.06	< 2	12	
4840	3	163	10	276	< .3	29	51	7115	9.66	15	< 5	< 2	51	2.3	< 2	< 2	67	0.61	0.288	17	62	0.32	734	0.03	< 3	1.82	0.01	0.13	< 2	7	
4850	5	86	27	216	0.5	25	14	435	7.38	90	< 5	< 2	42	0.3	9	< 2	90	0.13	0.083	11	28	0.37	303	0.04	< 3	2.21	0.15	0.11	< 2	25	
4860	3	62	14	292	< .3	54	24	1490	6.27	47	< 5	< 2	22	0.3	< 2	< 2	106	0.33	0.117	8	43	0.77	217	0.03	< 3	3.92	0.01	0.06	< 2	4	
4870	6	235	12	112	0.3	29	30	781	8.28	64	< 5	2	20	< .2	< 2	3	112	0.17	0.098	14	33	0.62	220	0.03	< 3	2.84	0.02	0.07	< 2	17	
4880	1	38	7	109	< .3	31	15	622	3.96	28	< 5	< 2	20	0.3	< 2	< 2	72	0.18	0.079	8	32	0.57	169	0.05	< 3	2.49	0.01	0.05	< 2	2	
4890	1	37	8	133	< .3	34	20	1017	5.06	42	< 5	< 2	21	0.3	< 2	< 2	98	0.36	0.046	12	34	0.8	190	0.04	< 3	2.66	0.01	0.06	< 2	3	
4900	1	147	17	111	0.3	30	26	1188	4.99	39	< 5	< 2	23	0.2	< 2	< 2	100	0.33	0.023	17	34	0.7	179	0.07	< 3	1.82	0.02	0.05	< 2	7	
4910	1	39	11	114	< .3	30	15	838	4.27	28	< 5	< 2	27	0.5	< 2	< 2	80	0.29	0.04	9	33	0.65	206	0.05	< 3	2.3	0.01	0.06	< 2	< 1	
4920	1	106	19	156	< .3	48	33	1148	6.36	63	< 5	< 2	20	0.3	< 2	< 2	111	0.36	0.088	11	75	0.94	231	0.04	< 3	3.03	0.01	0.08	< 2	8	
4930	2	76	20	119	< .3	32	19	826	4.65	27	< 5	< 2	33	0.7	< 2	< 2	80	0.49	0.051	8	32	0.59	197	0.07	< 3	1.68	0.02	0.06	< 2	94	
4940																															
4950	1	116	< 3	114	< .3	70	21	1285	7.36	10	< 5	< 2	71	0.5	< 2	< 2	147	0.78	0.057	5	239	3.14	219	0.16	< 3	3.67	0.03	0.31	< 2	10	
5000	2	64	11	125	< .3	24	12	1470	5.44	31	< 5	< 2	23	0.2	< 2	3	65	0.74	0.115	33	24	0.48	289	0.02	4	2.89	0.01	0.08	< 2	3	
5010	2	48	9	147	< .3	18	13	3153	4.88	10	< 5	< 2	18	0.5	2	< 2	72	0.45	0.151	34	26	0.3	278	0.02	3	2.71	0.01	0.07	< 2	< 1	
5020	4	104	10	160	< .3	38	13	683	5.05	19	< 5	2	16	0.2	< 2	< 2	86	0.12	0.074	11	39	0.54	249	0.02	< 3	3.96	0.01	0.09	< 2	< 1	

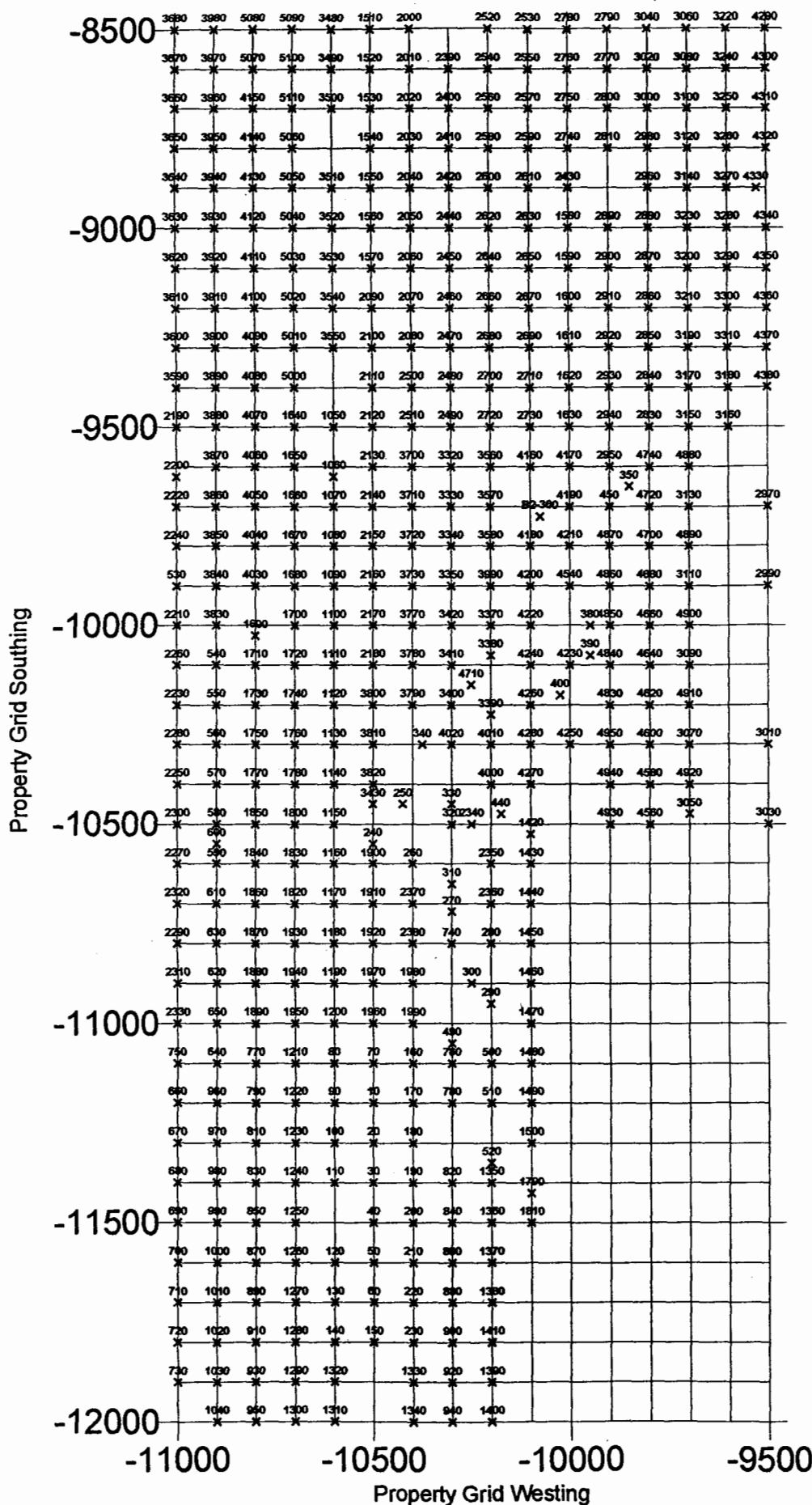
Property Scale C- Horizon Till Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
5030	2	33	8	106	<.3	26	10	414	3.69	22	<5	<2	29	<.2	<2	<2	74	0.24	0.052	8	28	0.52	226	0.03	<3	2.1	0.01	0.04	<2	<1
5040	6	180	11	985	0.4	32	14	1131	3.99	16	<5	2	44	3.4	3	<2	81	0.88	0.064	47	35	0.6	362	0.01	<3	3.51	0.01	0.08	<2	2
5050	10	31	7	167	<.3	26	9	308	3.63	17	<5	<2	18	0.3	<2	<2	74	0.13	0.025	7	28	0.53	192	0.04	<3	2.02	0.01	0.03	<2	1
5060	2	59	12	111	<.3	29	16	1101	4.93	15	<5	2	27	0.2	<2	2	108	0.32	0.046	8	36	1.05	144	0.11	3	3.18	0.01	0.06	<2	<1
5070	1	89	8	83	<.3	26	10	507	3.42	22	<5	<2	25	<.2	<2	<2	65	0.31	0.033	12	26	0.5	143	0.05	3	1.69	0.02	0.04	<2	1
5080	1	29	8	80	<.3	26	10	452	3.41	22	<5	<2	27	<.2	<2	<2	65	0.26	0.028	9	26	0.47	204	0.05	<3	1.75	0.02	0.04	<2	1
5090	1	47	12	210	<.3	30	13	1041	4.23	21	<5	<2	27	0.8	<2	<2	85	0.33	0.083	13	34	0.53	245	0.03	3	2.4	0.01	0.06	<2	<1
5100																														
5110	8	257	19	136	0.4	24	16	1100	5.91	21	<5	<2	23	0.5	2	5	72	0.35	0.045	10	28	0.55	252	0.04	3	2.09	0.01	0.1	<2	2

# Sample Locations

C-Horizon Soil Samples

Property Scale



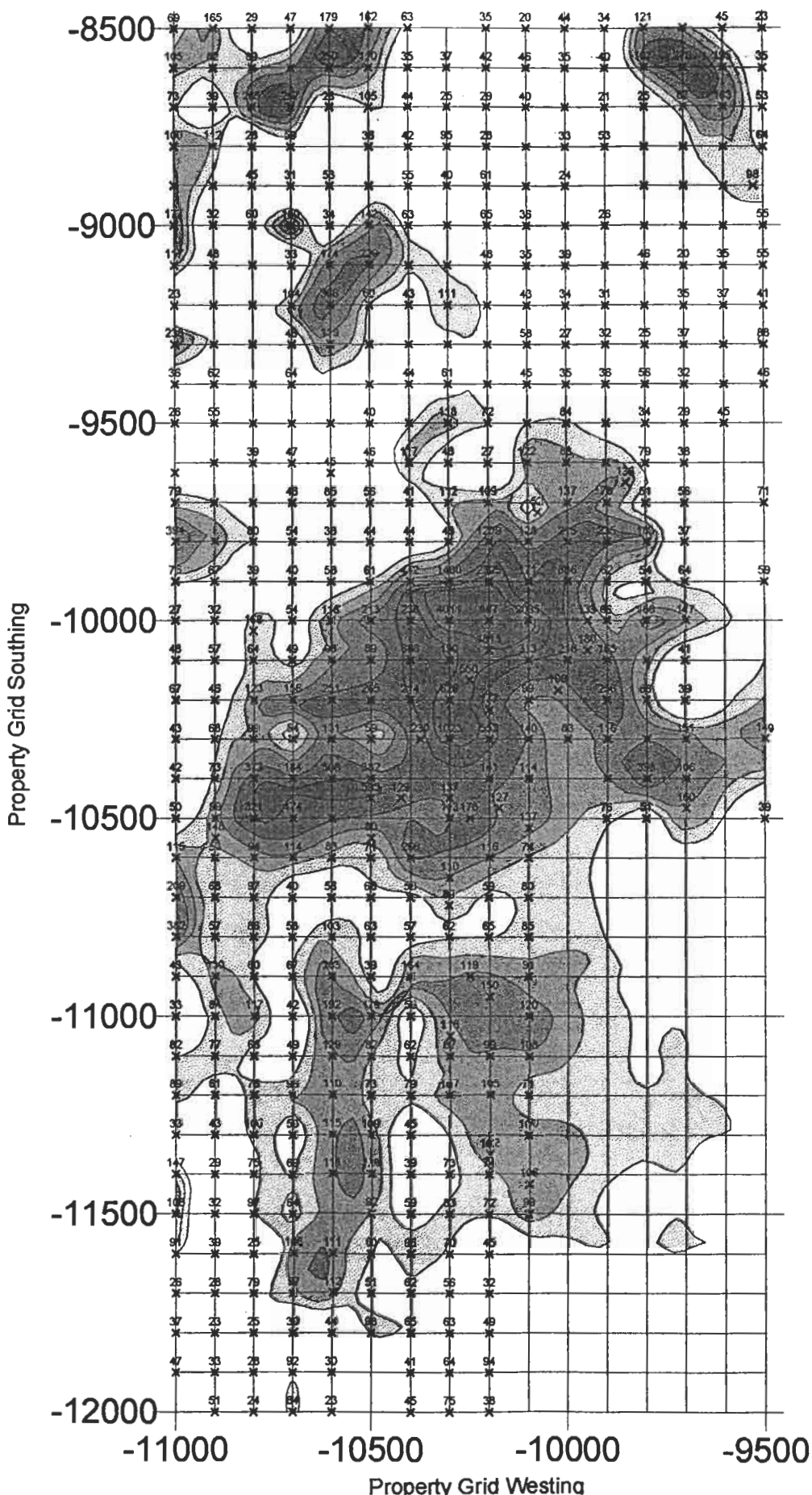
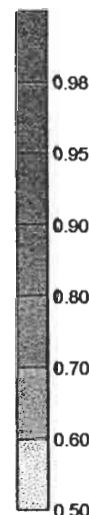
**BOOKER GOLD  
EXPLORATIONS LTD.**



### Copper (ppm) Concentrations in C-Horizon Soil Samples

Property Scale

Percentile Distribution



**bge**  
**BOOKER GOLD  
EXPLORATIONS LTD.**

## Detailed Scale C-Horizon Soil Sample Locations and Attributes

Sample	Westing	Southing	Map Unit	Map Unit	Depth	Bedrock
			c1 horiz.	c2 horiz.		
370	-10050	-9850	Cv	Mv		Weathered BFP
380	-9950	-10000	Cv	Mv/Cv		Min. Andesite
400	-10025	-10175	Cv	Mb	160	Min. Andesite
410	-10275	-10050	Cv//Mb	Cv//Mb	150	Min. BFP
420	-10175	-10125	Fg//Mbr	Fg//Mbr	300	Min. BFP
430	-10150	-10225	Cv	Mv	120	BFP in breccia zone
460	-10050	-10000	Cv	Mv	120	Wea. BFP
470	-10080	-10100	Cv	Mb	200	
3340	-10300	-9800	Mbr	Mbr	90	
3350	-10300	-9900	Mbr	Mbr	90	
3360	-10250	-9950	Cb	Cb	70	
3370	-10200	-10000	Cv	Mbr	150	
3380	-10200	-10075	Mf	Mf	300	
3390	-10200	-10225	Mb	R	150	
3400	-10300	-10200	Cv	Cb/Mbr	70	
3410	-10300	-10100	O	Mb	75	
3420	-10300	-10000	Cb	Cb	60	
3580	-10200	-9800	Mbr	Mbr	110	
3720	-10400	-9800	Mbr	Mbr	80	
3730	-10400	-9900	Cv/Mbr	Mbr	80	
3740	-10350	-9950	Cv	Mbr	70	
3750	-10350	-10050	Cv	Mbr	70	
3760	-10350	-10150	Cv	Mb	60	
3770	-10400	-10000	Cv	Mb	70	
3780	-10400	-10100	Mbr	Mbr	120	
3790	-10400	-10200	Mbr	Mbr	80	
3990	-10200	-9900	Mb	R	90	Wea,BFP
4180	-10100	-9800	Cb	Mbr	80	
4200	-10100	-9900	Mb	Mb	75	
4210	-10000	-9800	Mb	Mb		
4220	-10100	-10000	Cb	Cb	60	
4230	-10000	-10100	Cv//Mvr	R	70	Andesite with py & cp
4240	-10100	-10100	Fg	Fg	60	
4260	-10100	-10200	Cv	Mb	100	
4390	-10300	-9975	Cb	Cb	70	
4400	-10300	-9950	Cv	Mbr	100	
4410	-10275	-10000	Cb//Mbr	Cb//Mbr	80	
4420	-10250	-10000	Cv	Cb:Mb	100	
4430	-10150	-10000	Cv	Mb	130	
4440	-10150	-10050	Cv	Mb	200	
4450	-10150	-9950	Cb//Mbr	Cb//Mbr	80	
4460	-10150	-9800	Cb	Mb	80	dark grey andesite
4470	-10200	-9750	Cb	Mb	80	
4480	-10250	-9800	Cv/O	Mb	80	
4490	-10250	-9850	Cv	Cb:Mbr	80	
4500	-10300	-9850	Cv	Cb:Mbr	90	mineralized BFP
4510	-10350	-9850	Cv	Mb	90	
4520	-10250	-9900	Cv	Mbr	80	

## Detailed Scale C-Horizon Soil Sample Locations and Attributes

Sample	Westing	Southing	Map Unit		Depth cm	Bedrock
			c1 horiz.	c2 horiz.		
4530	-10200	-9950	Cv	Mb	80	mineralized BFP w/ cp,py,malachite
4540	-10000	-9900	Cb	Cb	110	
4550	-10150	-9850	Mbr	Mbr	100	
4570	-10200	-9850	Mb	Mb	120	
4590	-10200	-10050	Mbr:Mf	Mbr:Mf	130	
4610	-10200	-10025	Cv	Mbr:Fg	130	
4630	-10150	-9900	Cv	Mbr:Cb	80	
4650	-10100	-9850	Mb	Mb	80	
4670	-10100	-9950	Mbr	Mbr	80	
4690	-10250	-10100	Cb/O	Mbr/Fg	150	
4710	-10250	-10150	Cv	Mbr	90	
4730	-10100	-10050	Cv	Mbr	110	
4750	-10100	-10150	Mbr:Fg	Mbr:Fg		
4760	-10200	-10150	Cv	Mbr	70	BFP w/ malachite
4770	-10150	-10150	Cv//Mbr	Mbr	90	
4780	-10150	-10100	Cv	Mbr	90	
4790	-10250	-10050	Cv	Mbr	200	
4800	-10300	-10050	Mbr	Mbr	100	
4810	-10350	-10000	Cv	Mb	80	
4820	-10350	-9900	Mbr//Cb	Mbr//Cb	100	
4960	-10200	-9925	Cv	Mv/R	80	BFPw/py,bn, cp, mal,on fractures surfaces(min
4980	-10300	-9825	Mb	Mb	100	
5120	-10050	-10100	Cv	Mbr	100	
5130	-10050	-10050	Mb	Mb/R	200	BFPw/massive Feox on fracture surfaces,min.s
5140	-10050	-9950	Mbr	Mbr	70	
5150	-10050	-9900	Mb	Mb/R	70	Weathered BFP
5160	-10050	-9800	Cv	Mb	80	
5170	-10150	-9875	Mbr	Mbr	90	
5180	-10150	-9925	Mbr	Mbr	80	
5190	-10200	-9875	Mbr	Mbr	70	
5200	-10250	-9925	Cb	Cb	110	
5210	-10300	-9925	Cv	Mbr		
5220	-10300	-10025	Cb	Cb	150	
5230	-10250	-10025	Cv	Mbr	120	
5240	-10250	-9975	Cv	Cv	70	
5250	-10000	-10175	Cv	Mbr/R	80	BFP fresh Feox
5260	-10200	-9975	Fg/Mbr	Fg/Mbr	90	
5270	-10175	-9975	Mb	Mb	120	BFP
5280	-10150	-9975	Cv	Mbr	110	
5290	-10175	-9950	Mbr/Fg	Mbr/Fg	70	
5300	-10175	-9925	Mbr	Mbr	80	
5310	-10125	-9900	Mvr	Mvr/R	70	Intensely Feox BFP,w.
5320	-10225	-9950	Cv	Cv/R	90	BFP
5330	-10225	-9925	Mbr	Mbr	70	
5340	-10225	-9900	Cb	Cb	100	
5350	-10225	-9875	Mbr	Mbr	80	
5360	-10275	-9875	Mbr	Mbr	70	
5370	-10275	-9900	Mbr	Mbr	100	BFP



## Detailed Scale C-Horizon Soil Sample Locations and Attributes

Sample	Westing	Southing	Map Unit c1 horiz.	Map Unit c2 horiz.	Depth cm	Bedrock
5380	-10275	-9925	Cv	Mbr	80	
5390	-10275	-9950	Cv	Mbr	70	
5400	-10275	-9975	Cv	Mbr	70	
5410	-10325	-9925	Cv	Cv	80	BFP ?
5420	-10225	-10000	Cb	Cb/R	100	BFP
5430	-10225	-10050	Mbr	Mbr	80	
5440	-10225	-10025	Cv	Mbr	90	
5450	-10225	-9975	Cv	Cv	70	
5460	-10275	-10025	Cv	Cv/R	90	BFPw/mal,cp.
5470	-10325	-9975	Mbr	Mbr	50	
5480	-10325	-9950	Cv	Mbr	60	
5490	-10325	-9900	Mbr	Mbr	70	
5500	-10175	-9875	Mbr	Mbr	100	
5510	-10300	-9875	Mbr	Mbr/R	200	BFP,cp.
5520	-10325	-9875	Cv	Mbr/R	90	BFP
5530	-10325	-10000	Cv	Mbr	70	
5540	-10325	-10025	Cv	Cv	60	
5550	-10325	-10050	Cv	Mbr	70	
5560	-10175	-10025	Mbr	Mbr	70	BFP ?
5570	-10100	-9875	Mb	Mb	70	
5580	-10100	-9925	Cv	Mb	60	
5590	-10100	-9975	Cv	Mb	70	
5600	-10300	-10075	Mbr	Mbr	60	
5610	-10300	-10125	Cv	Cv	60	
5620	-10300	-10150	Cv	Cv	60	
5630	-10300	-10175	Cv	Mbr	70	
5640	-10250	-10125	Cb	Cb	100	
5650	-10250	-10175	Cv	Cv	60	
5660	-10250	-10200	Cv	Mbr	70	
5670	-10175	-10050	Mb	Mb	70	
5680	-10150	-10025	Mb	Mb	50	
5690	-10250	-10075	Mb	Mb	70	
5700	-10200	-10125	Cv	Cv/R	50	BFP
5710	-10150	-10200	Cb	Mbr		
5720	-10150	-10125	Mbr	Mbr/R	60	BFP
5730	-10150	-10075	Mbr	Mbr	70	
5740	-10100	-10025	Cb	Cb	120	
5750	-10125	-9850	Mbr	Mbr	50	
5760	-10125	-9875	Mbr	Mbr	50	BFP ?
5770	-10125	-9900	Cv	Mbr		
5780	-10125	-9925	Mb	Cb	70	
5790	-10125	-9925	Cb	Cb	70	
5800	-10125	-9975	Cb	Cb	110	
5810	-10125	-10000	Mb	Mb	60	
5820	-10100	-10075	Mb	Mb	70	
5830	-10125	-10075	Mb	Mb	70	
5840	-10125	-10075	Mb	Mb	60	
5850	-10175	-10225	Cb	Cb	90	



## Detailed Scale C-Horizon Soil Sample Locations and Attributes

Sample	Westing	Southing	Map Unit	Map Unit	Depth	Bedrock
			c1 horiz.	c2 horiz.	cm	
5860	-10100	-10175	Cv	Mb	100	
5870	-10100	-10125	Cv	Mbr	60	
5880	-10050	-10025	Mbr	Mbr	80	
5890	-10050	-9975	Mbr	Mbr	50	
PT-02	-10050	-9920	Mv	Mv	80	Breccia (4771 ppm)
PT-03	-10175	-9775	Mf:Fg	Cb/R	70	BFP (94ppm)
PT-04	-10190	-9850	Mb	Mb	100	BFP(3300 ppm)
PT-05	-10030	-10070	Cb:Mbr	Mb	150	BFP
HTT-14	-10235	-9850	Mb	Mb	200	BFP (2000ppm)
Total Samples Obtained: 153						

Detailed Scale C-Horizon Soil Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
370	3	128	16	98	0.3	27	11	703	4.04	20	5	2	38	0.2	2	2	72	0.33	0.03	17	26	0.63	289	0.05	3	1.72	0.01	0.07	2	8
380	2	133	18	127	0.3	44	20	1282	5.2	27	5	2	42	0.2	3	2	91	0.66	0.067	19	53	1.02	325	0.07	3	2.23	0.02	0.09	2	6
400	2	109	9	105	0.3	31	15	952	4.37	22	5	2	32	0.2	2	2	81	0.33	0.034	14	36	0.76	228	0.06	3	1.8	0.02	0.07	2	5
410	13	3332	32	151	0.5	75	30	700	5.49	34	5	5	165	0.2	4	15	100	0.67	0.089	24	57	0.95	243	0.11	3	1.98	0.02	0.19	2	190
420	10	3274	22	152	0.3	37	27	1217	6.72	38	5	3	87	0.2	7	15	75	0.73	0.119	16	58	1.74	1265	0.3	3	2.49	0.03	0.48	2	111
430	22	1093	12	149	0.3	61	26	1207	7.63	24	5	3	76	0.2	4	5	98	0.46	0.115	18	121	1.98	479	0.22	3	2.83	0.04	0.5	2	36
460	4	417	20	105	0.3	25	20	944	4.86	38	5	2	37	0.2	2	2	77	0.42	0.05	23	30	0.67	222	0.08	3	1.87	0.02	0.09	2	48
470	7	278	28	123	0.3	57	30	2172	7.28	40	5	2	58	0.3	2	2	104	0.6	0.085	24	103	1.13	410	0.09	3	2.57	0.03	0.21	2	43
3340	3	48	13	92	0.3	27	13	788	3.56	16	5	2	57	0.2	2	2	66	0.57	0.055	11	32	0.63	216	0.05	3	1.58	0.02	0.09	2	1
3350	18	1400	18	171	0.3	63	25	336	5.5	10	5	4	29	0.2	3	3	127	0.3	0.064	11	84	1.76	177	0.28	3	2.68	0.02	0.29	2	28
3360	26	2219	17	172	0.3	51	20	402	6.03	19	8	2	30	0.2	2	3	140	0.27	0.084	13	64	1.06	169	0.15	3	2.58	0.02	0.14	2	218
3370	10	867	21	289	0.3	81	21	874	6.71	17	5	5	74	0.2	7	2	154	0.46	0.08	25	126	2.92	454	0.53	3	2.55	0.02	1.04	2	34
3380	11	1811	26	155	0.3	59	20	929	6.05	54	7	4	68	0.2	2	2	110	0.62	0.092	20	90	1.71	488	0.27	3	1.77	0.03	0.3	2	51
3390	3	177	10	106	0.3	38	11	764	4.38	22	5	2	35	0.2	2	2	81	0.33	0.033	17	66	1.14	263	0.12	3	2.09	0.01	0.13	2	12
3400	10	626	14	105	0.3	37	14	732	4.24	22	5	2	45	0.2	4	2	72	0.33	0.053	11	36	0.71	200	0.09	3	2.1	0.01	0.07	2	10
3410	4	190	12	103	0.3	32	13	716	3.64	17	5	2	82	0.2	2	2	66	0.59	0.045	12	34	0.75	252	0.05	3	1.98	0.02	0.1	2	2
3420	26	4011	24	242	1	34	18	436	8.21	48	5	4	74	0.3	2	2	122	0.23	0.137	17	28	0.71	225	0.05	3	2.84	0.01	0.06	2	978
3580	31	1209	21	188	0.4	40	27	1014	6.28	31	5	4	36	0.2	2	2	107	0.36	0.093	24	47	0.78	192	0.11	3	1.76	0.01	0.14	2	139
3720	2	44	9	92	0.3	30	12	567	3.9	25	5	2	47	0.2	2	2	73	0.45	0.047	6	28	0.6	137	0.06	3	2.01	0.01	0.07	2	2
3730	9	442	9	147	0.3	35	12	403	4.41	18	5	2	24	0.2	2	2	85	0.22	0.099	10	36	0.81	166	0.09	3	2.46	0.01	0.08	2	7
3740	4	296	21	138	0.3	31	11	507	3.78	29	5	2	37	0.2	4	2	66	0.25	0.024	7	28	0.54	216	0.06	3	1.98	0.01	0.05	2	7
3750	5	358	46	116	0.5	32	12	461	4.26	51	5	2	110	0.2	6	2	76	0.21	0.03	8	32	0.51	294	0.06	3	1.65	0.01	0.07	2	73
3760	2	151	12	100	0.3	32	16	1094	4.2	30	5	2	47	0.2	2	2	73	0.49	0.043	12	33	0.74	234	0.06	3	1.98	0.02	0.15	2	8
3770	5	238	10	89	0.3	34	15	826	4.05	24	5	2	73	0.2	4	2	77	0.43	0.044	13	36	0.75	234	0.1	3	1.74	0.01	0.1	2	30
3780	5	686	24	116	0.3	46	20	1087	5.06	35	5	3	98	0.2	3	2	92	0.63	0.08	20	52	1.25	266	0.18	3	2.01	0.02	0.18	2	26
3790	3	214	14	129	0.3	34	18	1049	4.88	29	5	2	75	0.3	2	2	88	0.63	0.066	8	46	0.71	303	0.07	3	2.24	0.01	0.1	2	60
3990	17	2305	30	417	0.4	41	23	1295	6.17	51	5	2	90	0.5	2	3	99	0.71	0.067	21	43	1.06	206	0.05	3	2.4	0.03	0.16	2	38
4180	10	128	10	103	0.3	24	12	687	4.83	16	5	2	29	0.2	2	6	87	0.22	0.031	15	33	0.73	168	0.08	5	1.87	0.02	0.08	2	5
4200	2	171	12	99	0.3	28	8	442	4.61	4	5	2	37	0.2	2	2	86	0.29	0.039	10	33	0.74	234	0.09	3	2.2	0.01	0.11	2	3
4210	17	215	11	151	0.3	28	14	871	4.65	6	5	2	40	0.2	2	2	88	0.42	0.032	18	34	0.82	288	0.06	3	2.19	0.02	0.07	2	3
4220	12	2085	21	279	0.6	24	13	544	6.52	28	5	2	22	0.2	2	5	73	0.16	0.15	16	28	0.83	320	0.14	3	2.95	0.01	0.07	2	127
4230	6	218	11	138	0.3	29	16	771	5.42	16	5	2	39	0.2	2	4	83	0.28	0.065	7	41	0.76	175	0.06	3	2.51	0.01	0.1	2	8
4240	3	313	9	100	0.3	29	12	603	4.73	18	5	2	29	0.2	2	2	74	0.31	0.059	10	31	0.9	218	0.12	3	2.47	0.01	0.12	2	5
4260	2	99	16	141	0.3	54	24	2159	5	24	5	2	56	0.7	2	2	87	0.59	0.078	14	40	0.85	338	0.05	3	2.42	0.03	0.16	2	3
4390	72	3152	14	219	0.7	40	4	255	10.16	2	5	5	40	0.2	2	4	143	0.25	0.107	12	35	1.19	248	0.18	3	2.53	0.01	0.17	2	930
4400	5	1095	11	94	0.3	30	9	482	4.43	13	5	2	36	0.2	2	2	79	0.22	0.04	9	36	0.69	181	0.09	3	2.42	0.01	0.06	2	45
4410	5	415	13	147	0.3	42	12	407	4.56	61	5	2	42	0.2	2	2	88	0.21	0.02	8	39	0.65	253	0.08	3	2.52	0.01	0.06	2	12
4420	6	3097	21	212	0.5	65	13	782	5.87	46	5	6	177	0.4	2	6	125	0.73	0.084	34	69	1.34	339	0.22	3	2.41	0.01	0.27	2	76
4430	6	1653	14	135	0.3	32	11	1284	4.77	33	5	2	42	0.4	2	2	81	0.51	0.057	14	34	0.76	253	0.09	5	1.76	0.02	0.1	2	20
4440	11	257	14	189	0.3	31	19	1583	6.08	15	5	3	50	1.3	2	4	84	0.82	0.08	20	29	0.85	366	0.07	3	2.28	0.04	0.16	2	11
4450	7	601	10	141	0.3	40	17	420	5.47	65	5	2	57	0.8	2	2	82	0.45	0.062	9	34	0.52	291	0.06	3	2.4	0.01	0.09	2	38
4460	2	87	10	112	0.3	30	17	1032	4.87	26	5	2	36	0.2	2	2	92	0.52	0.035	14	37	0.85	245	0.04	3	2.19	0.02	0.08	2	14
4470	2	43	11	79	0.3	24	14	868	3.38	21	5	2	30	0.2	2	2	66	0.43	0.031	9	25	0.56	134	0.06	3	1.32	0.01	0.09	2	4

Detailed Scale C-Horizon Soil Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
4480	16	686	13	174	0.7	39	21	1596	5.5	19	5	2	190	0.2	2	2	86	0.84	0.094	32	47	0.94	531	0.02	3	2.79	0.02	0.13	2	75
4490	10	173	11	108	0.3	42	17	613	4.57	19	5	2	44	0.2	2	2	92	0.44	0.054	9	54	1.14	332	0.13	3	2.32	0.01	0.2	2	4
4500	16	549	12	233	0.3	32	15	895	4.65	58	5	2	63	0.2	2	2	74	0.43	0.05	14	28	0.55	188	0.03	3	2.24	0.01	0.09	2	12
4510	3	43	11	80	0.3	24	11	623	3.49	18	5	2	34	0.2	2	2	70	0.27	0.018	6	26	0.63	134	0.06	3	1.38	0.02	0.07	2	13
4520	3	76	8	79	0.3	24	10	405	3.42	19	5	2	28	0.2	2	2	63	0.28	0.035	6	25	0.5	172	0.04	3	1.64	0.01	0.05	2	7
4530	3	108	14	96	0.3	26	13	726	3.63	38	5	2	39	0.2	2	2	66	0.39	0.021	10	34	0.54	299	0.05	3	1.47	0.02	0.06	2	5
4540	23	886	54	279	0.6	24	54	3267	13.89	159	5	2	31	1.6	2	2	53	0.43	0.159	25	27	0.49	832	0.04	3	2.27	0.01	0.13	2	64
4550	4	73	10	87	0.3	25	15	516	4.68	27	5	2	25	0.6	2	2	76	0.21	0.032	8	30	0.54	178	0.06	3	1.67	0.01	0.04	2	6
4570	2	70	10	83	0.3	23	10	437	3.52	19	5	2	26	0.2	2	3	66	0.26	0.041	9	28	0.51	140	0.05	3	1.54	0.01	0.04	2	9
4590	5	1052	24	113	0.4	37	20	887	4.57	33	5	3	39	0.2	2	2	81	0.42	0.051	12	44	1.08	238	0.12	3	1.95	0.01	0.1	2	19
4610	4	663	26	100	0.3	29	11	618	3.78	30	5	2	66	0.2	2	2	69	0.42	0.053	14	33	0.64	222	0.09	3	1.29	0.01	0.08	2	46
4630	23	1511	20	226	0.3	47	29	2066	5.23	34	5	2	53	0.7	2	3	93	0.4	0.079	11	38	0.74	283	0.04	3	2.78	0.01	0.08	2	15
4650	3	107	14	94	0.3	30	15	557	4.28	20	5	2	23	0.2	2	2	79	0.2	0.04	7	33	0.66	166	0.06	3	2.32	0.01	0.05	2	5
4670	2	450	14	97	0.3	25	11	368	3.74	20	5	3	24	0.2	2	2	68	0.18	0.023	9	27	0.47	217	0.04	3	1.87	0.01	0.05	2	4
4690	12	879	62	169	0.3	37	18	847	5.86	29	5	2	37	0.5	2	2	79	0.27	0.082	13	45	0.9	259	0.12	3	1.81	0.03	0.18	2	100
4710	8	550	14	99	<.3	29	13	501	4.48	23	<5	3	26	<.2	<2	5	81	0.22	0.041	10	41	0.86	152	0.09	<3	1.82	0.01	0.06	<2	17
4730	4	627	14	108	0.3	34	17	493	4.65	15	5	2	21	0.2	2	3	74	0.19	0.05	10	38	1.07	155	0.14	3	2.09	0.01	0.14	2	37
4750	4	226	22	125	0.3	42	23	876	5.35	41	5	2	35	0.5	2	3	100	0.39	0.053	6	57	1.17	229	0.08	3	2.63	0.01	0.1	2	12
4760	23	1903	18	172	0.3	43	18	460	5.58	14	5	3	41	0.3	2	2	108	0.53	0.083	15	71	1.91	530	0.25	3	2.19	0.01	0.45	2	34
4770	3	1173	3	88	0.3	117	24	327	6.58	30	5	2	27	0.7	2	6	141	0.44	0.039	7	300	4.66	643	0.38	3	3.48	0.02	1.11	2	14
4780	63	327	16	99	0.3	42	17	479	4.47	27	5	2	30	0.2	2	2	82	0.3	0.04	8	44	0.9	220	0.12	3	2.07	0.01	0.09	2	6
4790	8	1263	13	122	0.3	68	25	833	5.21	24	6	5	171	0.6	2	2	106	0.76	0.145	20	80	1.55	1116	0.23	3	1.58	0.02	0.38	2	75
4800	5	360	15	125	0.3	31	14	556	4.47	35	5	2	41	0.2	2	2	80	0.27	0.033	8	35	0.73	223	0.08	3	2.04	0.01	0.05	2	98
4810	6	367	17	114	0.3	34	19	647	5.71	37	5	2	69	0.2	2	2	83	0.31	0.037	15	32	0.52	245	0.06	3	1.48	0.01	0.07	2	121
4820	10	373	18	92	0.3	35	14	455	4.3	20	5	2	36	0.5	2	3	83	0.28	0.04	8	40	1.04	149	0.14	3	2.01	0.01	0.1	2	7
4960	3	136	21	120	<.3	26	11	520	3.7	34	<5	<2	41	0.4	<2	<2	69	0.32	0.039	9	26	0.52	170	0.06	<3	1.57	0.01	0.07	<2	5
4980	6	126	13	122	<.3	39	19	1021	4.97	24	<5	<2	61	0.5	<2	<2	100	0.65	0.05	16	46	0.94	328	0.06	<3	2.4	0.02	0.1	<2	4
5120	3	108	15	105	<.3	31	15	884	4.44	31	<5	<2	32	<.2	<2	<2	79	0.39	0.065	9	33	0.6	181	0.06	<3	2.08	0.01	0.07	<2	3
5130	4	518	21	116	0.4	27	17	1120	5.85	83	<5	2	33	0.4	3	<2	86	0.46	0.081	25	33	0.53	157	0.06	3	1.52	0.02	0.07	<2	30
5140	18	1231	27	165	0.3	33	36	1890	8.22	63	<5	3	43	0.9	<2	<2	103	0.66	0.09	33	33	0.9	459	0.08	3	2.54	0.02	0.14	<2	18
5150	4	309	11	95	<.3	31	18	463	4.1	18	<5	<2	19	<.2	<2	<2	82	0.18	0.045	8	34	0.7	143	0.06	<3	2.3	0.01	0.04	<2	4
5160	3	59	12	151	<.3	34	15	783	4.78	20	<5	<2	26	0.2	<2	2	84	0.29	0.063	11	34	0.72	158	0.06	4	2.57	0.01	0.05	<2	3
5170	7	102	16	214	0.3	45	24	1667	5.58	38	<5	2	44	0.7	<2	<2	104	0.39	0.083	10	41	0.74	339	0.04	3	3.92	0.01	0.07	<2	2
5180	6	435	19	107	0.3	34	15	419	4.74	22	<5	2	54	<.2	<2	<2	90	0.26	0.041	10	32	0.56	207	0.05	3	2.16	0.01	0.04	<2	21
5190	3	56	9	95	<.3	31	11	472	3.62	20	<5	<2	33	<.2	<2	<2	67	0.25	0.048	8	27	0.48	213	0.04	<3	2.14	0.01	0.03	<2	2
5200	22	855	15	410	0.4	38	13	339	4.81	11	<5	3	29	0.6	<2	<2	118	0.25	0.061	9	62	0.92	193	0.18	3	2.59	0.01	0.06	<2	24
5210	21	986	46	245	0.7	36	14	653	6.16	111	<5	3	42	0.4	5	<2	86	0.21	0.049	12	35	0.59	319	0.07	<3	1.88	0.01	0.08	<2	89
5220	16	879	48	258	0.3	36	13	691	5.63	87	<5	2	38	0.5	6	<2	86	0.21	0.048	12	35	0.59	305	0.06	3	1.95	0.01	0.07	<2	63
5230	5	1522	8	87	<.3	63	13	299	4.82	12	5	7	126	<.2	<2	<2	113	0.75	0.158	32	101	1.88	855	0.27	3	1.67	0.01	0.29	<2	74
5240	7	814	28	424	0.5	31	12	325	5.1	34	<5	2	65	0.6	<2	<2	114	0.17	0.063	12	34	0.68	260	0.11	3	2.98	0.01	0.06	<2	35
5250	4	386	15	101	<.3	35	11	409	4.38	31	<5	3	39	<.2	3	<2	93	0.28	0.032	18	46	0.92	278	0.14	5	1.9	0.01	0.06	<2	12
5260	8	558	3	107	<.3	83	21	295	7.18	9	<5	6	164	0.3	<2	<2	148	0.47	0.052	10	113	3.52	386	0.62	4	3.07	0.02	0.93	<2	7
5270	5	1212	15	120	<.3	35	13	901	3.99	29	<5	3	85	<.2	<2	<2	76	0.53	0.063	16	32	0.6	289	0.07	4	1.59	0.01	0.08	<2	19

Detailed Scale C-Horizon Soil Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
5280	4	1858	19	118	0.3	41	11	539	4.11	30	<5	3	40	0.6	3	4	76	0.46	0.052	18	41	0.73	203	0.08	5	1.81	0.01	0.08	<2	19
5290	3	150	18	130	0.3	31	14	642	4.1	30	<5	2	52	0.2	<2	<2	79	0.34	0.036	9	30	0.56	226	0.07	4	1.95	0.01	0.08	<2	9
5300	4	118	17	105	<.3	24	12	625	4.01	20	<5	3	36	<.2	<2	<2	89	0.43	0.041	12	28	0.76	239	0.11	4	1.69	0.02	0.09	<2	3
5310	12	472	29	187	<.3	37	15	473	4.43	32	<5	2	32	0.2	2	2	84	0.27	0.031	9	31	0.57	222	0.05	3	2.12	0.01	0.05	<2	7
5320	28	3726	16	213	<.3	82	18	345	6.57	9	<5	7	81	1	<2	<2	144	0.46	0.109	23	88	2.82	270	0.52	<3	3.53	0.01	0.49	<2	50
5330	9	345	29	159	0.3	39	14	633	4.47	31	<5	4	52	0.3	<2	<2	89	0.43	0.038	10	37	0.7	259	0.05	<3	2.38	0.01	0.06	<2	81
5340	34	836	37	244	0.7	45	19	2428	6.63	22	<5	3	40	0.5	2	<2	146	0.33	0.087	15	59	0.43	305	0.06	<3	2.53	0.01	0.09	<2	47
5350	4	83	20	127	<.3	34	16	790	4.26	29	<5	2	42	0.3	<2	2	80	0.33	0.047	11	33	0.61	311	0.04	<3	2.36	0.01	0.05	<2	8
5360	13	465	12	129	<.3	37	14	592	4.23	16	<5	3	48	<.2	<2	<2	91	0.38	0.041	16	39	0.77	252	0.1	<3	2	0.01	0.08	<2	6
5370	6	463	12	140	<.3	43	17	550	4.61	20	<5	3	48	0.2	<2	<2	104	0.25	0.051	9	50	1.14	194	0.13	<3	2.57	0.01	0.07	<2	24
5380	7	732	22	148	0.4	35	14	474	4.55	38	<5	3	32	0.2	3	<2	87	0.19	0.041	11	36	0.62	271	0.05	<3	2.43	0.01	0.05	<2	59
5390	14	1151	19	166	0.5	62	19	296	7.43	9	<5	4	56	0.3	<2	<2	156	0.36	0.085	10	99	2.34	161	0.31	<3	3.08	0.01	0.17	<2	443
5400	9	2269	19	160	0.5	70	18	259	7.16	5	<5	8	43	0.8	<2	<2	169	0.32	0.114	20	112	3.09	324	0.6	<3	3.56	0.02	0.73	<2	102
5410	14	1185	20	307	0.4	32	12	968	4.83	41	<5	4	47	0.5	<2	<2	95	0.28	0.035	18	30	0.54	271	0.05	<3	2.29	0.01	0.09	<2	49
5420	11	1450	32	266	0.7	54	27	768	8.15	88	<5	6	64	0.6	<2	<2	110	0.38	0.084	18	69	1.19	324	0.21	<3	2.53	0.01	0.15	<2	79
5430	3	191	16	105	<.3	27	12	682	3.82	25	<5	2	56	<.2	<2	<2	71	0.39	0.037	8	28	0.54	137	0.07	<3	1.52	0.01	0.08	<2	22
5440	8	650	17	136	0.5	49	17	590	5.2	33	5	4	67	<.2	3	<2	100	0.33	0.036	12	57	1.13	206	0.16	<3	2.17	0.01	0.1	<2	61
5450	11	660	23	279	0.3	56	16	455	6.11	83	<5	4	42	<.2	4	2	116	0.25	0.036	12	47	1.1	306	0.19	<3	2.56	0.01	0.08	<2	14
5460	11	1898	13	108	<.3	60	17	428	5.46	62	<5	6	86	0.2	<2	<2	114	0.5	0.066	17	63	1.31	247	0.2	<3	2.12	0.01	0.13	<2	82
5470	7	162	15	94	<.3	31	12	529	4.04	18	7	2	35	<.2	<2	2	76	0.24	0.029	8	31	0.54	390	0.06	<3	1.84	0.01	0.05	<2	11
5480	15	626	169	753	0.8	41	11	1003	5.03	47	<5	3	37	1.3	3	<2	88	0.25	0.029	12	30	0.48	286	0.03	<3	2.15	0.01	0.05	<2	11
5490	10	435	15	109	<.3	43	15	404	4.58	20	<5	3	36	<.2	<2	<2	96	0.28	0.041	11	45	0.96	223	0.13	<3	2.55	0.01	0.09	<2	9
5500	11	428	24	128	<.3	33	20	1256	5.3	91	<5	3	57	0.4	<2	<2	90	0.44	0.068	21	33	0.64	283	0.05	<3	2.09	0.01	0.06	<2	60
5510	32	817	13	143	0.6	55	17	429	5.77	11	<5	6	70	0.5	<2	<2	124	0.62	0.095	29	67	1.56	516	0.25	<3	1.97	0.01	0.45	<2	66
5520	14	340	11	117	<.3	59	23	412	5.48	15	<5	3	38	0.3	<2	<2	130	0.31	0.056	13	79	1.42	241	0.2	<3	2.63	0.01	0.18	<2	28
5530	29	598	16	99	<.3	39	16	468	7.43	24	<5	3	62	0.3	<2	<2	93	0.21	0.039	10	43	0.65	221	0.06	<3	2.16	0.01	0.05	<2	117
5540	19	1765	33	280	0.6	27	16	615	6.16	50	<5	2	74	0.6	10	<2	70	0.41	0.135	13	25	0.97	485	0.14	<3	2.58	0.01	0.13	<2	146
5550	9	1069	64	244	0.4	31	12	405	4.96	50	<5	3	51	0.7	4	<2	78	0.24	0.045	12	41	0.96	303	0.1	<3	2.43	0.01	0.08	<2	70
5560	3	281	12	86	0.3	31	10	390	3.84	17	<5	2	34	<.2	<2	<2	74	0.25	0.03	8	35	0.65	170	0.09	<3	1.73	0.01	0.06	<2	8
5570	4	88	11	70	<.3	20	8	287	3.39	14	<5	2	29	<.2	<2	<2	65	0.18	0.024	6	23	0.4	133	0.04	<3	1.55	0.01	0.03	<2	3
5580	3	974	14	105	0.5	30	10	467	3.93	26	<5	2	25	<.2	2	<2	70	0.21	0.045	8	26	0.43	159	0.05	<3	1.94	0.01	0.05	<2	48
5590	5	3041	21	119	0.4	27	12	561	4.01	28	<5	2	37	0.3	3	<2	64	0.42	0.087	23	27	0.56	177	0.07	<3	1.54	0.01	0.06	<2	98
5600	3	482	12	98	<.3	26	10	483	3.88	26	<5	2	67	<.2	<2	<2	64	0.32	0.04	9	27	0.56	182	0.08	<3	1.55	0.01	0.08	<2	57
5610	7	492	16	108	0.4	30	14	836	4.05	19	<5	3	106	0.4	<2	<2	69	0.54	0.045	14	34	0.8	220	0.08	<3	1.87	0.01	0.09	<2	24
5620	5	202	13	111	0.3	32	12	513	4.64	28	<5	<2	46	<.2	<2	<2	79	0.23	0.042	8	35	0.58	307	0.06	<3	1.99	0.01	0.05	<2	12
5630	7	743	16	146	0.3	53	15	427	4.68	13	<5	3	54	0.2	<2	<2	99	0.28	0.034	9	65	1.25	195	0.2	<3	2.21	0.01	0.13	<2	32
5640	5	143	16	97	<.3	23	11	503	4.27	26	<5	2	27	<.2	<2	<2	70	0.29	0.047	8	29	0.57	146	0.06	<3	1.71	0.01	0.05	<2	4
5650	12	800	9	133	<.3	24	15	422	4.71	17	<5	2	41	0.4	3	<2	58	0.32	0.065	9	24	1.68	163	0.28	<3	2.71	0.01	0.23	<2	15
5660	7	316	10	82	<.3	28	9	363	3.92	25	<5	2	26	<.2	<2	<2	70	0.17	0.027	7	29	0.5	137	0.06	<3	1.76	0.01	0.04	<2	36
5670	4	484	16	100	<.3	30	11	539	4.05	17	<5	2	36	0.2	<2	<2	66	0.36	0.049	15	34	0.75	167	0.09	<3	1.53	0.01	0.07	<2	26
5680	9	618	25	98	<.3	29	15	712	4.34	46	<5	2	40	<.2	<2	<2	69	0.47	0.058	14	35	0.66	238	0.08	3	1.61	0.01	0.07	<2	10
5690	3	131	11	103	<.3	29	12	943	3.87	19	<5	<2	55	<.2	2	<2	75	0.44	0.036	9	29	0.75	209	0.07	3	1.66	0.01	0.07	<2	7
5700	9	497	19	120	<.3	27	12	975	4.35	43	<5	<2	38	<.2	4	<2	71	0.39	0.055	13	32	0.6	279	0.07	<3	1.53	0.01	0.06	<2	21

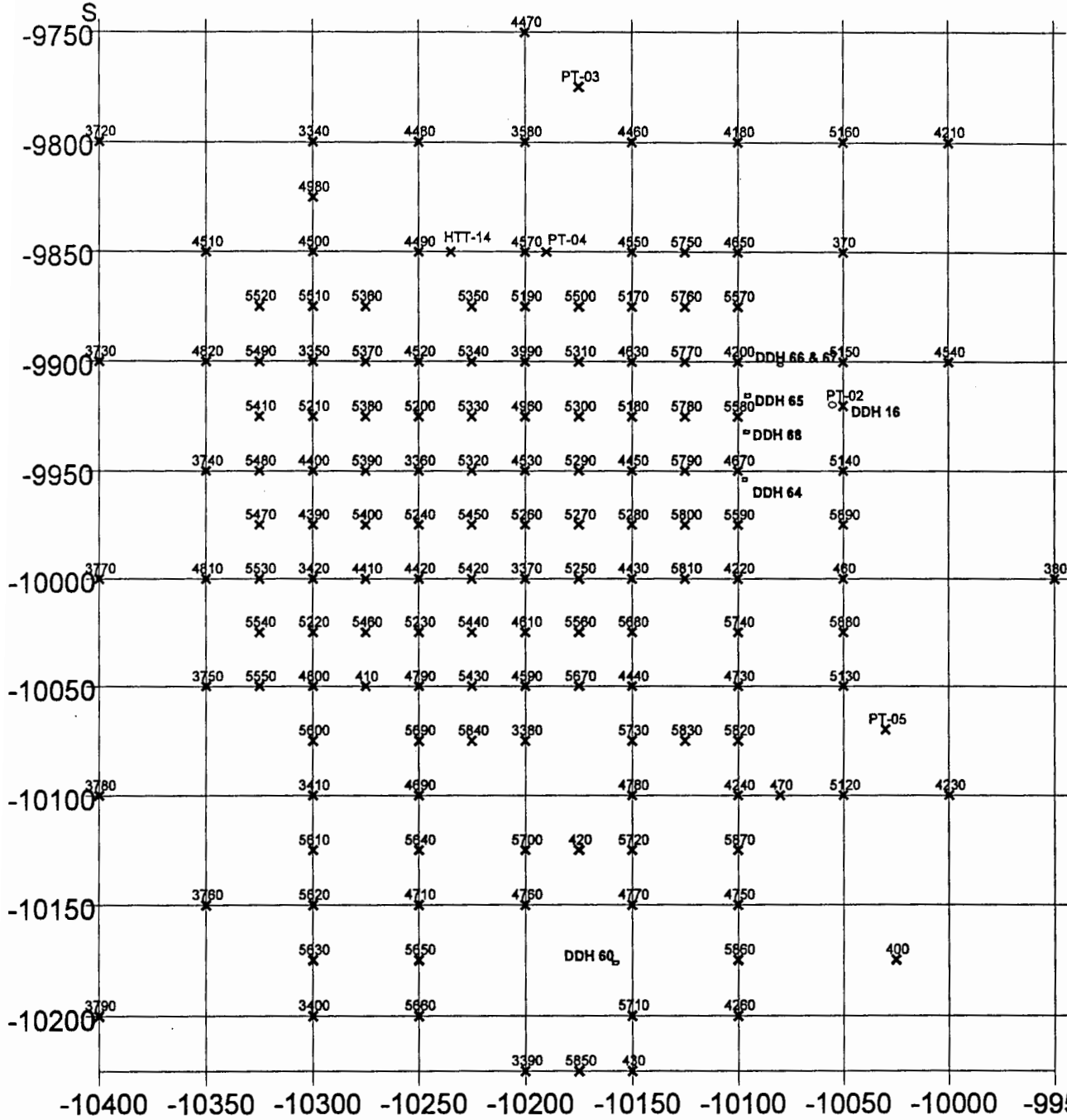
Detailed Scale C-Horizon Soil Geochemistry

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppb	
5710	12	541	12	81	<.3	29	12	485	4.28	14	<5	<2	38	<.2	2	<2	76	0.28	0.037	9	40	0.86	186	0.12	<3	1.9	0.01	0.13	<2	15
5720	3	467	12	100	<.3	37	16	652	4.91	24	<5	2	38	<.2	3	<2	97	0.51	0.055	12	57	1.36	241	0.2	<3	2.38	0.01	0.11	<2	31
5730	6	459	11	126	<.3	34	14	649	5.31	15	<5	2	23	0.2	2	<2	80	0.25	0.044	19	59	1.38	164	0.2	<3	1.9	0.01	0.08	<2	23
5740	3	269	11	90	<.3	22	12	863	3.68	17	<5	2	33	<.2	<2	<2	62	0.43	0.064	12	24	0.51	215	0.07	<3	1.28	0.01	0.04	<2	7
5750	8	224	7	118	<.3	33	18	658	5.14	14	<5	<2	24	<.2	<2	<2	101	0.23	0.054	6	37	0.82	167	0.05	<3	3.47	0.01	0.05	<2	19
5760	5	254	11	192	<.3	29	14	405	4.36	22	<5	<2	20	<.2	2	<2	76	0.16	0.053	7	29	0.54	211	0.04	3	2.55	0.01	0.04	<2	16
5770	11	353	14	124	<.3	28	12	366	4.66	33	<5	<2	15	<.2	<2	<2	81	0.12	0.051	8	28	0.59	167	0.04	3	2.55	0.01	0.03	<2	10
5780	4	85	8	90	<.3	25	9	300	3.84	20	<5	<2	21	<.2	3	<2	67	0.23	0.029	6	24	0.44	161	0.04	<3	1.68	0.01	0.03	<2	9
5790	16	629	12	141	<.3	35	11	554	4.24	24	<5	<2	26	<.2	2	<2	74	0.26	0.038	8	28	0.52	274	0.05	<3	1.9	0.01	0.05	<2	12
5800	8	5937	23	228	0.3	38	19	902	5.43	40	<5	<2	45	0.8	2	<2	90	0.72	0.103	24	42	1.07	227	0.06	<3	2.19	0.02	0.09	<2	42
5810	4	570	17	104	<.3	29	13	542	4.46	18	<5	2	30	0.3	2	<2	70	0.32	0.056	16	38	0.72	228	0.1	<3	1.49	0.01	0.08	<2	36
5820	5	133	15	112	<.3	19	13	722	4.19	15	<5	<2	25	0.2	<2	<2	70	0.31	0.043	9	24	0.59	126	0.07	<3	1.78	0.01	0.06	<2	6
5830	7	340	13	101	<.3	28	12	482	4.68	21	<5	2	20	<.2	3	<2	75	0.21	0.043	9	35	0.69	133	0.08	<3	1.97	0.01	0.05	<2	44
5840	17	1123	18	151	<.3	49	18	833	5.83	27	<5	3	63	0.5	5	<2	106	0.59	0.087	19	75	1.7	184	0.27	3	2	0.02	0.23	<2	57
5850	39	395	7	122	0.3	37	21	660	10.84	6	<5	2	160	<.2	<2	<2	62	0.36	0.202	21	71	1.37	207	0.11	<3	2.03	0.07	0.53	<2	25
5860	7	209	14	114	<.3	33	17	1255	4.85	26	<5	2	54	<.2	2	<2	81	0.52	0.066	17	38	0.74	203	0.06	<3	1.9	0.01	0.1	<2	9
5870	2	151	13	78	<.3	24	10	548	3.72	19	<5	<2	29	<.2	<2	<2	65	0.3	0.033	8	27	0.5	117	0.07	3	1.46	0.01	0.04	<2	16
5880	4	197	16	90	<.3	27	19	1050	4.57	28	<5	<2	31	<.2	<2	2	74	0.41	0.068	9	32	0.61	145	0.06	<3	1.83	0.01	0.06	<2	17
5890	3	153	12	138	<.3	30	12	670	4.31	22	<5	<2	24	<.2	<2	<2	75	0.37	0.048	8	34	0.62	233	0.05	<3	1.79	0.01	0.04	<2	5
PT-02	5	1114	23	141	<.3	38	38	1468	5.44	43	<5	3	33	0.4	<2	2	97	0.43	0.087	23	42	0.77	260	0.06	3	2.3	0.01	0.08	<2	9
PT-03	8	309	19	141	<.3	31	24	1292	5.44	27	<5	4	37	<.2	<2	<2	88	0.42	0.069	22	35	0.74	227	0.07	5	2.17	0.01	0.1	<2	25
PT-04	4	85	16	138	0.4	44	17	1102	5.12	27	<5	3	56	0.2	<2	3	98	0.72	0.059	18	46	1.02	349	0.04	4	2.69	0.02	0.11	<2	3
PT-05	4	300	18	148	<.3	46	22	1544	5.58	39	<5	3	45	0.3	2	<2	97	0.62	0.077	23	46	0.88	349	0.06	4	2.58	0.02	0.12	<2	9
HTT-14	3	93	13	78	0.3	24	11	547	3.86	19	<5	2	26	<.2	<2	<2	73	0.32	0.041	8	28	0.54	119	0.07	<3	1.53	0.01	0.06	<2	51

# Sample Locations

C-horizon soil samples

Detailed Scale

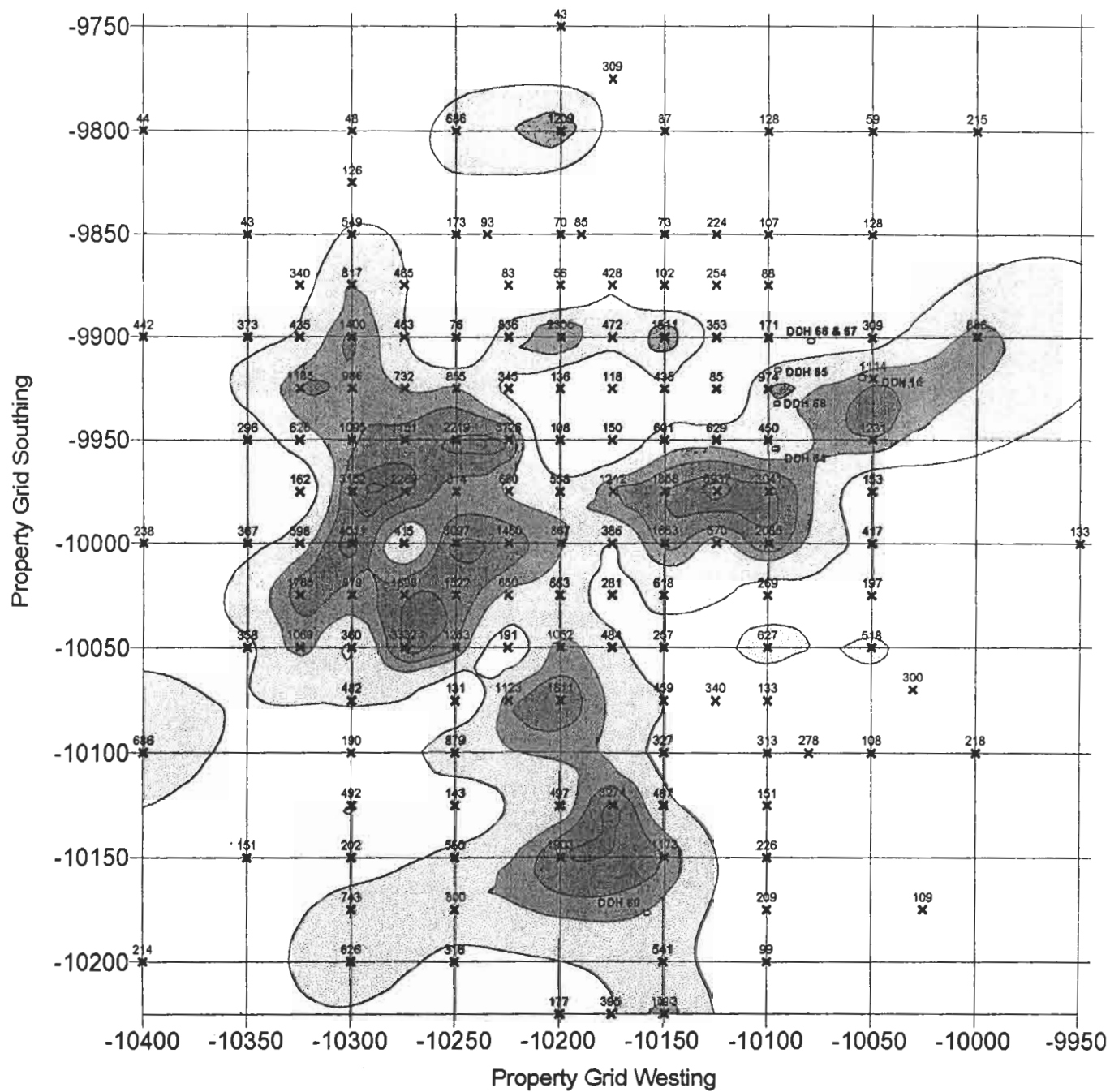


**bge**  
 BOOKER GOLD  
 EXPLORATIONS LTD.











**APPENDIX B**

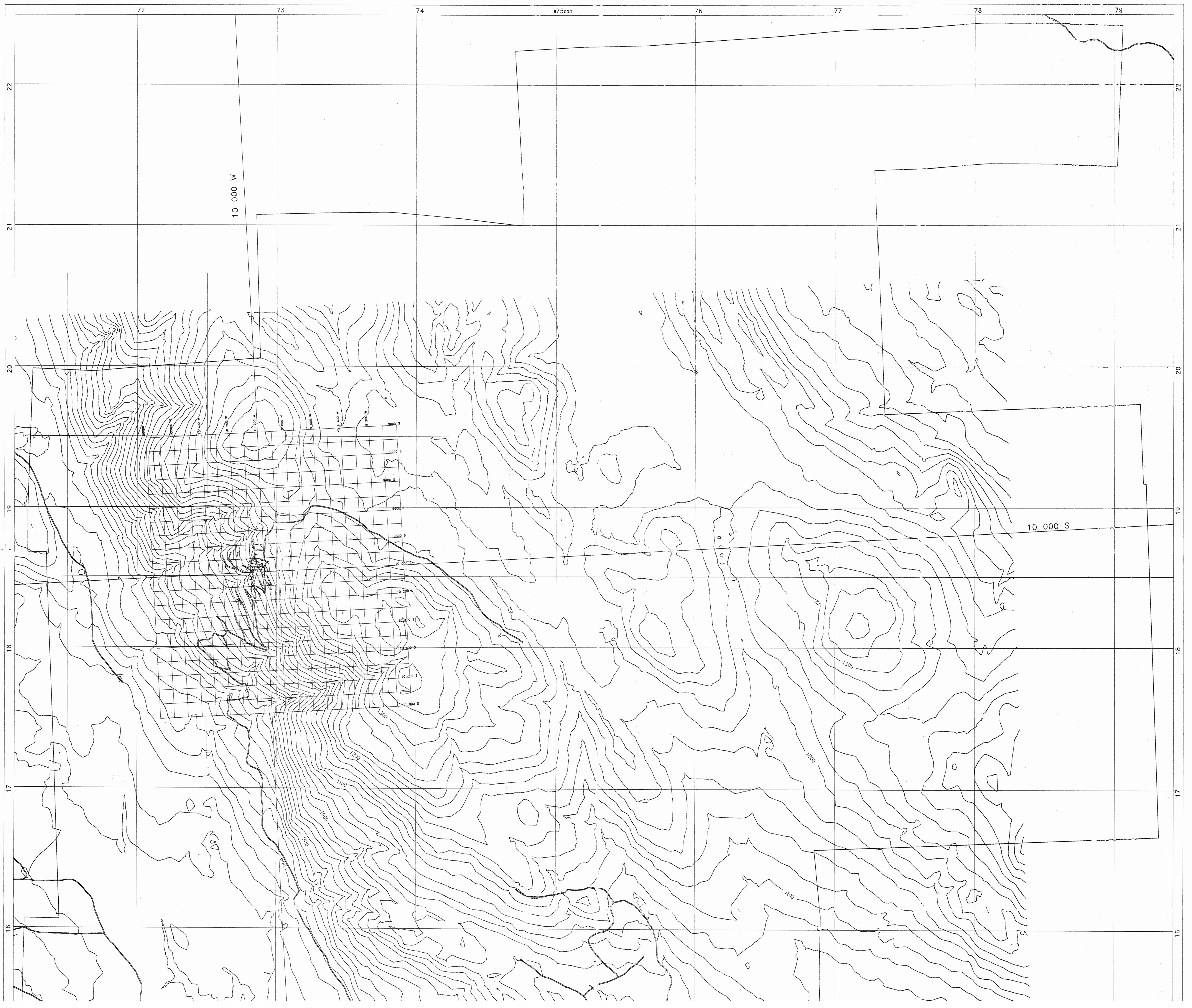
Drill Hole Azimuth, Dip Length and Assay Summary

Drill Hole	Coordinates		Collar Elevation (m)	Azimuth (deg.)	Dip Angle (deg.)	Hole Length (m)	Notable Intercepts					
	West (m)	South (m)					Interval(m) From To	Length (m) (ft)	Cu (%)	Au (g/t)		
DDH 95-16	10054	9921	1195		-90	304.2	0.	304.2	304.2	998	0.75	0.32
							0.	156.4	156.4	513	1.03	0.43
							0.	61.	61.	200	1.35	0.54
							101.5	132.	30.5	100	1.93	0.82
							303.9	304.2	0.3	1	0.73	0.23
DDH 95-17	10054	9921	1195	340	-60	32.9						
DDH 95-18	10054	9921	1195	340	-70	304.2	0.	304.2	304.2	998	0.20	0.06
DDH 95-19	10054	9921	1195	110	-60	304.2						
DDH 95-20	10061	9874	1201		-90	274.3	0.	274.3	274.3	900	0.18	0.09
DDH 95-21	10054	9921	1195	200	-70	304.2			20.4	67	0.70	0.32
									15.2	50	0.58	0.18
									39.6	130	0.58	0.25
									13.7	45	0.41	0.16
									9.1	30	0.69	0.28
		6.1	20	0.47	0.24							
DDH 95-22	10067	9818	1204		-90	242.9						
DDH 95-23	9975	10053	1202	330	-60	348.1			209.1	686	0.45	0.18
									152.1	499	0.60	0.20
									22.9	75	0.91	0.15
									8.2	27	2.15	0.61
									12.2	40	0.93	0.31
DDH 95-24	9964	10104	1197		-90	305.4						
DDH 95-25	10061	9874	1201	200	-60	349.3	0.	349.3	349.3	1146	0.25	0.10
									26.8	88	0.56	0.19
									22.9	75	0.41	0.22
											0.70	0.38
DDH 95-26	10067	9818	1204	200	-60	337.4	122.5	144.8	22.3	73	0.37	0.19
							122.5	124.1	1.5	5	0.68	0.26
							136.2	137.8	1.5	5	0.55	0.23
							139.3	140.8	1.5	5	0.61	0.25
							247.5	267.3	19.8	65	0.29	0.16
							264.6	266.1	1.5	5	0.79	0.48
							280.1	303.3	23.2	76	0.35	0.21
							280.1	281.6	1.5	5	0.48	0.34
DDH 95-27	10073	9764	1203		-90	216.7	3.7	216.7	213.1	699	0.14	
DDH 95-28	10041	9966	1185	200	-60	285.6	6.7	285.6	278.9	915	0.18	
DDH 95-29	10140	10129	1126	0	-60	297.8	3.7	297.8	297.8	977	0.27	
DDH 95-30	10104	10187	1125	340	-70	303.9	3.7	303.9	300.2	985	0.23	
DDH 95-31	10094	10048	1145	335	-60	23.5						

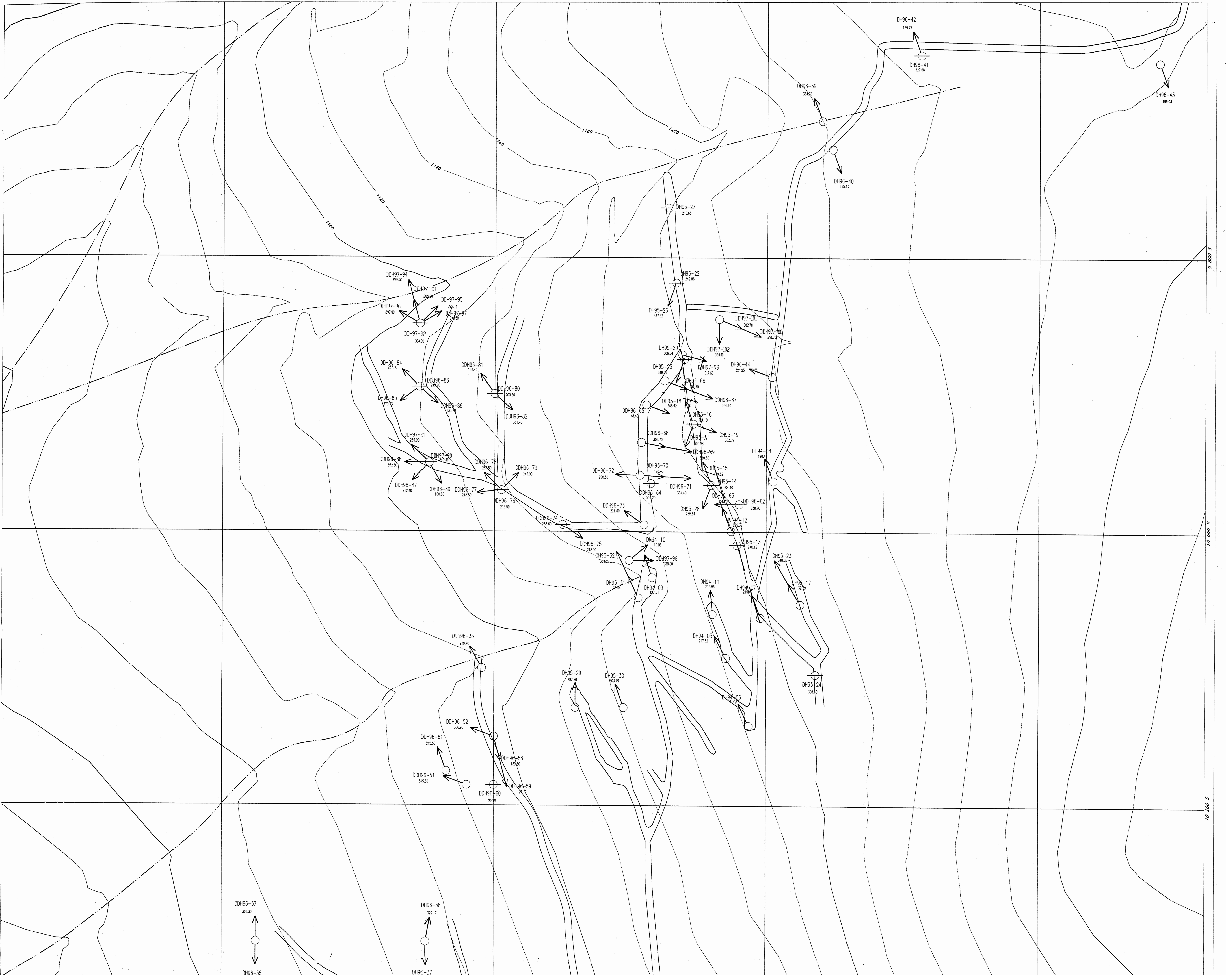
Drill Hole	Coordinates		Collar Elevation (m)	Azimuth (deg.)	Dip Angle (deg.)	Hole Length (m)	Notable Intercepts					
	West (m)	South (m)					Interval(m)		Length		Cu (%)	Au (g/t)
						From	To	(m)	(ft)			
DDH 95-32	10094	10048	1145	335	-70	467.9	3.7	467.9	464.2	1523	0.21	
							102.7	104.2	1.5	5	0.48	
							124.1	128.6	4.5	15	0.54	
							125.6	127.1	1.5	5	0.72	
							159.1	160.6	1.5	5	0.41	
							167.6	171.3	3.7	12	0.54	
							196.	197.2	1.2	4	0.49	
							206.4	210.9	4.6	15	0.51	
206.4	207.9	1.5	5	0.62								
						212.5	215.5	3.	10	0.53		
DDH 96-33	10209	10100	1084	330	-60	370.3	242.	244.9	2.9	10	0.40	
DDH 96-34	10305	10410		90	-70	318.2						
DDH 96-35	10375	10300		180	-55	307.8						
DDH 96-36	10250	10300		10	-55	322.2	10.4	275.2	264.9	869	0.25	
							157.6	160.6	3.	10	0.42	
							163.7	172.6	9.	29	0.53	
DDH 96-37	10250	10300		180	-55	349.	10.7	50.9	40.2	132	0.19	
							44.8	47.9	3.	10	0.41	
DDH 96-38	10200	10400		270	-55	276.5						
DDH 96-39	9952	9721		340	-55	334.4						
DDH 96-40	9952	9721		160	-55	255.1						
DDH 96-41	9887	9652			-90	227.7						
DDH 96-42	9887	9652		340	-55	169.8	69.2	81.4	12.2	40	0.23	
DDH 96-43	9712	9658		160	-55	199.						
DDH 96-44	9996	9887		290	-70	321.3	296.3	297.8	1.5	5	0.79	
DDH 96-45	10297	10460		270	-60	419.7						
DDH 96-46	10309	10500		290	-50	212.4						
DDH 96-47	10300	10548		290	-50	175.9						
DDH 96-48	10295	10650		290	-50	159.1						
DDH 96-49	10300	10600		290	-50	213.4						
DDH 96-50	10430	10600		290	-70	197.2						
DDH 96-51	10220	10185		290	-75	345.3	5.2	255.1	249.9	820	0.20	0.07
							215.4	218.5	3.1	10	0.46	0.15
							322.2	325.2	3.	10	0.47	0.15
DDH 96-52	10200	10150		290	-70	306.9	8.2	102.7	94.5	310	0.20	0.08
DDH 96-53	10510	10495		310	-45	320.6						
DDH 96-54	10440	10950		290	-50	56.3						
DDH 96-55	10900	11560			-90	133.5						
DDH 96-56	10950	11225			-90	164.						
DDH 96-57	10375	10300		360	-50	306.3	185.	303.9	118.9	390	0.23	0.09
							206.3	209.4	3.1	10	0.90	0.39
DDH 96-58	10200	10150		165	-70	139.6	5.5	32.9	27.4	90	0.23	0.07
							57.3	118.3	61.	200	0.24	0.06
DDH 96-59	10200	10150		165	-57	127.1	63.	93.5	30.5	100	0.68	0.12
							63.	72.2	9.2	30	1.95	0.27
							63.	69.1	6.1	20	2.51	0.28

Drill Hole	Coordinates		Collar Elevation (m)	Azimuth (deg.)	Dip Angle (deg.)	Hole Length (m)	Notable Intercepts					
	West (m)	South (m)					Interval(m)		Length		Cu (%)	Au (g/t)
						From	To	(m)	(ft)			
DDH 96-60	10200	10185			-90	96.9	4.	84.7	80.7	265	0.97	0.22
							4.	60.3	56.3	185	3.16	0.30
							5.4	20.7	15.3	50	1.59	0.28
							26.8	29.8	3.	10	1.44	0.40
							32.9	35.9	3.	10	1.72	0.25
							54.2	60.3	6.1	20	2.77	1.15
							69.4	75.5	6.1	20	0.44	0.07
DDH 96-61	10235	10175		340	-50	215.5						
DDH 96-62	10020	9980			-90	238.7			3.	10	1.40	0.87
							133.5	142.6	9.1	30	0.80	0.51
							115.	148.7	33.5	110	0.48	0.24
DDH 96-63	10020	9980		270	-59	118.9	26.5	38.7	12.2	40	0.40	
DDH 96-64	10085	9965		0	-90	506.	3.	6.1	3.	10	1.10	0.30
							168.2	370.9	167.6	550	0.38	0.15
							3.	506.	503.	1650	0.28	0.11
DDH 96-65	10085	9912		110	-75	320.			3.	10	4.70	0.98
							139.3	236.2	97.5	320	0.87	0.21
							21.	236.2	216.4	710	0.62	0.16
							4.2	320.6	317.	1040	0.50	0.13
DDH 96-66	10075	9885		110	-50	103.6			3.	10	1.20	0.50
							29.5	66.1	24.4	80	0.75	0.21
DDH 96-67	10075	9885		110	-75	335.3			3.	10	5.40	3.00
							121.	127.1	6.1	20	5.40	1.60
							99.7	133.2	30.5	100	3.10	1.00
							96.6	261.2	164.6	540	1.40	0.46
							4.6	300.8	295.7	970	0.81	0.28
DDH 96-68	10092	9935		100	-75	362.7	105.8	108.8	3.	10	3.00	0.80
							71.6	108.8	36.6	120	1.10	0.31
									246.9	810	0.60	0.15
DDH 96-69	10092	9935		100	-48	149.4			3.	10	2.40	1.40
							55.8	75.3	18.3	60	0.60	
DDH 96-70	10095	9965		95	-48	120.4	23.5	26.5	3.	10	1.10	3.30
							57.	75.3	18.3	60	0.43	
DDH 96-71	10095	9965		95	-75	335.3	206.3	209.4	3.	10	4.30	1.80
							194.2	209.4	15.2	50	3.30	1.00
							118.	246.9	128.	420	0.98	0.30
							0.	246.9	246.9	810	0.74	0.20
DDH 96-72	10095	9960		272	-60	350.5			3.	10	0.50	0.40
							Total Drill Meterage =				14684.2	
							Average hole length =				253.2	

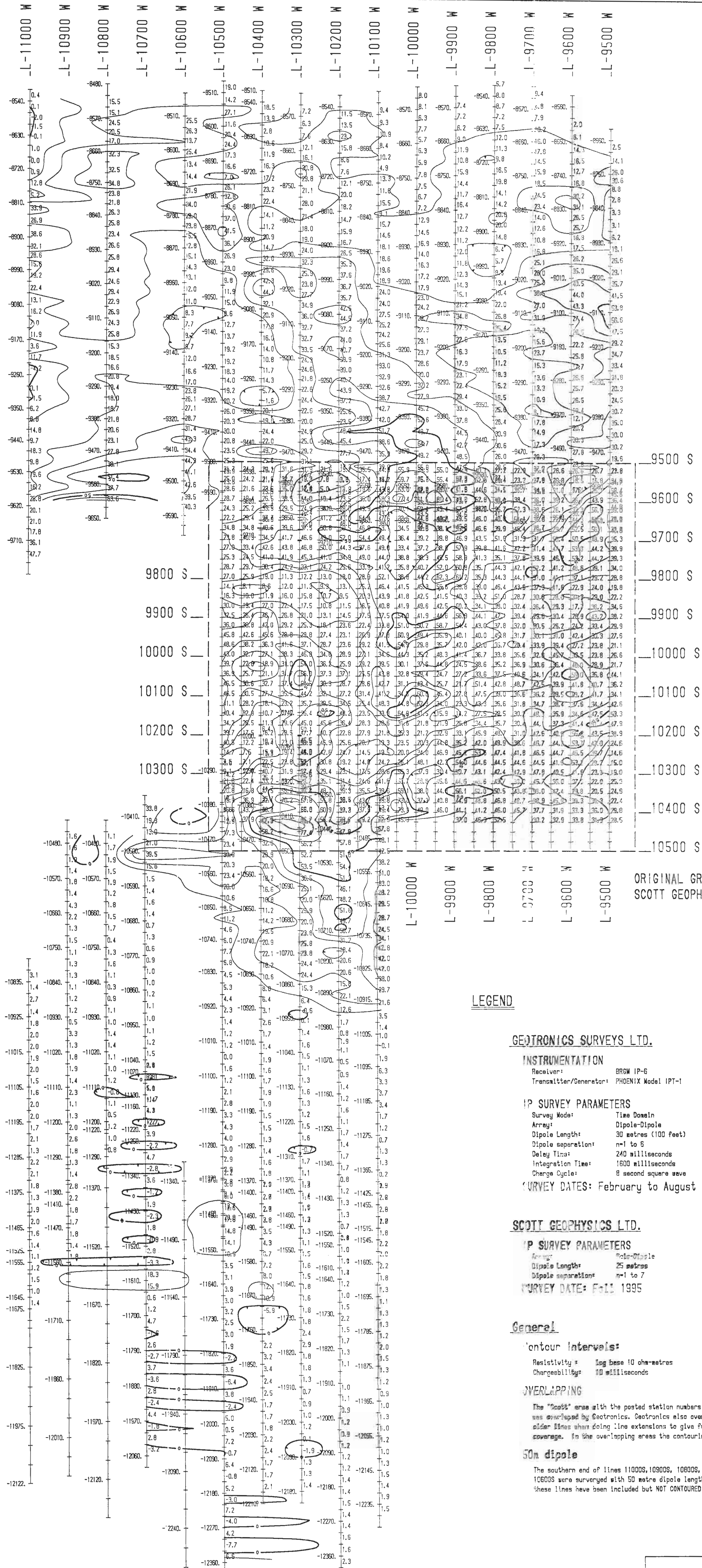












ORIGINAL GRID by  
SCOTT GEOPHYSICS LTD.

**LEGEND**

**GEOTRONICS SURVEYS LTD.**

**INSTRUMENTATION**  
Receiver: BRGM IP-6  
Transmitter/Generator: PHOENIX Model IPT-1

**IP SURVEY PARAMETERS**  
Survey Mode: Time Domain  
Array: Dipole-Dipole  
Dipole Length: 30 metres (100 feet)  
Dipole separation: n=1 to 6  
Delay Time: 240 milliseconds  
Integration Time: 1600 milliseconds  
Charge Cycle: 8 second square wave

**SURVEY DATES:** February to August 1996

**SCOTT GEOPHYSICS LTD.**

**IP SURVEY PARAMETERS**  
Array: Pole-Dipole  
Dipole Length: 25 metres  
Dipole separation: n=1 to 7  
**SURVEY DATE:** Fall 1995

**General**

**Contour intervals:**  
Resistivity: Log base 10 ohm-metres  
Chargeability: 50 milliseconds

**OVERLAPPING**

The "Scott" area with the posted station numbers was overlapped by Geotronics. Geotronics also overlapped older lines when doing line extensions to give full depth coverage. In the overlapping areas the contouring was averaged.

**50m dipole**

The southern end of lines 11000S, 10900S, 10800S, and 10600S were surveyed with 50 metre dipole length. These lines have been included but NOT CONTOURED.



GEOTRONICS SURVEYS LTD.  
VANCOUVER B.C.



GEOTRONICS SURVEYS LTD.				
BOOKER GOLD EXPLORATIONS LTD				
HEARNE HILL PROPERTY				
Babine Lake Area				
Omineca Mining Division, B.C.				
APPARENT CHARGEABILITY (IP)				
SURVEY PLAN - LEVEL ONE				
Drawn by:	Job No.	NTS	Date	Map No.
RTM	96/6	93M/1	Dec. 96	GP-34



