## **GARY C. LEE, P.ENG.**

# TRENCHING, PROSPECTING, GEOPHYSICAL SURVEYS ON THE TALLY HO PROPERTY, WHEATON RIVER DISTRICT, SOUTHERN YUKON TERRITORY

Carmen C. Lee, B.Sc.

#### **QUARTZ CLAIMS**

DICKSON 1-4	' YB55291 - YB55294
DICKSON 5-6	YB57666 - YB57667
DICKSON 7-10	YB57668 - YB57671
DICKSON 11-15	YB66294 - YB66298
DRAFT 1-5	YB66299 - YB66303
DRAFT 6-11	YB96001 - YB96006
DRAFT 12-39	YB96264 - YB96291
DRAFT 40-69	YC08125 - YC08154
TEMPUS FUGIT 1-4	YB46407 - YB46410
TEMPUS FUGIT 6-16	YB46411 - YB46423

YMIP No.: 97-006

Work performed: August 13 - October 24, 1997

Mining District: Whitehorse

NTS: 105 D/3

Location: 60°14'N 134°39'W

Date: February 3, 1998

#### **SUMMARY**

Prospecting, line cutting, blasting, trenching and geophysical surveys were conducted on the Tally Ho Property in the Wheaton River district between August 13 and October 24, 1997. A total of 28 short trenches and pits were excavated with a John Deere JD-450 CAT/backhoe and HLEM surveys were conducted over a grid covering the Carmen's Drift and No Man's Land showings. Prospecting and sampling was performed over most of the northern portion of the property as well. The work identified a new high grade gold vein 400 m ESE of the No Man's Land showing and determined that all of the showings identified to date are of restricted strike length. The results of this and previous work have identified a zone containing a number of N and E striking mesothermal quartz veins carrying gold over a length of approximately 5 km extending from Mt. Stevens to Tally Ho Gulch. This zone is adjacent to the axis of the Llewellyn Fault and appears to represent a regional scale trend controlling the emplacement of mesothermal quartz veins in this portion of the district. Recommendations for an airborne resistivity survey and limited drilling program to test this zone at depth are included

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#### 1.0 Introduction

This report describes geophysical and geological surveys, prospecting and trenching conducted on the Tally Ho Property during June to November 1997. The surveys were conducted to locate quartz-carbonate veins hosting auriferous ore shoots.

### 2.0 Property

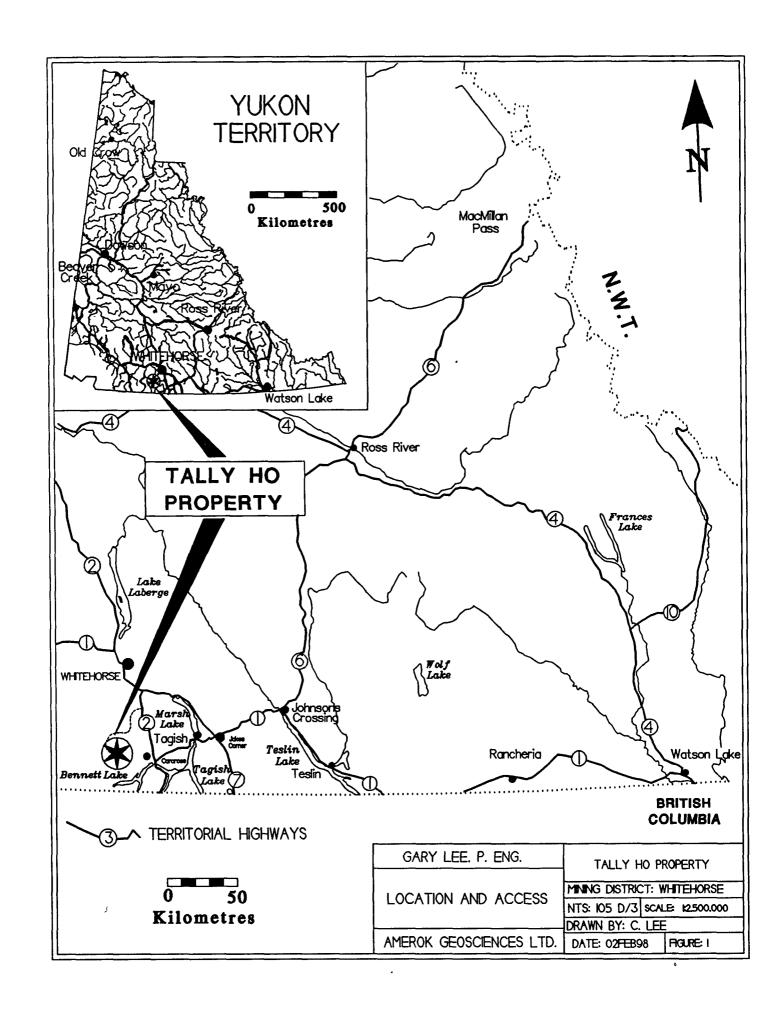
The Tally Ho Property consists of the following mineral claims staked under the Yukon Quartz Mining Act (Figure 2):

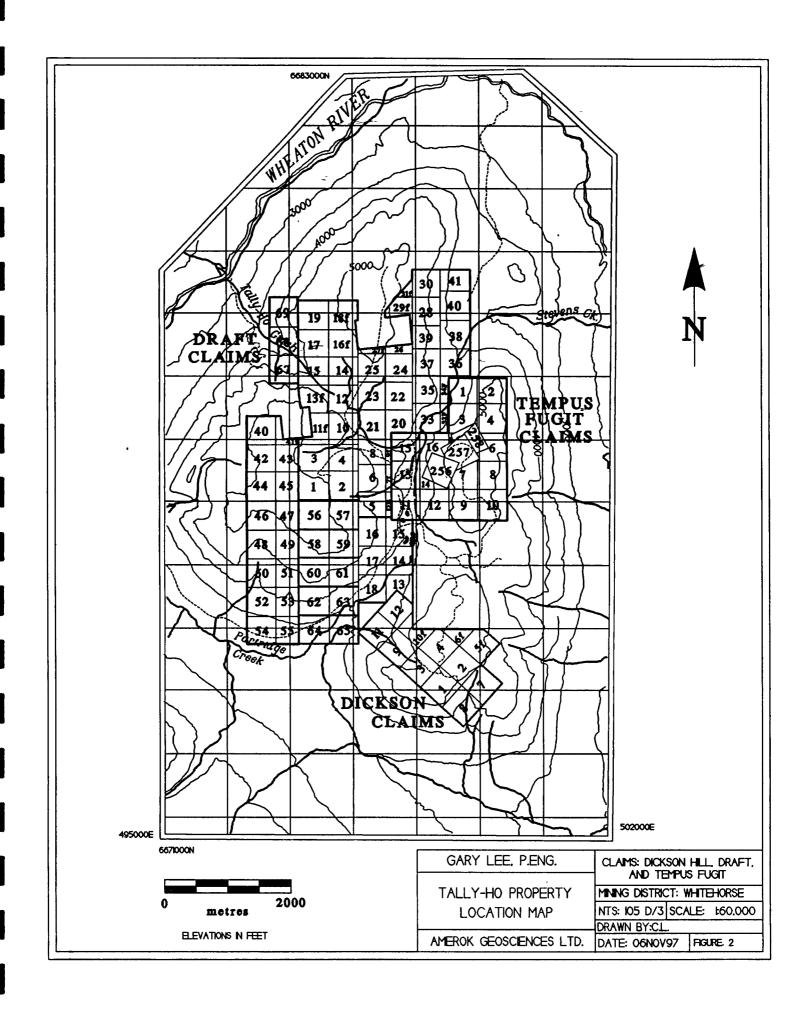
Claim name	Record number
DICKSON 1-4	YB55291-YB55294
DICKSON 5-6	YB57666-YB57667
DICKSON 7-10	YB57668-YB57671
DICKSON 11-15	YB66294-YB66298
DRAFT 1-5	YB66299-YB66303
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DRAFT 12-39	YB96264-YB96291
DRAFT 40-69	YC08125-YC08154
TEMPUS FUGIT 1-4	YB46407-YB46410
TEMPUS FUGIT 6-16	YB46411-YB46423

The claims are held by Gary Lee (50%) and Mike Power (50%), both of Whitehorse, Yukon.

#### 3.0 Location and access

The Tally Ho Property is located at 60°14 N 134°39' W, centered on Stevens Creek in the Wheaton River area, Whitehorse Mining District, Yukon Territory (Figure 1). The property is approximately 65 km from Whitehorse by air and 90 km by road. The route to the property is as follows:





Section	Distance (km)
Alaska Highway to Carcross Cutoff	20
Carcross Cutoff to Annie Lake Road	17
Annie Lake Road to Wheaton River Bridge	26
Wheaton River Bridge to Partridge Creek Roa	d 11
Partridge Creek Road to Property	16

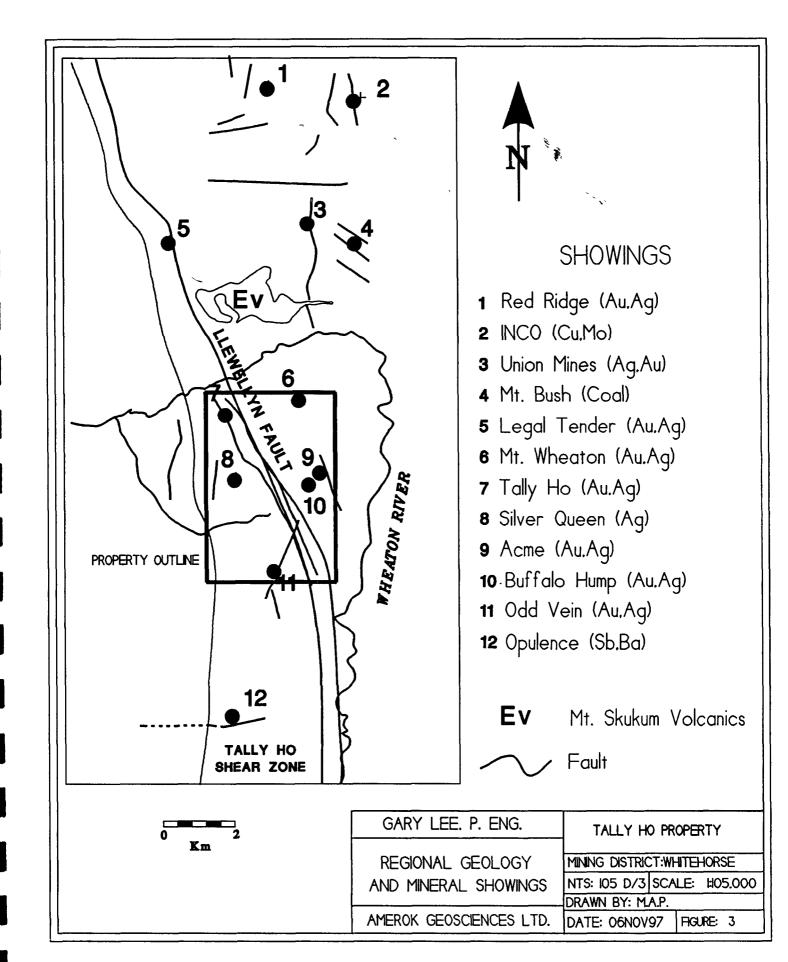
A four wheel drive vehicle is required on the Partridge Creek Road. During the winter months, the route is ploughed from Whitehorse to the Wheaton River Bridge.

## 4.0 Physiography

The Tally Ho Property is in the Boundary Ranges of the Coast Mountain Range. In this area, the topography is transitional between the rugged mountains of the Coast Range and the dissected uplands of the Yukon Plateau. The property is west of Mount Stevens, a rounded, north trending ridge on the west side of the Wheaton River valley. Elevations on the property range from 4300 feet at Stevens Creek on the west side of Mount Stevens to 5500 feet at the summit. The property is drained by Stevens Creek to the west and by the Wheaton River to the east with intermittent creeks found in gullies on the flanks of the mountain. Several small ponds located at the height of land between Stevens and Partridge creeks in the southwest corner of the property are suitable water sources for diamond drilling and small ponds occasionally develop near the summit of mount Stevens. Snow fields on the north facing slopes persist until the end of July and permafrost was encountered in trenches near the summit of the mountain. The property is above tree line with scrub willow and alder at lower elevations and grass and moss at higher elevations.

## 5.0 Regional Geology

The geology of the Wheaton River District is well documented by Doherty and Hart (1989) (see Figure 3). The region lies near the boundary between the Nisling Terrane and the Whitehorse Trough. The Nisling Terrane is a belt of metamorphic and intrusive rocks that includes the Coast Plutonic Complex and the Yukon Crystalline Terrane (Wheeler and McFeely, 1987). The Whitehorse trough is a relict fore-arc basin with clastic sediments derived from an uplifted core (LaBerge Group) being deposited over older andesitic volcanic rocks flooring the basin (Lewes River Volcanics) The Tally-Ho Shear Zone, west of the property, forms the boundary between the Whitehorse Trough and the Nisling Terrane. Following the mid-Jurassic amalgamation of the Nisling Terrane with the Whitehorse Trough, an overlap succession of clastic rocks was



Terrane with the Whitehorse Trough, an overlap succession of clastic rocks was deposited and the region was affected by a later episode of Eocene volcanism. During this latter event, high level alaskite and bimodal calc-alkaline felsic to intermediate volcanic rocks were emplaced throughout the Wheaton River District. The stratigraphy in the area of the Tally Ho Property is listed in Table I.

Table I. Stratigraphy - Tally Ho Property area

Age	Formation	Lithology
Early Eocene	Mount Skukum Complex	Felsic dykes, laccoliths or plugs; mostly aphanitic, porphyritic rhyolite
Late Cretaceous	Wheaton River Granodiorite	medium-grained, hornblende diorite, quartz diorite and lesser granodiorite; locally foliated
Late-Cretaceous	Wheaton River Volcanics	aphanitic and porphyritic andesite to dacite flows, heterolithic breccia, agglomerate and associated epiclastic rocks
Jurassic or Cretaceous	Millhaven Conglomerate	Polymictic conglomerate with minor sandstone, greywacke and shale.
Late Triassic	Lewes River Group	Coarse grained, variably altered augite porphyritic basalt and breccia commonly with coeval(?) hornblendite and its metamorphic equivalents.

Paleozoic and older (?)	Nisling Assemblage	Biotite-muscovite-quartz- feldspar schist, quartzite
		<u></u>

In the Mount Stevens area is underlain by Lewes River Group basic volcanics and their metamorphosed equivalents, overlain locally by the Millhaven Conglomerate and Wheaton River Volcanics and intruded by the Wheaton River Granodiorite. The property straddles the Llewellyn Fault on the east side of the Tally-Ho Shear Zone. Both the Llewellyn Fault and older Tally-Ho Shear Zone appear to exert strong control on the location of precious metal occurrences in northern BC and the southern Yukon (Hart and Radloff 1991, Mihalynuk and Mountjoy 1991). This is apparent in the distribution of showings north and south of the property. The Tally-Ho Shear Zone is a deep crustal structure extending from Lake Bennett 40 km north to the Mount McIntyre area. Near the Buffalo Hump Property, the zone is up to 4 km wide, strikes 145°, and dips 40° to 70° to the southwest. Early ductile deformation resulted in development of a penetrative fabric as the entrained rocks were metamorphosed to green schist facies. During a later (Late Cretaceous - Early Tertiary) stage of brittle deformation, quartz veins developed in extensional fractures. Later Eocene deformation resulted from doming and subsequent crustal collapse in the Bennett Lake Caldera Complex.

The property area hosts a number of significant precious metal occurrences. Hart and Radloff (1991) subdivided these showings into the following four types:

- a. Magmatic veins (Mount Wheaton)
- b. Metamorphic veins (Odd Vein)
- c. Mesothermal veins (Mount Stevens, Tally-Ho, Legal Tender)
- d. High Level Quartz-rich Epithermal veins (Silver Queen)

The sole example of a magmatic vein in the Wheaton River district is the occurrence on Mt. Wheaton. This consists of a quartz stockwork in silicified Wheaton River volcanics adjacent to its contact with a late Cretaceous intrusion. Approximately equal concentrations of gold and silver are found in thin white quartz veins with a few percent galena and chalcopyrite.

Metamorphic veins are composed of white to grey waxy quartz with disseminated chalcopyrite and lesser galena. These veins are concordant with little adjacent wall rock alteration indicating that they are probably the result of metamorphic dehydration

accompanying the development of the Tally Ho Shear Zone. The high concentration of copper in the veins is probably derived from the basic Lewes River Volcanics. The Odd vein on Dickson Hill is the only metamorphic vein mapped in the area.

Most of the veins in the Mount Stevens area are galena-rich mesothermal quartz sulphide veins. These include the showings on Mount Stevens proper (Acme, Buffalo Hump, Midnight) as well as others to the south and north (Tally-Ho, Legal Tender, Mount Anderson). The majority of these veins dip steeply and trend northwest. The veins consist of massive coarse grained quartz with thin bands or pods of sulphides up to 40 cm thick. On Mount Stevens, massive galena with pyrite, chalcopyrite, and occasional visible gold occurs in pods 5 - 50 cm thick. Tellurides have also been reported in these veins (MacLean 1914).

High level epithermal mineralization in the area of the property consists of brecciated quartz-chalcedony veins with accessory fluorite, clay alteration and rare fine grain pyrite. Gold mineralization occurs at and below a boiling zone level controlled largely by paleotopography. The Silver Queen showing on the property is the sole example of this type of mineralization.

## 6.0 Property History

Mining exploration in the Mt. Wheaton district began in the 1890's with the arrival of prospectors from the Alaska panhandle. Mining near Juneau attracted many prospectors and small miners and provided them an opportunity to earn a grubstake through winter employment in the mines. A number of these individuals began to move north and found the first hardrock and placer occurrences in the southern Yukon. Frank Corwin and Thomas Rickman were the first recorded prospectors in the region; they reportedly staked ground on Carbon Hill, Chieftain Hill and Idaho Mountain before returning to Juneau with high-grade gold samples. Probably because of uncertainties related to mineral tenure, they died without disclosing the location of their claims. Another prospector, Thomas Kerwin, reportedly staked near Idaho Hill in 1893 and returned with high grade gold samples; he too refused to disclose his claim location. During the Klondike Gold Rush, several occurrences were staked and recorded in Dawson but the first big rush to the area occurred in 1906 with the discovery of high grade gold at Tally Ho and Mt. Anderson. Both of these properties became small producers and numerous other showings were staked and explored. Activity in the area declined to a virtual standstill by the 1950's and the area remained dormant until the discovery of a bonanza epithermal gold-silver deposit at Mt. Skukum in the early 1980's. The district was restaked and extensively explored through the late 1980's. With the recission of favourable tax incentives for mineral exploration in 1989 and a decline in the gold price, exploration activity in the area has once again declined.

Exploration at Mt. Stevens and Tally Ho Mountain dates from 1906. The Tally Ho Mine (Minfile 105D 30) was staked by C.I. Burnside, C.J. Irvine and L. Belney (The Tally Ho Boys). The deposit was accessed via two adits at the 3950 and 4000 foot levels. At the 4200' level, development consisted of 700 feet of drifting and cross cuts and several short (50-75 ft) raises. Approximately 450 ft of adit and 150 ft of crosscut is found at the 3950 ft level. A number of hand sorted shipments were made to the Tacoma Smelter; records for a 1916 shipment record 14.6 T grading 2.34 OPT Au and 5.1 OPT Ag. Ore was originally transported to Millhaven Bay via a pack trail and later to the White Pass Railway via the Annie Lake Road. The latter was originally constructed solely to service mining claims in the Wheaton and has now been taken over by residential users in the Watson River valley. Additional development occurred on neighbouring Mt. Stevens and Mt. Wheaton showings during the same period in which Tally Ho was active. The Mt. Wheaton showing was high graded by Academy Resources in 1989, yielding a small shipment of ore. The showings on Mt. Stevens were staked in 1906 and worked repeatedly until 1940. Several collapsed adits are visible on the property and rehabilitation of one in 1997 revealed a small stope from which approximately 150 T of ore had been extracted. MacLean (1912) reports additional production from open cuts on the summit of Mt. Stevens. An elaborate horse trail, several cabins in the Wheaton River valley at the foot of the trail and the remains of a camp at the base of Mt. Stevens also attest to a significant effort on this property. Inactive since the 1940's, most of the ground in the current Tally Ho Property was assembled by Tally Ho Exploration Company Ltd. in the 1980's and explored from 1984 to 1989. Following the collapse of flow-through financing, the properties were dormant and restaked upon lapsing by the current owners.

Exploration at Dickson Hill in the southern portion of the property is also documented in the Yukon Minfile (Occurrence 105D 168). The vein was staked by Du Pont in June 1981 following a regional geochemical reconnaissance program. They performed limited geochemical sampling and mapping. Agip Canada Ltd. restaked the property in October 1983 and performed mapping, geochemical and geophysical surveys before entering into a joint venture with Shakwak Exploration Company Ltd. They trenched, drilled 4 holes and conducted geochemical and VLF surveys. Comaplex restaked the showing in 1990 and performed Maxmin and magnetometer surveys. Exploration to date turned up two mesothermal quartz veins hosting gold with tetrahedrite in Lewes River Group andesites. The southern vein on the Dickson 1-2 claims returned values of 46.3 g/t Au and 19.9 g/t Ag over 1.4 m while the northern vein returned values of 6.2 g/t over 2.5 cm in stringers.

## 7.0 Property geology

The Tally Ho Property is underlain by sheared Lewes River Group and Cretaceous

volcanic and intrusive rocks (Figure 4). The mean structural trend of both contacts and regional faults trends NW-SE.

The southern portion of the property is underlain by shear and highly metamorphosed Lewes River Group volcanics and ultramafic intrusive rocks. On Dickson Hill these rocks consist of massive to foliated dark green-grey mafic to intermediate metavolcanics. Metamorphosed pyroxenite, dunite and leucogabbro occurs in as a distinctive unit within the metavolcanic rocks.

Cretaceous quartz diorite, granodiorite and granite occurs to the north, in fault contact with the Lewes River Group. On Mt. Stevens, these rocks consist primarily of massive to locally foliated, speckled white and light grey weathering light grey, medium to coarse grained granodiorite. Disseminated pyrite and quartz flooding was noted locally throughout this unit approximately 200 m NW of the summit of Mt. Stevens.

To the north of the intrusive rocks are andesites and dacites of the Wheaton River Volcanics. Pink to light grey NW trending rhyolite dykes occur on Mt. Stevens and on Tally Ho Mountain; these appear to be feeders to this same unit.

Units in the Lewes River Group trend roughly N50W and dip predominantly to the SW. All rock units on the property are cut by NW trending steeply dipping strike slip faults of uncertain displacement. Faulting is pervasive on the property and only the most significant faults are shown in Figure 4. These faults are components of the Llewellyn Fault which appears to be a wide zone of brittle deformation on the property. The main axis of the Llewellyn Fault appears to run from the saddle between Mt. Stevens and Dickson Hill northwest to Tally Ho Gulch.

Four significant showings are found on the property. These include the showings on Mt. Stevens (Buffalo Hump and Sunrise), the Odd Vein on Dickson Hill, Carmen's Drift and the Silver Queen showing. These are discussed in turn.

## 7.1 Buffalo Hump and Sunrise Showings

The Buffalo Hump and Sunrise showings consist of auriferous and argentiferous quartz veins carrying disseminated to locally massive galena and pyrite. The Buffalo Hump showing consists of a steeply dipping, north striking quartz vein from 0.5 to 3 m wide. The vein occurs approximately 200 m NW of the summit of Mt. Stevens in blocky talus and has been traced on surface and underground over a distance in the order of 50 m. Underground development consists of 2 cross cuts and a stope from which approximately 100 T of material has been removed. A sample from the back of the stope collected during underground rehabilitation in 1997 returned 2.369 OPT Au and 55 OPT Ag. Samples with similar grades were taken from the muck pile at the mouth

of the southern cross cut.

#### 7.2 Odd Vein

The showing on Dickson Hill (Odd Vein) consists of a wide, apparently folded massive milky white to light grey quartz stained with malachite and rare azurite. The main showing is at the Dickson 1-4 post cluster. The vein is steeply dipping and appears to strike roughly north and is open folded about a NW trending axis. Rocks surrounding the vein consist of highly sheared metavolcanics. Pervasive epidote, limonite and calcite occur within several metres of the vein. The best assay returned from surface sampling in 1995 consisted of 0.194 OPT Au and 1.42 OPT Ag from a sample described as greenish white quartz containing 10% pyrite in anhedral crystals. Chalcopyrite was noted in other samples and appears to account for the malachite staining noted along fractures in the axis of the folded vein. The vein was drilled by Shakwak Exploration Company Ltd. in 1985 and returned 19.9 g/t over 1.4 m. This vein is unusual for the district in that it appears to be a metamorphic vein.

#### 7.3 Carmen's Drift

Carmen's Drift is an inclined shaft and dump with several nearby blast trenches located on Draft 25 in the northern portion of the property. The area is covered by overburden with the exception of the area near the workings. It appears that the showing was explored during the 1930's from the age and type of debris found at the site. The vein consists of massive white quartz up to 1.5 m wide with locally disseminated to (rare) massive galena and lesser pyrite. Best assays returned from this site were 0.213 OPT Au and 3.0 OPT Ag from selected specimens. Trenching during 1997 failed to find an extension of this vein on strike.

Additional showings are found south of Carmen's Drift. No Man's Land is approximately 600 m south of Carmen's Drift and returned 0.059 OPT Au from a weakly mineralized sample. A second quartz vein was discovered 400 m ESE of No Man's Land and returned geochemical gold values in excess of 7,000 ppm and silver in excess of 10000 ppm from a selected specimen. The vein was traced a short distance with trenching in 1997 and work abandoned when it did not appear to continue along strike.

#### 7.4 Silver Queen

The Silver Queen showing consists of massive argentiferous galena, argentite and chalcopyrite associated with a rhyolite dike near the Draft 1-4 post cluster (common boundary). The showing appears to be of limited strike extent as defined by both

geophysical surveys and drilling. Best assays from surface samples returned 3620 g/t Ag with negligible gold values.

In addition to these showings, a zone of silicified limestone occurs approximately 200 m NW of the Silver Queen showing (Sinter Zone). Float samples from this zone returned anomalous gold values up to 48 ppb.

## 8.0 Geophysical surveys

Horizontal loop electromagnetic (HLEM) surveys were conducted over Carmen's Drift and the Sinter Zone grids to delineate veins and faults in this area. Survey grids consisting of half-length pickets were cut prior to the survey and referenced to the overall property grid with origin (5000E, 5000N) on Mt. Stevens. The grid was straight chained (not slope corrected) to facilitate HLEM terrain corrections.

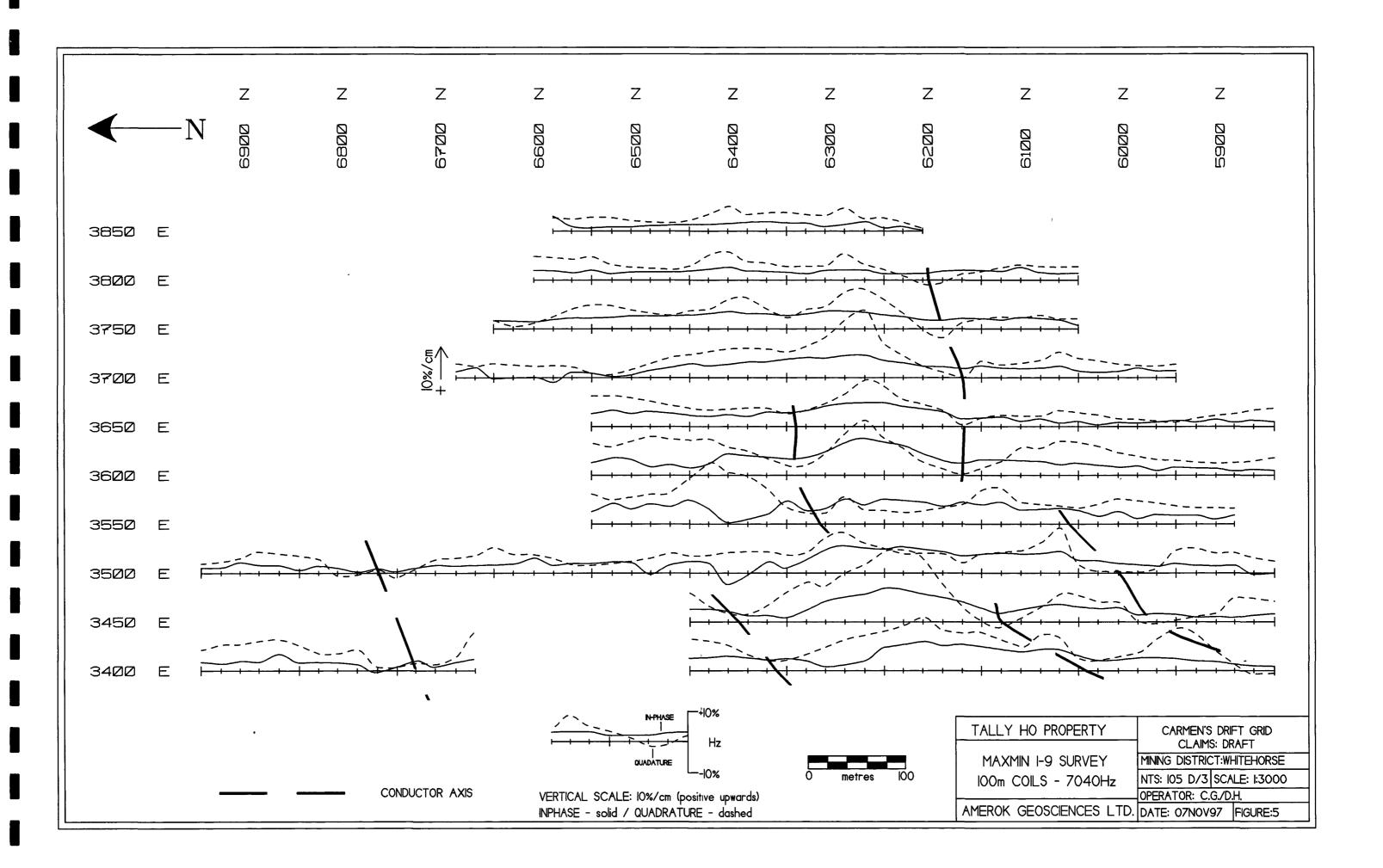
HLEM surveys were conducted with an Apex Parametric MaxMin I-10 equipped with an MMC data computer and 50, 100 and 150 m cables. A first pass over the grid was made using a 100 m coil spacing and measuring 7040, 14,080 and 28,160 Hz at a 25 m station spacing. Detail surveys were conducted over certain areas using a 50 m coil spacing and 14,080, 28,160 and 56,320 Hz reading at a 12.5 m station spacing. Corrections for terrain effect were made by having the operators record station-to-station slope, tight chain their relative separation using marks on the reference cable and numerically correcting the data during data processing.

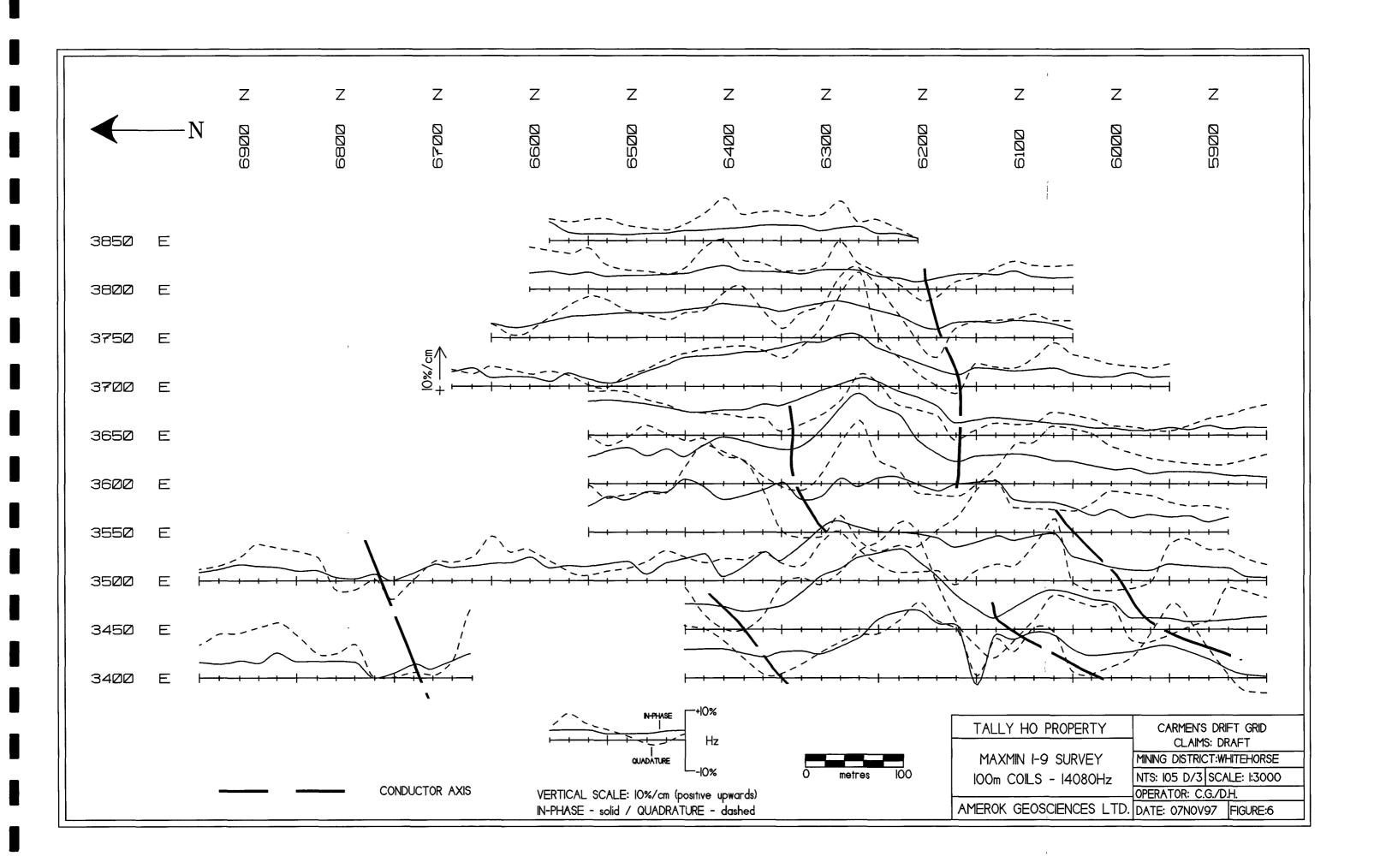
The data is plotted in Figures 5 to 13. In-phase (solid) and quadrature (dashed) components of the secondary field are stack plotted together with conductor axes (thick dashed lines). The anomaly expected from moderate to steeply dipping veins consists of a negative quadrature and/or in-phase response with flanking positive responses separated by the coil spacing. The peak negative response defines the axis of the conductor.

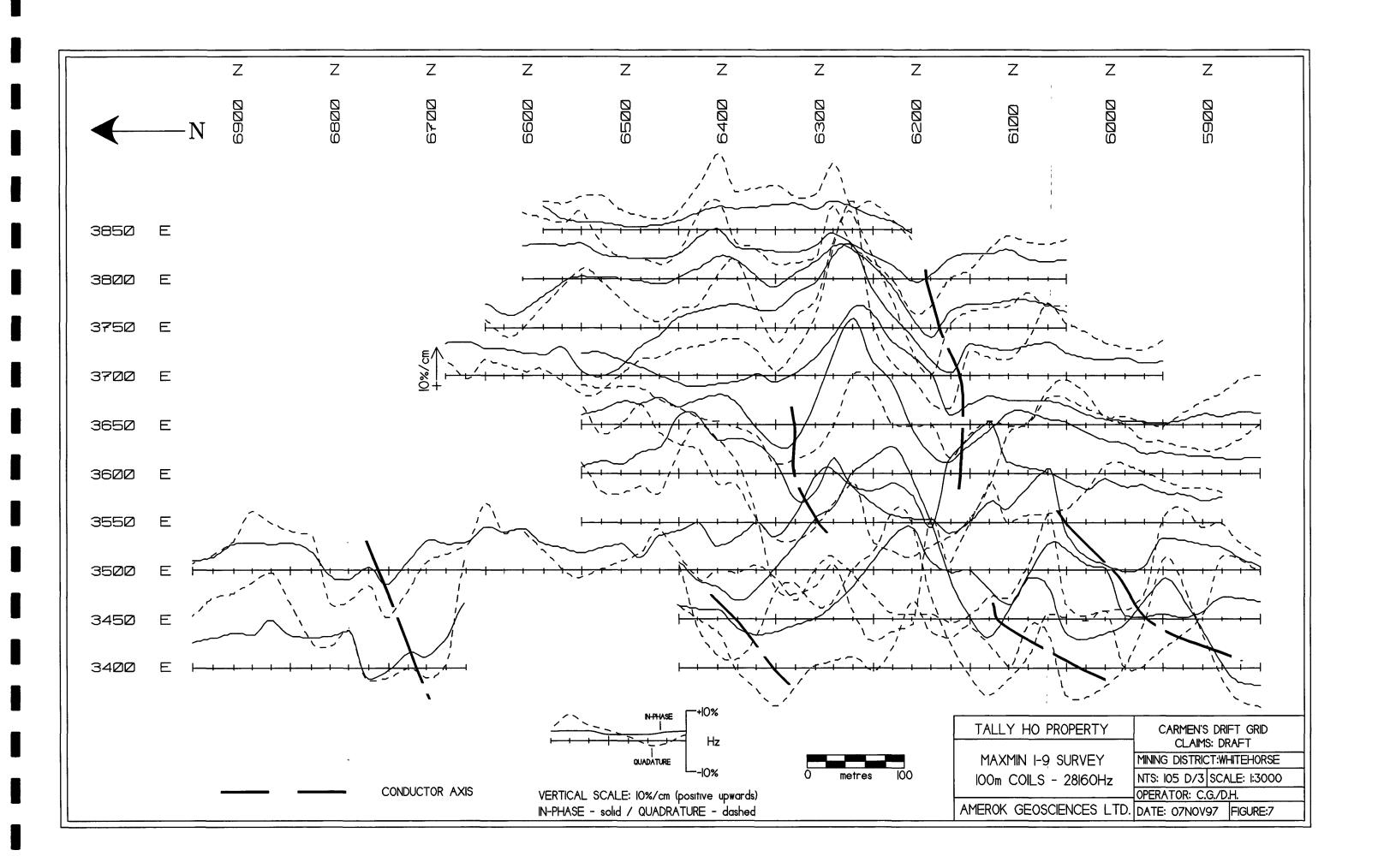
Anomalous quadrature responses defined a number of conductors with strikes generally conformable to those of mineralized quartz veins in the area.

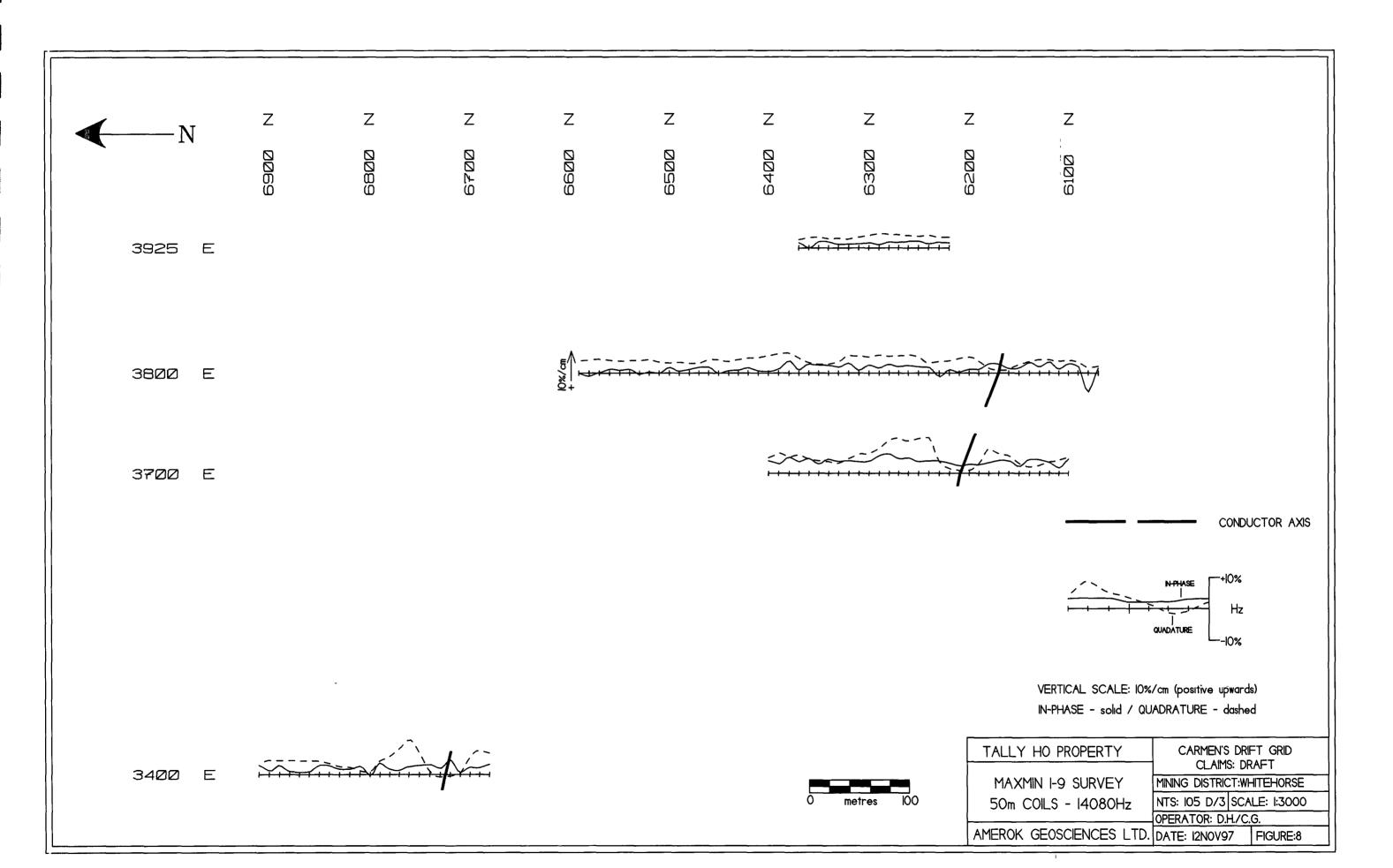
# 9.0 Trenching and sampling

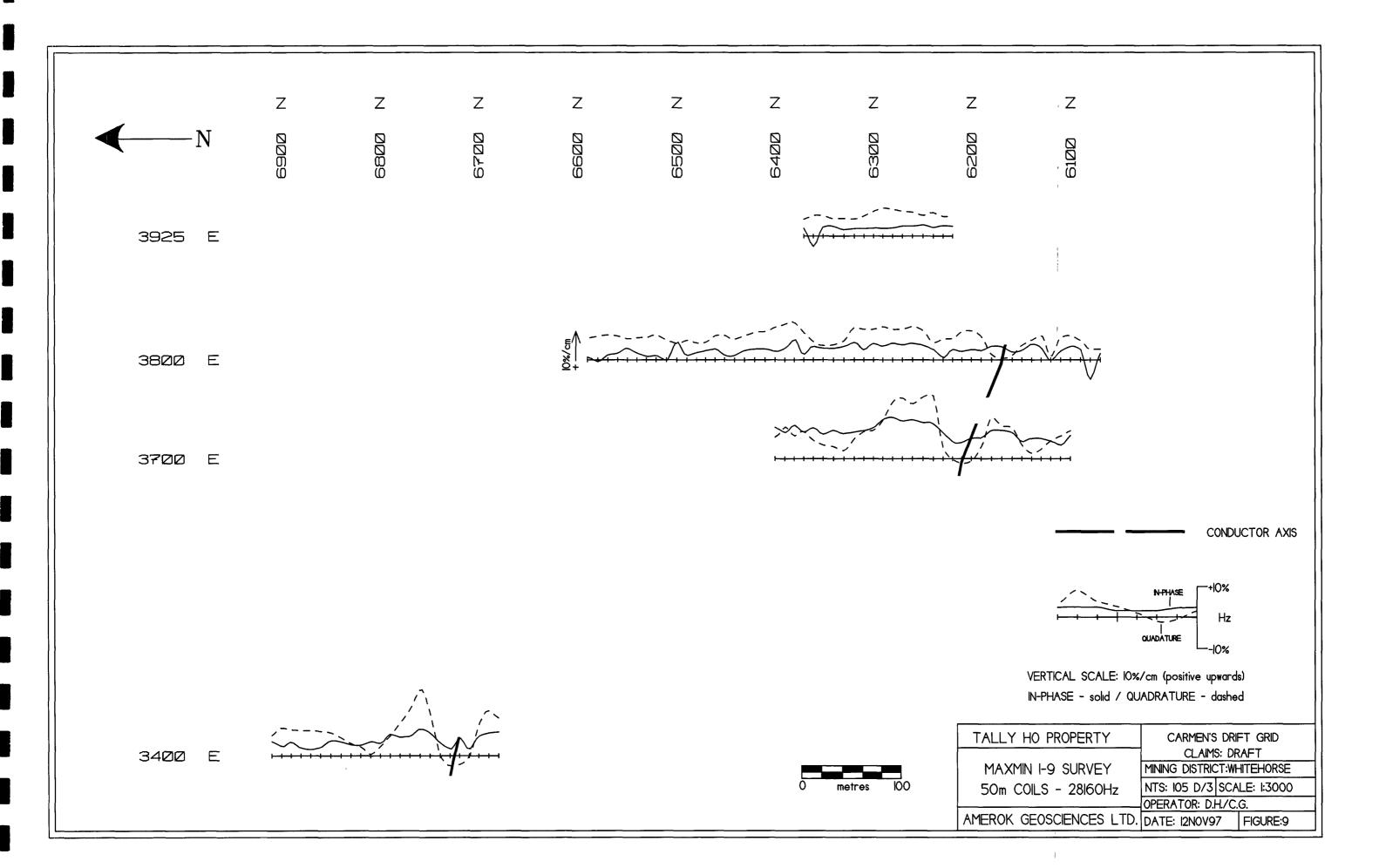
Trenching was conducted on the property with a John Deere JD-450 bulldozer / backhoe. The work was conducted by Gary Lee between August 18 and September 13, 1997 and between October 20 and 23, 1997. A total of 28 test pits and short trenches were excavated at Carmen's Drift, No Man's Land and at several showings in the vicinity. The trenches and pits were excavated solely to follow mineralized quartz

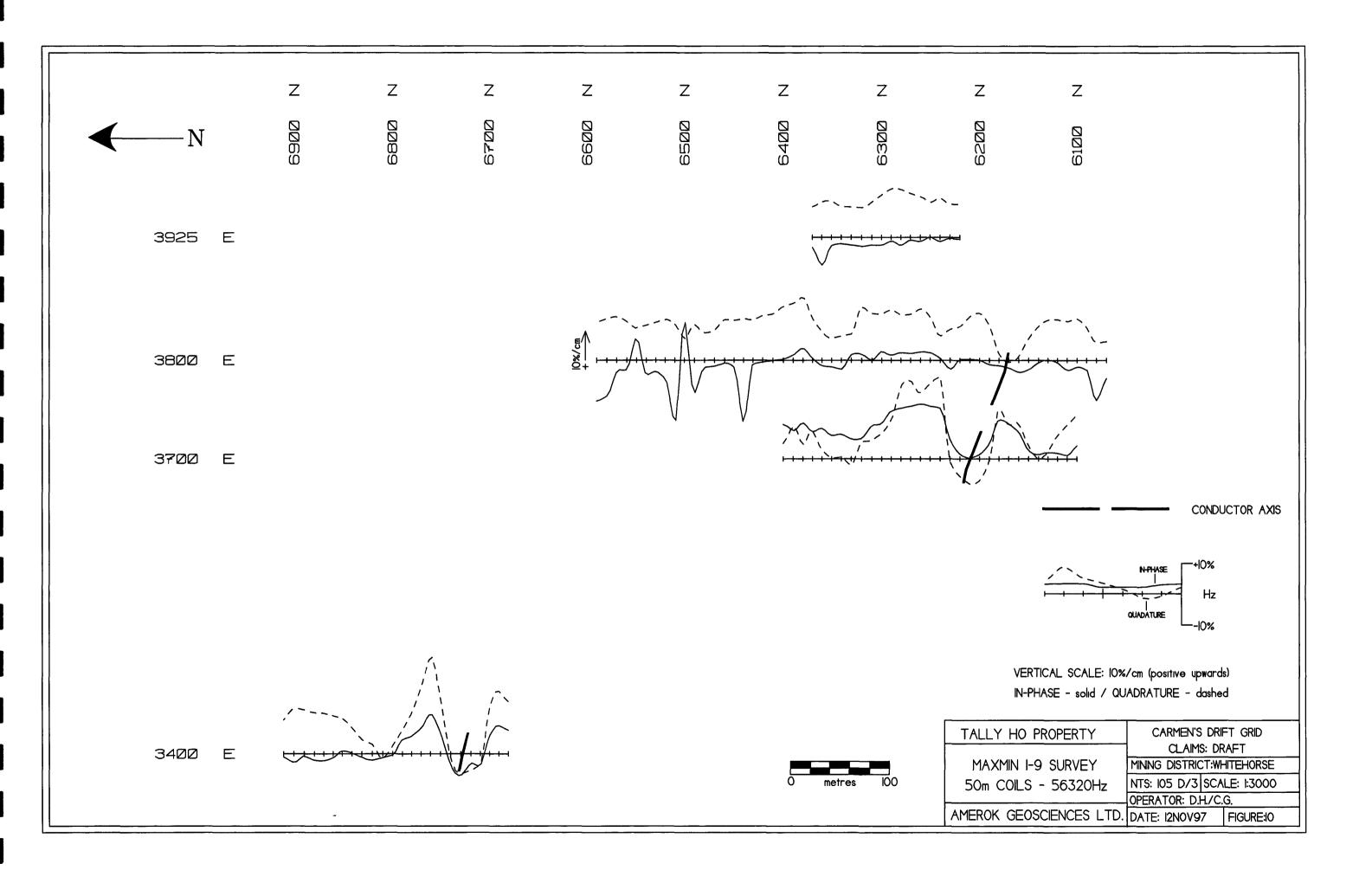


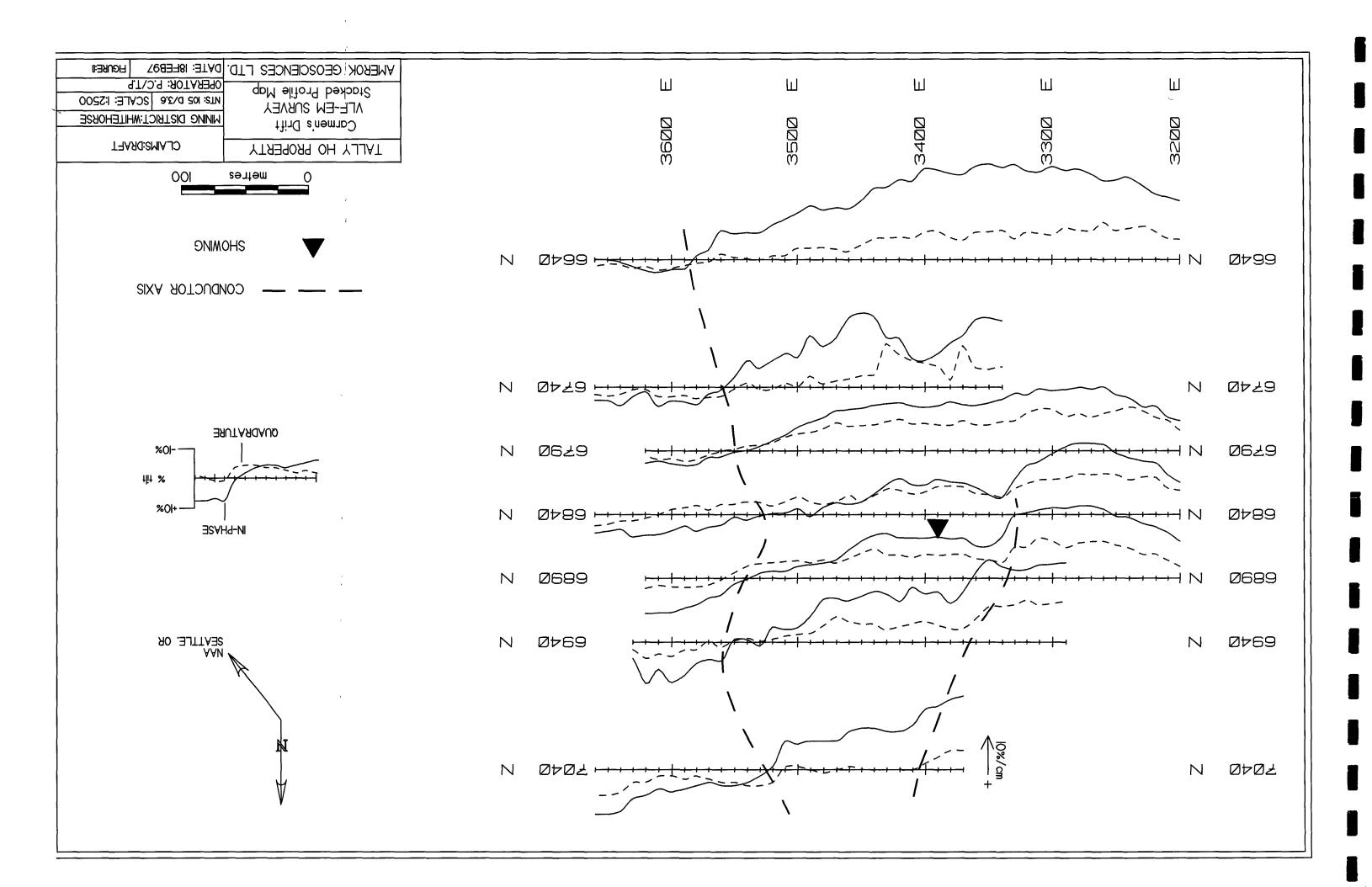


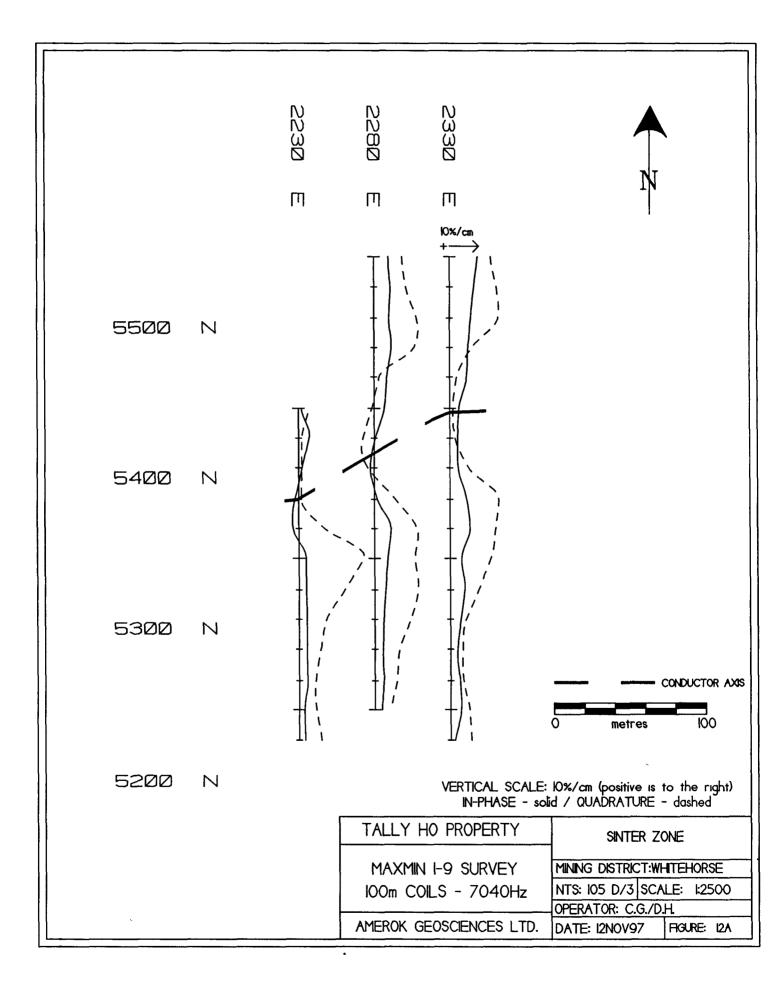


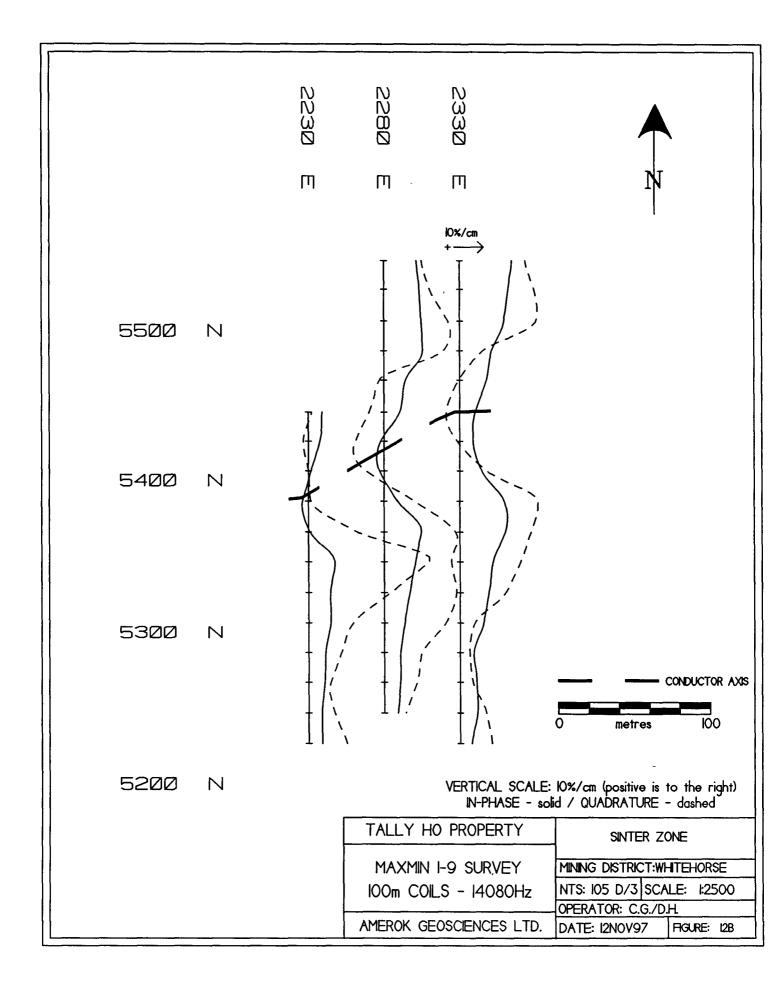


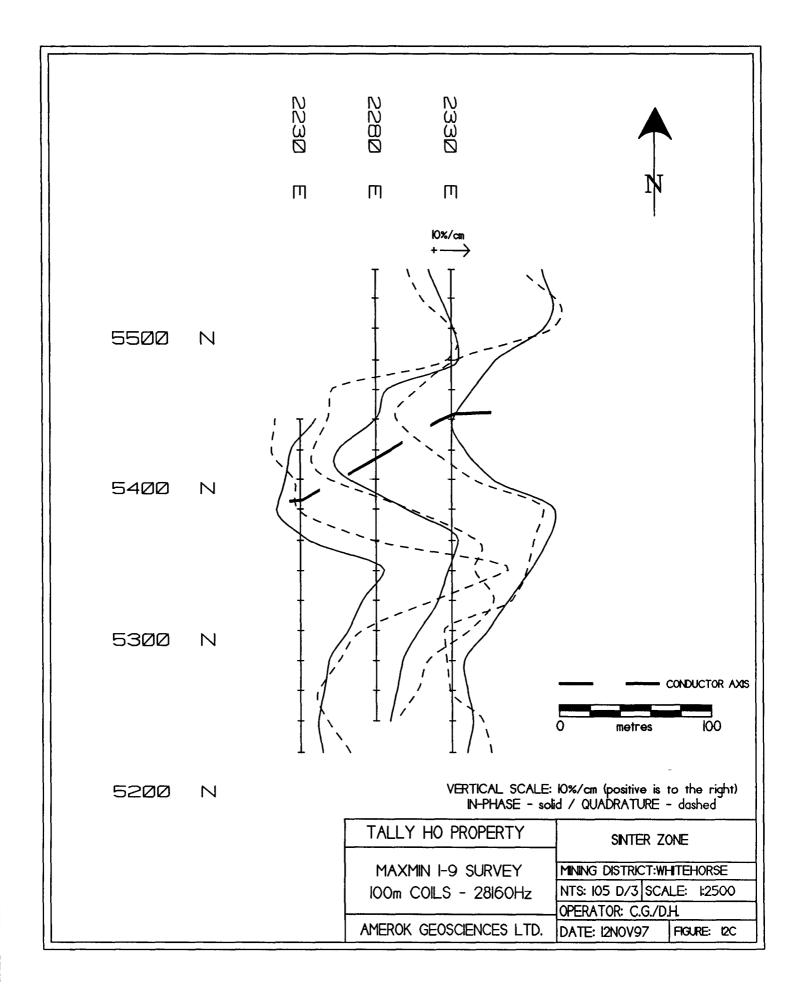


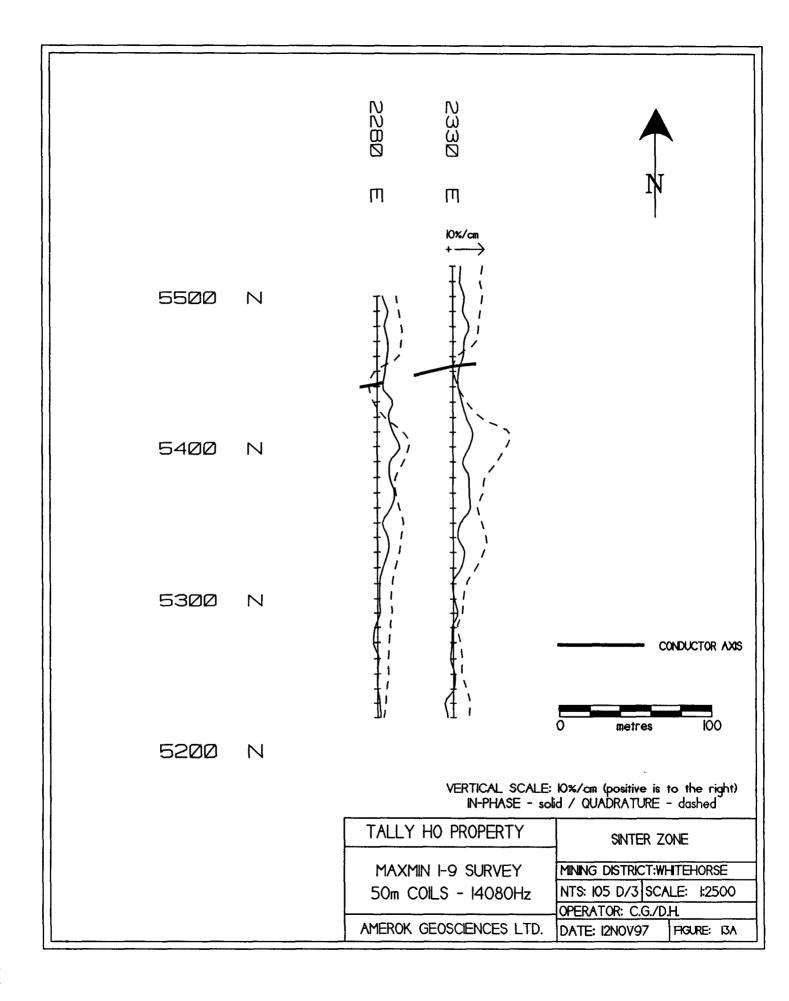


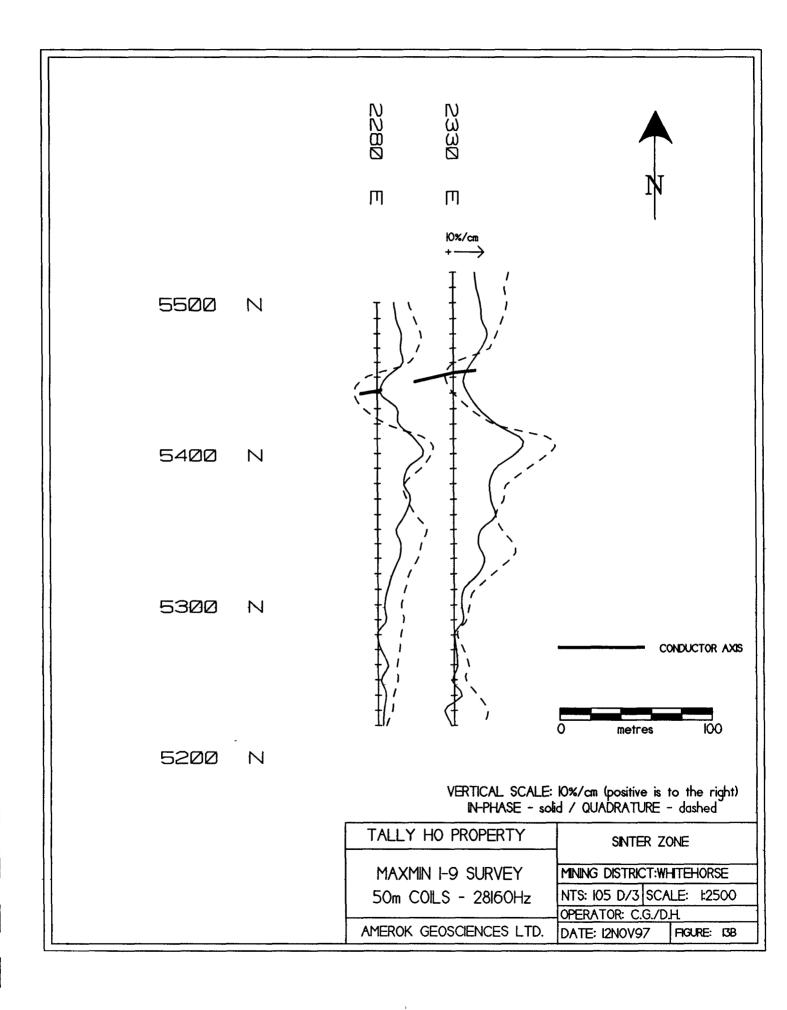


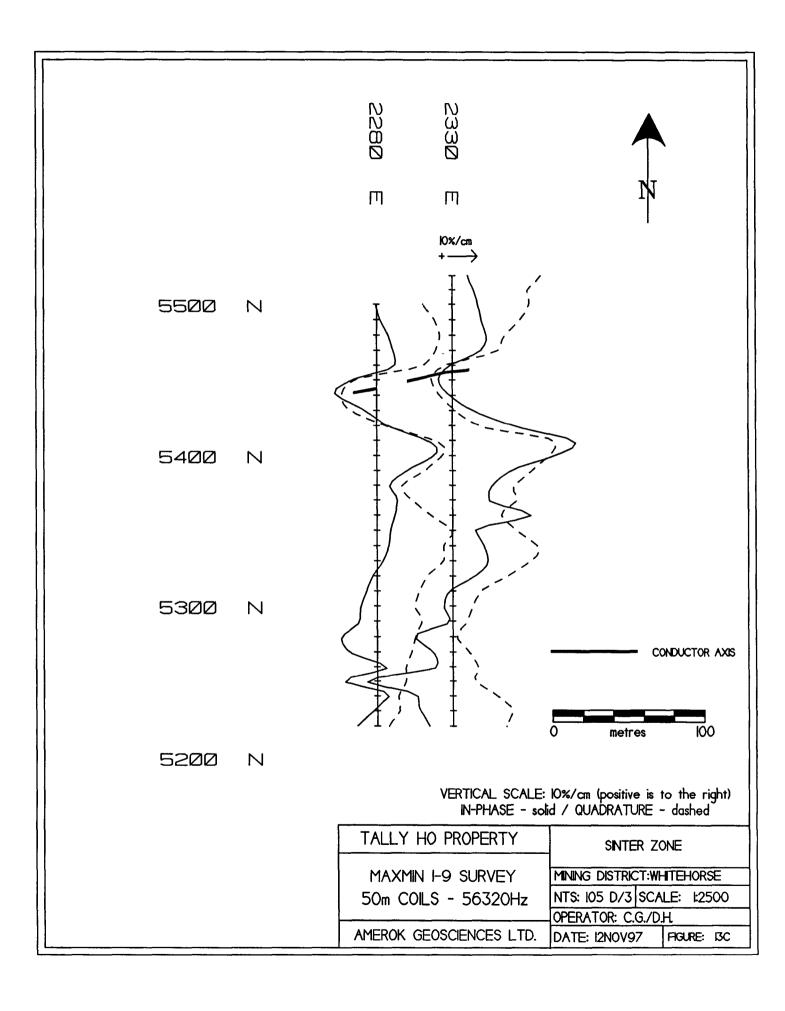












veins and samples were taken only when quartz veins were encountered. Two trenches were long enough to merit geological mapping; trench logs are shown below:

Trench 97-1

Location: L3800E

STATION	LITHOLOGY
6165N	granodiorite; heavily sheared light tan/brown to orange, contains ~30% amphiboles, 5-10% biotite, 40% quartz, 20% feldspar; all crystals are subhedral to euhedral; no visible mineralization.
6170N	granodiorite; sheared, blocky, jointed, fractured with minor clay gauge; overall darker green than above.
6175N	granodiorite; sheared with dark brown clay gauge; amount of gauge and shearing increasing.
6180N	granodiorite; strongly sheared with orange clay gauge; no visible mineralization.
6187N	granodiorite; blocky and jointed; clay gauge present between angular clasts of granodiorite.
6190N	same as above

Trench 97-2

Location: L3920E

STATION	LITHOLOGY	
6311N	granodiorite; fresh with some jointing and gauge within joints.	

6315N	granodiorite; jointed and fractured; gauging within strongly fractured zones; overall "baked" appearance with abundant anhedral crystals.
6318N	quartz-calcite vein; pinching and swelling from .13m; strike/dip 087°/42°; trace pyrite
6320N	granodiorite; fresh with minor gauge; ~55-70% mafics, 5% quartz, 25% feldspar; crystals subhedral.
6322N	granodiorite; altered, strong jointing and fracturing; trace pyrite; trace quartz/carbonate veinlets.
6325N	granodiorite; weakly altered; <1-2% euhedral pyrite; minor clay gauge.
6328N	granodiorite; narrow (5-10cm) zone moderately altered with small concentrations of pyrite.
6330N	granodiorite; weak to moderately altered; .8m wide shear zone with orange clay gauge; less pyrite.
6332N	minor shear zone (.2m wide) with orange clay gauge.
6335N	granodiorite; fresh; no pyrite present.
6337N	granodiorite; strongly jointed; moderate to strong alteration; dark green; trace pyrite; trace quartz-calcite stringers.
6339N	shear zone (.7m wide); strong gauging with remnant angular granodiorite clasts; no mineralization.
6341N	granodiorite; moderately altered; dark green; no mineralization present.

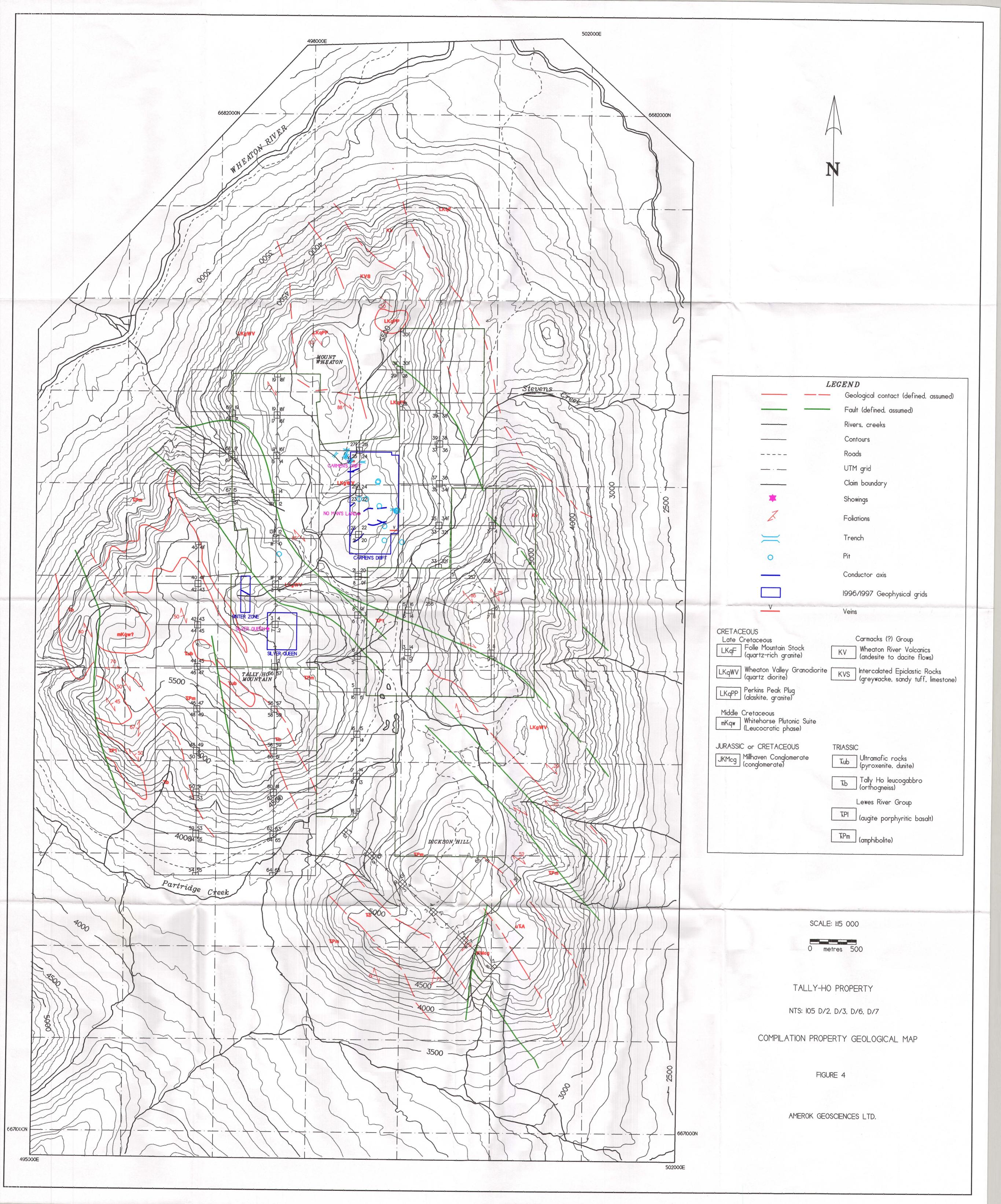
#### 10.0 PROSPECTING AND SAMPLING

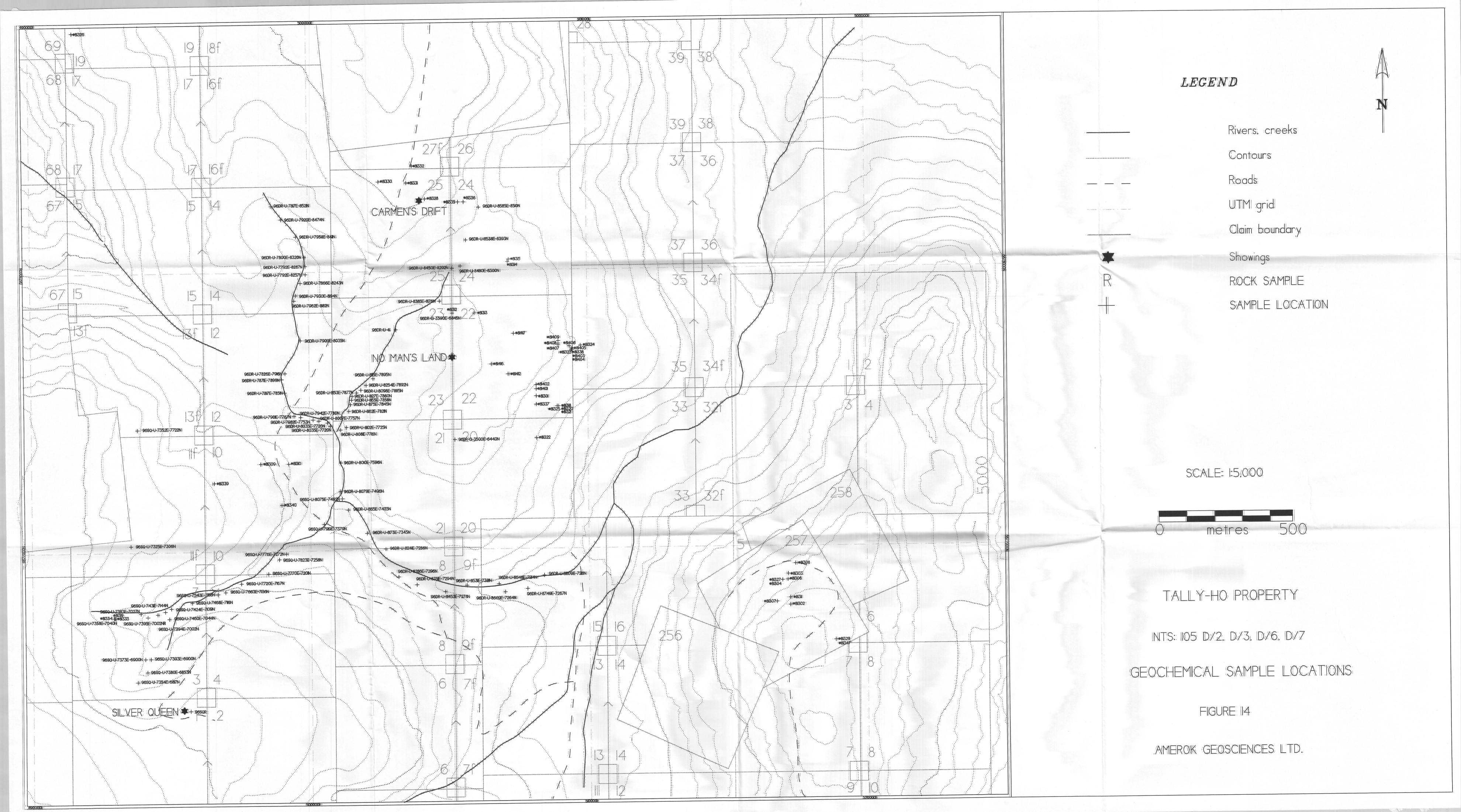
Prospecting was conducted over the area covered by the Carmen's Drift geophysical grid, on Tally Ho Mountain and around the showings on Mt. Stevens by Ron Stack between August 19 and September 13, 1997. His samples are together with the results of previous geochemical sampling conducted in 1996 are shown in Figures 14 to 18. A high grade gold showing was discovered approximately 400 m ESE of the No Man's Land showing on Draft 22. Assay certificates for all work conducted to date on the property are contained in Appendix D.

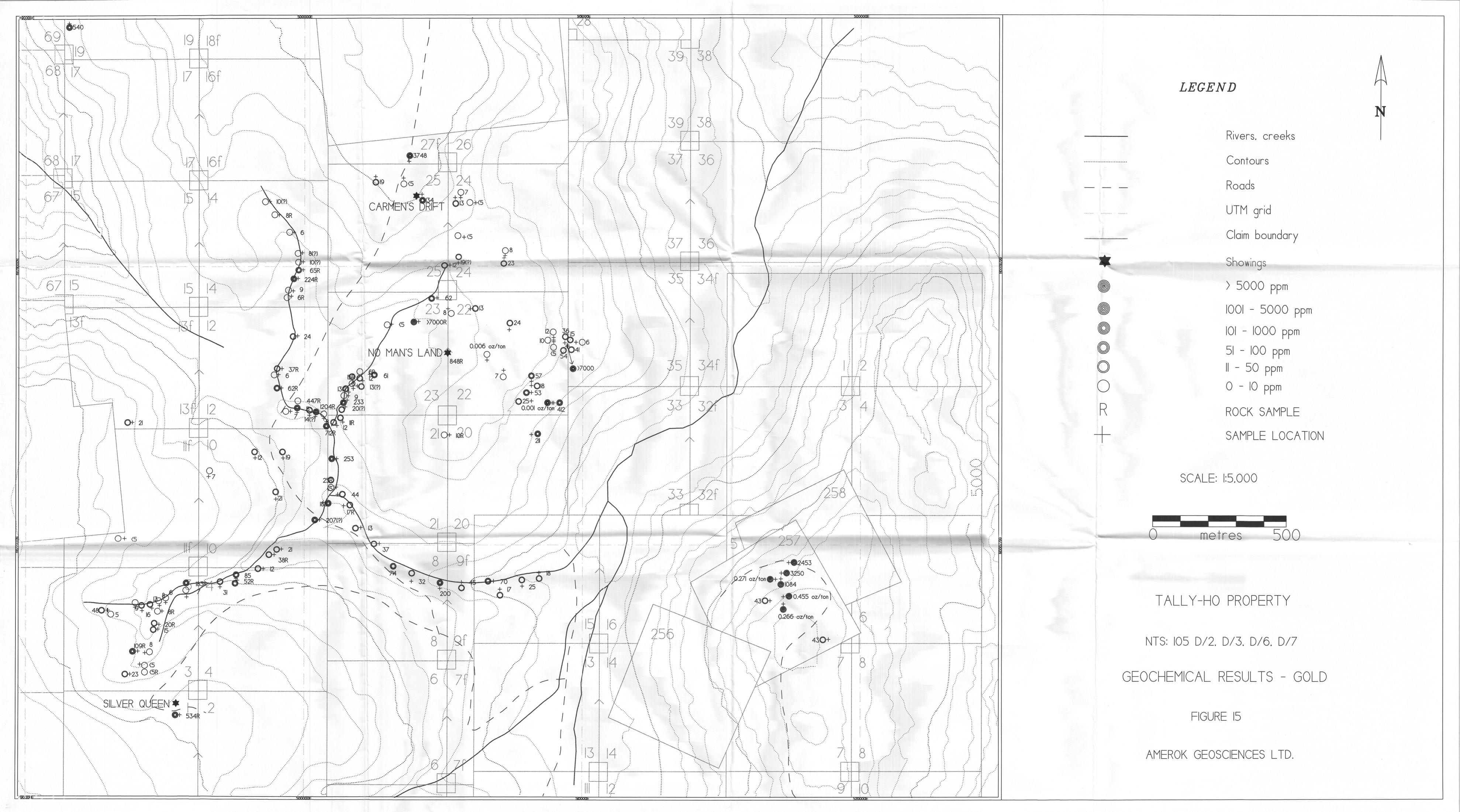
#### 11.0 CONCLUSIONS

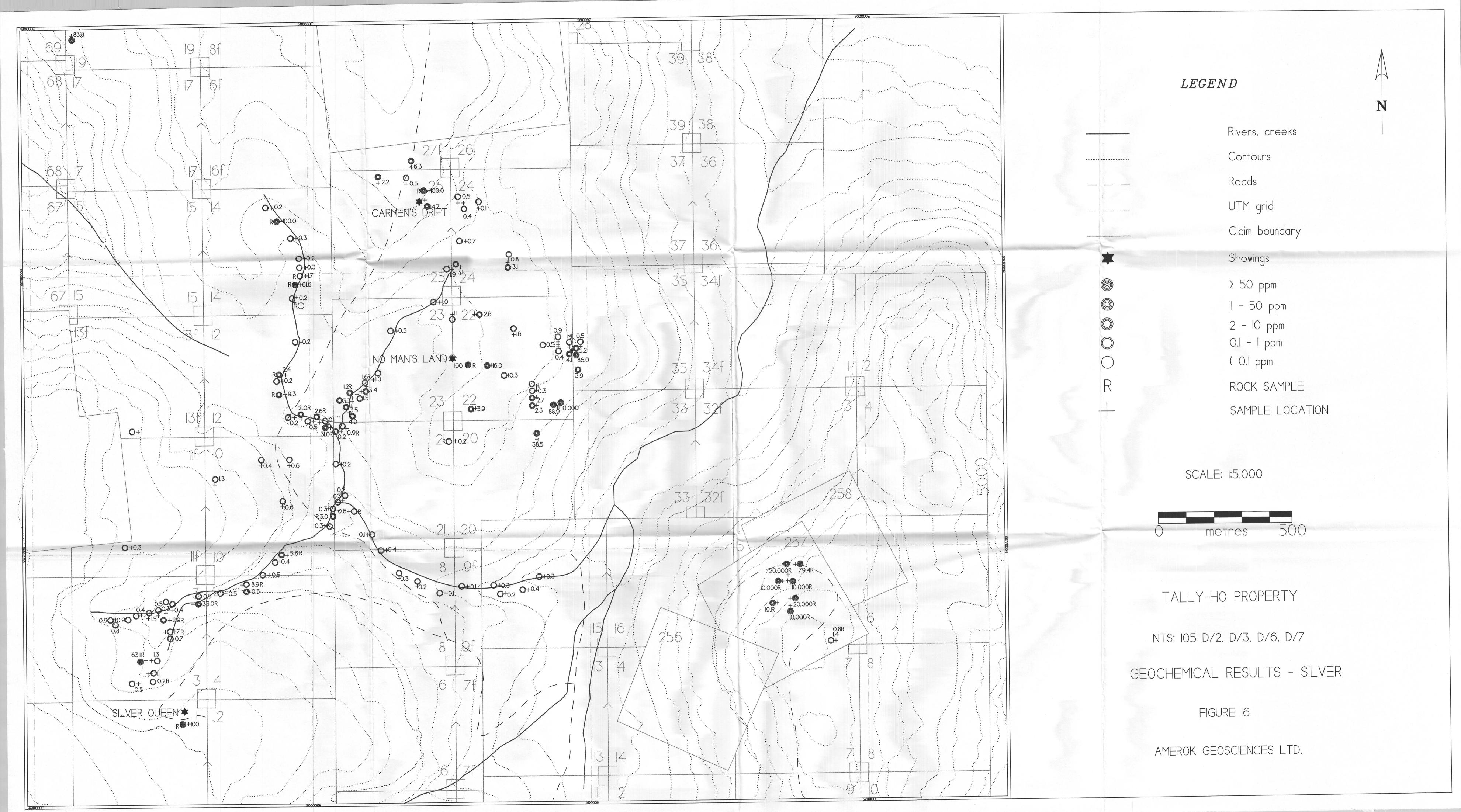
The results of the work conducted to date on the Tally Ho Property suggest the following conclusions:

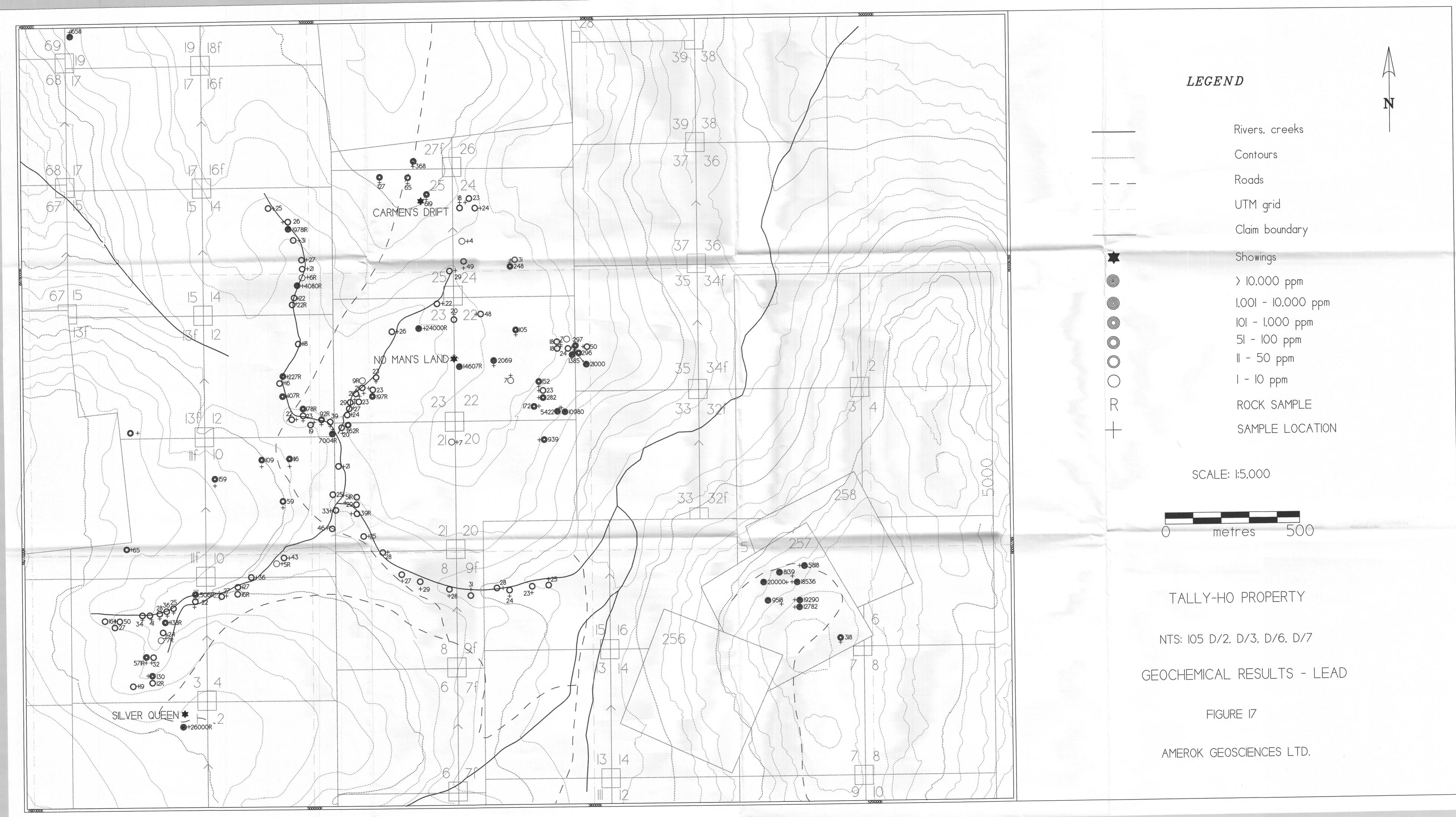
- a. Gold mineralization occurs in agentiferous galena and pyrite ore shoots within mesothermal quartz veins. These veins are of restricted strike length, generally less than 50 m and show widths ranging from 0.5 to rarely 2.0 m. Their depth extent is unknown. Gold concentration varies roughly with the proportion of galena suggesting that it is carried within this mineral. Gold grades vary from 0.1 to over 1.0 OPT in samples carrying disseminated to massive galena.
- b. Mineralized veins generally strike either N or E adjacent to the axis of a NW-SE trending fault zone, suggesting they may be dilatant features associated with the Llewellyn Fault. The general trend of the mineralization extends from showings on Mt. Stevens through the showings at Carmen's Drift to the Tally Ho Gulch workings. Anomalous gold values were encountered in silt samples from drainages along this trend suggesting that there may be other as yet undiscovered showings of a similar nature along this trend.
- c. The presence of a number of small high grade mesothermal quartz veins along a structural trend coupled with the anomalous stream geochemistry indicates that this trend may host larger, low grade gold mineralization at depth in areas where closely spaced small scale fractures may be more pervasive. Mesothermal quartz veins occur off this trend elsewhere in the immediate area (eg. on the Ton Claims) but they appear to be more common along the above mentioned trend.

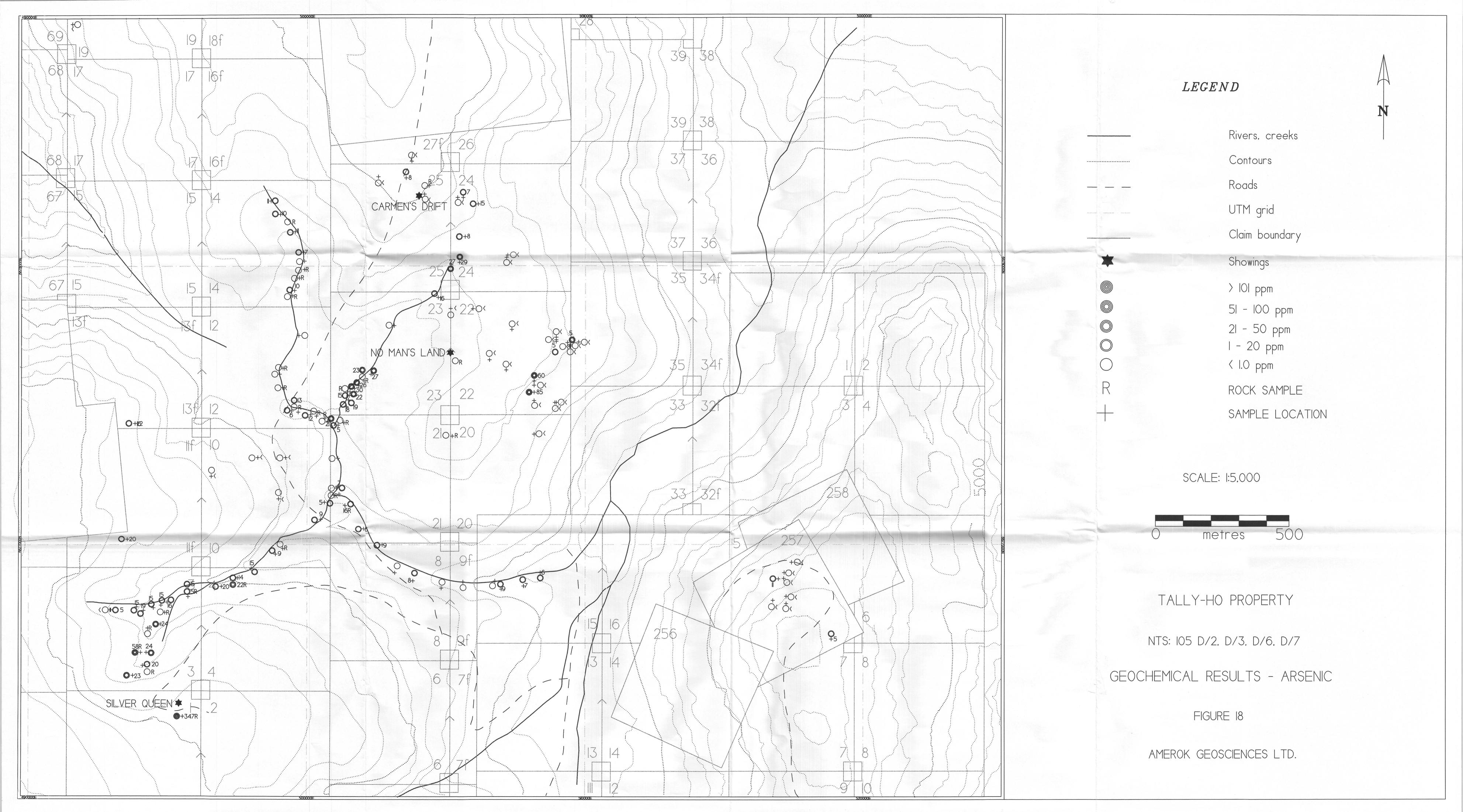












### 12.0 RECOMMENDATIONS

The following recommendations are made based on the above conclusions:

- a. An area approximately 2 km wide extending from Mt. Stevens to Tally Ho Gulch should be flown with a helicopter EM system to map resistivity and to detect small scale structures associated with gold mineralization. This work would require approximately 100 line-km of survey at an estimated cost of \$20,000.
- b. Anomalous resistivity trends associated with gold showing should be tested by three 400 m drill holes at an estimated cost of \$60,000.

Respectfully submitted,

AMEROK GEOSCIENCES LTD.

Carmen C. Lee, B.Sc.

Geologist

### References cited

- Doherty, R.A. and C.J.R. Hart (1989) Preliminary geology of Fenwick Creek (105 D/3) and Alligator Lake (105 D/6) map areas. INAC Open File 1988-2, Indian and Northern Affairs Canada.
- Hart, C.J. and J.K. Radloff (1991) Geology of Whitehorse, Alligator Lake, Fenwick Creek, Carcross and part of Robinson map areas (105 D/2, 3, 6, 7, & 11) INAC Open-File 1990-4, Indian and Northern Affairs Canada.
- MacLean, T.A. (1914) Lode Mining in Yukon. Ottawa: Mines Branch.
- Mihalynuk, M.G. and K. Mountjoy (1990) Geology of the Tagish Lake Area (Edgar Lake 104 M/8 and Warm Creek 104 M/9E) in: Geological Fieldwork 1989, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1989-1, p. 293-310.
- Wheeler, J.O. and P. McFeely (1987) Tectonic Assemblage Map of the Canadian Cordillera, Geological Survey of Canada, Open File 1565.

### **Appendix A. Statement of Qualifications**

- I, Carmen C. Lee with residence in Whitehorse, Yukon Territory, certify that:
- 1. I obtained a Bachelor of Science Degree in Geology from the University of Calgary in 1996.
- 2. I have been employed in mineral exploration and geophysical research since 1996.
- 3. I have conducted geological and geochemical surveys on the Tally Ho Property in 1996 and have prepared this report using data supplied by Gary Lee and collected by crews employed by Amerok Geosciences Ltd.

Carmen C. Lee, B.Sc.

Whitehorse, Yukon Territory February 3, 1998

### Appendix B. Survey Log

Date	Activity
17 Aug 97	Mobilize to property. Crew consisting of Gary Lee and Ron Stack. Check JD-450 and camp.
18 Aug 97 to 13 Sep 97	Trenching program at Carmen's Drift, No Man's Land and new showings (Gary Lee) and prospecting on Mt. Stevens, Tally Ho Mountain and Mt. Wheaton. (Ron Stack). Total CAT hours - 92. Limited blasting at Carmen's drift. Extend property grid to Tally Ho Mountain.
01 Sep 97	Visit by Graham Davidson, P. Geol. to inspect showings.
14 Sep 97	Demobilize from property.
19 Oct 97	Mobilize to property. Crew consist of Gary Lee, Dan Hall, Chris Gooliaff.
20 Oct 97 to 23 Oct 97	MaxMin survey on Carmen's Drift and No Man's Land showings. Trenching on extension to Carmen's Drift showing (Gary Lee). Line cutting / gridding to extend known grids.
24 Oct 97	Demobilize crew from Mt. Stevens.

### **Summary**

Gary Lee	- 19 days
Ron Stack	- 18 days
Graham Davidson	- 1 day
Dan Hall	- 6 days
Chris Gooliaff	- 6 days

Total man-days - 50

### Appendix C. Statement of Costs

Gridding and line cutting	\$3,570.00
Prospecting	\$2,500.00
Geophysical survey	\$6,848.00
Trenching: 115 hrs @ \$60	\$6,900.00
Trenching: operator wages	\$4,000.00
Blasting	\$840.00
Groceries, camp and fuel	\$4,245.00
Truck rental	\$1,322.00
Assays	\$685.00
Geological consulting	\$1890.00
Data processing, CADD, Report	\$3,500.00
Total expenditures	\$36,300.00

### Appendix D. Assay certificates



## **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers North Vancouver

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

To: LEE, GARY

P.O. BOX 5348 WHITEHORSE, YT Y1A 4Z2

Project:

Comments: ATTN: GARY LEE

Page Number :1-A Total Pages :1 Certificate Date: 19-OCT-97 Invoice No. :19746988 Invoice No. P O. Number

:PLS Account

CERTIFICATE OF ANALYSIS **AQ746Q88** 

			_		 							CE	KIIFI	CATE	: UF #	INAL	1010		A9/46	988		<b></b>
SAMPLE	PR CO	EP DE	1	Au FA g/t	Ag ppm	A	1 %	As ppm	Ba ppm			Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
SAMPLE 31347	+	ī	<	g/t 0.03	0.8			<b>ppm</b> < 2		\(\frac{1}{2}\)	 1.01	ppm 4.5	6 6	69		1.89		<b>ppm</b>	***	10		665



07/10/97

### **Assay Certificate**

Page 1

Gary Lee

WO# 07932

Ce	ertit	ied	b	y
	•			

Sample #	Au ppb	Au oz/ton	O
81312 81313 81314 81315 81316	8 13 23 8	0.006	
81317 81318 81319 81320 81321	24 23 5 412	0.001	
81322 81323 81324 81325 81329	211 54 6 18	0.010	
81330 81331 81332 81333 81334	19 <5 3748 48 14	,	
81335 81336 81337 81338 81339	13 7 25 >7000 7		•
81340 81342 81343 81344 81345	21 11 10 39 16		



SAMPLE

81347

PREP

CODE

208 276

Mo

ppm

< 1

Na

ક્ષ

0.03

### Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: LEE, GARY

P.O. BOX 5348 WHITEHORSE, YT Y1A 4Z2

Project:

Comments: ATTN: GARY LEE

Page Number :1-B Total Pages :1 Certificate Date 19-OCT-97

Invoice No. : 19746988
P.O. Number :
Account : PLS

**CERTIFICATE OF ANALYSIS** A9746988 Ni P Pb Sb Ti Tl V Sc Sr U Zn ¥ ppm ppm ppmppm ppm ppm ppmppmppm ppm ppm 730 158 < 2 1 38 0.02 < 10 < 10 17 < 10 70 3

CERTIFICATION: Harrison



07/10/97

### **Assay Certificate**

Page 2

WO# 07932

Gary Lee

Certified by

Sample #	Au ppb	Au oz/ton	
81346	64		
81302		0.266	
81327		0.271	

Note: Sample number 81302 was originally from WO#07903. Sample number 81327 was originally from WO#07908.





ć

16/09/97

### **Assay Certificate**

Page 1

Gary lee

WO# 07908

Certified by

	Au	Au	
Sample #	ppb	oz/t	
81304	. 1774		
81305	53		
81306	1084		
81307	43		
81308	2453		
81309	12		
81310	19	0 2.4	
81327	>7000	9.204	
81328	134		
81311		0.455	



16/09/97

**Assay Certificate** 

Page 1

Gary Lee

WO#07903

		Certified by
Sample #	Au ppb	
81301 81302 81303 81326	53 >7000 3250 520	
		-





# CERTIFICATE OF ANALYSIS iPL 9710909

2030 Columbia Street Vancouver, B C Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

Client: Northern Analytical Laboratories Project: PO#332333 WO#7908

10 Samples 10=Pulp

[090912:29:16:79092297]

Out: Sep 22, 1997 Page 1 of 1 In: Sep 15, 1997 Section 1 of 1

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm 1	T1 opm	B1 ppm	Cd ppm	Со ррт	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	T 1 %	A1 %	Ca %	Fe %	Mg %	K %	Na %	P %
81304	₽	0.1m	55	2.1%	11	6	9	<	35	<u> </u>	59	8.5	2	3	<	<	181	4	530	<	4	<	<	< 0	.06	0.02	0.62	0.01	0.01	0.02	<
81305	Ъ	6.8	58	711	44	<	<	<	6	<	<	2.5	9	3	116	<	95	9	576	19	32	1	1	< 0	. 76	0.89	1.67	0.34	0.25	0.04	0.08
81306	P	0.1m	839	18536	4883	<	620	<	5	<	70	1.4m	4	2	<	<	91	<	124	2	66	<	<	< 0	.04	0.02	0.67	<	0.03	0.01	<
81307	P	19.1	14	9518	69	<	20	<	1	<	<	19.8	1	2	9	<	169	2	97	<	4	<	<	< 0	.05	0.02	0.50	0.01	0.04	0.01	<
81308	P	79.4	2843	5818	414	<	7	<	2	<	*	43.5	3	12	3	<	204	4	149	<	5	1	<	< 0	.17	0.13	0.81	0.11	0.01	0.01	0.02
B1309	P	0.4	25	109	82	<	<	<	1	<	<	4.4	10	7	996	<	64	16	1128	18	134	1	2	< 0	.64	5.12	2.46	0.32	0.24	0.02	0.08
81310	P	0.6	19	116	93	<	<	<	2	<	<	4.4	11	6	396	<	87	11	1943	8	128	1	2	< 0	. 37	6.23	3.00	0.98	0.17	0.02	0.04
81311	₽	0.2m	1680	19290	26	<	54	<	5	<	3	70.2	4	2	<	<	143	<	113	<	14	<	<	< 0	.03	0.09	3.42	0.02	<	0.01	<
81327	P	0.1m	353	2.0%	15	11	12	<	23	<	65	9.5	1	3	<	<	175	<	54	<	6	<	<	< 0	.03	0.03	0.73	<	<	0.01	<
81328	₽	14.7	14	619	6	<	<	<	2	<	<	0.5	5	2	33	<	159	3	148	3	3	<	<	< 0	. 12	0.04	1.00	0.04	0.07	0.01	0-01



# CERTIFICATE OF ANALYSIS iPL 9710906

Vancouver, B C Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories Project: PO#332333 WO#7903

4 Samples

4=Pu1p

[090612:29:54:79092297]

Out: Sep 22, 1997 In : Sep 15, 1997 Page 1 of 1 Section 1 of 1

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm		-				Cd ppm			Ba ppm		Cr ppm	ppm V					Sc ppm	T1 %	A1 %	Ca %	Fe %	Mg %	K %	Na %	P %
81301	Þ	2.7	1855	282	42	85	40	<	2		16	1.0	13	75	246	<	212	19	419	<	40	<	3	< 1	0.43	2.12	2.04	0.48	<	0.01	0.02
81302	P	0.1m	40	12782	33	<	7	<	38	<	<	10.2	3	2	17	<	160	2	375	2	30	1	<	< 1	0.21	0.39	1.16	0.11	0.04	0.02	<
81303	P	0.2m	1717	8139	130	<	6	<	5	<	<	4.3	2	5	14	<	231	2	42	<	2	<	<	< 1	0.08	0.02	1.11	0.03	0.02	0.01	0.02
81326	P	83.8	688	1658	16	<	<	<	8	<	62	0.9	4	3	48	<	168	5	124	3	7	<	<	< 1	24	0.10	1.40	0.09	0.11	0.02	0.02



Project: WO# 7932

# CERTIFICATE OF ANALYSIS iPL 97J1002

2036 Columbia Street Vancouver, B C Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories

31 Samples
31=Pulp

[100212:33:01:79100997]

Out: Oct 09, 1997 Page 1 of 1 In: Oct 06, 1997 Section 1 of 1

roject: wo#	7330	-						31-	ruip								י ב	00212	: 33:0	1.731	00337	1			111		~ 00	, 133			560			0, ,
Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	_	bbw t	T1 opm	B <sub>1</sub> ppm	Cd ppm	Со	N <sub>1</sub>	Ba ppm	W ppm	Cr ppm	V	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Т:	1 %	A1 %	Ca %	Fe %	Mg	· ·	K %	Na %	P %	
81312	₽	1.1	10	20	28	<	<	<	7	<	<	0.2	3	4	33	<	168	10	231	3	8	<	1 (	0.0	1 0.	25	0.06	1.09	0.13	0.0	6 0.	.02	0.01	
81313	Р	2.6	31	48	51	<	<	<	4	<	<	0.6	10	4	34	<	159	14	385	3	4	<	1		< 0.	42	0.05	1.82	0.27	0.0	7 0.	.02	0.01	
81314		3.1	26	248	10	<	<	<	20	<	3	0.5	2	4	22	<	161	4	82	3	3	<	<		< 0.	10	0.02	0.85	0.03	0.0	5 0.	.02	<	
81315		0.8	5	31	14	<	<	<	4	<	<	0.5	5	3	48	<	131	3	299	3	12	<	<		< 0.	15	0.36	0.63	0.03	0.1	1 0.	.02	0.02	
81316	P	16.0	102	2069	8	<	<	<	8	<	<	2.1	1	3	14	<	174	2	70	<	3	<	<		< 0.	07	0.02	0.47	0.02	0.0	4 0.	.02	<	
81317	P	1.6	28	105	18	<	<	<	5	<	<	0.3	1	3	8	<	173	3	82	<	2	<	<		< 0.	06	<	0.94	0.02	0.0	3 0.	.02	<	
81318	Р	3.9	521	149	74	<	<	<	6	<	<	16.6	10	3	100	<	75	23	479	16	33	1	2 (	0.0	3 1.	14	0.59	2.81	0.65	0.3	7 0.	.02	0.16	
81319	Ρ	0.9	8	16	31	5	<	<	3	<		3.2	<	4	26	<		8	222	<	29	<	1					0.45					<	
81320	P	0.1m	180	10980	7	<	<	<	3	<	88	3.3	1	4	<	<	198	<	32	<	5	<	<	•	< 0.	02	0.06	0.58	0.01	0.0	2 0.	. 02	<	
81321	P	3.5	366	287	15	<	<	<	5	<	<	2.8	2	2	141	<	107	10	55	13	116	1	1 (	0.0	1 0.	48	0.18	2.12	0.18	0.3	1 0.	.06	0.04	
81322	р 3	38.5	2081	939	77	<	<	<	12	<	22	6.0	7	3	35	<		29	321	9	18	1	2 (	0.0	1 0.	80	0.23	3.06	0.44	0.0	9 0.	.04	0.09	
81323	Р	4.1	39	296	31	<	<	<	11	<	<	0.6	3	4	47	<	159	9	166	6	8	1	1	•	< 0.	21	0.07	1.86	0.06	0.1	2 0.	.02	0.03	
81324	P	0.5	19	50	41	<	<	<	4	<	<	0.2	12	5	43	<		13	643	<	24	1	<		< 0.	60	0.70	5.37	0.38	0.1	3 0.	.02	<	
81325	PE	38.9	436	5422	16	<	5	<	10	<	66	2.9	1	4	25	<	203	5	97	5	19	1	<		< 0.	13	0.05	1.41	0.04	0.0	7 0.	.02	0.02	
81329	P	1.4	31	318	231	5	<	<	2	<	<	23.1	6	3	162	<	62	7	953	14	110	4	1 (	0.0	2 0.	79	2.43	1.51	0.32	0.5	ю о.	.04	0.09	
81330	P	2.2	19	127	31	<	<	<	5	<	<	0.4	8	4	97	<			112	4	39	1	<					3.86						
81331		0.5	18	65	85	8	<	<	1	<		2.1	8	3	81	<	38	23	1015	29	33	1	2					2.03						
81332		6.3	16	368	91	*	<	<	8	<		1.9	6	5	40			6	147	4	7	<	<					2.47					0.Đ1	
81333		0.8	5	50	62	<	<	<	4	<		2.6	<	3	12	*	56	5	187	<	80	<	1					0.33					<	
81334	P	0.9	7	27	38	<	<	<	4	<	<	2.5	1	7	11	<	100	7	183	<	83	<	1	•	< 0.	05	9.77	0.43	3.70	0.0	1 0.	.01	<	
81335		0.5	16	18	9	<	<	<	2	<		0.6	5	3	67	<	66	4	233	21	9	12	1					0.61						
81336		0.4	16	23	54	7	<	<	4	<		0.9	10	6	228	<	58	25	961	31	20	3	2					2.59						
81337		2.3	24	172	33	<	<	<	4	<		2.2	7	4	128	<		13	254	15	12	1	1					1.83					0.13	
81338		36.0	82	2.17		<	16	<	6	<		2.0	2	9	<	<	533	4	83	<	4	1	<					0.86					*	
B1339	P	1.3	365	159	34	<	<	<	4	<	*	1.2	10	7	1314	×	67	8	573	27	46	1	2	•	< 0.	40	1.03	1.88	0.09	0.2	5 0.	.03	0.07	
B1 <b>34</b> 0		0.6	9	75	61	<	<	<	1	<		1.8	11	8	407	<	46	25	928	22	89	1	2					2.34						
81342		1.8	821	52	28	<	<	<	2	<		1.5	38	15	30	<	37	10	648	24	725	6	3		< 0.					0.2				
B1343		2.5	38	198	1176	127	<	<	4	<		12.1	<	<	18	<	11		1012	3	147	1	1					0.93						
81344	•			17399		4.17		<	<	<		0.3m	3	4	8	<	14	16	227	<	214	4	<		< 0.1				0.04				0.02	
B1345	₽	0.2m	47	17802	9102	307	155	<	1	<	<	21.5	<	3	<	<	8	<	3.8%	2	112	<	<	•	< 0.1	03	15%	3.42	4.50	0.0	3 0.	.02	*	
81346	PS	2.3	1256	4284	2.9%	3.37	16	<	<	<	196	0.3m	9	14	118	<	14	28	2775	8	64	8	1 (	0.0 <sup>-</sup>	1 0.	54	1.59	337	0.56	0.0	9	< 1	0.04	



# CERTIFICATE OF ANALYSIS iPL 96H0829

2036 Columbia Street Vancouver, B C Canada V5Y 3E1 Phone (604) 879-7878

Fax (604) 879-7898

INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories
Project: W.O. 07021 2 Pulp

**2**S

1PL: 96H0829

Out: Sep 10, 1996 In: Aug 30, 1996 Page 1 of 1 [082915:01:26:69091096]

Section 1 of 2 Certified BC Assayer: David Chiu

																											7	$\tau$		_
Sample Name			РЬ																						Ca	Fe	Mg	K	Na	_
	Phu	ppn	ppm	ppiii	ppiii	ppiii	ppiii	ppm	ppin p	ypui	ppiii	ppn r	ypan	ppm 1	ppii	ppiii	ppiii	ppm	ppm	ppm	ppm	ppm	~	٨.	٨					
96D - 1 - FL 96BH 5000N 4860E	P <	40 100	15 2074	40 119	60 35	< 5	< <	4 6	< <	< <	0.2 5.7	11	4 5	54 16	<b>«</b>	62 194	64 7	452 35	8 <	53 25	1	5 (	0.07	1.21 0.09	0,79 0,04	2.64 2.12	0.81 0.02	0.12 0.05	0.12 0.03	

ì -,



### CERTIFICATE OF ANALYSIS iPL 96H0829

2036 Columbia Street Vancouver, B C Canada V5Y 3E1 Phone (604) 879-7878

Fax (604) 879-789

Client: Northern Analytical Laboratories Project: W.O. 07021 2 Pulp

1PL: 96H0829

Out: Sep 10, 1996 In: Aug 30, 1996

Page 1 of 1 [082915:01:29:69091096]

Section 2 of 2 Certified BC Assayer: David Chiu

Sample Name	P <b>%</b>
96D - 1 - FL	9 0.13
96BH 5000N 4860E	9 0.02

Min Limit 0.01 Max Reported\* 5.00 ICP Method



13/05/97

**Assay Certificate** 

Page 1

Gary Lee

WO# 07767

Certified by

Sample #	Au oz/ton	Au oz/ton	Ag g/mt	0
97BH-A-0+70V	>0.400	2.369	1726	4.0292 = 50.4 g/tm
	(AAS)	(Grav)		Ag



20/12/96

### **Assay Certificate**

Page 1

Amerok Geosciences Ltd.

WO#07185

Certified by

		·	
Sample #	Au ppb	Au , oz/ton	
96DR-3500E	2295	0.057	
96-DH	22	0.037	
96DR-3390E-6845N	>7000	0.213	
96-SQ	534 *	0.210	
96SQ-U-7373E-6900N	109		
96SQ-U-7543E-7158N	183		
96SQ-U-7460E-7044N	8		
96DR-U-7920E-8474N	2235	0.069	
96DR-U-7866E-8243N	224		
96DR-U-8028E-7708N	712		
96DR-26-FLT	102		
96DR-U-7817E-7851N	62		
96DR-U-8075E-7492N	25		
96DR-U-8165E-7435N	17		
96SQ-U-7380E-6853N	<5		
96SQ-U-7395E-7002N	20		
96DR-U-8324E-8035N	848		
96DR-U-7826E-7916N	37		
96DR-U-8153E-7877N	6		
96DR-U-7792E-8257N	65		
96DR-U-7962E-8182N	6		
96DR-U-8007E-7757N	1204	0.030	
96SQ-U-7720E-7167N	52		
96DR-G-3500E-6440N	10		
96DR-U-8115E-7895N	15		
96DR-U-7942E-7780N	447		
96Dସ-U-8102E-7725N	11		
96SQ-U-7776E-7272N	38		

Note: \* Due to very high Ag in 96-SQ, gravimetric finish was necessary. Precision is reduced.





20/12/96

### **Assay Certificate**

Page 2

Amerok Geosciences Ltd.

WO#07185

Certified by

Comple #	Au	Au	
Sample #	ppb	oz/ton	
96DR-U-8385E-8176N	62		
96DR-U-7942E-7780N	5		
96DR-U-8531E-7321N	45		
96DR-U-8453 <b>E-7278N</b>	200		
96DR-U-8351E <b>-7294N</b>	32		
96DR-U-8286E-7296N	74		
96DR-U-8173E-7345N	13		
96DR-U-8241 <b>E-7286N</b>	37		
96DR-U-8079 <b>E-7496N</b>	44		
96DR-U-8010 <b>E-7596N</b>	253		
96DR-U-8809E-7218N	18		
96DR-U-8669E-7264N	17		
96DR-U-8749 <b>E-7267N</b>	25		
96DR-U-8646E-7214N	70		
96DR-U-8127E-7860N	9		
96DR-U-8035E-7720N	8		
96DR-U-8155 <b>E-7858N</b>	13 #		
96DR-U-8153 <b>E-7877N</b>	12		
96DR-U-8162 <b>E-7821N</b>	20 #		
96DR-U-8098 <b>E-7885N</b>	13 #		
96DR-U-8115 <b>E-7895N</b>	8		
96SQ-U-7358 <b>E-7040N</b>	9		
96SQ-U-7380E-6853N	<5		
96SQ-U-7354 <b>E-6817N</b>	23		
96SQ-U-7383E-7027N	16		
96SQ-U-7393E-6900N	8		
96SQ-U-7325E- <b>7306N</b>	<5		
96SQ-U-7431E-7144N	8		
96SQ-U-7352E-7722N	21		
96SQ-U-7823E- <b>7258N</b>	21		



20/12/96 Assay Certificate Page 3

Amerok Geosciences Ltd.

WO# 07185

Certified by

Sample #	Au ppb	Au oz/ton	
96SQ-U-7770E-7201N	12		
96SQ-U-7919E- <b>7379N</b>	207 #		
96SQ-U-8018E-7465N	183		
96SQ-U-8075E- <b>7492N</b>	<5		
96SQ-U-7720E- <b>7167N</b>	85		
96SQ-U-7663E <b>-7136N</b>	31		
96SQ-U-7543E <b>-7158N</b>	7		
96SQ-U-7424E <b>-7109N</b>	13		
96SQ-U-7468E <b>-7116N</b>	6		
96SQ-U-7394E <b>-7002N</b>	15		
96DR-U-8480E- <b>8300N</b>	19 #		
96DR-U-8538E <b>-8393N</b>	<5		
96DR-U-8175E <b>-7845N</b>	233		
96DR-U-8450E <b>-8292N</b>	12		
96DR-U-8254E <b>-7892N</b>	61		
96DR-U-41	<5		
96DR-U-8081E-7716N	12		
96DR-U-7930E <b>-8194N</b>	9		
96DR-U-7901E <b>-7767N</b>	7		
96DR-U-7982E <b>-7753N</b>	14 #		
96DR-U-7792E- <b>8287N</b>	10 #		
96DR-U-7909E <b>-8035N</b>	24		
96DR-U-7958E- <b>8411N</b>	6		
96DR-U-7871E <b>-7899N</b>	6		
96DR-U-7817E <b>-8521N</b>	10 #		
96DR-U-7920E-84 <b>74N</b>	8		
96DR-U-8035E-7720N	7 #		
96DR-U-7800E-8320N	8 #	,	
96DR-U-8585E-8510N	<5		
Note: # Insufficient -80 mesh	material in these sample	s40 mesh fraction was used.	



# CERTIFICATE OF ANALYSIS iPL 96L1304

2036 Columbia Street Vancouver B C Canada V5Y 3E1

Phone (604) 879-7878 Fax (604) 879-7898

INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories iPL: 96L1304 Out: Dec 24, 1996 Page 1 of 3 Section 1 of 2
Project: WO-7185 87 Pulp In: Dec 19, 1996 [130415:31:56:69122496] Certified BC Assaver: David Chiu

Project: WU-7185	87 Pulp	1							ın:	: Dec	c 19,	195	,0	Į 12	XV413	5:31:	20:03	312245	, O J		cert	ified B	L Assa	ver: v	3V 10	ונתט	υ	-/-	
Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb	Hg ppm	Мо ррт (	DDW b			Со						Mri ppm	La ppm		Zr ppm (	Sc T	1 A		3 7	Fe 7	Mg Z	K Z	
96DR-U-8385E-8176N 96DR-U-7942E-7780N 96DR-U-8531E-7321N 96DR-U-8453E-7278N 96DR-U-8351E-7294N	P 1.0 P < P 0.1 P 0.1 P 0.2	67 38 64 70 80	22 23 31 28 29	119 95 81 81 89	16 13 < < 8	< 5 <	< < <	4 5 4 4 3	<	< < <	0.2 1.8 0.7 0.3 0.6	16 19 19	19 28 28	188 252 160 152 195	< < < <	27 72 87	71 96 108	834 713 584 614 736	31 22 19 19 21	41 37 31 33 40	2 2 1 1	4 0.0 4 0.0	3 2.39 2 1.58 3 1.34 3 1.38 3 1.52	0.4 0.4 0.4	7 2. 5 3. 9 4.	.93 ( .62 ( .07 (	0.31 ( 0.43 ( 0.46 (	0.08 0.07 0.07	0.02 0.02 0.02
96DR-U-8286E-7296N 96DR-U-8173E-7345N 96DR-U-8241E-7286N 96DR-U-8079E-7496N 96DR-U-8010E-7596N	P 0.3 P 0.1 P 0.4 P 0.2 P 0.2	80 69 82 78 62	27 25 28 25 21	84 80 90 87 83	 6 9 7 <	< < < <	< < < <	2 3 3 3 3	< < < <	< < <	0.2 0.2 0.4 0.6 0.2	17 18 17	25 26 27	174 144 159 138 120	< < < <		87 90 82	687 647 764 786 732	20 19 22 21 25	36 31 36 44 42	1 1 1 1	4 0.0 4 0.0 3 0.0	2 1.45 2 1.34 3 1.52 2 1.42 3 1.42	0,49 0,50 0,70	3. 3. 3.	.53 ( .70 ( .43 (	0.53 ( 0.60 ( 0.58 (	0.07 0.08 0.08	0.02 0.02 0.02
96DR-U-8809E-7218N 96DR-U-8669E-7264N 96DR-U-8749E-7267N 96DR-U-8646E-7214N 96DR-U-8127E-7860N	P 0.3 P 0.2 P 0.4 P 0.3 P 3.5	68 70 72 69 <b>61</b>	25 24 23 28 23	92 87 86 79 122	6 9 7 < 18	< < < <	< < < < <	3 2 2 3 4	< < < < < < < <	< < <	0.8 0.5 0.3 0.1 0.2	17 16 19	26 23 29	200 173 175 166 191	< < < < < < < < < < < < < < < < < <	74 69	86 85 105	779 684 636 589 734	20 19 21 19 33	47 38 43 40 56	1 1 1 1	4 0.0 4 0.0 4 0.0	3 1.49 3 1.41 3 1.44 3 1.48 3 2.35	0.63 0.73 0.63	3 3. 3 3. 7 4.	52 0 45 0 03 0	0.69 ( 0.71 ( 0.80 (	0.07 0.08 0.07	0.02 0.02 0.02
960R-U-8035E-7720N 960R-U-8155E-7858N 960R-U-8153E-7877N 960R-U-8162E-7821N 960R-U-8098E-7885N	P 0.5 P 2.3 P 3.4 P 4.0 P 3.3	53 72 64 73 70	30 29 23 24 21	91 115 91 136 113	13 26 23 22 19	< < < <	< < < <	7 7 5 5 4	< /	<u> </u>		18 12 14	21 15 18	210	,		92 70 85	565 758 504 636 596	29 40 37 52 45	39 52 63 71 83	3 2 2 2 1	5 0.00 4 0.00 3 0.00 4 0.00 3 0.00	2.24 2.47	0.66 0.79 0.96	3.0 2.9 3.0	69 0 92 0 65 0	0.62 0 0.50 0 0.65 0	0.17 0.12 0.15	0.03 0.03 0.03
96DR-U-8115E-7895N 96SQ-U-7358E-7040N 96SQ-U-7380E-6853N 96SQ-U-7354E-6817N 96SQ-U-7383E-7027N	P 4.1 P 0.4 P 1.1 P 0.5 P 1.5	76 76 91 82 103	21 34 130 19 41	121 111 170 74 113	15 15 20 23 19	< 6 <	< < < < <	6 4 5 2 3	< < < < < < < <	<	0.8 2.5 0.1	10 16 21 19 19	32	199 86 121 144 114	A:A:A:A:A	29 67 142 130 124	84 79 85	695	51 11 14 10 11	75 39 38 44 36	1 1 1 1	3 0.03 3 0.03 8 0.03 5 0.04 6 0.04	1.84 1.96 2.51	0.96 0.99 0.58	3.4 3.5 3.5	40 0 58 1 34 1	0.88 0 1.10 0 1.43 0	).07 ).09 ).09	0.02 0.03 0.03
96SQ-U-7393E-6900N 96SQ-U-7325E-7306N 96SQ-U-7431E-7144N 96SQ-U-7352E-7722N 96SQ-U-7823E-7258N	P 1.3 F 0.3 F 0.3 F 1.2 F 0.4	94 56 71 83 83	32 65 36 58 43	101 109 103 111 78	24 20 15 16 9	5 < < 5 <	< < <	2 2 2 2 9	< < <	, , ,	0.6 1.1	10 17 23	22 29 41	109 82 99 131 127	X X X	43 59 70	54 81 84	608 654 752 1072 572	12 7 8 11 12	37 45 51 38 26	1 2 1 1	4 0.03 2 0.01 2 0.02 4 0.02 4 0.02	1.61 1.61 1.80	1,38 1,03 1,35	2.4 3.5 3.6	42 0 51 0 82 1	0.75 0 0.96 0 1.47 0	0.05 0.06 0.10	0.02 0.02 0.02
96SQ-U-7770E-7201N 96SQ-U-7919E-7379N 96SQ-U-8018E-7465N 96SQ-U-8075E-7492N 96SQ-U-7720E-7167N	# 0.5 # 0.3 # 0.3 # 0.3 # 0.5	97 93 96 71 97	36 46 33 29 27	90 78 78 83 93	15 9 5 5 4	<b>5 &lt; 5 &lt; 5</b>	< < <	2 2 1 3 2	< , < ,	٧,٧ × ا	0.5	18	21	115 148 158 130 111	<	71	90	199	11 13 15 20 10	47	1 1 1 1	4 0.02 4 0.02 5 0.03 3 0.03 4 0.03	1.44 1.49 1.48	0.57 0.63 0.79	3.8 4.3 3.6	82 1 33 1 68 1	1.19 0 1.21 0 1.04 0	.06 .06 .09	0.02 0.02 0.02
96SQ-U-7663E-7136N 96SQ-U-7543E-7158N 96SQ-U-7424E-7109N 96SQ-U-7468E-7116N	P 0.5 P 0.5 P 0.5 P 0.4	127 88 82 82	27 22 28 24	92 79 95 83	20 15 16 16	< < < 5	< < <	3 2 2 2	< <	< 1 < 1		16 14	29	96 71 73 77	<u> </u>	102 105 62 132	· 71 74	514 528	11 7 7 7	32	1 1 < 1	5 0.03 3 0.02 2 0.03 4 0.03	1.61 1.68	0.91	3.2 3.1	24 1 19 1	1.19 0 1.12 0	.07	0.02 0.02

International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC V5Y 3E1 Ph:604/879-7878 Fax:604/879-7898



# CERTIFICATE OF ANALYSIS iPL 96L1304

2036 Columbia Street Vancouver B C Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories 1PL: 96L1304 Out: Dec 24, 1996 Page 1 of 3 Section 2 of 2 Project: W0-7185 87 Pulp [130415:31-57:69122496] In: Dec 19, 1996 Certified BC Assayer David Chiu Sample Name Z 96DR-U-8385E-8176N P 0.23 96DR-U-7942E-7780N Ρ̈́ 0.16 96DR-U-8531E-7321N P 0.13 96DR-U-8453E-7278N Ρ́ 0.14 96DR-U-8351E-7294N PO.14 96DR-U-8286E-7296N P 0.14 96DR-U-8173E-7345N ₽́ 0.13 96DR-U-8241E-7286N Ρ̈́ 0.15 96DR-U-8079E-7496N β́ 0.13 96DR-U-8010E-7596N Ρ̈́ 0. 16 96DR-U-8809E-7218N P 0.15 960R-U-8669E-7264N Ε̈́ 0.14 Ρ̈́ 0.15 96DR-U-8749E-7267N 96DR-U-8646E-7214N É 0.14 96DR-U-8127E-7860N à 0.17 96DR-U-8035E-7720N P 0.14 96DR-U-8155E-7858N ₽ 0.18 ₿ 0.19 96DR-U-8153E-7877N 96DR-U-8162E-7821N ₽̃ 0.18 96DR-U-8098E-7885N ₽ 0.22 96DR-U-8115E-7895N ₱ 0.17 96SQ-U-7358E-7040N ₽ 0.10 96SO-U-7380E-6853N à 0.11 96SQ-U-7354E-6817N **E** 0.10 96SQ-U-7383E-7027N ₿ 0.11 96SQ-U-7393E-6900N Ê 0.11 ₩ 0.29 96SQ-U-7325E-7306N 96SQ-U-7431E-7144N **E** 0.14 96SQ-U-7352E-7722N ₿ 0.14 ₿ 0.10 96SQ-U-7823E-7258N 96S0-U-7770E-7201N P 0.10 96SQ-U-7919E-7379N ₿ 0.11 96S0-U-8018E-7465N ₿ 0.11 ₽́ 0.13 96SQ-U-8075E-7492N

Min Limit 0.01
Max Reported\* 5.00
Method ICP

Ë 0.10

P 0.10

₽ 0.10 ₽ 0.10

É 0.08

96SQ-U-7720E-7167N

96SQ-U-7663E-7136N

96SQ-U-7543E-7158N

96SQ-U-7424E-7109N 96SQ-U-7468E-7116N



# CERTIFICATE OF ANALYSTS iPL 96L1304

Vancouver B C Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories

1PL: 96L1304

Out: Dec 24, 1996

Page 2 of 3

Section 1 of 2 Certified BC Assayer: David Chi

Project: WO-7185	87 Pu	lρ							In: D	ec 19	, 199	96	[13	30415	5:31:5	57:69	912249	6]		Cert	ified	BC /	\ssaye	er: Dav	zid Chi	u		X-
Sample Name	A <sub>e</sub>	_	Pb ppm	Zn ppm		Sb ppm	Hg ppm		T1 Ba		Со			ppm W		V ppm		La ppm		Zr ppm (		Ti Z	A1	Ca %	Fe	Mg %	K	Na Z
96SQ-U-7394E-7002N 96DR-U-8480E-8300N	P 0.1 P 3.	1 78	24 49	90 168	24 29	< <	< <	2 5	< <	0.8	15	20	316	<.	115 29	83	771	9	29 60	1	4 0.	.03	3.26	0.93	3.80	0.92	0.24	0.02
96DR-U-8538E-8393N 96DR-U-8175E-7845N 96DR-U-8450E-8292N	Ρ̈ 0.1 ρ̈́ 1.5 ρ̈́ 1.6	5 63	4 27 29	21 185 147	8 30 27	< <	< <	1 4 3	< < <	0.3	11		58 259 250	< <	5 23 25	76	181 691 682	12 32 40	14 67 52	1 1	3 0.	03	0.61 2.91 2.79	0.99	0.74   3.71   3.95	0.78	0.17	0.03
96DR-U-8254E-7892N	g 1.0	0 60	23	124	27	<	<	5	< <	<	13	16	170	<	24	90	606	33	36	1	4 0.	.03	2.82	0.65	4.06	0.88	0.13	0.03
96DR-U-41 96DR-U-8081E-7716N 96DR-U-7930E-8194N 96DR-U-7901E-7767N	P 0.5 P 0.2 P 0.2 P 0.2	2 40 2 44	26 20 22 22	132 83 87 83	15 5 10 6	< < <	< < <	4 3 3 3	< <	0.3 0.3 0.4	14 15	15		< < <	36 27	83 83	1014 589 789 698	34 21 25 32	44 33 39 47	1 1 1	2 0. 3 0.	02 04	1.48 1.63	0.58 0.69	4.75 3.27 3.53 3.31	0.89 0.89	0.07 0.13	0.02 0.02
96DR-U-7982E-7753N 96DR-U-7792E-8287N 96DR-U-7909E-8035N 96DR-U-7958E-8411N 96DR-U-7871E-7899N	P 0.5 F 0.3 F 0.3 F 0.3	38 2 31 3 31	19 21 18 31 <b>16</b>	93 86 78 80 <b>82</b>	12 7 <	< < <	< < <	2 3 2 2 2	< < <	0.5 0.4 0.2 0.2 0.4	12 13 11	14 12 12	129 115 109	<pre></pre>	27 25 24 20 <b>27</b>	78 92 65	637 686 573 651 <b>612</b>	34 28 28 26 33	59 46 39 42 52	1 1 1 1	3 0. 3 0. 2 0.	04 04 03		0.73 0.73 0.59	3.21 ( 3.38 ( 3.85 ( 3.03 ( 3.88 (	0.81 0.80 0.74	0.12 0.10 0.10	0.02 0.02 0.02
96DR-U-7817E-8521N 96DR-U-7920E-8474N 96DR-U-8035E-7720N 96DR-U-7800E-8320N 96DR-U-8585E-8510N	P 0.2 F 0.2 F 0.1 F 0.2 F 0.1	2 29 32 2 36	25 26 39 27 24	79 81 111 83 75	11 10 21 7	< < < < < <	< < < <	2 2 2 2 3	<	0.5 0.9 0.9 1.0 0.4	10 12 12	10 11	123 136 159 125 83	~	18 17 20 20 20	54 60 65	730 747 1018 752 629	16 22 19 27 15	33 38 43 43 18	<pre></pre>	1 0. 1 0. 2 0.	02 02 03	1.62 2.02 1.54	0.51 0.42 0.67	2.70 ( 2.67 ( 2.87 ( 2.97 ( 2.91 (	).70 ).74 ).79	0.10 0.10 0.11	0.02 0.02 0.02
96DR-3500E 96DH 96DR-3390E-6845N 96SQ 96SQ-U-7373E-6900N	ğ 63.3 ğ 7.9 g 0.1 g 0.1	2618 m 65 m 2240	4052 95 2.4% 2.6% 571	7		5 13 36 1.2% 810	232	5 1 20 8 3	< 25		2	5 9 5 4 5	5 · < .		161 141 207 105 210	3 8 2 4 <	29 37 25 26 24	< ,	4 2 13 29	<pre>&lt; 1 &lt; 2 &lt;</pre>	< < < 1 < <	< <	0.05 0.04 0.09	0.04 0.01 0.03	0.52 0 0.55 0 0.52 0 0.41 0 0.26 0	0.05 0.01 0.01	0.01 0.02 0.08	0.02 0.02
96SQ-U-7543E-7158N 96DR-U-7460E-7044N 96DR-U-7920E-8474N 96DR-U-7866E-8243N 96DR-U-8028E-7708N	g 33.0 g 2.9 g 0.1 g 61.6	171 m 18 14	506 138 19781 4080 7004	2		147 41 50 19 13	< < < <	2 2 8 5 2		1.1	3 1 1 2 1	9 4 4 5 3	5	~~~ ~~~	261 174 156 195 150	3 3 2 3 <	45 138 68 70 22	- e '	12	< < < < < < <	< < < < < < < < < < < < < < < < < < <	< (	0.08 0.03	1.57 0.02 0.02	0.53 0 0.37 0 0.45 0 1.14 0 0.25	.09 ).01	, , 0.02	0.02 0.01
96DR-26-FLT 96DR-U-7817E-7851N 96DR-U-8075E-7492N 96DR-U-8165E-7435N 96SQ-U-7380E-6853N	第 7.5 第 9.3 第 3.0 第 0.6 第 0.2	8 31 259	175 107 51 39 12	28 2 3 47 4	16	7 9 8 6 5	< < < <	4 4 3 2 5	4. A A A A A	0.4	12 2 1 5	3 3 4 3 5	13	<u>*</u>	90 141 163 81 225	11 3 3 34 4	318 28 31 295 26	•		1 1 < 1 1	1 < < 3 0.	< ( < ( 05 (	0.04 0.02 0.94	0.01 0.01 0.37	2.90 0 1.08 0 0.38 0 1.53 0 0.33 0	0.01 ( 0.01 ( 0.50 (	0.02 0.02 0.07	0.01 0.01
96SQ-U-7395E-7002N 96DR-U-8324E-8035N 96DR-U-7826E-7916N 96DR-U-8153E-7877N	∯ 1.7	m 276	7 14607 227 197	7 3 3 7	, , , , , , , , , , , , , , , , , , ,	9 8 17 <	< < <	2 3 1 3			2 1 1 1	5 3 4 3	5 4 2	ĺ	192 160 165 171	3 2 2 3	53 23 26 53	< < <	8 3 1	< < <	< < <	< (	0.01 0.01	0.01	0.29 0 0.30 0.34 0.39 0	< < (	, 0.01	0.02 0.02 0.01 0.02

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

International Plasma Lab Ltd. 2036 Columbia St. Vancouver BC VSY 3E1 Ph:604/879-7878 Fax:604/879-7898



# CERTIFICATE OF ANALYSIS iPL 96L1304

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### INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories
Project: WO-7185 87 Pulo

1PL: 96L1304

Out: Dec 24, 1996 In: Dec 19, 1996

Page 2 | [130415:31:58:69122496] Section 2 of 2
Certified BC Assaver: David Chiu

Project: WO-7185	87 Pu1p	In: Dec 19, 1996	[130415:31:58:69122496]	Certified BC Assayer: David Chiu	
Sample Name	Р				0
	Z				
96SO-U-7394E-7002N	P 0.10				
96DR-U-8480E-8300N	<b>9</b> 0.23				
96DR-U-8538E-8393N	ž 0.08				
96DR-U-8175E-7845N	P 0.21				
96DR-U-8450E-8292N	ę̃ 0.22				
96DR-U-8254E-7892N	P 0.23				
	ρ 0.23 β 0.24		O		
960R-U-41	F 0.24				
96DR-U-8081E-7716N	P 0.16				
960R-U-7930E-8194N	ę̃ 0.18				
96DR-U-7901E-7767N	P 0.17				
96DR-U-7982E-7753N	P 0.16				
96DR-U-7792E-8287N	g̃ 0.17				
96DR-U-7909E-8035N	g 0.20				
96DR-U-7958E-8411N	g̃ 0.15				
96DR-U-7871E-7899N	g̃ 0.19				
96DR-U-7817E-8521N	É 0.14				
96DR-U-7920E-8474N	g 0.13				
96DR-U-8035E-7720N	ğ 0.16				
960R-U-7800E-8320N	g 0.16				
96DR-U-8585E-8510N	@ 0.13				
96DR-3500E	<b>(</b> ) <				
96DH	₿ 0.01				
96DR-3390E-6845N	∯ 0.01 ∰ <				
96SQ	P 0.04				
96SQ-U-7373E-6900N	§ 0.01				
96\$0-U-7543E-7158N	∯ 0.01				
96DR-U-7460E-7044N	Ř 0₊01				
96DR-U-7920E-8474N	<b>P</b> <				
96DR-U-7866E-8243N	ž <				
96DR-U-8028E-7708N	(2) (2) (2) (2) (2) (2) (2) (2) (2) (2)		•		
96DR-26-FLT	ff 0.00				
	6 0.00 n				
960R-U-7817E-7851N	g <				
96DR-U-8075E-7492N	r <				
960R-U-8165E-7435N	g U.U6				
96SQ-U-7380E-6853N	88 0.08 88				
96SQ-U-7395E-7002N	ti <				-
96DR-U-8324E-8035N	<u> </u>				
96DR-U-7826E-7916N	<u>ۋ</u> <				
96DR-U-8153E-7877N	20				
Min Limit	0.01				

Min Limit 0.01
Max Reported\* 5.00
Method ICP



### CERTITE TO TE TIE WINNEY X 2 1 2

iPL 96L1304

Canada V5Y 3E1 Phone (604) 879-7878

Fax (604) 879-78

INTERNATIONAL PLASMA LABORATORY LTD

Client: Northern Analytical Laboratories
Project: WO-7185 87 Pulp

iPL: 96L1304 .

Out: Dec 24, 1996 In: Dec 19, 1996 Page 3 of 3 [130415:31:58:69122496]

Section 1 of 2 Certified BC Assaver: David Chiu

Sample Name Ag CuРЬ Zn As Sb Mo TI Bi Cd Co Ni Ba W Cr V Mn La Sr Zr Sc Tı Fе Z Z Z ppm ppm ppm ppm ppm ppm ppm pom pom pom 96DR-U-7792E-8257N 1.7 8 < 183 < 0.04 0.01 0.50 0.01 0.01 0.02 96DR-U-7962E-8182N < 6 22 10 0.2 2 10 < 189 3 119 2 < 0.13 0.03 0.56 0.08 0.02 0.02 ž 2.6 ž 8.9 96DR-U-8007E-7757N 5 92 9 < 0.2 9 9 < 152 3 38 3 < 0.03 < 1.78 < < 0.02 14 4 1 2 96SO-U-7720E-7167N 5372 16 22 55 0.4 1 2 208 36 < < 0.01 < 0.64 < < 0.02 ρ̈́ 0.2 96DR-G-3500E-6440N 69 7 0.2 232 2 135 < 0.03 0.03 0.38 0.02 0.01 0.01 96DR-U-8115E-7895N P 1.2 22 15 146 11 267 < 0.25 0.47 0.91 0.12 0.07 0.02 β́ 21.0 8 178 3 0.3 2 9 162 3 27 96DR-U-7942E-7780N < < < 1 < 0.02 0.01 0.36 < 0.01 0.02 < **ў** 0.9 96DR-U-8102E-7725N 9 62 4 3 < 0.1 5 5 30 < 194 3 48 2 3 1 < 0.08 0.01 0.78 0.01 0.06 0.02 < 96SQ-U-7776E-7272N g 5.6 3213 5 21 < 0.2 3 9 124 < 108 15 190 10 . 0.36 0.03 1.03 0.25 0 14 0.03



INTERNATIONAL PLASMA LABORATORY LTD

# CERTIFICATE OF ALLLYS IPL 96L1304

Vancouver, B C Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

Client: Northern Analytical Laboratories
Project: WO-7185 87 Pulp

1PL · 96L1304

Out: Dec 24, 1996 In: Dec 19, 1996 Page 3 of 3 [130415:31-58:69122496]

Sample Name

P

Z

96DR-U-7792E-8257N P < 
0600 U-7062E-8192N P < 
060P G-3500E-6440N P < 
060R-U-8102E-7725N P < 
060R-U-8102E-7725N P < 
060R-U-7776E-7272N P 0.01



### Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers
212 Brooksbank Ave., North Vancouver.
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX 604-984-0218

To LEE, GARY

P.O. BOX 5348 WHITEHORSE, YT Y1A 4Z2

Project : Comments ATTN GARY LEE

Page Number 1-A
Total Pages 1
Certificate Date 14-NOV-97
Invoice No I9749796
P.O. Number :
Account PLS

CEDTIFICATE OF ANALYSIS A0740706

										CE	RTIFI	CATE	OF A	NAL'	YSIS	A9	749	796		
SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	A1 %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cđ ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	<b>M</b> g %	Mn ppm
81410 81411	205 226 205 226	< 5 < 5	< 0.2 0.2	0.04	2 < 2	10 < 10	< 0.5 < 0.5	< 2 ×	13.65 15.00	< 0.5 1.0	< 1 < 1	23 6	1	0.28 0.11	< 10 < 10	< 1 < 0 < 1 < 0	0.01	< 10 < 10	6.04 9.12	150 85
											ō									
																				\



Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE 604-984-0221 FAX 604-984-0218

LEE, GARY

P.O BOX 5348 WHITEHORSE, YT Y1A 4Z2

Page Number 1-B
Total Pages 1
Certificate Date 14-NOV-97
Invoice No 19749796
P.O Number
Account PLS

Project

Comments ATTN GARY LEE

										CE	RTIFI	CATE	OF A	NALY	'SIS	A9749796	
SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	ppm P	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	T1 ppm	U ppm	ppm V	ppm W	Zn ppm		
31410 31411	205 226 205 226	< 1 ·	< 0.01 < 0.01	2	30 10	8 20	< 2 < 2	< 1 < 1	80 < 0. 166 < 0.	.01 .01	< 10 < 10	< 10 < 10	7	< 10 < 10	10 20		
										•							

13/11/97

### **Assay Certificate**

Page 1

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Amerok Geosciences Ltd.

WO# 07963

Certified by

<del></del>	·					 ·
,	•	Au	AU			
Sample #	Ŧ	bbp	oz/ton			
81401	•	18				
81402	•	57				
81403	•	41				
81404	,	47				
81405		15				
81406		36				
81407	•	<5				
81408	-	10				**/
81409		12				
81412	*	7				
BBS-01		15				
CAM-182		<5				
S-1	+	18				
S-2-BBS2	*	15				
SHAZA SILY 1	1	10				
81338	3		0.272	riginal WO	7932	

# OV-14-97 OB:03 PM INTERNATI

### LPL 97K1135

Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

Page

1 of 1

Section 1 of 1

Client: Nombhern Analytical Laboratories 15 Samples Out: Nov 14, 1997
Project: NOW 1963 1989 [173515:28:07:79111497] In: Nov 12, 1997

Spany le What	PF	9	Cu pp=	Pb ppn	Zn ppm	As pon	Sb ppm	Hg	Mb ppm (	T1 ppm	B1 ppm	Cd pgm	Co pen	N4 ppn	Ba ppm (	W PDIR	Cr ppm	Spin A	Mn ppm	La pps	Sir open	Zr ppm	Sc	Ti X	Al T	Ca Z	Fe X	Mg Z	K Z	Na 3	. P	
81461	P 0.	3	32	23	127			~	4	٠,٠	<	0.6	12	5	174		37	81	802	24	`45	2	8 (	3.06	1.52	0.86	3.93	0.80	0.17	0.0	0:38	
67492	P _1.	+	15	152	156	-60	<	<	39	<	΄<	1.5	9	3	33	-  -	26	39	705	30	78	1	3	<	1.35	0,50	3.46	0.90	0.17	0.04	0.75	
81403	P 3.	9-	35	1385	1696			<	4	<	<	32.7	1	3	37	्रं 🗸	162		422	<	IJ	<	<	<	0.08	0.53	0.97	0.04	0.02	0.02	0,01	
81404	P-4.	6	8	<b>-63</b> 1	38_		_<	<	_1_	_	<_	0.5		1_	_127	~~	19	<del>3</del> -	25-	9-	<b>43</b> -	4	~	<	0.32	0,04	1.89	0.03	0.31	0.21	0.02	
81405	P -5.	5_	18	297	24	ميمد	6	<	2	<	<	0.7	3	4	12	<	155	<	35	<	2	1	<	<	0.02	0_01	0.51	<	0.02	0.00	2 ~	
81406	بلہ ع	4-	7	24	33	æ	- 5	<	3	<	~	0.6	2	3	40	c <b>C</b>	137	2	55	2	- 3	1	<	<	0.06	0.03	0.54	0.01	0.04	0.02	0.01	
81407	P -8.	4	42	18	92	-8	٠ <	<	4	<	<	1.0	15	4	89	<	27	49	1133	17	24	1	3 (	0.01	1.57	0.60	2.99	1.11	0.19	0.03	0.19	
81408	P-0:	5-	43	18	77	· -		<	2	<	` <	0.1	20	4	177	<	31	69	474	13	27	2	3 (	1.11	1.42	0.53	3.11	1.01	0.83	0.00	0.16	
81409	P 0.	9	101	7	98	_	<	<	3	<	`<	0.1	14	4	210	<	29	72	833	19	30	1	4 (	0.06	1.85	1.13	3.44	1.22	0.72	0.00	0.17	•
81412	P <del>- 0.</del>	3-	14	7	83	-ح	. <	<	2	<	<	0.3	13	4	119	<	25	35	806	22	19	1	2 (	0.02	1.55	0.56	3,12	1.13	0.19	0.0	0.17	
8BS-01	P 0.	4	80	33	123	- 48	<	`. «	i	<	٠		20 <sup>°</sup>	46	94	<	59	81	1030	16	<sup>***</sup> 45	2	8 (	0.04	1.79	0.65	4.12	1.28	0.06	0.0	2 0_11	
CAM-182	₽	<	3	24	70	71	<	<	3	<	. <	0.4	4	2	86	<	2	12	1089		. 19	4	2 (	0.01	0.60	0.27	1.85	0.27	0.06	0.0	0.07	
S-1	P 0.	. 6	110	50	351	49	7	~	3	<	′∵∢	<	21	57	90	<u>*</u>	68	85	1036	14	- 44	2	8 (	10.0	2.03	0.54	4.82	1.78	0.07	0.00	2 0.12	
S-2 - BS2	P 0.	.3	73	19	108	18	5	<	2	<	· 📆	<	16	48	79	×	72	81	773	- 11	√ 30	1	8 4	0.02	1.71	0.41	4.32	1.36	0.08	0.00	2 0, 10	
SHAZA SILY 1	P 0.	.6	92	38	104	37	10	<	5	<	ັ. ∢	0.2	38	270	32	`«	246	86	1060	4	104	2	6	0.05	2.85	2.50	4. 7R	4 96	0_07	0.03	0.06	

**07**/10/97 .

### **Assay Certificate**

Page 2

WO#07932

Gary Lee

Certified by

Sample #	Au ppb	Au oz/ton	
81346	64		
81302		0.266	
81327		0.271	

Note: Sample number 81302 was originally from WO#07903. Sample number 81327 was originally from WO#07908.

