Geochemical and Trenching Report

on the

Lawyers Property

Toodoggone, British Columbia

NTS: M94E02, 07 E/W

Latitude: $57^0$13'N Longitude: 126^0 42'W

Omineca Mining Division

for

Bishop Gold Inc.

206 - 595 Howe Street

Vancouver, British Columbia

Canada, V6C 2T5

by

David E. Blann, P..Eng.

Standard Metals Exploration Ltd.

February 7, 2005

Table of Contents

Summary 3
1.0 Introduction 5
2.0 Property Description and Location 5
3.0 Access, Climate, Local Resources, Infrastructure and Physiography 6
4.0 History 6
5.0 2004 Exploration Program 8
6.0 Regional Geology 9
7.0 Property Geology 10
8.0 Property Structure, Alteration and Precious Metals 12
9.0 Results 12
  9.1 Geochemical Surveys 12
  9.2 Trenching 13
  9.3 Prospecting and Rock Sampling 14
  9.4 Cliff Creek Waste Dump Sampling 14
  9.5 Tailings Pond Sampling 15
10.0 Discussion and Conclusions 15
11.0 Recommendations 17
12.0 Statement of Costs 18
13.0 Statement of Qualifications 19
14.0 References 20

Tables

1) Mineral Claim Tenure
2) Trench Assay Summary
3) PIMA Analyses
4) Rock Sample Results

Figures

1) B.C. Location
2) North Central B.C. Location and Access
3) Mineral Claim Location
4) Regional Geology
5) Property Geology
6) General Plan of Activities
7) Soil Geochemistry Au plots
8) M grid Trench Geology
9) M grid Trench Assay Plan
10) Silver Creek Sketch

Appendices

1) Assay Certificates
2) Petrography Reports

Summary

The Lawyers property is located in the Toodoggone District, approximately 450 kilometres north of Prince George, British Columbia. The property is comprised of two historically significant properties, Silver Pond and Lawyers. The Lawyers property contains the Amethyst Gold Breccia, Cliff Creek, Dukes Ridge and Phoenix prospects that were selectively mined between 1989 and 1991, producing 173,678 ounces of gold and 3,638,954 ounces of silver from 570,880 tonnes. An increase in cutoff grade and required development costs resulted in writing off remaining inferred resources of 85,178 tonnes grading 7.77 g/t gold, 232 g/t silver on the Cliff Creek prospect in 1992.

The geology of the Toodoggone area is comprised of a basement of volcanic, siliciclastic and carbonate rocks of the Asitka Group, Permian in age, overlain by the Takla/ Stuhini Group, Upper Triassic-Lower Jurassic in age, an island arc assemblage comprised of dominantly basaltic andesite flow, breccia and tuff. The Toodoggone Formation comprised of dacite-andesite and Lower to Middle Jurassic in age, was erupted during regional extension and coeval intrusions of composite granodiorite and associated dikes of felsic to mafic composition. Regional northwest trending strike slip and conjugate fault splays cut the Toodoggone and older rocks, and in part control intrusive and widespread hydrothermal activity of low to intermediate sulphidation epithermal style. Porphyry copper gold deposits such as Kemess also occur at somewhat deeper structural levels.

Between July 30th and October 4th, 2004 work on the Lawyers property comprised access road construction, 514 soil samples on three grids, limited prospecting, and approximately 2,700 metres of excavator trenching and chip sampling focused on the M grid, subparallel to and adjacent the Cliff Creek prospect. Petrographic and PIMA (portable infrared mineral analyzer), waste dump sampling at the Cliff Creek portal, and test pits of the tailings pond were also performed.

Trenching on the M grid has identified a series of northwest trending zones, approximately two to ten metres in width and extending 400 metres containing silicification, breccia and low temperature quartz veins, veinlets and stock work with trace to 5% pyrite, and locally sulphosalt minerals. Results include grab samples up to 9.91 g/t gold, 562.0 g/t silver. Chip sampling returned 1.0

metre 4.02 g/t gold, 291.0 g/t silver, 1.5 metres 7.06 g/t gold, 66.0 g/t silver, 4.0 metres 0.79g/t gold, 131.7 g/t silver, 1.0 metre 8.28 g/t gold, 59.0 g/t silver, and 3.0 metres 1.82 g/t gold, 241.0 g/t silver.

Soil geochemical surveys to the southeast and northwest of the trenching returned gold anomalies that suggest the potential strike length of the M grid zone is over one kilometre and remain open. Airborne radiometric and magnetic survey data from 2003, trenching and soil geochemical results, and existing gold-silver zones in the adjacent Cliff Creek prospect suggest a large scale epithermal gold-silver system approximately 300 metres in width and over 1.5 kilometres in length is host to excellent potential for the development of significant gold-silver resources.

A program of target specific prospecting, soil geochemical surveys, geological mapping, trenching and diamond drilling of 4,850 metres are recommended at a cost of $950,000, and are expected to advance several priority prospects to the definition drilling stage.

1.0 Introduction

In 2004, Bishop Gold Inc. funded exploration on the Lawyers property located in the Toodoggone River area of north central British Columbia, Canada. The Lawyers property includes the past producing Amethyst Gold Breccia (AGB), Dukes Ridge, Cliff Creek and Phoenix deposits. Between 1989 and 1992, 173,678 ounces of gold and 3,638,954 ounces of silver were recovered from high-grade epithermal veins in three discrete zones at the Lawyers deposit. An increase in cutoff grade and additional development cost resulted in writing off remaining inferred resources of 85,178 tonnes grading 7.77 g/t gold, 232 g/t silver on the Cliff Creek prospect in 1992.

The Silver Pond property to the west was extensively explored by St. Joe Canada Inc. between 1981 and 1988. Since 2001, Guardsmen Resources Inc. and Bishop Gold Inc. have focused on assessing the mineral potential in under-explored areas, in particular near the historical claim boundary between St. Joe and Cheni Gold Mines Ltd.

2.0 Property Description and Location

The Lawyers property is located in the Omenica Mining Division of north-central British Columbia, approximately 290 kilometers north of Smithers, or 480 kilometers north of Prince George, on NTS map sheet 094E/06W (Figure 1). The center of the property lies at coordinates 609000E and 6356000N (NAD83, Zone 9).

Road access to the property from Mackenzie, B.C., is via 420 km of gravel road to the Kemess Mine of Northgate Resources Ltd., approximately 30 km further to the Baker Mine, and approximately 15 kilometers to the Lawyers property. Driving time from Prince George is approximately nine hours. An air strip at Sturdee Valley and at the Kemess Mine facilitates personnel transportation with regularly scheduled flights. Access throughout the Lawyers property is via by a series of drill and cat trails suitable for four wheel drive trucks.

A proposed connecting road from the Toodoggone south and west to the deep sea port of Stewart, B.C. is in final stages of approval, and would significantly lower the cost of transporting materials to and from the seaport (Figure 2).

The Lawyers Property consists of 29 mineral claims, totaling 216 units and covering 5,400 hectares, located in the Omineca Mining Division, British Columbia (Table 1 and Figure 3). As of February 24th, 2005, the claims are registered at B.C. Mineral Titles in the name of Guardsmen Resources Inc. of Vancouver, B.C. Canada.

3.0 Access, Climate, Local Resources, Infrastructure and Physiography

The Lawyers property is located between approximately 1400 metres and 1900 metres elevation east of Lawyers Pass. The terrain is gentle to rolling, with localized areas of cliffs at higher elevations and in creek canyons. Glacio-fluvial deposits, re-worked moraine and gravel terrace underlie much of the valleys, and stunted pine, spruce and sub-alpine to alpine groundcover prevails above 1600 metres elevation.

Seasonal temperatures vary from -35° C in winter to over 30°C during the four months of summer. The mean daily temperatures for July and January are approximately 14°C and - 15 to - 20°C, respectively. Precipitation between 50 and 75 centimetres occurs annually, with most during the winter months as snow cover of approximately 2 metres.

The optimal time for surface exploration on the property is between mid-late June and the end of September.

4.0 History

The Lawyers property contains the AGB, Cliff Creek, Duke's Ridge and Phoenix deposits, previously mined, in part, by Cheni Gold during 1989-1992. In addition, the property includes the EOS, Ridge, Heavy Metal, North, West and Silver Creek prospects, extensively explored by St. Joe in the 1980's. The following is a summary of the main exploration and development activities derived from Assessment Reports, published papers and government sources. As quoted from Kaip/ Childe, 2001:

- **1925:** First foray into the Toodoggone area exploring for gold placers by Charles McClair.
- **1933**: Cominco staked and explored several base metal showings in the Toodoggone area.
- **1960's:** Regional geochemical surveys completed in the Toodoggone in search of porphyry copper mineralization. Follow-up work during the early 1970's by Kennco Exploration (Western) Ltd. identifies most of the precious metal occurrences in the Lawyers area.
- **1973:** AGB discovered by Kennco.
- **1974 & 1975:** Kennco completes surface 671 metres of trenching and 1,151 metres of diamond drilling in 10 drill holes on the AGB zone.
- **1979:** Kennco options the Lawyers property to Semco Mining Corporation. SEREM Inc. sign agreement with Semco and complete a small program of drilling and trenching on the AGB zone.
- **1980 to 1983**: SEREM completes 10,445 metres of surface diamond drilling, 1,209 metres trenching, 764.5 metres of underground development and 2,148 metres underground definition drilling on the AGB zone. During this time SEREM also completes 4,825 metres of trenching and 1,990 metres of surface diamond drilling on the Cliff Creek and Duke's Ridge zones. A resource of 509,740 tonnes grading 7.23 g/t gold, 243.8g/t silver is reported for the AGB zone (Vulimiri et. al., 1986).
- **1984 & 1985:** St. Joe completes a 3,000 metres diamond drill program, grid controlled geochemical sampling and mapping and geophysical surveys on the Silver Pond property, immediately west of SEREM's Lawyers property.
- **1987:** St. Joe and Nexus Resources Corp. conduct a program of 13,000 metres drilling, 3,000 metres trenching, ground IP, EM and total field magnetometer surveys and surface mapping and rock geochemistry along the Silver pond trend and the southern strike continuation of the Cliff Creek zone.
- **1985 to 1988:** SEREM changes name to Cheni Gold and continues exploration on the AGB zone and begins underground exploration on the Cliff Creek and Duke's Ridge zones. In 1986, Cheni Gold reports reserves of 941,000 tonnes averaging 7.2 g/t gold and 260 g/t

silver (Exploration in B.C., 1986). By 1988, Cheni Gold was operating the Lawyers mine in a pre-production state with mill construction commissioned in December of that year.

- **1989 to 1992**: Cheni Gold commences production in March of 1989, initially from the AGB followed by the Cliff Creek and Duke's Ridge zones. In the fourth quarter of 1992, Cheni Gold mined the Phoenix zone, a small, bonanza grade vein with a calculated head grade of 46.2 g/t gold and 2155.8 g/t silver. At the end of 1992 Cheni Gold ceases production due to depletion of reserves. Production between 1989 and 1992 totaled 173,678 ounces of gold and 3,638,954 ounces of silver from 570,880 tonnes (recovered grade: 9.5 g/t gold and 198 g/t silver).
- **1996**: Americas Gold Corp. acquires the Lawyers property and enters into a Joint Venture agreement with Antares Mining and Exploration Corp.
- **1998**: Cheni Gold completes reclamation of the Lawyers mine site.
- **2001:** Guardsmen Resources acquires a portion of the former Lawyers mine site and performed grid layout, geophysical, geological surveys and prospecting.
- **2003** Guardsmen Resources performs geology, prospecting, and geochemical, geophysical geological surveys.

5.0 2004 Exploration Program

Between August and September, 2004, Bishop Gold completed approximately 2,700 metres of excavator trenching on the M Grid from which 345 rock chip samples were taken. Overall, trenches were approximately 25% sampled largely due to the ground freezing and snow cover of 30 cm to 60 cm in drifts within the trenches at the end of September. Three grids and 514 soil samples, GPS surveying of historical drill hole collars and features, prospecting and 26 rock samples were also completed. Eight test pits were dug by machine into the tailings pond and a large muck sample taken from each pile. Four 0.25 square metre grab samples were taken from the Cliff Creek portal waste dump, currently road fill. Petrographic and PIMA analyses were performed by Anne Thompson of Petrascience Consultants Inc. of Vancouver, B.C. A preliminary review and compilation of assessment reports on file with the B.C. Government, along with 2003 Airborne magnetic and radiometric survey data was performed.

6.0 Regional Geology

The regional geology is summarized largely after Diakow et al. (1993, 1997) (Figure 4). The oldest lithology exposed in the region is Lower Permian aged rocks of the Asitka Group and consist of andesite and rhyolite with locally prominent sections of inter-bedded limestone and chert. Upper Triassic rocks of the Stuhini Group (also referred to as Takla Group) are more widespread and characterized by clinopyroxine-bearing basalt, andesite, and associated epiclastic rocks, and locally appear similar to Paleozoic rocks.

Lower to Middle Jurassic Toodoggone Formation rocks of dacite-andesite composition lie in non-erosional, gently dipping unconformity with Stuhini Group rocks. The lowermost Addoogatcho Creek Formation is comprised of lower quartz plagioclase porphyry, a middle unit of crystal ash tuff, lapilli tuff and rare agglomerate, and an upper unit of quartz, biotite and hornblende-bearing ash flow. The Moyez Creek volcanic rocks comprise thinly bedded crystal tuff with associated sandstone and mudstone, and conglomerate locally containing granite clasts, greywacke, crystal tuff and epiclastic rocks. The Lawyers-Metsantan quartzose andesite consists mainly of flow and tuff. The mafic flow and tuff unit contains pyroxene-biotite-hornblende phyric flows, lapilli, crystal and ash tuff with local sandstone and rare marl layers, porphyritic basalt, and pyroxene phyric basalt flow and tuff. The McClair Creek Formation includes an intrusive dome complex and mainly purple, lavender or grey crowded plagioclase phyric flow. The Tuff Peak Formation strata include flows with sparse orthoclase megacrysts, conglomerate or lahar with sandstone and mudstone interbeds, debris flow, lapilli and crystal tuff and biotite-augite-hornblende-plagioclase phyric flow. The Toodoggone crystal ash tuff and flow unit has lower epiclastic red arkosic sandstone, siltstone, conglomerate and slide debris, and an upper unit with mainly plagioclase crystal tuff, lapilli tuff and breccia. The upper ‘Grey Dacite’ unit consists of quartzose plagioclase-bearing ash flows of andesitic and rarely dacitic composition that are locally welded.

The youngest strata exposed are Upper Cretaceous rocks of the Tango Formation, Sustut Group, and comprise polymictic conglomerate, sandstone, shale, and carbonaceous mudstone; these rocks occur in gently west dipping unconformity with the Toodoggone Formation.

Intrusive rocks in the area include Lower to Middle Jurassic feldspar and hornblende-feldspar porphyry dikes and plugs, granodiorite to quartz diorite, and quartz monzonite to granodiorite bodies that are partly megacrystic as well as minor syenite. Lower Jurassic dikes, sills and small plugs include pyroxene-plagioclase porphyry, diorite to gabbro, augite-hornblende porphyry, and basalt.

Early Jurassic Black Lake suite calc-alkaline plutons are apparently coeval with the Toodoggone Formation volcanic rocks and development of an elongated volcano-tectonic depression that is endowed with numerous precious metal-bearing occurrences (Diakow, 1997).

A system of high-angle normal and possibly contraction faults trend between 120 degrees and 150 degrees in azimuth and occurs with conjugate sets of secondary faults trending from 20 to 40 degrees, and 60 to 80 degrees in azimuth. These structures may impart primary control of high-level co-magmatic plutons and deposition of the Toodoggone Formation rocks.

Regional-scale, northwest trending faults occur over a distance of 30 kilometres, with up to four kilometres of right-lateral displacement indicated. Parallel faults also display dip-slip movement, locally placing Stuhini Group in contact with Toodoggone Formation as at Kemess North (Diakow, 1997).

Northeasterly trending high angle faults cut and displace northwest trending structures, tilting and rotating monoclinal strata (Diakow, 1986). North trending, right-lateral strike slip faults are prominent along the eastern margin of the Geigerich Pluton, and are Cretaceous and Early Tertiary in age.

7.0 Property Geology

The Hazelton Group is comprised of undivided and Toodoggone Formation sub-aerial and marine volcanic members divided into lower and upper volcanic cycles (Figure 5). The lower cycle consists of the Adoogachoo, Moyez, Metsantan and McClair Members and the upper cycle consists of the Attycelley and Saunders Members. The Attycelley Member is 500 metres in thickness, and comprised of a heterogeneous mixture of green, grey and mauve lapilli-ash tuff, subordinate lapilli tuff, with minor ash and lava flow, and epiclastic rocks. These rocks resemble the Adoogachoo Member.

The Saunders Member is composed almost exclusively of welded crystal dacite ash flow and tuff. The lower contact of this member appears to be in part, erosional with underlying Takla Group conglomerate and tuffite.

Mesozoic intrusions of the Lower to Middle Jurassic Black Lake intrusive suite cut Asitka, Stuhini rocks and are in part coeval with the Toodoggone Formation; large porphyry style copper-gold systems such as Kemess, Pine, Brenda and Pil prospects are associated with Early Jurassic calc-alkaline intrusions. The Geigerich, Duncan Lake, and Sovereign plutons are of predominantly granodiorite derivation and are compositionally and texturally similar, with the Sovereign pluton having somewhat more prominent quartz phenocrysts.

The Duncan Lake pluton appears to plunge southeast beneath the Kemess North deposit, and affects adjacent Toodoggone Formation volcanic rocks (Diakow, 1997).

Dikes and sills of rhyolite, rhyodacite, quartz latite porphyry, and trachy-andesite to basalt composition cut intrusive and volcanic rocks of the Toodoggone Formation and Takla/Stuhini Group.

Lower to Upper Cretaceous Sustut Group sedimentary rocks are in unconformable contact with Toodoggone Formation rocks in the south and western portions of the property. Screens of Sustut conglomerate occur southwest of the Silver Creek prospect, and cap a north trending ridge further south; the Ridge and EOS/Dream prospects appear adjacent to or within inliers of Toodoggone Formation rocks within the Sustut Group.

The area was glaciated and glacio-fluvial deposits cover approximately 80% of the deeper and wider river valleys at lower elevations. In these areas approximately 1-25 metres of clean, unconsolidated sand and till with rounded boulders up to one metre in diameter occurs. Talus and felsmeer cover much of the bedrock at higher elevations.

2003 airborne radiometric and magnetic surveys, along with regional and deposit scale mapping suggest strong north-northwest trending structures are cut by northeast to east trending structures.

Fractures, shears and fault breccia in outcrop trend east-southeast, southwest, east, and dip moderately to steeply.

8.0 Property Structure, Alteration and Precious Metals

On the Lawyers property, Toodoggone Formation rocks are cut by regional northwest trending structures through the property and subparallel to conjugate fault, shear and tectonic breccia zones contain widespread zones of hydrothermal alteration. Locally dikes of felsic to mafic composition occur, and are weakly altered. A felsic dike two to three metres in width strikes approximately 122 degrees through the M grid and locally is cut by northeast trending faults having variable displacement. Weak to strong clay alteration comprised of kaolinite, dickite, pyrophyllite and alunite occur in the Silver Pond North zone, and in conjunction with zones of locally vuggy silica suggest intermediate to advanced argillic alteration. Hydrothermal alteration associated with gold-silver values at the AGB, Dukes Ridge, Cliff Creek, Phoenix, M Grid, West, South, Amethyst, Silver Creek, Ridge and EOS/Dream prospects is comprised of dominantly silica, illite, adularia, carbonate and suggest a low-sulphidation style epithermal gold-silver system.

9.0 Results

Work performed in 2004 was targeted largely on the M grid area first identified by Guardsmen Resources Inc. between 2001-2003 to the southwest of the Cliff Creek zone, in an area historically occurring on the property boundary between Cheni Gold and St. Joe (Figure 6).

9.1 Geochemical Surveys

Three grids were laid out and 514 soil samples gathered during 2004 (Figure 6). Samples were taken from the B horizon, at a depth of approximately 15-30 cm, placed in kraft paper bags, and tied closed. The samples were air dried then shipped to Acme Analytical Laboratories for analysis by ICP MS. Soil analyses were viewed with Gemcom V. 5.4.4 geostatistical tools to identify a

90% log normal probability value of 22 ppb gold, and 95% probability as 39 ppb gold, which were contoured by hand (Figure7). Complete assay certificates are located in Appendix 1.

Soil sampling returned gold anomalies to the southeast and northwest of the M grid trenches. Anomalous silver values (up to 3.5 ppm) on the east side of the northwest extension occur in proximity with old drillhole collars and may reflect drillhole cuttings from down-hole. Gold anomalies extend over 400 metres northwest and approximately 200 metres southeast of the M grid trenches and remain open. Spotty gold anomalies occur in the northwest corner of the C grid, located northwest of the Cliff Creek air shaft (Figure 6).

9.2 Trenching

The M grid trench geology map and trench sample assay results are located in Figures 8 and 9 respectively. A summary of Trench Assay Results and PIMA analyses, are located in Tables 2 and 3, respectively, and assay certificates and petrography reports are located in Appendix 1 and 2, respectively.

The M grid is underlain by grey to pale green, fine grained biotite-feldspar massive crystal tuff and lapilli tuff of dacite-andesite composition cut by moderate to steeply dipping pre, syn and post-mineral northwest to northeast trending faults, and are broadly weak propylitic to kaolinite-smectite (argillic) altered. Zones from two to ten metres in width contain one to two stage clear to milky white, massive and vuggy, dog tooth/ comb quartz and quartz-chalcedony open space filling in fractures and fault breccia. Locally, one mm wide selvages of pink-flesh colored adularia and trace to five percent pyrite occurs. In hand sample, some quartz has very fine grained sooty sulphosalt, possibly acanthite/argentite. Calcite was not indicated where tested, however a pinkish orange zeolite, laumontite is present. Base metal sulphides were not observed in hand specimen nor anomalous copper, lead, zinc in analytical results. In comparison, sample 04DB-7 returned 12.20g/t gold, 245 g/t silver and 256 ppm zinc, 170 ppm lead from the Cliff Creek underground. Zones of quartz veinlets, veins, stock work, and silicified breccia occur in spatial proximity to wider zones of weak to strong iron oxides, hydroxides (jarosite) and manganese oxides.

A felsic dike of rhyodacite composition is cut by fractures containing iron oxides, manganese oxides and locally quartz veinlets and associated gold and silver values in Trench 3 and 10.

At least four gold-silver bearing zones trend northwest at approximately 110-140 degrees and are cut by 020-080 degree cross structures in part causing displacement and re-brecciation of silicified zones. Grab samples from the dogleg trench returned up to 9.91 g/t gold, 562.0 g/t silver. Chip sampling returned 1.0 metre 4.02 g/t gold, 291.0 g/t silver from trench 1, 1.5 metres 7.06 g/t gold, 66.0 g/t silver from trench 2a, 4.0 metres 0.79g/t gold, 131.7 g/t silver from trench 3, 1.0 metre 8.28 g/t gold, 59.0 g/t silver from trench 6, 12.0 metres 0.11 g/t gold, 3.4 g/t silver from trench 8, 3.0 metres 1.82 g/t gold, 241.0 g/t silver from trench 11, and 3.0 metres 0.25 g/t gold, 1.7 g/t silver from trench 12. The northeast side of the trenches are within 50 metres of drill hole 1990-cc-107 returning 0.5 metres of 0.184 oz/ton gold, 23.85 oz/ton silver at a depth of approximately 25 metres below surface.

9.3 Prospecting and Rock Sampling

Areas of prospecting and location of rock samples are shown in Figure 6 and rock sample results are provided in Table 5. A sketch of the Silver Creek prospect and chip samples is located in Figure 10. The Silver Creek prospect returned significant gold and silver values, as previously described by Kennedy (1986). Rock sampling in 2004 confirm gold and silver values occur over at least 100 metres along a northwest trend in the canyon walls, however localized zones of higher grade may have a different orientation.

A rock sample of quartz vein material from a blast pit at the south end of Dukes Ridge returned 0.12 g/t gold, 3.1 g/t silver. A rock sample northwest of the M grid returned 0.16 g/t gold.

9.4 Cliff Creek Waste Dump Sampling

Four 0.25 square metre panel samples of waste dump muck each over 3.0 kg in weight were obtained from an area approximately 50 by 22 meters in dimension (Figure 6, Table 5). The four samples averaged 2.57 g/t gold, 71.9 g/t silver. The potential volume and grade of waste dump material remains unclear, however not included in this average is sample 04DB-7 returning 12.02

g/t gold and 245 g/t silver from a large boulder within the waste dump pile. These samples contain silicified bleached fragments and grey quartz chalcedony, bladed quartz after calcite and or barite, and anomalous lead and zinc on analyses. These rocks are distinct from those exposed within the M grid trenches, and may reflect a deeper boiling zone associated with precious metal deposition.

9.5 Tailings Pond Sampling

Eight test pits were excavated in the Lawyers tailings pond 1.8 to over 4 metres in depth and the muck pile randomly grab sampled giving total weights averaging over 4 kg (Figure 6, Table 5). The average for the eight random grab samples is 0.40 g/t gold, 28.3 g/t silver. Muck was comprised of grey, fine to sandy silt, and locally banded with iron oxides, and darker colored material. The highest assay of 0.50 g/t gold and34.7 g/t silver was returned from the southwest corner of the tailings pond. These results appear consistent with a 95% recovery of material grading approximately 8.0 g/t gold through the Lawyers mill.

10.0 Discussion and Conclusions

The Lawyers Property is underlain by Toodoggone Formation dacite-andesite tuff cut by regional northwest trending strike slip faults, and conjugate splays trending north to northeast. Dikes of felsic to mafic composition cut the Toodoggone rocks locally. The M Grid is underlain by a series of subparallel, northwest trending silicified and fault breccia zones traced for at least 400 metres along strike, and cut by north to northeast trending faults. Larger silicified zones are two to ten metres in width and contain variable quartz-chalcedony veinlets, veins, breccia, trace to five percent pyrite, iron oxides, hydroxides and manganese oxides, and locally sulphosalt minerals, likely acanthite, argentite and associated gold and silver values. Grab samples returned up to 9.91 g/t gold, 562.0 g/t silver. Chip sampling returned 1.0 metre 4.02 g/t gold, 291.0 g/t silver, 1.5 metres 7.06 g/t gold, 66.0 g/t silver, 4.0 metres 0.79g/t gold, 131.7 g/t silver, 5.0 metres 1.47 g/t gold, 20.2 g/t silver, 12.0 metres 0.11 g/t gold, 3.4 g/t silver, 3.0 metres 1.82 g/t gold, 241.0 g/t silver from trench 11. The texture and composition of quartz veins, silicified zones containing anomalous gold and silver values and kaolinite, smectite and locally illite, silica clay alteration suggest the mineralized zones on the M grid reflect the top of a low sulphidation epithermal gold-silver deposit, similar to the adjacent Cliff Creek prospect to the northeast, where drill hole 1990-cc-107 returned 0.5 metres of 0.184 oz/ton gold, 23.85 oz/ton silver at a depth of approximately 25 metres below surface.

To the northwest and southeast of the M grid trenches, 2004 soil geochemical anomalies have identified an additional 600 metres of potential strike length. The M grid trenches, soil geochemical surveys and Cliff Creek prospect, in conjunction with 2003 airborne geophysical results suggest a large-scale epithermal system 1.5 kilometres in length and at least 300 metres in width underlies the M grid area.

The West, South, Silver Creek, Heavy Metal, Ridge and EOS gold-silver epithermal prospects are located to the southwest and southeast of the M grid, and occur in spatial proximity to post-mineral cover rocks of the Sustut Group; the Ridge and EOS prospects are located in gentle scree and boulder covered talus comprised of mixed till, Toodoggone Formation and Sustut conglomerate. 2003 geophysical survey data suggest these historical prospects may be much larger than exposed or explored to date, and have important gold-silver potential. Similarly, additional potential occurs west-northwest of the M grid and around the Cliff Creek and AGB prospects.

11.0 Recommendations

Compilation of historical data, prospecting, geological mapping, sampling in conjunction with target-specific soil geochemistry, trenching and diamond drilling is recommended. Diamond drilling of 2,000 metres on the M grid is recommended. In addition, selected targets for drilling include the Kaip trench, twinning a 1990 Cliff Creek drillhole, and one hole each on the West, North, Silver Creek, Ridge, and EOS zones, for a total of 4,850 metres of NQ thin wall core drilling

2005 Lawyers Property Proposed Budget Phase 1

				Cost
Compilation				$25,000
Diamond Drilling	Holes	Total Length (metres)	$ metre	
M grid	4	2,000	$150	$300,000
AGB Kaip Trench	1	250	$150	$37,500
Cliff Creek	1	350	$150	$52,500
West Zone	1	400	$150	$60,000
Silver Creek	1	250	$150	$37,500
Ridge	1	250	$150	$37,500
EOS	1	250	$150	$37,500
North	1	350	$150	$52,500
Other	3	750	$150	$112,500
	14	4,850		$727,500
Prospecting				$25,000
Soil Geochemistry				$50,000
Trenching				$75,000
				$150,000
			Total	$902,500

Respectfully submitted, ______________________ Date____________________

David E. Blann, P.Eng.

Lawyers 2004 Project Statement of costs Bishop Gold Inc.

Geochemical, Trenching Report on the Lawyers - Project Duration: 67 Days - July 30, 2004 To October 4,2004

Wages:	**Position**	**# Days**	**Rate/Day**	**Amount**	**Totals**
All North Engineering	Bridge Assessment				
Carl Hovey	Forestry Engineer	4	Subcontractor	$0.00	
Ian Sinclair	Legal Surveyor	4	Subcontractor	$0.00	
Ruskin Construction	Bridge Contractor				
Steve Welsh	Bridgeman	7	Subcontractor	$0.00	
Gord Grant	Helper	7	Subcontractor	$0.00	
Lomak	Road Maintainence				
Colin Blair	Cat Excavator Operator	23	Subcontractor	$0.00	
Cecil Kachkowski	Cat Excavator Operator	19	Subcontractor	$0.00	
Dick Wallace	Road Grader Operator	5	Subcontractor	$0.00	
Lawrence Couiyk	Dump Truck Operator	5	Subcontractor	$0.00	
Steve Jack	Dump Truck Operator	5	Subcontractor	$0.00	
Bishop Gold Inc.					
Gary Nordin	Senior Geologist	5	Director	$0.00	
Jim Cuttle	Geologist	8	Subcontractor	$0.00	**$0.00**
Guardsmen Resources Inc.					
Dave Blann	Q.P. Geologist	20.5	$500.00	$10,250.00	
Scott Gifford	Project Manager	67	$350.00	$23,450.00	
Harry Huffels	Camp/field Quality Control	67	$350.00	$23,450.00	
Michael Renning	Level 3 First Aid/Prospecting	12	$350.00	$4,200.00	
Jason Rabinovitch	Level 3 First Aid/Labourer	15	$250.00	$3,750.00	
Dave Ridley	Field Crew Chief	39	$275.00	$10,725.00	
Ray Carter	Field Worker	67	$250.00	$16,750.00	
Dan Moznik	Mechanic/Maintainence/Field	65	$250.00	$16,250.00	
Doug Gregerson	Cat Bulldozer Operator	50	$350.00	$17,500.00	
Gonzalo Zuniga	Camp Cook	50	$275.00	$13,750.00	
Subtotal:		**544.5**		**$140,075.00**	**$140,075.00**

Disbursements:					
Equipment	Complete 20 man Camp	60 Days	$450.00/Day	$27,000.00	
	Yamaha ATV's x 3	60 Days	$210.00/Day	$12,600.00	
	Honda Inverter Generator	2 Months	$450.00/Mth	$900.00	
	Honda EM5000 Generator	2 Months	$490.00/Mth	$980.00	
	Info-Sat Base Station Phone	2 Months	$500.00/Mth	$1,000.00	
	Satelite Phone Time			$9,864.09	
	Crew Cab 4x4 + Camper	2 Months	$2500.00/Mth	$5,000.00	
	Caterpillar D8K Bull Dozer	2 Months	$12,000./Mth	$24,000.00	
	7-Ton Equipment Trailer	2 Months	$750.00/Mth	$1,500.00	
	2005 Freightliner 5 Ton	1 Mth+kms		$2,755.71	
	Accident + Towing			$4,262.61	
	Ford F350 Crew Cab	2 Mths+kms		$7,000.06	
	2004 Freightliner 5 Ton	2Mth+kms		$8,507.46	
	7-Ton Fuel Tank Trailer	2 Months		$2,150.00	
	Tidy Tank - 1000 Gallon	2 Months		$1,612.50	
	Tidy Tank - 130 Gallon	2 Months		$403.13	
	Hiab Fuel Truck	Job		$1,174.88	
	VHF Hand Held Radio x 5	Job		$913.75	
	VHF Truck Mount Radio x 3	Job		$432.90	
	Gate Welder-Bridge Deck	Job		$311.88	
	Level 3 First Aid Complete	Job		$807.30	
				$113,176.27	**$113,176.27**

Subcontractors	Pre-Fab. 1st Aid Station	Job		$1,500.00	
	Contract Claim Staking	Job		$27,766.94	
	Excavator, Grader, Dump T.'s	Job		$57,476.13	
	Rescue Vehicle	Job		$950.00	
	Replacement 5 Ton Truck	Job		$900.00	
	Trailer Welding	Job		$149.80	
				$88,742.87	**$88,742.87**
Bridge Decks	Mobilization	Job		$26,595.00	
	Road Assessment	Job		$3,000.00	
	Culvert Supply & Install	Job		$3,284.00	
	50ft Deck Supply & Install	Job		$45,986.00	
	40ft Deck Supply & Install	Job		$41,849.00	
	50ft Deck Supply & Install	Job		$50,993.00	
	Gate Supply	Job		$1,806.00	
				$173,513.00	**$173,513.00**
Field Expediting	A & D Expediting	27.5	$300.00	$8,250.00	
	6,230kms @ $0.40/km			$2,492.00	
				$10,742.00	**$10,742.00**
Field Supplies					**$15,303.75**
Groceries & Meals					**$10,679.76**
Transportation					**$34,458.89**
Hotel					**$1,984.39**
Fuel					**$18,178.68**
Geochemical Assay Laboratory Services					**$17,120.18**
Petrasciences: Professional Petrographic Services - PIMA Analysis					**$920.20**
Petrasciences: Petrographic Report					**$2,275.00**
Report					**$6,500.00**
			Wages & Disbursements:		**$633,669.99**
			10% Management Fee:		**$45,046.18**
			Subtotal:		**$678,716.17**
			GST @ 7%:		**$47,510.00**
			Total:		**$726,226.17**

13.0 Statement of Qualifications

I, David E. Blann, P.Eng., of Squamish, British Columbia, do hereby certify:

That I am a Professional Engineer registered in the Province of British Columbia.

That I am a graduate in Geological Engineering form the Montana College of Mineral Science and Technology, Butte, Montana, 1987.

That I am a graduate in Mining Engineering Technology from the B.C. Institute of Technology, 1984.

That I have been actively engaged in the mining and mineral exploration industry since 1984.

That the 2004 exploration program was directed and performed in part, under my supervision, and information conclusions and recommendations herein are based upon approximately 20 days on the property in September, 2004.

Dated in Squamish, B.C., February 27, 2005

David E Blann

Digitally signed by David E Blann
DN: CN = David E Blann, C = CA, O = Standard Metals Exploration Ltd., OU = President
Reason: I am the author of this document
Date: 2005.03.02 15:19:29 -08'00'

David E Blann, P.Eng.

14.0 References

BC Assessment Report 16,952 (1987): Silver Pond Property, Omenica Mining Division, North-central BC: Report on Exploration Program by St. Joe Canada Inc. in Joint Venture with Nexus Resource Corp.

Clark and William-Jones, 1991Ar-Ar ages of epithermal alteration from the Toodoggone Au-Ag district, north-central British Columbia (94E). BC Ministry of Energy Mines and Petroleum, Geological Fieldwork 1990, Paper 1991-1, pages 207-216.

Diakow, et.al. (1991): Jurassic Epithermal Deposits in the Toodoggone River Area, Northern British Columbia: Examples of well preserved, volcanic hosted, precious metal mineralization; Economic Geology, vol. 86, pages 529-554.

Diakow, et. al. (1993): Geology of the Early Jurassic Toodoggone Formation and Gold-Silver Deposits in the Toodoggone River Map Area, Northern British Columbia; British Columbia Ministry of Energy Mines and Petroleum Resources, Mineral Resources Division, Bulletin 86, 72 pages.

Diakow, L.J. and Metcalfe, P. 1997. Geology of the Swannell Ranges in the Vicinity of the Kemess Copper Gold Porphyry Deposit, Attycelley Creek (NTS 94E/2), Toodoggone River Map Area. British Columbia Geological Survey Branch. Geological Fieldwork 1996, Paper 1997-1, 101-115.

Diakow, L.J., Panteleyev, A., and Schroeter, T.G. 1993. Geology of the Early Jurassic Toodoggone Formation and Gold-Silver Deposits in the Toodoggone River Map Area, Northern British Columbia. B.C. Ministry of Energy Mines and Petroleum Resources, Bulletin 86, 72 pages.

Kaip, Andrew, MSc., Childe, Fiona, Ph.D., Summary Report on the Lawyers Property, prepared for Guardsmen Resources Inc., November 31, 2001.

Panteleyev, A. (1996): Epithermal Au-Ag: Low Sulphidation, in Selected British Columbia Mineral Deposit Profiles, Volume 2 - Metallic Deposits, Lefebure, D.V. and Hõy, T, Editors, British Columbia Ministry of Employment and Investment, Open File 1996-13, pages 41-44.

Simpson, et. al. (2001): Hydrothermal alteration and hydrologic evolution of the Golden Cross epithermal Au-Ag deposit, New Zealand; Economic Geology, vol. 96, pages 773/796.

Vulimiri, et. al. (1986): Lawyers gold-silver deposits, British Columbia; Mineral deposits of the Northern Cordillera Special Volume 37, Morin, J.A. Editor, Canadian Institute of Mining and Metallurgy, pages 191-201.

Claim Name	Tenure Number	Status	Mining Division	Area
BIRTHSTONE 1	382259	Good Standing 2007.11.09	15 OMINECA	20 un
BIRTHSTONE 2	382260	Good Standing 2007.11.09	15 OMINECA	12 un
BIRTHSTONE 3	382261	Good Standing 2007.11.09	15 OMINECA	1 un
BIRTHSTONE 4	382262	Good Standing 2007.11.09	15 OMINECA	1 un
BIRTHSTONE 5	382263	Good Standing 2007.11.09	15 OMINECA	1 un
BIRTHSTONE 6	382264	Good Standing 2007.11.09	15 OMINECA	1 un
WO 1	383411	Good Standing 2007.11.09	15 OMINECA	1 un
WO 2	383412	Good Standing 2007.11.09	15 OMINECA	1 un
WO 3	383413	Good Standing 2007.11.09	15 OMINECA	1 un
WO 4	383414	Good Standing 2007.11.09	15 OMINECA	1 un
WO 5	383415	Good Standing 2007.11.09	15 OMINECA	1 un
WO 6	383416	Good Standing 2007.11.09	15 OMINECA	1 un
WO 7	383417	Good Standing 2007.11.09	15 OMINECA	1 un
SHOTGUN 2	389431	Good Standing 2007.11.09	15 OMINECA	1 un
SHOTGUN 4	389432	Good Standing 2007.11.09	15 OMINECA	1 un
SHOTGUN 5	389433	Good Standing 2007.11.09	15 OMINECA	1 un
SHOTGUN 6	389434	Good Standing 2007.11.09	15 OMINECA	1 un
SHOTGUN 7	389435	Good Standing 2007.11.09	15 OMINECA	1 un
SHOTGUN 8	389436	Good Standing 2007.11.09	15 OMINECA	1 un
LIBERTY 1	396522	Good Standing 2007.11.09	15 OMINECA	18 un
LIBERTY 2	396523	Good Standing 2007.11.09	15 OMINECA	9 un
LIBERTY 3	396524	Good Standing 2007.11.09	15 OMINECA	8 un
LIBERTY 4	396525	Good Standing 2007.11.09	15 OMINECA	20 un
Bishop 1 *	411302	Good Standing 2005.06.09	15 OMINECA	18 un
CLOUD 1	414669	Good Standing 2007.09.26	15 OMINECA	20 un
CLOUD 2	414670	Good Standing 2007.09.27	15 OMINECA	18 un
KURT 1	414671	Good Standing 2007.09.29	15 OMINECA	20 un
KURT 2	414672	Good Standing 2007.09.29	15 OMINECA	20 un
Booth	405005	Good Standing 2007.11.09	15 OMINECA	16 un
			Total	216
			Hectares	5,400

* Bishop Resources
all others : Guardsmen Resources Inc.

Trench ID	From (m)	To (m)	Width (m)	Ag ppm_gm/t	Au** gm/mt
T-1	1.00	2.00	1.0	86.6	1.55
T-1	53.00	55.00	2.0	24.7	0.83
T-1	64.00	66.00	2.0	13.7	0.25
T-1	131.50	132.50	1.0	291.0	4.02
T-1	133.50	134.50	1.0	142.0	2.13
T-1a	185.0	187.0	2.0	37.2	1.17
T-2	56.00	57.00	1.0	44.6	2.54
T-2	104.0	104.4	0.4	17.3	1.40
T-2a	0.00	0.40	0.4	58.0	4.49
T-2a	70.3	71.8	1.5	65.8	5.71
T-3	125.80	127.80	2.0	240.0	1.10
T-4	25.50	29.00	3.5	51.4	0.21
T-4	100.60	101.60	1.0	2.8	0.21
T-4	101.6	102.1	0.5	16.5	0.72
T-4	102.1	103.1	1.0	4.1	0.17
T-6	12.50	13.50	1.0	59.0	8.28
T-7ext	0.0	3.0	3.0	3.5	0.20
T-7ext	11.0	12.0	1.0	13.5	0.33
T-8	28.0	40.0	12.0	3.4	0.11
T-8	85.0	88.0	3.0	10.9	0.28
T-9	97.0	100.0	3.0	3.7	0.10
T-10	60.5	62.5	2.0	2.0	1.18
T-10	62.5	64.5	2.0	1.8	0.29
T-11	57.0	60.0	3.0	241.0	1.82
T-11	118.0	118.6	0.6	2.2	1.01
T-11	240.5	241.2	0.7	67.9	0.57
T-12	249.0	250.0	1.0	3.5	0.49

Trench ID	From	To	Width	Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Fe %	As ppm	Cd ppm	Sb ppm	Bi ppm	Ca %	Cr ppm	Mg %	Ba ppm	Au** gm/mt	Weight kg	Ag** gm/mt	Au** gm/mt
T-1	0.0	1.0	1.0	1-116	<1	14	6	71	0.4	1221	3.42	3	<.5	<3	<3	0.62	3	0.86	85	0.01	1.49		
T-1	1.0	2.0	1.0	1-117	1	20	42	59	86.6	487	2.43	16	<.5	<3	<3	0.13	1	0.08	77	1.55	2.19		
T-1	2.0	3.0	1.0	1-118	<1	16	4	78	1.1	1509	3.49	5	<.5	<3	<3	0.32	7	0.73	113	0.03	1.44		
T-1	8.5	11.5	3.0	1-119	<1	23	3	66	0.9	1381	3.14	2	<.5	<3	<3	0.43	3	1.3	102	0.02	2.34		
T-1	13.5	14.5	1.0	1-120	<1	21	8	90	30.5	2134	3.52	4	<.5	<3	<3	0.37	13	0.95	203	0.41	1.64		
T-1	14.5	15.5	1.0	1-121	<1	24	<3	75	7.2	1871	3.08	5	<.5	<3	<3	0.3	4	1.13	141	0.07	1.33		
T-1	21.2	22.0	0.8	1-122	<1	15	<3	82	1.3	1255	3.38	<2	<.5	<3	<3	0.31	6	1.35	111	0.05	1.18		
T-1	22.0	23.0	1.0	1-123	<1	20	8	78	9.8	1172	3.34	11	<.5	<3	<3	0.28	7	1.1	112	0.27	1.28		
T-1	23.0	25.0	2.0	1-124	<1	18	3	81	3.1	1223	3.45	4	<.5	<3	<3	0.29	6	1.22	102	0.13	2.39		
T-1	25.0	27.0	2.0	1-125	<1	18	4	77	1.3	1116	3.64	4	<.5	<3	<3	0.25	8	1.17	89	0.03	2.08		
T-1	41.0	42.0	1.0	1-126	<1	16	8	76	0.6	1305	3.32	21	<.5	<3	<3	0.27	8	0.64	117	0.01	0.9		
T-1	42.0	43.0	1.0	1-127	<1	24	<3	84	3.4	1090	3.51	10	<.5	<3	<3	0.19	2	0.16	127	0.13	0.89		
T-1	43.0	44.0	1.0	1-128	<1	35	4	77	5.8	1052	3.49	18	<.5	<3	<3	0.16	6	0.13	97	0.28	1.33		
T-1	44.0	45.0	1.0	1-129	1	24	6	64	3.2	1248	2.88	13	<.5	<3	<3	0.1	<1	0.09	92	0.16	1.22		
T-1	45.0	46.0	1.0	1-130	<1	25	5	70	3.6	1833	3.34	44	<.5	<3	<3	0.17	1	0.1	159	0.38	0.95		
T-1	46.0	47.0	1.0	1-131	<1	20	6	73	1.8	1256	3.4	33	<.5	<3	<3	0.24	8	0.12	210	0.08	0.88		
T-1	47.0	48.1	1.1	1-132	<1	19	<3	90	1.1	1734	4.2	14	<.5	<3	<3	0.28	4	0.15	381	0.06	1.33		
T-1	48.1	49.0	0.9	1-133	<1	19	7	68	1.1	2266	2.85	13	<.5	<3	<3	0.2	6	0.11	489	0.03	1.04		
T-1	49.0	50.0	1.0	1-134	<1	9	8	60	0.7	561	2.23	6	<.5	<3	<3	0.25	5	0.09	95	0.01	0.8		
T-1	50.0	51.0	1.0	1-135	<1	24	<3	75	0.7	667	3.35	6	<.5	<3	<3	0.23	7	0.1	86	0.02	0.85		
T-1	51.0	52.0	1.0	1-136	1	15	<3	62	0.5	764	3.07	5	<.5	<3	<3	0.24	3	0.1	86	0.01	0.91		
T-1	52.0	53.0	1.0	1-137	<1	16	4	62	1.3	1373	3.14	5	<.5	<3	<3	0.21	2	0.12	137	0.27	1.08		
T-1	53.0	54.0	1.0	1-138	<1	28	5	67	15	1171	2.95	9	<.5	<3	<3	0.17	7	0.1	160	1.21	1.11		
T-1	54.0	55.0	1.0	1-139	1	18	17	83	34.4	1124	3.31	5	<.5	<3	<3	0.2	9	0.23	112	0.45	1.17		
T-1	55.0	56.0	1.0	1-140	<1	30	<3	79	0.7	1777	3.7	7	<.5	<3	<3	0.25	6	0.4	152	0.01	1.34		
T-1	56.0	57.0	1.0	1-141	1	41	3	67	0.6	1651	3.46	3	<.5	<3	<3	0.25	7	0.13	124	0.01	0.78		
T-1	57.0	58.0	1.0	1-142	<1	16	<3	58	0.3	1046	3.36	6	<.5	<3	<3	0.32	7	0.27	89	0.04	1.26		
T-1	58.0	59.0	1.0	1-143	<1	24	<3	76	4.3	1464	3.52	4	<.5	<3	<3	0.34	4	0.55	92	0.32	0.99		
T-1	59.0	60.0	1.0	1-144	<1	22	<3	65	0.3	1176	3.13	4	<.5	<3	<3	0.33	4	0.88	91	0.01	0.89		
T-1	60.0	61.0	1.0	1-145	<1	4	<3	57	<.3	1053	3.05	4	<.5	<3	<3	0.38	9	0.97	95	<.01	1.05		
T-1	61.0	62.0	1.0	1-146	1	6	3	87	<.3	1427	3.29	3	<.5	<3	<3	0.45	5	1.27	79	<.01	0.91		
T-1	62.1	64.0	1.9	1-147	1	27	<3	76	<.3	1837	3.67	<2	<.5	<3	<3	0.31	9	0.85	134	0.01	0.93		
T-1	64.0	65.0	1.0	1-148	2	17	19	49	19.9	859	1.91	9	<.5	<3	<3	0.09	11	0.05	126	0.31	1.42		
T-1	65.0	66.0	1.0	1-149	2	25	7	51	7.4	1056	2.44	8	<.5	<3	<3	0.1	13	0.08	120	0.19	1		
T-1	66.0	67.0	1.0	1-150	1	37	9	65	1.9	1358	3.42	11	<.5	<3	<3	0.29	4	0.92	116	0.06	1.02		
T-1	67.0	68.0	1.0	1-151	<1	25	4	64	<.3	1432	3.55	4	<.5	<3	<3	0.34	9	1.14	99	<.01	1.18		
T-1	82.7	85.0	2.3	1-152	<1	22	<3	77	<.3	1819	3.64	3	<.5	<3	<3	0.23	2	0.19	191	0.02	2.53		
T-1	85.0	86.6	1.6	1-153	<1	16	<3	74	<.3	1774	3.61	3	<.5	<3	4	0.42	4	0.2	92	0.01	2.05		
T-1	86.6	89.0	2.4	1-154	<1	16	3	73	<.3	1526	3.61	6	<.5	<3	<3	0.26	4	0.21	152	0.01	1.43		
T-1	89.0	89.9	0.9	1-155	<1	17	5	69	1.4	1227	3.01	11	0.6	<3	<3	0.19	7	0.11	231	0.03	1.35		
T-1	89.9	90.9	1.0	1-156	<1	17	<3	78	0.3	1885	3.74	8	<.5	<3	<3	0.24	4	0.29	138	0.03	1.68		
T-1	131.5	132.5	1.0	1-157	3	24	96	129	>100	1626	3.5	20	1.8	<3	<3	0.21	5	0.75	199	4.02	1.61	291.0	
T-1	132.5	133.5	1.0	1-158	<1	12	5	76	1.2	1346	3.35	3	<.5	<3	<3	0.27	9	0.81	59	0.03	2.45		
T-1	133.5	134.5	1.0	1-159	3	22	13	78	>100	1161	3.07	14	0.5	<3	<3	0.15	9	0.57	97	2.13	1.68	142.0	
T-1	134.5	138.5	4.0	1-160	<1	17	6	75	1.6	1233	3.64	<2	<.5	<3	<3	0.41	6	1.15	63	0.05	1.78		
T-1	196.5	199.0	2.5	1-256	2	14	10	69	3.5	1243	3.32	24	<.5	<3	<3	0.13	3	0.23	78	0.22	1.83		
T-1	199.0	201.0	2.0	1-257	5	12	5	77	2	1439	3.55	51	<.5	3	<3	0.06	<1	0.05	68	0.08	2.03		
T-1	201.0	202.5	1.5	1-258	1	9	7	47	2.1	1160	2.39	32	<.5	<3	<3	0.13	1	0.05	105	0.08	1.91		
T-1	202.5	204.5	2.0	1-259	1	19	6	78	2.3	1791	3.36	53	<.5	<3	<3	0.14	2	0.35	127	0.14	2.37		
T-1	204.5	206.5	2.0	1-260	1	11	6	69	1.2	1107	3.39	23	<.5	3	<3	0.18	2	0.57	69	0.06	2.05		
T-1	221.0	223.0	2.0	1-261	<1	15	7	75	<.3	1619	3.45	2	<.5	4	<3	0.38	<1	1.16	58	0.01	0.96		
T-1	223.0	224.5	1.5	1-262	1	15	6	85	1.8	1328	3.5	27	<.5	4	<3	0.18	2	0.86	66	0.08	2.28		
T-1	224.5	226.5	2.0	1-263	2	16	13	83	8.1	1133	3.04	32	0.7	4	<3	0.13	3	0.54	74	0.13	2.16		
T-1	170.0	175.0	5.0	T-1-1	<1	25	34	140	3.7	1478	2.99	42	0.5	4	3	0.14	3	0.31	110	0.13	4.55		
T-1	153.0	154.0	1.0	T-1-2	<1	17	4	83	0.5	2089	3.35	3	<.5	<3	3	0.27	3	1.26	76	0.03	2.50		
T-1	112.0	113.0	1.0	T-1-9	<1	13	7	79	0.9	1190	3.32	4	<.5	<3	<3	0.25	2	0.11	114	0.18	3.65		
T-1a	9.0	10.0	1.0	1-A-100	5	17	8	70	1.4	1065	3.78	11	<.5	<3	<3	0.36	8	0.96	88	0.03	1.95		
T-1a	10.0	10.1	0.1	1-A-101	9	17	11	24	3.3	335	1.78	20	<.5	<3	<3	0.06	19	0.2	57	0.11	2.28		
T-1a	10.1	11.1	1.0	1-A-102	2	19	7	82	1.2	1588	3.85	17	<.5	<3	<3	0.27	5	1.07	110	0.16	2.17		
T-1a	15.0	16.0	1.0	1-A-103	<1	21	7	75	<.3	1257	3.38	2	<.5	<3	<3	0.33	8	1.14	90	<.01	1.38		
T-1a	16.0	16.1	0.1	1-A-104	2	15	5	45	2.7	575	3.18	29	<.5	<3	<3	0.16	4	0.56	157	0.63	0.56		
T-1a	16.1	17.1	1.0	1-A-105	2	20	3	83	1.8	1175	3.83	9	<.5	<3	<3	0.4	7	1.25	190	0.03	1.56		

Trench ID	From	To	Width	Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Fe %	As ppm	Cd ppm	Sb ppm	Bi ppm	Ca %	Cr ppm	Mg %	Ba ppm	Au** gm/mt	Weight kg	Ag** gm/mt	Au** gm/mt
T-1a	38.0	39.0	1.0	1-A-106	1	24	3	83	1.3	2125	3.93	7	<.5	<3	<3	0.27	6	1.17	180	0.03	1.72		
T-1a	39.0	40.0	1.0	1-A-107	<1	31	7	90	5	1739	3.75	20	<.5	<3	<3	0.25	2	0.81	136	0.14	1.34		
T-1a	40.0	41.0	1.0	1-A-108	2	20	8	62	34	955	3.05	5	<.5	<3	<3	0.16	2	0.18	91	0.59	1.41		
T-1a	41.0	42.0	1.0	1-A-109	1	13	8	65	8.9	1995	2.7	9	1.6	<3	<3	0.07	6	0.05	185	0.09	1.35		
T-1a	42.0	43.0	1.0	1-A-110	1	20	7	83	5	2272	3.99	18	1.8	<3	<3	0.2	6	0.5	223	0.11	1.35		
T-1a	43.0	44.0	1.0	1-A-111	1	24	8	88	2.6	1723	3.96	19	<.5	<3	<3	0.27	5	1.26	165	0.11	1.32		
T-1a	56.0	57.2	1.2	A-1-112	2	13	<3	70	<.3	1573	3.49	2	<.5	<3	<3	0.37	7	1.02	151	<.01	1.58		
T-1a	65.0	68.0	3.0	A-1-113	2	18	<3	66	<.3	1082	3.6	<2	<.5	<3	<3	0.45	9	0.89	107	<.01	3.11		
T-1a	72.5	74.0	1.5	A-1-114	<1	19	<3	77	0.8	1401	3.67	4	<.5	<3	<3	0.36	8	0.76	171	0.02	2.8		
T-1a	75.0	76.5	1.5	A-1-115	<1	1	4	31	<.3	290	0.85	3	<.5	<3	<3	0.03	10	0.03	73	0.01	2.06		
T-1a	160.0	165.0	5.0	T-1a-1	<1	22	7	78	1.3	1592	3.58	21	<.5	<3	<3	0.23	2	0.9	131	0.09	3.61		
T-1a	165.0	168.0	3.0	T-1a-2	<1	19	<3	69	0.7	1646	3.55	6	<.5	<3	<3	0.23	3	0.41	120	0.02	4.62		
T-1a	168.0	171.0	3.0	T-1a-3	<1	20	25	109	1.3	1085	3.36	13	<.5	<3	3	0.17	4	0.13	100	0.03	3.61		
T-1a	171.0	174.0	3.0	T-1a-4	<1	17	5	60	1.4	1495	3.06	15	<.5	<3	<3	0.13	2	0.09	96	0.04	2.93		
T-1a	174.0	176.0	2.0	T-1a-5	<1	16	7	62	3.7	848	3.02	45	0.5	<3	<3	0.09	1	0.07	82	0.23	3.25		
T-1a	176.0	178.0	2.0	T-1a-6	1	14	5	57	2.6	890	2.93	46	<.5	<3	3	0.08	4	0.07	83	0.36	4.23		
T-1a	178.0	179.0	1.0	T-1a-7	<1	9	11	47	4.5	1293	2.1	28	<.5	<3	3	0.09	3	0.04	94	0.67	2.65		
T-1a	179.0	180.0	1.0	T-1a-8	<1	6	17	30	6	619	1.26	13	0.7	<3	<3	0.13	10	0.03	61	0.50	2.55		
T-1a	180.0	181.5	1.5	T-1a-9	<1	16	8	47	3.9	629	1.78	22	<.5	<3	<3	0.07	1	0.03	92	0.14	3.44		
T-1a	181.5	183.0	1.5	T-1a-10	<1	30	5	83	4	1108	2.9	13	<.5	<3	3	0.14	3	0.1	82	0.30	3.95		
T-1a	183.0	185.0	2.0	T-1a-11	<1	21	3	84	3.1	1914	3.48	7	<.5	<3	<3	0.16	2	0.1	148	0.22	4.03		
T-1a	185.0	187.0	2.0	T-1a-12	<1	17	4	68	37.2	1426	2.95	11	<.5	<3	<3	0.16	1	0.08	87	1.17	3.41		
T-1a	187.0	189.0	2.0	T-1a-13	<1	20	7	52	6.5	788	2.76	22	<.5	<3	<3	0.12	2	0.05	67	0.20	4.63		
T-1a	189.0	192.0	3.0	T-1a-14	<1	14	5	79	1.4	1923	3.27	16	<.5	<3	<3	0.15	2	0.07	107	0.08	4.01		
T-1a	192.0	195.0	3.0	T-1a-15	<1	20	9	78	3.2	1487	3.28	13	<.5	<3	<3	0.14	<1	0.06	104	0.11	4.05		
T-2	36.0	38.0	2.0	2-162	2	19	8	81	9.4	1520	3.73	12	<.5	<3	<3	0.38	7	1.26	87	0.16	1.69		
T-2	52.0	54.0	2.0	2-163	3	20	3	66	2	1100	3.49	27	<.5	<3	<3	0.29	8	0.94	92	0.03	1.85		
T-2	54.0	55.0	1.0	2-164	2	21	8	77	5.5	1511	3.96	39	<.5	<3	<3	0.19	11	0.62	88	0.44	1.02		
T-2	55.0	56.0	1.0	2-165	5	13	12	26	20.9	65	2.36	29	<.5	<3	<3	0.03	5	0.02	75	0.09	1.35		
T-2	56.0	57.0	1.0	2-166	2	34	12	76	44.6	1155	3.05	17	<.5	<3	<3	0.09	6	0.12	88	2.54	1		
T-2	57.0	58.0	1.0	2-167	1	31	10	73	2.9	1422	3.16	10	<.5	<3	<3	0.16	<1	0.36	106	0.20	1.22		
T-2	58.0	60.0	2.0	2-168	1	23	6	74	1.8	1589	3.53	10	<.5	<3	<3	0.27	4	0.79	107	0.08	1.63		
T-2	67.0	69.0	2.0	2-169	1	17	<3	100	3.5	1350	3.77	5	<.5	<3	<3	0.21	6	0.11	118	0.19	1.73		
T-2	69.0	70.5	1.5	2-170	1	10	4	36	0.8	533	1.04	3	<.5	<3	<3	0.03	4	0.03	91	0.11	1.39		
T-2	152.5	153.5	1.0	2-171	1	8	4	72	3.6	1080	2.57	47	<.5	<3	<3	0.12	8	0.65	50	0.09	0.99		
T-2	153.5	154.5	1.0	2-172	1	10	5	80	3.4	1150	3.24	59	<.5	<3	<3	0.13	7	0.82	63	0.04	1.26		
T-2	161.5	163.5	2.0	2-173	1	14	6	92	1.3	1223	3.07	8	<.5	<3	<3	0.18	3	0.22	66	0.11	1.92		
T-2	163.5	165.5	2.0	2-174	1	12	3	90	1.4	1041	3.22	20	<.5	<3	<3	0.09	1	0.1	68	0.09	1.82		
T-2	165.5	166.5	1.0	2-175	2	4	3	43	2.1	701	1.91	11	<.5	<3	<3	0.05	1	0.03	81	0.05	1.01		
T-2	166.5	167.5	1.0	2-176	2	11	4	41	3.5	725	1.73	3	<.5	<3	<3	0.06	6	0.03	46	0.06	1.14		
T-2	167.5	169.0	1.5	2-177	1	10	<3	48	2.8	637	1.93	4	<.5	<3	<3	0.04	5	0.02	54	0.03	1.27		
T-2	169.0	170.0	1.0	2-178	2	18	3	68	3	179	3.22	13	<.5	<3	<3	0.05	5	0.04	79	0.07	1.18		
T-2	170.0	171.0	1.0	2-179	1	16	8	55	4.9	139	3.34	27	<.5	<3	<3	0.04	4	0.05	75	0.07	1.42		
T-2	171.0	172.0	1.0	2-180	2	18	9	65	6.5	334	2.68	29	<.5	<3	<3	0.05	6	0.08	56	0.14	1.41		
T-2	172.0	174.0	2.0	2-181	1	23	6	98	5.5	1335	3.38	29	<.5	<3	<3	0.09	5	0.43	89	0.23	1.9		
T-2	174.0	176.0	2.0	2-182	2	23	13	89	2.7	1631	3.76	27	<.5	<3	<3	0.18	<1	1.17	61	0.07	1.81		
T-2	175.0	177.0	2.0	2-232	2	15	10	69	4.1	1313	3.6	30	<.5	3	<3	0.13	<1	1.02	62	0.18	1.78		
T-2	177.0	179.0	2.0	2-233	2	10	7	73	1.8	1593	3.79	23	<.5	4	<3	0.18	2	1.31	71	0.06	2.64		
T-2	179.0	181.0	2.0	2-234	<1	11	6	76	1.7	1594	3.66	19	<.5	4	<3	0.21	2	1.37	80	0.07	0.8		
T-2	181.0	183.0	2.0	2-235	2	18	8	75	4.2	1530	3.73	48	<.5	5	<3	0.18	3	1.33	61	0.12	1.49		
T-2	183.0	185.0	2.0	2-236	<1	13	10	74	1.9	1479	3.72	18	<.5	5	<3	0.23	4	1.48	75	0.11	1.15		
T-2	239.0	240.0	1.0	T-2-1	<1	14	7	73	2.5	1561	3.39	47	<.5	<3	<3	0.25	6	0.61	111	0.09	2.44		
T-2	104.0	104.4	0.4	T-2-2	1	17	6	46	17.3	1233	1.98	7	<.5	<3	3	0.11	8	0.45	79	1.40	1.29		
T-2a	0.0	0.4	0.4	2A-160	2	24	23	26	58	276	1.08	5	<.5	<3	<3	0.04	10	0.05	38	4.49	1.39		
T-2a	3.0	5.7	2.7	2A-161	<1	17	<3	82	0.8	1117	3.37	3	<.5	<3	<3	0.31	7	0.6	151	0.14	2.08		
T-2a	10.0	13.0	3.0	T-2a-1	1	11	6	44	4.4	633	3.23	25	<.5	<3	<3	0.15	3	0.45	78	0.05	1.66		
T-2a	33.0	35.0	2.0	T-2a-2	<1	17	11	67	3.9	1241	3.34	8	<.5	<3	<3	0.29	3	1.12	91	0.24	1.24		
T-2a	65.0	67.0	2.0	T-2a-3	<1	17	8	66	0.6	1204	3.19	8	<.5	<3	<3	0.37	2	1.12	100	0.04	1.35		
T-2a	67.0	69.0	2.0	T-2a-4	<1	35	4	63	4.6	1170	3.02	23	<.5	<3	<3	0.19	1	0.48	93	0.26	2.02		
T-2a	69.0	70.3	1.3	T-2a-5	<1	23	6	72	2.4	1236	3.24	14	<.5	<3	<3	0.15	3	0.12	123	0.17	1.53		
T-2a	70.3	71.8	1.5	T-2a-6	<1	32	18	31	65.8	834	1.82	8	<.5	<3	<3	0.05	2	0.03	67	5.71	1.55	66.0	7.06
T-2a	71.8	72.8	1.0	T-2a-7	1	29	11	61	11.6	889	3.44	35	<.5	<3	<3	0.12	1	0.12	101	0.45	0.95		

Trench ID	From	To	Width	Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Fe %	As ppm	Cd ppm	Sb ppm	Bi ppm	Ca %	Cr ppm	Mg %	Ba ppm	Au** gm/mt	Weight kg	Ag** gm/mt	Au** gm/mt
T-2a	72.8	75.0	2.2	T-2a-8	<1	26	5	77	0.5	2021	3.39	14	0.6	<3	<3	0.29	1	0.77	152	0.02	1.22		
T-2a	92.0	93.2	1.2	T-2a-9	<1	25	10	107	2.2	832	3.42	3	<.5	<3	3	0.23	2	0.12	102	0.06	1.61		
T-2a	93.2	96.0	2.8	T-2a-10	<1	9	4	29	0.5	268	0.96	2	<.5	<3	<3	0.03	2	0.04	77	0.04	1.52		
T-2a	96.0	98.0	2.0	T-2a-11	<1	8	3	47	<.3	485	1.55	<2	<.5	<3	<3	0.1	1	0.07	82	0.02	1.78		
T-2a	101.0	102.0	1.0	T-2a-12	<1	23	8	81	17.9	1208	3.44	6	<.5	<3	<3	0.21	2	0.16	134	0.17	2.05		
T-2a	139.0	141.0	2.0	T-2a-13	<1	15	5	69	4.5	1702	2.96	3	<.5	<3	<3	0.26	3	0.68	63	0.16	2.15		
T-2a	144.8	147.5	2.7	T-2a-14	<1	18	12	72	6.2	1294	3.16	19	<.5	<3	<3	0.19	1	0.86	69	0.24	1.15		
T-2a	170.0	171.5	1.5	T-2a-15	<1	14	<3	81	1.2	1892	3.2	2	<.5	<3	<3	0.33	<1	1.05	73	<.01	1.07		
T-2a	171.5	172.5	1.0	T-2a-16	<1	18	9	75	1.1	1371	3.19	3	<.5	<3	<3	0.28	<1	0.76	85	0.37	1.87		
T-2a	178.0	180.6	2.6	T-2a-17	1	13	11	72	2.5	1281	2.63	15	<.5	<3	<3	0.12	4	0.07	38	0.19	3.23		
T-2a	180.6	181.6	1.0	T-2a-18	1	15	<3	68	1.2	1942	2.63	6	<.5	<3	<3	0.26	3	0.16	69	0.14	1.18		
T-2a	193.0	195.0	2.0	T-2a-19	1	12	<3	71	2.7	1561	3.03	15	<.5	<3	<3	0.26	3	0.8	64	0.18	1.57		
T-2a	195.0	197.0	2.0	T-2a-20	1	11	<3	72	2.2	1368	3.17	18	<.5	<3	<3	0.25	2	1.06	92	0.05	1.42		
T-2a	197.0	200.0	3.0	T-2a-21	<1	15	<3	74	2.3	1479	3.09	10	<.5	<3	<3	0.25	2	0.75	97	0.08	4.49		
T-2a	200.0	201.0	1.0	T-2a-22	<1	11	<3	99	0.9	1945	3.29	9	0.5	<3	<3	0.48	2	0.62	73	0.03	2.72		
T-2a	201.0	202.0	1.0	T-2a-23	<1	16	5	121	1	2037	3.46	11	<.5	<3	<3	0.2	<1	0.16	64	0.04	1.89		
T-2a	202.0	203.0	1.0	T-2a-24	<1	8	4	39	1.5	763	1.5	5	<.5	<3	<3	0.08	3	0.04	59	0.08	2.44		
T-2a	203.0	205.0	2.0	T-2a-25	<1	8	6	41	2.7	740	1.53	12	<.5	<3	<3	0.08	6	0.04	51	0.09	3.12		
T-2a	205.0	206.5	1.5	T-2a-26	<1	17	11	92	3.4	1319	3.6	27	<.5	<3	<3	0.1	4	0.19	93	0.23	1.77		
T-2a	206.5	209.5	3.0	T-2a-27	<1	14	3	76	4.2	1481	3.16	31	<.5	<3	<3	0.11	<1	0.59	96	0.13	2.34		
T-2a	209.5	210.5	1.0	T-2a-28	1	16	3	85	3.5	1726	3.34	27	0.5	<3	<3	0.07	1	0.22	70	0.28	1.24		
T-2a	210.5	215.0	4.5	T-2a-29	1	16	3	92	2.9	1704	3.71	19	<.5	<3	<3	0.16	<1	0.93	82	0.53	3.02		
T-2a	215.0	217.0	2.0	T-2a-30	<1	18	3	104	14.6	1387	3.42	25	<.5	<3	<3	0.12	2	0.44	73	0.22	2.44		
T-2a	217.0	218.5	1.5	T-2a-31	<1	11	6	92	2.9	1310	3.21	30	<.5	<3	<3	0.06	1	0.06	113	0.05	2.03		
T-2a	218.5	220.0	1.5	T-2a-32	<1	14	3	62	8.3	912	2.31	25	<.5	<3	<3	0.09	6	0.04	82	0.10	2.32		
T-2a	220.0	221.5	1.5	T-2a-33	1	16	6	110	9.1	1679	3.3	26	<.5	<3	<3	0.14	2	0.48	110	0.29	2.05		
T-2a	221.5	223.5	2.0	T-2a-34	<1	22	<3	104	0.9	1488	2.79	7	<.5	<3	<3	0.27	3	0.68	85	0.03	2.09		
T-2a	129.0	135.0	6.0	T-2a-35	<1	8	5	65	2.8	973	3.29	16	<.5	<3	<3	0.13	1	0.99	168	0.07	2.40		
T-3	111.8	113.8	2.0	3-183	12	19	19	65	7.4	788	2.46	46	<.5	<3	<3	0.05	6	0.05	51	0.21	2.46		
T-3	113.8	115.8	2.0	3-184	8	15	8	102	1.8	1303	3.1	35	<.5	<3	<3	0.11	9	0.42	62	0.11	2.8		
T-3	115.8	117.8	2.0	3-185	7	15	12	91	5.1	1243	3.14	49	<.5	<3	<3	0.11	4	0.46	86	0.11	1.79		
T-3	117.8	119.8	2.0	3-186	4	15	15	85	4.3	1438	3.65	59	<.5	<3	<3	0.13	<1	0.51	96	0.10	2.14		
T-3	119.8	121.8	2.0	3-187	4	13	12	76	3.9	1358	3.3	65	<.5	<3	<3	0.11	2	0.33	92	0.08	1.91		
T-3	121.8	123.8	2.0	3-188	43	9	10	64	5.3	570	3.21	77	<.5	<3	<3	0.09	1	0.2	61	0.06	1.64		
T-3	123.8	125.8	2.0	3-189	10	15	11	45	23.3	421	2.33	45	<.5	<3	<3	0.03	<1	0.03	66	0.48	1.42		
T-3	125.8	127.8	2.0	3-190	2	39	88	87	>100	886	2.47	18	<.5	<3	<3	0.05	2	0.04	49	1.10	2.68	240.0	
T-3	127.8	129.8	2.0	3-191	3	18	19	115	13.7	1049	3.59	25	<.5	<3	<3	0.1	4	0.28	46	0.08	2.56		
T-3	129.8	131.8	2.0	3-192	1	16	16	145	5.8	1655	3.48	19	<.5	<3	<3	0.27	1	0.32	69	0.05	1.99		
T-3	131.8	133.8	2.0	3-193	1	16	11	140	1.6	1013	3.41	21	<.5	<3	<3	0.16	3	0.33	53	0.06	1.95		
T-3	133.8	135.8	2.0	3-194	1	15	6	113	2.8	1382	3.34	31	<.5	<3	<3	0.19	1	0.65	90	0.02	2.55		
T-3	44.0	46.0	2.0	3-195	1	9	3	64	0.8	1205	2.98	<2	<.5	<3	<3	0.24	3	0.21	114	0.20	2.18		
T-3	46.0	48.0	2.0	3-196	<1	3	<3	30	0.6	310	0.96	<2	<.5	<3	<3	0.02	<1	0.04	82	0.16	1.12		
T-3	48.0	50.0	2.0	3-197	2	3	<3	28	0.9	330	0.87	<2	<.5	<3	<3	0.02	4	0.03	79	0.22	1.12		
T-3	50.0	52.0	2.0	3-198	1	8	3	55	1.9	762	2.58	4	<.5	<3	<3	0.16	3	0.11	105	0.05	2.04		
T-3	52.0	54.0	2.0	3-199	<1	12	4	73	0.9	997	3.35	2	<.5	<3	<3	0.24	2	0.29	126	0.18	1.46		
T-3	54.0	56.0	2.0	3-200	<1	8	9	73	1.1	1236	3.66	2	<.5	<3	<3	0.28	4	0.55	149	0.19	1.36		
T-3	56.0	58.0	2.0	3-201	<1	11	5	75	3.1	1242	3.2	4	<.5	<3	<3	0.27	<1	0.49	141	0.06	1.6		
T-3	58.0	60.0	2.0	3-202	1	8	3	68	1	1146	3.27	5	<.5	<3	<3	0.25	4	0.41	112	0.02	1.46		
T-3	60.0	62.0	2.0	3-203	<1	16	4	69	2.2	1157	3.26	5	<.5	<3	<3	0.25	<1	0.44	157	0.06	1.41		
T-3	62.0	64.0	2.0	3-204	1	8	6	62	0.7	825	3.12	<2	<.5	<3	<3	0.26	<1	0.47	131	0.02	1.35		
T-3	64.0	66.0	2.0	3-205	2	22	5	96	0.6	1395	4.18	3	<.5	<3	<3	0.35	2	0.74	95	0.04	1.17		
T-3	66.0	68.0	2.0	3-206	<1	12	<3	75	0.4	1296	3.35	4	<.5	<3	<3	0.27	2	0.5	173	0.04	1.22		
T-3	68.0	70.0	2.0	3-207	1	19	3	69	0.6	1188	3.35	4	<.5	<3	<3	0.27	<1	0.47	146	0.02	1.44		
T-3	70.0	72.0	2.0	3-208	1	13	5	69	0.5	1360	3.47	4	<.5	<3	<3	0.28	5	0.44	117	0.01	1.51		
T-3	72.0	74.0	2.0	3-209	<1	17	4	68	1	1434	3.32	4	<.5	<3	<3	0.28	<1	0.56	119	0.07	1.26		
T-3	74.0	76.0	2.0	3-210	1	10	5	74	0.8	1422	3.43	3	<.5	<3	<3	0.34	3	0.63	110	0.05	1.79		
T-3	76.0	78.0	2.0	3-211	<1	14	8	71	4.1	1271	3.35	54	<.5	<3	<3	0.18	3	0.25	123	0.12	2.41		
T-3	78.0	80.0	2.0	3-212	<1	15	4	62	6.4	1298	2.85	43	<.5	<3	4	0.08	4	0.08	100	0.13	1.8		
T-3	80.0	82.0	2.0	3-213	1	22	5	73	9	1242	3.23	32	<.5	<3	<3	0.14	1	0.2	85	0.36	2.62		
T-3	82.0	84.0	2.0	3-214	<1	18	6	79	5.8	1394	3.53	30	<.5	<3	<3	0.16	3	0.78	90	0.07	1.61		
T-3	84.0	86.0	2.0	3-215	<1	20	9	77	4	1358	3.02	14	<.5	<3	<3	0.17	<1	0.62	92	0.21	1.82		
T-3	86.0	88.0	2.0	3-216	1	19	7	83	2.7	1250	3.54	7	<.5	<3	3	0.23	1	0.74	87	0.16	1.44		

Trench ID	From	To	Width	Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Fe %	As ppm	Cd ppm	Sb ppm	Bi ppm	Ca %	Cr ppm	Mg %	Ba ppm	Au** gm/mt	Weight kg	Ag** gm/mt	Au** gm/mt
T-3	88.0	90.0	2.0	3-217	<1	13	3	72	1.6	1163	3.44	6	<.5	<3	<3	0.24	2	0.99	100	0.03	1.6		
T-3	90.0	92.0	2.0	3-218	2	12	6	75	1.5	1363	3.27	8	<.5	<3	<3	0.25	2	1.23	79	0.02	1.39		
T-3	92.0	94.0	2.0	3-219	<1	12	7	73	2.5	1728	3.31	20	<.5	<3	<3	0.22	2	1.4	89	0.04	1.63		
T-3	94.0	96.0	2.0	3-220	<1	12	6	82	3.7	1733	3.28	24	<.5	<3	<3	0.21	2	1.26	85	0.09	1.16		
T-3	96.0	98.0	2.0	3-221	<1	21	5	85	5.2	1562	3.29	35	<.5	<3	<3	0.21	5	1.29	75	0.14	1.5		
T-3	98.0	100.0	2.0	3-222	<1	17	12	79	3.6	1097	3.18	38	<.5	<3	<3	0.19	2	1.06	72	0.30	1.69		
T-3	100.0	102.0	2.0	3-223	2	18	14	79	3.2	1501	3.69	42	<.5	<3	<3	0.2	2	1.41	72	0.11	1.39		
T-3	102.0	103.7	1.7	3-224	<1	18	13	71	8.6	1375	3.39	38	<.5	<3	<3	0.18	3	1.23	79	0.14	1.67		
T-3	103.7	105.3	1.6	3-225	1	14	11	79	1.8	1434	3.62	175	<.5	3	<3	0.23	3	1.37	86	0.04	1.6		
T-3	105.3	107.0	1.7	3-226	<1	19	7	80	1.5	1530	3.61	23	<.5	<3	3	0.33	5	1.5	73	0.12	1.27		
T-3	107.0	107.8	0.8	3-227	<1	16	9	75	1.7	1411	3.62	28	<.5	<3	<3	0.28	5	1.25	126	0.03	1.48		
T-3	107.8	109.3	1.5	3-228	1	16	7	66	1.4	1248	3.24	14	<.5	<3	<3	0.29	5	1.13	93	0.02	1.73		
T-3	109.3	111.8	2.5	3-229	<1	14	5	74	1.1	1589	3.49	15	<.5	<3	<3	0.32	6	1.02	91	0.06	1.92		
T-3	170.0	172.0	2.0	3-249	<1	13	<3	62	0.3	1511	2.6	4	<.5	<3	<3	0.47	6	1.19	50	<.01	1.16		
T-3	172.0	174.0	2.0	3-250	<1	9	<3	68	0.6	1846	2.64	9	<.5	<3	<3	0.49	1	1.13	55	0.07	1.25		
T-3	174.0	176.0	2.0	3-251	<1	14	5	84	0.4	2156	2.72	6	<.5	<3	3	0.51	5	0.98	63	0.01	1.5		
T-3	176.0	178.0	2.0	3-252	2	17	13	60	10.4	1478	2.65	41	<.5	<3	<3	0.19	4	0.48	76	0.18	1.93		
T-3	150.0	150.5	0.5	T-3-1	1	11	3	84	3.8	892	2.36	8	<.5	<3	<3	0.15	4	0.32	53	0.05	2.04		
T-3	177.0	178.0	1.0	T-3-2	1	20	25	54	39.8	1336	2.28	36	<.5	<3	<3	0.12	2	0.25	73	0.55	2.63		
T-4	25.5	29.0	3.5	4-253	2	20	10	68	51.4	1113	3.44	14	0.5	<3	<3	0.35	2	0.92	142	0.21	2.4		
T-4	101.5	103.5	2.0	4-242	<1	19	12	61	4.2	1595	3.05	19	<.5	<3	<3	0.08	6	0.1	138	0.07	2.04		
T-4	108.0	109.0	1.0	4-243	<1	25	4	69	4.5	1450	3.03	25	<.5	<3	<3	0.14	7	0.27	177	0.12	2.25		
T-4	93.5	93.7	0.2	4-244	6	28	51	48	12.8	650	3.3	50	<.5	3	<3	0.1	5	0.31	188	0.16	1.91		
T-4	79.6	79.7	0.1	4-245	10	9	15	29	3.3	660	2.91	54	<.5	<3	<3	0.09	4	0.27	59	0.13	2.87		
T-4	100.6	101.6	1.0	T-4a-1	1	16	7	67	2.8	1449	3.05	13	<.5	<3	<3	0.07	2	0.08	141	0.21	2.21		
T-4	101.6	102.1	0.5	T-4a-2	1	19	24	47	16.5	1247	1.93	9	<.5	<3	<3	0.04	4	0.03	95	0.72	2.12		
T-4	102.1	103.1	1.0	T-4a-3	<1	22	17	63	4.1	1384	2.84	18	<.5	<3	<3	0.08	5	0.15	108	0.17	2.20		
T-4	109.0	110.0	1.0	T-4a-4	1	18	6	80	1.1	1830	2.96	10	<.5	<3	<3	0.12	4	0.42	199	0.03	1.88		
T-6	3.0	6.0	3.0	6-264	<1	15	5	77	1	1364	3.4	11	<.5	3	<3	0.25	6	0.14	133	0.05	N/A		
T-6	6.0	10.0	4.0	6-265	<1	17	4	69	1.9	1289	3.04	19	<.5	<3	<3	0.16	5	0.05	110	0.46	N/A		
T-6	10.0	12.5	2.5	6-266	2	66	9	67	4.7	1330	2.81	21	0.9	<3	<3	0.09	6	0.04	85	0.37	N/A		
T-6	12.5	13.5	1.0	6-267	2	10	23	56	45.3	641	1.55	23	1.3	<3	<3	0.07	5	0.02	66	5.20	N/A	59.0	8.28
T-6	13.5	15.0	1.5	6-268	1	14	6	105	29.2	940	3.1	33	0.6	<3	<3	0.05	9	0.02	74	0.83	N/A		
T-6	14.5	16.5	2.0	6-269	2	14	5	92	1.5	1353	2.98	11	<.5	<3	<3	0.17	5	0.06	91	0.06	N/A		
T-6	16.5	18.5	2.0	6-270	1	31	4	68	1.3	1310	2.85	7	<.5	<3	<3	0.38	4	0.54	47	0.02	N/A		
T-6	18.5	20.5	2.0	6-271	1	6	<3	74	0.3	1309	3.04	4	<.5	<3	<3	0.61	3	0.36	49	0.02	N/A		
T-6	29.5	32.5	3.0	6-272	2	12	6	113	1.9	894	3.19	51	0.8	<3	<3	0.26	4	0.36	82	0.04	N/A		
T-7	6.0	7.6	1.6	7-273	5	17	8	71	1.4	1243	3.67	11	<.5	<3	<3	0.24	3	0.71	89	0.03	0.99		
T-7	7.6	10.9	3.3	7-274	4	8	11	24	2.8	289	2.85	14	<.5	<3	<3	0.06	2	0.2	81	0.04	1.08		
T-7	10.9	14.2	3.3	7-275	1	17	9	80	1.1	1120	3.85	15	<.5	<3	<3	0.23	5	1.07	73	0.02	0.98		
T-7	14.2	16.7	2.5	7-276	14	18	16	41	3.1	514	3.48	22	<.5	<3	4	0.1	5	0.42	104	0.06	2.25		
T-7	22.5	24.7	2.2	7-277	3	19	9	84	1.1	1159	3.68	26	<.5	<3	<3	0.19	4	0.85	61	0.02	1.78		
T-7	24.7	27.2	2.5	7-278	21	27	11	64	3.4	623	3.35	24	<.5	<3	3	0.11	7	0.64	54	0.09	1.33		
T-7	27.2	29.5	2.3	7-279	2	22	6	76	0.9	645	4.28	21	<.5	<3	<3	0.09	5	0.77	71	0.01	1.49		
T-7	29.5	31.8	2.3	7-280	8	13	10	31	2.4	185	3.46	23	<.5	<3	<3	0.01	<1	0.22	76	0.07	1.49		
T-7	50.0	52.5	2.5	T-7-1	<1	23	8	75	0.8	764	2.93	4	0.7	<3	<3	0.26	1	0.46	97	<.01	2.72		
T-7	52.5	55.0	2.5	T-7-2	1	24	12	56	0.6	453	3.29	10	<.5	<3	<3	0.18	3	0.36	91	<.01	3.24		
T-7	100.0	105.0	5.0	T-7-3	<1	22	3	163	0.4	1174	3.89	3	0.8	<3	<3	0.27	3	0.93	75	<.01	4.25		
T-7	105.0	110.0	5.0	T-7-4	<1	23	<3	209	0.3	850	3.92	<2	0.7	<3	<3	0.2	1	0.83	131	<.01	4.94		
T-7	110.0	115.0	5.0	T-7-5	1	26	6	89	<.3	465	4.14	8	<.5	<3	<3	0.14	<1	0.47	107	<.01	4.03		
T-7	115.0	120.0	5.0	T-7-6	1	28	<3	137	<.3	831	4.02	<2	0.6	<3	<3	0.2	1	0.88	93	<.01	4.33		
T-7	120.0	125.0	5.0	T-7-7	<1	21	4	107	<.3	997	3.82	3	0.5	<3	<3	0.17	3	0.8	76	<.01	4.14		
T-7	125.0	130.0	5.0	T-7-8	2	20	3	117	<.3	941	3.69	2	0.5	<3	<3	0.22	1	0.81	119	<.01	4.48		
T-7	0.0	1.5	1.5	T-7-9	3	16	6	74	1.5	1137	3.49	18	0.6	<3	<3	0.17	1	0.78	70	0.02	2.57		
T-7ext	0.0	1.5	1.5	T-7-10	13	11	11	33	3.5	300	2.91	23	<.5	<3	<3	0.05	1	0.25	55	0.11	1.85		
T-7ext	1.5	3.0	1.5	T-7-11	11	16	20	63	3.4	529	3.16	24	<.5	<3	<3	0.08	4	0.62	54	0.29	2.25		
T-7ext	3.0	5.0	2.0	T-7-12	1	18	4	107	2.2	1339	3.92	13	0.5	<3	<3	0.27	3	0.84	66	0.04	2.86		
T-7ext	5.0	7.0	2.0	T-7-13	<1	16	5	92	1.8	935	3.56	6	<.5	<3	<3	0.32	2	0.83	50	0.04	2.68		
T-7ext	11.0	12.0	1.0	T-7-14	<1	28	13	82	13.5	1154	2.97	49	0.6	<3	<3	0.32	1	1.04	121	0.33	1.25		
T-7ext	44.5	44.7	0.2	T-7-15	<1	14	6	81	0.8	1114	2.5	14	<.5	<3	<3	0.28	5	0.92	66	0.04	0.92		
T-7ext	73.0	74.5	1.5	T-7-16	<1	20	<3	62	1.2	1243	3.06	16	<.5	<3	<3	0.26	2	0.8	140	0.20	1.67		
T-7ext	86.0	86.2	0.2	T-7-17	<1	14	12	46	9.7	841	2.93	25	0.5	<3	<3	0.2	6	0.53	625	0.37	1.1		

Trench ID	From	To	Width	Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Fe %	As ppm	Cd ppm	Sb ppm	Bi ppm	Ca %	Cr ppm	Mg %	Ba ppm	Au** gm/mt	Weight kg	Ag** gm/mt	Au** gm/mt
T-8	0.0	5.0	5.0	T-8-1	1	17	8	76	<.3	1558	3.74	2	<.5	<3	<3	0.51	3	1.51	62	0.03	1.83		
T-8	5.0	10.0	5.0	T-8-2	1	23	9	70	0.3	1617	3.48	2	<.5	3	3	0.76	4	1.49	64	0.03	1.59		
T-8	10.0	15.0	5.0	T-8-3	1	14	4	77	0.3	1861	3.59	<2	<.5	5	<3	0.71	2	1.57	69	<.01	1.47		
T-8	15.0	20.0	5.0	T-8-4	1	15	3	75	<.3	1643	3.72	4	<.5	<3	4	0.57	3	1.24	100	<.01	1.65		
T-8	20.0	23.0	3.0	T-8-5	2	21	<3	96	<.3	1456	3.95	3	<.5	3	3	0.76	3	1.01	77	0.01	1.19		
T-8	23.0	25.0	2.0	T-8-6	2	22	4	83	0.5	1409	3.78	8	<.5	3	<3	0.71	2	0.92	109	0.06	0.96		
T-8	25.0	28.0	3.0	T-8-7	6	14	5	84	3.1	601	3.1	52	<.5	<3	<3	0.08	3	0.06	63	0.08	2.99		
T-8	28.0	30.0	2.0	T-8-8	6	13	9	92	4.7	436	3.05	50	<.5	<3	<3	0.06	2	0.05	69	0.13	2.91		
T-8	30.0	32.0	2.0	T-8-9	3	7	6	65	3.4	511	2.82	41	<.5	<3	<3	0.04	2	0.04	87	0.05	3.1		
T-8	32.0	34.0	2.0	T-8-10	2	11	5	56	2.9	192	2.74	36	<.5	<3	<3	0.04	2	0.03	68	0.14	2.87		
T-8	34.0	36.0	2.0	T-8-11	4	9	8	65	3.1	174	3.34	44	<.5	<3	<3	0.05	4	0.06	96	0.05	1.63		
T-8	36.0	38.0	2.0	T-8-12	7	9	7	63	2.7	733	3.07	45	<.5	<3	<3	0.03	3	0.03	101	0.10	1.45		
T-8	38.0	40.0	2.0	T-8-13	5	14	9	82	3.3	1491	3.31	29	0.6	<3	<3	0.08	4	0.15	107	0.20	1.13		
T-8	40.0	42.0	2.0	T-8-15	3	14	7	74	1.3	1125	3.56	33	<.5	<3	<3	0.14	1	0.5	50	0.03	1.78		
T-8	42.0	44.0	2.0	T-8-16	2	19	8	91	1	3375	3.42	29	<.5	<3	<3	0.2	1	0.76	132	0.03	2.31		
T-8	44.0	50.0	6.0	T-8-17	2	12	7	83	0.6	1891	2.91	17	<.5	<3	<3	0.34	2	1.1	89	0.03	3.39		
T-8	83.0	85.0	2.0	T-8-19	1	16	5	105	2.8	1529	3.64	23	<.5	<3	<3	0.22	1	0.61	172	0.02	2.13		
T-8	85.0	86.0	1.0	T-8-20	12	16	20	76	29.4	818	2.87	53	0.8	<3	<3	0.07	13	0.05	128	0.59	2.4		
T-8	86.0	88.0	2.0	T-8-21	2	26	10	114	1.6	1988	3.88	15	<.5	<3	<3	0.3	<1	1.18	117	0.13	2.29		
T-9	6.0	8.0	2.0	T-9-1	2	31	13	100	1.1	1953	3.74	9	<.5	<3	<3	0.31	1	1.41	116	0.04	1.84		
T-9	8.0	10.0	2.0	T-9-2	1	16	20	107	6.6	1165	2.98	20	<.5	<3	<3	0.23	3	1.02	65	0.19	4.61		
T-9	10.0	12.0	2.0	T-9-3	<1	31	9	119	0.6	1506	3.43	3	<.5	<3	<3	0.41	1	1.39	84	0.02	1.54		
T-9	12.0	14.0	2.0	T-9-4	1	5	6	99	<.3	1145	3.09	3	<.5	<3	<3	0.4	3	1.29	90	0.02	1.39		
T-9	41.0	43.0	2.0	T-9-5	3	23	10	84	4.5	1089	3.43	26	0.8	<3	<3	0.12	3	0.81	77	0.12	1.75		
T-9	43.0	45.0	2.0	T-9-6	3	17	5	98	2.7	1462	3.76	27	<.5	<3	<3	0.13	2	1	71	0.08	2.16		
T-9	45.0	47.0	2.0	T-9-7	1	15	3	93	0.7	1295	3.77	28	<.5	<3	<3	0.19	1	1.3	98	<.01	2.21		
T-9	61.0	63.0	2.0	T-9-8	10	10	12	86	2.7	801	3.53	60	<.5	<3	<3	0.09	3	0.51	85	0.11	4.51		
T-9	87.0	88.0	1.0	T-9-9	9	13	5	54	6.4	898	2.96	32	0.5	<3	<3	0.17	4	0.5	141	0.16	1.32		
T-9	97.0	100.0	3.0	T-9-10	4	14	3	85	3.7	832	3.45	160	0.7	<3	<3	0.15	4	0.51	67	0.10	2.78		
T-9	123.0	125.0	2.0	T-9-11	8	17	7	46	0.4	750	3.33	14	0.5	<3	<3	0.23	2	0.29	65	<.01	1.52		
T-9	125.0	128.0	3.0	T-9-12	13	13	11	27	0.6	130	4.03	25	<.5	<3	<3	0.07	2	0.12	40	0.01	1.93		
T-10	18.0	19.0	1.0	T-10-1	3	20	5	47	10.9	1058	3.23	39	0.5	<3	<3	0.24	2	0.57	75	0.25	2.02		
T-10	21.4	22.4	1.0	T-10-2	<1	18	<3	72	0.4	1648	3.45	8	0.5	<3	<3	0.33	3	1.43	74	0.03	1.05		
T-10	55.0	57.5	2.5	T-10-3	1	13	<3	57	6.9	1320	2.91	5	<.5	<3	<3	0.16	2	0.15	110	0.22	2.85		
T-10	57.5	60.5	3.0	T-10-4	<1	20	<3	68	10.4	1196	2.89	13	0.5	<3	<3	0.12	4	0.08	106	0.37	2.93		
T-10	60.5	62.5	2.0	T-10-5	<1	14	<3	24	2	334	0.97	2	<.5	<3	<3	0.04	1	0.02	88	1.18	2.24		
T-10	62.5	64.5	2.0	T-10-6	<1	7	<3	26	1.8	434	0.96	2	<.5	<3	<3	0.03	5	0.04	83	0.29	1.79		
T-10	64.5	66.5	2.0	T-10-7	1	6	<3	24	2.2	126	1.19	11	<.5	<3	<3	0.02	3	0.03	60	0.30	1.78		
T-10	66.5	68.0	1.5	T-10-8	2	8	8	10	4.9	83	1.5	431	<.5	16	<3	0.03	9	0.03	79	0.22	2.23		
T-10	68.0	70.0	2.0	T-10-9	<1	21	3	29	3.6	534	1.79	65	<.5	<3	<3	0.05	2	0.05	88	0.33	2.48		
T-10	70.0	72.0	2.0	T-10-10	1	22	<3	83	0.9	1815	3.64	21	0.6	<3	<3	0.19	8	0.28	142	0.09	2.3		
T-10	72.0	75.0	3.0	T-10-11	<1	21	<3	67	1.3	1245	3.53	10	<.5	<3	<3	0.2	2	0.25	131	0.10	3.14		
T-10	75.0	78.0	3.0	T-10-12	1	25	3	59	3.9	1075	2.84	7	<.5	<3	<3	0.12	8	0.08	101	0.39	3.35		
T-10	78.0	81.0	3.0	T-10-13	<1	25	<3	70	0.4	1020	3.56	4	<.5	<3	<3	0.25	3	0.21	128	0.02	3.36		
T-10	81.0	84.0	3.0	T-10-14	1	21	3	65	0.9	923	3.43	11	<.5	<3	<3	0.22	4	0.32	139	0.05	3.12		
T-10	84.0	87.0	3.0	T-10-15	2	15	<3	74	1.6	1210	3.66	7	<.5	<3	<3	0.22	3	1.03	124	0.04	3.45		
T-10	120.0	121.5	1.5	T-10-16	2	26	4	64	6.1	1387	2.97	23	<.5	<3	<3	0.16	5	0.28	111	0.22	1.75		
T-10	135.0	137.0	2.0	T-10-17	<1	13	<3	75	<.3	1634	3.36	3	<.5	<3	<3	0.31	2	0.41	144	0.02	1.44		
T-10	137.0	139.0	2.0	T-10-18	1	21	4	126	5.3	2600	3.61	25	<.5	<3	<3	0.17	3	0.12	101	0.18	1.72		
T-10	139.0	141.0	2.0	T-10-19	<1	16	<3	123	2.8	1928	3.69	27	<.5	<3	<3	0.2	3	0.4	93	0.27	1.58		
T-10	150.0	151.5	1.5	T-10-20	<1	24	7	97	2.7	1370	3.57	38	<.5	<3	<3	0.18	7	0.24	74	0.06	1.6		
T-10	151.5	153.0	1.5	T-10-21	2	12	3	51	7.6	1071	2.21	8	<.5	<3	<3	0.08	5	0.05	64	0.10	1.65		
T-10	153.0	155.0	2.0	T-10-22	<1	16	4	83	16.8	1254	2.92	4	0.5	<3	<3	0.11	4	0.09	70	0.05	2.13		
T-10	155.0	158.0	3.0	T-10-23	1	17	3	103	3.5	1395	3.47	10	<.5	<3	<3	0.13	3	0.1	92	0.08	2.22		
T-10	158.0	161.0	3.0	T-10-24	<1	21	4	85	3.9	1370	3.26	2	<.5	<3	<3	0.16	2	0.17	131	0.05	3.05		
T-10	161.0	164.0	3.0	T-10-25	2	22	<3	75	3.1	1140	3.39	13	0.5	<3	<3	0.17	5	0.15	97	0.13	3.08		
T-10	164.0	167.0	3.0	T-10-26	<1	14	<3	89	1.9	1264	3.34	9	<.5	<3	<3	0.22	3	0.27	91	0.09	2.56		
T-10	167.0	170.0	3.0	T-10-27	1	19	3	102	2.2	1439	3.59	12	<.5	<3	<3	0.21	3	0.53	94	0.50	2.28		
T-10	170.0	172.0	2.0	T-10-28	1	16	11	64	3.8	1287	2.9	22	<.5	<3	3	0.14	5	0.37	93	0.09	2.1		
T-10	172.0	174.0	2.0	T-10-29	1	14	5	77	1.5	1442	3.47	17	<.5	<3	3	0.23	3	1.11	76	0.02	1.75		
T-10	200.0	205.0	5.0	T-10-30	<1	21	10	64	4.8	1437	3.05	28	<.5	<3	6	0.19	5	0.3	111	0.06	3.09		
T-10	210.0	210.6	0.6	T-10-31	2	17	10	53	2.6	1587	3.18	65	<.5	<3	8	0.2	5	0.85	92	0.41	0.89		

Trench ID	From	To	Width	Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Fe %	As ppm	Cd ppm	Sb ppm	Bi ppm	Ca %	Cr ppm	Mg %	Ba ppm	Au** gm/mt	Weight kg	Ag** gm/mt	Au** gm/mt
T-10	219.0	220.0	1.0	T-10-32	1	16	11	67	1.1	1536	3.26	41	<.5	<3	4	0.3	6	0.71	78	0.03	1.33		
T-11	10.0	12.6	2.6	T-11-1	<1	19	<3	69	0.5	1589	4.02	10	<.5	<3	<3	0.44	4	1.2	125	0.01	1.65		
T-11	45.0	46.0	1.0	T-11-2	5	17	15	59	10.4	846	4.01	27	<.5	<3	6	0.25	3	0.84	112	0.08	1.23		
T-11	57.0	60.0	3.0	T-11-3	5	47	47	116	>100	1134	3.63	28	<.5	<3	5	0.2	6	0.76	125	1.60	3.66	241.0	1.82
T-11	95.0	97.0	2.0	T-11-4	13	24	16	63	4.2	996	3.61	23	<.5	<3	3	0.19	5	0.71	119	0.05	2.35		
T-11	100.0	101.4	1.4	T-11-5	2	15	6	65	2.8	1028	3.52	34	<.5	<3	5	0.18	6	0.88	134	0.05	1.51		
T-11	115.0	116.0	1.0	T-11-6	1	28	<3	83	0.4	2195	4	7	0.6	<3	3	0.24	4	0.63	156	0.01	1.09		
T-11	116.0	117.0	1.0	T-11-7	2	13	6	52	4	1736	2.83	7	0.9	<3	4	0.09	6	0.1	134	0.04	1.05		
T-11	117.0	118.0	1.0	T-11-8	2	8	6	19	1.9	274	1.35	13	<.5	<3	4	0.05	16	0.03	50	0.03	1.17		
T-11	118.0	118.6	0.6	T-11-9	3	24	12	53	2.2	1376	2.93	19	1.1	<3	4	0.08	5	0.05	147	1.01	1.77		
T-11	118.6	120.2	1.6	T-11-10	2	20	6	63	0.6	1669	3.57	8	<.5	<3	5	0.19	4	0.2	201	0.01	1.65		
T-11	198.6	198.8	0.2	T-11-14	6	16	15	38	12.5	602	3.08	11	<.5	<3	3	0.25	5	0.46	126	0.20	1.52		
T-11	206.1	206.9	0.8	T-11-15	1	22	16	58	11.8	854	3.3	31	<.5	<3	4	0.24	7	0.78	115	0.57	1.61		
T-11	215.8	216.0	0.1	T-11-16	2	28	11	55	16.1	1040	2.6	13	<.5	<3	4	0.3	5	0.51	90	0.53	2.42		
T-11	228.0	231.0	3.0	T-11-17	1	22	8	67	3.4	1526	3.5	26	<.5	<3	<3	0.41	9	1.26	126	0.13	3.75		
T-11	240.5	241.2	0.7	T-11-18	2	25	33	75	67.9	1429	3.33	25	<.5	<3	<3	0.31	4	1.06	113	0.57	2.27		
T-12	58.0	59.0	1.0	T-12-1	<1	17	4	73	1.3	811	4.23	15	<.5	<3	<3	0.30	3	0.95	91	<.01	2.00		
T-12	60.5	63.0	2.5	T-12-2	<1	18	8	65	0.8	693	4.12	13	<.5	<3	<3	0.24	4	0.68	101	<.01	2.90		
T-12	72.9	73.6	0.7	T-12-3	2	20	12	64	0.6	951	4.36	20	<.5	<3	<3	0.32	3	0.72	132	<.01	1.62		
T-12	82.0	83.5	1.5	T-12-4	1	15	7	67	0.5	974	3.74	11	<.5	<3	<3	0.39	3	0.91	149	<.01	1.68		
T-12	83.5	85.0	1.5	T-12-5	3	17	3	76	0.4	963	4.39	13	<.5	<3	<3	0.38	2	1.10	195	<.01	2.08		
T-12	88.3	90.0	1.7	T-12-6	1	12	8	59	0.8	558	3.60	25	<.5	<3	<3	0.19	2	0.64	159	<.01	2.78		
T-12	92.0	93.0	1.0	T-12-7	<1	13	4	63	0.9	734	3.90	13	<.5	<3	<3	0.19	4	0.79	234	0.03	3.22		
T-12	99.0	100.0	1.0	T-12-8	<1	14	7	64	0.7	852	3.34	6	<.5	<3	<3	0.15	5	0.37	98	<.01	1.59		
T-12	100.0	102.5	2.5	T-12-9	<1	5	8	40	<.3	582	1.37	3	<.5	<3	<3	0.05	5	0.05	99	<.01	2.33		
T-12	102.5	105.5	3.0	T-12-10	<1	14	<3	67	0.4	1190	3.51	7	<.5	<3	<3	0.17	<1	0.39	149	0.01	4.10		
T-12	110.0	111.0	1.0	T-12-11	<1	14	3	61	0.7	906	3.31	11	<.5	<3	<3	0.19	3	0.93	266	0.04	3.40		
T-12	111.0	111.8	0.8	T-12-12	<1	11	<3	40	0.7	705	2.36	18	<.5	<3	<3	0.09	2	0.55	217	0.04	2.79		
T-12	190.0	191.0	1.0	T-12-13	<1	7	<3	52	1.4	948	2.66	30	<.5	<3	<3	0.35	4	0.97	165	0.03	1.92		
T-12	233.0	234.0	1.0	T-12-14	10	16	9	62	1.8	743	2.95	38	0.5	<3	<3	0.19	4	0.76	85	0.29	2.62		
T-12	245.0	247.0	2.0	T-12-15	7	19	13	73	1.4	738	3.01	45	<.5	<3	<3	0.19	3	0.84	89	0.08	1.99		
T-12	247.0	249.0	2.0	T-12-16	2	17	5	61	0.8	479	3.45	26	<.5	<3	<3	0.10	1	0.58	83	0.13	4.00		
T-12	249.0	250.0	1.0	T-12-17	21	13	34	71	3.5	432	3.32	24	<.5	<3	<3	0.10	4	0.53	82	0.49	2.20		
T-12	290.0	292.0	2.0	T-12-18	1	14	43	46	<.3	184	2.36	3	<.5	<3	<3	0.13	2	0.15	66	0.01	3.32		
T-12	344.0	347.6	3.6	T-12-19	1	17	30	98	1.7	873	3.26	11	<.5	<3	<3	0.21	2	0.40	116	<.01	1.68		

Table 3
PSA583 PIMA Analysis

Sample	Spectrum	Minerals	Alunite or Al-OH Features	Comment
MP-1-1/200	583D001A	kaolinite, jarosite, smectite	2209	Pinkish/yellow mottled hard quartzy rock/stringers
MP-1-1/200	583D001B	kaolinite, smectite	2209	Pinkish/yellow mottled hard quartzy rock/stringers
MP-1-18/104	583D002A	kaolinite, smectite	2209	Brown hard quartzy
MP-1-18/104	583D002B	kaolinite, smectite	2209	Brown hard quartzy
MP-1-19/80	583D003A	kaolinite, smectite	2209	Fault. Brown hard quartzy friable
MP-1-19/80	583D003B	kaolinite, smectite	2209	Fault. Brown hard quartzy friable
MP-1-20/64	583D004A	kaolinite, smectite	2209	Wallrx or vn. Strong limonitic stain, hard, quartzy
MP-1-20/64	583D004B	kaolinite, smectite	2209	Wallrx or vn. Strong limonitic stain, hard, quartzy
MP-1-21/54	583D005A	kaolinite, smectite, silica	2209	Beige hard quartzy
MP-1-21/54	583D005B	kaolinite, smectite, silica	2209	Beige hard quartzy
MP-1-22/50.5	583D006A	kaolinite	2209	Brown hard quartzy, limonitic staining
MP-1-22/50.5	583D006B	kaolinite	2209	Brown hard quartzy, limonitic staining
MP-1-23/49.5	583D007A	smectite, illite, ?kaolinite	2211	White soft perv/yellow mottled
MP-1-23/49.5	583D007B	smectite, kaolinite, illite?	2209	White soft perv/yellow mottled
MP-2-13/58.5	583D008A	kaolinite, jarosite, silica		Greybrown silic., sus
MP-2-13/58.5	583D008B	kaolinite, jarosite, silica		Greybrown silic., sus
MP-2-14/70	583D009A	kaolinite, silica		Rhyolite. Beige/brown hard quartzy
MP-2-14/70	583D009B	kaolinite, silica		Rhyolite. Beige/brown hard quartzy
MP-2-15/115	583D010A	epidote		Greybrown/greenish mottled/white fs
MP-2-15/115	583D010B	smectite, epidote, kaolinite	2216	Greybrown/greenish mottled/white fs
MP-2-16/165	583D011A	kaolinite, smectite	2209	Browngrey hard quartzy, limontic
MP-2-16/165	583D011B	kaolinite, smectite	2210	Browngrey hard quartzy, limontic
MP-3-9/156	583D012A	smectite, kaolinite, illite?	2209	Grey silic.mx, salmon pink fs
MP-3-9/156	583D012B	smectite, kaolinite, illite?	2209	Grey silic.mx, salmon pink fs
MP-3-10/129	583D013A	kaolinite, smectite, jarosite	2210	Grey silic.mx, salmon pink fs
MP-3-10/129	583D013B	kaolinite, smectite, ?jarosite	2209	Grey silic.mx, salmon pink fs
MP-3-11/85	583D014A	smectite, kaolinite	2209	Greybrown/pink mottled, hard
MP-3-11/85	583D014B	smectite, kaolinite	2209	Greybrown/pink mottled, hard
MP-3-12/75	583D015A	kaolinite, smectite	2209	White/pink mottled, quartzy, limonitic fracts
MP-3-12/75	583D015B	kaolinite, smectite	2209	White/pink mottled, quartzy, limonitic fracts
MP-4-5/5	583D016A	smectite, jarosite, illite	2213	Offwhite soft perv.altn/yellow mottled
MP-4-5/5	583D016B	smectite, jarosite, illite	2213	Offwhite soft perv.altn/yellow mottled
MP-4-6/25	583D017A	kaolinite, smectite, ?jarosite	2208	Offwhite mod.soft perv. Limonitic staining
MP-4-6/25	583D017B	kaolinite, smectite	2208	Offwhite mod.soft perv. Limonitic staining
MP-6-7/15	583D018A	kaolinite, silica	2210	Grey qv, offwhite/yellow banding/masses
MP-6-7/15	583D018B	kaolinite, silica	2209	Grey qv, offwhite/yellow banding/masses (qv)
MP-6-8/22.5	583D019A	kaolinite, smectite	2209	qv (green). Brown/white mottled, qzy. Circled area
MP-6-8/22.5	583D019B	kaolinite, silica	2209	qv (green). Brown/white mottled, qzy
MP-7-2/7-280	583D020A	silica, smectite, ?kaolinite	2211	Grey/salmon pink mottled, qzy, sus

Kim Heberlein, P.Geo.
Anne JB Thompson, P.Geo.

Sample	Spectrum	Minerals	Alunite or Al-OH Features	Comment
MP-7-2/7-280	583D020B	silica, smectite, ?kaolinite, ?jarosite	2211	Grey/salmon pink mottled, qzy, sus
MP-7-3/7-278	583D021A	chlorite, silica, ?smectite	2208	Grey/salmon pink mottled, qzy, sus
MP-7-3/7-278	583D021B	chlorite, kaolinite, silica	2206	Grey/salmon pink mottled, qzy, sus
MP-7-4/7-274	583D022A	smectite, jarosite, silica, ?kaolinite	2210	Offwhite/pink/grey mottled quartzy, limonitic
MP-7-4/7-274	583D022B	silica, smectite, jarosite	2214	Offwhite/pink/grey mottled quartzy, limonitic
MP-17	583D023A	kaolinite, silica		Grey silic/salmon pink mottled, sus
MP-17	583D023B	kaolinite, silica		Grey silic/salmon pink mottled, sus
PMT2A/79	583D024A	kaolinite, smectite	2209	Brown quartzy friable, strong limonitic thr'out
PMT2A/79	583D024B	kaolinite, smectite	2209	Brown quartzy friable, strong limonitic thr'out
PMT2A/108	583D025A	kaolinite, smectite, silica	2209	Dark greybrown, hard
PMT2A/108	583D025B	kaolinite, smectite, silica	2209	Dark greybrown, hard
PMT2A/104	583D026A	smectite,illite,kaolinite	2210	Offwhite/strong brown staining
PMT2A/104	583D026B	kaolinite, smectite,illite	2209	Offwhite/strong brown staining
PMT2A/180	583D027A	kaolinite, smectite	2209	south wall. Offwhite mod.soft/strong lim.staining
PMT2A/180	583D027B	kaolinite, smectite	2209	south wall. Offwhite mod.soft/strong lim.staining
PMT2A/221	583D028A	kaolinite, smectite	2209	South wall. Dark greybrown, mod.hard, strong feox
PMT2A/221	583D028B	kaolinite, smectite	2209	South wall. Dark greybrown, mod.hard, strong feox
PMT2A/225	583D029A	smectite, kaolinite	2210	South wall. Dark grey/pinkish mottled, hard
PMT2A/225	583D029B	smectite, kaolinite	2211	South wall. Dark grey/pinkish mottled, hard
PM2A-7	583D030A	smectite, kaolinite	2209	Grey quartzy, hard, strong feox
PM2A-7	583D030B	smectite, kaolinite, jarosite	2209	Grey quartzy, hard, strong feox
PM-8-24/tr8-12	583D031A	kaolinite, smectite, jarosite	2210	Grey quartzy/salmon pink mottled/green staining, feox
PM-8-24/tr8-12	583D031B	kaolinite, smectite, jarosite	2210	Grey quartzy/salmon pink mottled/green staining, feox
PM-9-1/125	583D032A	smectite, illite, kaolinite	2208	Pink/buff mod. hard
PM-9-1/125	583D032B	smectite, illite, kaolinite	2207	Pink/buff mod. hard
PM-9-2/125	583D033A	smectite, illite	2213	White intense soft pervasive altn
PM-9-2/125	583D033B	smectite, illite	2214	White intense soft pervasive altn
PMT-10/60	583D034A	smectite, kaolinite	2209	Grey/brown quartzy, strong feox
PMT-10/60	583D034B	smectite, kaolinite	2209	Grey/brown quartzy, strong feox
PMT-10/62	583D035A	kaolinite, silica	2209	rhyolite. Beige/buff quartzy, hard
PMT-10/62	583D035B	kaolinite, silica	2209	rhyolite. Beige/buff quartzy, hard
PMT-10/77	583D036A	smectite, kaolinite, silica	2209	Grey/brown qv, strong feox
PMT-10/77	583D036B	kaolinite, silica	2208	Grey/brown qv, strong feox
PMT-10/137	583D037A	kaolinite, smectite	2209	Offwhite/brown friable, strong feox
PMT-10/137	583D037B	kaolinite, smectite	2209	Offwhite/brown friable, strong feox
PMT-11/113	583D038A	kaolinite, smectite, illite	2209	Greybrown, v.soft
PMT-11/113	583D038B	kaolinite, smectite, illite	2208	Greybrown, v.soft
PMT-11/120	583D039A	kaolinite, smectite, illite	2209	Greybrown, mod. soft
PMT-11/120	583D039B	kaolinite, smectite, illite	2208	Greybrown, mod. soft

Kim Heberlein, P.Geo.
Anne JB Thompson, P.Geo.

Table 3
PSA583 PIMA Analysis

Sample	Spectrum	Minerals	Alunite or Al-OH Features	Comment
PMT-11/115.5	583D040A	kaolinite, smectite	2209	Brown, v.soft, crumbly
PMT-11/115.5	583D040B	kaolinite, smectite	2209	Brown, v.soft, crumbly
PMT-11-2	583D041A	kaolinite, smectite, illite	2210	5m sw of T11-1. Brown, v.soft, crumbly
PMT-11-2	583D041B	kaolinite, smectite	2209	5m sw of T11-1. Brown, v.soft, crumbly
PMT-11-1/1870/7	583D042A	kaolinite, smectite	2209	607607/6354717. S.side. Perv. mod. soft altn
PMT-11-1/1870/7	583D042B	kaolinite, smectite, ?illite	2209	607607/6354717. S.side. Perv. mod. soft altn
PMT-11-3/1877/6	583D043A	kaolinite, silica	2209	607580/6354704. trench floor. Brown hard silic.
PMT-11-3/1877/6	583D043B	kaolinite, silica	2210	607580/6354704. trench floor. Brown hard silic.

Kim Heberlein, P.Geo.
Anne JB Thompson, P.Geo.

Rock Sample Results

Sample #	East	North	Elevatio	Pos Erro	Location	Distance	Sample ID	Width	Comments	ELEMENT SAMPLES	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Au gm/mt	Sample kg	Au gm/mt	Ag gm/mt
04DB-1	607511	6353385	1663	8	Silver creek			1.7	Silver Creek 1.7m Qtz stk, Bx, propyl+ weak clay	04DB-1	8	31	53	70	16.7	0.60	2.25		
04DB-2	607512	6353388	1663	8	Silver creek			1.3	Silver Creek @320, mod sil, 10 cm gouge 1.3 m	04DB-2	6	14	29	43	4.3	0.09	1.52		
04DB-3	607512	6353388	1663	8	Silver creek			1.3	Silver Creek @320, Q-s-py,wk stk 1.3 m	04DB-3	76	104	116	53	73.6	2.70	1.23	2.00	74.0
04DB-4					T-11	57-60	T-11-3	3	Check , wk qtz vn stk, pyrite	04DB-4	6	34	31	121	>100	0.74	2.04	0.81	138.0
04DB-S-1	607558	6354814	1872	4	T-7ext	150-153			soil from 2m depth in T- 7ext @ 125 metres	04DB-S-1					0.4	16.7 (ppb)			
04DB-5	607489	6354696	1874	4	T-9	57		1	Msv qtz vn clasts in fault breccia	04DB-5	4	12	11	51	3.2	0.08	1.29		
04DB-6	607427	6354918	1852	4	T-12	93	T-12-7	1	Qvn stringers weak sil wallrock	04DB-6	1	5	13	44	0.9	<.01	1.36		
T-8-14					T-8	32			grab of massive qtz vein, veinlets with tr py	T-8-14					3.2	0.05			
T-8-18					T-8	27			grab of qtz vein, veinlets with tr py	T-8-18					2.3	0.04			
04DB-7	608334	6355561	1771	5	Cliff creek				Grab of bladed Q Vn Bx at Cliff Creek Portal dump	04DB-7	35	75	170	256	>100	7.32	2.40	12.20	245.0
CC-WD-1	608393	6355509	1749	5	Cliff creek				Grab of surface rocks .5 X .5 m at Cliff Creek Portal dump	CC-WD-1	10	236	810	1307	>100	4.73	5.00	4.60	296.0
CC-WD-2	608386	6355527	1751	5	Cliff creek				Grab of surface rocks .5 X .5 m at Cliff Creek Portal dump	CC-WD-2	6	37	44	115	58.8	1.54	3.40		
CC-WD-3	608408	6355523	1750	5	Cliff creek				Grab of surface rocks .5 X .5 m at Cliff Creek Portal dump	CC-WD-3	12	67	103	182	83.9	2.33	3.36	2.53	85.0
CC-WD-4	608421	6355549	1753	5	Cliff creek				Grab of surface rocks .5 X .5 m at Cliff Creek Portal dump	CC-WD-4	11	22	39	97	44.9	1.69	3.94		
TP-1-1	611162	6357372	1387	5	Tailings Pond				Grab of tailings muck- thickness= 3.3m	TP-1-1		165	338	417	15.4	0.42			
TP-2-1	611211	6357264	1387	4	Tailings Pond				Grab of tailings muck- thickness=3.8m	TP-2-1		156	311	676	25.9	0.28			
TP-3-1	611191	6357122	1390	4	Tailings Pond				Grab of tailings muck- thickness= 3.4m	TP-3-1		83	179	384	25.3	0.41			
TP-4-1	611180	6357063	1385	4	Tailings Pond				Grab of tailings muck- thickness= 1.8m	TP-4-1		105	293	553	34.7	0.5			
TP-5-1	611210	6357041	1385	4	Tailings Pond				Grab of tailings muck- thickness= 2.5m	TP-5-1		94	231	509	28.9	0.42			
TP-6-1	611237	6357082	1388	3	Tailings Pond				Grab of tailings muck- thickness= >4m	TP-6-1		116	278	639	34.8	0.41			
TP-7-1	611235	6357131	1388	4	Tailings Pond				Grab of tailings muck- thickness= >4m	TP-7-1		90	211	515	37.9	0.47			
TP-8-1	611252	6357205	1385	4	Tailings Pond				Grab of tailings muck- thickness= >4m	TP-8-1		127	313	697	23.4	0.27			
TP-8-2	611252	6357205	1385	4	Tailings Pond				Grab of tailings muck-Black muck select	TP-8-2		123	306	843	10.6	0.11			
										L04DR8	19	15	<3	4	<.3	0.16	1.68		
									picked grab of quartz vein from dogleg trench	L04DR10	3	34	69	44	>100	9.91	1.61	8.80	562.0
									chip across 1.1 metre of dogleg trench	L04DR11	1	15	24	76	>100	2.20	1.49	2.38	140.0
									Silver Creek 100 m nw of showing- east side of canyon, tr py	L04DR12	30	14	56	54	13.2	0.30	1.6		
									Silver Creek 100m nw of showing- west side of canyon, tr py	L04DR13	7	49	162	49	38.0	0.13	1.42		
									Scott Gifford M grid trench rock	SG-1	2	137	7	32	0.8	0.02	1.86		
									Scott Gifford M grid trench rock	SG-2	15	26	32	20	>100	1.99	2.37		
									Scott Gifford M grid trench rock	SG-3	19	8	20	60	19.9	0.31	2.7		
										LAW04DR1	<1	2	3	2	<.3	<.01	2.02		
										LAW04DR2	3	15	4	3	<.3	<.01	1.61		

BISHOP GOLD INC.

LAWYERS PROPERTY

PROPERTY LOCATION MAP

Date: Dec. 2004	Figure: 1

IBEX DRAFTING SERVICES

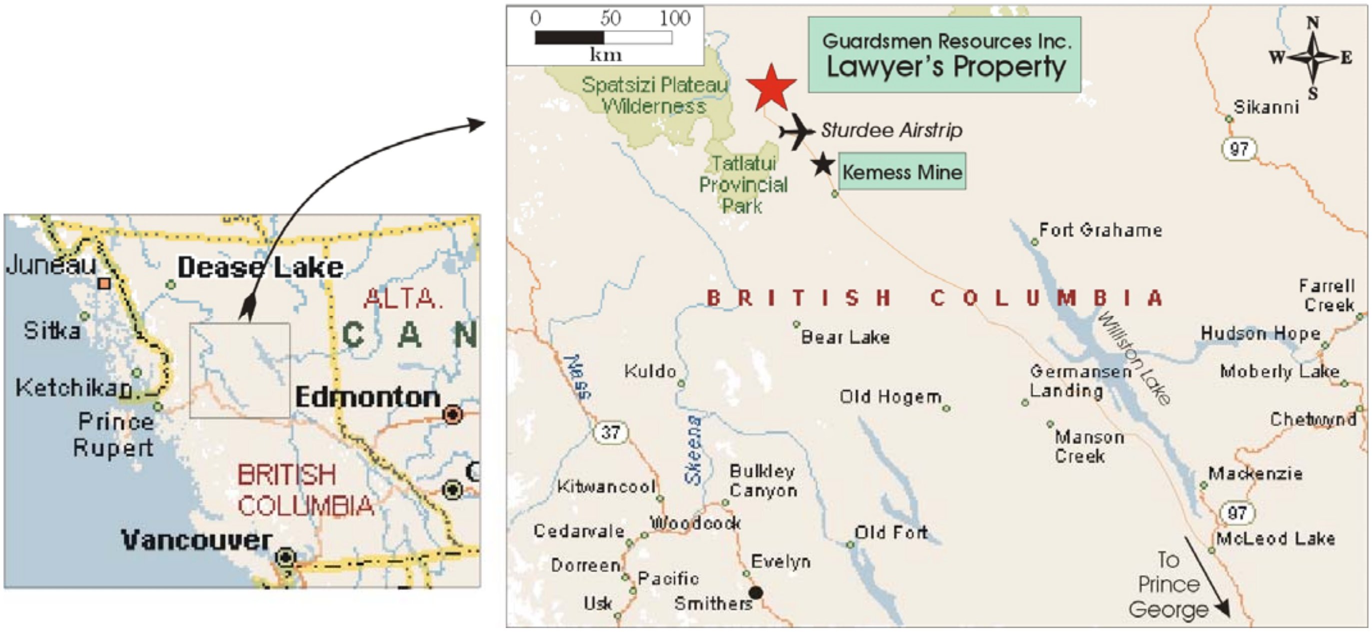
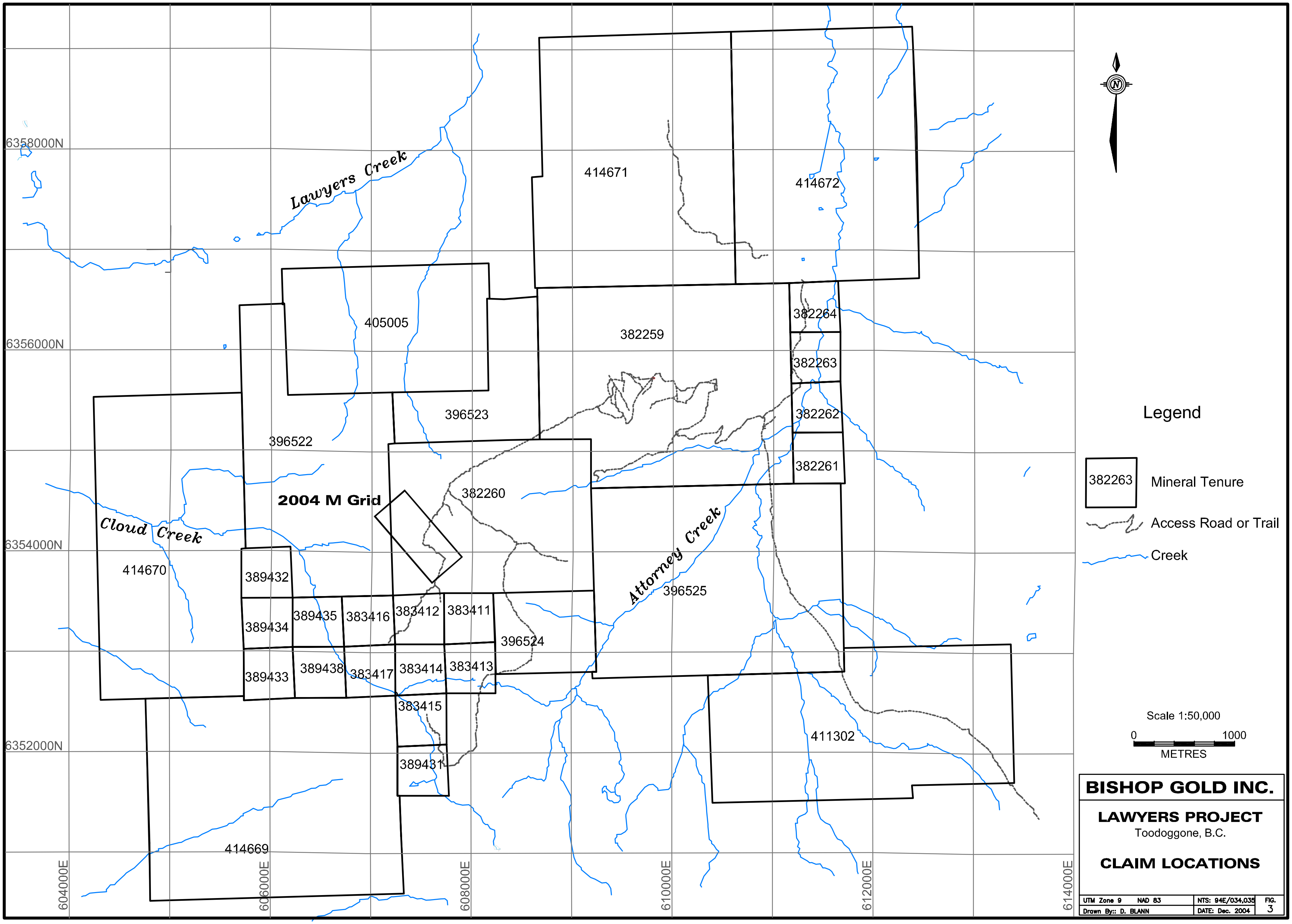
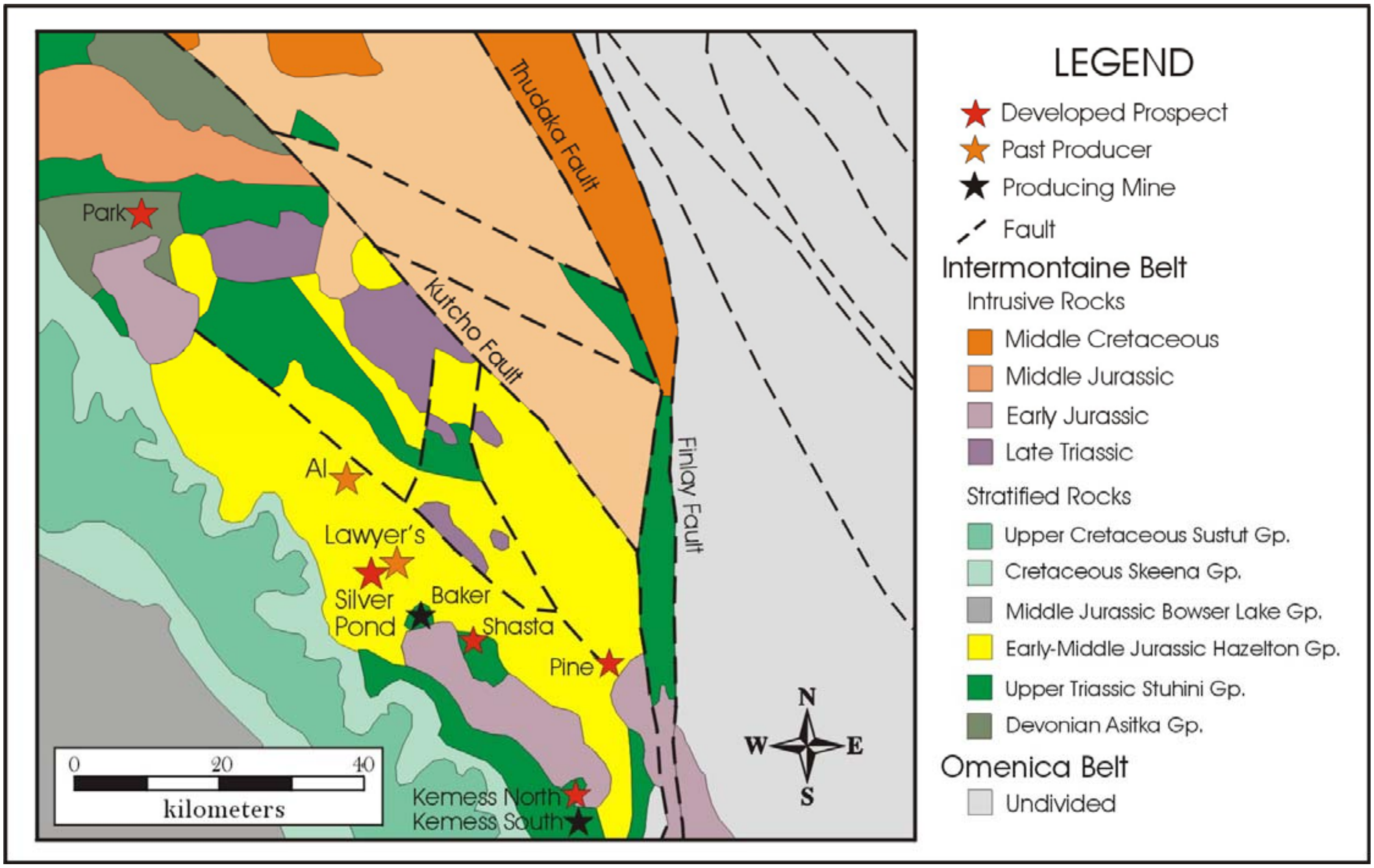


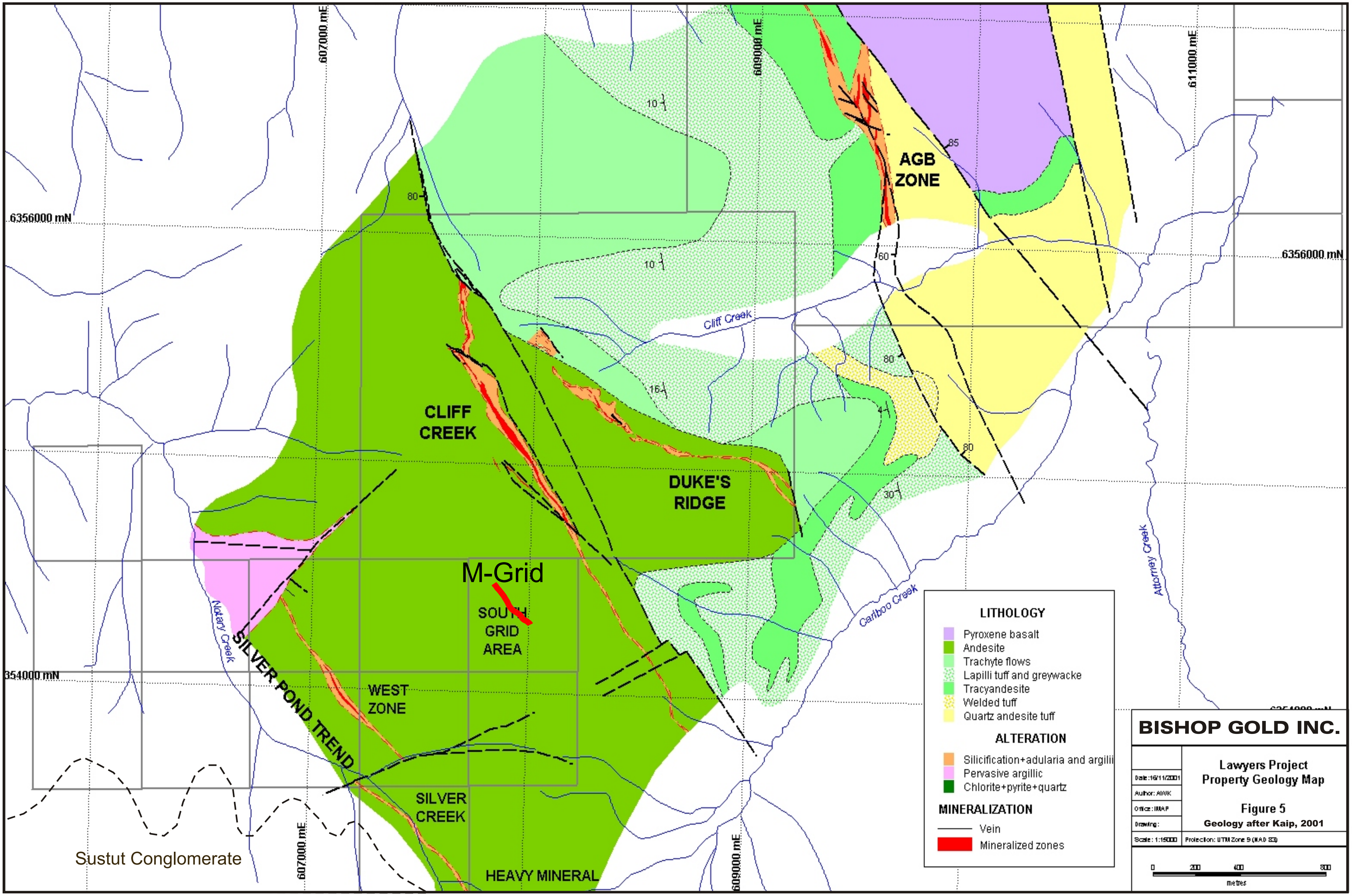
Figure 2 Location of the Lawyers Property, north-central British Columbia.(Kaip, 2001)

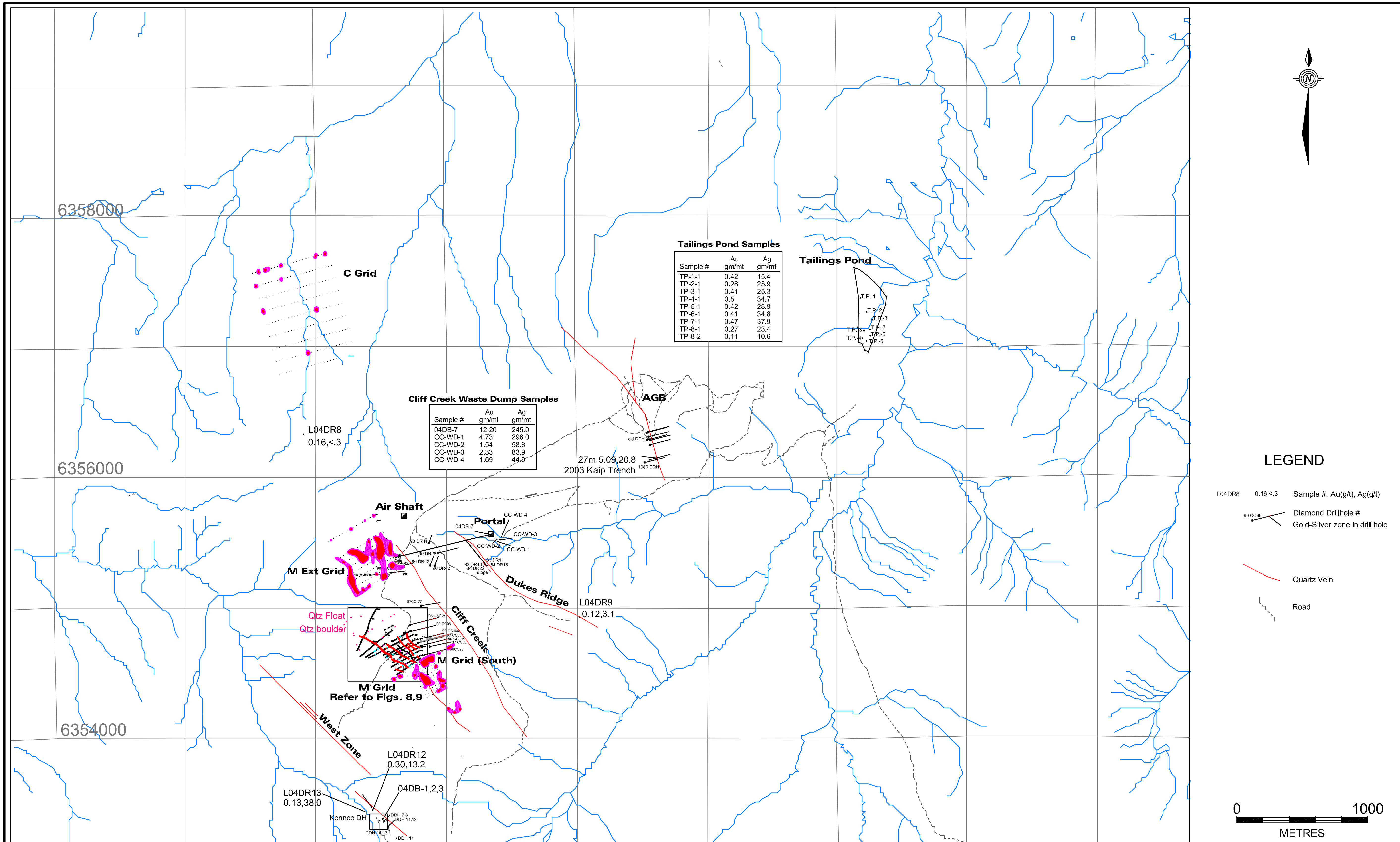


Lawyers Creek
Cloud Creek
Attorney Creek
2004 M Grid
6358000N
6356000N
6354000N
6352000N
604000E
606000E
608000E
610000E
612000E
614000E
414671
414672
405005
382259
382264
382263
382262
382261
396523
396522
382260
414670
389432
389434
389435
383416
383412
383411
396524
389433
389438
383417
383414
383413
383415
389431
396525
411302
414669
Legend
382263
Mineral Tenure
Access Road or Trail
Creek
Scale 1:50,000
0
1000
METRES
BISHOP GOLD INC.
LAWYERS PROJECT
Toodoggone, B.C.
CLAIM LOCATIONS
UTM Zone 9
NAD 83
NTS: 94E/034,035
FIG.
3
Drawn By:: D. BLANN
DATE: Dec. 2004

Figure 4 Regional Geology (After Kaip/ Childe, 2001)




AGB ZONE
CLIFF CREEK
DUKE'S RIDGE
M-Grid
SOUTH GRID AREA
WEST ZONE
SILVER CREEK
HEAVY MINERAL
SILVER POND TREND
Sustut Conglomerate
Cliff Creek
Cariboo Creek
Attorney Creek
Notary Creek
607000 mE
609000 mE
611000 mE
6356000 mN
6354000 mN
LITHOLOGY
Pyroxene basalt
Andesite
Trachyte flows
Lapilli tuff and greywacke
Tracyandesite
Welded tuff
Quartz andesite tuff
ALTERATION
Silicification+adularia and argillic
Pervasive argillic
Chlorite+pyrite+quartz
MINERALIZATION
Vein
Mineralized zones
BISHOP GOLD INC.
Lawyers Project
Property Geology Map
Figure 5
Geology after Kaip, 2001
Date: 16/11/2001
Author: AWK
Scale: 1:15000
Projection: UTM Zone 9 (NAD 83)
metres



Tailings Pond Samples

Sample #	Au gm/mt	Ag gm/mt
TP-1-1	0.42	15.4
TP-2-1	0.28	25.9
TP-3-1	0.41	25.3
TP-4-1	0.5	34.7
TP-5-1	0.42	28.9
TP-6-1	0.41	34.8
TP-7-1	0.47	37.9
TP-8-1	0.27	23.4
TP-8-2	0.11	10.6

Cliff Creek Waste Dump Samples

Sample #	Au gm/mt	Ag gm/mt
04DB-7	12.20	245.0
CC-WD-1	4.73	296.0
CC-WD-2	1.54	58.8
CC-WD-3	2.33	83.9
CC-WD-4	1.69	44.9

BISHOP GOLD INC.

LAWYERS PROJECT

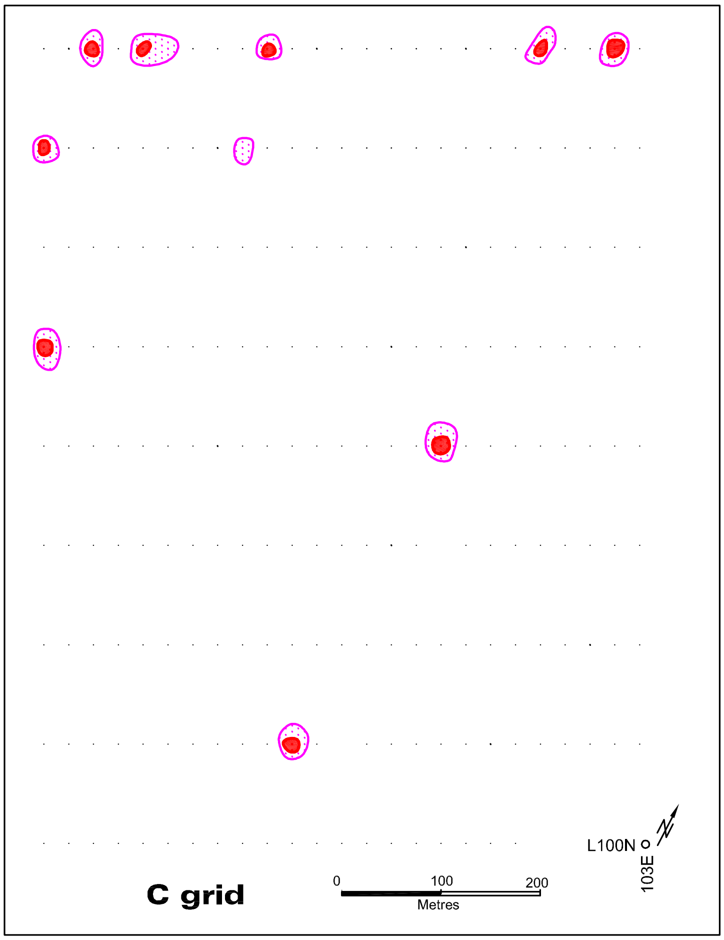
Toodoggone, B.C.

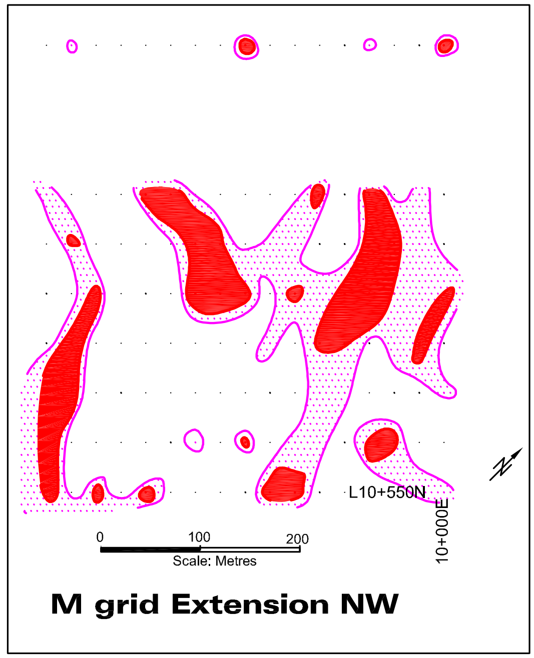
2004 Exploration Program

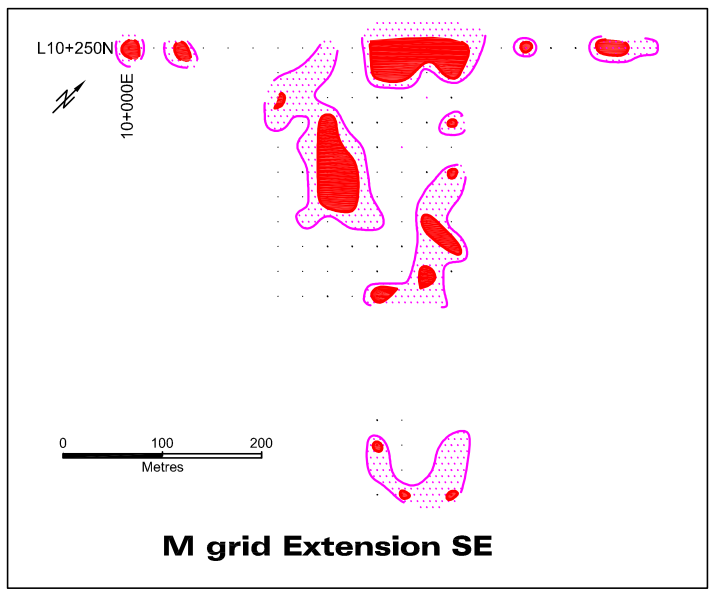
General Location of Activities

UTM: Zone 9 NAD 83

Omineca Mining Division	NTS: 94E/034,035	FIG.
Drawn By:: D. BLANN P.Eng.	DATE: Feb. 2005	6







LEGEND

- 39-500 ppb Au
- 22-39 ppb Au
- 0-22 ppb Au

Grid Location as shown in Figure:

BISHOP GOLD INC.

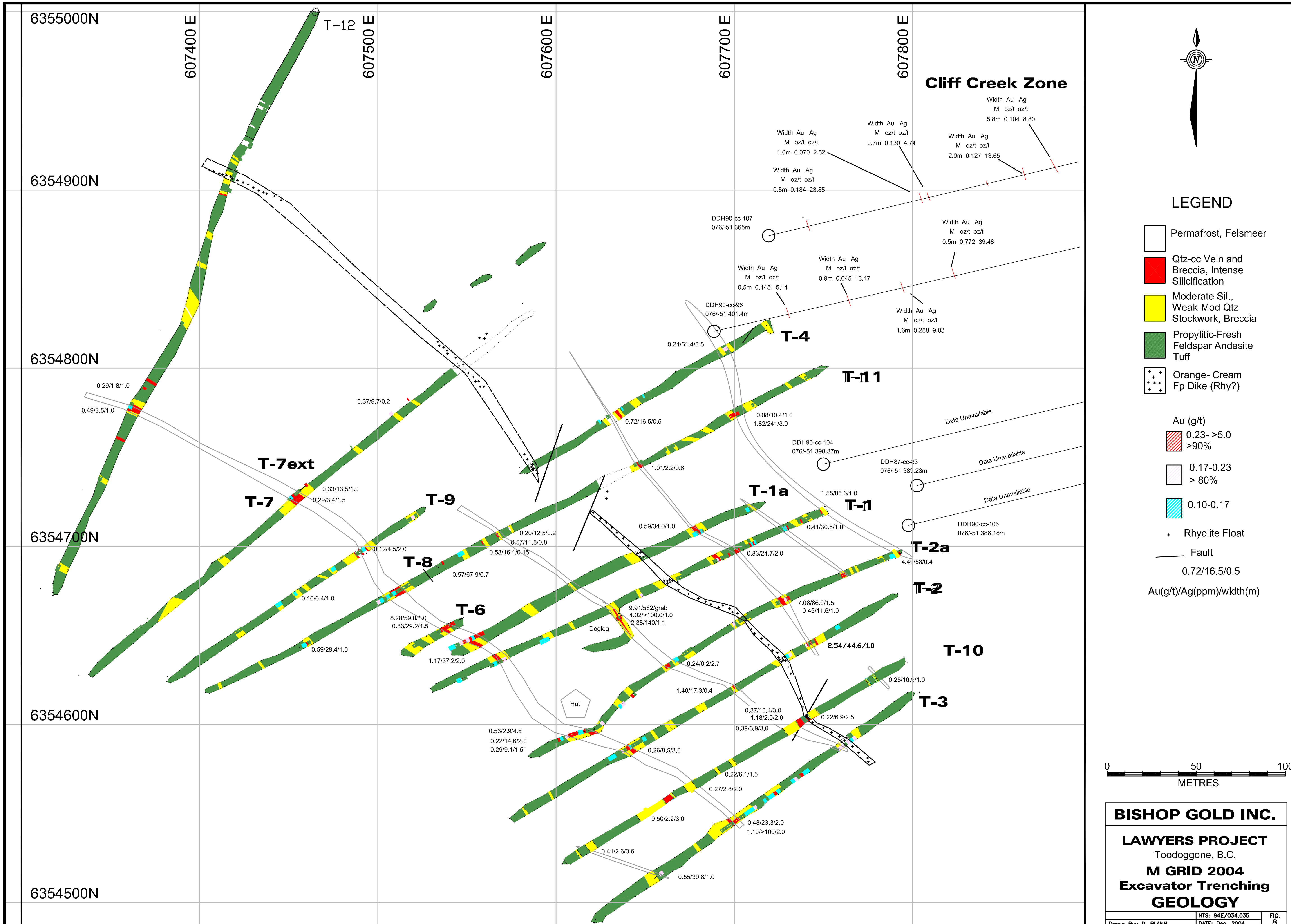
LAWYERS PROPERTY

Toodoggone, B.C.

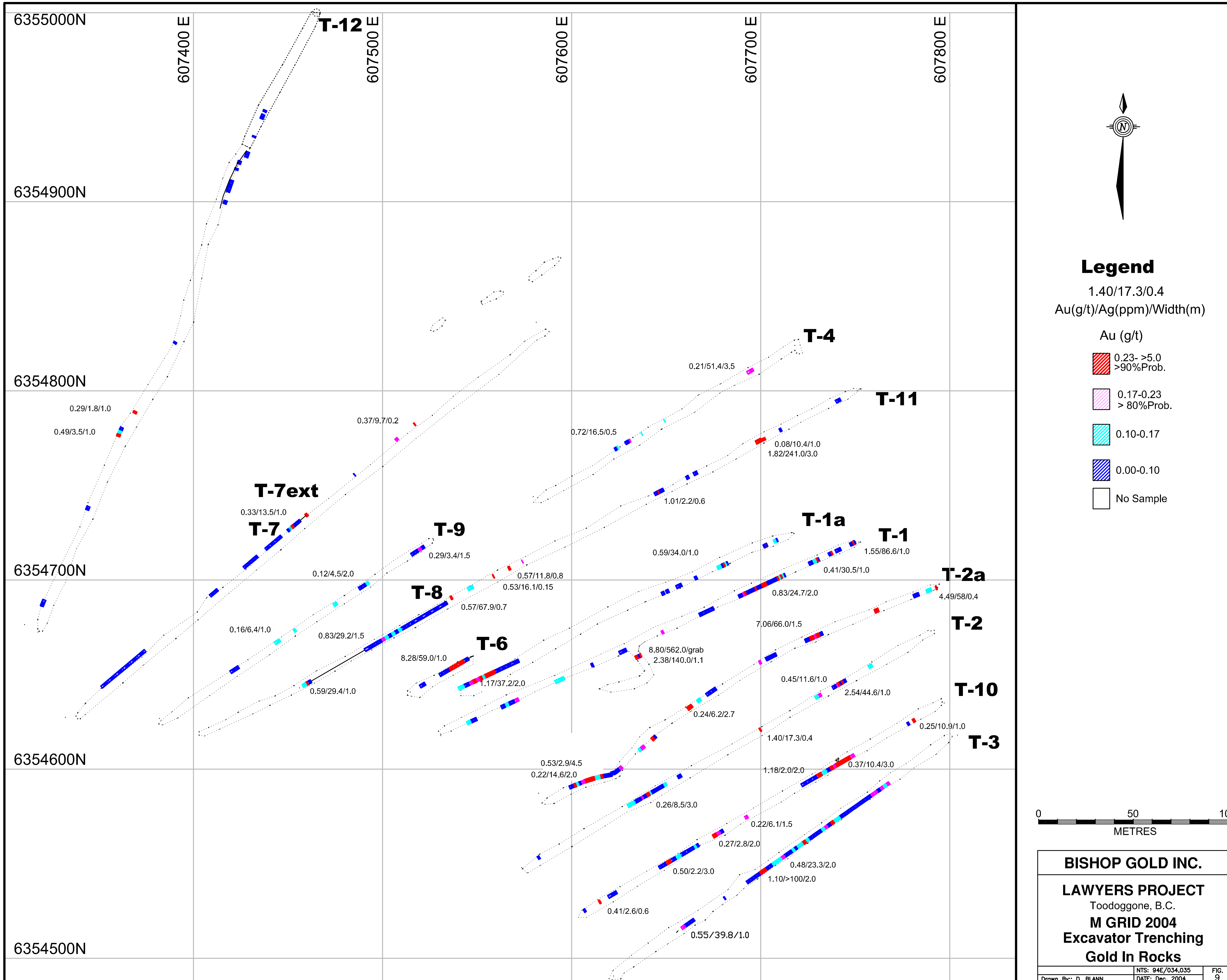
2004 Soil Geochemistry M Grid Area

Au in Soil

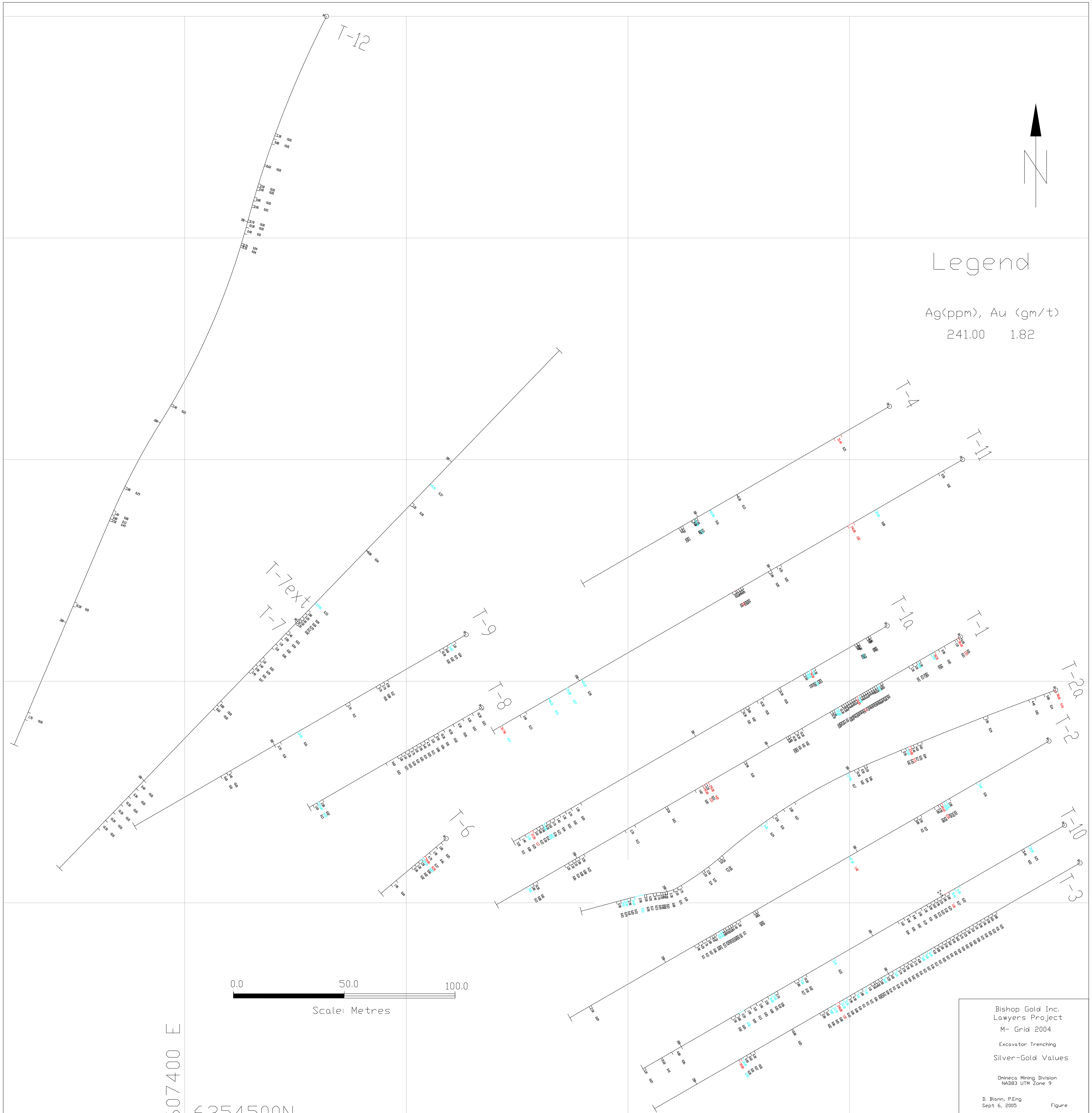
UTM Zone 9 NAD 83	NTS: 94E/034,035	FIG. 7
Drawn By:: D. BLANN	DATE: Dec. 2004	

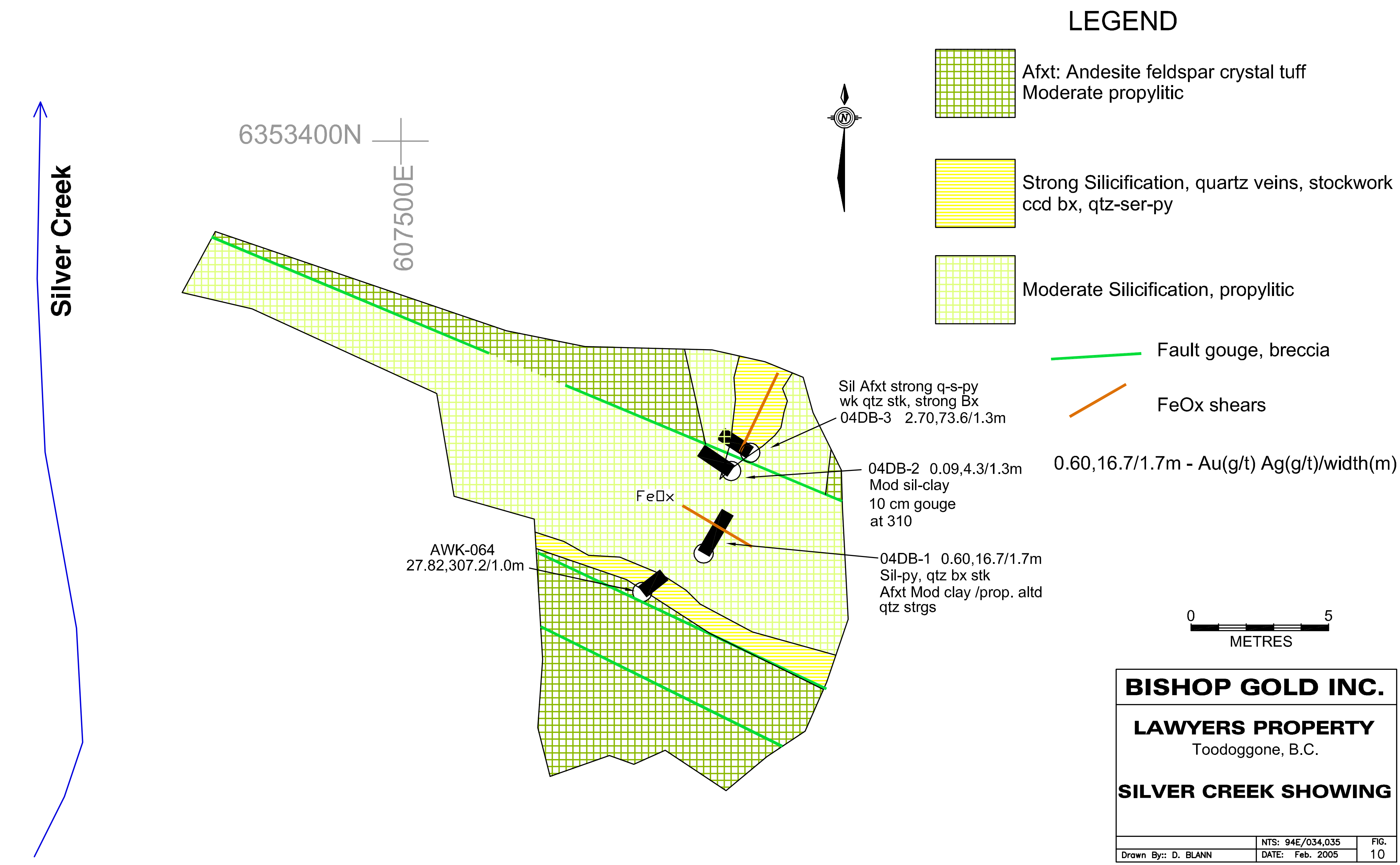


Cliff Creek Zone
LEGEND
Permafrost, Felsmeer
Qtz-cc Vein and Breccia, Intense Silicification
Moderate Sil., Weak-Mod Qtz Stockwork, Breccia
Propylitic-Fresh Feldspar Andesite Tuff
Orange- Cream Fp Dike (Rhy?)
Au (g/t)
0.23- >5.0 >90%
0.17-0.23 > 80%
0.10-0.17
Rhyolite Float
Fault
0.72/16.5/0.5
Au(g/t)/Ag(ppm)/width(m)
0 50 100
METRES
BISHOP GOLD INC.
LAWYERS PROJECT
Toodoggone, B.C.
M GRID 2004
Excavator Trenching
GEOLOGY
NTS: 94E/034,035
FIG. 8
Drawn By:: D. BLANN
DATE: Dec. 2004



6355000N
6354900N
6354800N
6354700N
6354600N
6354500N
607400 E
607500 E
607600 E
607700 E
607800 E
T-12
T-4
T-11
T-7ext
T-7
T-9
T-8
T-6
T-1a
T-1
T-2a
T-2
T-10
T-3
0.29/1.8/1.0
0.49/3.5/1.0
0.37/9.7/0.2
0.33/13.5/1.0
0.29/3.4/1.5
0.12/4.5/2.0
0.57/11.8/0.8
0.53/16.1/0.15
0.57/67.9/0.7
0.16/6.4/1.0
0.83/29.2/1.5
8.28/59.0/1.0
1.17/37.2/2.0
0.59/29.4/1.0
0.21/51.4/3.5
0.72/16.5/0.5
0.08/10.4/1.0
1.82/241.0/3.0
1.01/2.2/0.6
0.59/34.0/1.0
1.55/86.6/1.0
0.41/30.5/1.0
0.83/24.7/2.0
4.49/58/0.4
7.06/66.0/1.5
8.80/562.0/grab
2.38/140.0/1.1
0.45/11.6/1.0
2.54/44.6/1.0
0.24/6.2/2.7
1.40/17.3/0.4
0.25/10.9/1.0
0.53/2.9/4.5
0.22/14.6/2.0
1.18/2.0/2.0
0.37/10.4/3.0
0.26/8.5/3.0
0.22/6.1/1.5
0.27/2.8/2.0
0.48/23.3/2.0
0.50/2.2/3.0
1.10/>100/2.0
0.41/2.6/0.6
0.55/39.8/1.0
N
Legend
1.40/17.3/0.4
Au(g/t)/Ag(ppm)/Width(m)
Au (g/t)
0.23- >5.0
>90%Prob.
0.17-0.23
> 80%Prob.
0.10-0.17
0.00-0.10
No Sample
0
50
100
METRES
BISHOP GOLD INC.
LAWYERS PROJECT
Toodoggone, B.C.
M GRID 2004
Excavator Trenching
Gold In Rocks
NTS: 94E/034,035
DATE: Dec. 2004
Drawn By: D. BLANN
FIG.
9


T-12
T-7ext
T-7
T-9
T-8
T-6
T-4
T-11
T-1a
T-1
T-2a
T-2
T-10
T-3
N
Legend
Ag(ppm), Au (gm/t)
241.00 1.82
0.0
50.0
100.0
Scale: Metres
607400 E
6354500N
Bishop Gold Inc.
Lawyers Project
M- Grid 2004
Excavator Trenching
Silver-Gold Values
Omineca Mining Division
NAD83 UTM Zone 9
D. Blann, P.Eng
Sept 6, 2005
Figure



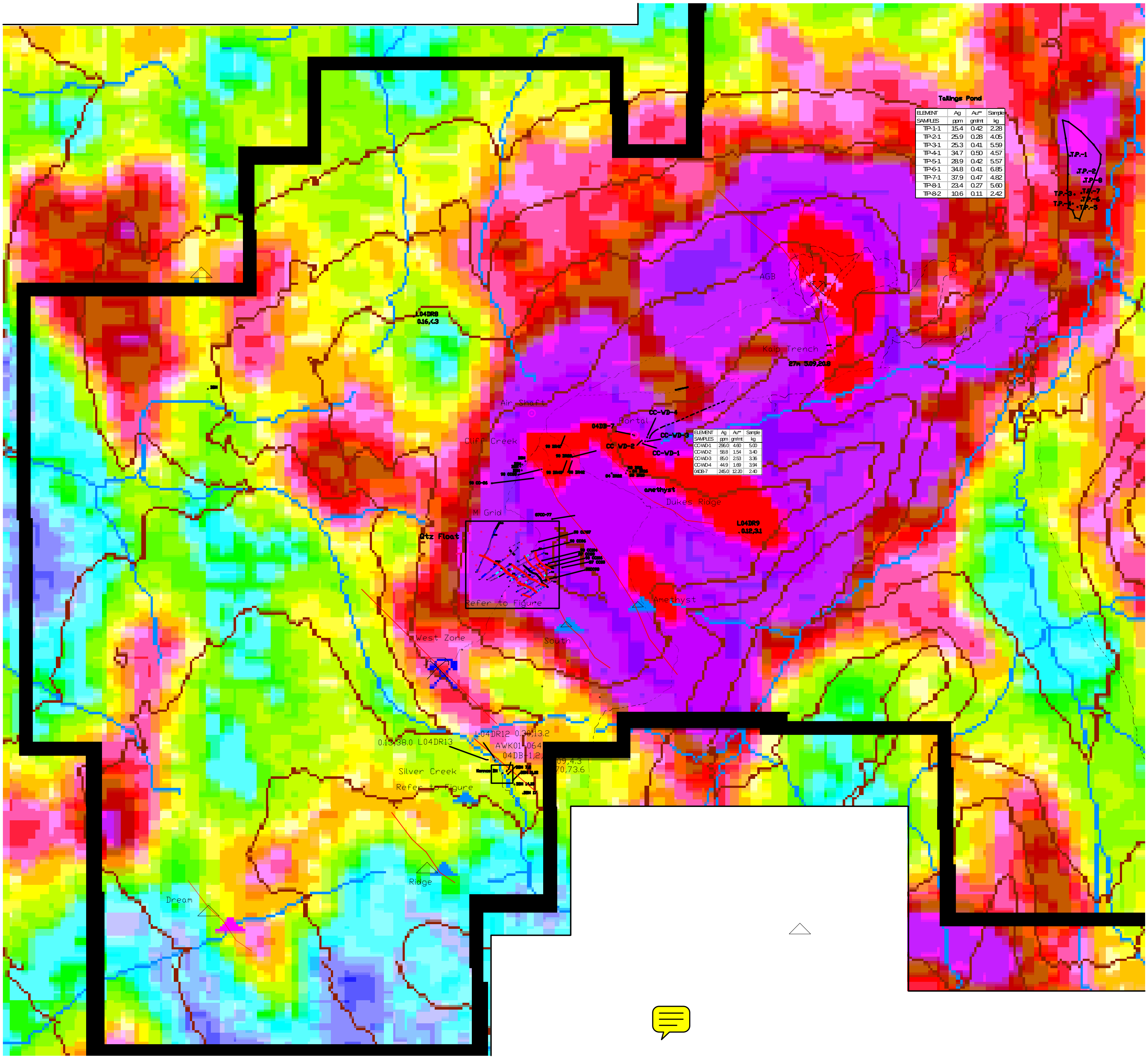
BISHOP GOLD INC.

LAWYERS PROPERTY

Toodoggone, B.C.

SILVER CREEK SHOWING

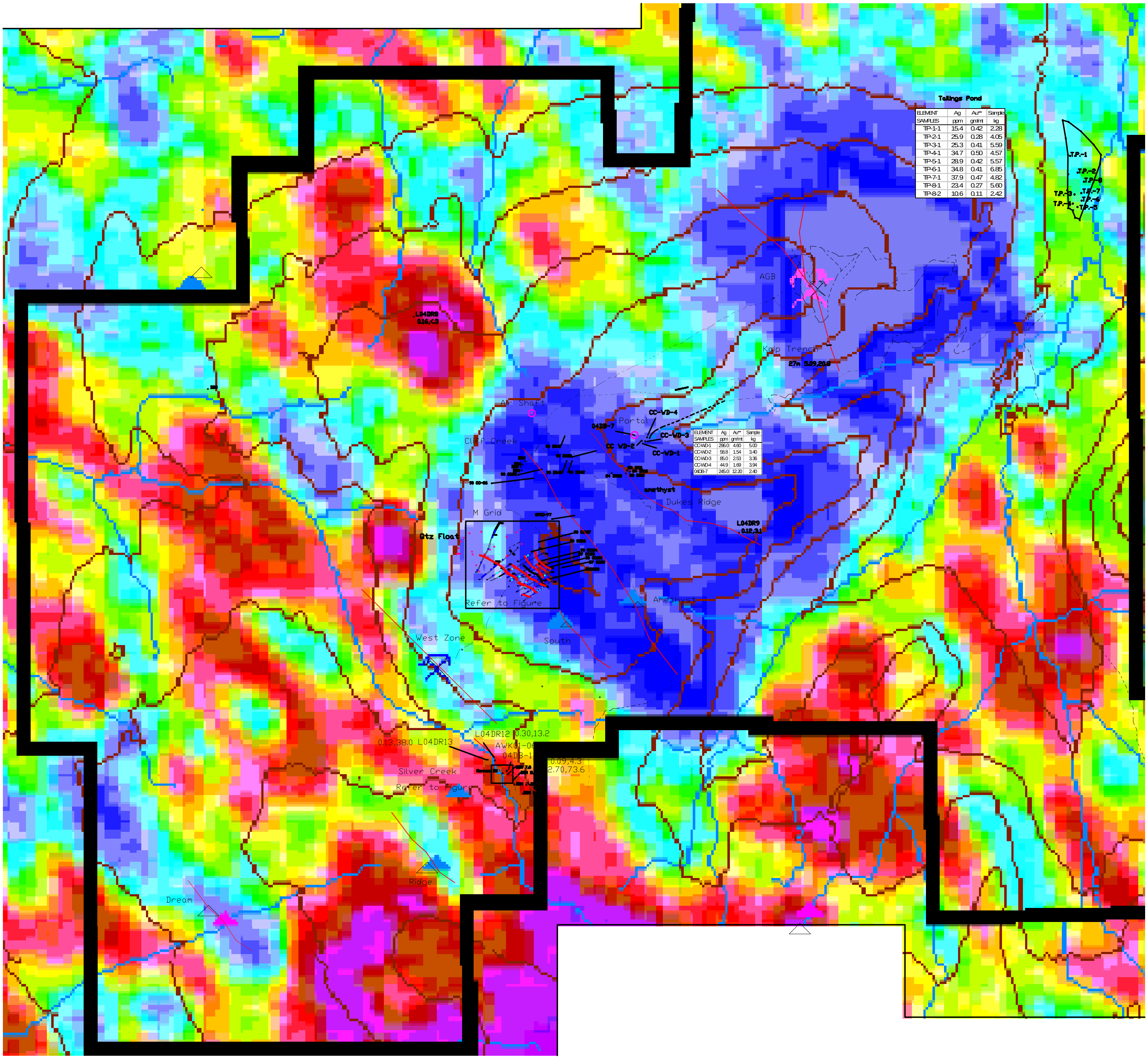
	NTS: 94E/034,035	FIG.
Drawn By:: D. BLANN	DATE: Feb. 2005	10



Tailings Pond

ELEMENT	Ag	Au**	Sample
SAMPLES	ppm	gm/mt	kg
TP-1-1	15.4	0.42	2.28
TP-2-1	25.9	0.28	4.05
TP-3-1	25.3	0.41	5.59
TP-4-1	34.7	0.50	4.57
TP-5-1	28.9	0.42	5.57
TP-6-1	34.8	0.41	6.85
TP-7-1	37.9	0.47	4.82
TP-8-1	23.4	0.27	5.60
TP-8-2	10.6	0.11	2.42

ELEMENT	Ag	Au**	Sample
SAMPLES	ppm	gm/mt	kg
CC-WD-1	296.0	4.60	5.00
CC-WD-2	58.8	1.54	3.40
CC-WD-3	85.0	2.53	3.36
CC-WD-4	44.9	1.69	3.94
04DB-7	245.0	12.20	2.40



ELEMENT	Ag	Au**	Sample
SAMPLES	ppm	gm/mt	kg
TP-1-1	15.4	0.42	2.28
TP-2-1	25.9	0.28	4.05
TP-3-1	25.3	0.41	5.59
TP-4-1	34.7	0.50	4.57
TP-5-1	28.9	0.42	5.57
TP-6-1	34.8	0.41	6.85
TP-7-1	37.9	0.47	4.82
TP-8-1	23.4	0.27	5.60
TP-8-2	10.6	0.11	2.42

ELEMENT	Ag	Au**	Sample
SAMPLES	ppm	gm/mt	kg
CC-WD-1	296.0	4.60	5.00
CC-WD-2	58.8	1.54	3.40
CC-WD-3	85.0	2.53	3.36
CC-WD-4	44.9	1.69	3.94
04DB-7	245.0	12.20	2.40

Petrographic Report

Lawyers Project, B.C.

May 27, 2005

Prepared For: Scott Gifford
Guardsmen Resources Inc.
525-1027 Davie Street
Vancouver, V6E 4L2

PetraScience Consultants Inc.

700 – 700 West Pender Street
Vancouver, B.C. V6C 1G8 Canada
Phone: 604.684.5857 fax: 604.222.4642

info@petrascience.com
www.petrascience.com

Background

A set of 13 samples was received from Dave Blann and Scott Gifford. The objective of the work was to define the characteristics of the alteration, mineralization and ore associations. The samples were prepared as polished thin sections for petrographic analysis. No detailed geologic or spatial information was provided with the samples, however brief descriptions were provided. The petrographic work included basic transmitted and reflected light observations, covering description of lithologies (where possible), alteration, mineralization as well as a study of vein quartz textures. The analyses were carried out by Anne Thompson and Alexandra Mauler at the PetraScience office, Vancouver and Kathryn Dunne at her office in Salmon Arm. The observations are summarized below and descriptions follow. All percentages in the descriptions are approximate.

Summary

Lithologies

Most samples are breccias with altered wallrock fragments infilled or cut by vein quartz. Primary wallrock lithologies are partly obscured by selectively pervasive alteration. However, compositions appear to favor feldspar porphyry and, in samples T-h-5 174-176 and 04DB-3, an aphanitic rhyolite. Feldspar porphyry fragments typically contain plagioclase and / or K-feldspar and locally quartz phenocrysts in a fine-grained quartz-K-feldspar dominated matrix. In sample T-h-5 174-176, the aphanitic rhyolite incorporates fragments of feldspar porphyry and vein quartz which indicates that it may be younger than the feldspar porphyry and quartz veining. Sample T-1-RIN is a flow-banded, feldspar-phyric ?dacite.

Alteration

The alteration appears typical of low-sulfidation epithermal environment and is dominated by K-feldspar-sericite. K-feldspar occurs as very fine-grained, brown cloudy aggregates or as rhombic adularia both of which can occur in respective samples as pervasive replacement of wallrock fragment groundmass or as selective replacement of plagioclase phenocrysts. Vein quartz with traces of adularia was observed in sections T-2a-30, T-11-16, 04DB-3. A weak progression from this orthoclase alteration to a more sericitic alteration, including calcite was observed. Tourmaline occurs with adularia replacement in sections T-11-16 and L04-DR-10. A late phase of weathering affects most of the samples, leading to formation of clay, goethite and hematite.

Mineralization

Mineralization is weak, consisting mostly of pyrite. In most of the sections, pyrite is rimmed to completely replaced by Fe-oxides, and numerous anhedral vugs and cavities suggest complete leaching of the original pyrite. Trace chalcopyrite is observed in some samples. Trace ?galena, sphalerite and possibly ?acanthite are noted in section 04DB-7. Trace gold is observed in section T-4a-2.

Sample: T-1-RIN

LITHOLOGY: Flow-banded, feldspar-phyric ?dacite
ALTERATION TYPE: K-feldspar, quartz, sericite; clay, Fe-oxide

Hand Sample Description:
Flow banded feldspar-phyric lava consisting of alternating very thin discontinuous white bands in microcrystalline pinkish to brownish layers. Salmon pink, 1 to 3 mm large feldspar phenocrysts are disseminated. Not magnetic, no reaction to HCl. Strong response to sodium cobaltrinite in most of the sample, except from thin bands and rare phenocrysts.

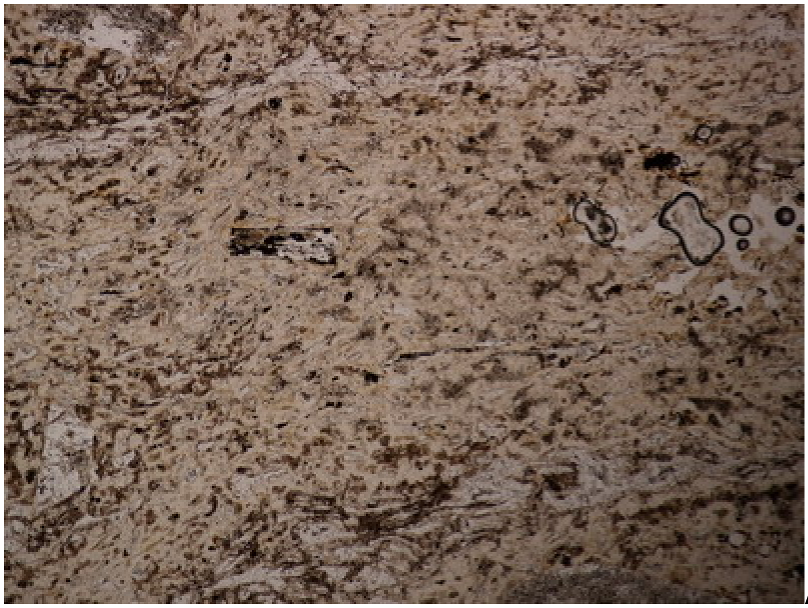
MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
K-feldspar	50	as bulbous aggregates of anhedral grains, result of recrystallization of devitrified spherulitic ?dacite, very fine-grained, partly replacing plagioclase cores	
Quartz	25	nodular to cauliflower-shaped, aggregates of anhedral quartz, result of recrystallized, coalesced spherulites	
Clay	07	extremely fine-grained pockets disseminated, occurs as replacement of recrystallized spherulites, locally intergrown with sericite and Fe-oxides	
Plagioclase	07	fine to medium-grained phenocrysts, subhedral to euhedral, typically zoned, weakly fractured, flow foliation directed around grains, commonly replaced in their cores by secondary K-feldspar and sericite	
Sericite	05	very fine-grained, patchy replacement of recrystallized spherulites, weakly replacing plagioclase-K-feldspar phenocrysts, commonly occurs with clay and Fe-oxides	
Fe-oxides	05	stain throughout the sample, disseminated aggregates, locally associated with sericite and clay	

MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Rutile	tr	very fine-grained, anhedral aggregates, disseminated	
Pyrite	tr	one grain, fine-grained, anhedral	

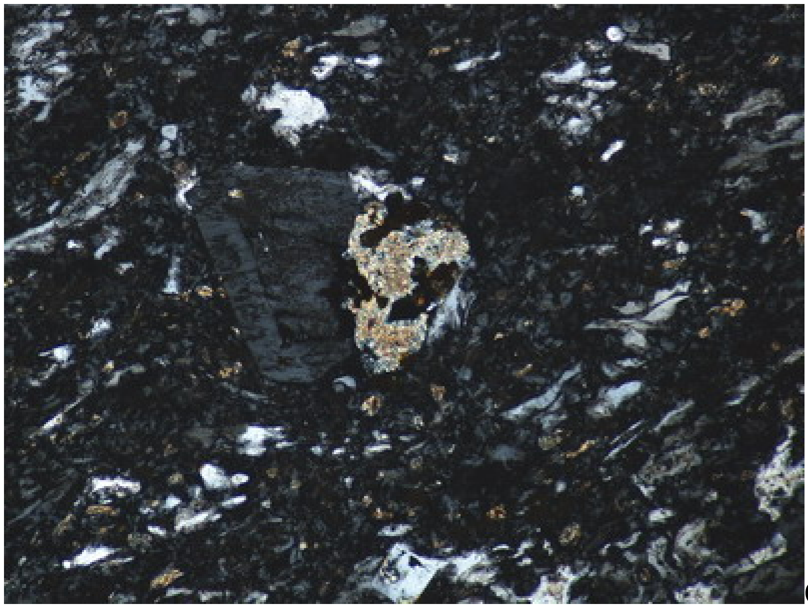
Thin Section Description:
This section is a flow banded, recrystallized, devitrified, spherulitic lava with evenly distributed euhedral feldspar phenocrysts. Former coalesced spherulites now resemble bulbous aggregates of anhedral K-feldspar and quartz grains as the result of recrystallization. Banding comprises pale siliceous bands alternating with darker K-feldspar dominant bands. The bulbous aggregates are partly replaced by aggregates of clay and patches of very fine-grained sericite. Scattered eu-subhedral, locally zoned, plagioclase phenocrysts are partly replaced by K-feldspar and sericite. Fe-oxides occur as disseminated aggregates and stain throughout the sample. Trace rutile and pyrite grains occurs disseminated. The occurrence of plagioclase phenocrysts may indicate a dacitic rather than rhyolitic composition.



A

B

T-1-RHY: Representative view of the occurrence of bulbous aggregates of anhedral K-feldspar and quartz which are the result of recrystallization of devitrified spherulitic lava. FOV = 3.25 mm, A) PPL, B) XPL,


C


D

T-1-RHY: Representative view of the occurrence of plagioclase phenocrysts. The core of the phenocryst is replaced by K-feldspar while its rim shows replacement by sericite, clay and Fe-oxides
FOV = 1.75 mm, C) XPL, D) RL

Sample: T-h-5 174-176

LITHOLOGY: Rhyolite with feldspar porphyry and quartz vein fragments
ALTERATION TYPE: K-feldspar, sericite; Fe-oxides

Hand Sample Description:
Aphanitic grey rhyolite with angular fragments of feldspar porphyry and vein quartz. Fragments comprise salmon pink and gray phenocrysts (< 2mm size) and numerous vugs. The fragments were cut by quartz veinlets (1-2mm size) prior to fracturing and inclusion as fragments within the later aphanitic rhyolite. Not magnetic, no reaction to HCl. Porphyry fragments have strong response to sodium cobaltrinite.

MAJOR MINERALS

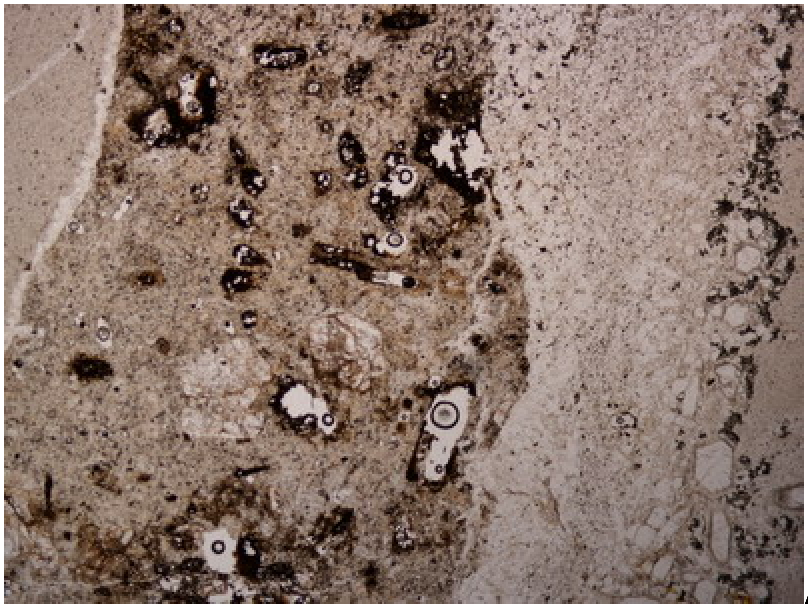
Mineral	%	Distribution & Characteristics	Optical
Quartz	50	- extremely fine-grained forms groundmass of the rhyolite and occurs with K-feldspar as groundmass of feldspar porphyry fragments - subhedral, locally resorbed phenocrysts in the rhyolite - in alternating bands of anhedral to prismatic quartz with various grain sizes, locally zoned, polygonal aggregates, forms veinlets that cut fragments but cut by aphanitic rhyolite, also occurs as fragment of veinlets within rhyolite	
K-feldspar	25	very fine-grained, occurs with quartz as groundmass to the porphyry fragments, as euhedral phenocryst; very fine-grained, brown, as replacement of plagioclase phenocrysts	
Fe-oxides	10	filling thin fractures and rimming vugs, also as stain and patches and rare subhedral grains throughout	
Sericite	08	fine sheaves, weakly replacing feldspar and biotite phenocrysts; as fibres and clots disseminated in the rhyolite; within and as a partial rim around quartz veinlet fragments	

MINOR MINERALS

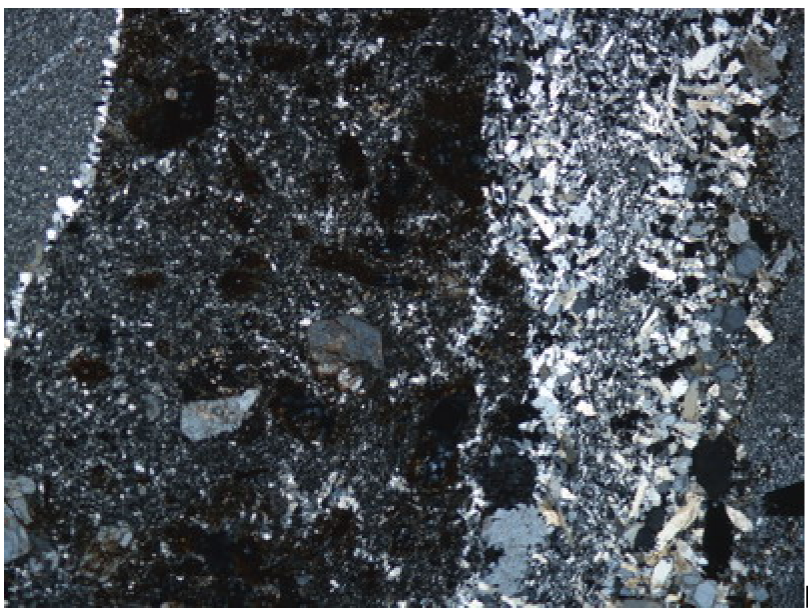
Mineral	%	Distribution & Characteristics	Optical
Plagioclase	03	fine to medium-grained, eu-subhedral, occurs as phenocrysts in feldspar porphyry fragments, partly replaced by K-feldspar and subsequently by sericite aggregate	
Clay	02	aphanitic, as pockets associated with Fe-oxides around vugs	
Rutile	tr	very fine-grained, anhedral grains and aggregates, occurs as groundmass to rhyolite and lithic fragments	
Biotite	tr	rare phenocrysts in porphyry fragments, replaced by Fe-oxides and sericite	
Pyrite	tr	preserved anhedral core within subhedral Fe-oxides	

Thin Section Description:
The section comprises angular fragments of feldspar porphyry and vein quartz trapped in an aphanitic rhyolite. The rhyolite comprises a very fine-grained quartz groundmass with disseminated fibrous to patchy sericite (after probably K-feldspar microlites). The rhyolite has locally resorbed quartz and rare K-feldspar phenocrysts and trapped fragments of euhedral zoned vein quartz and lithic fragments. The lithic fragments comprise phenocrysts of feldspar and biotite in a very fine-grained groundmass of dominantly K-feldspar, quartz, rutile and Fe-oxides. Sericite occurs weakly replacing phenocrysts, within and rimming quartz veinlet fragments and finely disseminated as fibres and clots in the rhyolite. Lithic fragments are locally bounded or cut by quartz veinlets which are incorporated in the rhyolite as fragments. The quartz veinlets comprise alternating bands of various grain sizes and shapes including fine-grained zoned quartz. Fe-oxides are disseminated throughout the sample, as replacement of pyrite, as rims around vugs and fractures and locally intergrown with clay.

Kathryn Dunne, P.Geo., Alexandra Mauler, Ph. D. and Anne J.B. Thompson, P.Geo.

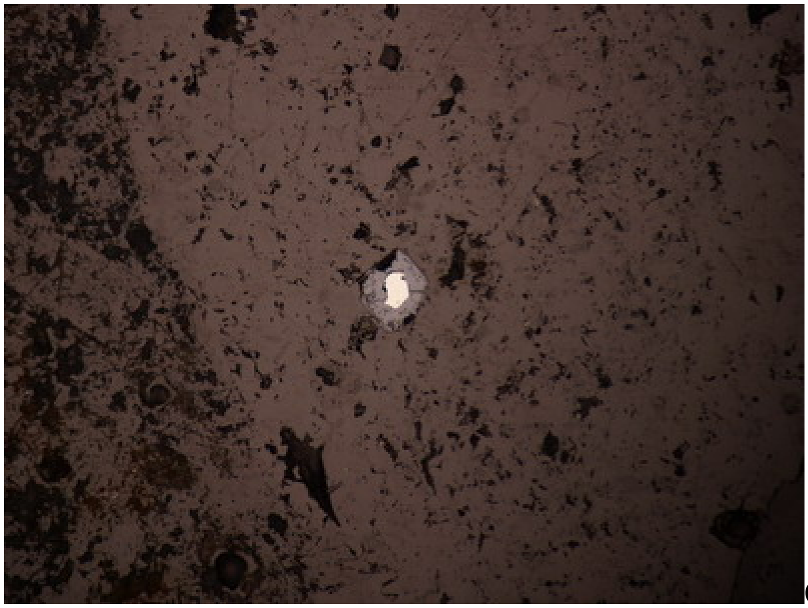


A



B

T-1a-5: Representative view showing a lithic fragment cut by fine-grained bands of quartz with variable grain sizes. Fragment is incorporated in aphanitic rhyolite (top left & right side of photo). FOV = 8.5 mm, A) PPL, B) XPL



C

T-1a-5: Representative view showing a grain of Fe-oxide with a preserved core of pyrite respecting the euhedral grain shape of the original pyrite.
FOV = 1.75mm, C) RL

Sample: T-2-2

LITHOLOGY: Quartz-vein with lithic fragments
ALTERATION TYPE: K-feldspar; clay-Fe-oxides

Hand Sample Description: Massive saccharoidal quartz with locally weakly developed colloform textures. Contains numerous salmon pink to deep red rock fragments, 1 to 15 mm large, as well as some thin fractures and cavities. Lithic fragments commonly crosscut by thin subparallel quartz veinlets. Not magnetic, no reaction to HCl. Rock fragments strongly reacted to sodium cobaltrinite.

MAJOR MINERALS

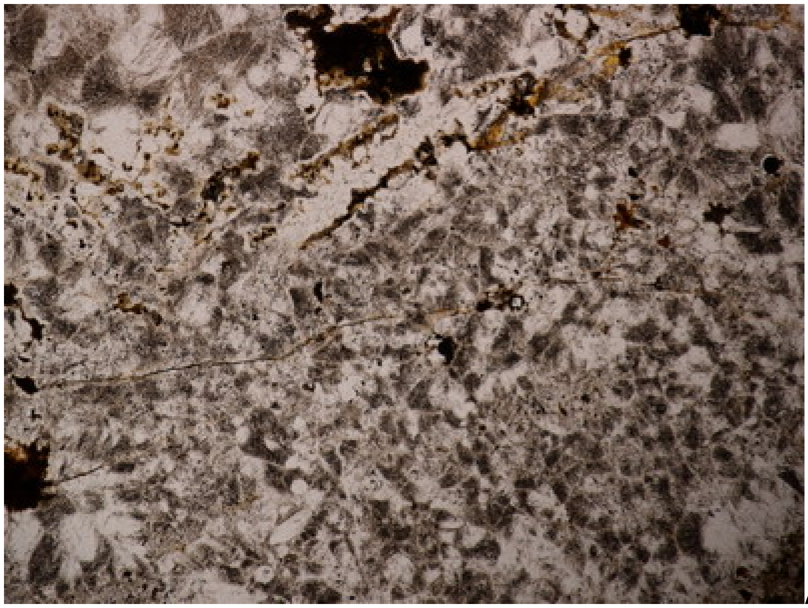
Mineral	%	Distribution & Characteristics	Optical
Quartz	50	- as vein matrix, fine-grained, equant, interlocking subhedral grains with triple junctions and disseminated pockets of extremely fine-grained quartz; locally medium-grained, prismatic with radial zoning overgrowing weak colloform banding - also in veinlets cutting lithic fragments, fine to medium-grained commonly elongated perpendicular to the vein walls - fine-grained associated with fine-grained K-feldspar to form the matrix of the lithic fragments	
K-feldspar	20	only in lithic fragments; very fine-grained with quartz forming the matrix, and as subhedral cloudy, brown secondary phenocrysts locally preserving the original plagioclase core	
Fe-oxides	12	fine boytroidal masses, locally as colloform banding, and stain throughout the sample, set of anastomosing veinlets	*red-brown*
Unknown, ?clay	10	microcrystalline, undetermined; brown, nearly opaque, in subhedral masses with Fe-oxides, as replacement of tabular ?plagioclase phenocrysts and along Fe-oxides veinlets.	

MINOR MINERALS

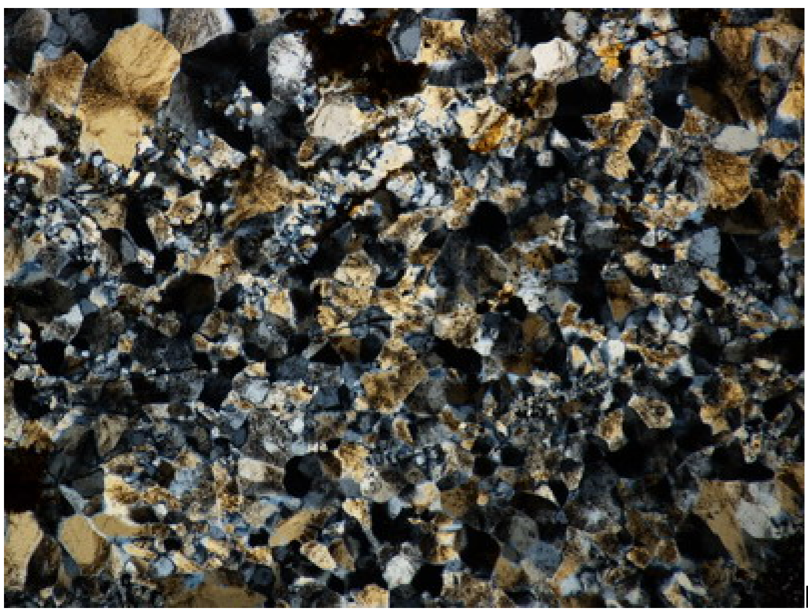
Mineral	%	Distribution & Characteristics	Optical
Plagioclase	03	remnant subhedral and commonly twinned phenocrysts, partially altered to secondary K-feldspar, sericite or clay	
Hematite	03	fine-grained, occurs with vein matrix as replacement of medium-grained sulphides with cubic forms (probably pyrite)	
Sericite	02	extremely fine-grained masses, disseminated, replacing plagioclase and as patches within quartz vein matrix	
Pyrite	tr	extremely fine-grained anhedral altered grains, disseminated, replaced by hematite; locally unaltered anhedral grains	

Thin Section Description:
This section comprises K-feldspar-Fe-oxide-?clay altered lithic fragments that are fractured and infilled by fine-grained, locally colloform and medium-grained prismatic quartz. The fine-grained quartz is commonly euhedral, and equant, commonly with abundant fluid inclusions; extremely fine-grained quartz occurs locally as pockets and colloform texture with Fe-oxides and ?clay. Medium-grained zoned quartz occurs overgrowing the colloform texture and forming radial pattern. Rock fragments consist of a very fine-grained quartz – K-feldspar matrix containing plagioclase phenocrysts that have been partially to completely replaced by K-feldspar and/or sericite or by an undetermined brown groundmass (?clay) associated with Fe-oxides. Lithic fragments commonly are fractured and infilled by thin quartz veinlets. Fe-oxides typically rim the numerous vugs and fractures that occur in the sample and form some botryoidal masses. Hematite occurs as replacement of disseminated, medium-grained cubic sulphide forms within fine-grained quartz. Trace relict and unaltered pyrite occurs disseminated.

Kathryn Dunne, P.Geo., Alexandra Mauler, Ph. D. and Anne J.B. Thompson, P.Geo.

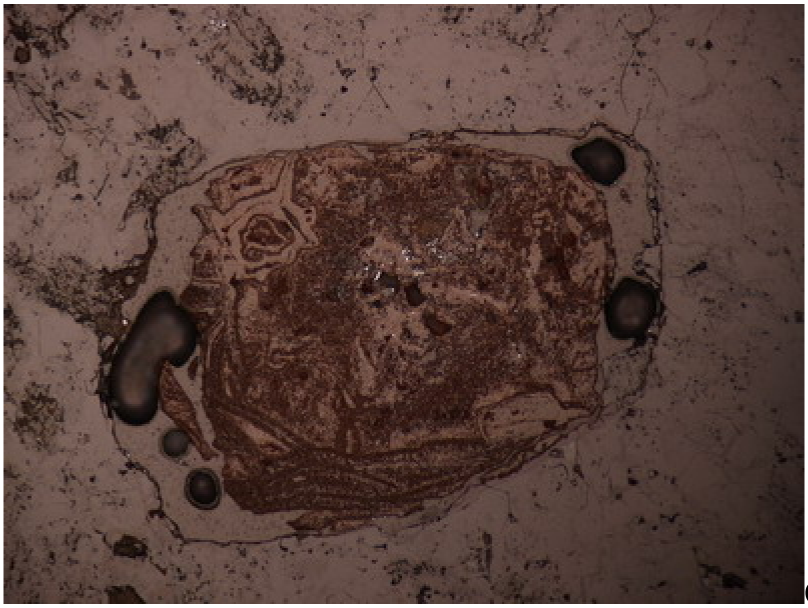


A

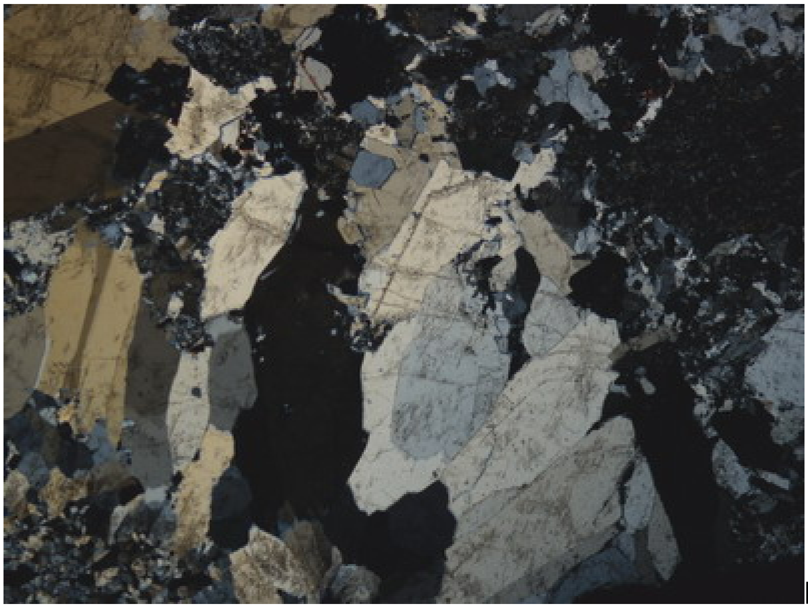


B

T-2-2: Representative view of interlocking subhedral, equant quartz grains in the vein matrix. Note the radial zoning pattern of fluid inclusions in the grains on the top left corner.
FOV = 3.25 mm, A) PPL, B) XPL



C



D

T-2-2: C) Representative view of hematite as replacement of cubic sulphide form, FOV = 1.75 mm, RL
D) Representative view of part of a quartz veinlet oriented NW-SE. Medium-grained prismatic quartz is developed perpendicular to the vein walls.
FOV = 8.5mm, XPL

Sample: T-2a-6

LITHOLOGY: Quartz vein
ALTERATION TYPE: Fe-oxides; K-feldspar

Hand Sample Description:
Massive saccharoidal quartz crosscut by thin whitish to reddish veinlets and fractures. Contains creamy green 0.3 to 5 mm large anhedral rock fragments and vugs, locally with deep red rim of Fe-oxides. Not magnetic, no reaction to HCl. Rock fragments strongly reacted to sodium cobaltrinite.

MAJOR MINERALS

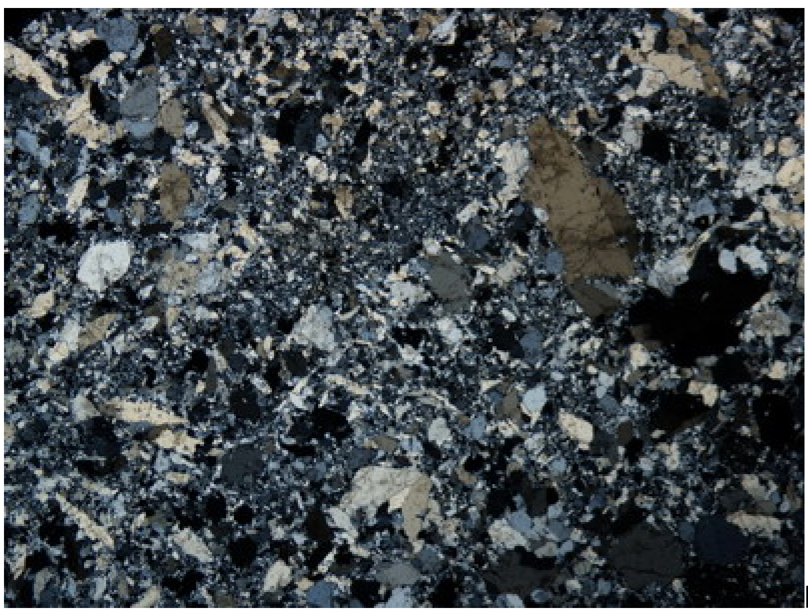
Mineral	**%**	**Distribution & Characteristics**	**Optical**
Quartz	90	as quartz vein: - fine to medium-grained, commonly subhedral in polygonal aggregates or disseminated with internal deformation features – fine to very fine-grained, anhedral aggregates, locally irregular grain boundaries, rims and surrounds coarser subhedral grains - extremely fine-grained, as veinlets/infill and disseminated pockets as rock fragments: - very fine-grained, occurs with K-feldspar as rock fragment matrix	

MINOR MINERALS

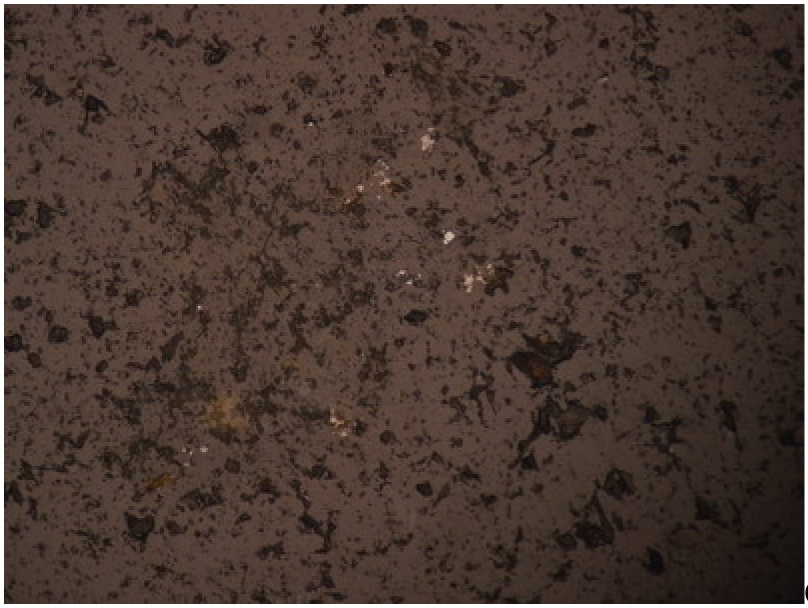
Mineral	**%**	**Distribution & Characteristics**	**Optical**
Fe-oxides	05	stain throughout the sample, botryoidal masses disseminated, as replacement of cubic and anhedral sulphide forms	
K-feldspar	03	very fine-grained, brown aggregates, occurs with very fine-grained quartz partly replacing rock fragments	
Pyrite	tr	rare subhedral grains, locally unaltered within fine-grained quartz; commonly partially replaced by Fe-oxides	

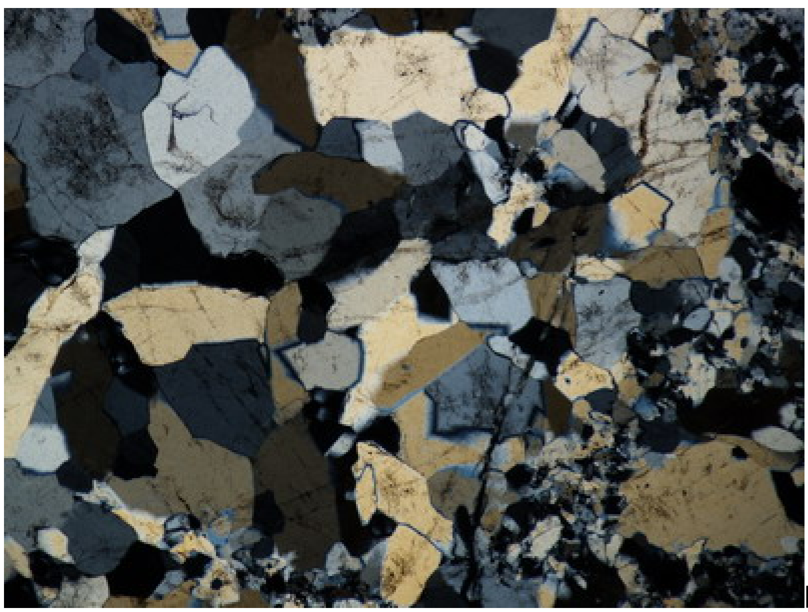
Thin Section Description:
The section consists of a quartz vein, with quartz presenting a seriate inequigranular grain size distribution. Polygonal aggregates of fine to medium-grained quartz, locally with undulose extinction and / or subgrains are rimmed and surrounded by fine to very fine-grained anhedral quartz. Quartz recrystallized to an extremely fine grain size also occurs, in veinlets and in patches around these veinlets as well as along boundaries of medium quartz grains. Numerous vugs are rimmed by Fe-oxides and botryoidal masses of Fe-oxides, after sulphide grains, are disseminated. Trace pyrite occurs disseminated.


A


B

T-2a-6: Representative view of the quartz matrix showing a wide range of grain sizes
FOV = 8.5 mm, A) PPL, B) XPL


C


D

T-2a-6: C) Same view as above showing fine dissemination of Fe-oxides and pyrite (white, center top), FOV = 8.5 mm, RL,
D) Detailed view of a polygonal quartz aggregate of near uniform grain size. FOV = 3.25mm, XPL

Sample: T-2a-30

LITHOLOGY: Banded vuggy quartz and quartz-vein with lithic fragments
ALTERATION TYPE: Fe-oxides, hematite

Hand Sample Description:
Banded sample alternating layers of sugary, locally vuggy quartz, heavily leached layers with numerous cavities displaying honey-comb structures, microcrystalline quartz with angular rock fragments and locally weak crustiform textures. Saccharoidal layers contain white to orange fragments as well as polygonal quartz crystals up to 10 mm large. Not magnetic, no reaction to HCl. Some fragments stained with sodium cobaltrinite.

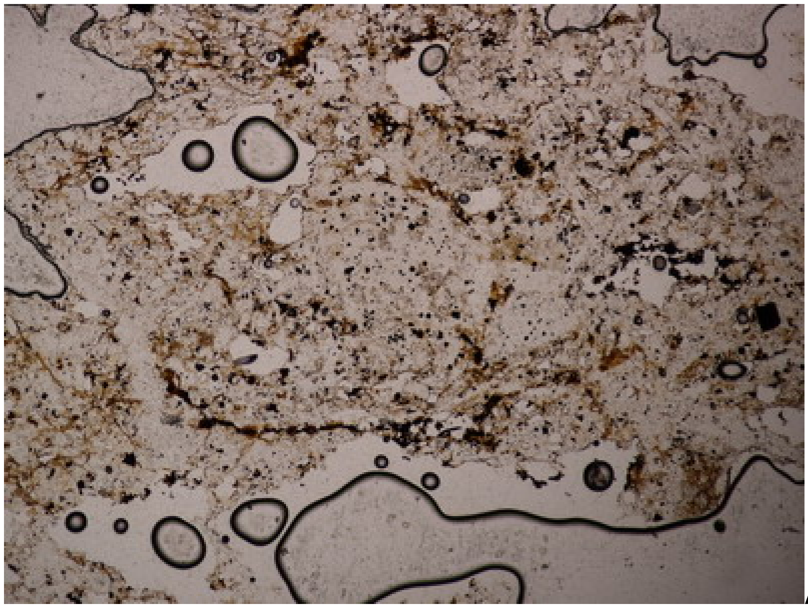
MAJOR MINERALS

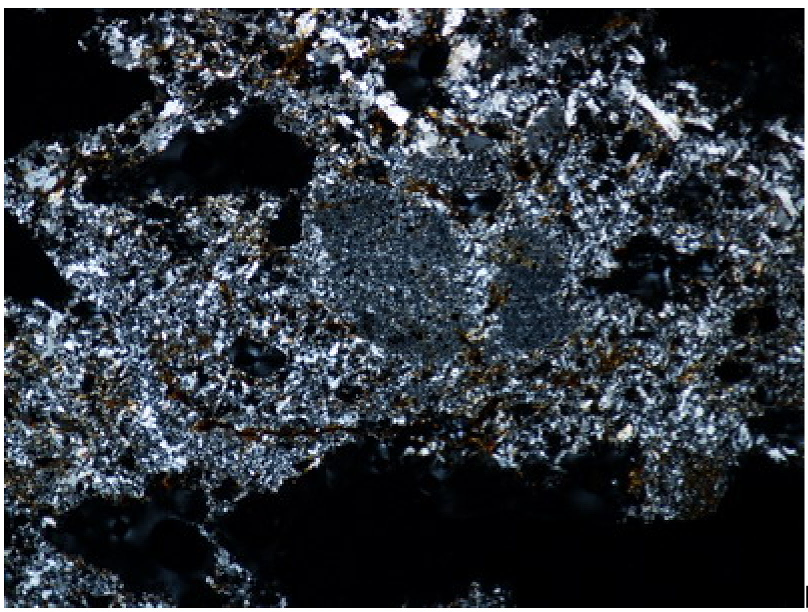
Mineral	%	Distribution & Characteristics	Optical
Quartz	65	- fine to medium-grained in veins, elongated in the direction perpendicular to vein walls - as breccia matrix and vuggy quartz, fine-grained, irregular - extremely fine-grained in subhedral aggregates and bands, as fragments with K-feldspar, strong pyrite dissemination	
Fe-oxides	10	stain throughout the sample, veinlets around quartz grains and around vugs and fractures	
Hematite	05	fine-grained, cubic forms after pyrite, disseminated; very fine-grained, cubic forms, occurs disseminated within aphanitic rock fragments	*red*

MINOR MINERALS

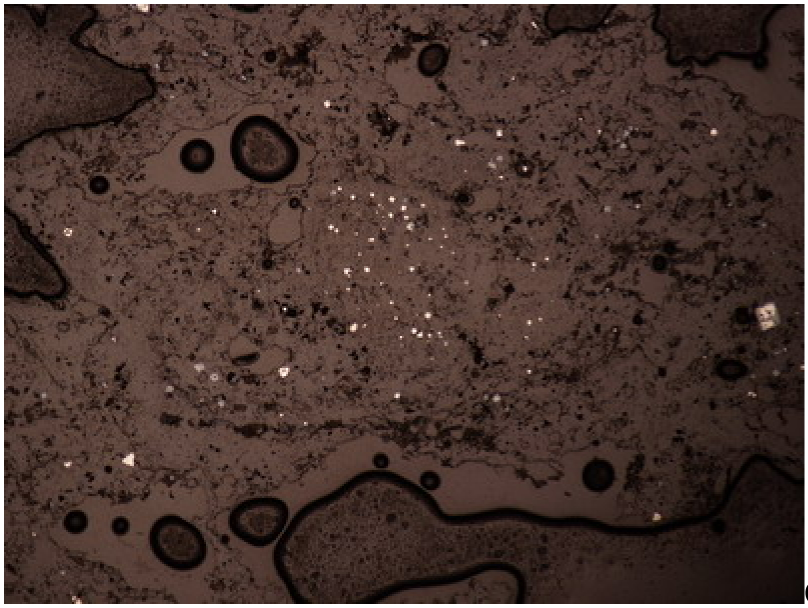
Mineral	%	Distribution & Characteristics	Optical
Pyrite	04	fine-grained subhedral grains disseminated, showing weak to complete replacement by hematite	
Illite	03	very fine-grained, fibrous, occurs interstitial to fine and very fine-grained quartz, heavily stained orange by Fe-oxides	
Carbonate	01	disseminated fine grains, commonly as infill; very fine-grained, disseminated in quartz-pyrite-hematite fragments	
K-feldspar	01	?aphanitic, disseminated in some rock fragments, not recognized in section (based on stained offcut only)	
?Clay	tr	extremely fine-grained pockets disseminated, typically associated with Fe-oxides	
Rutile	tr	very fine-grained, anhedral aggregates, occurs disseminated in fine-grained quartz	
Adularia	tr	very fine-grained, rare disseminated rhombic grains within fine-grained quartz	

Thin Section Description:
The section consists of banded vuggy quartz and banded breccia with infill by fine to medium-grained prismatic quartz. The vuggy quartz comprises fine-grained anhedral quartz with numerous cavities and the breccia comprises fragments of extremely fine-grained quartz, and locally aphanitic K-feldspar, with disseminated eu-subhedral pyrite and hematite (after pyrite). Cavities and quartz aggregates are rimmed by irregular patches and veinlets of Fe-oxides and possibly trace ?clay. Minor illite occurs as heavily Fe-oxide stained fibres interstitial to fine-grained quartz. Minor carbonate occurs disseminated as fine to very fine-grains. The vuggy quartz and banded breccia are cut by numerous fine quartz veinlets. Rare adularia is disseminated in some of the veinlets.

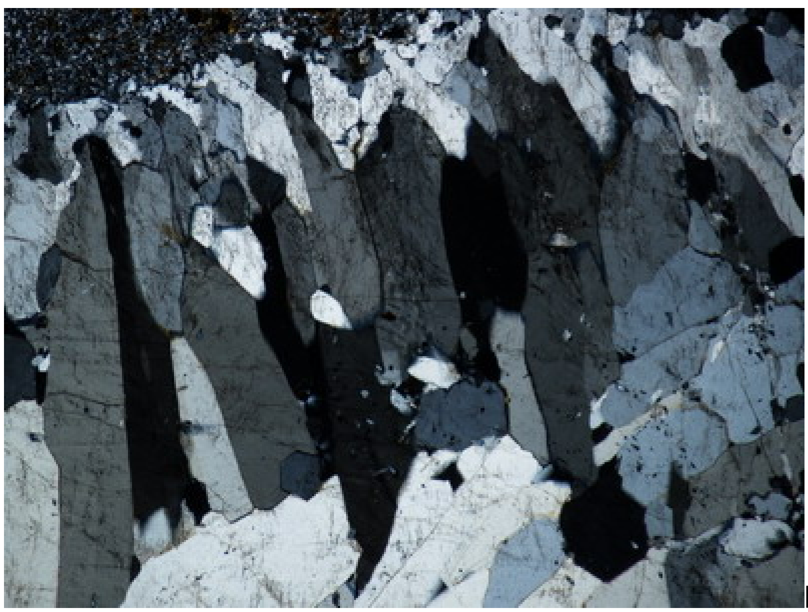

A


B

T-2a-30: Representative view of vuggy fine-grained quartz with extremely fine-grained quartz fragments (disseminated pyrite and hematite – opaque). The quartz matrix is stained by numerous veinlets of Fe-oxides FOV = 3.25mm, A) PPL, B) XPL,



C



D

T-2a-30: C) Same view as above showing a fine dissemination of subhedral pyrite, especially in the finer-grained aggregates. FOV = 3.25mm, RL
D) Representative view of a quartz veinlet showing fine to medium-grained prismatic quartz grains, FOV = 3.25 mm, XPL

Sample: T-3-2

LITHOLOGY: Vuggy feldspar porphyry crackle breccia
ALTERATION TYPE: K-feldspar, Fe-oxide, ?clay

Hand Sample Description:
Brown to grey crackle breccia with vuggy rock fragments containing salmon pink and creamy brown phenocrysts (<5 mm large) parted by thin quartz veinlets. Patches and thin veinlets of chalcedonic quartz. Not magnetic, no reaction to HCl. Phenocrysts strongly responded to sodium cobaltrinite.

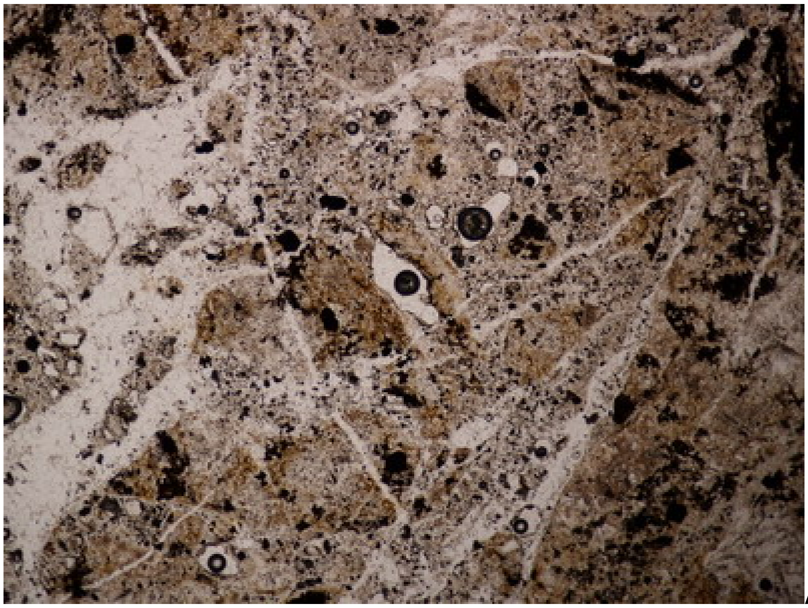
MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Quartz	40	- extremely fine to fine-grained, anhedral aggregates, occurs with K-feldspar as replacement of fragment matrix - fine-grained, anhedral to prismatic aggregates, growth perpendicular to fragment walls, occurs as breccia infill -fine-grained, resorbed, occurs as rare phenocrysts within fragments	
K-feldspar	30	very fine-grained, aggregates, occurs partly replacing subhedral and zoned plagioclase phenocrysts; very fine-grained, anhedral, with quartz as groundmass of fragments	
Fe-oxides	15	rims vugs and quartz veinlets, stain throughout the sample, rims and virtually replaces pyrite leaving relict pyrite cores	
Unknown, ?clay	05	undetermined – brown opaque, cryptocristalline masses with interlobate grain boundary geometry disseminated within lithic fragments	

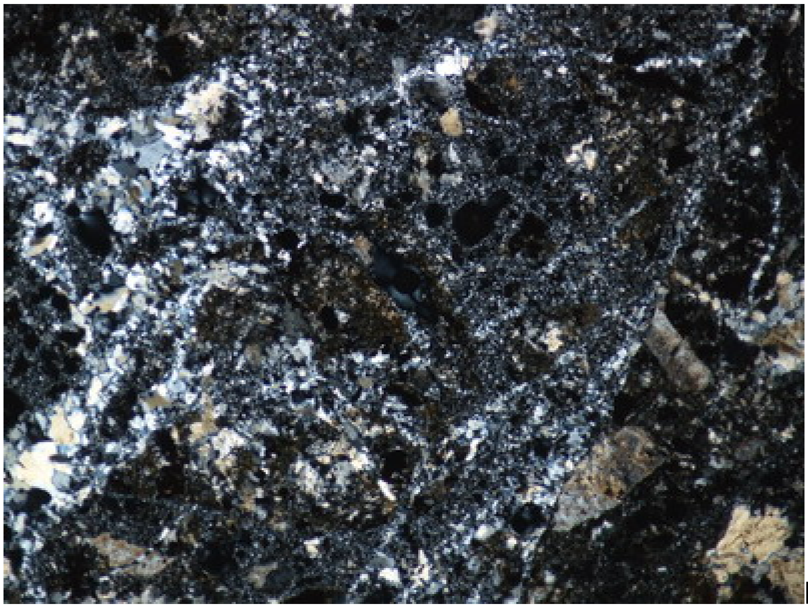
MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Plagioclase	03	rare fine subhedral phenocrysts, partially to completely replaced by K-feldspars	
Illite	02	fine-grained masses weakly replacing K-feldspar	
Pyrite	02	fine-grained, disseminated, relict cores of mostly subhedral grains, rims replaced by Fe-oxides; rare very fine-grained, anhedral, unaltered grains	
Rutile	01	fine rounded grains disseminated	
Carbonate	tr	very fine-grained, disseminated grains occurs with Fe-oxides and rutile, overprints quartz in fragment matrix	

Thin Section Description:
This section is a crackle breccia comprising vuggy, porphyritic lithic fragments infilled by fine-grained quartz veinlets. The lithic fragments comprise fine-grained subhedral former plagioclase phenocrysts and rare resorbed quartz phenocrysts in a fine to very fine-grained groundmass. Both feldspar phenocrysts and groundmass are selectively replaced by K-feldspar aggregate. Very fine-grained quartz and disseminated rutile, pyrite and Fe-oxides occur with K-feldspar as replacement of the fragment matrix. K-feldspar is partially replaced along cleavage planes by patches of illite or by an undetermined brown material (?clay). Numerous vugs are anhedral and typically rimmed by Fe-oxides. Pyrite grains are disseminated throughout the sample, typically partially to completely replaced by Fe-oxides.

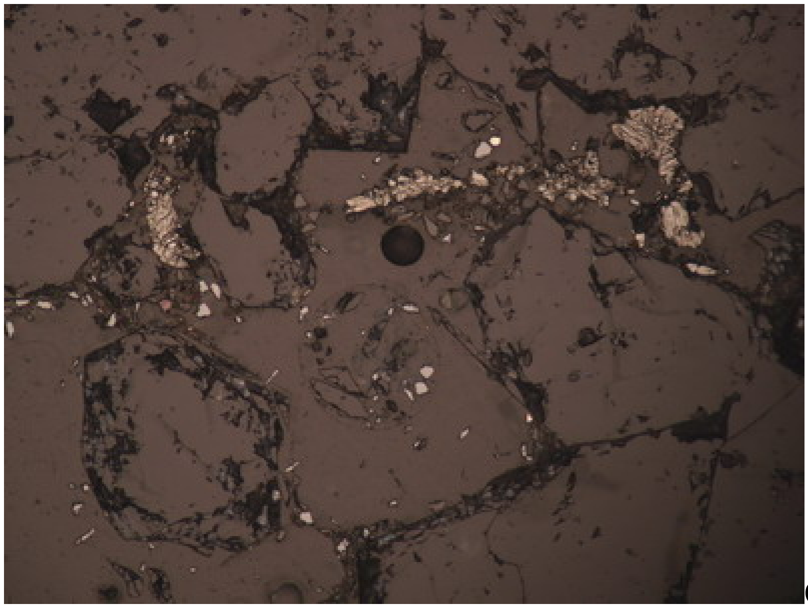


A



B

T-3-2: Representative view of crackle breccia showing lithic fragments with phenocrysts and very fine-grained quartz-K-feldspar dominant matrix infilled by a series of quartz veinlets
FOV = 3.25mm, A) PPL, B) XPL,



C

T-3-2: C) Representative view showing the occurrence of pyrite (white, center top) and Fe-oxides (grey), FOV = 0.85 mm, RL

Sample: T-4a-2

LITHOLOGY: Quartz vein with lithic fragments
ALTERATION TYPE: K-feldspar, hematite

Hand Sample Description:
Matrix-supported breccia with infill by massive fine-grained quartz with anhedral to polygonal cavities, up to 10 mm large. The cavities are locally rimmed by Fe-oxides and rarely filled by quartz. Fine-grained, small (< 1 cm) whitish to pinkish rock fragments. Not magnetic, no reaction to HCl. Rock fragments strongly reacted to sodium cobaltrinite.

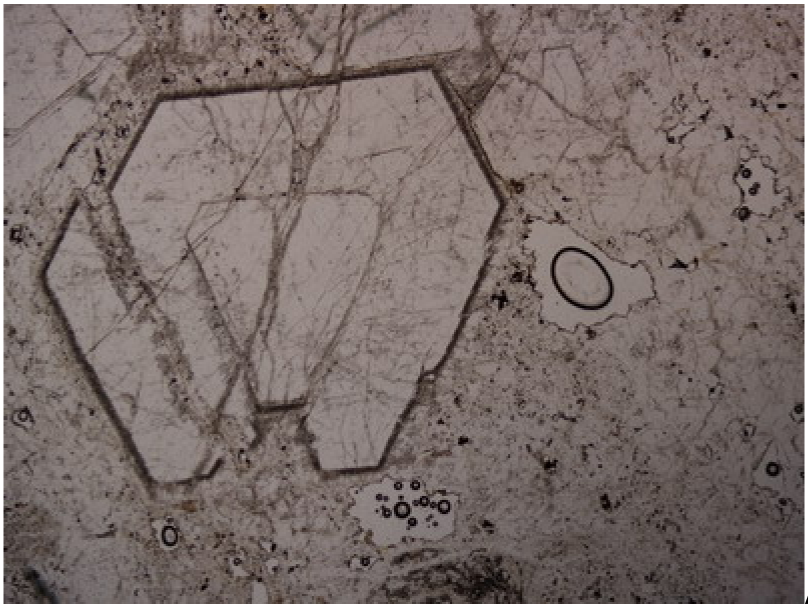
MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Quartz	80	- medium to coarse crystals, equant, typically zoned, or with undulose extinction and/or subgrains. Locally filling molds with rhomb shapes (dissolution of carbonates?). - fine-grained, irregular grain boundaries, recrystallized anhedral to subhedral, forms breccia matrix. - extremely fine-grained in cross-cutting veinlets - fine-grained, anhedral aggregates with K-feldspar in lithic fragments	
K-feldspar	07	extremely fine-grained, brown anhedral aggregates within rock fragments; locally as phenocrysts within rock fragments	
Hematite	05	boytroidal masses and interstitial grains disseminated, locally rims polyhedral cavities, commonly rims and replaces pyrite	

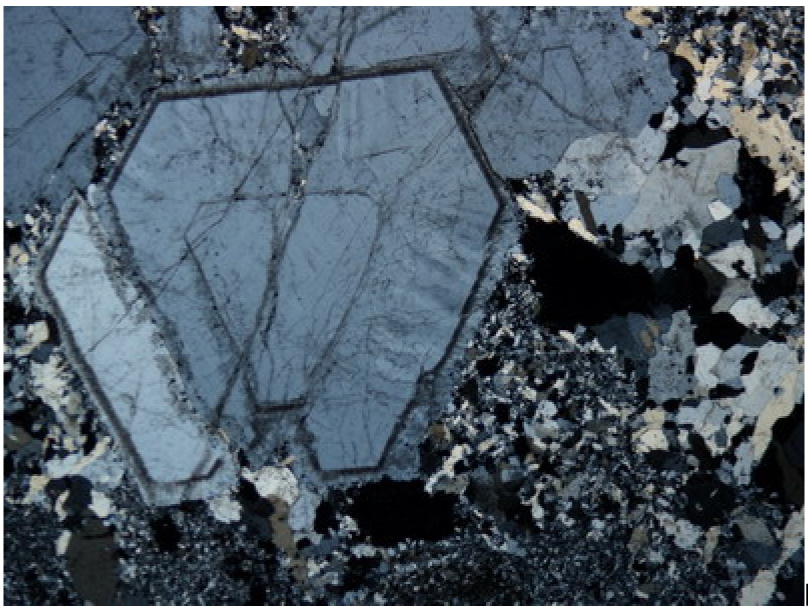
MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Illite	02	very fine-grained, fibrous, occurs interstitial to fine grained quartz, heavily stained orange by hematite	
Carbonate	tr	very fine-grained, disseminated in fine-grained veinlets and aggregates	
Pyrite	tr	extremely fine-grained anhedral to subhedral grains, disseminated, commonly rimmed and replaced by hematite	
Rutile	tr	very fine-grained, anhedral aggregates, occurs disseminated in lithic fragments and fine-grained quartz	
Gold	tr	two grains observed, between 5 and 15 µm diameter, occurs in fine-grained quartz	

Thin Section Description:
This section is a matrix-supported breccia vein with angular lithic fragments trapped in a very fine to medium-grained quartz vein. The lithic fragments are pervasively K-feldspar-altered with patches and disseminatd hematite, locally rimming and replacing pyrite. Fine-grained quartz, typically with irregular grain boundaries, probably recrystallized, but locally as prismatic aggregates, occurs with disseminated hematite, interstitial illite and rutile aggregates rimming and infilling fragments. Medium to coarse-grained, locally zoned quartz occurs infilling vugs which may possibly be molds of weathered ?carbonate rhombs. The coarse-grained quartz displays internal deformation features such as undulose extinction and subgrains, as well as trails of secondary fluid inclusions. Extremely fine-grained quartz aggregate occurs as irregular veinlets that cross-cut the section. Trace unaltered pyrite is disseminated throughout the sample as are boytroidal masses of hematite (after pyrite). Two small grains of gold are observed disseminated in the fine-grained quartz.

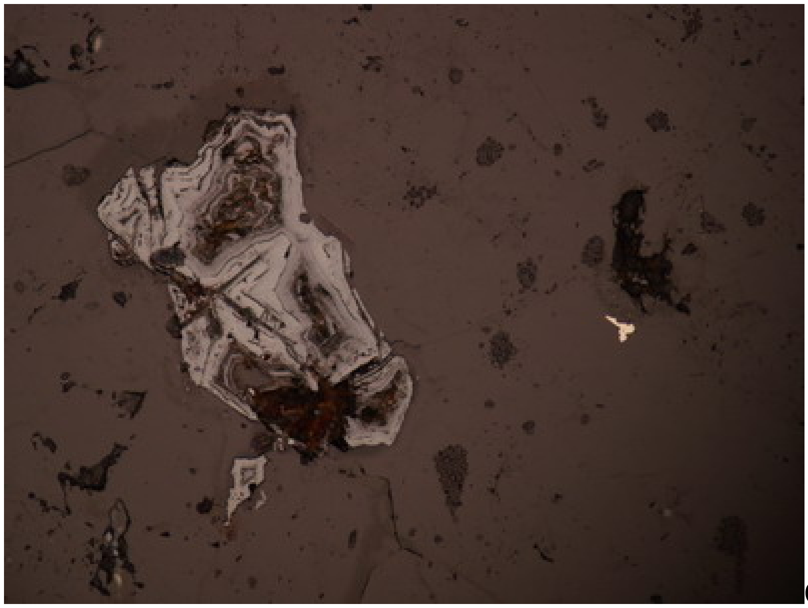


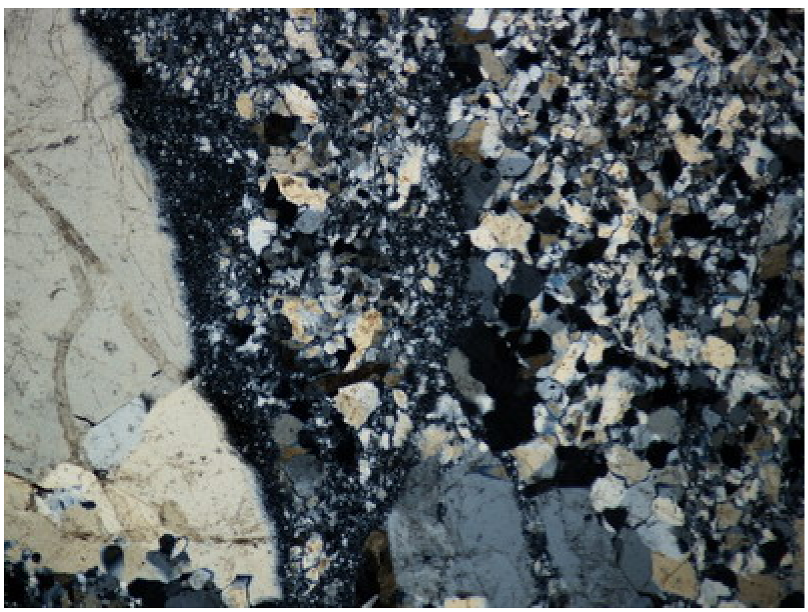
A



B

T-4a-2: Representative view of polygonal vug, ?mold, with zoned quartz crystals displaying undulose extinction. Note breccia matrix with very fine to fine-grained quartz aggregate of seriate grain size distribution.
FOV = 8.5 mm, A) PPL, B) XPL


C



T-4a-2: C) Representative view showing botryoidal hematite and extremely fine-grained anhedral pyrite. FOV = 0.85 mm, RL
D) Detail of the quartz matrix showing part of a coarse-grained quartz crystal and fine anhedral quartz grains crosscut by extremely fine-grained quartz veinlets. FOV = 3.25mm, XPL

Sample: T-8-10

LITHOLOGY: Quartz vein with lithic fragments
ALTERATION TYPE: K-feldspar, hematite-jarosite

Hand Sample Description:
Sample comprises a massive fine-grained quartz vein, with numerous angular, porphyritic rock fragments (2 to 20 mm size) with salmon pink phenocrysts (<3 mm). The rock fragments are commonly crosscut by very thin quartz veinlets. Reddish brown patches throughout. Not magnetic, no reaction to HCl. All rock fragments responded strongly to sodium cobaltrinite.

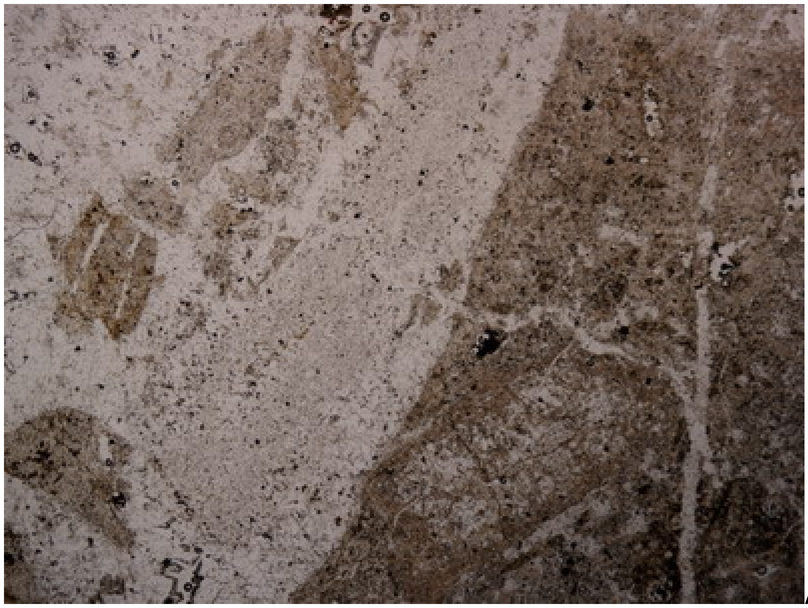
MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
K-feldspar	40	fine to very fine-grained, brown, cloudy, occurs with hematite, jarosite and carbonate as replacement of plagioclase phenocrysts and fine-grained plagioclase laths in the matrix of the rock fragments	
Quartz	40	subhedral to euhedral interlocking grains, with sizes varying from extremely fine-grained to fine-grained, locally zoned with fluid inclusion-rich zones, locally with colloform texture, locally prismatic in veinlets cutting rock fragments with elongation perpendicular to veinlets walls.	
Goethite-hematite	10	very fine-grained, anhedral aggregates, occurs as irregular stringers and patches replacing plagioclase phenocrysts and matrix, occurs as rims around vugs, locally as subhedral grains possibly after pyrite	*red-brown*
Jarosite	08	very fine-grained, occurs with goethite-hematite as stringers, disseminated and patches as replacement of plagioclase and mafic phenocrysts, also occurs as rims around vugs	*pale yellow*

MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Plagioclase	02	fine to medium-grained, relict phenocrysts, selectively replaced by K-feldspar, goethite-hematite, jarosite	
Carbonate	tr	very fine-grained, disseminated grains, occurs with hematite and jarosite as replacement of rock fragments	
Sericite	tr	fine-grained, fibrous to radiating aggregates, occurs with jarosite in fine-grained quartz vein infill	
Biotite	tr	rare subhedral grain, virtually replaced by jarosite and goethite-hematite	

Thin Section Description:
The section consists of a large quartz vein with numerous angular, plagioclase porphyritic rock fragments pervasively replaced by K-feldspar, goethite-hematite and jarosite. Quartz in the vein is typically euhedral, locally zoned, with a very fine to fine-grain size. Rare fragments of microcrystalline colloform quartz occur. Minor jarosite and hematite and trace sericite occur with the quartz. Thin veinlets of fine-grained, commonly elongated quartz crosscut section. The rock fragments comprise fine to medium-grained plagioclase phenocrysts and lesser tabular ?biotite phenocrysts in a lath-like matrix which has been virtually replaced by K-feldspar. Plagioclase phenocrysts are rimmed and selectively replaced by K-feldspar, hematite and jarosite aggregate. Goethite-hematite and jarosite occur as vug infill, thin irregular stringers and patches cutting rock fragments and rare subhedral cubic grains possibly replacing original pyrite.

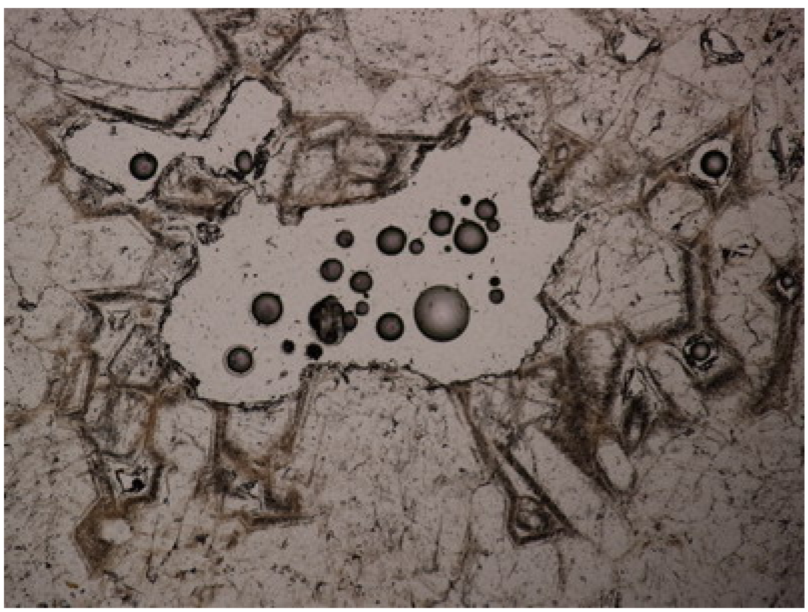


A

B

T-8-10: Representative view showing the quartz vein and porphyritic lithic fragments cut by thin quartz veinlets. FOV = 8.5 mm A) PPL, B) XPL,

C



T-8-10: C) Representative view of the occurrence of goethite-hematite. FOV = 0.85 mm RL
D) Detailed view of subhedral and zoned quartz around a cavity. FOV = 3.25mm, PPL

Sample: T-11-16

LITHOLOGY: Quartz vein cuts feldspar porphyry
ALTERATION TYPE: K-feldspar; goethite-hematite, tourmaline

Hand Sample Description:
Sample contains a massive quartz vein and part of wallrock. Vein contains wallrock fragments (<5 mm) as well as deep red and metal-grey patches. Wallrock formed by brown to grey groundmass with salmon pink, whitish and dark grey phenocrysts. Numerous thin fractures throughout. Not magnetic, no reaction to HCl. Wallrock matrix and salmon-red phenocrysts strongly responded to sodium cobaltrinite.

MAJOR MINERALS

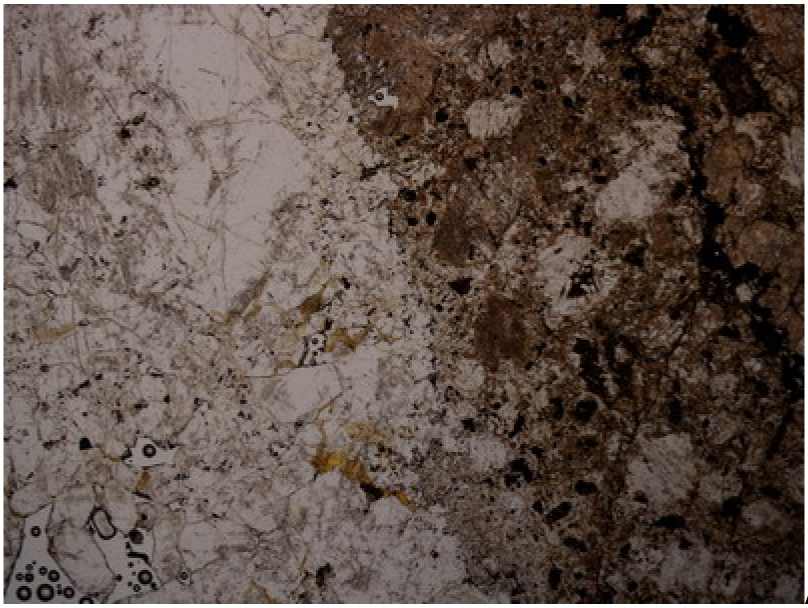
Mineral	%	Distribution & Characteristics	Optical
Quartz	55	vein of very fine to medium-sized, anhedral to subhedral interlocking grains, locally elongated, some altered K-feldspar-tourmaline-altered wallrock fragments disseminated in the vein; very fine-grained, ?recrystallized, in veinlets crosscutting the main vein; in the matrix of the wallrock, as fine-grained anhedral grains	
K-feldspar	25	brown, patchy partial to complete alteration of original plagioclase in wallrock matrix and phenocrysts	
Goethite-hematite	07	fine subhedral and boytroidal grains disseminated in the quartz vein and in the wallrock, typically with concentric rims and locally preserving pyrite cores; as stain and veinlets throughout	

MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Plagioclase	04	fine-grained phenocrysts disseminated in the wallrock, typically showing strong to complete replacement by K-feldspar	
Pyrite	03	in the quartz vein and the wallrock, as rare small remnant cores in goethite-hematite grains; locally in the wallrock as unaltered or weakly altered anhedral to subhedral grains	
Tourmaline	03	very fine-grained needles and radiating clusters of needles, occurs in quartz vein associated with adularia rhombs; in the wallrock as fine-grained granular aggregates and rare needles	*colourless to green*
Chlorite	02	very fine-grained, anhedral low relief aggregates, occurs with jarosite as replacement of biotite and former mafic phenocrysts	*pale green*
Sericite	01	masses of very fine-grained sheaves within K-feldspar phenocrysts and wallrock matrix	
Adularia	tr	very fine-grained, rhombs, occurs in quartz vein associated with tourmaline aggregates and altered wallrock fragments	
Rutile	tr	very fine-grained, anhedral aggregates, occurs as replacement of biotite	*brown*
Biotite	tr	fine-grained, subhedral platy grains, partly replaced by jarosite, chlorite, rutile, sericite and hematite	*red-brown*

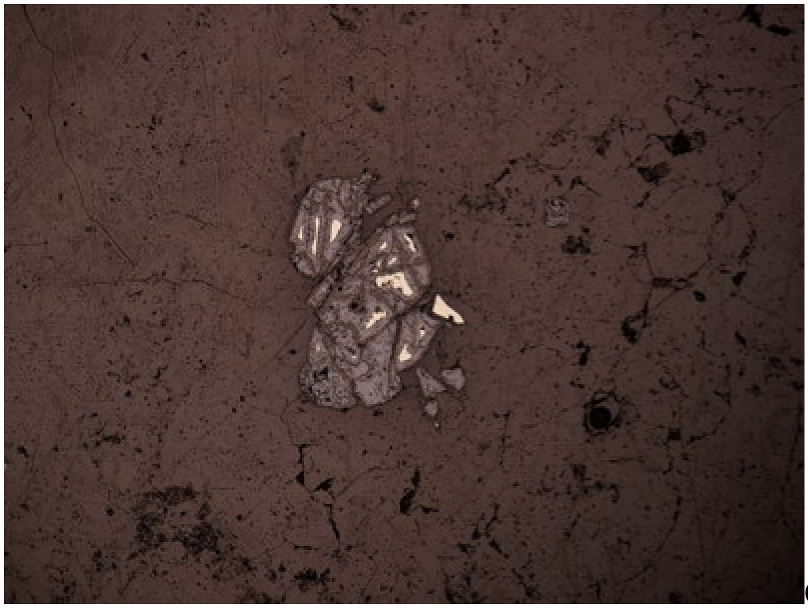
Thin Section Description:
The sample comprises a pervasively K-feldspar-hematite altered porphyritic wallrock cut by a quartz vein which incorporates K-feldspar-tourmaline-altered fragments of the wallrock. The wallrock comprises phenocrysts of plagioclase, former ?amphibole and biotite in a fine-grained, felted plagioclase-dominant groundmass.

Plagioclase phenocrysts and groundmass are selectively replaced by very fine-grained, brown K-feldspar. K-feldspar in turn is locally replaced by patches of sericite or tourmaline. Biotite and former ?amphibole phenocrysts are selectively replaced by chlorite, tourmaline, rutile, hematite and locally sericite. The quartz in the vein strongly varies in size and shape ranging from extremely fine-grained, recrystallized, in veinlets cutting the main vein to large, anhedral, locally elongated grains within the vein. Fine irregular K-feldspar-tourmaline altered fragments occur within the vein. Traces of very fine-grained adularia rhombs are associated with clusters of tourmaline within the vein. Minor pyrite occurs disseminated in the wallrock and quartz vein; it is strongly rimmed and replaced by goethite-hematite and only locally preserving cores of the original grains.

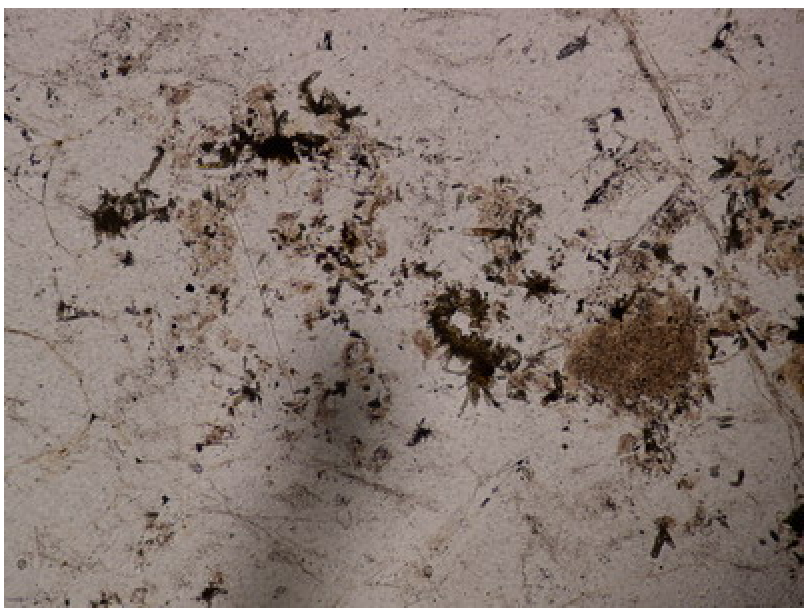

A


B

T-11-16: Representative view showing part of the quartz vein and the K-feldspar altered porphyritic wallrock. FOV = 8.5 mm, A) PPL, B) XPL



C



T-11-16: C) Representative view showing pyrite grains with thick rims of Fe-oxides. FOV = 3.25 mm, RL. D) Detail view of the quartz vein showing numerous needles and clusters of tourmaline associated with K-feldspar altered relict fragments. FOV = 1.75 mm, PPL.

Sample: T-12-17

LITHOLOGY: Feldspar porphyry with porphyritic ?fragment
ALTERATION TYPE: K-feldspar, illite

Hand Sample Description:
Sample formed by a light to dark grey matrix with creamy white to salmon pink phenocrysts up to 5 mm large. Some dark grey phenocrysts. Adjacent part of sample (?fragment) heavily altered and made by a brown earthy matrix with creamy to pinkish phenocrysts. Some vugs in both parts of the sample. Not magnetic, no reaction to HCl. The matrix and most phenocrysts strongly reacted to sodium cobaltrinite.

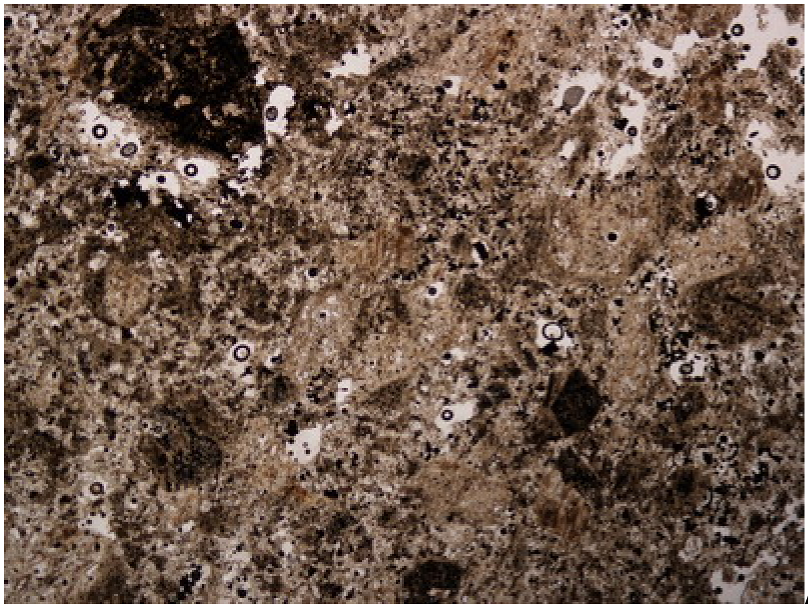
MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
K-feldspar	50	fine- to very fine-grained, brown, cloudy, occurs as replacement of phenocrysts, typically strongly altered by kaolinite-sericite-pyrite aggregates or by groundmass-pyrite	
Quartz	25	fine to very fine-grained, anhedral, occurs as groundmass; fine-grained, resorbed, occurs as phenocrysts; fine-grained and intergrown with pyrite in granular aggregates, commonly with subhedral outlines	
Illite	10	very fine-grained anastomosing ribbons within the matrix, intergrown with clay and pyrite, as selective replacement of K-feldspar phenocrysts and groundmass	
Pyrite	07	very-fine to fine-grained, anhedral to irregular grains disseminated in the matrix and as clusters typically with clay and illite as replacement of K-feldspar, fractured and corroded, partly replaced by Fe-oxides	

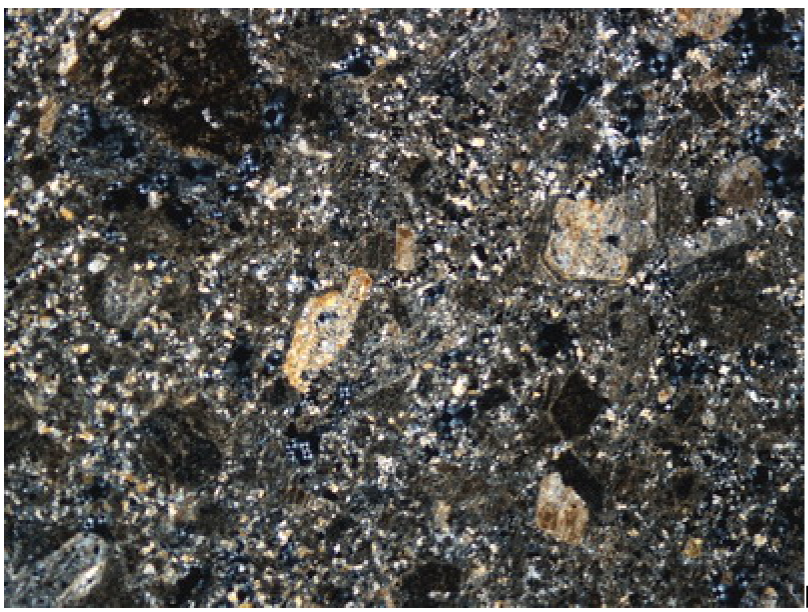
MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Plagioclase	03	fine to medium-grained, tabular, occurs as locally twinned phenocrysts; fine to very fine-grained, laths, occurs as groundmass, both phenocrysts and groundmass selectively replaced by K-feldspar, cores of phenocrysts are locally vuggy	
Clay	03	very fine-grained, brown, pockets within the groundmass, locally rimming K-feldspar phenocrysts, intergrown with illite and pyrite in subhedral aggregates	
Fe-oxides	02	stain and sets of anastomosing veinlets around fractures, cavities and K-feldspar phenocrysts. Localized in one side of the section	
Rutile	tr	very fine-grained, anhedral aggregates, occurs disseminated in groundmass	

Thin Section Description:
The section is a feldspar porphyry with an adjacent finer-grained, porphyritic ?fragment. The section has been affected by a strong potassic alteration which has pervasively replaced plagioclase phenocrysts and groundmass laths with K-feldspar. The K-feldspar alteration is overprinted by patchy illite, clay and rutile aggregates. Major pyrite occurs disseminated and as clusters that replace K-feldspar. Cores of phenocrysts are locally vuggy. On one side of the section, veinlets of Fe-oxides line cavities and rim K-feldspar phenocrysts.

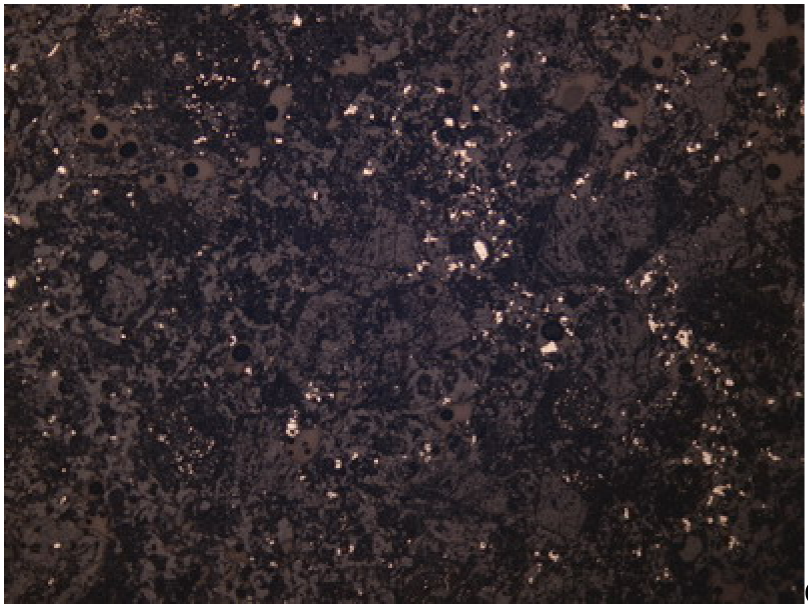


A



B

T-12-17: Representative view showing K-feldspar altered phenocrysts and their replacement products in a fine-grained quartz-K-feldspar-illite matrix. Note abundant vugs.
FOV = 8.5 mm A) PPL, B) XPL



C

T-12-17: C) Same view as above showing strong pyrite dissemination, RL

Sample: L04-DR10:

LITHOLOGY: Quartz vein with feldspar porphyry
ALTERATION TYPE: Quartz-adularia, K-feldspar, goethite-hematite

Hand Sample Description:
Massive quartz vein with thin fractures, brown masses and cavities coated by reddish Fe-oxides. Feldspar porphyry ?wallrock/?fragment with salmon pink phenocrysts (<5 mm) on one side of the sample. Fine sulfide dissemination throughout. Not magnetic, no reaction to HCl. Wallrock strongly responded to sodium cobaltrinite.

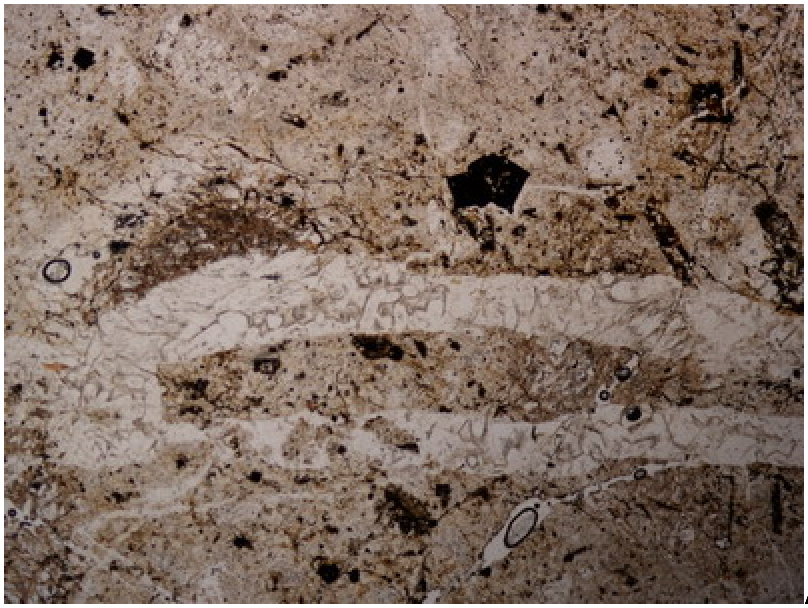
MAJOR MINERALS

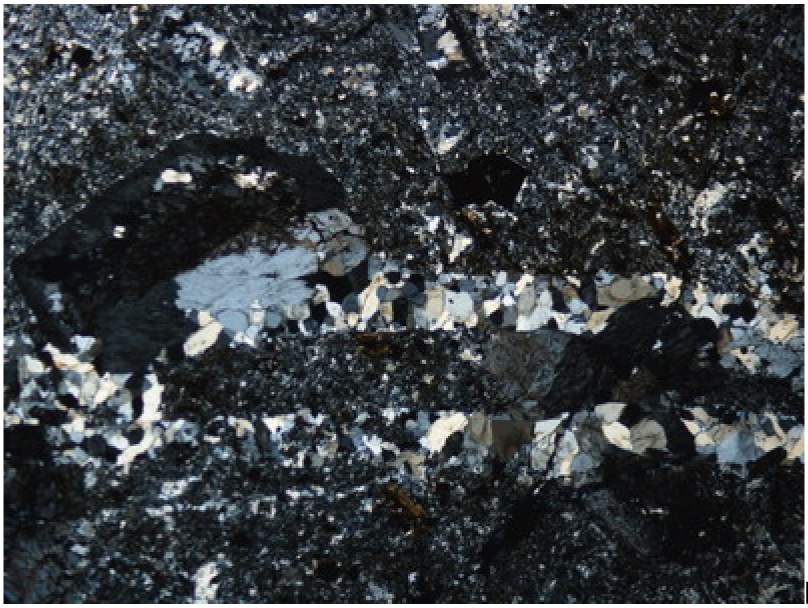
Mineral	%	Distribution & Characteristics	Optical
Quartz	60	fine- to medium-grained, occurs as vein, locally elongated or with a micro-plumose appearance, commonly showing growth or radial zoning; microcrystalline, colloform texture with radiating fine-grained prismatic aggregates, occurs as clusters and veinlets throughout section; very fine-grained, occurs with adularia as replacement of feldspar porphyry wallrock/fragments	
Adularia	15	very fine-grained, rhombic aggregates, occurs with very fine-grained quartz as replacement of feldspar porphyry wallrock/fragments preserving primary porphyritic textures	
Goethite-hematite	15	stain throughout the sample, thin veinlets, and as replacement of pyrite respecting its euhedral outlines	
K-feldspar	5	medium to coarse-grained, twinned phenocrysts within wallrock/fragments, locally with tabular shape	

MINOR MINERALS

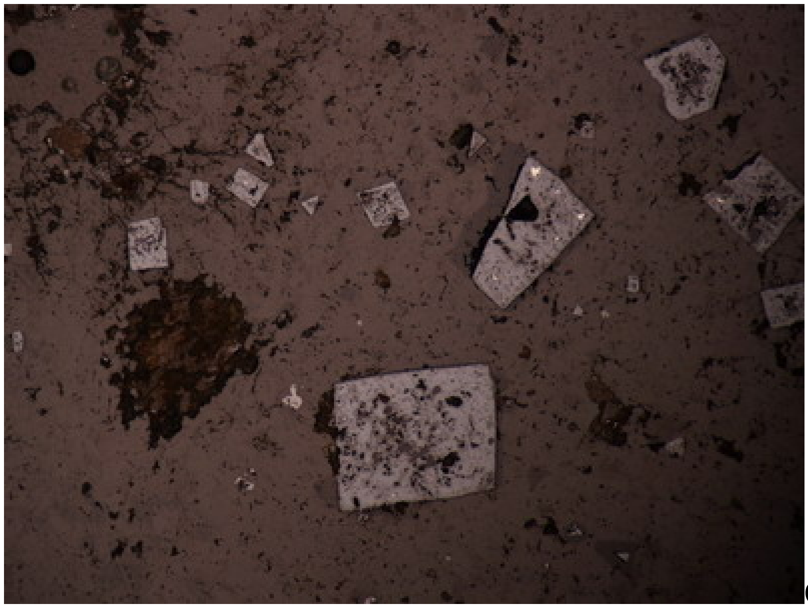
Mineral	%	Distribution & Characteristics	Optical
Jarosite	03	very fine-grained, aggregates, occurs with rutile and goethite-hematite as replacement of mafic phenocrysts	
Plagioclase	01	medium to coarse-grained, tabular, patchy replacement by brown K-feldspar	
Tourmaline	tr-1	very fine-grained, needles, occurs disseminated with very fine-grained adularia-quartz aggregate	
Rutile	tr	very fine-grained, anhedral aggregates, occurs as replacement of mafic phenocrysts	
Biotite	tr	subhedral grains as phenocrysts within wallrock/fragments, inclusions of with goethite (after pyrite)	
Pyrite	tr	rare cores of goethite-hematite grains	

Thin Section Description:
The sample comprises a pervasively adularia-quartz altered porphyritic wallrock cut by a quartz vein which incorporates altered fragments of the wallrock. The wallrock, similar to other samples in this suite, comprises former phenocrysts of plagioclase, biotite and possibly other mafic minerals in a matrix that has been pervasively replaced by adularia-quartz aggregate. Plagioclase phenocrysts are selectively replaced by very fine-grained, brown K-feldspar. Biotite and mafic phenocrysts are selectively replaced by rutile, goethite-hematite and locally jarosite. The quartz vein comprises medium-grained euhedral quartz crystals with locally finer-grained anhedral clusters and locally colloform texture (similar to sample T-8-10). Veinlets of zoned, commonly elongated quartz cut the wallrock. Weathering is intense and marked by stain as well as veinlets of goethite-hematite throughout the section. Goethite-hematite also replaces most of the original pyrite respecting its euhedral outlines, with very locally some remnant pyrite in the cores of the goethite-hematite grains.

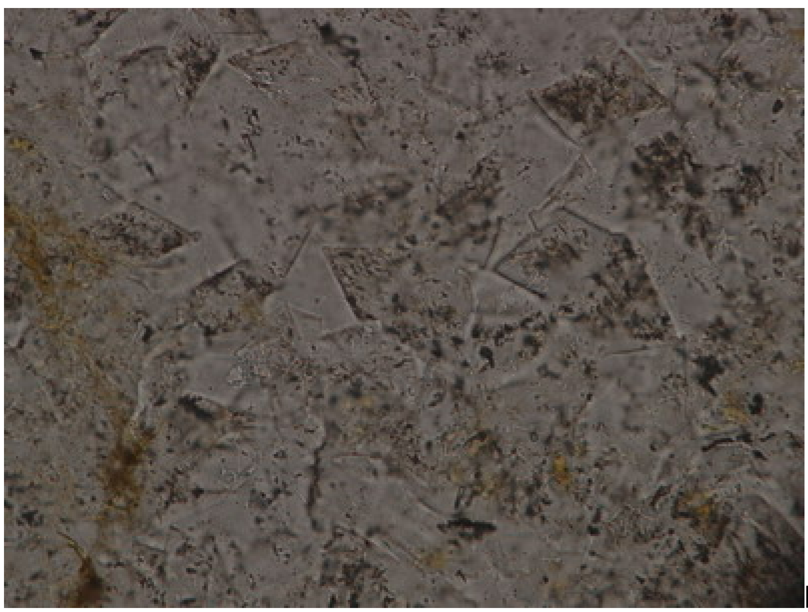

A


B

L04-DR10: Representative view of wallrock/fragments. The matrix contains a large former plagioclase phenocryst and is cut by subparallel veins of quartz. Note the quartz zoning in the veins.
FOV = 8.5 mm, A) PPL, B) XPL



C



D

L04-DR10: C) Representative view of subhedral Fe-oxides locally with weak preservation of the original pyrite, FOV = 1.75 mm, RL,
D) Representative view of adularia rhombs, FOV = 0.35mm, PPL

Sample: 04DB-3

LITHOLOGY: Breccia with quartz infill
ALTERATION TYPE: Quartz-adularia; Fe-oxides, sericite

Hand Sample Description:
Breccia comprising small angular feldspar porphyry fragments (0.3 to 15 mm size) and large aphanitic grey rock fragment (3.5 cm size) infilled by fine-grained quartz and crosscut by thin reddish or black veinlets and fractures. Intense very fine-grained sulfide dissemination. Not magnetic, no reaction to HCl. Rock fragments responded strongly to sodium cobaltrinite. Weaker response in the matrix.

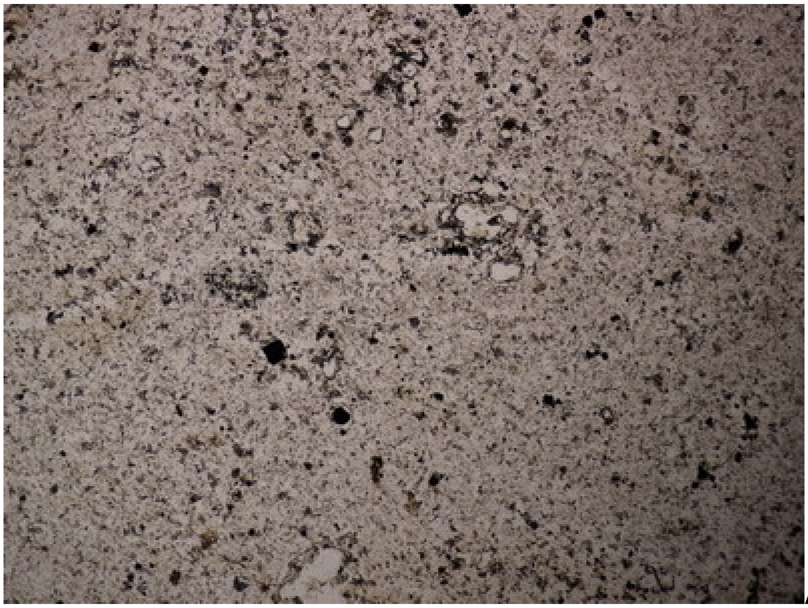
MAJOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
Quartz	50	very fine-grained, anhedral, occurs with adularia in the matrix of aphanitic fragment; fine to very fine-grained, subhedral, occurs with brown K-feldspar or sericite in matrix of other fragments; fine interlocking, equant to prismatic, occurs as infill and discontinuous veinlets	
Adularia	25	very fine-grained, rhombic crystals and aggregates, occurs with rutile, disseminated pyrite and very fine-grained quartz as replacement of aphanitic rock fragment, also occurs as rare rhombs within fine-grained quartz vein infill	
Goethite-hematite	05	as fracture infill, also as partial to complete replacement of pyrite near fractures	
Pyrite	05	fine typically euhedral grains, locally pitted and fractured, disseminated	
Sericite	05	anastomosing network of very fine sheaves, typically associated with rutile and clay in some fragments	

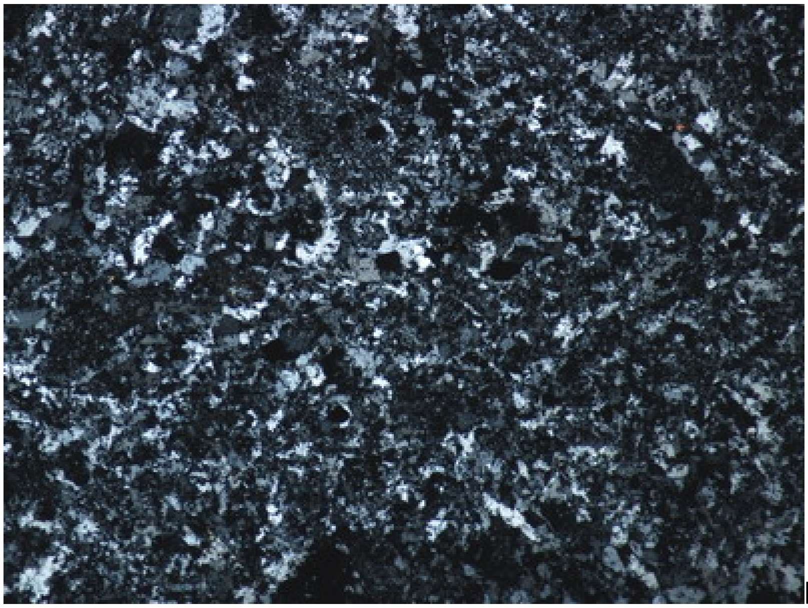
MINOR MINERALS

Mineral	%	Distribution & Characteristics	Optical
K-feldspar	03	very fine-grained, anhedral brown aggregates, occurs as replacement of plagioclase in some fragments	
Clay	03	very fine-grained granular aggregates disseminated, commonly with rutile and sericite in some fragments	
Rutile	02	very fine-grained, anhedral grains and aggregates, occurs with adularia and quartz as replacement of aphanitic rock fragment; skeletal masses of fine rounded grains associated with sericite and clay	
?Tourmaline	tr	very fine-grained needles, occur disseminated throughout aphanitic rock fragment of anhedral grains and columnar crystals, locally associated with chlorite	

Thin Section Description:
The section is a breccia comprising a variety of fragments including porphyritic and aphanitic varieties infilled by fine-grained euhedral quartz. Most of the section is made up of an aphanitic rock fragment which has been pervasively replaced by quartz-adularia aggregate with minor rutile, clay and ?tourmaline. Porphyritic fragments are selectively replaced by brown K-feldspar aggregate with patches of very fine-grained sericite, Fe-oxides, clay and rutile. Equant to prismatic quartz occurs as infill and veinlets. Pyrite is the only sulfide and occurs as disseminated anhedral to euhedral grains. Oxidation of the sample is indicated by the presence of boytroidal goethite and minor hematite in fractures and as replacement of pyrite adjacent to the fractures.

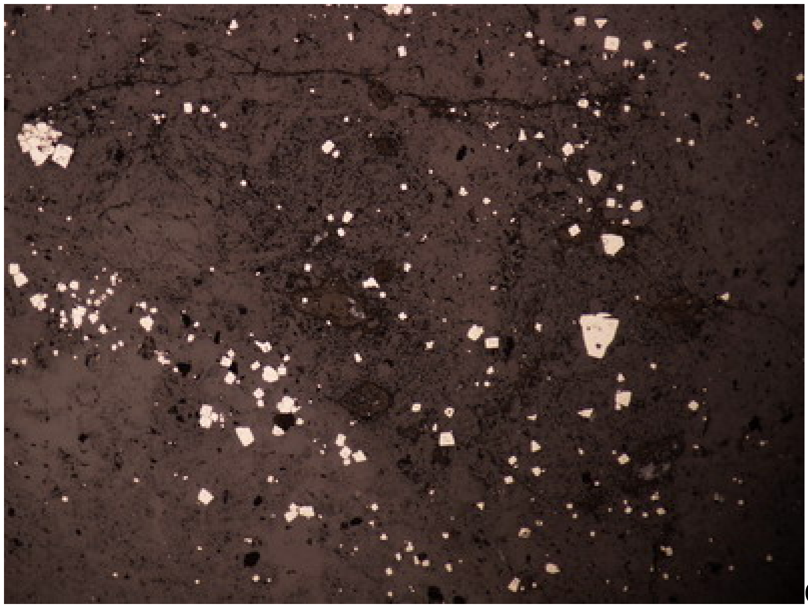


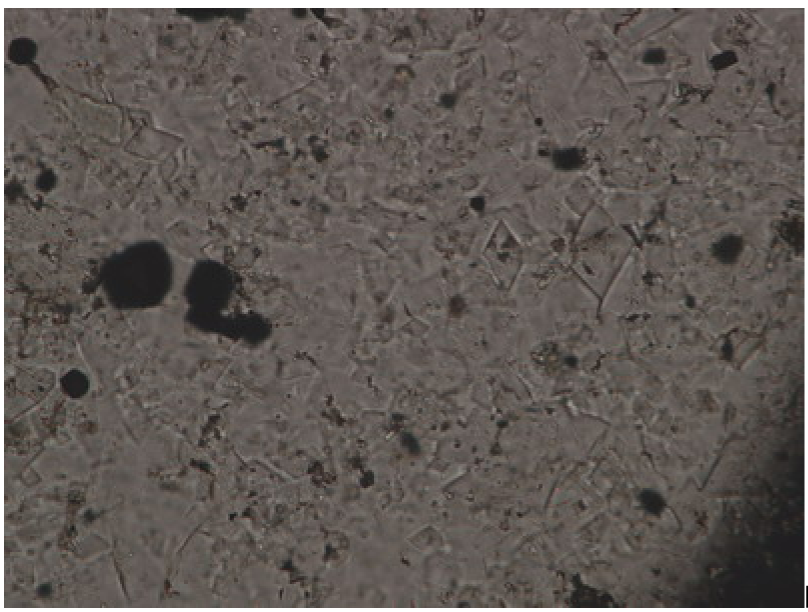
A



B

04DB-3:Representative view of fine-grained quartz-adularia-rutile-clay-pyrite replacement of aphanitic rock fragment. FOV = 8.5 mm, A) PPL, B) XPL


C


D

04DB-3: C) Representative view of pyrite dissemination, FOV = 8.5 mm, RL
D) Representative view of adularia rhombs within fragment of A) and B) above, FOV = 0.35 mm, PPL

Sample: 04DB-7

LITHOLOGY: Quartz vein with feldspar porphyry fragments
ALTERATION TYPE: Quartz, K-feldspar, calcite

Hand Sample Description:
Massive saccharoidal quartz with silicified angular fragments of feldspar porphyry. Fragments contains disseminated very fine-grained sulphides. Weakly magnetic with disseminated white patches and veinlets highly reactive to HCl. Fragments strongly responded to sodium cobaltrinite.

MAJOR MINERALS

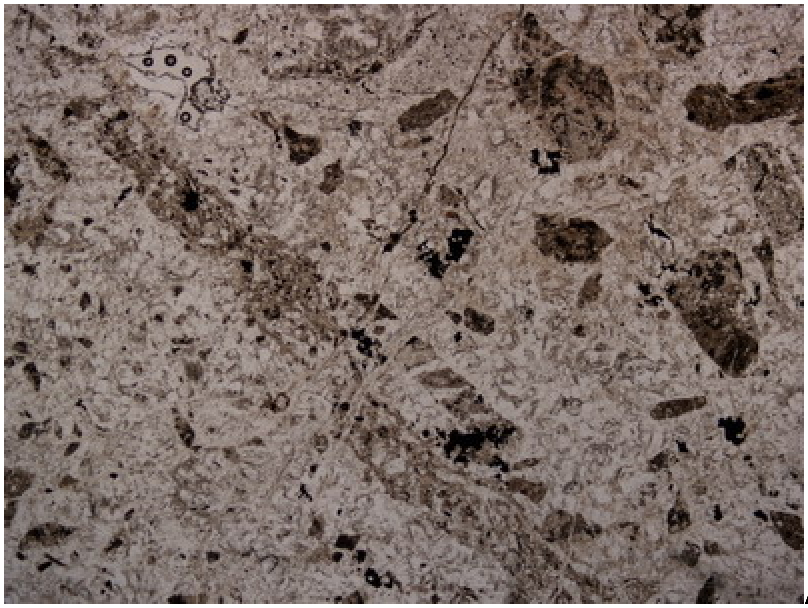
Mineral	%	Distribution & Characteristics	Optical
Quartz	90	interlocking fine-grained, subhedral, locally prismatic, locally zoned crystals, occurs as vein; fine to very fine-grained aggregates, irregular grain boundaries, occurs as replacement of fragments, enclose former tabular phenocrysts that have been replaced by patches of calcite, rutile and sulfides	

MINOR MINERALS

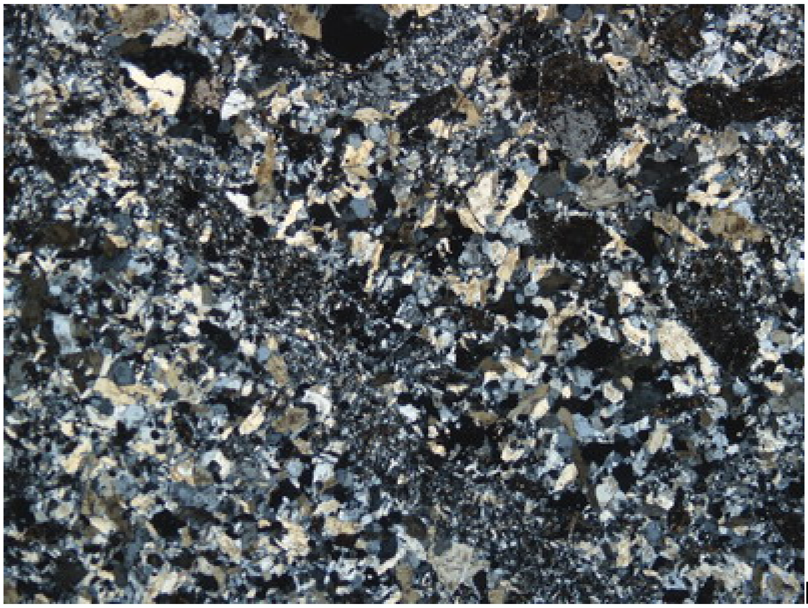
Mineral	%	Distribution & Characteristics	Optical
Calcite	03	fine-grained, anhedral aggregates, occurs with jarosite as fracture and prismatic quartz vug infill, occurs disseminated with fine-grained quartz as replacement of fragment matrix and occurs as patchy aggregates replacing tabular phenocrysts within fragments	
K-feldspar	03	very fine-grained, brown aggregates, occurs as replacement of subhedral tabular phenocrysts, replaced by calcite, rutile and sulphides	
Pyrite	02	very fine anhedral to subhedral grains disseminated, locally intergrown with chalcopyrite, sphalerite, ?galena and ?acanthite	
Jarosite	01	very fine-grained, anhedral aggregates, occurs with calcite as fracture infill	*yellow-brown*
Rutile	01	very fine-grained pockets, as replacement of tabular phenocrysts, disseminated within finer grained aggregates of quartz as replacement of fragments	*brown*
Chalcopyrite	tr	fine anhedral masses, locally intergrown with pyrite and magnetite	
Magnetite	tr	fine anhedral masses, locally intergrown with pyrite, ?galena and chalcopyrite	
?Galena	tr	very fine-grained, intergrown with sphalerite	
Sphalerite	tr	very fine-grained, one grain observed intergrown with ?galena and pyrite	*yellow*
?Acanthite	tr	very fine-grained, strongly corroded and tarnished grains and aggregates, occurs with pyrite	

Thin Section Description:
This sample comprises vague, silicified, angular feldspar porphyry fragments cut by a fine-grained quartz vein. The fragment matrix is replaced by fine to very fine-grained recrystallized quartz, locally overprinted by patchy to disseminated calcite grains; tabular phenocrysts are replaced by K-feldspar and subsequently by patchy aggregates of calcite, rutile, and sulphides. The quartz vein comprises fine-grained, interlocking, locally zoned, crystalline equant to prismatic quartz. Minor pyrite and trace chalcopyrite, sphalerite, ?galena and ?acanthite occur disseminated. The sulphides are locally intergrown with each other and with trace magnetite.

Kathryn Dunne, P.Geo., Alexandra Mauler, Ph. D. and Anne J.B. Thompson, P.Geo.

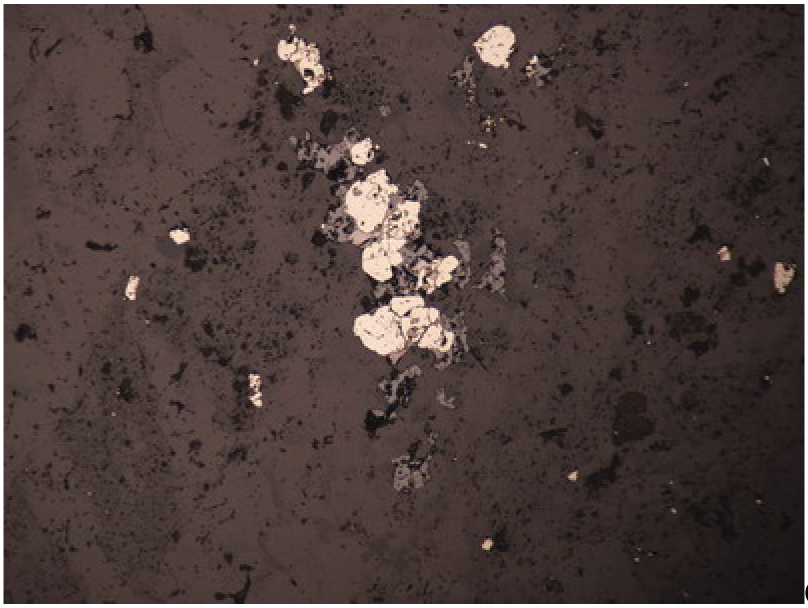


A

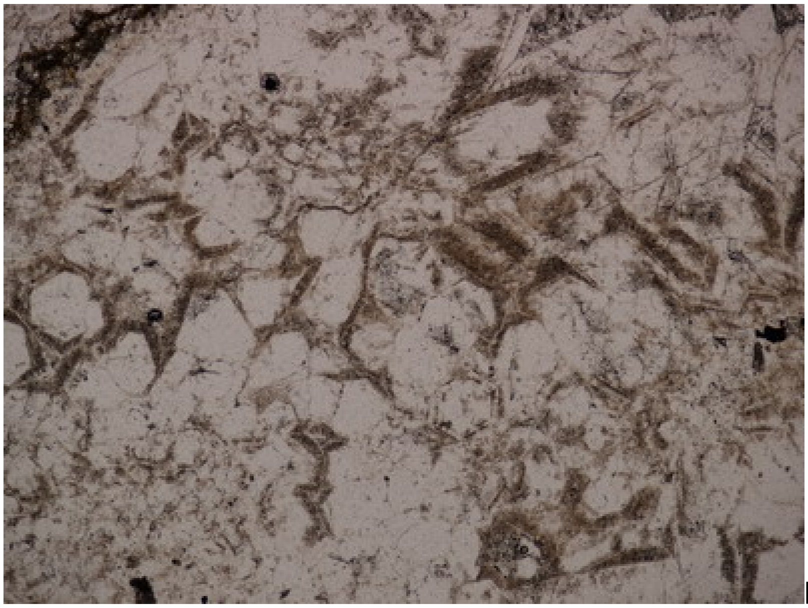


B

04DB-7: Representative view of showing recrystallize fine-grained quartz matrix with relict altered tabular phenocrysts.
FOV = 8.5 mm, A) PPL, B) XPL



C



D

04DB-7: C) Representative view showing anhedral pyrite (yellow) intergrown with magnetite (grey), FOV= 1.75 mm, RL
D) Detailed view of an aggregate of euhedral and zoned quartz within the vein, FOV = 3.25mm, PPL