

**TECHNICAL REPORT
using
NATIONAL INSTRUMENT 43-101 GUIDELINES

for the
Preparation of the Tiger Zone Mineral Resource Estimate

on the

RAU PROPERTY
YUKON TERRITORY, CANADA
NTS Map Sheets 106D 01/06/07/08
Latitude 64⁰ 11' N Longitude 134⁰ 22' W

prepared for

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1.0 SUMMARY

Protore Geological Services has prepared this Technical Report on the Rau Property, Yukon to provide the first resource estimate for the Tiger Zone mineralization. The Technical Report includes a detailed account of the mineral resource, metallurgy, permitting, and drilling. The resource was produced for the purpose of supplying updated information to the shareholders of ATAC Resources Ltd. as the project is being advanced within the Rackla Gold Belt. This report was written in compliance with the recently revised (June 24, 2011) disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1.

ATAC Resources Ltd. holds 100% interest in the Rau Property and the Tiger Zone resource estimated in this report. The Tiger Zone is an advanced-stage exploration project located in east central Yukon near the edge of the ancestral North American carbonate platform 55 kilometers northeast of the hamlet of Keno City.

The Rau Property is 576.7 square kilometers in area and covers a favorable northwest trending carbonate sequence that hosts a significant gold resource at the Tiger Zone. The main area of interest surrounding the Tiger Zone consists of a 17 kilometer by 7 kilometer area defining the Rau Ridge system.

1.1 Geology and Mineralization

The Rau property lies within a band of regional-scale thrust and high angle reverse faults that imbricate rocks of Selwyn Basin and Mackenzie Platform. Selwyn Basin stratigraphy consists of regionally metamorphosed, basinal sediments of Neoproterozoic to Paleozoic age. Mackenzie Platform stratigraphy comprises dominantly shallow water carbonate and clastic sediments that were deposited from Mid-Proterozoic through Paleozoic times. Both packages of sediments were deposited on the western margin of ancestral North America.

Thrust faults were active during Jurassic to Cretaceous times (160 to 130 Ma) when the area underwent compressional orogenesis related to large-scale plate convergence. During Late Cretaceous (94-90 Ma) intermediate to felsic plutons of the Tombstone Suite were emplaced. Another compressional orogenic event occurred about 65 Ma and was accompanied by emplacement of felsic intrusions assigned to the McQuesten Suite.

The Tombstone, Dawson and Robert Service thrust faults plus a number of lesser thrust faults affect stratigraphy along the trend of the Rau claim block. All thrusts verge northeasterly and predate emplacement of the Tombstone Suite intrusions. The thrust panel that contains the Rau Property approximately straddles the boundary between Selwyn Basin and Mackenzie Platform and includes units belonging to both tectonic elements.

The Rau Property lies within a northwest trending thrust package bound to the south by the Dawson Thrust and to the north by the Kathleen Lakes Fault. The stratigraphic units within this package form open folds that are aligned parallel to the thrusts and plunge gently to the southeast. Several high angle faults that parallel the general structural trend are inferred on the property and others could be present. One or more of these faults are interpreted to have acted as conduits for mineralizing fluids.

Mineralization at the Tiger Zone is hosted by carbonates of the regionally extensive Bouvette Formation. Replacement style gold mineralization has been the primary focus of exploration on the Rau Property and the Tiger Zone is the best understood and most aggressively explored type of occurrence identified to date.

The Tiger Zone is a thick northwesterly trending body of carbonate replacement style gold mineralization hosted by a moderately northeast dipping horizon. It is currently 700 meters long, 100 to 200 meters wide and up to 96 meters thick. Mineralization is developed within and adjacent to a regionally extensive corridor of highly strained carbonate rocks that is manifested as a 40 to 150 meter wide zone of small

scale folding and shearing. The geometry of the mineralized system is defined by a series of stacked and folded limestone horizons intercalated with locally extensive mafic flows and volcanoclastic units.

Gold occurs in both sulphide and oxide facies type mineralization. Sulphide mineralization is accompanied by, and developed within, limestone that is replaced by ferruginous dolomite and iron carbonate minerals. Oxide mineralization is completely devoid of sulphide minerals and ranges from very competent, weakly porous limonitic mud to rubbly porous limonitic grit. The oxide appears texturally amorphous within most intersections but occasionally exhibits residual color banding that may represent relict sulphide textures. Complete oxidation extends up to a depth 250 meter from surface.

Based on these observations associated with the Tiger Zone mineralization, the most suitable classification is "sediment-hosted Nevada-type carbonate replacement style" gold mineralization.

1.2 Exploration and Mining History

While no historical commercial mining is documented on the current claim block a modest amount of exploration was conducted by a number of operators as early as 1922 and through 1974. This work was intermittent and focused within the north-western part of the claim block on silver vein targets akin to the Keno Hill District vein systems.

Lead-zinc exploration was reported as early as 1968 initiated by Cominco Limited and continued intermittently through to the late 1980's by various operators. Most of the work comprised broad scale evaluation by way of soil and stream sediment geochemical surveys followed by detailed prospecting and mapping plus limited diamond drilling. This work discovered skarn- associated tungsten mineralization and the first gold occurrence (Now Occurrence) on the claims currently comprising the Rau Property.

Very little work was done in the vicinity of the current claims from the mid 1980's to 2006 when ATAC Resources Ltd. was drawn to the area to follow up a 99th percentile gold-in-stream sediment sample site reported in the historical Regional Geochemical Survey database. Since 2006 ATAC Resources Ltd. has worked the area annually expanding and advancing its exploration each year. During this time a total of 31 889 meters of diamond drilling has been completed in 164 holes at a number of targets but the majority of this work was focused at the Tiger Zone where 25 562 meters was drilled in 133 holes by the end of the 2010 exploration season. The latter drilling has been used to provide the necessary data for the first mineral resource estimate at the Tiger Zone.

1.3 Drilling and Sampling

The Tiger Zone was discovered by diamond drilling in 2008. Down-hole drill depths range from 5 to 593.25 meters with an average depth of approximately 192 meters. The drilling was completed on survey controlled section lines oriented northeasterly at nominal spacings of 25 to 40 meters within the core portion of the mineralized zone and 50 meters on the outer edges. Diamond drill tooling ranged from BTW to PQ sizes, the larger diameter core was generally used to drill the oxide mineralization in order to optimize recovery. PQ size tooling was also used to obtain large diameter samples in part for metallurgical surveys within the oxide zone.

For the bulk of the diamond drilling between the 2009 and 2010 field seasons, samples were divided into batches containing 31 core samples, two standards, two blanks and one quartered core duplicate. Blank samples each comprised approximately four, five, seven and eight kilograms of landscaping marble which was analyzed prior to the field season in order to use as "certified blank" material. The various sizes were assigned to the appropriate tooling diameter. Matrix compatible sulphide gold standards were produced by CDN Resource Laboratories Ltd from core reject material retained from the 2008 drill program for use during 2009 in addition to two shelf standards used for tungsten control. In 2010 four sulphide gold standards were prepared from the 2009 Tiger Zone core reject material by CDN Resource Laboratories Ltd. and four oxide gold standard samples were purchased from Geostats Pty Ltd.

The quality control program for the various years indicates the assay results are a reliable indicator of the metal concentrations of the Tiger Zone mineralization. The data presented for all ATAC Resources' exploration meets NI 43-101 standards. It is the Authors' opinion that the sample preparation, quality control, security and analytical procedures for work conducted on the Rau property by ATAC Resources Ltd. meet the standards as set out in National Instrument 43-101.

1.4 Mineral Processing and Metallurgical Testing

Five separate surveys directly and indirectly associated with metallurgical testing have been completed on the sulphide and oxide out "mineralization" out at the Tiger Zone. The following work was conducted over a two year period by independent contractors:

1. Sulphide petrographic studies – Micron Geological Ltd. (B.C.)
2. Sulphide Flotation/Cyanidation Surveys – G&T Metallurgical Services (B.C.)
3. Gold deportment studies - Surface Science Western (O.N.)
4. Bio-oxidation studies – SGS Minerals Services (O.N.)
5. Preliminary cyanidation tests on crushed core rejects – ALS Group (Nevada)
6. Oxide cyanidation – SGS Minerals Services (O.N.)

This work determined the nature of the gold mineralization within the Tiger Zone to be micron/sub-micron. Metallurgical tests on five composited samples from the sulphide portion of the Tiger Zone suggest conventional flotation and gold extraction by cyanidation is highly variable ranging from 23.4 to 95.2%. Subsequent Pressure Oxidation and Carbon-in-Leach (POX/CIL) plus BIOX/CIL tests using generic bacteria were performed by SGS in Lakefield, Ontario and returned high yield oxidation residues and gold extraction.

Metallurgical tests completed on oxide material returned highly favorable results again using conventional cyanidation processes with low residence periods. Neither of the metallurgical tests has been further expanded for optimization.

1.5 Mineral Resource Estimate

The resource estimate for the Tiger Zone was initiated by constructing a wire frame 3D solid model in "Gems" to constrain both the oxide and sulphide zones. The model was constructed based upon lithological boundaries and structural controls. Three-dimensional solids were manually digitized from the available drill data and were used to constrain the interpolation of mineralization. A total of five different lithological units were used in the modeling process.

Drill holes were "passed through" these solids, with the point each hole entered and left each solid, recorded. Gold and silver assay values were then back tagged with a solid designation and the assay statistics tabulated. Three oxide solids were modelled and the remaining lithologies were lumped into a main footwall solid and a smaller hanging wall solid sitting above the main mineralization. The assays were subdivided into oxides and sulphide bearing lithologies.

Pairwise relative semivariograms were produced for both gold and silver in oxide and sulphide domains. Once the direction of maximum continuity was established in the horizontal plane, the vertical plane perpendicular to this direction was examined. For both variables in both domains geometric anisotropy was demonstrated. In all cases, nested spherical models were fit to the data.

A block model with blocks 10 x 10 x 5 meters in dimension was superimposed over the mineralized solids and rotated to match the drill hole fences. For each block, the percentage below surface topography, below overburden and within each mineralized solid was recorded.

Due to the extensive oxide content in the Tiger Zone and the inherent problems with measuring bulk density on soft, broken up oxide material, much care and attention was used in determining bulk density for the various units.

Representative densities for each lithology, alteration type and mineralization style were calculated by ATAC Resources Ltd. staff in the field using three methods; the first from weights in air from whole competent core, the second from measuring the weight of an entire box of core and the third measuring the weight of crushed, dried oxide material. A fourth and relatively new method of determining density was conducted by Scintrex Limited using a Borehole Gravity Meter (Seigel et. al, 2009). The new Scintrex Gravilog BHG system can be deployed down drill holes to determine the bulk density determination of formations intersected by the borehole. This methodology was performed on eight drill holes through oxide material during the 2010 drill program.

For the purpose of this resource estimate a density of 2.38 was used for oxide material. For the mineralized dolomite unit (mineralized sulphide domain) a value of 3.38 was used which represents the average of 63 samples within the limits of two standard deviations above and below the mean of all mineralized dolomite samples. The material outside the mineralized solids was assigned a density of 2.86 the average of 578 samples outside the solids.

Grades for gold and silver were interpolated into the block model using Ordinary Kriging. The kriging exercise was completed four times, once each for gold and silver in blocks containing some percentage within the oxide solids and again for gold and silver in blocks containing some percentage within the sulphide mineralized solids. For kriging in oxides only oxide composites were used and for estimating grades in sulphides only sulphide composites were used.

The Tiger Zone resource estimate is presented in Table 1-1.

Table 1-1: Tiger Zone Resource Estimate

COG (g/t) (Au)	Indicated (Oxide and Sulphide)					Inferred (Oxide and Sulphide)				
	Tonnes (1,000s)	Grade (g/t Au)	Grade (g/t Ag)	Ounces Au(1000s)	Ounces Ag(1000s)	Tonnes (1000s)	Grade (g/t Au)	Grade (g/t Ag)	Ounces Au(1000s)	Ounces Ag(1000s)
0.20	7700	2.07	3.76	512.5	930.8	9090	1.01	1.02	295.2	298.1
0.30	7150	2.21	3.68	508.0	846.0	8280	1.09	0.94	290.2	250.2
0.50	6220	2.49	3.68	498.0	735.9	6620	1.26	0.86	268.2	183.0
0.70	5500	2.73	3.80	482.8	672.0	4920	1.49	0.95	235.7	150.3
1.00	4550	3.13	3.98	457.9	582.2	3180	1.84	1.00	188.1	102.2
1.40	3680	3.58	4.19	423.6	495.7	2000	2.24	1.06	144.0	68.2
1.60	3260	3.85	4.26	403.5	446.5	1570	2.44	1.05	123.2	53.0
2.00	2640	4.34	4.24	368.4	359.9	1010	2.80	0.83	90.9	27.0

A cut-off gold grade of 0.30 g/T is used for the reported resource estimate until a Preliminary Economic Assessment (PEA) is conducted for the project.

1.6 Summary and Conclusions

The Rau Property hosts a significant carbonate replacement gold resource in Yukon referred to as the Tiger Zone. Gold mineralization occurs within a karsted limestone horizon belonging to the regionally mapped Bouvette Formation and is locally bounded by a northwest trending structural corridor that has resulted in limestone replacement by coarse-grained dolomite. Sulphide mineralization was introduced into the dolomite altered system in at least three sulphide phases of which at least two are interpreted to be gold bearing. Later north trending faults cut through the sulphide mineralization and serve as a conduit for fluids that are responsible for intense oxidation and potential gold grade enhancement. The area defining the combined sulphide and oxide mineralization is 700 meters long, between 100 and 200 meters wide and up to 96 meters thick.

The nature of the gold mineralization in the Tiger Zone is micron/sub-micron. Metallurgical tests performed on five composited samples from the sulphide portion of the deposit suggest conventional flotation and gold extraction by cyanidation is highly variable. Subsequent POX/CIL and BIOX/CIL tests returned high yield oxidation residues and gold extraction.

Metallurgical tests completed on oxide material returned highly favourable results using conventional cyanidation processes with low residence periods. Neither of the metallurgical surveys was further expanded for optimization.

No work has been done by way of a Preliminary Economic Assessment (PEA) to determine project costs, viability and potential return on capital expenditures.

The identification and confirmation of the structural controls at the Tiger Zone, particularly on the oxide mineralization, has provided a model with which to understand the Tiger Zone and to locate similar mineralization elsewhere along the local trend of the Rau Ridge system. North trending structures identified from airphotos near geochemical anomalies such as the Cheetah, Puma, and Cougar are high priority exploration targets. The Rau Property has the potential to host district-scale deposits and systematic drilling along strike of the Tiger Zone at the other known showings should be the focus of future exploration.

1.7 Recommendations

Significant, relatively shallow oxide and sulphide gold mineralization has been outlined at the Tiger Zone on the Rau Property. Although the mineralization remains open along strike, the most readily accessible gold-bearing material has been identified locally within the current boundaries of the Tiger Zone.

Numerous targets remain untested along strike of the Tiger Zone within a similar geological and structural setting that has yielded highly elevated gold-bearing surface samples supported by strongly elevated and coincident gold-in-soil geochemical signatures.

Further exploratory drilling at the Rau Property is warranted and should focus on advancing the known gold targets along strike of the Tiger Zone and understanding the mechanisms of gold deposition. The discovery and definition of additional gold resources along trend could benefit the economics of the current Tiger Zone resource specifically if the new discoveries are situated in relatively close proximity.

A Preliminary Economic Assessment (PEA) is recommended for the Tiger Zone resource given the current robust global gold market. The focus of the PEA should be directed toward fast-tracking the production of the high-grade oxide material which would likely provide the best Internal Rate of Return (IRR) for the near term project economics. As part of the PEA, further detailed metallurgical studies should be investigated for optimization of oxide and sulphide processing. Also included, should be continued environmental monitoring and hydrological studies in the vicinity of the Tiger Zone.

An approximate budget for this work is presented below:

An exploration program of diamond drilling on the peripheral carbonate replacement targets following a detailed evaluation of each showing to select drill targets. A portion of the diamond drilling would be allocated to deposit expansion and whole core metallurgical studies.

PROPOSED BUDGET – RAU PROPERTY

Diamond Drilling –	8 000 m @ \$150/m including fuel, core boxes, mob/demob	1 200 000
Helicopter & Fixed Wing		750 000
Bulldozer		100 000
Assay & Analytical		250 000
Labour		400 000
Expediting, Safety & Accounting		120 000
Report Preparation & Senior Supervision		200 000
Room & Board		350 000
Airfares, Ground Transportation & Shipping		100 000
Environmental & Heritage Surveys		170 000

Metallurgical & Mineralogical Studies	150 000
Mining Cost Analysis	120 000
Preliminary Economic Analysis	400 000
Government Fees	200 000
Consultant's Management Fee	250 000
Contingency @ 10%	476 000

Total (excluding HST) \$ 5 236 000

The Author has prepared the proposed budget and concludes that the funding is adequate to complete the proposed exploration program.

2.0 INTRODUCTION

This report has been prepared at the request of Mr. Robert Carne, President of ATAC Resources Ltd. and documents the first mineral resource estimate at the Tiger Zone, Rau Property located in east central Yukon. The resource estimate was prepared using drill data generated between 2008 and 2010. The report was written in compliance with disclosure and reporting requirements set forth in the Canadian Securities Administrations' current "Standards of Disclosure for Mineral Projects" under the provisions of National Instrument 43-101, Companion Policy 43-101 CP and Form 43-101F1.

ATAC Resources Ltd. is listed on the TSX Venture Exchange (TSX-V) and holds a 100% interest in the Tiger Zone resource.

The Author was directed to examine the results of exploration conducted on the property in preparation of the first mineral resource at the Tiger Zone. The assignment included a compilation of regional- and property-scale geological data; a review of exploration procedures and results; interpretation of exploration results; a review of environmental data; a review of preliminary metallurgical studies and preparation of the mineral resource estimate. The Author recognizes the significant technical contributions of William A Wengzynowski, P.Eng who was involved with the project in an onsite supervisory capacity between 2009 and 2010. The Author has utilized much of this technical knowledge for directional guidance in the preparation of the report. Giroux Consultants Ltd. was retained to prepare the resource estimate.

2.1 Project Scope and Terms of Reference

The purpose of the Technical Report is to provide a formal mineral resource estimate of the Tiger Zone and by doing so satisfy the reporting requirements as described in the Canadian Securities Administrations' current "Standards of Disclosure for Mineral Projects" under the provisions of National Instrument 43-101, Companion Policy 43-101 CP and Form 43-101F1.

The scope of this report includes a study of information obtained from public documents, assessment reports and literature sources cited in Section 6.0; the results of geological work performed on the property and the Authors' familiarity with the geology and similar mineral deposits of the Northern Cordillera. The Senior Author visited the property on August 25, 2009 examined core from both the oxide and sulphide portions of the Tiger Zone, met with the exploration crew and over flew the Rau trend hosting the Tiger Zone mineralization.

3.0 RELIANCE ON OTHER EXPERTS

The Author is not an expert in legal, tenure, environmental, permitting, resource preparation or metallurgical matters and relied on the information and opinions of legal advisors and consultants with regard to the following:

Section 4.0 Claim Information: Data concerning the location and status of mineral claims was provided by the Whitehorse District Mining Recorder. The Author assumes that independent

legal advice has been received by ATAC Resources Ltd. regarding the validity of the claims. Sections 6.0 – 12.0: Historical and Recent Reports: Pre 2008 assessment reports are not heavily relied upon for technical information in this report but company assessment reports summarizing exploration programs between 2008 and 2010 are heavily relied upon for technical data and were prepared by authors who are qualified persons thus the data reported within is considered relevant and technically acceptable under the requirements for NI 43-101 Technical Reports.

Section 13.0: Mineral Processing and Metallurgical Testing: The Author has relied on the work conducted and comments provided by SGS Mineral Services, Lakefield Ontario.

Section 14.0: Mineral Resource Estimates: The Author has relied on the work completed by Giroux Consultants Ltd. to complete the resource estimate on the Tiger Zone oxide and sulphide mineralization.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Rau Property consists of 2 798 contiguous quartz mineral claims located in central Yukon at latitude 64°11'N and longitude 134°22'W on NTS map sheets 106D/01, 106D/02, 106D/06, 106D/07 & 106D/08 (Figure 4-1). The Property covers an area of 57 671 hectares (576.7 square kilometers). The claims are registered with the Mayo Mining Recorder in the name of Archer, Cathro and Associates (1981) Limited that holds them in trust for ATAC Resources Ltd. ATAC Resources Ltd. owns the property 100% with no underlying interests. The claims and expiry dates are tabulated in Table 4-1 and the locations of individual claims are shown on Figure 4-2.

Table 4-1: Claim Data

Claim Name	Grant Number	Expiry Date
Rau 1-64	YC50268-YC50331	April 28, 2024
65-96	YC57529-YC57560	April 28, 2017
97F-98F	YC69925-YC69926	April 28, 2018
99F-100F	YC69961-YC69962	April 28, 2018
GF 3-4	YC32305-YC32306	April 28, 2018
Q 1-13	YC92361-YC92373	April 28, 2015
14	YC92470	April 28, 2015
15-109	YC92375-YC92469	April 28, 2015
R 1-103	YC68334-YC68436	April 28, 2017
105-1295	YC68438-YC69628	April 28, 2017
1296-1337	YC70595-YC70636	April 28, 2014
S 1-700	YC90801-YC91500	April 28, 2015
701-1154	YC91901-YC92354	April 28, 2015
1155-1250	YD09635-YD09730	April 28, 2015

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FIGURE 4-1

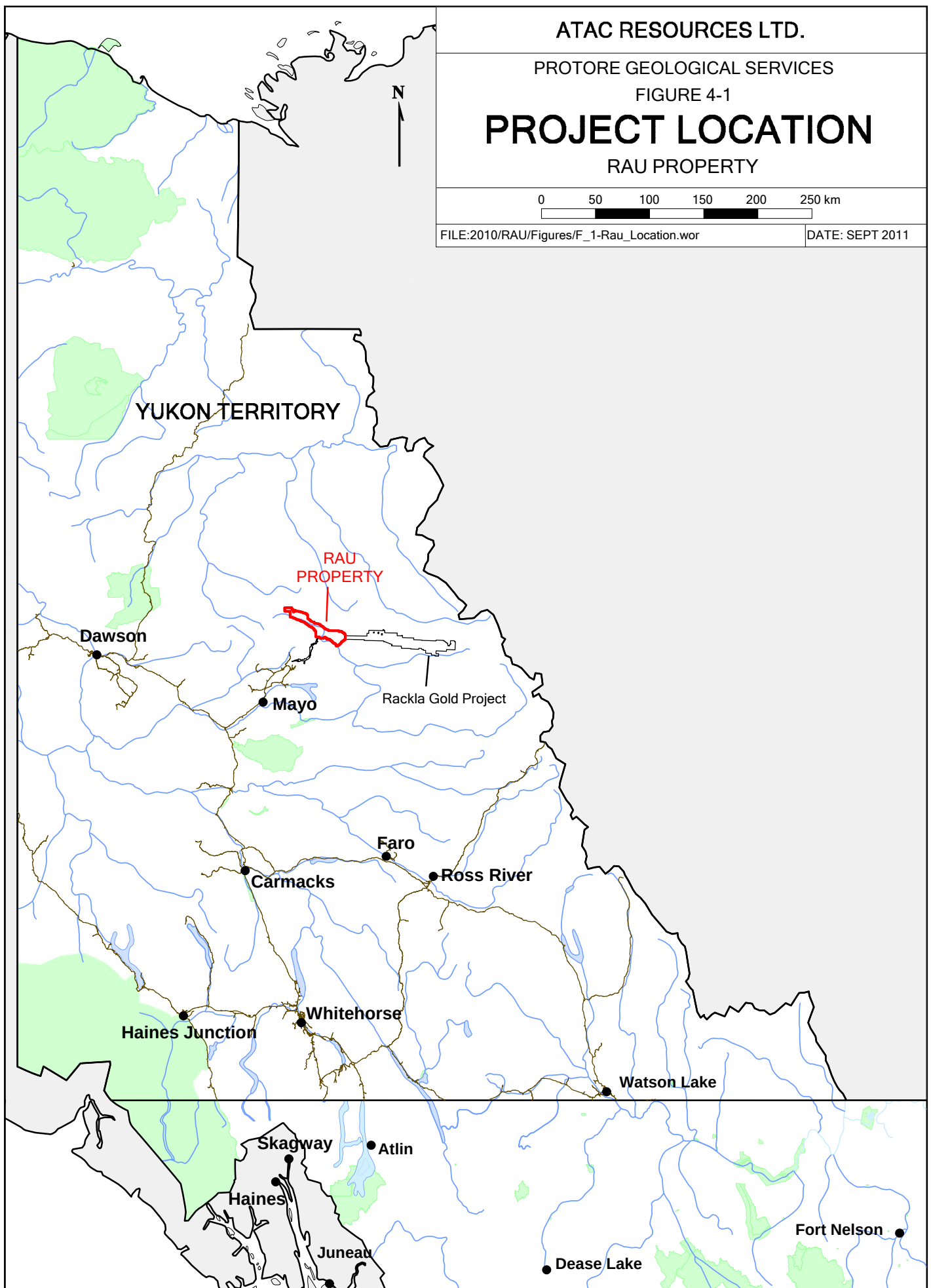
PROJECT LOCATION

RAU PROPERTY

0 50 100 150 200 250 km

FILE:2010/RAU/Figures/F_1-Rau_Location.wor

DATE: SEPT 2011



The mineral claims comprising the Rau Property can be maintained in good standing by performing approved exploration work to a dollar value of \$100 per claim per year. The Authors are not aware of any unusual encumbrances associated with lands underlain by the Rau property.

4.1 Location of Mineralization

The gold mineralization that is the focus of the Technical Report is located on quartz mineral claims Rau 56 and 97F, the location of which is illustrated on Figure 4-3 along with a number of other mineral occurrences documented during previous work programs.

Exploration work is subject to the Mining Land Use Regulations of the Yukon Mining Quartz Act and to the Yukon Environmental and Socio-Economic Assessment Act (YESAA). A land use permit must be obtained and YESAA Board approval issued, before large-scale exploration is conducted. Work performed to obtain the results utilized to prepare the mineral resource estimate and continued exploration has been carried out under a Class III land use permit. A Class III Mining Land Use Permit has been issued for the area of the Tiger Zone deposit (LQ00260) that expires on August 13, 2014. ATAC currently has permit approval to construct an airstrip on claims under the provisions of LQ00317 and an access route permit application is in place.

Potential mine development on the property will require a Yukon Mining Licence and Lease issued by the Yukon Government. There are no other impediments to the Company's surface rights of the Property.

The claim posts on the property have been located by GPS using the UTM coordinate system.

The Property is not encumbered by First Nations Land Claims. There are no tailings ponds on the Property. There are no outstanding environmental liabilities or other significant factors that may affect access, title, the surface rights or ability of the company to perform work on the property determined by the Authors.

4.2 Environmental Considerations

From the onset of exploration at the Rau Property ATAC Resources Ltd. and its main field contractor, Archer, Cathro & Associates (1981) Limited, have consulted with local First Nations of the Na-cho Nyak Dun in recognition and respects of their Traditional Territory. Consultation has been conducted on an ongoing basis at least twice annually providing updates of work conducted and work proposed. In 2010 an Exploration Cooperation Agreement was established between The First Nations of the Na-cho Nyak Dun and ATAC Resources Ltd. to continue development of a long-term working relationship with mutual respect among the two parties.

Environmental monitoring was established and carried out from 2007 to present and consisted of water quality assessment by J. Gibson Environmental Consulting of the main drainages around and within the ridge system hosting the Tiger Zone mineralization and along a proposed future access route from the existing all-season Hansen-McQuesten road through the Franklin creek valley to the property. Wildlife surveys were also conducted within the same general areas by Laberge Environmental Services. In 2009, EBA Engineering Ltd was retained to prepare a terrain analysis for the most appropriate ground access into the property and on-claims. This was done with the use of pre-existing low level government accessible orthophotos. Matrix Research Ltd. was contracted to perform an archaeological assessment of proposed future ground access routes to the property and within an area comprising a proposed airstrip.

Outstanding liabilities within the project area are currently limited to reclamation of the camp, on-claim access and decommissioning of the recently constructed airstrip prior to the expiration of the current Land Use permits.

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FIGURE 4-3

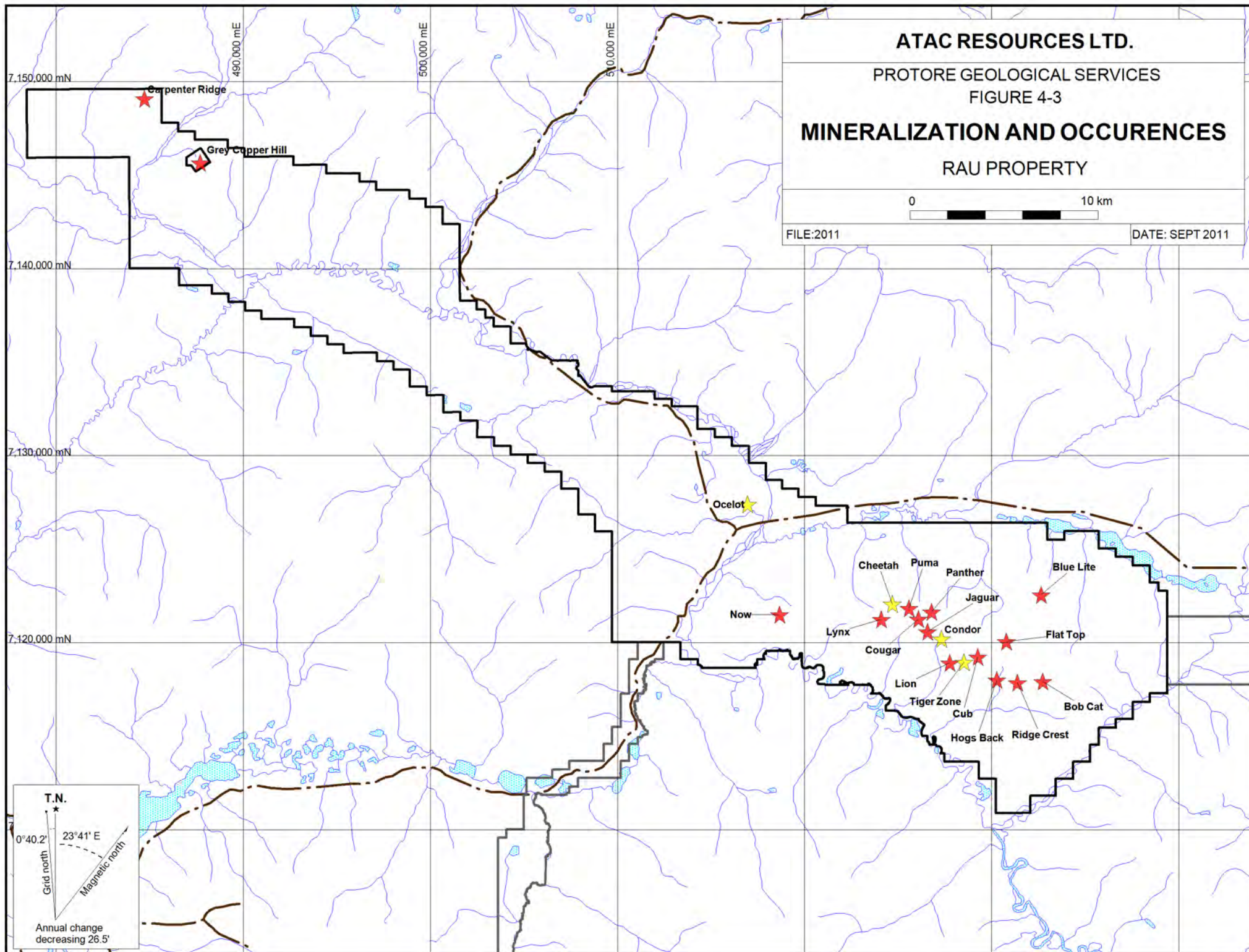
MINERALIZATION AND OCCURENCES

RAU PROPERTY

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DATE: SEPT 2011



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The property lies 100 kilometers northeast of Mayo, the nearest supply centre. The closest road access is to the community of Keno City, situated 49 kilometers by road northeast of Mayo and 55 kilometers by air southwest of the Property. Mayo and Keno City can be reached in all seasons by two wheel drive vehicles using the Yukon highway system from Whitehorse, Yukon. The Wind River trail is also accessible via the Yukon highway system from McQuesten Lake near Keno City and crosses the western portion of the Property. The Wind River Trail has been used intermittently as a winter trail by various exploration companies since it was built in the late 1960s and most recently in 2007 as a winter fuel route into the Wernecke Mountains.

From Whitehorse there is daily jet airplane service to Vancouver, British Columbia and other points south. Whitehorse is a major center of supplies, communications and has a source of skilled labor for exploration diamond drilling, construction and mining operations. Portable electrical generators provide sufficient power for exploration stage programs and the creeks in the area provide sufficient water for camp and diamond drilling requirements on the property. The Property area contains abundant accessible sites for mining, camp sites, potential tailings storage areas and waste disposal areas and potential processing plant sites with no conflicting surface rights.

Access to the property and daily logistical support were accomplished using a Bell 206L4 helicopter based on the property and a Hughes 500D helicopter based at the McQuesten camp. Both helicopters were operated by Fireweed Helicopters Ltd. of Whitehorse. A camp located at McQuesten Lake served as a staging area and as a base of operations for the helicopter borne geophysical surveys and soil sampling crews. If required, fixed wing aircraft can land at the Kathleen Lakes airstrip along the northeastern boundary of the property. These lakes are also suitable for float equipped aircraft. A local road system, constructed in 2009 using a John Deer 450 bulldozer, provided access to the drills in the Tiger Valley. The road system is accessible with the use of four wheel drive ATV from camp to the main drill area.

The Rau property is 66 kilometers long and covers a diverse geomorphological setting. Much of the claim block covers low lying vegetated valley bottom and similarly covered low elevation ridge systems.

The core portion of the Rau property is situated in the Nadeleen Range of the Selwyn Mountains and is drained by creeks that flow into the Rackla and Beaver Rivers, which are both part of the Yukon River watershed. Local topography is alpine to sub-alpine and features north and south-trending rocky spurs and valleys that flank a main east-west trending ridge. Elevations range from 725 meters alongside the Beaver River in the centre of the claim block to 1 800 meters atop a peak, referred to as Monument Hill. Outcrop is most abundant near ridge crests and in actively eroding creek beds. Most hillsides are talus covered at higher elevations and are blanketed by glacial till at lower elevations. Soil development is moderate to poor in most areas.

Tree line in the vicinity of the property is at about 1 500 meters. Slopes above that elevation are unvegetated. The density and size of vegetation gradually increases on lower slopes, and the valley floors are well treed with mature black spruce. Understorey typically consists of low shrubs and moss. Moderately steep, south facing slopes are well drained and are often lightly forested with poplar. Steep, north facing slopes are usually rocky outcrop and talus. Gentler, spruce- and moss-covered terrain exhibits widespread permafrost.

Much of the overburden in the region is associated with the most recent Cordilleran ice sheet, the McConnell glaciation, that is believed to have covered south and central Yukon between 26 500 and 10 000 years ago (Yukon Geological Survey, 2010).

The climate at the Rau Property is typical of northern continental regions with long, cold winters, truncated fall and spring seasons and short, mild summers. Although summers are relatively mild, snowfall can occur in any month at higher elevations. The Property is mostly snow free from early June

to late September, this coincides with the exploration season. According to Environment Canada, central Yukon where Mayo is located, experiences the greatest range of annual temperatures of any place in North America. Mayo holds the Yukon high-temperature record based on June 14, 1969 when the thermometer peaked at 36.1 degrees Celsius. The lowest the temperature has dropped in Mayo is minus 62.2 C, recorded on February 3, 1947. Mayo also holds the Canadian record for the greatest range of absolute temperatures, a difference of 98.3 degrees Celsius between the extreme high and extreme low (Yukon Community Profiles, 2011).

Historical weather records over the past three decades show that the average daytime temperature in January in Mayo is minus 20.5 Celsius, dropping to minus 31 C at night. In July the daytime average was close to plus 23 C; at night the temperature dropped to about 9 C. Annual precipitation averages 313 millimeters. This includes 205 mm of rain and 147 centimeters of snow.

6.0 HISTORY

The locations of the showings referred to in this section are shown on Figure 4-3 while the various surveys conducted by ATAC Resources Ltd. between 2006 and 2010 are shown on Figures 4-4 through 4-6.

The earliest reported exploration within the area covered by the Rau Property occurred in 1922 following the discovery of silver mineralization at Keno Hill when prospectors first identified and staked mineralized float occurrences at Carpenter Ridge in the far northwest corner of the Property. In 1924, reconnaissance work conducted by the Geological Survey of Canada discovered galena-calcite-siderite in float on the southwest end of Carpenter Ridge. A sample of this float returned 8.75 oz silver and 56.0% lead (Cockfield, 1925); however, the source of this mineralization was not found. Hand pits were dug in 1927 and 1928 but little record remains of the work completed during this period. All claims were ultimately dropped.

Nearby at Grey Copper Hill, 9 kilometers to the southeast, silver-rich tetrahedrite float was discovered in 1923 by an independent prospector. This showing and other nearby prospects were staked later that year. Several exploration adits were dug into the hillside during unsuccessful follow up exploration but eventually all claim holdings lapsed.

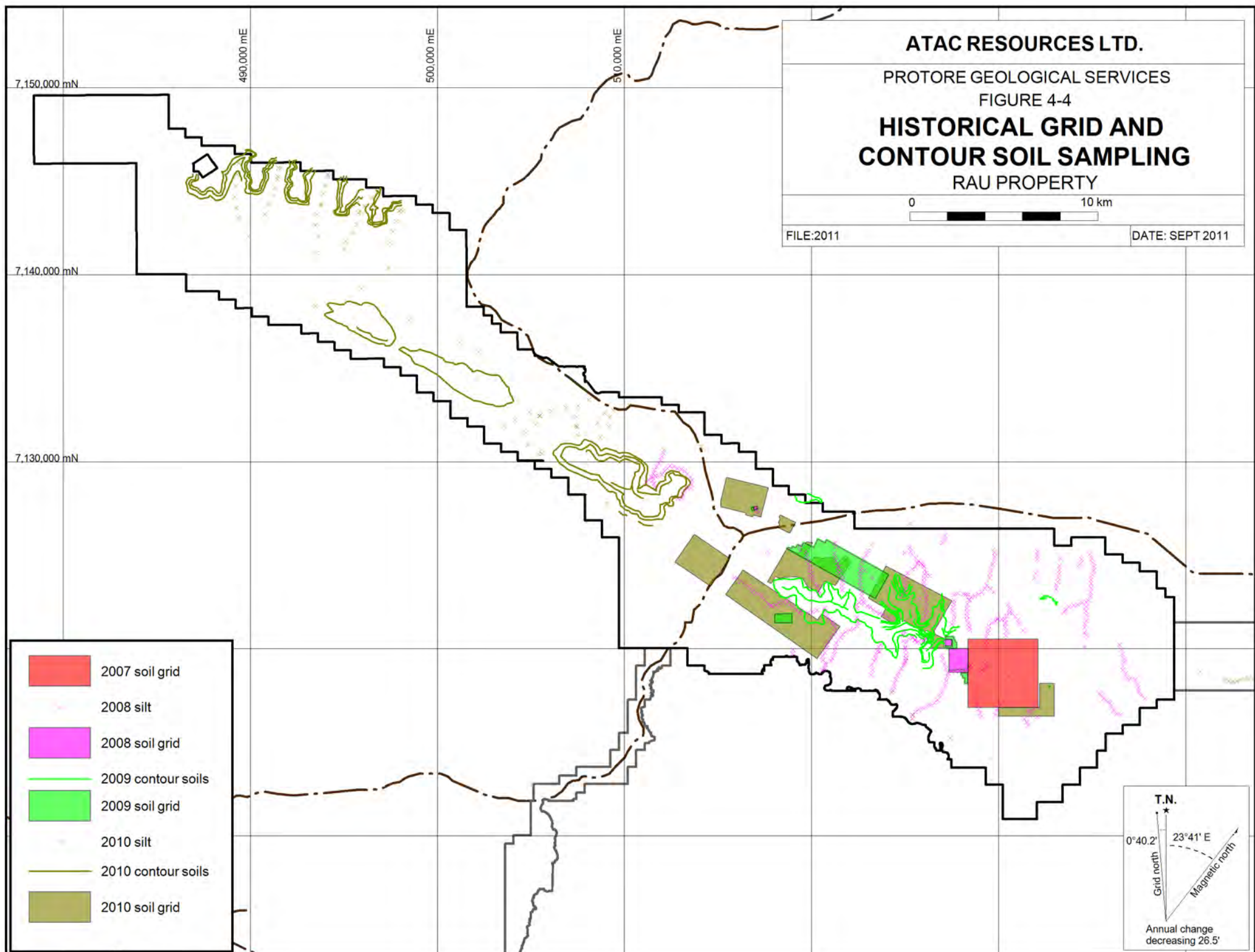
Between 1930 and 1974 Grey Copper Hill was staked several times by independent prospectors and exploration companies, including Cypress Resources Limited and United Keno Hill Mines Limited. Little work was reported (Hilker, 1969) and all claims ultimately expired.

Hesca Resources Corporation Ltd staked Grey Copper Hill in 1974 and conducted prospecting, soil sampling, hand trenching and adit maintenance. In addition two shallow, small diameter diamond drill holes totalling 56.3 meters were drilled; however, the results from this drilling are not documented. No further work was done by Hesca Resources Corporation Ltd. and the claims were dropped (Deklerk and Traynor, 2004).

In spring 1978 Prism Resources Limited staked the Grey Copper Hill area and conducted prospecting and geochemical sampling later that year. Soil sampling identified several lead and silver anomalies; follow up prospecting failed to explain them (Sivertz, 1979). A sample collected from an outcrop of dolomite yielded 0.60% lead and 51.43 g/t silver, while a tetrahedrite sample collected near an old adit assayed 7 000 g/t silver (Sivertz, 1980). The Prism Joint Venture allowed the claims to lapse.

Grey Copper Hill was again staked in 1983 by a prospector who conducted grid soil sampling later that year. This program delineated silver anomalies coincident with surface lineaments. No further work was completed and the claims expired.

In 1988 Bonventures Limited staked the area and conducted limited blast trenching, prospecting, mapping plus soil and rock sampling. A gossan zone with pyrite and strong fracture filling malachite and azurite was identified between two collapsed adits (Carlyle, 1989). These claims eventually lapsed.



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FIGURE 4-5

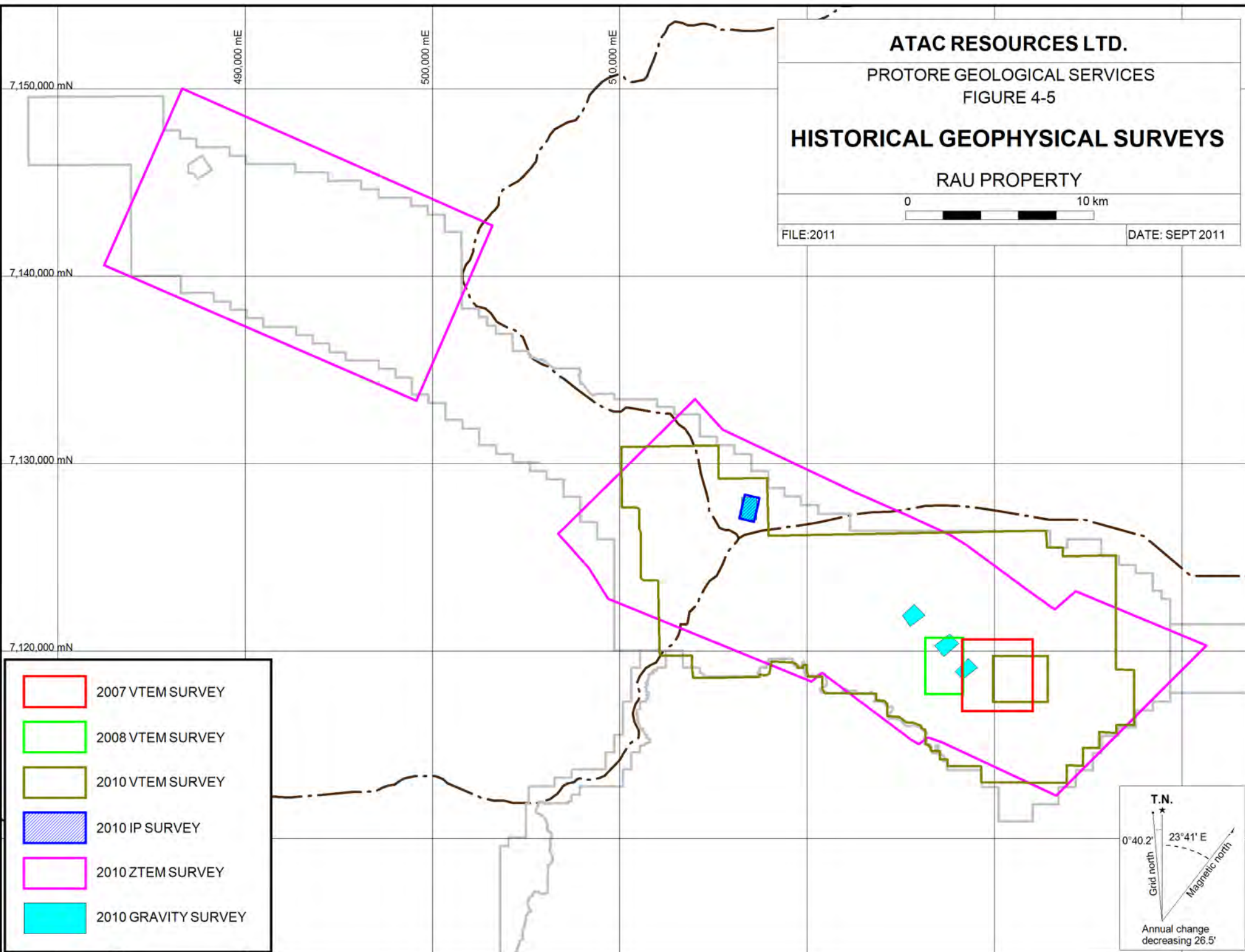
HISTORICAL GEOPHYSICAL SURVEYS

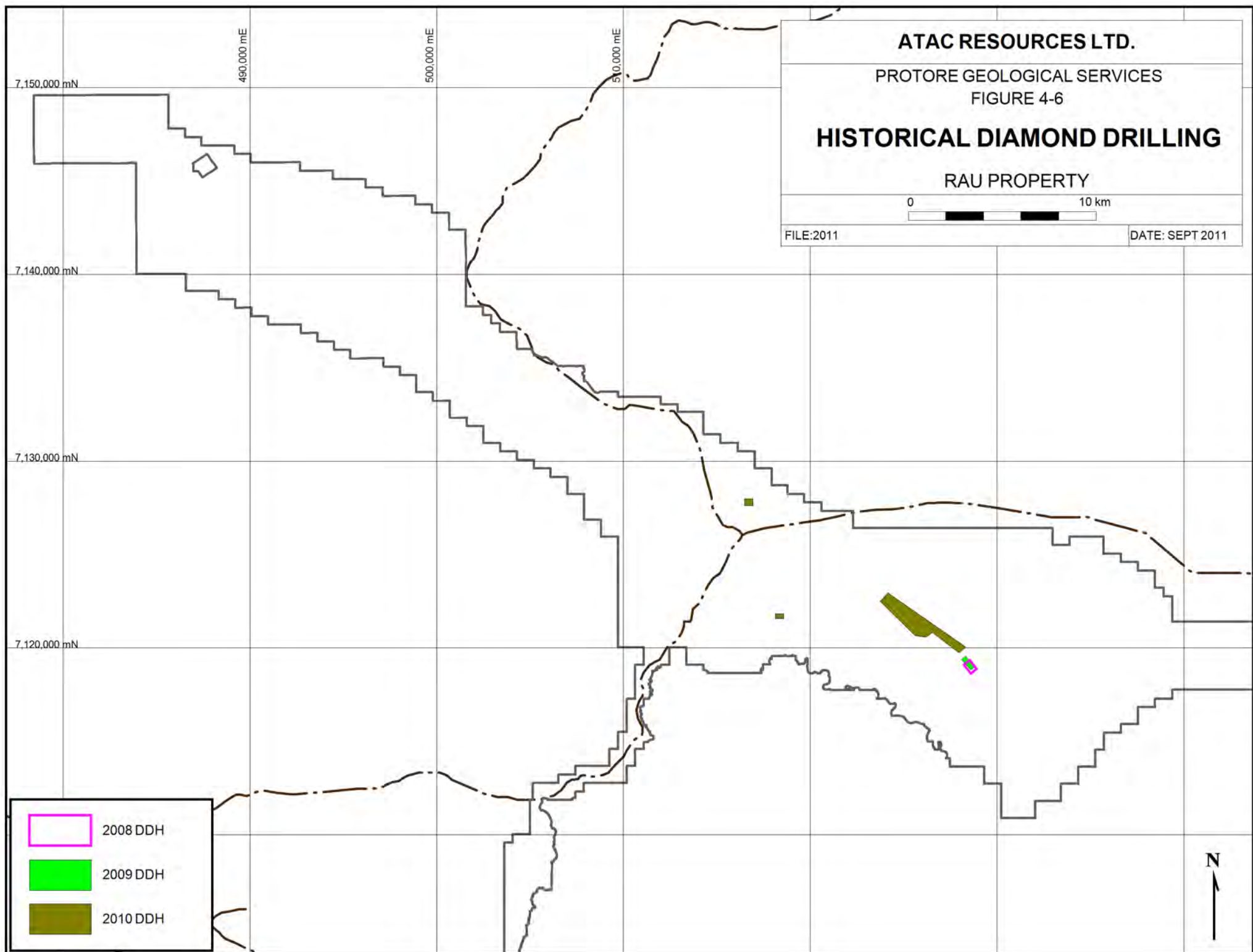
RAU PROPERTY

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The area remained open until August of 2005 when an independent prospector staked four claims over the Grey Copper Hill showing. No work on these claims has been reported and they are now surrounded by the Rau property.

In the central part of the Rau Property, Cominco Limited staked the Beaver claims in 1968 based on results of regional geochemical sampling done the year before. Later that year, L. Elliott staked the nearby Now claims and optioned them to Cominco Limited that completed mapping and soil sampling in 1968 and 1969 (Johnson and Richardson, 1969a and b).

In 1977, Prism Joint Venture (Asamera Oil Corp, Chieftain Development Company Limited, Prism Resources Ltd, Siebens Oil & Gas Limited and E & B Exploration Limited) staked the area of the Cominco Limited claims as part of a larger block that extended for about 20 kilometers along the north side of the Beaver River. In 1979, Dome Petroleum Ltd. replaced Siebens Oil & Gas Limited in the joint venture.

The Prism Joint Venture conducted most of its activities around the original Beaver claims. Soil sampling and mapping were performed in 1977 (Montgomery and Dewonck, 1978) and additional soil sampling and trenching were done in 1978 (Prism Joint Venture, 1979a). In 1979 the Prism Joint Venture completed six diamond drill holes that totaled 610 meters (Dewonck, 1980). This work focused primarily on sedimentary exhalative and Mississippi Valley type lead-zinc mineralization, but resulted in the discovery of a narrow gold-rich vein material (the Now Showing).

NDU Resources Ltd. staked claims over the Now Showing in 1987 to cover the lead, zinc and silver soil geochemical anomalies identified by Cominco Limited and the Prism Joint Venture. The following year, NDU Resources Ltd. conducted a geochemical sampling program that focused on the gold vein mineralization at the Now Showing (Cathro, 1989).

In 1977, 6.25 kilometers further to the northwest, the Prism Joint Venture conducted mapping, soil sampling and electromagnetic surveys. Numerous samples from that program returned high zinc-in-soil values ranging from 2 100 ppm to 12.2%. One sample collected from a large transported gossan (Ocelot Showing) yielded 3.8 g/t silver, 800 ppm lead and 12.2% zinc (Montgomery and Cavey, 1978), suggesting the metals were leached and remobilized in acidic groundwater before being re-precipitated when the fluids were neutralized. These promising results were not followed up. In 1977, the Prism Joint Venture also performed minor soil sampling near a strong gossan developed along the eastern edge of the Rau Property (Kathy Showing) (Prism Joint Venture, 1979b).

In 1979 and 1980, the Prism Joint Venture explored in two areas in the north central part of the Rau Property and conducted prospecting, soil geochemical sampling and one diamond drill hole. This work led to the discovery of scheelite mineralization at the Blue Lite and Flat Top Showings. Well mineralized tremolite skarn specimens from the Flat Top Showing assayed 8.4% WO_3 , but most material graded below 0.04% (Churchill, 1980). No further work was done at either showing.

ATAC Resources Ltd. became interested in the location of an isolated, high gold value (150 ppb) reported by a regional-scale stream sediment geochemical survey, conducted by the Geological Survey of Canada (Hornbrook, et al 1990). This value is in the 99th percentile of gold results from the survey and is supported by a 99th percentile tungsten value (25 ppm). The sample was collected near the Rackla Pluton, east of the Tiger Zone.

In summer 2006, ATAC Resources Ltd. staked 64 claims to cover the anomalous drainage. During the staking, a number of rock and soil samples were collected, many of which returned anomalous values for tungsten and a few were notably enriched in gold, lead, zinc, silver and copper. Cursory prospecting located scheelite-bearing tremolite skarn (Flat Top Showing) and discovered tungsten in diopside-actinolite skarn and highly fractionated intrusive rocks, about 1 500 meters to the south.

In 2007, ATAC Resources Ltd. completed geological mapping, prospecting, grid soil sampling and helicopter-borne variable time-domain electromagnetic (VTEM) surveys (Eaton and Panton, 2008). This work partially delineated a large hydrothermal system centered on the largely buried Rackla Pluton.

Following that program, ATAC Resources Ltd. staked an additional 32 claims, mostly to improve coverage around a very strong gold-in-soil anomaly outlined on the western edge of the grid.

ATAC Resources Ltd. and Yankee Hat Minerals Limited signed an option agreement in spring 2008 concerning 40 claims that covered the Rackla Pluton and the tungsten-bearing skarns. During the summer of 2008 Yankee Hat conducted prospecting and a total of 437.4 meters of diamond drilling in three holes (Dumala, 2008). Several narrow skarn bands with weak to moderate tungsten mineralization were identified within the carbonate host rocks. The option agreement was terminated in late 2008 following poor results and the claims were returned to ATAC Resources Ltd.

Also in the summer of 2008, ATAC Resources Ltd. conducted geological mapping, prospecting, soil and stream sediment geochemical sampling, 3 423.2 meters of diamond drilling in 18 holes and property-wide helicopter-borne magnetic variable time-domain electromagnetic (VTEM) surveys on the claims not covered by the Yankee Hat Minerals Limited option agreement. Drilling identified three stacked, gold-bearing horizons in what is now known as the Tiger Zone. The central horizon (Discovery Horizon) contains gold in iron carbonate replacement and hosts the most abundant mineralization. In 2008, grid soil sampling and stream sediment sampling was extended to the northwest. Property wide geophysical and geochemical surveys completed later in the season suggested the trend extends for as much as 22 kilometers (Dumala, 2009). In response to positive results, ATAC Resources Ltd. added 1 340 claims to cover the favorable stratigraphy along the anomalous trend.

In 2009, ATAC continued to delineate the Tiger Zone with an additional 58 diamond drill holes that totaled 9 578.3 meters (Dumala and Lane, 2010). Drilling identified a significant oxide component to the northwest, within the Tiger Zone. Prospecting in 2009 also identified several new showings containing mineralization similar to that found at the Tiger Zone. These include the Cub, Lion, Jaguar, Panther, Cougar, Puma, Cheetah and Lynx Showings.

ATAC Resources Ltd. continued its exploration campaign in 2010 with regional scale silt and contour soil sampling, localized grid soil sampling, an airborne Z Axis Tipper Electromagnetic survey, continued prospecting and mapping, ground gravity surveys and 18 450.4 meters of diamond drilling. The majority of the diamond drilling was focused within the Tiger zone for the purpose of resource definition but a number of peripheral targets were also tested based on combinations of positive geological, geochemical and geophysical response.

Details of the exploration conducted by ATAC Resources Ltd. and the results of this work are contained in Section 9.

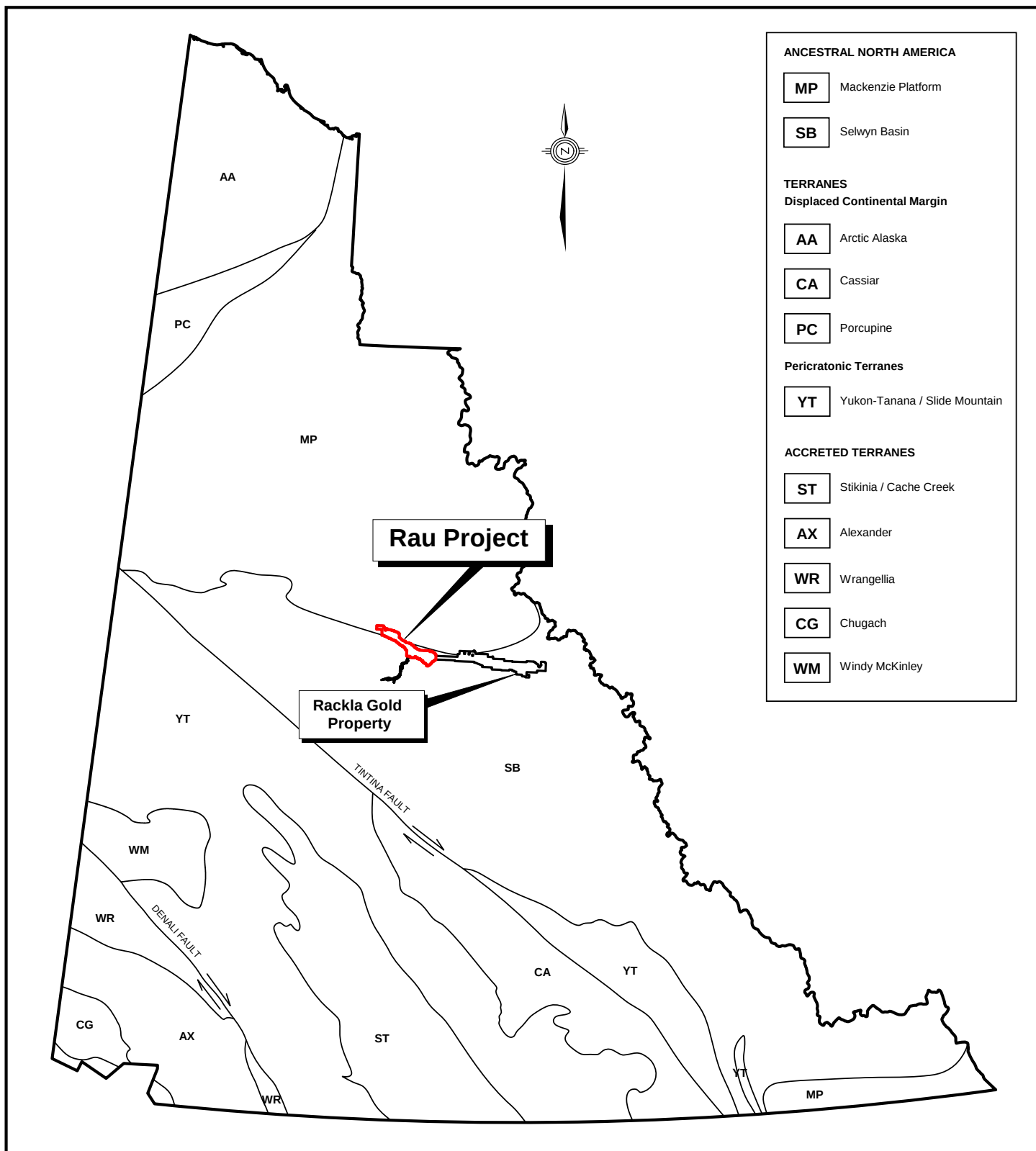
7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Geological Survey of Canada performed geological mapping in the vicinity of the Rau Property at 1:250 000 scale in the 1960s (Green, 1972) and 1970s (Blusson, 1978). More recent mapping in the area was completed at 1:50 000 scale by Indian and Northern Affairs Canada (Abbott, 1990 and Roots, 1990).

The Rau Property lies within a band of regional-scale thrust and high angle reverse faults that imbricate rocks of Selwyn Basin and Mackenzie Platform (Figure 7-1). Selwyn Basin stratigraphy consists of regionally metamorphosed, basinal sediments of Neoproterozoic to Paleozoic age. Mackenzie Platform stratigraphy comprises dominantly shallow water carbonate and clastic sediments that were deposited from Mid-Proterozoic through Paleozoic times. Both packages of sediments were deposited on the western margin of ancestral North America.

The thrust faults were active during Jurassic to Cretaceous times (160 to 130 Ma), when the area underwent compressional orogenesis related to large-scale plate convergence (Fingler, 2005). During Late Cretaceous (94-90 Ma), intermediate to felsic plutons of the Tombstone Suite were emplaced



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FIGURE 7-1

TECTONIC SETTING

RAU PROPERTY

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(Mortensen et al, 2000). Another compressional orogenic event that occurred about 65 Ma, was accompanied by emplacement of felsic intrusions assigned to the McQuesten Suite.

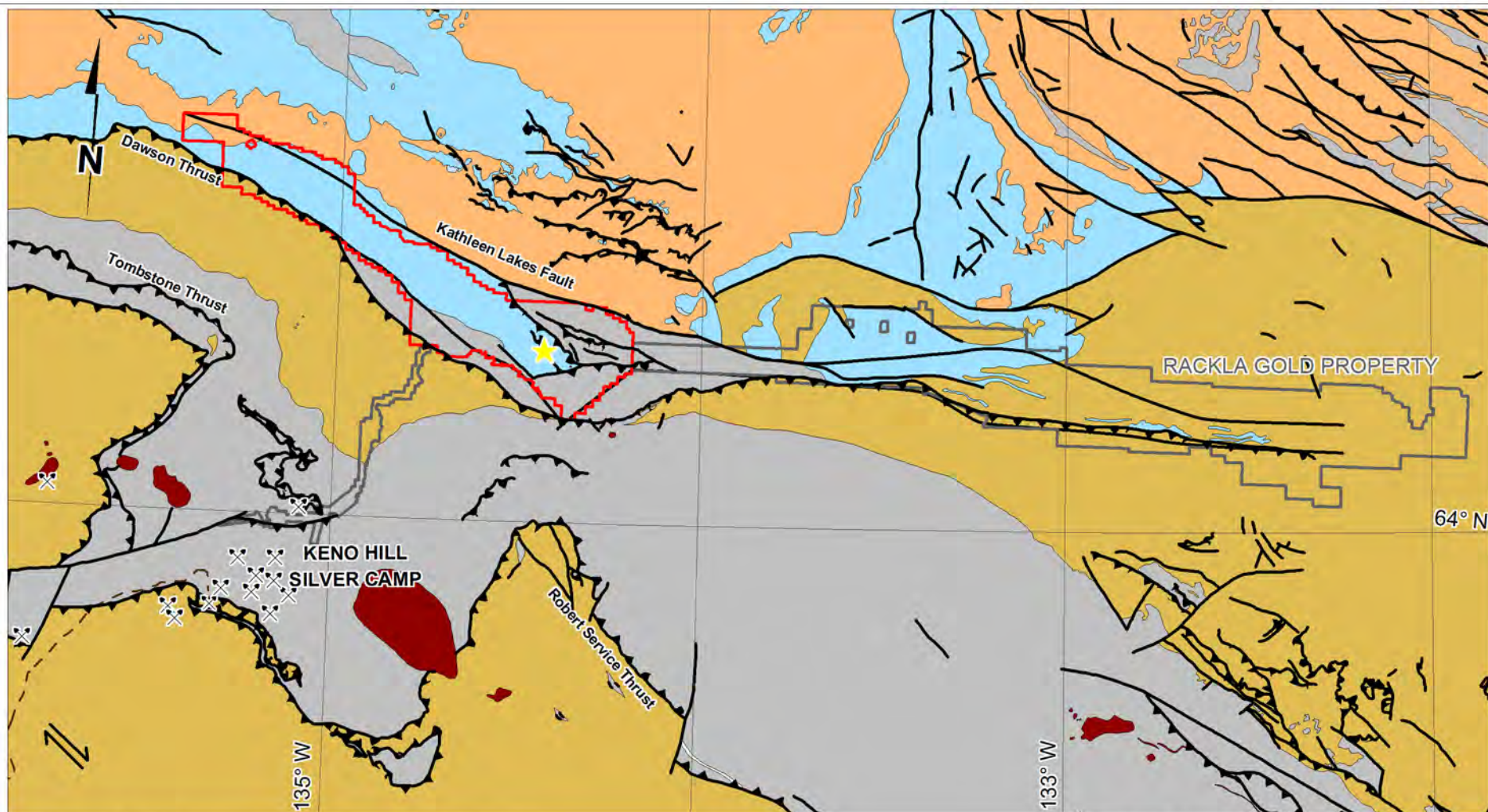
Figure 7-2 shows regional geology in central Yukon. It is a geological compilation that takes into account recent age dating and new unit correlations that Dr. Charlie Roots prepared for the Yukon Geological Survey (Cathro, 2006).

The Tombstone, Dawson and Robert Service thrust faults plus a number of lesser thrust faults affect stratigraphy along the trend of the Rau claim block. All thrusts verge northeasterly and predate emplacement of the Tombstone Suite intrusions. The thrust panel that contains the Rau Property approximately straddles the boundary between Selwyn Basin and Mackenzie Platform and includes units belonging to both tectonic elements.

Table 7-1 contains a brief summary of the rock units in the area of the Rau Property.

Table 7-1: Regional Lithological Units (after Roots in Cathro, 2006)

<u>Tectonic Element</u>	<u>Age (Ma)</u>	<u>Unit and Lithologies</u>
<u>Rocks of Ancestral North America</u>		
Mackenzie Platform	1700 - 1800	Gillespie Lake Group: orange-brown dolostone and sandstone.
Mackenzie Platform	540 - 390	Bouvette Formation: white and grey limestone with rare black shale.
Mackenzie Platform	540 - 420	Marmot Formation: dark green to brown mafic, vesicular and amygdaloidal volcanic flows.
Selwyn Basin	750? - 530	Hyland Group: brown quartz-mica schist, with rare limestone.
Selwyn Basin	530 - 500	Gull Lake Formation: brown and green shale, sandstone, conglomerate and volcanic tuff.
Selwyn Basin	500 - 480	Rabbitkettle Formation: dark silty limestone and limy mica-rich conglomerate.
Selwyn Basin	480 - 390	Road River Group: black shale, chert and limy siltstone.
<u>Rock formed before orogenic event</u>		
	390 - 350	Earn Group: black shale and chert with lesser pebble conglomerate, sandstone and grit.
	340	Keno Hill Quartzite: grey metamorphosed sandstone, minor black shale and phyllite.
<u>Rocks formed during orogenic event</u>		
	225	Galena Suite intrusions: brown and green diorite and gabbro.
	200 - 250	Jones Lake and Mt. Christie Formations: sandstone, brown shale and dark limestone.
<u>Rocks formed after orogenic event</u>		
	90 - 94	Tombstone Suite intrusions: granite and granodiorite.
	62 - 67	McQuesten Suite intrusions: granite with two types of mica.



Modified from: Gordey and Makepeace (2001)

- | | |
|--|---|
| Tombstone Suite Intrusions | Former mine |
| Earn Group | High angle fault |
| Bouvette Formation | <div style="position: absolute; left: 0; top: 50%; transform: translateY(-50%); width: 100%; height: 2px; background: linear-gradient(to right, transparent 49%, black 49%, black 51%, transparent 51%);"></div> Thrust fault |
| Hyland Group | <div style="position: absolute; left: 0; top: 50%; transform: translateY(-50%); width: 100%; height: 2px; background: linear-gradient(to right, transparent 49%, black 49%, black 51%, transparent 51%);"></div> Major transcurrent fault |
| Proterozoic Sediments | Road |
| | Tiger Zone |

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PROTORE GEOLOGICAL SERVICES FIGURE 7-2	
REGIONAL GEOLOGY RAU PROPERTY	
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FILE:2011	DATE: SEPT 2011

Sediments younger than 3 Ma

0 - 3

Overburden: ice-deposited sand and gravel; river silt.

7.2 Property Geology

Very little detail geological mapping has been conducted within the Property boundary. Most work has focused within the favorable Bouvette Formation stratigraphy in close proximity to the Tiger Zone mineralization. The following descriptions are taken largely from previously documented government and historical mapping.

The Rau Property lies within a northwest trending thrust package bound to the south by the Dawson Thrust and to the north by the Kathleen Lakes Fault (Figure 7-3). Stratigraphy within this package forms open folds that are aligned parallel to the thrusts and plunge gently to the southeast. Several high angle faults that parallel the general structural trend are inferred on the Property and others could be present. One or more of these faults may have acted as a conduit for mineralizing fluids.

The Bouvette Formation is the most abundant inferred rock type shown on government based maps and is the principal focus of ATAC Resources Ltd. exploration. It can be divided into three main units that young to the northeast. In order from oldest to youngest:

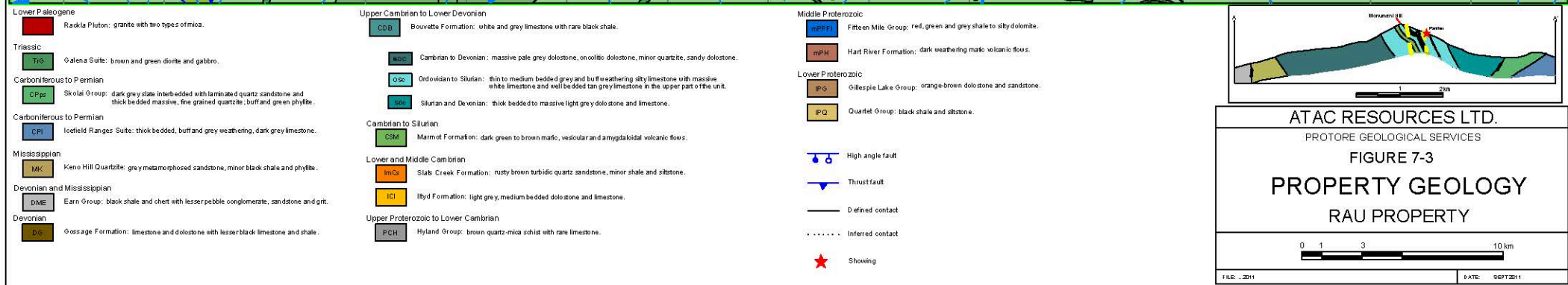
- 1) Cambrian and Ordovician – massive pale grey dolostone, oncolitic dolostone, minor quartzite and sandy dolostone.
- 2) Ordovician and/or Silurian – thin to medium bedded grey and buff weathering silty limestone; massive white limestone, well bedded tan and grey limestone in the upper part of the unit.
- 3) Silurian and Devonian – thick bedded to massive light grey dolostone and limestone. Dark grey, fetid limestone that contains “two-hole” and “star” crinoids occurs at the top of the unit.

The thickness of the Bouvette Formation on the Property is estimated to be at least 1 400 meters. The primary focus of mapping has been largely limited to the area around Monument Hill and the Tiger Zone within the Ordovician-Silurian strata hosting carbonate gold replacement mineralization. Elsewhere the Bouvette Formation has not been mapped in detail and remains undifferentiated.

A narrow sliver of Middle Proterozoic Fifteen Mile Group dolostone lies beneath the Bouvette Formation, to the southwest. This unit is composed of chocolate to orange brown weathering, cryptalgal laminated, medium to thick bedded dolostone, overlain by rusty brown weathering, olive green siltstone and shale with lesser maroon black and buff shale.

The Marmot Formation consists of thin volcanic horizons that are inter-bedded with the Ordovician and/or Silurian Bouvette Formation. The horizons range from a few meters to about 20 meters thick and comprise dark green to brown weathering mafic, vesicular volcanic flows, carbonate-cemented hyaloclastic breccias and volcanic-derived sandstone, grit and pebble and cobble conglomerate. Locally these horizons are magnetic. Although the Marmot Formation is volumetrically insignificant, it appears to have played an important role in localizing mineralization in the underlying carbonate by acting as an impermeable cap.

Devonian and Mississippian Earn Group rocks are located in the southern half of the property and bounds the Bouvette Formation to the south, east and north. This unit is generally recessive weathering and is mostly composed of black shale and chert. To the south a high angle normal fault places Earn Group against Bouvette Formation, while a thrust fault marks the southeastern contact. To the north, the Earn Group conformably lies above Cambrian to Devonian shale and limestone, which has been placed against the Bouvette Formation by another high angle fault.



The central part of the property hosts numerous dykes and sills believed to represent a roughly 1000 m diameter granitic plug referred to as the "Rackla Pluton". The plug is mostly composed of coarse grained, equigranular, biotite-and muscovite-bearing granite that locally is miarolitic (Panton 2008). The dykes and sills typically range between 30 centimeters and seven meters in thickness. They are often more fractionated than the plug and include garnet bearing aplite and coarse pegmatite that locally features beryl, amazonite (a green variety of feldspar) and one or more tourmaline minerals (rubellite, indigolite and schorl). The pegmatite bodies comprise mainly orthoclase and quartz but often exhibit abundant lithium-and vanadium-rich micas on their margins.

On surface, the Rackla Pluton is mostly covered by glacial till and only aplite and pegmatite sills and dykes are visible. The pluton is best delineated by its airborne magnetic signature. At the property scale the pluton is represented by a strong magnetic high. When the data is collapsed to the area immediately surrounding the pluton and a high-pass filter is applied, the signature shows a core magnetic low with a fringing magnetic high.

Analysis of several small bodies of granitic aplite and pegmatite have yielded $^{40}\text{Ar}/^{39}\text{Ar}$ muscovite ages of 62.3 ± 0.7 Ma, 62.4 ± 1.8 Ma and 59.1 ± 2.0 Ma (Kingston, 2009 and Kingston et al., 2010). Based on this data and the composition of the intrusion, Kingston concludes that the Rackla Pluton is younger than the McQuesten Suite (65.2 ± 2.0 Ma) intrusive bodies.

Skarn and minor hornfels are developed locally within the Bouvette Formation proximal to the intrusions. Skarn grades from distal tremolite-rich (iron-deficient) facies, which are most abundant near the Flat Top Showing (about 1 000 meters northwest of the pluton), to proximal actinolite-diopside $\pm$ garnet $\pm$ pyrrhotite (iron-rich) facies, which are found closer to the pluton and on the margins of some dykes and sills. Massive skarns are mostly developed at contacts between limestone and volcanoclastic horizons. Hornfels is restricted to thin volcanoclastic layers within the Marmot Formation. It is normally rusty weathering and often contains disseminated to semi-massive pyrrhotite. Limestone and dolomite are locally altered to marble and often contain disseminated, light grey scapolite crystals. The scapolite is difficult to recognize on freshly broken surfaces but stands out on weathered surfaces as prismatic randomly orientated crystals.

7.3 Deposit Scale Lithology

During 2010 detail deposit scale mapping was conducted within the Bouvette Formation carbonate sequence in the vicinity of the Tiger Zone mineralization. This work was conducted at different periods during the field season by Dr. Elizabeth Turner (Laurentian University) and Dr. Harry E. Cook (Nevada consultant and formerly with the USGS). The following descriptions are largely based upon the observations made by Drs. Turner and Cook.

The stratigraphy of the carbonate sequence at the Tiger Zone was established using rock texture, fossil composition and relationships with the inter-layered non-carbonate material. Most carbonate, volcanic flow and volcanoclastic lithostratigraphic units exposed at surface are relatively laterally continuous but differences in structural thinning of individual units are evidenced.

The stratigraphic succession exposed at surface above the Tiger Zone mineralization consists of ten carbonate units (0-10) and seven intercalated non-carbonate units (A-G). Carbonate units 1 through 10 are identified based largely on their fossil composition, textures and relationships with associated volcanic and volcanoclastic rocks. These carbonate units are grouped into four subtly distinct packages based on fossil content and rock texture. Non-carbonate units A through G consist of volcanic flows and associated reworked volcanic material.

The relationship of the map units and descriptions are illustrated in Figure 7-4.

Mineralization at the Tiger Zone is hosted by carbonates in the middle of the succession near the contact of Carbonate Unit 2 and Volcanoclastic Unit B. Additional mineralization in an upper horizon occurs within

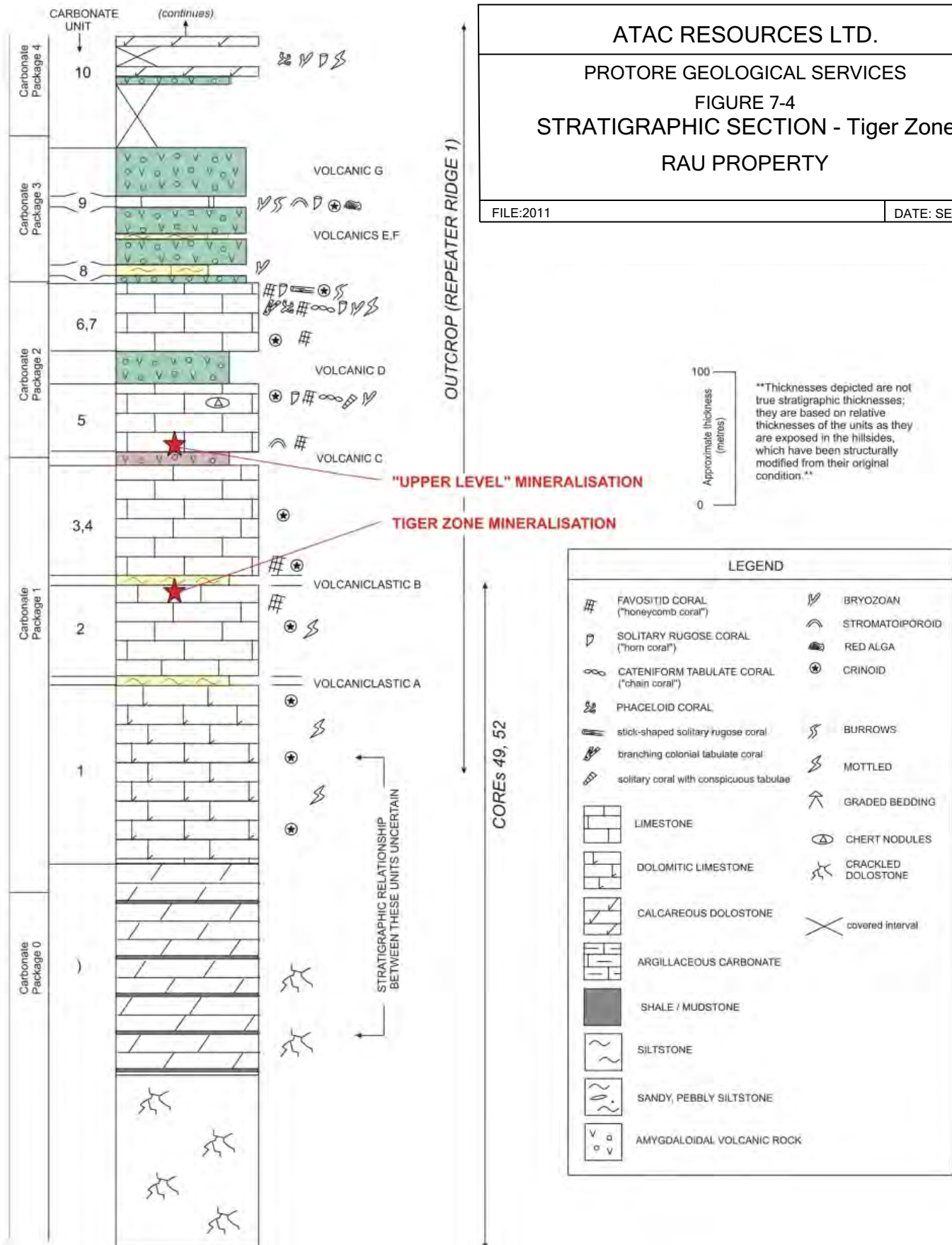
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FIGURE 7-4 STRATIGRAPHIC SECTION - Tiger Zone RAU PROPERTY

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carbonates of the lower Carbonate Unit 5 immediately above the lowest amygduloidal volcanic unit. A brief description of all pertinent stratigraphy comprising the stratigraphic column is contained below.

Carbonate Unit 0 consists of graded beds of dark grey to black, variably calcareous mudstone or argillaceous carbonate mudstone, interlayered with paler layers of coarser particles. Original layering is generally obliterated by collapse brecciation, such that dark and light breccia clasts are intermingled. The original layering, where preserved, represents turbidites. This lithofacies passes downward into crystalline dolostone with no hint of original rock texture. The exact relationship with overlying units 1-10 is uncertain because the core crosses a presumed fault zone.

Carbonate Unit 1 is dominated by crinoid wackestone and lime mudstone, with rare favositid and halysitid coral fragments and solitary rugose corals. Yellow dolomitic mottles are locally conspicuous.

Volcaniclastic Unit A consists of sericitized silt- to mud-grade clastic material presumed to be of volcanic origin. It may be laterally equivalent to a thin pyroclastic flow exposed on the knoll of the Puma showing.

Carbonate Unit 2 is dominated by lime mudstone with rare crinoid fragments. Layering and sedimentary structures are generally absent.

Volcaniclastic Unit B consists of sericitized silt- to mud-grade clastic material and local granule-grade particles, and is presumed to be of volcanic origin. It may be laterally equivalent to a thick pyroclastic flow exposed on the knoll of the Puma showing.

Carbonate Units 3 and 4 are dominated by crinoid wackestone and lime mudstone, with no layering or sedimentary structures.

Volcanic Unit C consists of brownish-green-weathering variably amygdaloidal volcanic flows and associated volcaniclastic material.

Carbonate Units 5 to 7 consist of lime mudstone to crinoid wackestone with rare large fossils that are dominated by a range of tabulate and rugose corals and distributed both as isolated specimens and in conspicuous fossil-rich rudstone to floatstone layers. Carbonates 5 and 6 are separated by a green-weathering volcanic flow unit (Volcanic D). Carbonate 7 is overlain by volcanic flow unit E.

Volcanic Unit D is a conspicuously green-weathering volcanic flow unit that generally lacks vesicular textures. It lies between carbonate units 5 and 6.

Volcanic Unit E is a very thin (several metres), green-weathering amygdaloidal flow unit

Carbonate Unit 8 is very thin and lies between volcanic flow units E and F. It consists of bryozoan floatstone in a matrix of mixed carbonate mudstone and volcaniclastic fines.

Carbonate Unit 9 thinly separates volcanic flow units F and G, and consists of lime mudstone and skeletal wackestone with a characteristic fauna of bryozoans, rugose corals and crinoid fragments.

Volcanic Unit F is a green-grey-weathering amygdaloidal flow unit.

Carbonate Unit 10 is a group of different rock types, including distinctly mottled carbonates, lenses of amygdaloidal volcanic rock and bright orange marker dolostone layers. The biota is dominated by large phaceloid tabulate corals, bryozoans, and rugose corals concentrated in certain beds only. This part of the succession is exposed at Repeater Plateau and Monument Ridge north, but was not examined in detail. Its contact with the underlying volcanic succession (volcanics E-G) may be structurally modified.

7.4 Mineralization

Several types of mineralization are known to occur on the Rau Property including: 1) sediment-hosted replacement-style gold; 2) zinc±silver±lead±gold±bismuth in limonite-rich veins and replacement bodies; 3) scheelite in tremolite skarns; 4) pyrrhotite±scheelite±chalcopyrite in actinolite-diopside±garnet skarns; 5) wolframite±tantalite in granite; and 6) gold bearing quartz-boulangerite veins. 7) iron±zinc in hydromorphically transported gossans. The sediment-hosted replacement style gold mineralization is the most significant economic mineralization explored on the property to date and includes the Tiger Zone.

Replacement Style Gold Mineralization – Tiger Zone

Replacement style gold mineralization has been the primary focus of exploration on the Rau Property. The Tiger Zone is the best understood and most aggressively explored type of occurrence identified to date and is the focus of this technical report.

Tiger Zone

The Tiger Zone is located 3 kilometers west-northwest of the Rackla Pluton in a moderate to steep walled valley. It consists of a thick northwesterly trending body of carbonate replacement style gold mineralization hosted by a moderately northeast dipping horizon. It is currently 700 meters long, 100 to 200 meters wide and up to 96 meters thick. Mineralization is developed within and adjacent to a regionally extensive corridor of highly strained rocks that are manifested as a 40 to 150 meter wide zone of small scale folding and shearing. The geometry of the mineralized system is defined by a series of stacked and folded carbonate horizons intercalated with locally extensive mafic flows and volcanoclastic units.

Most of the exploration at the Tiger Zone has been directed toward the Discovery Horizon, although there is evidence of at least one additional stratabound interval of gold mineralization above the Discovery Horizon.

Due to a combination of topography, overburden and stratigraphic orientation, the Discovery Horizon is the only mineralized horizon observed at surface. It is exposed over a 75 meter long by 10 meter wide area on the east side of Tiger Creek. At the northeast end of this exposure, a hand trench dug in 2009 uncovered moderately oxidized limonite boxwork with remnant sulphide mineralization, capped by highly sericite altered volcanoclastic unit. Two samples of sub crop collected in 2008 from the area near this trench returned 22.5 g/t gold, greater than 1% arsenic, 415 ppm bismuth and 116 ppm tungsten; and 13.6 g/t gold, greater than 1% arsenic, 410 ppm bismuth and 51.9 ppm tungsten.

Gold occurs in both sulphide and oxide facies mineralization at the Tiger Zone. Sulphide mineralization is accompanied by, and developed within, limestone that is replaced by ferruginous dolomite and iron carbonate minerals. Sulphide species consist of disseminated to banded pyrite, with subordinate arsenopyrite and pyrrhotite and minor bismuthinite and sphalerite. Small amounts of disseminated scheelite are also present. The main sulphide minerals exhibit at least three stages of mineralization. The best intersection from sulphide bearing mineralization averaged 4.04 g/t gold over 96.0 meters true width from hole Rau-09-66.

Oxide mineralization is completely devoid of sulphide minerals and ranges from very competent, weakly porous limonitic mud to rubbly porous limonitic grit. The oxide appears texturally amorphous within most intersections but occasionally exhibits residual color banding that may represent relict sulphide textures. Complete oxidation extends up to 150 meters from surface. The best oxide grades (e.g. hole Rau-09-19 assayed 24.07 g/t gold across 28.0 meters) and deepest oxidation occur where northerly trending extensional faults intersect the northwest trending regional shear structure. Detail observations predominantly collected from drill core on site are described below with respect to pre-mineralizing

ground preparation and sulphide/oxide paragenesis. Much of this work was conducted by Master's student Eric Theissen for paragenetic studies being conducted by the University of Alberta.
Carbonate Ground Preparation

The favorable carbonate lithological horizons consist of carbonate units 2, 3, and 4. Carbonate unit 2 is expressed in drill core as mineralized and non-mineralized Tiger zone equivalent stratigraphy and carbonate units 3 and 4 occur stratigraphically above the Tiger Zone mineralization.

Ground prepared units are characterized by grey fluid-assisted to solution collapse brecciated lime-mudstone to dolo-mudstone. Clasts average 3 to 10 centimeters and have sub-angular to sub-rounded to corrosive-irregular margins with many re-entrants due to dissolution and subsequent clast formation. These primary carbonate clasts average a homogenous to slightly mottled medium-grey colour. Mottling is due to bioturbation as well as irregular anastomosing stylo-mottling. Fossils and clastic textures are rare. Single-seamed serrated stylolites are common and may be as abundant as several hundred per meter in places. Polyphase carbonate and silicate fluid events establish what is observed today as classic karst dissolution and phreatic zone precipitation followed by subsequent open-space filling fluids (Figure 7-5 to 8).

Plate 1



Figure 7.5: Solution collapse karst, dogtooth calcite spar grows into the vug.



Figure 7.6: Solution collapse karst, dogtooth calcite spar is lined with pyrobitumen with a calcite vug infill.



Figure 7.7: Solution collapse karst, limestone hosts abundant stylolites.



Figure 7.8: Solution collapse karst, with a quartz vug infill.

The delicate and irregular margins of the carbonate clasts as well as the rarely preserved speleothems are the product of meteoric karsts that differ from the 'puzzle piece' angular fragments commonly produced from tectonic brecciation. The clasts and open space margins are lined by 'dog-tooth' calcite spar, white sub-centimeter size angular calcite crystals which are in turn often rimmed by a thin veneer of sub-mm size tabular pyrobitumen. The 'dog-tooth' calcite spar cement, which lines open spaces and clasts, is a product of calcite crystallization in the phreatic zone of the meteoric realm, meaning that the open spaces were fully saturated with meteoric fluids allowing isopachous crystallization on all clast faces and open spaces. This calcite spar is also differentiated from marine cement since it exhibits a low-Mg calcite (Figure 7-9 to 14).

Plate 2



Figure 7.9: Fresh karsted limestone before staining.

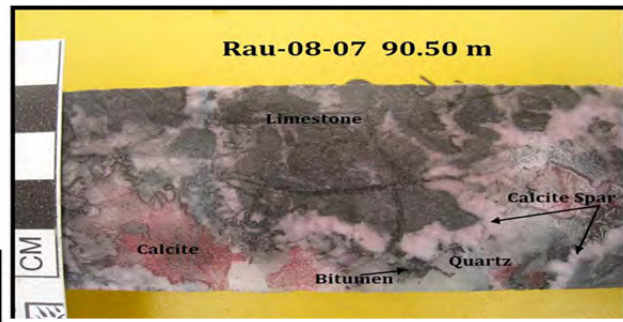


Figure 7.10: Limestone after staining. Pink to red colour indicates calcite, areas with higher relief (quartz) have not been removed via the etching process.

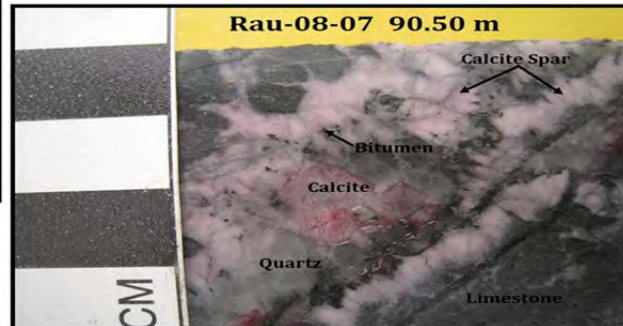


Figure 7.11: Close up of stained karsted limestone

Plate 3

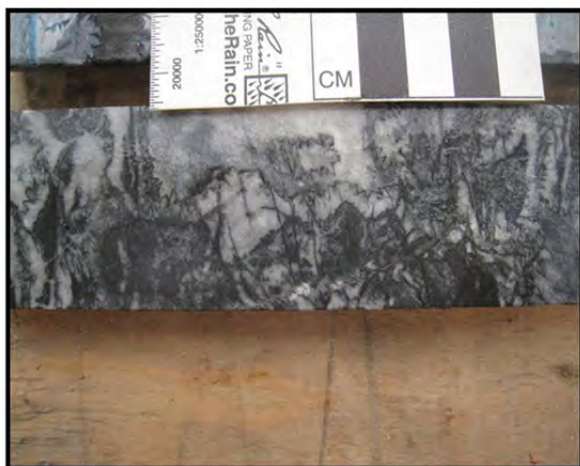


Figure 7.12: Unstained karsted limestone.

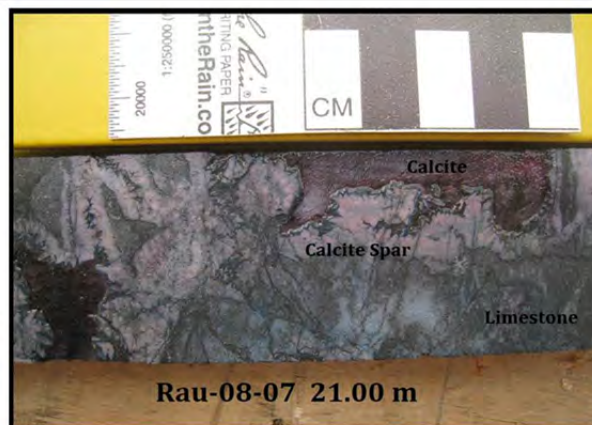


Figure 7.13: Stained karsted limestone. Pink to red indicates calcite, dark blue indicated ankerite

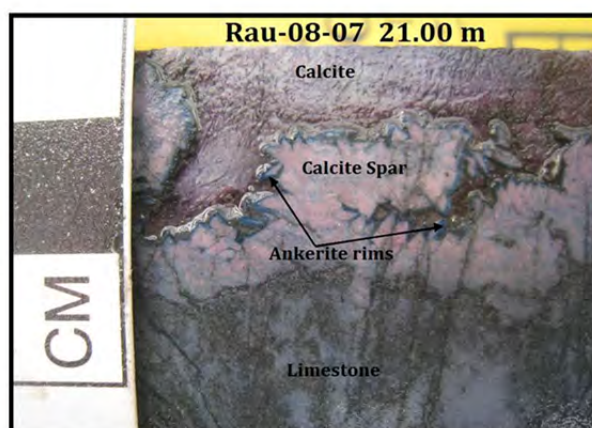


Figure 7.14: Close up of stained karsted limestone. Pink to red indicates calcite, dark blue indicates ankerite.

Regionally thrust and compressed basinal shales may be the source of pyrobitumen that channel through platform porosity. It is likely that petroleum residues once resided in the karst produced openings, later remobilized and are now lining the calcite spar. Open space filling is primarily composed of a clear anhedral pyrite-bearing quartz-calcite phase with other phases of grey coarse-grained calcite filling voids.

This carbonate unit is interpreted to have acted as a fluid pathway or ground preparation for the mineralization present today. The favorable mineralized horizon, Carbonate unit 2, bounded by two volcanic packages exposed at surface.

Tiger Zone sulfide paragenesis

The primary Tiger Zone mineralization occurred in at least three distinct events with potentially more cryptic events. The earliest recognizable event in the Tiger Zone, phase one, is a pervasive, fabric destructive, re-crystallized hydrothermal ankerite phase associated with arsenopyrite. The ankerite occurs as medium to coarse-grained euhedral to anhedral angular crystals that have no distinct sign of strain. Some mineralized open spaces, postulated to be equivalent to the karstification vugs in non-mineralized units, display hydrothermal saddle ankerite with curvilinear crystal faces. The ankerite varies in colour from a deep peach-salmon colour to a white-buff colour (Figures 7-15 to 18).

Plate 4

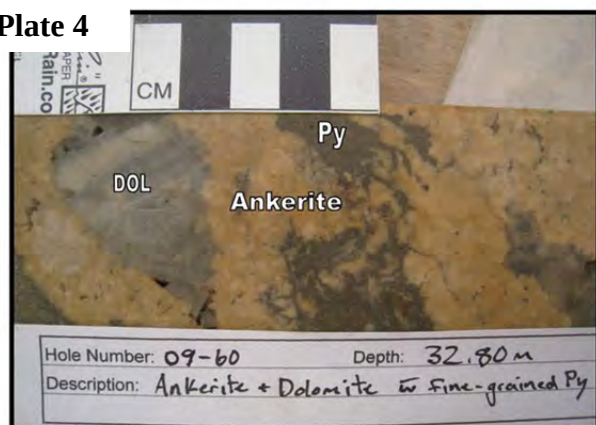


Figure 7.15: Unstained Tiger Zone sample of peach coloured ankerite intruded by a grey dolomite with subsequent fine-grained pyrite overprint.

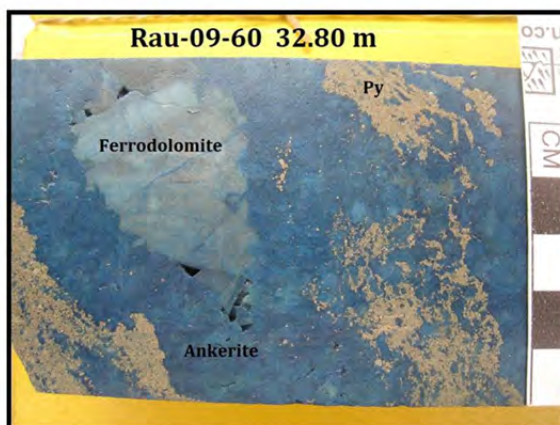


Figure 7.16: Stained sample from Figure 7.15, Dark blue indicates ankerite, pale blue is ferrodolomite, the sulfide present is pyrite.

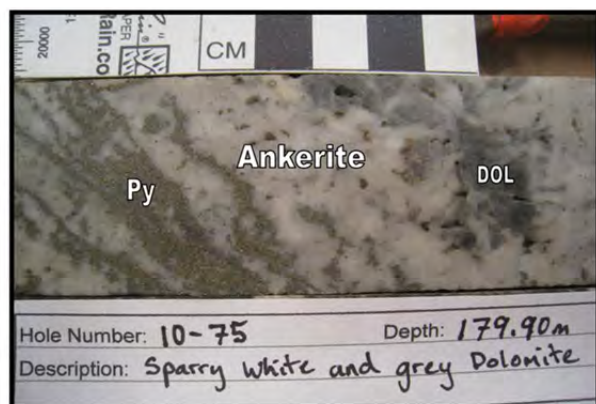


Figure 7.17: Unstained Tiger Zone sample of white ankerite and grey dolomite are hosts to a fine-grained pyrite.

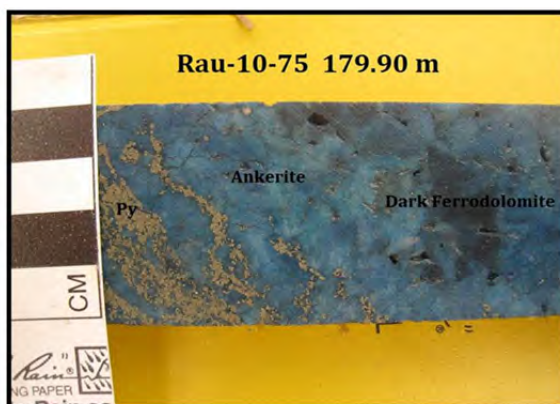


Figure 7.18: Stained sample from Figure 7.14. White ankerite is stained dark blue. The darkest blue portion is usually ankerite, however the dark ferrodolomite with a pale blue stain has the appearance of ankerite with staining.

Ankerite in the Tiger Zone occurs in these two seemingly distinct forms, the white version is dolomite as confirmed using the carbonate staining technique 'Alizarin Red and Potassium Ferricyanide' (Figures 7-21 and 23). The arsenopyrite occurs commonly as disseminations to weakly bedding/cleavage plane parallel and crystals are medium to coarse-grained and commonly euhedral. Arsenopyrite crystals appear to be in equilibrium with the initial carbonate phases as well as being unstrained (Figure 7-24). The arsenopyrite and ankerite are thought to have been precipitated by a common arsenian and iron rich hydrothermal fluid.

Phase two of the sulphide mineralization is characterized by pyrite precipitated in a strained environment to produce parallel bands (stripes) that give rise to the "Tiger" stripe nature of sulphide mineralization (Figure 7-19 to 22).

Plate 5

Figure 7.19: Tiger Zone mineralization. Unstrained ankerite and arsenopyrite in equilibrium with foliated pyrite 1.



Figure 7.20: Foliated pyrite 1 cutting lighter coloured ankerite.

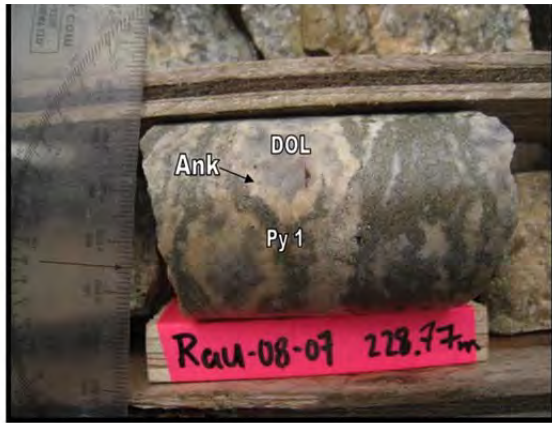


Figure 7.21: Grey dolomite intruding and warping ankerite and pyrite 1.

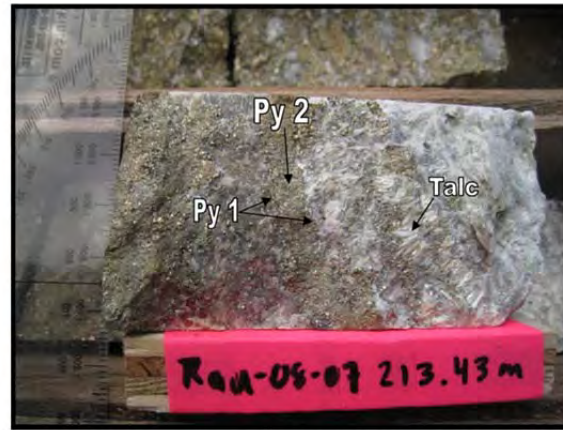


Figure 7.22: Pyrite 2 "overprinting" pyrite 1. Pyrite 1 is visible at the margins of pyrite 2 and the hot phase 3 fluids (Talc).

This pyrite is referred to as pyrite-1 and occurs as medium to fine-grained commonly cubic euhedral grains that cut between ankerite grain boundaries and across arsenopyrite in a non-destructive manner. Moreover, pyrite 1 overprints the ankerite and arsenopyrite yet appears in equilibrium with these phases as they remain euhedral and in their primary form. The pyrite-1 banding is parallel to the banding developed within the volcanic packages bounding the tiger zone stratigraphy (Figure 7-20), and thus thought to be coeval. Although no obvious ductile structures occur within the Tiger Zone sulphide mineralization, sigmoidal shear bands amongst other shear sense indicators occur in the foliation parallel fabric of the bounding volcanic units (personal communication, John Fedorowich, Rau-2010). These observations as well as the lack of brittle features within the Tiger Zone sulphide mineralization indicate that pyrite-1 was likely precipitated during a ductile stress regime. This shearing is also likely responsible for the alignment of the micaceous cleavage in the bounding volcanic packages and has aided in the broken nature of those units along their sericitized micaceous foliations.

A grey coarse-grained euhedral and often zoned ferro-dolomite (Figure 7-21) occurs as a late stage mineral phase within phase two that hosts pyrite-1 mineralization. This ferro-dolomite occurs in bands parallel to pyrite-1, and may exist as thin millimeter-scale or thick centimeter-scale units. The ferro-dolomite often occurs along the same foliation plane as pyrite-1, surrounding the sulphide and giving the appearance of coeval precipitation. This ferro-dolomite is suggested to be a late stage mineral in the same phase because it also intrudes parallel and between pyrite-1 bands plastically deforming the once planar pyrite-1 fabric (Figure 7-21).

The next stage in mineralization, phase three, consists of an intruding fluid phase of quartz-ferro-calcite-talc +- pyrite-pyrrhotite-bismuthinite-sphalerite and is potentially associated with secondary magnetite and biotite. This fluid phase is destructive and overprints all minerals in phases one and two. A second pyrite (pyrite-2) occurs and overprints all mineral phases in phase one and two, but is overprinted or destroyed by the intruding fluids of phase 3.

Pyrite-2 occurs as fine to very-fine anhedral grains commonly with a dull green hue and pervasively overprints all previous phases (Figures 7-23 to 26).

Plate 6

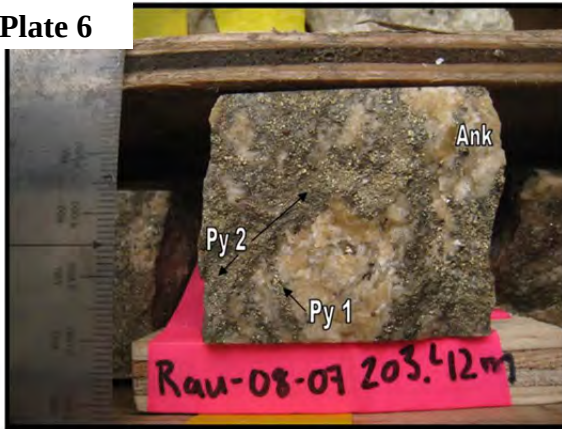


Figure 7.23: Pyrite 2 cutting obliquely across pyrite 1 and ankerite.

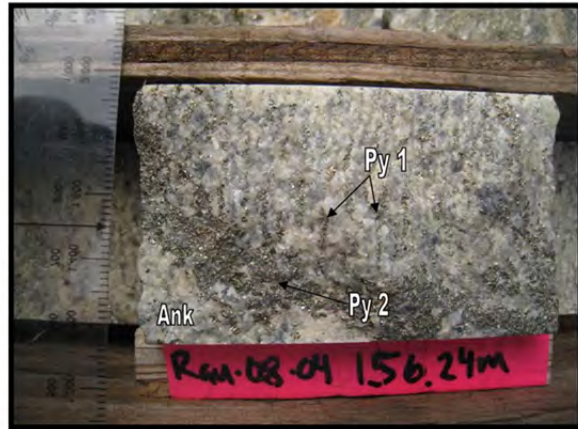


Figure 7.24: Pyrite 2 cuts obliquely across pyrite 1 and white ankerite.

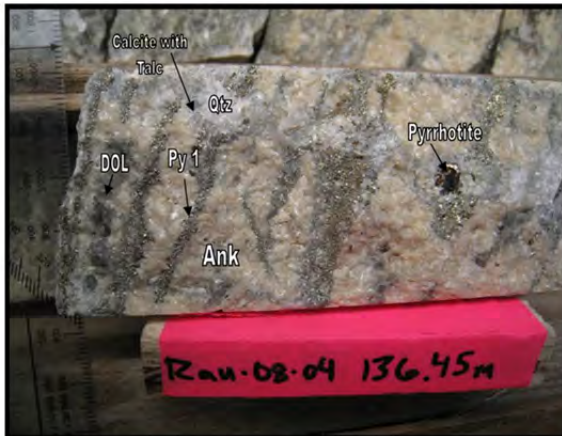


Figure 7.25: Phase 3, quartz-calcite-talc-pyrrhotite cuts obliquely to pyrite 1 and ankerite.

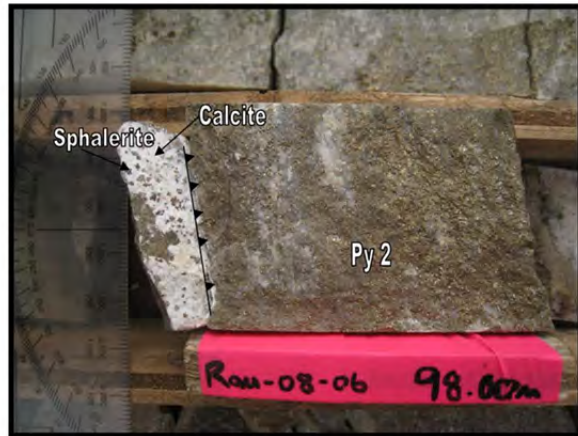


Figure 7.26: Calcite-sphalerite vein cuts obliquely to pyrite 2.

Its most common occurrence is as anhedral diffuse masses (Figure 7-26) but also occurs parallel to pyrite-1 bands and cuts obliquely across foliation to pyrite 1 (Figure 7-23 and 24). Rather than placing pyrite 2 into its own class or fluid phase, it is suggested that pyrite-2 is a product of pyrite-1 from phase two interacting with the fluids and stress regime of phase three. Because pyrite-2 is cut by the mineral phases in phase three, phase three is by inference a later phase. Pyrite-2 often forms parallel to pyrite-1 bands, and is commonly rimmed on its margins by a medium to fine-grained pyrite diagnostic of pyrite-1 (Figure 7-22). This infers that pyrite-2 is not necessarily a newly precipitated mineral but that it could be the product of re-crystallization of pyrite-1 in a slightly different stress regime. The fine-grained dull nature of pyrite-2 thus may be characteristic of sub-grain formation via dynamic recovery mechanisms or thermally induced grain boundary migration.

The notion of phase three occurring in a different stress regime is due to oblique overprinting of pyrite-2 over pyrite-1 (Figure 7-23 and 24), as well as phase three fluids that commonly crosscut earlier phases oblique to the pyrite-1 bands (Figure 7-25).

Phase three minerals consist of quartz-ferro-calcite-talc±pyrite-pyrrhotite-bismuthinite (Figures 7-27 to 29).

Plate7

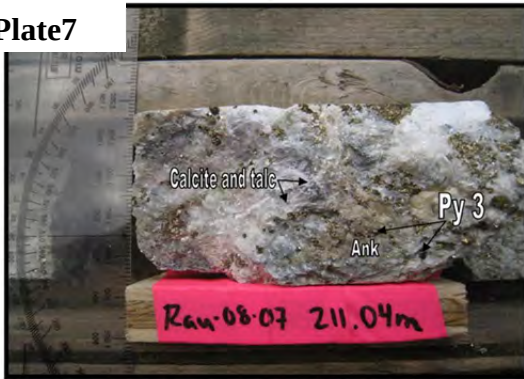


Figure 7.27: Phase 3 calcite-talc-pyrite 3 overprints ankerite.



Figure 7.28: Pyrite 2 overprinting sericitized volcanic.

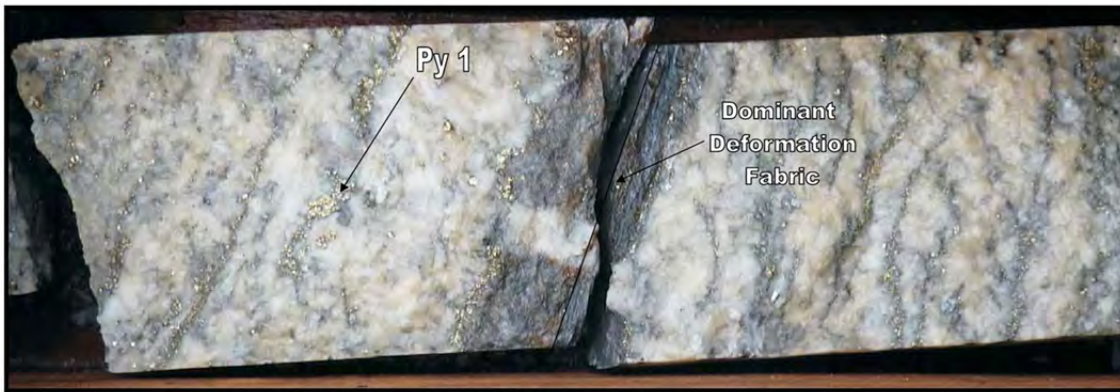


Figure 7.29: Pyrite 1 in a foliation parallel to the dominant deformation fabric within a silty interbed.

This mineral phase is not always observed together but when they do they exhibit a distinct relationship. Rimming phase three is a grey to white coloured fibrous ferro-calcite, the fibrous nature is accompanied by talc crystals and occur perpendicular to the phases contacts (Figure 7-25). Quartz commonly is central in the intruding phase as coarse-grained subangular grains. Pyrite 3 occurs as medium to coarse-grained angular to euhedral grains disseminated within the fluid phase as well as disseminated overprinting phase one and two minerals in close proximity to phase three (Figure 7-27). The pyrrhotite occurs mostly as fine-grained anhedral masses within the ferro-calcite or interstitial to the quartz, and more rarely interstitial to the quartz and more rarely interstitial to the phase one and two minerals. Pyrrhotite rarely occurs as 1-2 meter intervals of massive sulphide where phase three fluids have had profound influence. Red sphalerite occurs in very small amounts as anhedral fine- to medium-sized grains within late calcite veins that cut all phases (Figure 7-26). Phase three is associated with the destruction of previous mineralization phases including arsenopyrite.

Tiger Zone Oxide Mineralization

The overall character of the oxide zone is partial to complete destruction of primary features and rarely preserved secondary features. The oxide is a combination of siderite, goethite and limonite (potentially

more phases) that vary from moderately hard competent sections to gritty-clay to silt rich rubble (Figure 7-30 to 34). Oxide colour varies from deep red to bright orange-rust to dark brown in color.



Figure 7.30: Typical competent oxide with siderite, goethite and limonite.

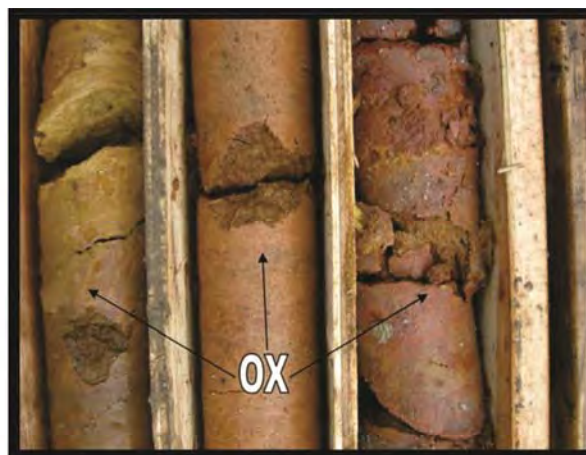


Figure 7.31: Typical soft-silty oxide units, colours do not correspond to gold grade. Often pale yellow will indicate oxidized volcanic



Figure 7.32: Sharp marble contact with Upper Tiger Zone mineralization.



Figure 7.33: Typical arsenopyrite-free sulfide mineralization within the Oxide.



Figure 7.34: Host rock being oxidized while Py (2?) is less resistant.

Transition zones of oxide to sulfide where the rock has not undergone complete destruction, some first order observations can be made on general paragenesis. Non-oxidized rock is often equivalent to Tiger Zone sulfide mineralization (Figure 7-28) with minor but important differences. Typically the ankerite and phase three minerals are present, however there is usually a depletion of arsenopyrite accompanied by strong iron staining throughout (Figure 34). Strongly oxidized portions may show a fine-grained diffuse pyrite (pyrite-2?) that is resistant to the oxidation (Figure 7-29). Brittle core axis parallel fractures occur more frequently in these sulfide-oxide transition zones and are thought to be attributed to a higher fracture density proximal to the late north trending structures.

From these first hand observations it is inferred that the Tiger Zone sulfide mineralization has interacted with a late post phase three oxidizing fluid that may be gold bearing itself.

Alteration phases

Sericite alteration is light brown to pale yellow and often occurs within the volcanic horizons proximal to the Tiger Zone. The sericite is best developed at the upper and lower contacts of the volcanic packages bounding the Tiger Zone sulfide mineralization. The sericitized volcanics have a preferred banding/cleavage developed parallel to pyrite-1 and is thought to be coeval with pyrite-1. Pyrite-2 is observed to overprint sericitized volcanic units thus sericitization occurred before pyrite-2 and phase three mineralization.

Talc forms white-to-grey fibrous-to-radiating crystals associated with the ferro-calcite minerals of phase three. The talc is most often rimming a phase three fluid intrusion with ferro-calcite surrounding a central quartz phase.

Potassic alteration occurs as an overprinting biotite-magnetite-calcite phase mostly within the volcanic packages, and more specifically within the sericitized units. This phase commonly intrudes and occurs as bleb-like clear calcite masses with rounded boundaries connected to one another by an irregular stockwork pattern (Figure 7-35). These intrusions bend and warp the cleaved and wispy sericitized ash



Figure 7.35: Sericitized volcanic intruded by "blebby" calcite with pyrite and lesser biotite rims.

within the volcanics. Rimming the calcite phase is a fine-grained biotite that lines the calcite contacts by a thin brown demarcation. Magnetite often occurs as fine-grained euhedral disseminations throughout the volcanic units and may occur in more concentrated masses. This late phase fluid also precipitates an anhedral fine-grained pyrite and pyrrhotite usually within the calcite phase. Relationships of this phase and phase three mineralization are unknown.

Lower Pyrite Zone

The Lower Massive Pyrite Zone is only observed in DDH Rau-08-18 and Rau-09-18. The host lithology is a heavily altered cryptic carbonate unit that occurs stratigraphically beneath Tiger Zone mineralization. Pyrite mineralization occurs in intervals tens of meters in length and is closely associated with quartz. The pyrite is coarse-grained, generally massive, angular to euhedral textured with variable amounts of clear to white anhedral quartz within interstices (Figure 7-36). Pyrite often exhibits a brittle fracturing habit of coarse-grain which are subsequently annealed around grain margins. These pyrite grain margins exhibit no fracturing and appear to be a recrystallization of the brittly deformed pyrite. All primary textures of the limestone have been destroyed by the pervasive silicification.

Trace anhedral red sphalerite and bismuthinite occur within late stage quartz veins that crosscut the pyrite mineralization (Figure 7-37).

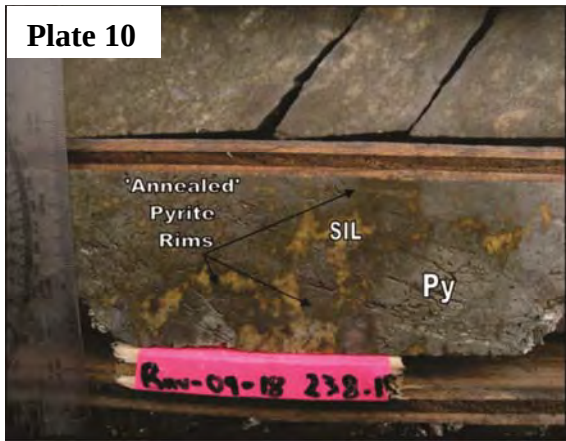


Figure 7.36: Massive pyrite from the Lower Massive Pyrite Zone. Brittly pyrite is rimmed by "annealed darker pyrite. Matrix is silicified.



Figure 7.37: Massive pyrite cut by a quartz vein with sphalerite and bismuthinite.

This late quartz-base metal mineralization is also observed as a late phase in the Tiger Zone. Overall, this style of mineralization does not appear to be associated with the earlier gold mineralizing events.

East Zone Mineralization

The East Zone occurs in a litho-stratigraphical unit equivalent to the Tiger Zone mineralization down dip to the southeast and structurally down dropped. Key distinctions that differ from the East Zone from the Tiger Zone are a decrease in hydrothermal ankerite and arsenopyrite and an increase in phase three mineralization, in particular pyrite-3 accompanied by pyrrhotite and talc.

The East Zone horizon, where unaltered, displays karst solution brecciation and subsequent dogtooth spar, bitumen, and quartz infilling. This carbonate package is bound by traceable volcanic units that correlate to the equivalent litho-stratigraphy as the Tiger Zone horizon. Typical Tiger Zone mineralization, ankeritization and foliated pyrite (phase 1 and phase 2), occur replacing carbonate textures in only a few of the East Zone intersections. Tiger Zone equivalent style mineralization within the East Zone occurs in small discrete intervals, has low amounts of arsenopyrite, and becomes non-existent down dip to the southeast. Massive pyrite and quartz occur in discrete intervals separated by a light-grey 'bleached' silicified limestone (Figure 7-38 and 39).

Phase three mineralization (quartz-calcite-talc-pyrrhotite-pyrite-3-bismuthinite) occurs in much greater

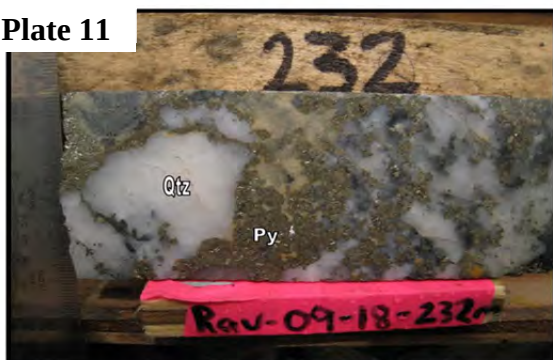
Plate 11

Figure 7.38: Pyrite growing interstitial to quartz within the same vein.

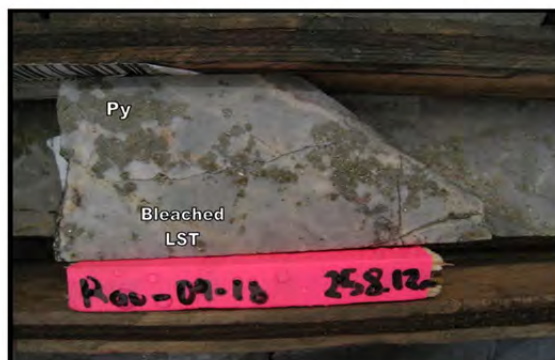


Figure 7.39: Coarse-disseminated pyrite (3?) within silicified "bleached" limestone



Figure 7.40: Typical coarse-grained pyrite 3 overprinting dolomite and primary limestone textures.



Figure 7.41: Typical massive fine-grained pyrite within the East Zone.

abundances in the East Zone overprinting mineralized units as well as overprinting unmineralized karsted limestone. Mineralization ranges from long intervals of coarse to fine-grained pyrite (Figure 7-40 and 41), to massive pyrrhotite and is commonly associated with extensive talc alteration. The pyrite occurs either as 'splashy' medium-grained disseminations, massive coarse-grains or massive fine-grains, and is often associated with quartz. All of these pyrite types overprint all previous phases including brecciated limestone and Tiger Zone style mineralization.

Pyrrhotite-talc and lesser bismuthinite (Figure 7-42) also occur in the East Zone in much higher proportions than in the Tiger Zone and do not appear to be positively correlated to gold grade.

East Zone Alteration

Sericite: The volcanic packages bounding the East Zone are traceable and believed to be equivalent with the Tiger Zone volcanic horizons. However, the volcanic horizons in the East Zone show a much stronger sericite alteration being very pale yellow (Figure 7-44) and are often strongly cleaved. The sericite is mostly localized within what appears to be fine-grained volcanic ash and pumice fragments that occur as weak bands.

Potassic: The volcanic packages bounding the East Zone are also highly altered, in contrast to the moderately altered Tiger Zone volcanics, by a calcite-biotite-pyrite-pyrrhotite-arsenopyrite phase (Figure 7-43). This alteration is much more pervasive and extensive compared to the Tiger Zone 'potassic'

Plate 12

Figure 7.42: Phase 3 quartz-calcite-pyrite-pyrrhotite-talc pervasively overprints all primary textures.

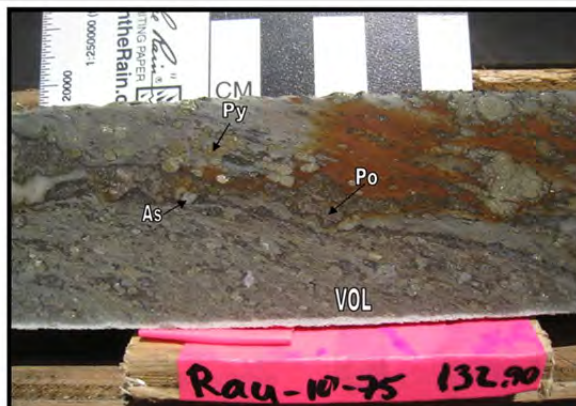


Figure 7.43: Pyrite-pyrrhotite and arsenopyrite (??) occur within the foliated wispy sericitized volcanic unit. Orange colour is iron staining.

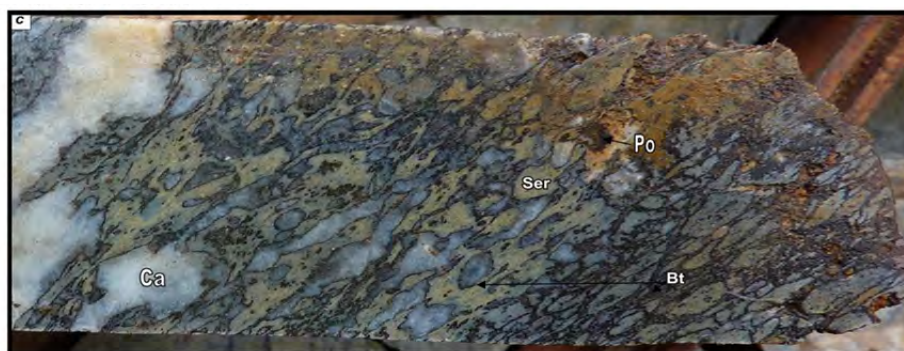


Figure 7.44: Highly sericitized wispy volcanic ash intruded by calcite-biotite-pyrrhotite phase. Biotite rims calcite.

alteration and in particular has much more biotite and pyrrhotite throughout. The calcite intrudes in rounded irregular masses connected by a stockwork calcite matrix. This phase bends and warps the sericitized ash fragments as it intrudes. The calcite is rimmed with fine-grained brown biotite crystals and has fine-grained anhedral pyrite and pyrrhotite within the phase (Figure 7-44). Arsenopyrite occurs as medium-grained euhedral crystals within this phase in the volcanic horizons above the East Zone (Figure 7-43).

Upper Tiger Zone

A mineralized zone was discovered by drilling above the East Zone mineralization in 2010 above the amygdaloidal Volcanic Unit C. The Upper Tiger Zone is between four and 11 meters thick and is almost identical to typical Tiger Zone mineralization – on the west side of Tiger Creek. The ankerite in the Upper Tiger Zone is white and pyrite-1 is difficult to distinguish. The arsenopyrite is coarse-grained and very prevalent throughout the unit and appears to be in equilibrium with all other phases present. The upper and lower contacts of the Upper Tiger Zone are very sharp and consist of a white marble. Phase three mineralization is observed in small amounts in the Upper Tiger horizon.

Several other showings containing mineralization similar to that found at the Tiger Zone have been identified on the property. These include the Cub, Lion, Jaguar, Panther, Cougar, Puma, Cheetah and Lynx Showings. All of the showings are occurrences of mineralized float found on grassy or talus covered slopes and ridges.

Replacement Style Gold Mineralization - Peripheral Occurrences

The Cub Showing occurs 575 meters to the east of the Tiger Zone. Mineralized float was found in a 110 meter wide by 250 meter long area on a south facing talus covered slope. The showing coincides with a strong bismuth-in-soil anomaly (>200 ppm). Float samples typically yielded values of 200 ppm bismuth and include peak values of 1 645 ppm, 1 990 ppm and 6 160 ppm. Rock samples returned peak gold values of 1.08 g/t and 1.15 g/t. A float sample taken from the southeastern edge of the showing contained 18.15 g/t silver, 4 630 ppm lead and greater than 1% zinc. The sample that contained 1 990 ppm bismuth also produced the highest tungsten value (223 ppm).

The Lion Showing was discovered while surveying the Tiger Zone drill access road. Here, strongly pitted orange-black limonite and orange-red limonitic siderite and dolomite cobbles were found 770 meters west of the Tiger Zone. A sample of this material returned 0.17 g/t gold, greater than 1% arsenic, 2 000 ppm lead, 2 080 ppm tungsten and 1.36% zinc.

The Jaguar Showing is located on a grassy spur radiating outwards from the south side of Monument Hill. Thirteen samples were collected within a 400 meter by 300 meter area. Float samples generally consisted of dense, rusty purple, goethite-rich limonite with rare patches of quartz.

Two samples taken from this showing in 2009 returned 1.57 g/t and 2.81 g/t gold. Only cursory prospecting has been performed at this locale and the source of mineralization has yet to be identified.

The Panther Showing is situated along a ridge on the north side of Monument Hill. Limonite float was found within a north northeast trending recessive linear feature that marks the contact between limestone to the south and volcanoclastic to the north. A specimen returned 5.72 g/t gold, 5.01 g/t silver, 9 460 ppm arsenic, 61.7 ppm bismuth, 94.9 ppm lead and 1 070 ppm zinc. Limonitic float was also found downhill, to the north and yielded 0.06 g/t gold, 11.05 g/t silver, 6200 ppm arsenic, 47.3 ppm bismuth, 2 100 ppm lead and 1.29% zinc. The source of mineralization has not yet been located.

The Cougar Showing is located in a north facing cirque, along the northwest slope of Monument Hill. Mineralized float is found in an avalanche chute which stretches approximately 600 meters from the base of the hill to the ridge. This float train continues over the ridge and into the valley to the southeast. Cobbles of dense rusty limonite with rare blebby bismuthinite and galena in quartz occur in a talus field comprising mostly limestone with volcanoclastic material to the east and west. Mineralized float becomes more concentrated near the ridge, although no outcrop was located.

A number of samples collected from this float train produced elevated gold (1.57 g/t and 3.13 g/t) and silver values (483 g/t). Three samples taken near the ridge yielded greater than 1% bismuth; however, these samples were only slightly elevated for other elements. Arsenic values throughout the Cougar Showing were elevated and include peak values of 1.2% and 2.1%. Four samples yielded greater than 10% lead with a peak of 35.7%, while most samples contained below 5000 ppm lead. The sample yielding 1.57 g/t gold also contained 19.4% lead.

The Puma Showing is located on an east-facing slope approximately 750 meters northwest of the Cougar Showing. Oxidized cobbles were found scattered along a grassy hillside in a 250 meter by 450 meter area. Many of the samples collected from this showing are dense, rusty, dark purple siderite and goethite containing patches of box-work limonite. Other samples consisted of limonite or altered carbonate, with occasional narrow quartz veins containing bismuthinite and galena. Bismuthinite crystals, up to 3 centimeters long, were observed in one sample.

Six goethite or goethite rich limonite samples collected in 2009 returned gold values greater than 1.0 g/t including a peak value of 18.45 g/t gold. Silver ranged between 0.2 g/t and 68.8 g/t with four samples exceeding 100 g/t to a maximum of 241 g/t silver.

The Cheetah Showing is located approximately 800 meters west northwest of the Puma Showing. A 500 meter long by 100 meter wide float train extends up a south facing slope to a ridge which is cut by a

northeast trending linear. The linear was traced for approximately 30 meters to the northeast until becoming buried in limestone talus. A sample of a purple brown, goethite rich box-work limonite collected in 2009 returned an assay of 3.06 g/t gold.

Six diamond drill holes at the Cheetah Showing targeted a prominent linear feature corresponding to a 310 meter long string of anomalous soil samples. Drilling intersected dolomite and limestone cut by a steeply dipping oxidized zone. The most significant intersection came from CH-10-04 and graded 1.29 g/t gold over 16.9 meters core length as the true width cannot be determined until the orientation of the mineralization has been established.

The Lynx Showing is located 2.3 kilometers west of Monument Hill and consists of isolated limonite float within a limestone talus field. This showing is located on the opposite side of the valley as the Cheetah Showing. A sample collected at the Lynx returned 0.24 g/t gold, 7 290 ppm arsenic, 789 ppm lead and 5 970 ppm zinc. A similar sample, collected 700 meters to the east, yielded 1.45 g/t gold.

Scheelite Tremolite-Actinolite Skarns

Four known tungsten skarn showings occur on the Rau Property. Three of these are located less than 1.5 kilometers from the Rackla Pluton, while the fourth is located 4.8 kilometers to the north. They are a combination of scheelite-tremolite and actinolite skarns containing varying concentrations of pyrite, pyrrhotite and rare chalcopyrite. These showings have associated moderate to strong tungsten, gold and copper soil geochemical anomalies (Dumala, 2009).

The Hogs Back Showing is located 800 meters southwest of the pluton. This showing is exposed on the north and south side of a northwest trending gully. It was first identified in 2006 and followed up in 2007. The showing consists of three actinolite skarn layers occurring conformably within a portion of the Bouvette limestone sequence. Mineralization comprises finely disseminated to patchy pyrrhotite, pyrite and lesser chalcopyrite. Marble in the enclosing limestone is variable but extends up to 5 meters in areas. The skarn layers have been traced to the northwest for over 750 meters and vary in thickness from 0.3 meters to 6 meters, averaging 0.8 meters. The thickest and best mineralized exposure occurs at the southeast edge of a crosscutting drainage before disappearing to the southeast beneath cover. In general the exposed skarn horizons appear to thin to the northwest.

The two thickest packages of mineralization appear proximal to a pair of southwest striking, quartz muscovite pegmatite dykes. The northwesterly dyke is one meter wide and exposed along strike for only two metres, while the dyke to the southwest is three meters wide and exposed for ten meters. No direct contact was observed between the dykes and the skarns.

Select rock samples collected from this showing in 2006 and 2007 yielded peak values of 4010 ppm tungsten and 1.24 g/t gold from the north side of the showing (Dumala, 2008), while chip samples collected in 2009 from the south side returned gold values less than 0.05 g/t, and a peak tungsten result of 3 110 ppm. A one meter chip sample of sugary weathered limestone containing fine grained pyrite that was taken between two skarn layers returned 0.45 g/t gold. A single diamond drill hole tested this showing in 2008; however, it was collared too far forward and did not intersect the skarn mineralization.

The Ridge Crest Showing, located on the southwest side of the Rackla Pluton, was discovered in 2009 while following up a gold-in-soil anomaly (990 ppb) within the 2007 sample grid. A 70 centimeter deep hand pit dug at this location revealed glacial till and grey limestone fragments. Two cobbles of rusty dark green pyroxene skarn and several oxidized skarn fragments were also extracted from this pit. Grab samples of the skarn yielded 0.02 g/t gold and 850 ppm tungsten. A dyke containing equigranular, coarse grained white to smoky quartz and minor muscovite with occasional patches of chlorite and trace fine grained sulphides occurs 15 meters to the west. A nearby float sample returned 1 060 ppm tungsten.

The Flat Top Showing occurs along a north trending ridge approximately 1.3 kilometers northwest of the Rackla Pluton. It is localized along the contact between the Bouvette Formation and Earn Group strata. The showing is marked by approximately coincident, moderately to strongly anomalous gold, copper and

tungsten soil geochemical values approximately 600 meters long and up to 300 meters wide. Scheelite in tremolite skarn was first found at this locale in 1979 by Prism. Prospecting in 2009 traced skarn mineralized float around the nose of the ridge for 400 meters.

Four types of skarn mineralization occur across a stratigraphic thickness of 40 meters. The first, found immediately above the contact, occurs as felted to radiating masses of acicular tremolite/actinolite or wollastonite/actinolite localized in a band that ranges from a few 10's of centimeters to a few meters thick. The second, found within unaltered carbonate rock, are masses of tremolite mixed with calcite found in 0.5 millimeter to 2 centimeter thick veinlets. Thirdly, an iron rich skarn consisting of coalescing aggregates of radiating acicular masses of tremolite/actinolite preferentially replaces the host carbonate. Rare interstitial green tourmaline or vesuvianite, calcite and quartz also occur with this skarn type. Finally extending upward from the contact is the most iron rich species. It contains felted masses of light green actinolite with local black tourmaline, biotite books, light grey to smoky quartz and patches of massive medium brown limonite.

Prism Resources reported rock samples assaying up to 8.38% WO₃ most samples collected from the area grade less than 0.04% WO₃ (Churchill, 1980). One sample consisting of a quartz fragment surrounded by green actinolite with black tourmaline and traces of pyrrhotite returned 0.127 g/t gold. A single diamond drill hole tested the area in 2008 but it was collared too far downhill and only intersected shale belonging to the Earn Group.

The Blue Lite Showing, first discovered by the Prism Joint Venture in 1979, is a scheelite tremolite skarn located 4.8 kilometers northeast of the Rackla Pluton. The skarn mineralization is well exposed on a cliffy outcrop on the north side of a prominent peak. Mineralization consists of scheelite as disseminations with massive pyrrhotite and minor chalcopyrite. The skarn horizon disappears under talus to the east and grass to the west. The Blue Lite Showing is located along a high angle normal fault that dips to the south. This fault marks the contact between Devo-Mississippian clastics to the north and Devonian to Jurassic clastics to the south.

Samples collected by the Prism Joint Venture in 1979 from this showing returned between 0.02% and 4.3% WO₃. A drill hole completed later that year yielded between 0.02% and 0.08% WO₃ in drill core across narrow widths. Three samples taken at the Blue Lite Showing in 2009 returned greater than 0.10% tungsten with a peak of 0.34%. Most of the other samples ranged from 200 to 950 ppm tungsten. Gold values were all below background, with a peak of 9 ppb.

Gold-Bearing Quartz-Boulangerite Vein Style Mineralization

The Now Showing is situated within a pronounced northwest trending gully located approximately 8 kilometers west of Monument Hill. Little outcrop is exposed here but abundant float occurs along more than 400 meters of the gully. Mineralization was first discovered in 1969 by Cominco Limited. Lead, zinc and copper anomalies were identified but no clear relationship between them was determined (Johnston and Richardson, 1969).

In the late 1970's the Prism Joint Venture conducted soil sampling, mapping, trenching and diamond drilling. Results of this soil sampling included values ranging from background to 7.4 g/t silver, 2.51 % lead and 790 ppm zinc within extensive northwest trending anomalies. A rock sample collected from a hand dug pit graded 74 g/t silver, 2.15% lead and 790 ppm zinc (Montgomery and Dewonck, 1977). Two samples of quartz rubble containing boulangerite were retrieved from a partially completed trench. The trench failed to reach bedrock due to permafrost but the grab samples returned 38.06 g/t gold, 343.55 g/t silver, 47.2% lead and 0.01% zinc and 39.43 g/t gold, 581.49 g/t silver, 23.26% lead and 0.06% zinc.

The most encouraging drill results obtained by the Prism Joint Venture were from two holes that tested beneath this trench. The first of these holes intersected boulangerite and sphalerite in a narrow quartz vein. A narrow interval yielded 1.51 g/t gold, 54.5 g/t silver, 2.74% lead and 5.26% zinc over 0.5 meters. The second hole, drilled at a steeper angle from the same pad, intersected the mineralized quartz vein that assayed 3.50 g/t gold, 60.3 g/t silver, 4.64% lead and 0.04% zinc over 1.1 meters. The true widths

cannot be determined from the information in the report. The other four drill holes were either not sampled or contained no significant intersections.

In 1988, NDU Resources Ltd. collected rock samples in the areas identified by Cominco Limited and the Prism Joint Venture as being anomalous for zinc. Samples were collected from two blocky quartz veins, one with blebby galena and the other with jamesonite and boulangerite. The sample containing blebby galena graded greater than 1% lead while the sample containing jamesonite boulangerite contained greater than 1% lead and greater than 100 g/t silver (Cathro, 1989).

Prospecting by ATAC Resources Ltd. in 2009 revealed that these anomalies appears to follow the stratigraphy but are locally overprinted by one or more vein faults. The deep gully located near the Now Showing trends slightly oblique to bedding and corresponds to a main fault. Three of the six holes drilled by Prism are believed to have intersected this and are represented by gougy intervals surrounded by zones of intense veining. These intervals were not sampled.

Transported Gossans

Two transported gossans occur on the Rau Property separated by approximately eighteen kilometers. The Kathy Showing comprises a 40 meter wide by 30 meter long brick red gossanous ferricrete slab, located approximately 750 meters southeast of the Rackla Pluton. The gossan is situated downhill of a thrust fault that places Earn Group shale, to the south, over Bouvette Formation carbonates to the north. The interpretation is that the gossan is formed by fluids traveling along this thrust fault. Soil samples collected by the Prism Joint venture in 1978 returned silver values between 0.08 g/t and 25 g/t, lead values ranging from 32 to 90 ppm and zinc values ranging from 95 to 3 900 ppm. Results for other elements were not reported.

The Ocelot Showing (also referred to as EL) is located 11.5 kilometers northwest of Monument Hill and was first identified by the Prism Joint Venture in 1978. The showing is marked by a 110 meter long by 25 meter wide gossan that formed by the precipitation of iron oxides containing silver, lead and zinc from solutions traveling along a permeable horizon (Montgomery and Cavey, 1978). The gossan has a northwest orientation and parallels an adjacent topographic linear feature. The showing is most pronounced in a kill zone to the northwest that originates at a weakly flowing spring.

The gossan is predominately dolomite rubble cemented by iron oxides and is surrounded by buff to orange weathering dolomite and limestone. Soil samples collected by the Prism Joint Venture returned anomalous metal values that ranged up to peak values of 3.8 g/t silver, 800 ppm lead and 12.2% zinc.

Drilling at the Ocelot gossan in 2010, were drilled to test combined ground gravity and IP anomalies located uphill from the transported gossan. A total of 1 133.5 meters of drilling in five holes was completed at the Ocelot showing. The only significant mineralization intersected was in hole OC-10-01 that intersected 4.23 meters grading 552 g/t silver, 14.5% lead and 34.3% zinc from 49.12 meters to 53.35 meters. The true width of the interval can not be determined as the orientation of the mineralization has not been determined.

8.0 DEPOSIT TYPES

The gold mineralization at the Tiger Zone is sediment-hosted, Nevada-type carbonate replacement style gold mineralization. Carbonate replacement-type gold deposits are a class of gold deposits that are best known in Nevada and span a broad classification from high temperature skarn/manto-type deposits through low temperature Carlin-type deposits. Although neither is completely unique to that locale, they do occur in great numbers and the total associated gold resource size in northern Nevada is considered world class. The Carlin-type deposits are characterized by concentrations of very finely disseminated gold in silty, carbonaceous, calcareous rock. The gold is present as micron-size to sub-micron-size disseminated grains, often internal to iron-sulfide minerals (arsenical pyrite is most common) or with carbonaceous material in the host rock. Free particulate gold, and particularly visible free gold, is not a

common characteristic of these deposits thus significant placer alluvial concentrations of gold are not commonly produced when Carlin-type gold deposits are eroded.

Most of the Carlin-type deposits in Nevada have some general characteristics in common, although there is a wide spectrum of variants. Anomalous concentrations of arsenic, antimony, and mercury are typically associated with the gold mineralization; thallium, tungsten, and molybdenum may also be present in various amounts. Alteration of the gold-bearing host rocks of Carlin-type deposits is typically manifested by decalcification of the host, often with the addition of silica, addition of fine-grained disseminated sulfide minerals, remobilization and/or the addition of carbon to the rock, and late-stage barite and/or calcite veining. Small amounts of white clays (illite) can also be present. Decalcification of the host produces volume loss, with incipient collapse brecciation, which enhances the fluid channel ways of the mineralizing fluids. Due to the lack of free particulate gold, Carlin-type deposits generally do not have a coarse-gold assay problem common in many other types of gold deposits.

Deposit configurations and shapes are quite variable. Carlin-type deposits are typically somewhat stratiform, with mineralizing characteristics being best exhibited in specific stratigraphic units, although steeply dipping faults can host high-grade gold mineralization. Fault and solution breccias can also be primary hosts to mineralization.

The highest grade (5-15 g/t gold) gold skarn deposits are relatively reduced, are mined solely for their gold content, lack economic concentrations of other metals, and have a distinctive gold-bismuth-tellurium-arsenic geochemical association. Most high-grade gold skarns are associated with reduced ilmenite-bearing diorite-granodiorite plutons and dike/sill complexes. They typically occur in clastic-rich protoliths rather than pure limestone and skarn alteration of dikes, sills, and volcanoclastic units is common. Reduced gold skarns are dominated by iron-rich pyroxene, but proximal zones can contain abundant intermediate grandite garnet. Other common minerals include K-feldspar, scapolite, vesuvianite, apatite, and amphibole. Distal/early zones contain biotite+K-feldspar hornfels that can extend for 100's of meters beyond massive skarn. Due to the clastic-rich, carbonaceous nature of the sedimentary rocks in these deposits, most skarn is relatively fine-grained.

The mineralization identified at the Tiger Zone shares characteristics of both Carlin-type gold systems and higher temperature intrusive related skarn systems, including:

- 1.) Stratigraphic control on mineralization - mineralization is hosted primarily in dolomitized carbonate units;
- 2.) Structural control on mineralization - mineralization occurs in karstic cavities, collapse breccias, anticlinal fold hinges and has undergone significant grade enhancement by late stage structural fluids;
- 3.) Geochemical association - elevated arsenic, bismuth and tungsten accompany the gold mineralization, while silver and base-metal concentrations are generally low;
- 4.) Alteration - mineralization is associated with initial dolomitization creating porosity and iron source for sulphidation, temperature gradients high enough to produce arsenopyrite and minor talc alteration.

Based on these observations associated with the Tiger Zone mineralization, the most suitable classification is "sediment-hosted Nevada-type carbonate replacement style" gold mineralization.

Although the Authors make this comparison to the above-mentioned deposit type, the reader is cautioned that the author cannot verify that these deposits are directly comparable with the mineralization at the Rau Property.

9.0 EXPLORATION

Exploration activities on the Rau Property prior to 2006 and prior to ATAC Resources Ltd. involvement in the area are referenced in this report as historical activities and are described in Section 6.0. Part of the historical exploration includes documentation of ATAC Resources Ltd. work in the area between 2006

and 2010. A more detailed account of this collective exploration campaign within the immediate vicinity of the Tiger Zone defined within the Rau Ridge System is described below while diamond drilling is discussed in Section 10.0.

9.1 Soil Sampling

Between 2007 and 2010 soil geochemical sampling was conducted within a 20 by 8 kilometer area of the Rau Ridge System defining the most favorable geological setting to host Tiger Zone style mineralization (Figure 9-1). Soil geochemical data was collected by means of grid and contour sampling while drainage systems were evaluated by collecting stream sediment samples. At least 18 800 soil and stream sediment samples were collected along the favorable trend.

Grid samples were collected at 50 meter intervals along lines spaced 100 meters apart in most areas, while detailed 50 meter by 50 meter grids were established over the Now, Jaguar and Kathy Showings. The relative line positions were established using handheld GPS, while sample spacing was maintained using compass and topofil chain. Sample sites are marked by wooden lath bearing aluminum tags inscribed with the corresponding sample number and the grid coordinates, where appropriate.

All soil samples were collected from holes that were dug with a mattock or hand auger to depths of 20 to 50 centimeters below surface. Soil was taken from the bottom of the holes and placed in pre-numbered Kraft paper bags. Above tree line, the samples consisted of poorly developed soils mixed with talus fines. At lower elevations, the sampled material mostly comprised residual soils mixed with glacially transported material.

Background and anomalous values for gold, arsenic and bismuth are summarized in table 9.1. Background averages, weak, moderate, strong and very strong anomalous thresholds approximately correspond to the 50th, 90th, 98th, 99th and 99.9th percentiles.

Table 9-1: Geochemical Characteristics for Soil Samples

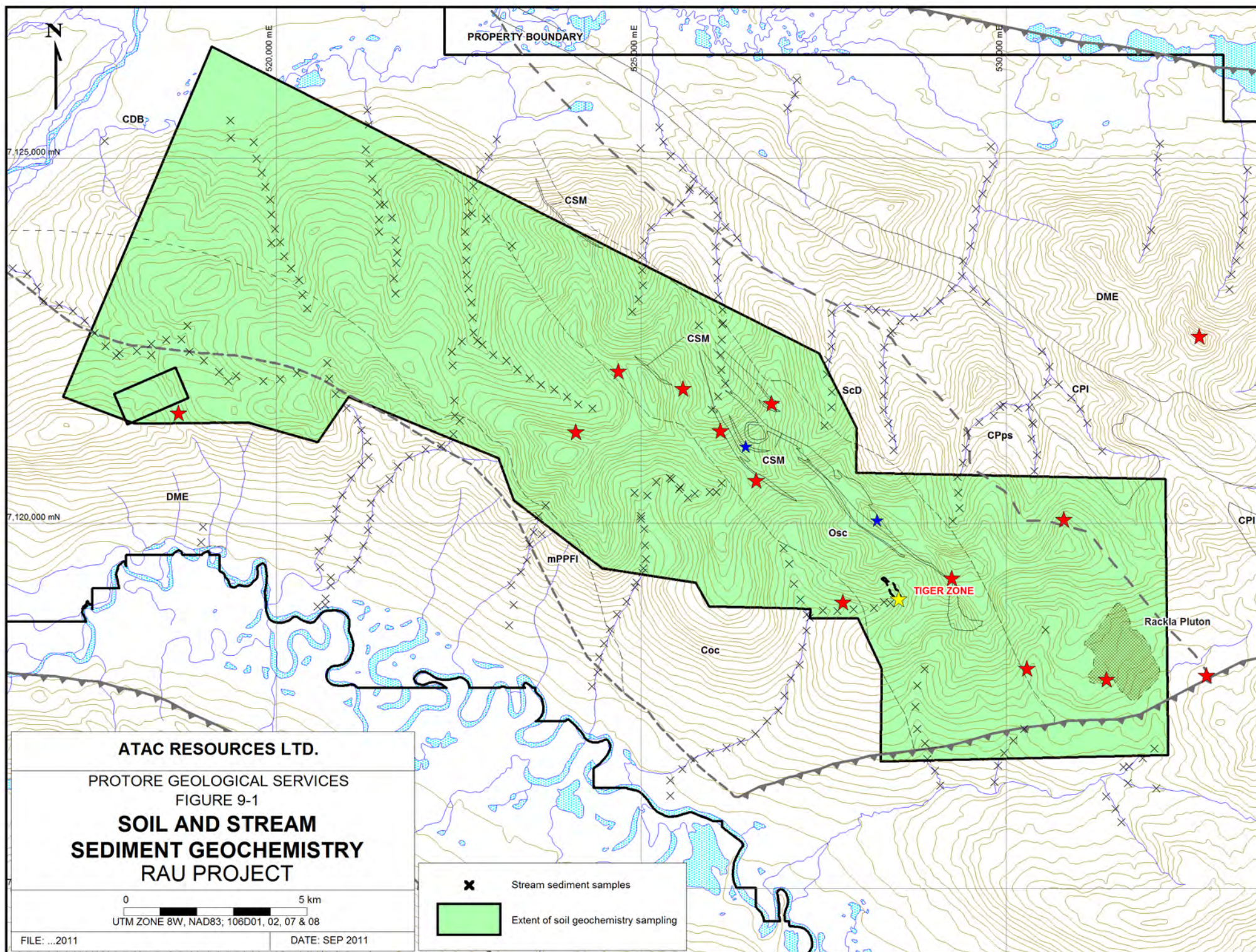
Level	Gold	Arsenic	Bismuth
Background	3	17	1
Weak	25	50	5
Moderate	50	100	10
Strong	100	200	25
Very Strong	200	500	50
Peak	11.65	10,005	1,300

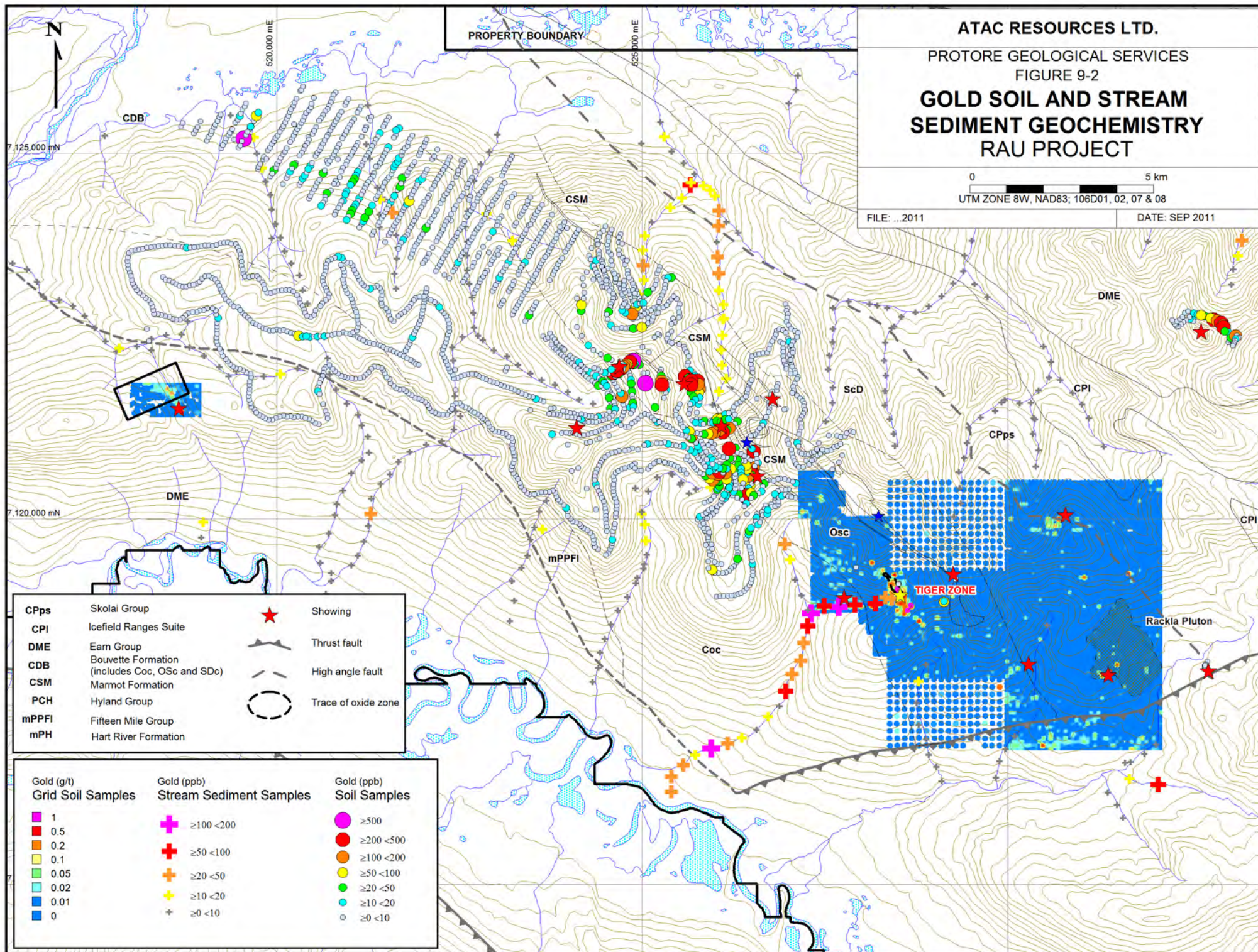
(all values are ppm except gold which is ppb)

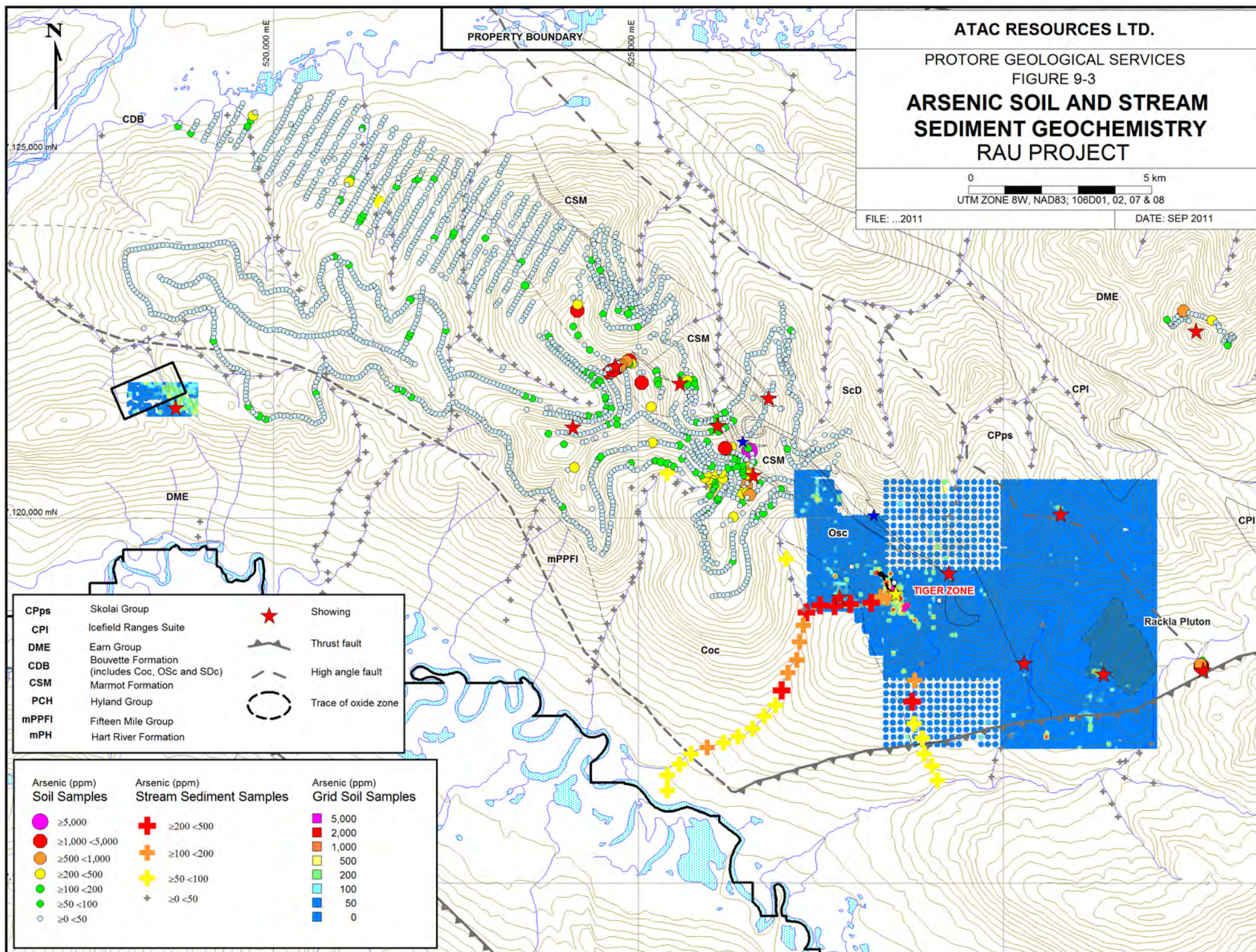
Integrated soil geochemical results for gold, arsenic and bismuth are illustrated on Figures 9-2 to 9-4 with the respective showings described in Section 6.0.

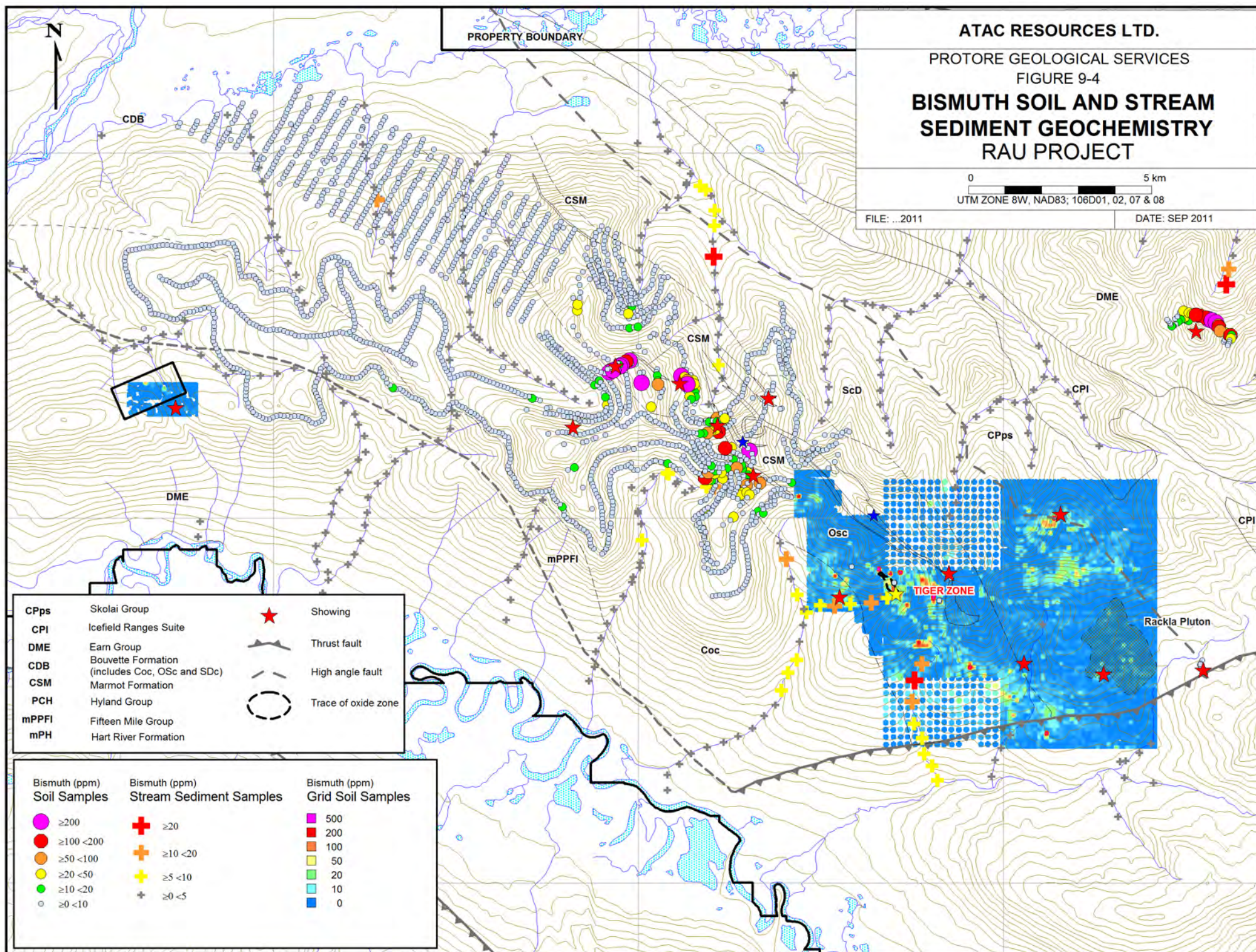
9.2 Surface Rock Sampling

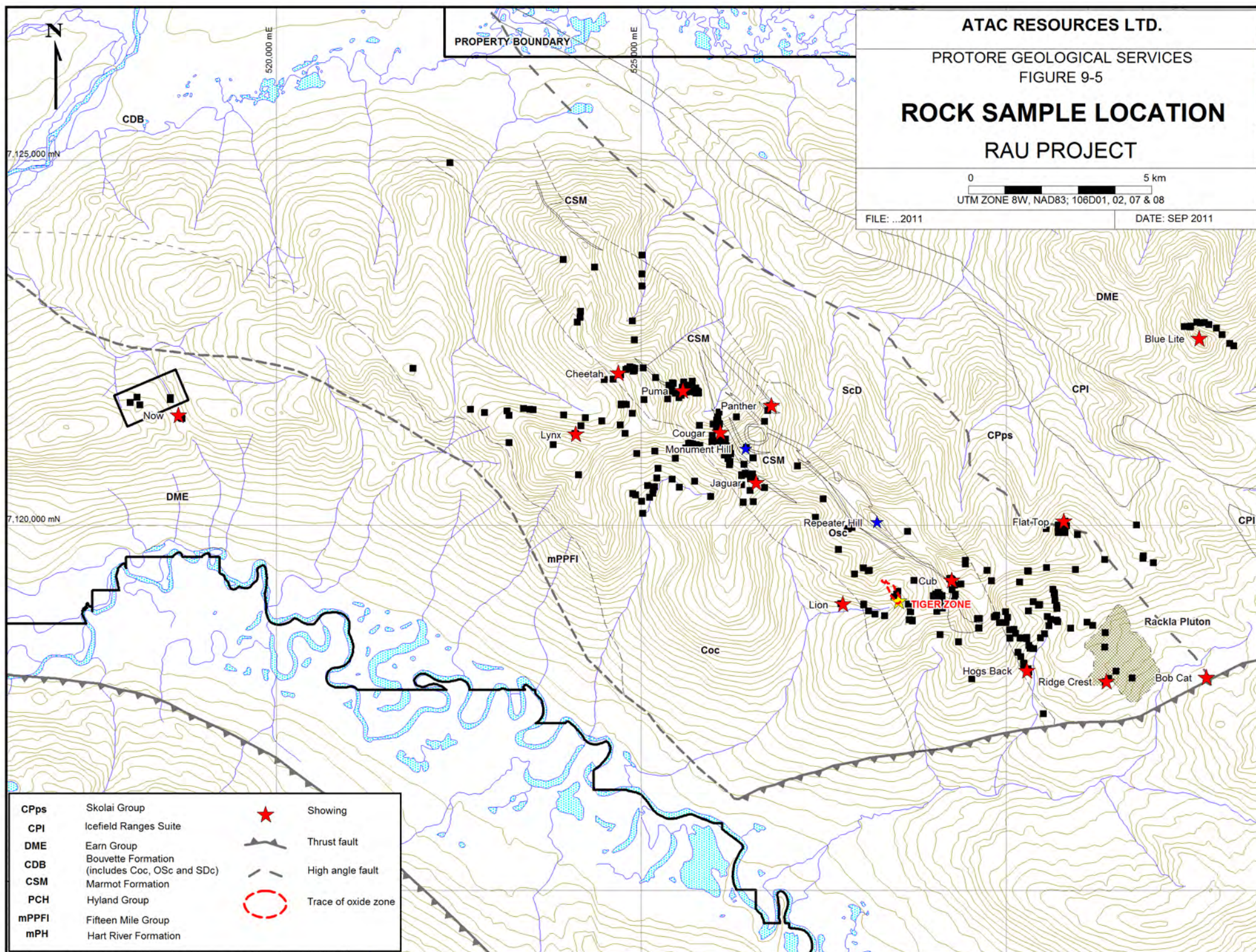
A total of 424 rock samples were collected from various targets along the Rau Ridge system between 2007 and 2010 (Figure 9-5). During 2007 only a limited amount of prospecting was conducted due to limited soil geochemical results available to follow up. The prospecting that was done was localized around the periphery of the Rackla Pluton in close proximity to the surrounding carbonates focusing on proximal tungsten-gold skarn potential. Forty-four grab samples were collected and submitted for 34 element Induced Coupled Plasma (ICP) analyses in addition to gold by fire assay and tungsten by x-ray fluorescence procedures. Samples of mineralized actinolite-diopside skarn generally returned low values but some material returned up to 3.23% WO₃ and one sample yielded a gold value of 1.24 g/t (Eaton and Panton, 2008).











Rock samples were collected by measured chip samples across mineralized zones. Grab samples were collected from selected mineralized intervals and mineralized float samples. Rock geochemical sample sites on the property were marked with orange flagging tape labeled with the sample number. The location of each sample was determined using a handheld GPS unit. The rock sampling at surface showings is commonly strongly weathered with sulphides oxidized to limonite. This material would be expected to yield higher metal assays than unweathered mineralized samples.

In 2008 additional prospecting ensued following up very strongly anomalous gold-in-soil geochemistry from the 2007 grid soil sampling survey. A total of 54 grab samples were collected mostly from the area of strong gold-in-soil geochemical response which resulted in the discovery of oxide gold mineralization at the Tiger Showing in Tiger Creek. Samples collected from the exposed Discovery Horizon yielded 22.5 g/t gold, >1% arsenic, 415 ppm bismuth and 116 ppm tungsten and 13.6 g/t gold, >1% arsenic, 410 ppm bismuth and 51.9 ppm tungsten. A limonitic float sample taken 90 meters downstream contained 241 g/t silver, 3 730 ppm arsenic, 388 ppm bismuth, 3.27% lead and 2.09% zinc (Dumala, 2009).

Another area of mineralized float (Cub Showing) was found 575 meters to the east of the Tiger Showing. Samples from the Cub Showing returned peak gold values of 1.15 g/t and 1.08 g/t. Neither of these samples had any noteworthy values for other metals. A sample taken from the southeastern edge of this showing contained 18.15 g/t silver, 4630 ppm lead and >1% zinc. Nine other samples collected from the showing returned 0.98 to 6.54 g/t silver. Three of these samples also contained large amounts of bismuth (1 645 ppm, 1 990 ppm and 6 160 ppm), while most of other samples had >200 ppm. The highest tungsten value at this showing was 233 ppm, from the sample that contained 1 990 ppm bismuth.

The Ridge Showing is a gossan located about 375 meters southeast of the Tiger Showing. A soil sample site within this gossan yielded an exceptionally high gold value (11.65 g/t); but surprisingly the only two rock samples taken in the area returned low gold values. One of these samples, which contained siderite, returned 8.24 g/t silver, 369 ppm lead and 15.95% zinc, while the other yielded >1% arsenic, 36.1 ppm bismuth 92.4 ppm tungsten and 1 285 ppm zinc.

A sample of limonitic vein breccia float collected 1 600 meters southeast of the Tiger Showing in 2006 yielded 1.24 g/t gold, 2.2 g/t silver, 427.9 ppm bismuth and 206.5 ppm tungsten. The sample site is in a heavily vegetated area that has not yet been systematically prospected.

A limonitic float sample was taken along a ridge 650 meters northwest of the Tiger Showing. This sample yielded 1 580 ppm arsenic, 967 ppm lead, 4 760 ppm zinc and 82.6 ppm tungsten, but only 5 ppb gold.

Several more pieces of limonitic float were discovered in a north flowing drainage 5.5 kilometers northwest of the Tiger Showing. This occurrence is known as the Panther Showing. A sample of this material yielded 4.53 g/t silver, 2 900 ppm arsenic, 458 ppm bismuth, 5 760 ppm lead, >1% zinc and 47.7 ppm tungsten. While a second sample, collected 650 meters upstream, returned 8.96 g/t silver, 5 650 ppm arsenic, 275 ppm lead and >1% zinc. Both samples contained less than 16 ppb gold.

Prospecting in 2009 was focused primarily to the northwest up to 13 kilometers along strike from the Tiger Zone following up gold and arsenic-in-soil geochemical anomalies defined at intermittent locales mainly in the upper regions of the Rau ridge system. A total of 275 samples were collected of which many returned elevated gold response. The resulting showings/occurrences (Lion, Cub, Jaguar, Panther, Cougar, Puma, Cheetah, Lynx, Now, Blue Lite, Flat Top, Hogs Back and Ridge Crest) defined from this sampling are described in detail in Section 7.4.

In 2010 only a modest amount of additional prospecting was carried out within the same general area as the prospecting conducted in 2009 to follow up a series of ZTEM geophysical anomalies and to better define a number of the previously identified targets in preparation for diamond drilling.

Nine samples of limonite style mineralization were collected from the Condor Showing 8 000 meters northwest of the Tiger Zone. Five of these samples yielded elevated gold values ranging from 0.53 to 1.50 g/t. An additional four samples were collected from the Puma Showing following up a series of samples collected in 2008 which returned similar assays with one sample yielding 18.45 g/t gold. The

2010 prospecting traced similar limonitic siderite breccia to source where samples collected across steeply dipping structures returned >5 g/t Au across narrow widths between 0.10 and 0.20 meters (Wengzynowski, pers comm.)

9.3 Geological Mapping

Geological mapping was conducted on an ongoing basis between 2007 and 2010 at different locales determined by the focus of that particular exploration season. By 2009, however, the focus of the project was determinately sediment-hosted gold associated with the Tiger Zone style mineralization and mapping was directed toward defining favorable carbonate rock units and structural settings along the trend of the Rau Ridge system.

Recent 1:50 000 scale geological mapping was compiled over the Rau area by Indian and Northern Affairs in 1990 by Abbott. More detailed mapping was performed by Archer, Cathro & Associates (1981) Limited geologists at 1:20 000 scale with certain areas of interest receiving detailed mapping at 1:1 000 scale. The latter scale mapping was conducted primarily by specialist Dr. Elizabeth Turner and Harry E. Cook, the results are summarized in Section 7.3.

9.4 Geophysics

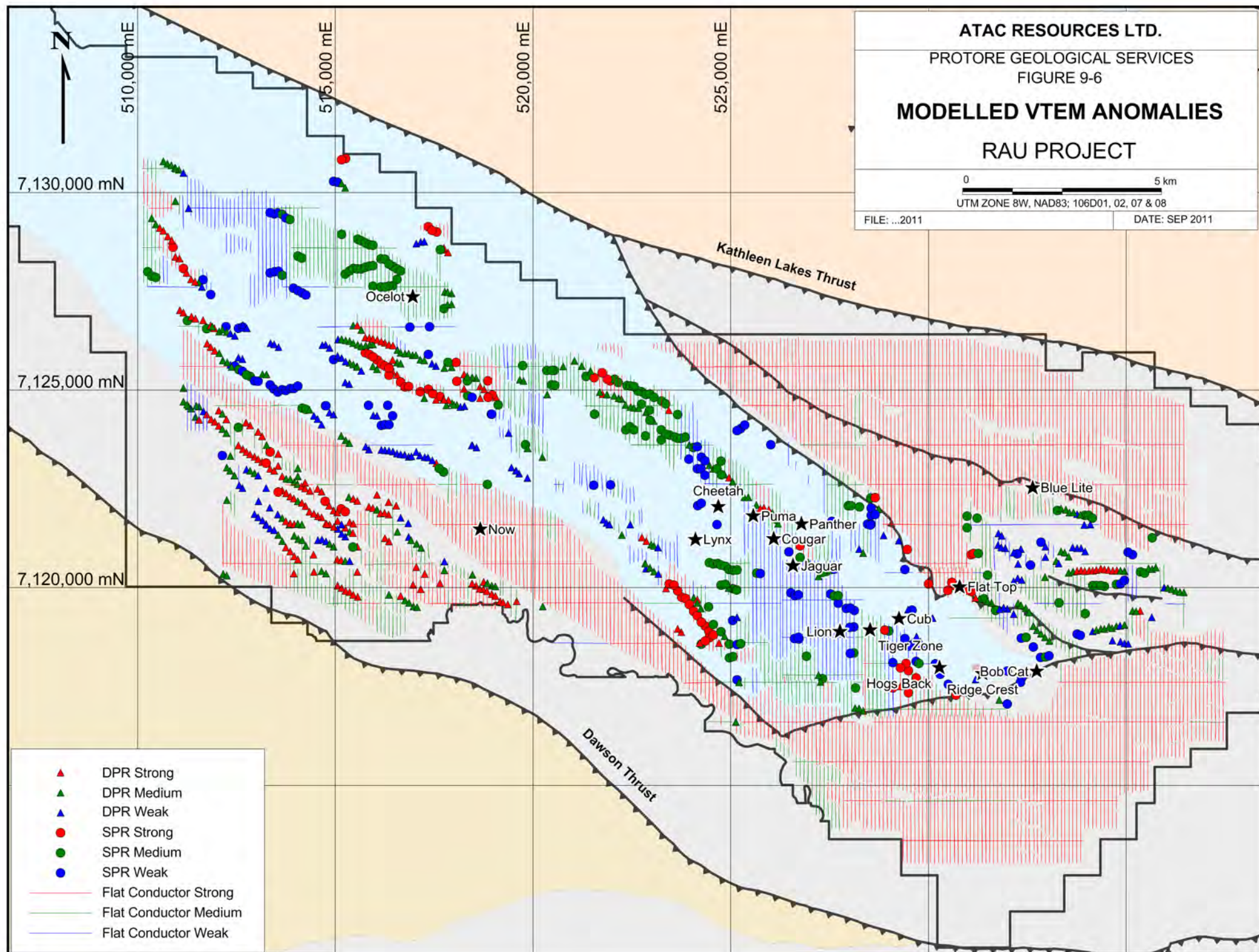
A variety of airborne and ground geophysical work was carried out over the Rau Ridge system hosting the Tiger Zone mineralization between 2007 and 2010. Airborne surveys consisted of Vertical Time Domain Electromagnetic (VTEM) and Z axis Tipper Electromagnetic (ZTEM) surveys while ground surveys consisted of Induced Polarization/Resistivity (IP) and Gravity. The airborne surveys covered the entire Rau Ridge system while the ground based surveys were conducted specifically over the Tiger Zone and isolated VTEM/ZTEM anomalies. In addition to these airborne and ground based surveys, Scintrex Limited was contracted to conduct a specialized Bore-hole Gravity Meter survey in a number of drill holes that intersected significant oxide mineralization for purposes of determining insitu specific gravity.

VTEM: Helicopter-borne magnetic and VTEM surveys were flown over the 64 claims that comprise the core of the Rau Property on August 12, 2008 by Geotech Ltd. of Aurora, Ontario. A total of 135.09 line-kilometers were flown on north-south lines spaced 100 meters apart. The total magnetic data outlined an area of high susceptibility directly over the Rackla Pluton. This high gradually weakens to the west but continues into the area of dykes and sills, suggesting that these tabular intrusions may coalesce with the Rackla Pluton to form a larger body at depth. Strings of weaker magnetic highs in the western part of the survey area are closely correlated magnetic volcanic horizons correlative with Units E, F and G.

Additional VTEM surveys were completed over the rest of the Rau Ridge system in two phases on July 14 and 15 and between August 13 and September 23, 2008 by Geotech Ltd. of Aurora, Ontario. In total, 2 994 line-kilometers were flown on north-south lines spaced 100 meters apart. The preliminary total magnetic and electromagnetic data outlined a strong, 23.5 kilometer long, northwest trending linear feature originating near the Rackla Pluton.

In spring 2009, Condor Consulting Inc., was retained to complete processing, analysis and interpretation of EM and magnetic data obtained from VTEM surveys completed in 2007 and 2008. Condor's work outlined a series of conductive units originating from the Tiger Zone and extending approximately 15 kilometers northwest along trend (Figure 9-6). Many of these conductors parallel the property extensive shear zone believed to be associated with the fluid conduit localizing gold at the Tiger Zone. An approximately 25 kilometer long linear magnetic high, corresponding to the Marmot Formation volcanic units can be traced through the centre of the property. Typically, conductors can be found along the south side of this magnetic feature.

ZTEM: In late spring 2010, Geotech Ltd. was contracted to complete two helicopter-borne ZTEM (Z-axis tipper electromagnetic) and aeromagnetic geophysical surveys over the Rau Property. The initial survey was conducted between May 27th and June 6th and comprised 331 line-kilometers, while the second survey was completed between June 14th and 22nd and totaled 3 018.6 line-kilometers which included the area covering the Rau Ridge system.



Strings of ZTEM conductors were identified throughout the Rau Property many of which correspond with the VTEM conductors. A number of new anomalies were also identified a short distance from the Tiger Zone with similar geophysical signatures which were the focus of some of the 2010 exploration. Figure 9-7 illustrates the extent of the ZTEM survey and the associated anomalies identified within the vicinity of the Rau Ridge system.

IP/Resistivity: A modified ground pole-dipole IP survey was completed at the Tiger Zone by Aurora Geoscience of Whitehorse. The survey was done using a four person crew based out of a lodge located north of Mayo between August 4 and 13, 2009. Three lines, totaling 4.2 line-kilometers corresponding to section lines 10+400NW, 10+120NW and 09+650NW were tested by this survey.

On section line 10+400NW, a well-defined chargeability high is located to the southwest of the baseline. The lower portion of this anomaly would have been pierced by hole Rau-09-52, which intersected unmineralized, brecciated limestone in this area. Unfortunately noise on section line 10+120NW made interpretation at depth near the massive pyrite intersection in hole Rau-08-18 unusable. Only the near surface data (<100 meter) was usable in the area of interest. On section line 09+650NW, the chargeability high is located at surface at 10+1000NE and dips to the northeast at approximately 45°.

Gravity: In June 2011, MWH Geo-Surveys, Inc. completed ground gravity surveys over three grids along the Rau Ridge system. These grids were located over the Tiger Zone, Condor and Puma showings. At the Puma Showing, a linear, north trending gravity high is defined along the western edge of the grid, near the ridgeline. No significant anomalies were identified at the Tiger Zone or Condor Showings.

10.0 DRILLING

The mineral resource discussed in this report was determined using the data provided by diamond drilling completed by ATAC Resources Ltd. between 2008 and 2010. Figure 10-1 illustrates the drill hole locations utilized for the determination of the mineral resource.

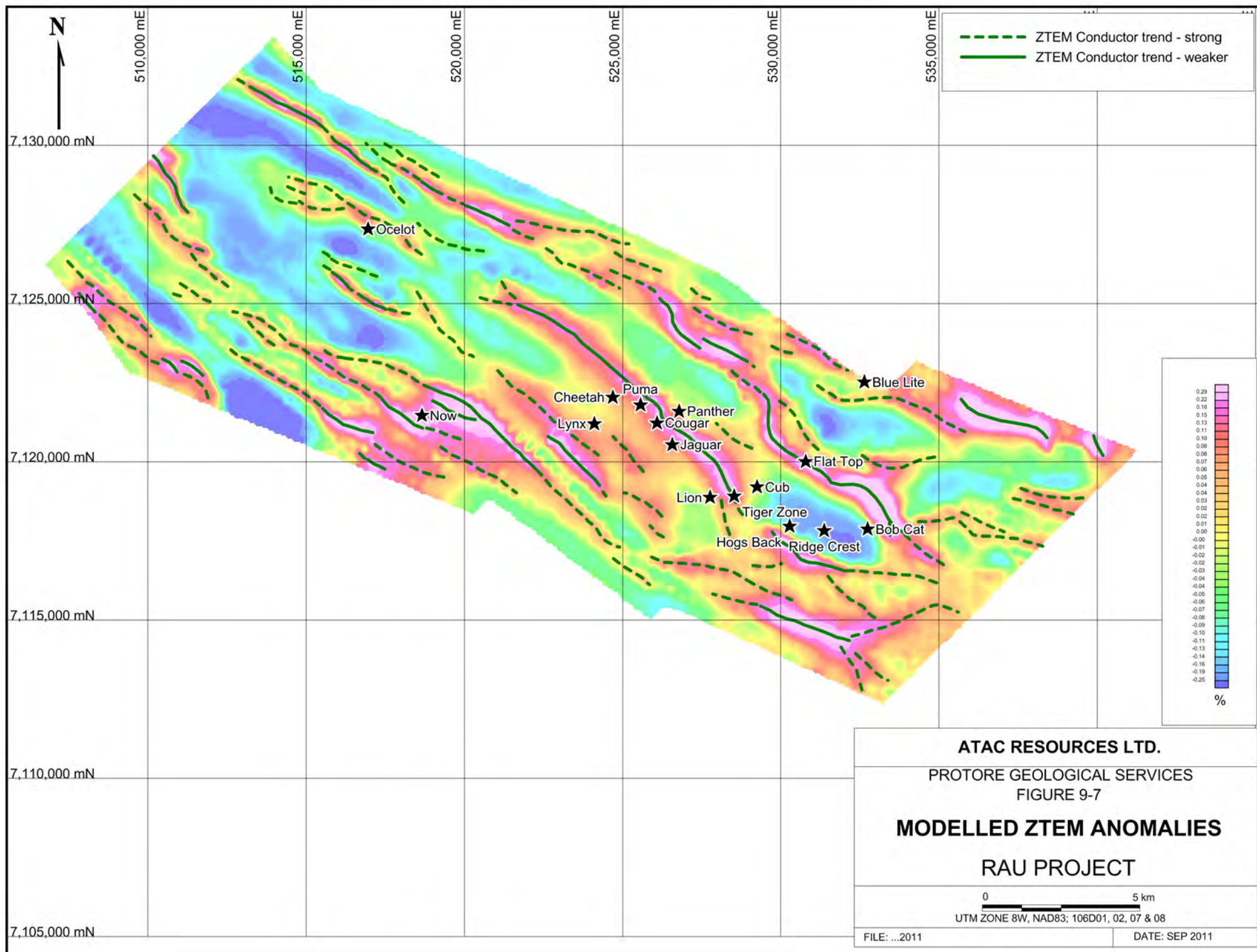
Drilling at the Tiger Zone has defined potentially economic gold mineralization in numerous drill holes that have delineated a cohesive oxide and sulphide zone from surface to 250 meters depth. This mineralization is confined to a single horizon that has been structurally displaced near Tiger Creek. The structural displacement also defines the boundary between oxide dominant and sulphide dominant portions of the mineralized system. The limits of the mineralization are not fully delineated along strike or down dip and there is evidence that suggests that there are potential mineralized horizons occur in a stacked nature above and beneath the Tiger Zone Discovery Horizon.

A total 25 562.5 meters of exploration and definition drill holes were completed through 2010 and evaluated for use in the Tiger Zone resource estimation (Table 10-1). Down hole drill depths range from 5 to 593.25 meters with an average depth of 192.2 meters. This drilling was completed on a nominal 50 meter spaced grid over the main area of interest with portions of the oxide mineralization being drilled at 25 to 30 meter spacing. The drill sections are all oriented northeast-southwest.

Table 10-1: Tiger Zone Mineral Resource Database Summary

Year	Holes Drilled	Total Drilled (meters)
2008	19	3 516.85
2009	53	8 651.2
2010	61	13 394.4
Total	133	25 562.45

The Tiger Zone is a thick northwesterly trending body of carbonate replacement style gold mineralization hosted by a moderately northeast dipping horizon. It is currently 700 meters long, 100 to 200 meters wide and up to 96 meters thick. Mineralization is developed within and adjacent to a regionally extensive corridor of highly strained rocks that are manifested as a 40 to 150 meter wide zone of small scale folding



and shearing. The geometry of the mineralized system is defined by a series of stacked and folded limestone horizons intercalated with locally extensive mafic flows and volcanoclastic units. Examples of this geometry are illustrated within sections on Figures 10-2 and 3

Gold occurs in both sulphide and oxide facies mineralization. Sulphide mineralization is accompanied by, and developed within, limestone that is replaced by ferruginous dolomite and iron carbonate minerals. Sulphide species consist of disseminated to banded pyrite, with subordinate arsenopyrite and pyrrhotite and minor bismuthinite and sphalerite. Small amounts of disseminated scheelite are also present. The main sulphide minerals exhibit at least three stages of mineralization. The best intersection from sulphide bearing mineralization averaged 4.04 g/t gold over 96.0 meters true width from hole Rau-09-66.

Oxide mineralization is completely devoid of sulphide minerals and ranges from very competent, weakly porous limonitic mud to rubbly porous limonitic grit. The oxide appears texturally amorphous within most intersections but occasionally exhibits residual color banding that may represent relict sulphide textures. Complete oxidation extends up to 150 meters from surface. The best oxide grades (e.g. hole Rau-09-19 which assayed 24.07 g/t gold across 28.0 meters true width) and deepest oxidation occur where northerly trending extensional faults intersect the regional structure. The nature of the contacts between the oxide and sulphide facies is poorly understood, as is the gold distribution within the mineralized horizon and within individual sulphide species.

Figure 10.4 illustrates the gold g/t x meter plot which distinctly defines and segregates the oxide mineralization and the sulphide mineralization.

10.1 Diamond Drilling Specifications

All drill campaigns were contracted to Superior Diamond Drilling of Kelowna, BC which conducted all work within the deposit on behalf of ATAC Resources Ltd.

During 2008 diamond drilling at the Rau project was completed with a Mandrill 1200 diesel-powered drill using BTW equipment yielding core diameters 4.17 centimeters. In 2009, drilling was performed with a Mandrill 1200 and two B-15 diesel-powered drills using BTW (4.17 centimeter core diameter), NQ2 (5.06 centimeter core diameter) and HQ3 (6.11 centimeter core diameter) equipment. The same equipment was used among the three drills in 2010 with the addition of a track mounted mobilization system on one of the B-15 drills and the ability to utilize PQ (8.50 centimeter core diameter) tooling.

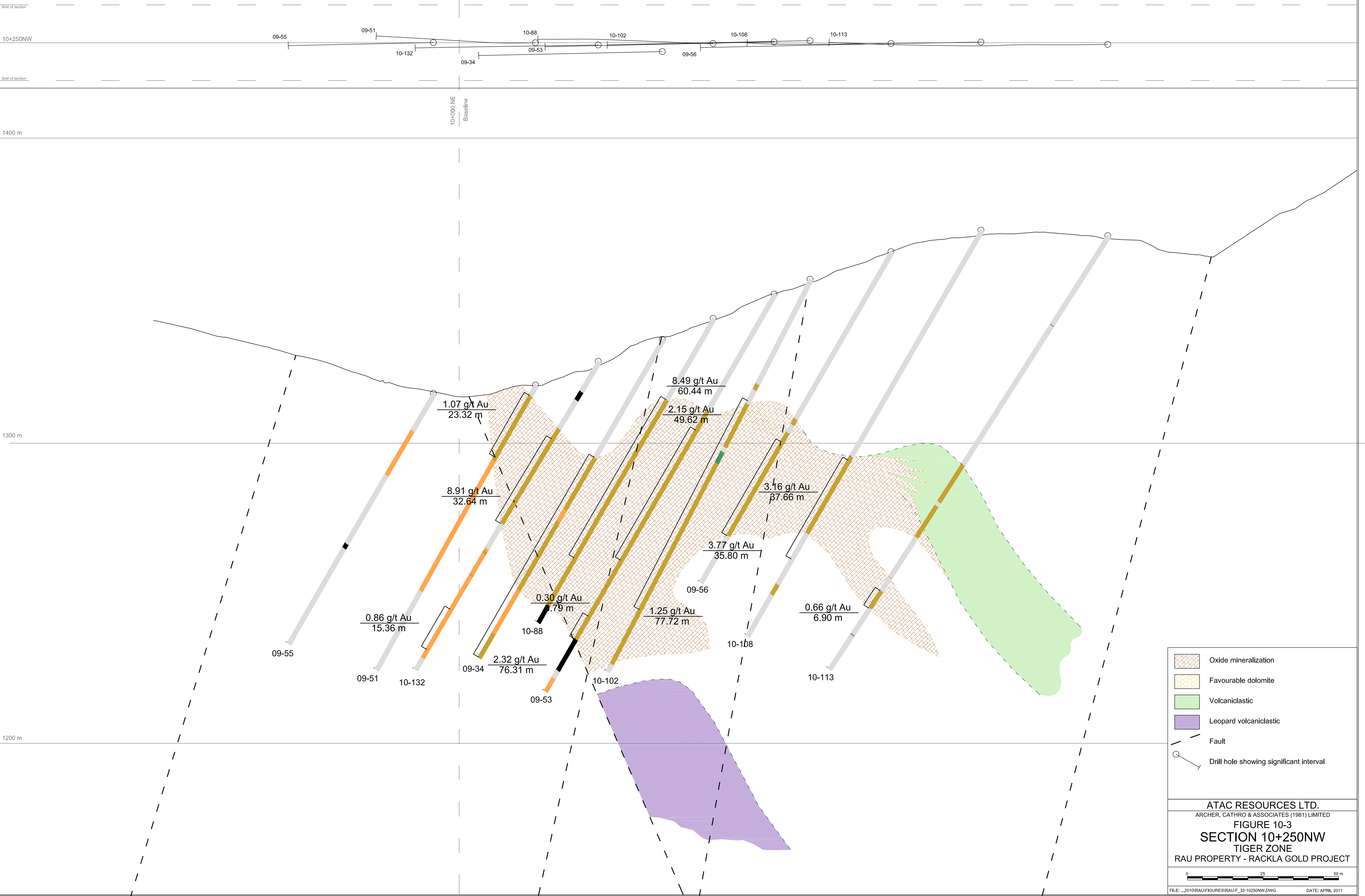
Different diameter tooling was used in certain parts of the mineralizing system as the effectiveness of certain diameters was determined throughout the evolution of the exploration campaigns. BTW tooling was considered efficient from a recovery perspective within the sulphide portion of the deposit while NQ2 and HQ3 were the best means of properly testing the oxide parts of the mineralizing system to maximize recovery. PQ size holes were drilled as infill and twinned holes from earlier campaigns to evaluate the effects of larger diameter core diameter with respect to recovery and continuity of gold grade.

10.2 Core Logging and Collar Surveys

Core logging started very basic in 2008 using a generic logging form that was filled out in hardcopy form during the day and entered digitally during the evening. As the project evolved a site specific core assessment manual with a project specific drill log was created for the Rau Project and included fields for rock type and modifiers for lithology, minerals, alteration, textures, structure, hardness, weathering and concentrations. Where oxide was logged, a Munsel color chart was utilized to characterize color for maximum continuity.

Drill core samples were collected using the following procedures:

- Core was lightly washed and measured.
- Core was geotechnically logged.



ATAC RESOURCES LTD.
ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
FIGURE 10-3
SECTION 10+250NW
TIGER ZONE
RAU PROPERTY - RACKLA GOLD PROJECT

0 25 50 m

FILE: ...2010\RAU\FIGURES\RAU-F_32-10250NW.DWG DATE: APRIL 2011

- Core was geologically logged and sample intervals were designated. Sample intervals were set at geological boundaries, drill blocks or sharp changes in sulphide/oxide content.
- Core recovery was calculated for each sample interval.
- Sample intervals were based on sulphide/oxide content.
- Core was sawn or split in half depending on the type of mineralization encountered. Oxide was generally split with the impact splitter to avoid washing away potential gold bearing material. One-half was sent for analyses and one-half returned to the core box.
- Samples were double bagged in 6 millimetre plastic bags, a sample tag was placed in each sample bag, then two (2) or three (3) samples were placed in a fiber glass bag sealed with a metal clasp and sample numbers were written on the outside of that bag with permanent felt pen.
- Two (2) blank and two (2) standard samples were randomly included in every batch of 31 core samples.
- Duplicate samples were collected by quartering sample intervals after the initial half split in every batch of 31 core samples.

A separate Geotechnical Log was filled out prior to geological logging and included the conversion of drill marker blocks from imperial to metric and determinations of recovery, rock quality designation (RQD) hardness and weathering. Wetted core photographs were taken prior to logging photographing three boxes at a time from a common marker to provide the same field of view for each photo taken. These photos were then catalogued for historical reference.

Sulphide mineralization and unoxidized intervals within the oxide zone were collected for “field-based” density measurements used both wet and dry evaluation methods to provide base level density data for resource evaluation. Magnetic susceptibility logs were also created where measurements were collected at one meter intervals along the entire hole.

All logging data was collected by means of hardcopy during the day and transcribed to digital format during the evenings or by designated personnel the next day.

The drill hole collars were surveyed by Archer Cathro employees using a Trimble real time kinematic GPS. Collars are marked by scrap drill rods cemented into the hole and a steel tag showing the hole number.

All down-hole surveys were conducted with the use of a “Ranger Explorer” magnetic multi-shot tool provided by Ranger Survey Systems. Shots were taken every 50 feet in the hole recording Azimuth, Inclination, Temperature, Roll Angle (Gravity and Magnetic) plus Magnetic Intensity, Magnetic Dip and Gravity Intensity (for quality assurance). The tool uses a landing collar that sits in the bit and aluminum extension rods to ensure that the tool is hanging beneath the rod string (about 20') away from any magnetic interference.

All readings were reviewed and erroneous data (magnetic and/or gravity intensity were outside the normal range, or other obviously incorrect readings) were not used when plotting the final hole traces.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

This section describes the sample procedures followed during the diamond drilling exploration programs supervised and described by Archer, Cathro and Associates (1981) Limited for ATAC Resources Ltd. The authors have reviewed the methods and approaches where described in the recent assessment reports and have discussed the processes in detail with the supervising geologist. Also described are sample handling procedures followed during the exploration programs managed by Archer, Cathro & Associates (1981) Limited for ATAC Resources Ltd. A project specific sample handling manual was designed in conjunction with the field operations manual specific to core processing.

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PROTORE GEOLOGICAL SERVICES

FIGURE 10-4

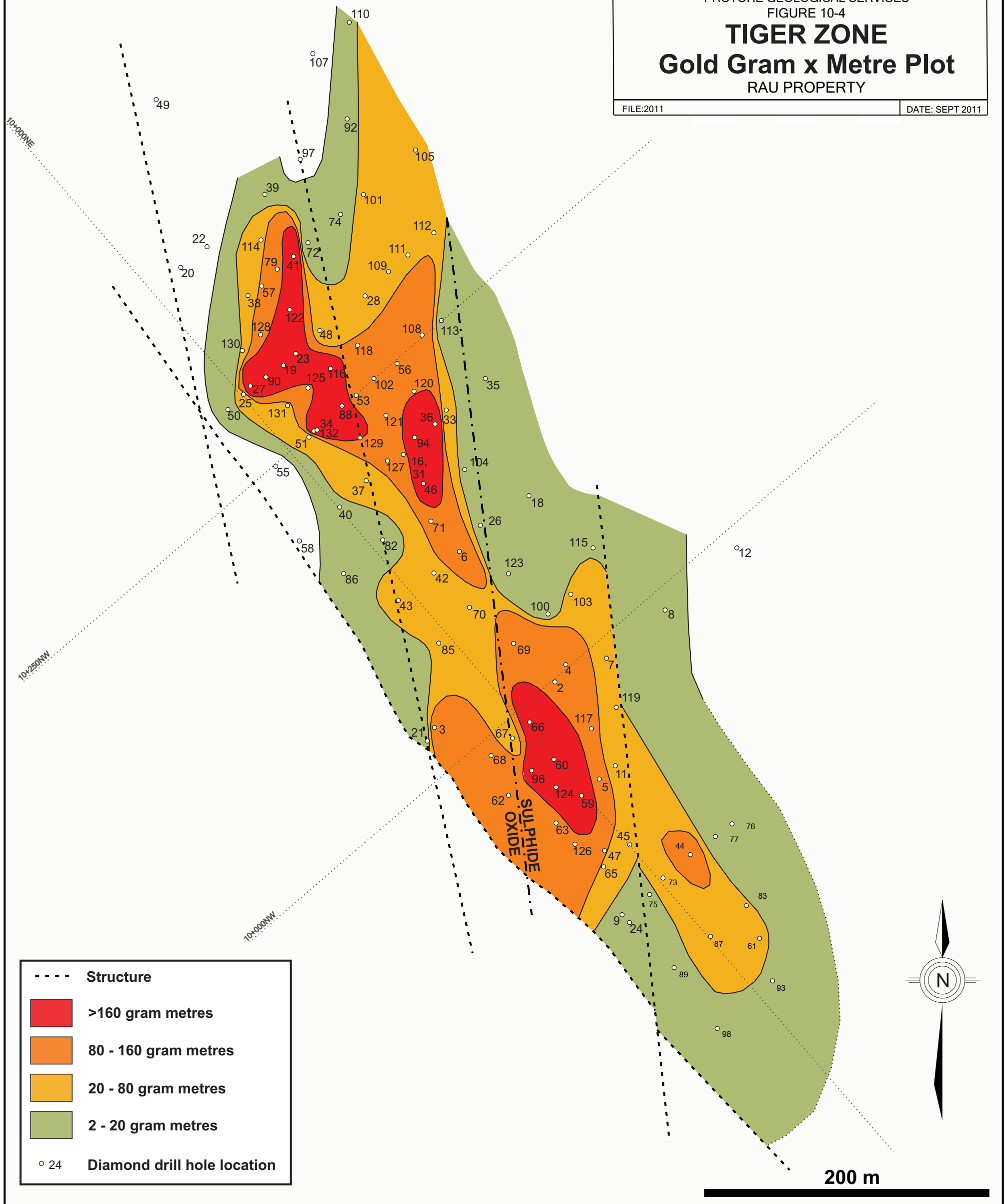
TIGER ZONE

Gold Gram x Metre Plot

RAU PROPERTY

FILE:2011

DATE: SEPT 2011



Soil samples were transported from the Property to Whitehorse in the custody of Archer, Cathro and Associates (1981) Limited employees. From there, they were shipped to ALS Canada laboratory in North Vancouver. At the lab, soil samples were dried and screened to -35 mesh to produce a fine fraction, which was then pulverized to 85% passing 75 microns. Splits of the pulverized fraction were routinely dissolved in aqua regia and analyzed for 35 elements using the ICP-AES technique (ME-ICP41). All samples were also analyzed for gold using fire assay and ICP-AES (Au-ICP21).

Surface rock and core samples were flown by helicopter from the property to a staging area at McQuesten Lake, then transported to Whitehorse by truck, escorted by a representative of Archer Cathro and Associates (1981) Limited. The samples were shipped from Whitehorse to ALS Canada in North Vancouver. Core samples were dried and crushed to 70% minus 2 millimeters, before a 1.5 kilogram split was taken and pulverized to better than 85% minus 75 microns. To reduce cross contamination between samples during preparation, the equipment was washed twice with quartz silica sand. Splits of the pulverized fraction were routinely dissolved in aqua regia and analyzed for 48 elements using technique ME-MS61, which combined inductively coupled plasma (ICP) with mass spectroscopy (MS) and atomic emission spectroscopy (AES). Samples were analyzed for gold by fire assay finished with atomic absorption spectroscopy (Au-AA26).

Core recovery was excellent in the sulphide portion of the Tiger Zone averaging 98%. Recovery of the oxide mineralization was very poor during the 2008 drill season but rapidly improved in 2009 and 2010 with the use of larger core diameter tooling and superior mud technology. All mineralized drill core was split/sawn for assay. The mineralization is readily recognizable by sulphide /oxide content in the core. It is the opinion of the authors that the drill core sampling is reliable and is representative of the mineralization with the Tiger Zone.

The samples collected from the project were controlled by employees of Archer Cathro and Associates (1981) Limited until delivered to a commercial carrier or directly to the laboratory facilities. ALS Canada is an independent commercial laboratory. The ALS Canada laboratory in Vancouver, B.C. has ISO 9001:2000 certification.

Core was transported by helicopter from the drill sites to a logging area on the property, where recovery was measured and geological and geotechnical logging was performed. Geologically and mineralogically favorable intervals from each hole were split with one-half bagged and sent for analysis and the other half returned to the core box. All cores are stored on the property.

Prior to 2008 no drilling was conducted on the property and QAQC for soil sample and rock sample processing utilized standard industry procedures. More robust protocols used for the diamond drilling between 2008 and 2010 are discussed below.

QAQC 2008

During the program 35 gold standards and 42 blanks were inserted within the sample sequences. The standard material was obtained from CDN Resource Laboratories Ltd. (gold ore reference standard CDN-GS-15A), which has a consensus value of 14.83 ppm gold. The acceptable (two standard deviation) error in the sampling is ± 0.61 ppm.

Gold values from all but one of the blank samples were within acceptable range (< 0.05 ppm). The failed sample was from hole Rau-08-07 and returned 0.14 ppm. All samples from this hole were reanalyzed by the laboratory to ensure the results were accurate.

All but nine of the standard sample values were within the acceptable range. Gold values from four of the sample batches (Rau-08-07, -08, -09 and -11) that included failed standards were reanalyzed by the laboratory to ensure results were accurate. Most results from the reanalysis were relatively consistent when compared with the original values. The most notable exceptions were three samples from Rau-08-07, which returned values significantly higher than the original. These samples first yielded 6.71, 4.39

and 5.67 ppm. Results from the reanalysis were 8.32, 5.69 and 7.84 ppm respectively. The following table shows the results of the analysis for the standard samples.

Table 11-1: 2008 Quality Control Samples

Hole	Sample	Gold (ppm)
Rau-08-01	G004539	14.7
Rau-08-02	G004541	14.3
Rau-08-02	G004561	14.8
Rau-08-02	G004581	>10.0*
Rau-08-02	G004602	>10.0*
Rau-08-03	G004838	14.55
Rau-08-04	G004755	13.3
Rau-08-04	G004774	14.25
Rau-08-05	G004808	14.4
Rau-08-05	G004823	14.45
Rau-08-06	G004862	NSS*
Rau-08-06	G004879	15.2
Rau-08-07	H246016	9.74
Rau-08-07	H246029	12.95
Rau-08-07	H246251	13.7
Rau-08-08	H246046	13.8
Rau-08-08	H246066	14.5
Rau-08-08	H246074	14.35
Rau-08-09	H246124	14.05
Rau-08-09	H246140	13.65
Rau-08-10	H246159	15.35
Rau-08-10	H246170	14.65
Rau-08-11	H246198	13.4
Rau-08-11	H246223	13.25
Rau-08-12	H246239	15.2
Rau-08-13	H246276	15.2
Rau-08-13	H246297	14.85
Rau-08-14	H246577	14.75
Rau-08-15	H246604	14.65
Rau-08-16	H246618	15.45
Rau-08-16	H246634	14.5
Rau-08-18	H246717	13.5
Rau-08-18	H246753	14.35
Rau-08-18	H246773	15.05
Rau-08-18	H246791	14.55

*sample size not sufficient to obtain complete assay result

QAQC-2009

During the 2009 field season, samples were divided into batches, each containing 31 core samples, two standards, two blanks and one duplicate. A total of 155 standards and 151 blanks were inserted into the sample sequences. Blank samples each comprised 4 kilograms of landscaping marble obtained from a garden centre in Whitehorse. Samples of this material were randomly selected and analyzed prior to the field season in order to use as certified blank material.

Prior to the field season, three standard samples were prepared by CDN Resource Laboratories Ltd. from core collected in 2008. Two additional gold standards, obtained from CDN Resource Laboratories and a tungsten standard from the Canada Centre for Mineral and Energy Technology were used for check

analysis performed following the field season. Table 11-2 summarizes the consensus and two standard deviation values for each of the standard samples used during the program.

Table 11-2: 2009 Standard Sample Consensus Values

Sample	Consensus Value	2 σ
STD-1	0.514 g/t Au	0.058
STD-2	1.527 g/t Au	0.134
STD-3	5.705 g/t Au	0.498
CDN-GS-1D	1.05 g/t Au	0.10
CDN-GS-3F	3.10 g/t Au	0.24
BH-1	0.422% W	0.008

Gold values from all but five of the blank samples were within acceptable range (≤ 0.05 ppm). The failed samples were from batches 1 (0.15 g/t), 35 (0.06 g/t and 0.13 g/t), 53 (0.23 g/t) and 55 (0.08 g/t). All samples from batch 35 were reanalyzed by the laboratory to ensure the results were accurate. The remaining samples were found to be within the ALS Chemex's accepted "carry-over" limit given the high gold values of the proceeding samples.

All but nine of the standard sample values are within the acceptable range. Gold values from seven of the sample batches (5, 23, 39, 46, 52, 68 and 76) that included failed standards were reanalyzed by the laboratory to ensure results were accurate. Results from the reanalysis were typically consistent with the original values. The most notable variations came from thirteen samples with values greater than 1.5 g/t gold, suggesting a small nugget effect occurs with higher grade samples.

A total of 76 duplicate samples, prepared from quarter core, were collected and analyzed throughout the program. In general, there was a small decrease in gold values but otherwise little variation between the initial and duplicate samples. The most notable difference was from hole Rau-09-19. The initial sample yielded 162.00 g/t, while the duplicate returned 84.50 g/t. This implies that there is some nugget effect present, particularly in the higher grade samples. The smaller size of the duplicate sample may also account for the general decrease in gold grade in these samples.

In December 2009, 132 pulps and 137 coarse rejects were randomly selected from the 2 359 core samples collected that summer. In order to remove any bias, pulps and coarse rejects were selected from a Microsoft Excel spreadsheet using a random number generator. These samples were renumbered and submitted to ACME Analytical Laboratories in Vancouver, B.C. for reanalysis for gold and tungsten.

At ACME, coarse reject material was pulverized to better than 85% minus 75 microns. Equipment was washed twice with glass between samples to reduce the possibility of cross contamination. A 50 gram split was taken and analyzed for gold by fire assay and finished with atomic inductively coupled plasma (ICP) with emission spectroscopy (ES). Tungsten was analyzed using the Group-7KP technique, which dissolves the sample in phosphoric acid and completes the analysis using a combination of inductively coupled plasma (ICP) and emission spectroscopy (ES).

These samples were arranged in batches of 35 samples and include two standard samples per batch. Two blank samples were also included in each batch of coarse rejects. Table 11-3 lists the results of these QAQC samples.

Table 11-3: 2009 ACME QAQC Standard and Blank Samples

Batch	Standard	Sample	Au (g/t)	W (%)
Reject-1	Blank	E687006	<0.01	<0.005
Reject-1	BH-1	E687010		0.435
Reject-1	STD-3	E687015	5.53	
Reject-1	Blank	E687034	<0.01	<0.005
Reject-2	BH-1	E687044	0.04	0.423
Reject-2	Blank	E687051	0.02	<0.005
Reject-2	Blank	E687056	<0.01	<0.005
Reject-2	STD-1	E687063	0.48	
Reject-3	Blank	E687082	0.02	<0.005
Reject-3	Blank	E687083	0.01	<0.005
Reject-3	STD-2	E687084	1.43	
Reject-3	STD-1	E687100	0.47	
Reject-4	Blank	E687110	<0.01	<0.005
Reject-4	BH-1	E687118		0.417
Reject-4	Blank	E687124	0.01	<0.005
Reject-4	STD-1	E687125	0.5	
Reject-5	STD-2	E687145	1.5	
Reject-5	Blank	E687148	<0.01	<0.005
Reject-5	Blank	E687152	15.55	<0.005
Reject-5	STD-1	E687157	0.48	
Pulp-1	BH-1	E687168		0.427
Pulp-1	GS-3F	E687183	2.77	
Pulp-2	GS-3F	E687202	2.97	
Pulp-2	GS-1D	E687222	1.04	
Pulp-3	GS-1D	E687246	1.12	
Pulp-3	GS-1D	E687252	1.07	
Pulp-4	GS-3F	E687268	3.05	
Pulp-4	BH-1	E687279		0.415

One standard and one blank sample did not meet the QAQC criteria. The standard sample (E687010) returned the maximum allowable value before resulting in an automatic failure. Blank sample E687152 yielded 15.55 g/t gold. Despite a maximum allowable carry-over of 1% from the preceding sample (41.20 g/t) this sample was a clear failure.

The blank samples consisted of coarse marble aggregate and first needed to be crushed to 70% passing two millimeters. Because these samples had to be removed from the sample stream to accommodate this extra step, it is not clear as to where the contamination would have occurred and whether or not other samples could have been affected.

On average, gold results were similar to the original analytical results. The greatest variability occurs in samples that initially yielded greater than 10.0 g/t gold. Of the 269 pulp and coarse reject samples reanalyzed, 191 returned gold values within 0.10 g/t of the original, 33 samples increased by more than 0.10 g/t and 46 decreased by more than 0.10 g/t. In general, tungsten results from ACME were higher than the original Chemex results. A total of 157 samples returned tungsten values below the detection limit and are consistent with the original values. Of the remaining 112 samples, 90 yielded values greater than the original. The greatest increase came from a sample that originally returned 1 320 ppm tungsten, which increased to 1 870 ppm tungsten. The general increase can be explained by the more complete digestion of the sample using the Group-7KP analytical technique.

QAQC - 2010

During the 2010 field season, samples were divided into batches, each containing 31 core samples, two standards, two blanks and one duplicate. Blank samples comprised landscaping marble obtained from a garden centre in Whitehorse. The weight of each blank sample was determined based upon the core diameter of the surrounding samples. Blank weight for BTW, NQ, HQ and PQ were four, five, seven or eight kilograms, respectively. Several tons of this material was obtained prior to the start of the exploration season and laid out in conical pile within a “sterile” environment where it was thoroughly mixed. Eight equally spaced channels were sampled from the base of the pile to the apex and analyzed by ALS Group of North Vancouver, B.C. and Acme Analytical of Vancouver B.C. prior to the field season in order to use as certified blank material.

Prior to the field season, four sulphide standard were prepared from the 2009 Tiger Zone core reject material by CDN Resource Laboratories Ltd. Four oxide standard samples were purchased from Geostats Pty Ltd. Table 11-4 summarizes the consensus and two standard deviation values for each of the standard samples used during the program.

Table 11-4: 2010 Standard Sample Consensus Values

Standard	Sample	Consensus Value	2σ
ROS-1	G306-1	0.41 g/t Au	0.06
ROS-2	G399-2	1.46 g/t Au	0.18
ROS-3	G999-4	3.02 g/t Au	0.42
ROS-4	G306-3	8.66 g/t Au	0.66
RSS-5	2010-A	0.437 g/t Au	0.048
RSS-6	2010-B	1.83 g/t Au	0.21
RSS-7	2010-C	3.83 g/t Au	0.33
RESS-8	2010-D	2.72 g/t Au	0.35

In 2010 gold values from all but five of the blank samples were within acceptable range (≤ 0.05 ppm). The failed samples were from batches 12 (0.06 g/t), 31 (0.10 g/t), 42 (0.16 g/t), 73 (0.08 g/t) and 104 (0.38 g/t). New master pulps were created for all samples in batches 73 and 104 and were reanalyzed to ensure the results were accurate. The remaining samples were found to be within the ALS Chemex's accepted “carry-over” limit given the high gold values of the proceeding samples.

All but ten of the standard sample values were within the acceptable range. Gold values from the sample batches (2, 5, 9, 14, 33, 45, 58, 93, 85 and Cheetah 7) that included failed standards were reanalyzed by the laboratory to ensure results were accurate. Results from the reanalysis were typically consistent with the original values.

A total of 117 duplicate samples, prepared from quarter core, were collected and analyzed throughout the program. In general, there was little variation in gold values between the initial and duplicate samples. On average the duplicate samples show a 13% increase in gold grade over the original sample. The most notable differences come from low grade samples where even a minor increase in grade translates to a significant percentage gain.

The quality control program indicates that the assay results are a reliable indicator of the metal concentrations of the mineralization. Gold assays correlate to mineralized veins and alteration zones.

The data presented for all ATAC Resources Ltd. exploration meets NI 43-101 standards. It is the opinion of the Authors that the sample preparation, quality control, security and analytical procedures for work conducted on the Rau property by ATAC Resources Ltd. meet the standards as set out in National Instrument 43-101 and the results are representative of the mineralization of the Tiger Zone.

12.0 DATA VERIFICATION

Samples from the diamond drilling programs were subjected to a Quality Control (QC) program designed by the Company. The QC program consisted of:

- Sequentially numbered sample tickets: to identify each sample with a unique number to minimize the possibility of sample numbering errors and to ensure uniform collection of sample data.
- Sealed sample bags: to secure individual sample bags to reduce the possibility of sample contamination, spilling or tampering.
- Chain of custody: samples were stored in secure preparation area and delivered to the laboratory directly by company personnel or commercial freight carrier.
- Sample duplicates: selected samples were re-submitted for assay. There were normally three or four samples duplicated for each drill hole.
- Sample blanks: commercial samples were purchased and inserted in the sample sequence. All blank samples yielded background values, including samples inserted directly following a "standard" value to test for "smear effect" during the sampling process, indicating no observable contamination. Thus, the analytical techniques employed by ALS Chemex can be considered highly reliable. These blanks were assigned unique sample numbers within the sample sequence so as to be "blind" to the laboratory.
- Reference standard samples: Four different commercial standard samples for gold in sulphide and four commercial standard samples for gold in oxide that ranged from 0.41 to 8.66 g/t gold. The reference standards were assigned unique sample numbers within the sample sequence.

The Authors have verified the data from the records between 2008 and 2010 carried out by ATAC Resources Ltd. Verification of the data included:

- Comparing assay certificate data to log assays sheets.
- Compared assay results to the lithological and mineralization descriptions in the log sheets.
- Compared assay results for the standard, blank and duplicate samples.
- Re-calculated composite assay averages and compared those reported by the Company.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Five separate surveys directly and indirectly associated with metallurgical testing have been completed on the potential sulphide and oxide ore comprising the Tiger Zone mineralization. The following work was conducted over a two year period by independent contractors:

1. Sulphide petrographic studies – Micron Geological Ltd. (B.C.)
2. Sulphide Flotation/Cyanidation Surveys – G&T Metallurgical Services (B.C.)
3. Gold deportment studies - Surface Science Western (O.N.)
4. Bio-oxidation studies – SGS Minerals Services (O.N.)
5. Oxide cyanidation – SGS Minerals Services (O.N.)

13.1 Sulphide Petrography

Micron Geological Ltd. (Peter LeCouter) was retained to perform gold characterization on a number of samples from the Rau project during fall and winter 2009/2010. This work was done on five grain mounts and six polished thin sections. Material for the construction of the grain mounts was selected from coarse reject drill core from the 2009 drilling within the Tiger Zone and East Zone. Select grains were collected and sent to Vancouver Petrographics Ltd. in Burnaby B.C. where they were mounted in epoxy and polished. Table 13-1 illustrates the location and grade data for these samples.

Table 13-1– Grain Mount Data

Drill Hole #	Zone	Comp #	Sample #	Au g/t
Rau-09-44	East	1	H884773	14.05
Rau-09-60	Tiger	2	H885186	9.66
Rau-09-66	Tiger	*	G284424	19.35
Rau-09-67	Tiger	3	G284349	8.85
Rau-09-69	Tiger	4	G285018	2.08

* - No composite was prepared from this reject

Six polished sections were constructed using select sulphide sections of Tiger Zone drill core from the 2008 drill campaign. The assay data for the intervals from which the select pieces were collected are contained in Table 13-2.

Table 13-2 – Polished Section Data

Hole	Depth (m)	Interval Assay Au g/t
Rau-08-02	60.80	0.617
Rau-08-02	60.90	0.617
Rau-08-04	162.80	8.25
Rau-08-04	164.50	8.25
Rau-08-05	73.40	4.99
Rau-08-11	22.20	8.13

The polished grain mounts were examined by transmitted/reflected light microscope and minerals of interest were analyzed on an AMRAY 1810 scanning electron microscope equipped with an EDAC “Genesis” energy dispersive X-ray analyzer.

Comments from Micron Geological Ltd’s report of findings are described below.

Grain Mounts

The samples appear to have relatively simple mineralogy consisting mainly of pyrite (40-70%) and arsenopyrite (0-45%) with 5 to 25% dolomite. Small amounts of fine-grained bismuthinite (many antimonial) are present in all samples including native bismuth.

Sulphide ore microscopy identified gold-bismuth alloys in two of the five samples. One of the alloys was noted within the sample from DDH-09-44 (East Zone). The sample is comprised of 70% pyrite with no traces of arsenopyrite. One gold-bismuth alloy ($\text{Au}_{15}\text{Bi}_{80}\text{Fe}_5$) grain measuring 40 microns was documented along a pyrite grain boundary.

The other gold-bismuth alloy was documented in the grain mount prepared from DDH-09-60 core reject material. The polished thin section comprised 50% pyrite and 40% arsenopyrite. The gold-bismuth alloy is a 50 micron composite grain occurring with bismuthinite within a larger pyrite grain. Gold content within the alloy ranges from 19 to 76%.

Polished Thin Sections

Six polished thin sections were prepared from core specimens collected from 2008 drill holes Rau-08-04, 05 and 11. The samples covered a range of gold grades from 0.6 to 8.3 g/t and also covered a variety of sulphide compositions. Native gold was observed in two samples and a gold-bismuth alloy was noted in another.

The first occurrence of gold and gold-bismuth alloy was identified in a pyrite dominant section collected from the Discovery Horizon DDH-08-02 from which the assay interval was 0.617 g/t gold. The modal abundance of pyrite, quartz and arsenopyrite in the polished thin section is 60%, 20% and 10%, respectively. Three composite grains of gold-bismuth alloy and native bismuth measuring 70 to 116 microns across occur within larger pyrite grains. In some instances arsenopyrite occurs as composite grains with the pyrite but there appears to be no association with gold. One native gold grain measuring 50 microns occurs as a composite with bismuthinite and a very small grain of arsenopyrite all occurring within a larger pyrite grain.

The other occurrence of gold was from a pyrite dominant piece of mineralization from the Upper Horizon in DDH-08-11. Modal sulphide content for pyrite and arsenopyrite is 50% and 35%, respectively. The interval assay from which the specimen was collected was 8.13 g/t. Four irregular shaped grains of native gold were observed up to 75 microns long and 35 microns wide. All occur within larger pyrite grains and appear to be along grain boundaries.

13.2 Sulphide Flotation/Cyanidation Surveys

During winter 2009/2010, G&T Metallurgical Services Ltd. was retained to perform scoping level metallurgical tests on five select composite sulphide samples from the Tiger and East Zones. Composite data for the samples is shown in Table 13-3 below.

Table 13-3: Composite Data

<u>Zone</u>	<u>Hole #</u>	<u>Composite #</u>	<u>W.A. g/t Au</u>	<u>Average Sx %</u>
Tiger	RAU-09-60	2	7.61	15
	RAU-09-67	3	4.60	10
	RAU-09-69	4	2.40	8
East	RAU-09-44	1	8.72	16
	RAU-09-61	5	4.58	30

All composites were subjected to Bulk Mineral Analyses (BMA) using the Qemscan technique. Key observations indicate the material composition for the Tiger and East Zones are mineralogically distinct with respect to carbonate and sulphide compositional ratios. Table 13-4 illustrates the respective carbonate and sulphide ratio data.

Table 13-4: Bulk Mineral Analysis Data

<u>Zone</u>	<u>Hole</u>	<u>Comp #</u>	<u>Dolomite %</u>	<u>Ankerite %</u>	<u>Dol:Ank</u>	<u>Pyrite %</u>	<u>Aspy %</u>	<u>Py:Aspy</u>
Tiger	09-60	2	23.0	26.0	0.88	31.4	10.4	3.02
	09-67	3	20.7	23.3	0.89	34.4	11.9	2.89
	09-69	4	34.3	19.2	1.79	24.9	5.94	4.19
East	09-44	1	38.2	9.53	4.01	31.3	Tr*	31.3
	09-61	5	15.4	4.88	3.16	70.8	2.46	28.8

A series of whole ore cyanidation and flotation tests were conducted on all composites. Cyanidation parameters were as follows:

Primary Grind: 70 to 77 micron
 Secondary Grind: 15 to 20 micron
 Leach PH: 11
 NaCn conc: 2000 g/t
 Residence Time: 48 hrs

Procedure: Bottle Roll
Volume: 500 g

Table 13-5 shows the results of the first phase cyanidation tests.

Table 13-5: Phase I Cyanidation Results

<u>Zone</u>	<u>Comp #</u>	<u>Au Distribution (%)</u>	<u>Au Distribution (%)</u>	<u>Au Distribution (%)</u>	<u>Au Distribution (%)</u>
Hours		6	48	6	48
Grind		75 micron	75 micron	15 micron	15 micron
Tiger	2	62.0	65.2	63.5	68.9
	3	22.5	23.4	23.5	30.1
	4	38.9	42.4	37.1	45.9
East	1	88.2	95.2		
	5	24.49	35.2		

The East Zone material composite 09-44 responded very well to cyanidation at 75 micron grind yielding 95.2 and recovery in 48 hours. The Tiger Zone material responded less favorably yielding recoveries between 23 and 65%. In all cases the cyanide leach kinetic curves exhibit the highest percentage gold extraction within the first six hours with between 1% and 11% residual leach taking place in the remaining 42 hours.

The three composites from the Tiger Zone were also taken to ultra-fine grind of 15 to 20 micron and subjected to the same cyanidation process. Percentage gold distribution for composites two through four increased by 6%, 29% and 8%, respectively when comparing final residence time of 48 hrs.

Open circuit rougher flotation tests were performed to evaluate the gold recovery in a rougher flotation concentrate. Approximately 2 000 grams of composite material for each sample was subjected to a primary grind size of approximately 75 micron and processed through a standard one product rougher kinetic flotation system using a neutral PH of about 8.0 and potassium amyl xanthate to collect the sulphide minerals.

The difference between the feed gold grades of the final rougher concentrates gold grades for each of the composites tested increased between 62% and 137%. The small increase in gold concentrate grade indicates there is a large volume of sulphide comprising the final concentrates.

Gold recoveries from the flotation tests for Composite 1 (East Zone) are excellent yielding 97%. Material from Composites 2-4 ranged between 82% and 87% within a calculated 77% to 89% sulphide content. Table 13-6 lists the results of the cumulative metallurgical balances for these rougher flotation tests.

Table 13-6: Cumulative Balances for Phase I Rougher Flotation Tests

<u>Zone</u>	<u>Comp #</u>	<u>Feed Mass</u>	<u>Flotation Concentrate</u>		<u>Flotation Tails</u>	
		<u>Au g/t</u>	<u>Au g/t</u>	<u>Au Distr %</u>	<u>Au g/t</u>	<u>Au Distr %</u>
East	1	7.82	17.4	97.1	0.41	2.9
Tiger	2	7.89	14.9	84.1	2.26	15.9
	3	4.65	7.53	82.3	1.67	17.7
	4	2.27	5.37	87.3	0.46	12.7

Because a significant proportion of gold appears to be contained within the Tiger Zone flotation tails, additional cyanidation leach tests were performed on 500 grams of material from bulk flotation tails

generated from a second phase of flotation tests required for bench scale pressure oxidation testing. Leach efficiency of the tails was low not exceeding 31.7% of the gold contained within the tails. Table 13-7 shows the cumulative balances for the phase II rougher concentrates and Table 13-8 shows the results for leach tests on the flotation tails.

Table 13-7: Cumulative Balances for the Phase II Rougher Flotation Tests

Comp #	Feed Mass	Flotation Concentrate		Flotation Tails	
<i>Tiger Zone</i>	<u>Au g/t</u>	<u>Au g/t</u>	<u>Au Distr %</u>	<u>Au g/t</u>	<u>Au Distr %</u>
2	7.44	13.8	91.3	1.28	8.7
3	4.29	6.78	78.7	1.82	21.3
4	2.04	5.16	90.0	0.32	10.0

Table 13-8: Cyanidation Results for Phase II Flotation Tails

Comp #	Feed Mass	Au Distr %	Au Distr %
<i>Hours</i>	<u>Au g/t</u>		
		6	48
2	1.37	23.5	26.0
3	1.98	17.5	19.2
4	0.33	18.6	31.7

The maximum gold recovery from cyanidation of the rougher tails was calculated to be 4% of the original feed mass.

The phase II rougher flotation concentrates were prepared for additional Pressure Oxidation and Carbon in Leach (POX/CIL) performed by SGS in Lakefield, Ontario. The following specifications were established for these tests:

Pressure Oxidation Parameters

Feed Mass: 100 g
Pulp Density: 7.5% solids (w/w)
Temperature: 250 C
Oxygen Over Pressure: 100 psi
Retention Time: 90 minutes

CIL Parameters

Pulp Density: 20% solids (w/w)
Pulp PH: 10.5-11
CN Concentration: 1.0 g/l
Carbon Concentration: 10 g/l preatrittioned GRC22
Retention Time: 48 hours

Near complete oxidation of the sulphide mineralization was attained in the pressure oxidation tests. The average sulphide oxidation was 99.5% for all three samples. Post pressure oxidation CIL leaching of the POX residues produced very high gold extractions between 96.6 and 98.6% in 24 hours. Overall gold extractions using a combination of flotation, pressure oxidation and cyanide leaching of the POX residues and flotation tailings produced good gold recoveries. The overall unoptimized gold recoveries for composites 2, 3 and 4 were 94, 80 and 92%, respectively.

13.3 Sulphide Gold Department Studies

Surface Science Western was retained to perform additional work on material from the rougher concentrates prepared by G&T Metallurgical Services Ltd. to further characterize the gold in sulphide samples using Dynamic Secondary Ion Mass Spectrometry (D-SIMS). The D-SIMS quantitative analysis is designed specifically for sub-microscopic gold in sulphide minerals. Similar work has been done to characterize ores from the Carlin District in Nevada among others.

The samples appropriate for gold characterizations using the D-SIMS analysis were the rougher concentrates from G&T Metallurgical Ltd. Table 13-9 lists the composite data provided to Surface Science Western from G&T Metallurgical Services Ltd.

Table 13-9: Cumulative Balances for the Surface Science Rougher Flotation Concentrates

<u>Zone</u>	<u>Comp #</u>	<u>Reference</u>	<u>Feed Mass</u>	<u>Flotation Concentrate</u>	
		<u>#</u>	<u>Au g/t</u>	<u>Au g/t</u>	<u>Au Distr %</u>
Tiger	2	2537-06	7.89	14.9	84.1
	3	2537-07	4.65	7.53	82.3
	4	2537-08	2.27	5.37	87.3

13.31 Scope of the Study

- General mineralogy and optical microscopy scan for visible gold grains.
- Quantitative analysis of gold in sulphide minerals by Dynamic SIMS.

13.32 Methodology

1. General mineralogy and optical microscopy scan for visible gold grains:

This part of the study addresses the presence of free gold and the abundance and morphological types of the sulphide minerals in the sample. Each sample was assayed for gold, arsenic, sulphide sulphur and other major elements. The sulphide concentrate was subjected to gravity separation using a super-panner which separates minerals with different specific gravities: gold, sulphides and rock minerals. Polished sections prepared from different mineral fractions were studied by optical microscopy in order to identify gold grains and characterize the sulphide minerals present in the samples. The free gold grains found in the sample are characterized by size and association. Although not included in the initial scope of this study, the composition of free gold grains was established by the SEM/EDX technique; it is provided free of charge.

2. Quantitative analysis of gold in sulphide minerals by D-SIMS:

The D-SIMS technique is a benchmark technique for analysis of sub-microscopic (invisible) gold in minerals. This type of gold is present as finely disseminated colloidal size gold particles (<0.5µm) or as a solid solution in the mineral matrix of sulphide minerals and it is not directly amenable to cyanidation. In order to liberate this sub-microscopic gold, the ore generally has to be oxidized prior to leaching.

A large number of sulphide mineral particles were analyzed for the presence of sub-microscopic gold using the Cameca IMS 3F SIMS instrument and concentration depth profiles for gold, arsenic, sulfur and iron were produced. The quantification of the gold and arsenic was established using internal mineral specific standards.

The following summary of results is taken from the final report prepared by Surface Science Western.

13.33 Gold Department Balance

- The description of the samples analyzed and their corresponding assayed gold values are provided in Table 13-10. The established forms and carriers of gold in the analysed flotation concentrate samples are presented on the gold department diagram in Figure 13-1 and summarized in Table 13-11. Forms of gold refer to free microscopic (visible) gold and sub-microscopic (invisible) gold. Carriers of gold refer to all major host minerals carrying one or more of the abovementioned forms of gold. The three flotation concentrates showed varying proportions of free and sub-microscopic gold content.

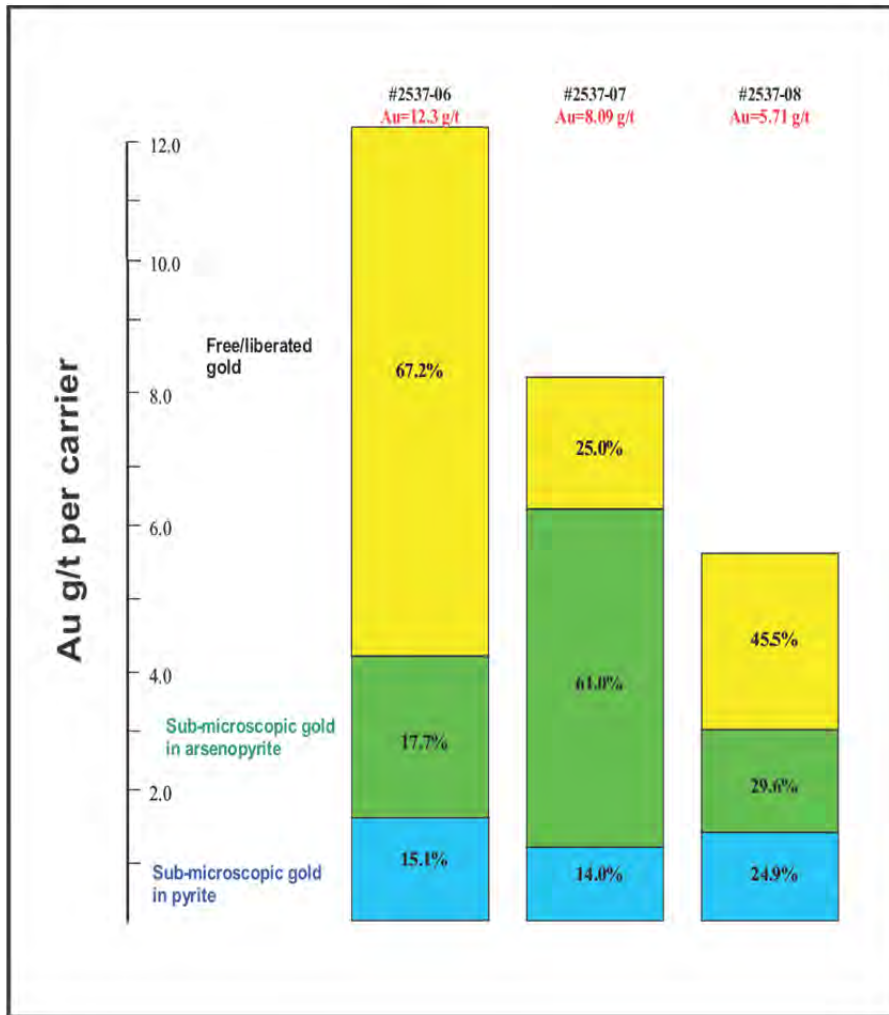


Figure 13-1. Gold department diagram representing all major forms and carriers of gold in the samples. The relative distribution of gold per carrier (in %) is given for each sample.

Table 13-10: Samples Description and Assays

Sample description	Sample I.D.	Au, g/t		S ⁼ , wt% sulfide sulfur	As, wt%
		Assayed on site ¹	Provided by client ²	Assayed on site ¹	Assayed on site ¹
Sulphide flotation concentrate	2537-06	12.30	14.90	42.00	6.60
Sulphide flotation concentrate	2537-07	8.08	7.53	39.10	10.00
Sulphide flotation concentrate	2537-08	5.71	5.37	41.00	7.20

(1) Assayed at SGS Lakefield analytical lab

(2) Assayed at G&T analytical lab

Table 13-11: Gold Department Summary

Sample	#2537-06		#2537-07		#2537-08	
Gold assayed in the sample	12.3 g/t		8.09 g/t		5.71 g/t	
Forms and Carriers of gold	Au g/t	% in head assay	Au g/t	% in head assay	Au g/t	% in head assay
Native (visible) gold ¹	8.27	67.24	2.02	24.97	2.60	45.53
Sub-microscopic (invisible) gold ²						
Pyrite	1.85	15.04	1.13	13.97	1.42	24.87
Arsenopyrite	2.18	17.72	4.94	61.06	1.69	29.60
TOTAL	12.3	100	8.09	100	5.71	100

(1) Determined by difference

(2) Determined independently by D-SIMS

2. The relative proportion of free (amendable to cyanidation) gold is, (from Table 13-11):

1. sample 2537-06: 8.27g/t; 67.24% of the total assayed gold in the head sample
2. sample 2537-07: 2.02g/t; 24.97% of the total assayed gold in the head sample
3. sample 2537-08: 2.60g/t; 45.53% of the total assayed gold in the head sample

These values correlate well with the reported gold recoveries by direct cyanidation of the flotation concentrates.

3. Sub-microscopic gold in the pyrite and arsenopyrite mineral structures account for the balance of the gold assays in the flotation concentrates. The sub-microscopic fraction of the gold was independently determined based on quantification by D-SIMS of the gold content in arsenopyrite and the three different morphological types of pyrite, and their abundance in the sample.
 - a. sample 2537-06: 1.71g/t in py (15.04% of total); 2.18g/t in apy (17.72% of total)
 - b. sample 2537-07: 1.13g/t in py (13.97% of total); 4.94g/t in apy (61.06% of total)
 - c. sample 2537-08: 1.42g/t in py (24.87% of total); 1.69g/t in apy (29.6% of total)

Small portions of the sub-microscopic gold in sulphides or fine, free gold particles could be locked in the rock mineral phases present in the samples and may not be recoverable without further grinding. The scope of the present study did not include detailed evaluation of the amount of carriers locked in rock minerals.

13.34 Major Findings

Visible gold study

1. In total, 30 gold grains were found in the samples during the optical microscopy scan: 21 grains in sample 2537-06; 5 grains in sample 2537-07 and 4 grains in sample 2537-08.
2. Most of the gold grains are fully liberated or exposed (attached to other mineral phases). Based on the total surface area measured for exposed and locked gold grains, the fraction of encapsulated (locked) in other mineral phase visible gold is $\leq 1.8\%$.
3. Size distribution: For samples 2537-06 and -07 most of the grains are in the 5-50 μm range. In sample 2537-08, most of the grains found are in the 50-100 μm range.
4. Composition:
 - Both native gold and electrum were identified by the SEM/EDX compositional analysis. The ratio between the native gold and electrum grains for the observed grains is: 1:2.7.
 - The average composition of the electrum grains is 96% gold and 4% silver.
 - Some of the gold grains have an enclosed/attached separate pure bismuth phase. The SEM/EDX images/data did not show a presence of Bi-Au compounds. Only one SEM/EDX spot showed a bismuth-gold phase but it is possible that this spot may belong to a boundary of gold-bismuth attachment.

13.35 Sub-microscopic gold study

1. Two gold carriers of sub-microscopic gold were identified in this study. The estimated mean values for gold content in different minerals are summarized in Tables 13-12 to 13-14. The relative distribution of Au among the mineral phases for all 3 samples is shown in Figure 13-2.

Table 13-12: Measured concentrations of sub-microscopic and arsenic in pyrite and arsenopyrite from #2537-06 sample.

PS mount M1: 2537-06										
Pyrite									Arsenopyrite	
Coarse			Porous			Fine				
Grain I.D.	Au ppm	As ppm	Grain I.D.	Au ppm	As ppm	Grain I.D.	Au ppm	As ppm	Grain I.D.	Au ppm
m1pyc43	2.27	6690.87	m1pyp09	6.24	7074.97	m1pyf08	3.43	4970.04	m1ap01	1.16
m1pyc44	0.88	2038.36	m1pyp10	7.70	9923.45	m1pyf11	3.20	3503.81	m1ap02	5.40
m1pyc46	2.09	724.50	m1pyp12	3.30	4114.17	m1pyf14	1.43	1231.50	m1ap03	33.16
m1pyc47	1.89	5064.39	m1pyp13	2.34	7627.79	m1pyf16	3.40	2279.59	m1ap04	3.56
m1pyc48	1.56	5826.98	m1pyp15	3.64	8410.11	m1pyf17	2.37	4039.65	m1ap05	2.40
m1pyc50	3.41	1552.85	m1pyp18	1.98	7559.64	m1pyf31	1.87	4441.71	m1ap06	10.21
m1pyc51	1.35	3636.32	m1pyp19	2.80	1447.39	m1pyf39	3.16	9437.57	m1ap07	1.34
m1pyc52	2.23	2231.36	m1pyp20	4.60	9139.61	m1pyf42	2.60	706.39	m1ap24	9.66
m1pyc53	1.36	2746.12	m1pyp21	2.43	4153.12	m1pyf45	4.25	8410.24	m1ap25	87.37
m1pyc54	1.33	910.55	m1pyp22	4.93	10544.11	m1pyf57	2.48	899.10	m1ap26	19.77
			m1pyp23	4.45	6448.42	m1pyf58	4.80	3773.69	m1ap27	10.40
			m1pyp40	2.68	3015.56	m1pyf61	2.83	3119.76	m1ap28	4.07
			m1pyp41	5.32	8416.00				m1ap29	10.70
			m1pyp56	4.02	8137.90				m1ap30	14.53
			m1pyp60	2.22	3745.75				m1ap32	27.25
			m1pyp62	4.93	11297.58				m1ap33	5.11
									m1ap34	5.87
									m1ap35	9.89
									m1ap36	30.72
									m1ap37	2.46
									m1ap38	33.40
									m1ap63	6.34
Average	1.84	3142.23		3.97	6940.97		2.99	3901.09		15.22
±λ	0.45	1321.56		0.81	1438.37		0.55	1578.24		8.18

 $\pm\lambda$: 95 % confidence interval

$\lambda = 2 \sigma / \sqrt{n}$; σ is the standard deviation; n is the number of analyses

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 $\lambda = 2 \sigma/\sqrt{n}$; σ is the standard deviation; n is the number of analyses

$\lambda = 2 \sigma / \sqrt{n}$; σ is the standard deviation; n is the number of analyses

2. Comparison of the estimated sub-microscopic gold concentrations in the mineral phases between the samples shows some variability. The highest percentage of sub-microscopic gold in the gold balance was determined in sample 2537-07.
3. The carriers of sub-microscopic gold among the analyzed mineral phases are ranked below:

- i) **Arsenopyrite:** Major carrier. The estimated average gold concentration is in the range 10.8-22.76ppm. The occurrence of solid solution type sub-microscopic gold in the SIMS depth profiles for arsenopyrite was 73%, the rest being colloidal type of sub-microscopic gold.
 - ii) **Pyrite:** Secondary carrier. The average gold concentration in the various morphological phases of pyrite ranges from 1.34ppm-3.97ppm (Tables 13-2, 13-3 and 13-4). All SIMS depth profiles in pyrite showed presence of colloidal type sub-microscopic gold.
4. There is a positive correlation between the measured sub-microscopic gold concentrations and the arsenic content in pyrite for all three samples (Figures 13-2, 13-3 and 13-4).

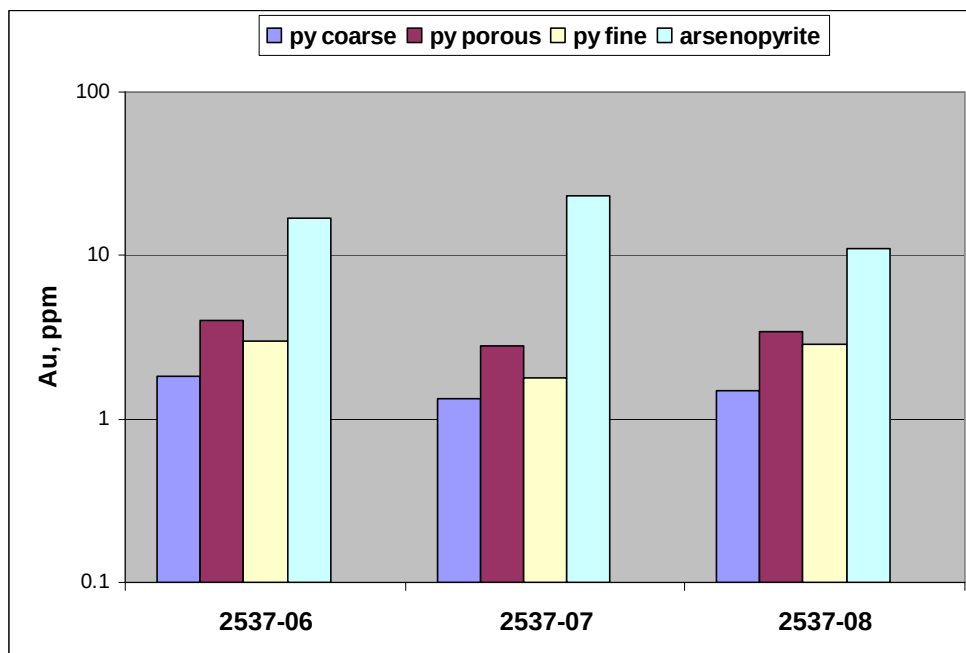


Figure 13-2: Relative Gold Distribution Diagram

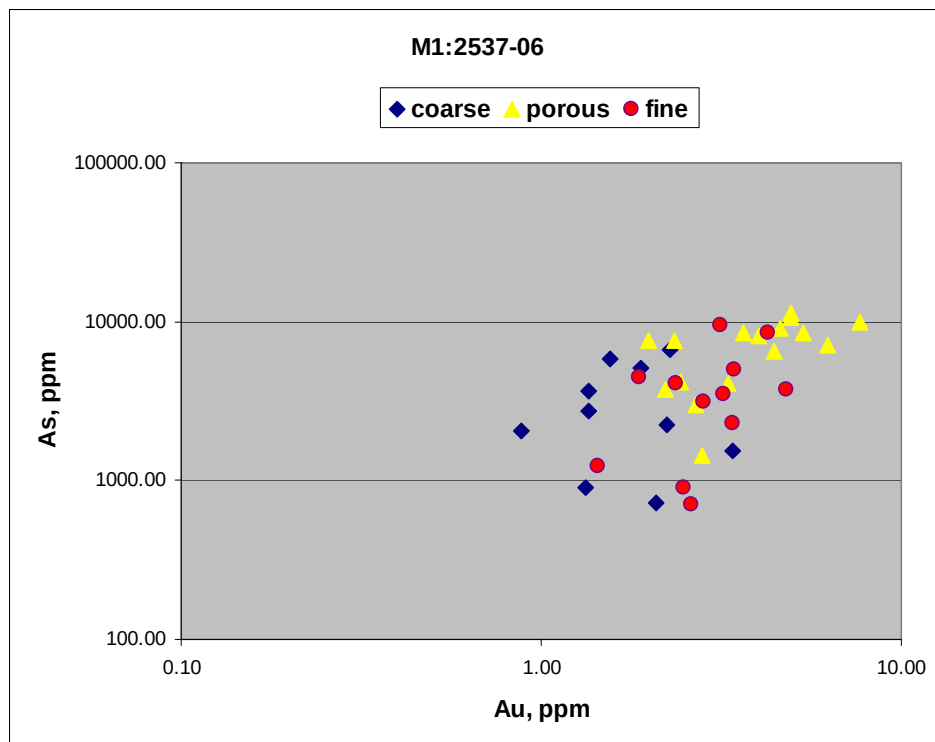


Figure 13-3: Scatter plot of gold and arsenic concentration in different morphological types of pyrite in 2537-06 sample

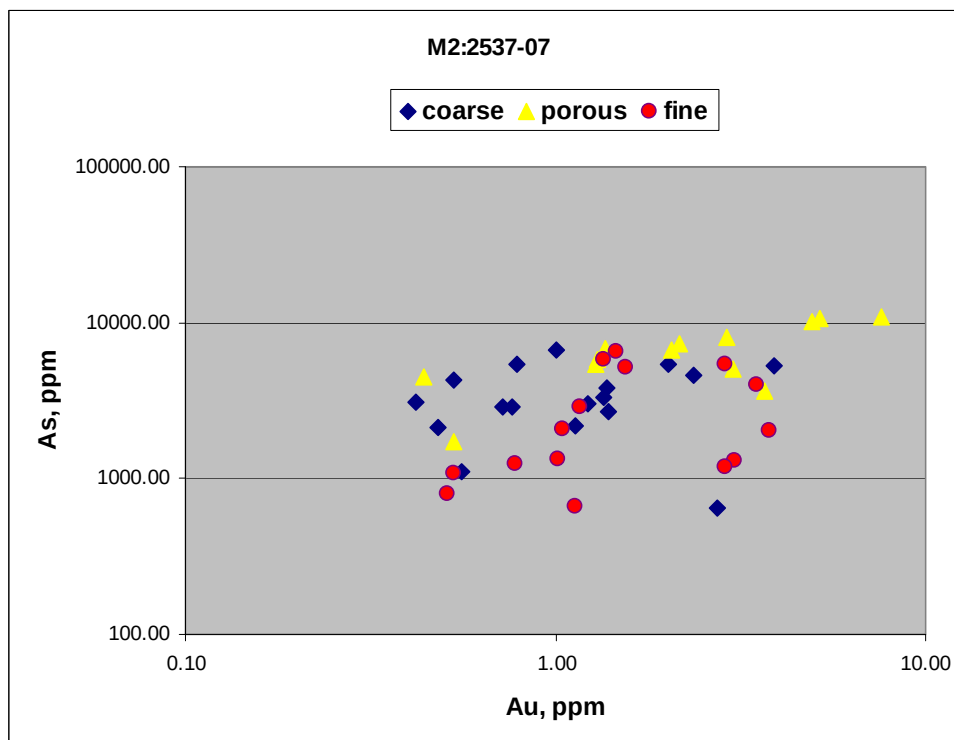


Figure 13-4: Scatter plot of gold and arsenic concentration in different morphological types of pyrite in 2537-07 sample

13.4 Sulphide Bio-Oxidation Studies

During winter of 2010/2011 SGS Mineral Services conducted a metallurgical test program on a Tiger Zone sulphide composite sample for the purpose of determining the amenability of the sulphide mineralization to bio-oxidation (BIOX) and subsequent carbon in leach (CIL) cyanidation for the extraction of its precious metals. The unit operations simulated in the metallurgical test program included milling, flotation, BIOX of the flotation concentrate, and CIL of the BIOX residue. In addition, neutralization of the BIOX liquor was undertaken. The resulting ferric arsenate from the neutralization was submitted for stability tests to determine its suitability for disposal in tailing ponds.

The ore submitted for metallurgical testing comprised approximately 150 kg composited from 20 individual samples. The composite head grade contained 2.14 g/t gold, <0.5 g/t silver, 2.5% arsenic, 17% sulphide and 32% carbonate. The ore was subjected to rougher flotation for the recovery of gold and the flotation concentrate was subjected to ultra-fine grinding followed by cyanidation and to BIOX/CIL.

The mass pull of the rougher flotation concentrate was high at 44% with a gold recovery of 97%. Gold extraction by cyanidation increased from less than 50% using the reground un-sulphide flotation concentrate, to over 91% in the BIOX residue Tiger Zone sulphide. Sulphide oxidation increased from 75% after 10 days, to 98% after 30 days of BIOX retention time. However, the gold extraction by the CIL from the BIOX residue was essentially equal (between 91 and 93%) for all the BIOX residues of sulphide oxidation between 75 and 98%. The consumption of cyanide and lime during the CIL were high, however their addition would need to be further optimized in a separate set of leach kinetic tests.

The Tiger Zone BIOX liquor is amenable to neutralization by limestone and lime from pH 1.12 to pH 7 in a one stage process, consuming 0.12 kg of limestone and 0.016 kg of lime per litre of BIOX solution (equivalent of 1088 kg of limestone and 141 kg of lime per tonne of concentrate, for the BIOX pulp density of 9.9% solids). The concentrations of iron and arsenic in the filtrate from the neutralization are 0.08 mg/L and 0.02 mg/L respectively, which are below the limits of 0.5 mg/L and 1.0 mg/L respectively, set by the USEPA.

The TCLP test on the residue from neutralization yielded extract containing 0.05 mg/L As, well below the 5 mg/L As limit set by the USEPA for waste disposal. The ferric arsenate precipitate can therefore be considered stable for disposal.

13.5 Oxide Metallurgy

Metallurgical studies were performed on oxide material from the Tiger Zone at two different periods between 2009 and 2010-2011. The first of these studies was performed by ALS Group of North Vancouver BC using coarse reject material from the mineralized interval in Rau-09-19 which assayed 24 g/t gold across 28 m. The process utilized for these tests was an Au-AA14 procedure which is an ore grade cyanide leach with Atomic Absorption Spectroscopy finish (AAS). The procedure for this technique is described below from the ALS Group mineral services schedule.

A 1000 g sample is weighed into a polyethylene bottle, jar or drum. The leach solution, 0.25% NaCN – 0.1% NaOH, is added at the ratio of two parts solution to 1 part solid. After closing the container, it is shaken to wet the sample thoroughly, rolled for one hour and the pH checked. If less than pH 9.5, NaOH or CaO is added to raise the pH to between 9.5 and 11.5. The sample is rolled for a total leach time of 24 hours. At the end of the leach, the pH is checked again. If the pH is less than 8.5 the procedure is repeated with more CaO and more frequent evaluations of the pH during the 24 hour leach. After rolling for the designated time a portion of the leachate is withdrawn, centrifuged until clear, and analyzed by flame – atomic absorption spectroscopy against gold standards prepared to match the cyanide and pH of the analysis.

In total, six - one kg samples of varying grades from the Tiger Zone drill hole Rau 09-19 were pulverized to 75 micron and subjected to cyanide leaching over a 24 hour cycle time. The process recovered an average 96.87% of the gold at all grade levels tested as illustrated in Table 13-15 below:

Table 13-15: Preliminary Oxide Cyanide Leach Results

Sample	Reject	Pulp	Au-AA26 (g/t)	Au-AA14 (g/t)	% Recovery
RAU-CY-A	X		85.7	82.6	96.38
RAU-CY-A		X	83.5		
RAU-CY-B	X		7.76	7.50	96.65
RAU-CY-B		X	7.87		
RAU-CY-C	X		4.69	4.51	96.16
RAU-CY-C		X	4.30		
RAU-CY-D	X		2.70	2.68	99.26
RAU-CY-D		X	2.44		
RAU-CY-E	X		0.83	0.77	92.77
RAU-CY-E		X	0.81		
RAU-CY-F	X		0.25	0.26	100
RAU-CY-F		X	0.29		
Average Recovery					96.87

During the 2010 exploration season one PQ hole (Rau-10-94) was drilled within the central portion of the Tiger Zone oxide mineralization specifically for the purpose of oxide metallurgical work. SGS Mineral Services was retained to perform scoping level gold recovery test work on a single composited sample from this material.

Fifty-one samples comprising the mineralized interval were forwarded to SGS Lakefield's facility where a 1-kg portion of each of the 51 interval samples was riffle split from the minus 10 mesh available sample to form a composite sample. The 51-kg composite was combined and blended and further riffle split into 1-kg test charges.

13.51 Head Analysis

Duplicate ~1 kg charges of minus 10 mesh material of the composite sample were submitted for Au analysis applying a screened metallics protocol, at +/- 150 meshes. The screen undersize product was sampled (by riffing) and assayed in duplicate. Screen oversize material (metallics) was assayed to extinction. The head grade analysis of the composite yielded an average grade of 4.82 g/t gold.

A smaller head sample (~100 to 200 g) was submitted for sulphur speciation (ST, S0, S2- and SO4) and carbon speciation (CT, Cg, Corg, CO2) analyses. An additional amount of -10 mesh material was also submitted for a brief mineralogical evaluation as described below.

The composite was also submitted for baseline environmental analysis including Acid Base Accounting (ABA) and Net Acid Generation (NAG) tests.

Gold distribution in the head grade was assessed in +150 mesh and -150 mesh as a mass percent within each size fraction. The analysis showed that 99% of the gold reports to the -150 mesh fine fraction confirming the fine grained nature of the gold in this system.

13.52 Mineralogical Evaluation

The composite was subjected to qualitative mineralogical evaluation. The Rapid Mineral Scan evaluation package (RMS) was applied. This included a description of the mineral assemblage with manual grain counting or a QEMSCAN BMA scan. An X-ray diffraction analysis was included for the identification of the major minerals. Results incorporated mineral identification, grain size range determination and general mineral liberation characterisation.

Mineralogical evaluation of the composite (80% passing 150 microns) was done using a “RMS” Petrographic and XRD examination of the oxide material. The evaluation shows the majority (~75%) of the sample is comprised of non-opaques, likely dolomite and quartz, while goethite and limonite comprise the main oxides. Goethite grains are largely liberated (85%) with 6% of the grains “attached” and 9% of the grains “locked”.

Other non-opaques of particular interest are traces of graphite and Total Carbonaceous Matter (TCM) but do not appear to be problematic with respect to preg-robbing in the cyanidation processes.

13.53 Metallurgical Testing

Scoping level metallurgical testing evaluated the following process options with a view to establishing the basic flowsheet configuration.

- Gravity recovery of gold,
- Flotation of gravity tailing and whole ore,
- Cyanidation of whole ore, gravity tailing and flotation concentrate.

13.54 Gravity Separation Test Work

Typically an operating plant's optimal grind size is determined by the process downstream from the gravity separation circuit. For that reason (and also given the very limited amount of material available for testing) the impact of grind size on gravity performance was not evaluated in this scoping level program. The testwork was conducted at a relatively coarse P80 (i.e., ~150 µm). A 10 kg charge was ground and processed through a Knelson MD-3 concentrator. The Knelson concentrate was recovered and upgraded further by treatment on a Mozley mineral separator. The Mozley concentrate (5 – 10 g) was assayed to extinction for Au. The Mozley and Knelson tailings were recombined blended and divided into representative ~1 kg charges (as slurry) for downstream flotation and cyanidation testwork.

Gravity separation tests suggest up to 18% gold recovery is possible but this was only reported for a solitary test. It should be noted that an earlier test yielded approximately 5% recovery but these results were deemed problematic.

13.55 Cyanidation Test Work

a) Gravity Tailing Cyanidation Tests

Standard bottle roll cyanidation tests were completed on ~1 kg (dry equivalent) charges of gravity tailing generated from the testwork described in 13.54. Tests were proposed to be completed at three grind sizes ranging from as-is (~150 µm) to ~75 µm on the composite sample. The conditions applied are outlined below.

Pulp density = 40% solids (w/w)

Pulp pH = 10.5 – 11 (maintained with lime)

Cyanide Concentration = 0.5 g/L as NaCN

Retention time = 48 hours

Pregnant solution sub-samples will be removed and assayed for Au at ~8, 24 and finally at 48 hours

Leach residue samples were dried, weighed and sampled in duplicate for Au analysis. A second sample was submitted for confirmatory size analysis. Applying the same conditions as indicated above, a single carbon-in-leach (CIL) test was completed on a gravity tailing sample.

Cyanidation of ground ore was conducted at feed sizes ranging from 69 to 131 micron and gold extraction was monitored at 6, 24 and 48 hour retention times. Normalized gold extraction at maximum retention time ranged from 89.6% to 91.3%. It should be noted that 85 to 90% of the gold extraction was achieved in the first 6 hours of the cyanidation process.

b) Whole Ore Cyanidation Tests

Tests applying similar baseline conditions, as indicated above, are currently in process on samples of whole ore. Three coarse bottle roll cyanidation tests will be conducted at ¼", ½" and ¾". In addition to these size fractions, a column leach test will be performed on the best case scenarios from the bottle roll including a test of the 1.25 inch material. Before feeding the columns, an agglomeration test will be run to determine if agglomeration is required.

14.0 MINERAL RESOURCE ESTIMATE

14.1 Introduction

At the request of Rob Carne from ATAC Resources Ltd., Giroux Consultants Ltd. was contracted to complete resource estimates on the Tiger Zone, Rau Property Yukon. The resources were estimated by Gary Giroux, P.Eng., MASc. who is a qualified person and independent of the both the issuer and the title holder, based on the tests outlined in National Instrument 43-101.

14.2 Data Analysis

The data base consisted of 133 diamond drill holes totaling 25 562 m (see Figure 10-1). A total of 5 881 assays were provided, completed by the effective date for this report, February 28, 2011. Gaps in the from-to record totaled 402 and represented missing or unsampled intervals in waste areas and no recovery in mineralized zones. Values of 0.001 g/t were inserted for missing or unsampled intersections. Gaps where there was no material recovered, within mineralized sections, were left blank.

The following lithologies were logged:

LST	Grey, fine to medium grained, bedded, variably fossiliferous limestone with intermittent zones of solution collapse structures. Major alteration types in the limestone are marbleization and dolomitization
DOL	White to yellow, coarse grained hydrothermal crystalline dolomite and ankerite.
DOL,MX	The "Tiger Zone"; white to yellow, coarse grained hydrothermal dolomite and ankerite with masses and bands of coarse, euhedral pyrite, arsenopyrite and variable pyrrhotite mineralization.
OX	Brick red to brown, clay-like to competent, fine to coarse grained, intensely oxide altered "Tiger Zone" with variable siderite and limonite alteration.
VOL	Green to brown, fine to medium grained, variably amygdaloidal and magnetic volcanics and volcaniclastics. Strong sericite and chlorite alteration overprints primary textures which at times exhibit ash/pumice textures.
LEP	Grey to brown, fine to medium grained, mottled, calcified pumice tuff volcaniclastics
MBL	White to light grey, sucrosic marble.
MX - SX	Massive to semi-massive sulphide mineralization
OVB	Overburden, glacial till and poorly developed soils
QV	White to translucent grey, coarse grained quartz vein with variable calcite and iron sulphide content.
ARG SHL	Argillites and shales
FLT	Fault zones

Assays were tagged with a lithology code and the statistics are tabulated below. The results show significant gold mineralization (Maximum Value) in eight out of the 11 lithologic units.

Table 14-1: Assay statistics sorted by lithology

Lithology	Number of Assays	Mean Au (g/t)	Standard Deviation	Minimum Value	Maximum Value	Coefficient Of Variation
OX	1,515	2.93	10.628	0.001	175.00	3.62
MX – SX	869	1.27	2.330	0.001	19.35	1.83
DOL	477	0.36	0.939	0.001	9.11	2.59
LEP	221	0.04	0.134	0.001	1.37	3.49
LST	2,188	0.13	0.619	0.001	21.00	4.95
MBL	214	0.11	0.378	0.001	4.19	3.54
VOL	695	0.12	1.276	0.001	31.90	10.36
QZ VN	38	0.16	0.250	0.005	1.21	1.61
FLT	9	0.05	0.044	0.005	0.14	0.81
ARG-SHL	14	0.11	0.156	0.001	0.51	1.37
OVB	40	0.01	0.020	0.001	0.10	3.11

As a result, the lithology alone was not the best method to constrain mineralization. ATAC Resources Ltd. geologists built a geologic 3D solid model to constrain the oxide zones and the sulphide zones in dolomite between a series of confining fault surfaces. The solids are shown below in Figure 14-1. Drill holes were “passed through” these solids, with the point each hole entered and left each solid, recorded. Assay values were then back tagged with a solid designation and the assay statistics tabulated in Table 14-2. Three oxide solids were modelled and the remaining lithologies were lumped into a main footwall solid and a smaller hanging wall solid sitting above the main mineralization. Thus the assays were subdivided into oxides and sulphide bearing lithologies.

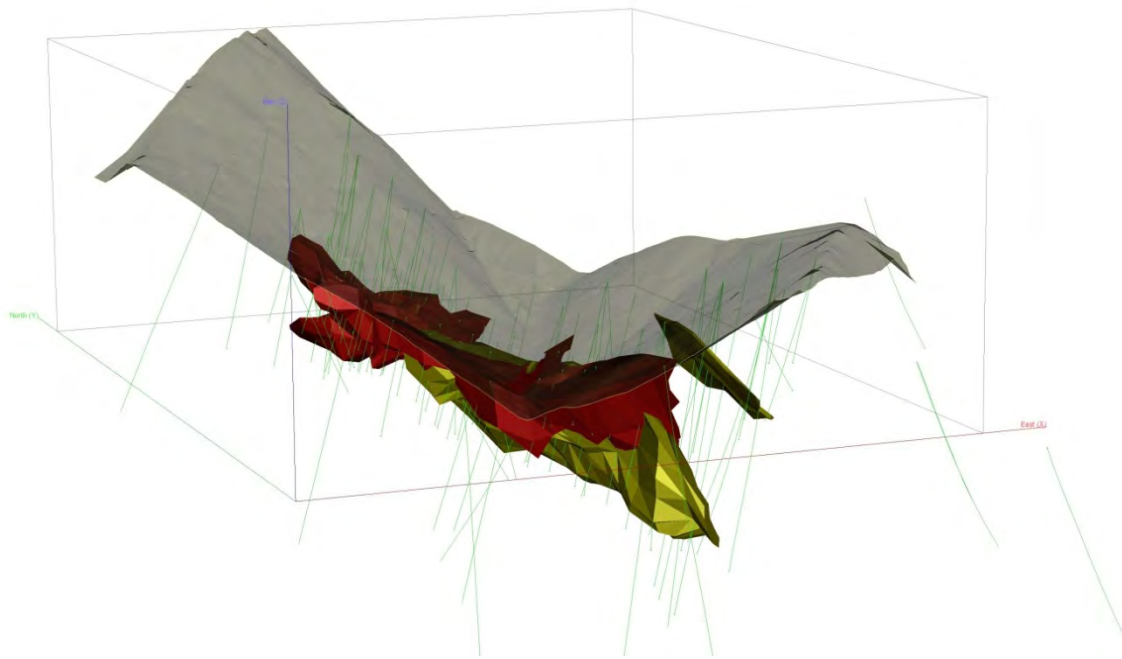
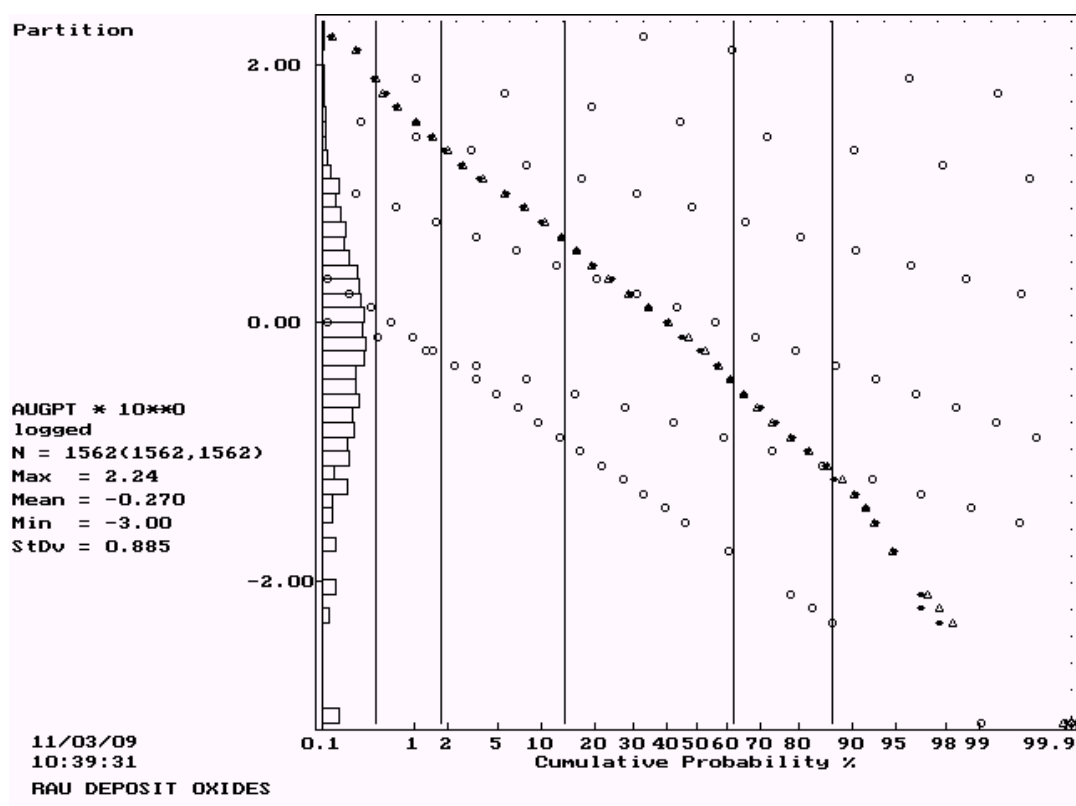


Figure 14-1: Isometric view looking NE of the oxide solids in red, sulphide solids in yellow, surface topography in grey and drill hole traces

Table 14-2: Assay Statistics from Solids

	Oxides		Sulphides	
	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)
Number of Assays	1,562	1,562	1,060	1,060
Mean Value	2.89	12.12	1.14	0.75
Standard Deviation	10.51	168.68	2.10	2.10
Minimum Value	0.001	0.001	0.001	0.001
Maximum Value	175.00	6280.00	19.35	30.10
Coefficient of Variation	3.63	13.92	1.85	2.80

The gold distributions, within the mineralized solids, were examined using a lognormal cumulative frequency plot to determine if capping was required and if so at what level. The procedure used is explained in a paper by Dr. A.J. Sinclair titled Applications of probability graphs in mineral exploration (Sinclair, 1976). In short the cumulative distribution of a single normal distribution will plot as a straight line on probability paper while a single lognormal distribution will plot as a straight line on lognormal probability paper. Overlapping populations will plot as curves separated by inflection points. Sinclair proposed a method of separating out these overlapping populations using a technique called partitioning. In 1993 a computer program called P-RES was made available to partition probability plots interactively on a computer (Bentzen and Sinclair, 1993). A screen dump from this program is shown for Oxide gold in Figures 14-2. On this plot the actual gold distribution is shown as black dots. The inflection points that separate the populations are shown as vertical lines and each population is shown by the straight lines of open circles. The interpretation is tested by recombining the data in the proportions selected and this test is shown as triangles compared to the original distribution. In each case the grade distributions for gold and silver were positively skewed with multiple overlapping lognormal populations present.

**Figure 14-2: Lognormal cumulative probability plot for gold in oxides**

In the case of gold in oxides a total of six overlapping populations were identified as tabulated below.

Table 14-3: Gold populations in Oxide Domain

Population	Mean Au (g/t)	Percentage of Total	Number of Assays
1	142.20	0.40 %	6
2	34.13	1.34 %	21
3	7.58	12.05 %	188
4	1.15	48.14 %	752
5	0.15	24.89 %	389
6	0.03	13.19 %	206

Population 1, with a mean grade of 142 g/t Au and representing 0.04% of the data can be considered erratic outlier mineralization. The samples in this population are scattered through the zone and don't represent a cohesive zone. A cap level of two standard deviations above the mean of population 2 was chosen to cap population 1 assays. A total of 7 gold assays in oxides were capped at 69 g/t.

A similar exercise was completed for silver in oxides where the top 2 populations; 1 averaging 2,936 g/t Ag and representing 0.14 % of the data and 2 averaging 803 g/t Ag and representing 0.16 % of the data, were capped at two standard deviations above the mean of population 3. A total of 4 assays were capped at 418 g/t Ag.

For gold in sulphides the top population averaging 15.88 g/t Au and representing 0.63% of the data was considered erratic and capped at two standard deviations above the mean of population 2. A total of eight samples were capped at 11 g/t Au.

For silver in sulphides the top population averaged 25.3 g/t Ag and represented 0.30 % of the data. Three silver assays were capped at 17.0 g/t. The results of capping are tabulated below.

Table 14-4: Capped Assay Statistics from Solids

	Oxides		Sulphides	
	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)
Number of Assays	1,562	1,562	1,060	1,060
Mean Value	2.61	6.93	1.11	0.72
Standard Deviation	6.83	28.79	1.93	1.81
Minimum Value	0.001	0.001	0.001	0.001
Maximum Value	69.00	418.00	11.00	17.00
Coefficient of Variation	2.62	4.15	1.74	2.51

14.3 Composites

With 98% of assays less than or equal to 3.05 m in length (see Figure 14-3), a three meter composite interval was chosen. Composites were formed within each mineralized solid honouring the solid boundaries. Intervals at the boundaries less than 1.5 meters in length were combined with adjoining samples to produce composites of equal support 3 ± 1.5 meters in length. The statistics for composites in the oxide and sulphide solids are tabulated below.

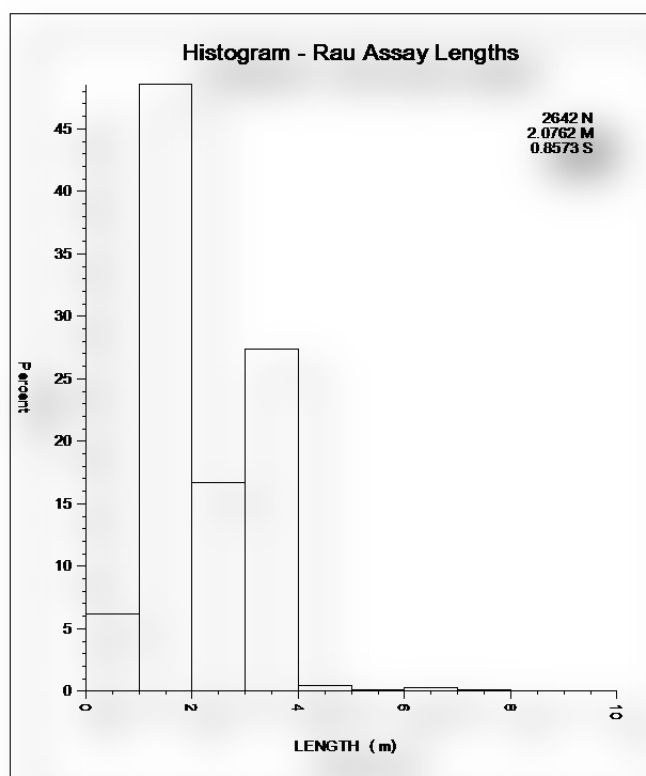


Figure 14-3: Histogram of assay sample lengths

Table 14-5: 3 m Composite Statistics from Solids

	Oxides		Sulphides	
	Au (g/t)	Ag (g/t)	Au (g/t)	Ag (g/t)
Number of Assays	985	985	826	826
Mean Value	2.55	6.03	1.04	0.63
Standard Deviation	5.63	18.80	1.57	1.38
Minimum Value	0.001	0.001	0.001	0.001
Maximum Value	65.98	269.18	9.55	14.10
Coefficient of Variation	2.21	3.12	1.51	2.19

14.4 Variography

Pairwise relative semivariograms were produced for both gold and silver in oxide and sulphide domains. The modelling procedure consisted of first examining the horizontal plane by producing semivariograms at azimuths of 90, 0, 45 and 135 degrees with dip 0 degrees. The vertical direction was also examined with this semivariogram setting the nugget effect. Once the direction of maximum continuity was established in the horizontal plane the vertical plane perpendicular to this direction was examined. For both variables in both domains geometric anisotropy was demonstrated. In all cases, nested spherical models were fit to the data.

The semivariogram parameters are tabulated below in Table 14-6.

Table 14-6: Semivariogram parameters for Tiger Zone

Domain	Variable	Az / Dip	C ₀	C ₁	C ₂	Short Range (m)	Long Range (m)
Oxides	Au	173 / 0	0.25	0.42	0.30	38.0	200.0
		83 / -55	0.25	0.42	0.30	20.0	68.0
		263 / -35	0.25	0.42	0.30	10.0	20.0
	Ag	173 / 0	0.20	0.30	0.50	15.0	50.0
		83 / -55	0.20	0.30	0.50	8.0	22.0
		263 / -35	0.20	0.30	0.50	10.0	32.0
Sulphides	Au	135 / 0	0.10	0.16	0.55	15.0	60.0
		45 / 0	0.10	0.16	0.55	15.0	25.0
		0 / -90	0.10	0.16	0.55	10.0	60.0
	Ag	0 / 0	0.10	0.30	0.40	50.0	120.0
		90 / 0	0.10	0.30	0.40	20.0	80.0
		0 / -90	0.10	0.30	0.40	8.0	20.0

14.5 Block Model

A block model with blocks 10 x 10 x 5 meters in dimension was superimposed over the mineralized solids. The model was rotated to match the drill hole fences. The block model origin and details follow:

Lower Left Corner of model

528619 E

Size of Column – 10 m

37 columns

7118717 N

Size of Row – 10 m

80 rows

Top of Model

1520 Elevation

Size of Level – 5 m

100 levels

X axis rotated 42 degrees counter clockwise

For each block the percentage below surface topography, below overburden and within each mineralized solid was recorded. Figure 14-4 shows the various mineralized solids with the overburden and topographic surfaces.

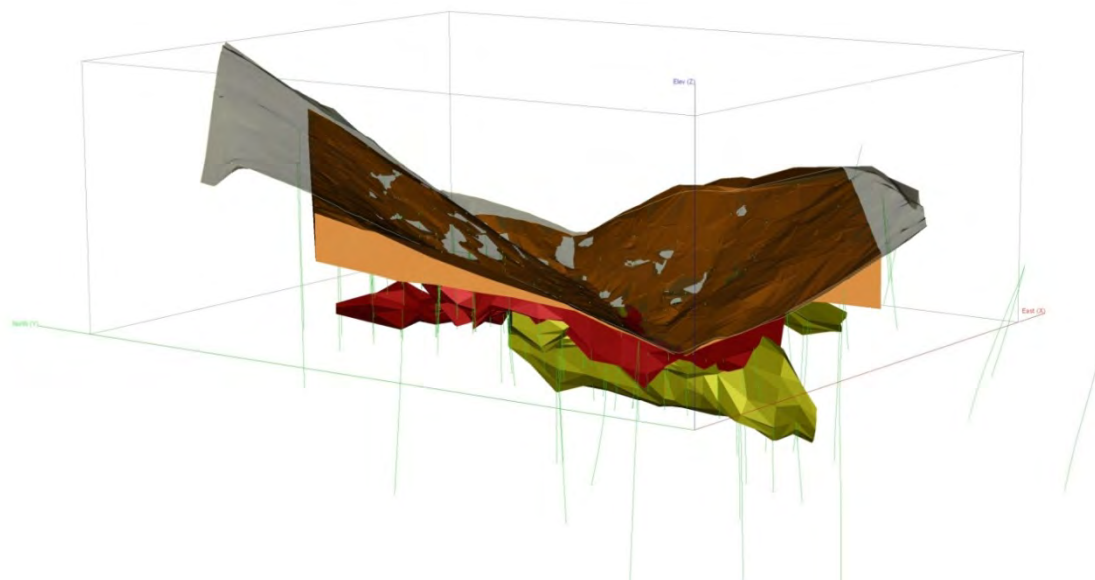


Figure 14-4: View looking NE showing oxide solids in red, sulphide solids in yellow, topography in grey and overburden in orange.

14.6 Bulk Density

Due to the extensive oxide content in this deposit and the inherent problems with measuring bulk density on soft, broken up oxide material, a lot of care and attention went into determining bulk density for the various units.

Representative densities for each lithology, alteration type and mineralization style were calculated by ATAC staff in the field using three methods; the first from weights in air from whole competent core, the second from measuring the weight of an entire box of core and the third measuring the weight of crushed, dried oxide material.

The first method was used most often. Several of these measurements were taken from each lithological unit within each hole. The second and third methods were used exclusively for oxidized material.

14.61 Weight in air from whole competent core

For the first method, 710 lengths of competent core were cut perpendicular to the core axis with a rock saw to ensure a cylindrical shape for accurate volume calculations. The final length of each cylinder was then measured to the nearest millimeter. Volumes were calculated using the measured sample length and predetermined core diameters (84.61 mm for PQ, 60.68 mm for HQ, 50.34 mm for NQ and 41.59 mm for BTW core). Core diameters were determined by averaging numerous measurements taken on representative pieces of core using calipers accurate to 0.01 mm. All weights were measured with an Ohaus Scout Pro digital scale to an accuracy of 0.1 grams. The scale was calibrated, leveled and zeroed prior to all measurements. Weight in air was measured first and then the sample was placed in a submerged metal basket suspended from a hook on the underside of the scale and weighed. In air and in water weights were recorded along with the depth of the sample, its hole number, lithology, alteration and the percentage of sulphide mineralization if applicable. To calculate density, the in air weight of the sample was divided by its volume. Specific gravity was also calculated using the Archimedes method from the sample weights in air and water. These calculations were used as a quality control check for the density calculations. In general, specific gravity measurements are comparable to density measurements. Minor variations can be attributed to porosity and inaccuracy while measuring the volume of each sample. In addition, the Archimedes method also assumes the measurements were taken at sea level and with constant air and water temperatures. Field measurements were taken roughly 1100 meters above sea level and under highly variable temperatures which could have affected specific gravity calculations. A scatterplot showing non oxide samples measured for both density and specific gravity is shown as Figure 14-5. No bias is indicated with a best fit regression line (black) mirroring the equal value line (blue). The coefficient of correlation is 0.901 showing good agreement. This means there is no significant porosity in the sulphide samples.

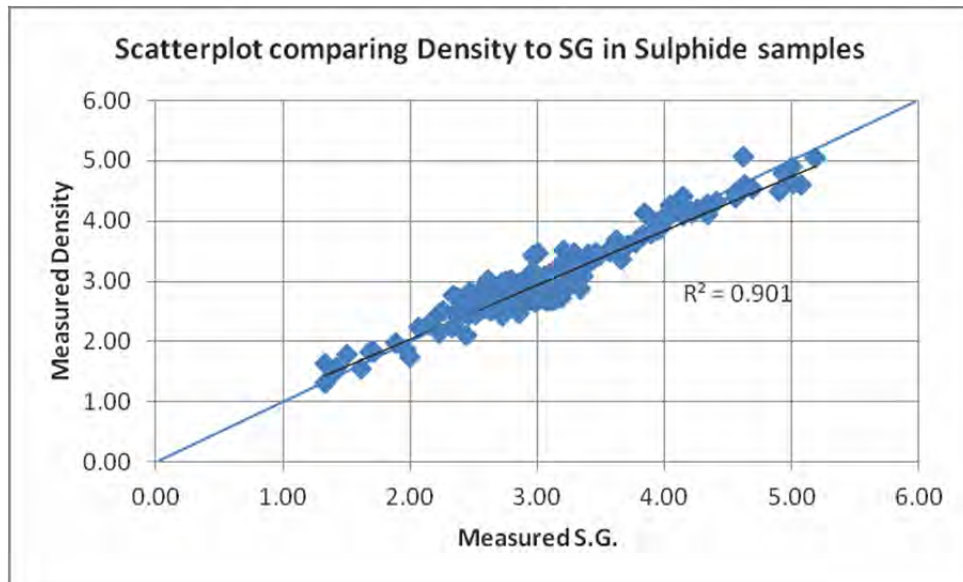


Figure 14-5: Scatterplot comparing Density to SG in Sulphide samples

14.62 Weight in air of entire box of core

Much of the oxidized core was too fragile to weigh using the above procedure; instead it was weighed in the core box. After geotechnical analysis, full boxes containing homogeneous intervals of oxide material were weighed using a bathroom scale. The weight of the box was subtracted from the measurement. The weight of each core box size was determined at the start of the program by taking an average weight of several boxes. To do these calculations, the length of core within the weighed box was measured. Some of the recovered core may be rubble or broken, so estimation for measuring recovery may be required. The volume was then calculated assuming a perfect cylinder using predetermined core diameters and the measured length of core within the weighed box.

A high variability in the weights of core boxes, variations in recovery estimates, error in volume calculations, limited accuracy of a bathroom scale, and occasional excess drill mud in core boxes make box density calculations suspect and are only considered an approximation.

14.63 Weight of crushed dry oxide material

A third method to calculate density of oxide material was used later in the field season when drill crews were consistently achieving high recoveries of oxide material. A total of 18 samples were collected from competent oxide material within intervals of 100% recovery that could be extracted from the core box. Lengths of oxide material were cut perpendicular to the core axis with sharp, metal edges. Cut sections were measured to the nearest millimeter prior to being extracted from the box. The volume of the sample was calculated from the same method described above. The sample was placed in a metal pan of known mass and was weighed using an Ohaus Scout Pro digital scale. The weight of the pan was subtracted from this measurement and the weight of the sample was recorded.

The initial sample weight includes the weight of water from natural ground conditions and fluids added during drilling and these samples are therefore considered saturated. To expedite drying, the sample was roasted in an oven at 400°C to remove all water. The sample was taken from the oven hourly and re-weighed until a consistent weight within the 0.1 gram error of the scale was achieved. This process would typically take 5-6 hours. The density of the sample was calculated at each stage using the previously defined method.

Because the oxide material could not be submerged, density calculations using the roasted method could not be checked against a specific gravity calculation. The most likely source of error in the roasting method would come from inaccurate measurements used in the volume calculations.

Oxidized core often contains significant pebbles and cobbles of limonite and goethite, this makes selection and extraction of representative intervals difficult. The amount of solid pieces within a particular interval of core can range from one or two pebbles per metre to nearly solid boxwork limonite. When selecting core for measurements, the uneven distribution of limonite and goethite produces a bias towards the softer, easier to cut and extract intervals. Although a close approximation, density results obtained from this method for oxidized core should be considered a minimum value and not entirely representative of more competent oxidized core.

The results are summarized in the table below.

Table 14-7: Average Unit Density

Unit	Modifier	Count	Avg	Min	Max	Comments
OX	Wet	65	2.38	1.81	3.10	
OX	Dry	18	1.80	1.25	2.37	Average 24% density loss after roasting
OX	Box	156	2.53	1.75	3.43	Using box weight method
DOL	MX	67	3.46	2.58	5.19	Mineralized Dolomite (incl. Tiger Zone)
DOL		35	2.98	2.71	3.36	Unaltered/Unmineralized Dolomite
LST		387	2.83	2.37	3.46	
LEP		38	2.94	2.75	3.33	
VOL		78	2.93	2.60	3.30	Not including partially oxidized VOL
MBL		40	2.79	2.52	3.05	

14.64 Sintrex Gravilog BHG system

A fourth and relatively new method of determining density was conducted by Scintrex using a Borehole Gravity Meter (Seigel et. al , 2009). The new Scintrex Gravilog BHG system can be deployed down drill holes to determine the bulk density determination of formations intersected by the borehole. This methodology was tried on 8 drill holes through oxide material during the 2010 drill program.

Table 14-8: Average Unit Density – Scintrex

Unit	Count	Avg	Min	Max
OX	80	2.46	1.62	3.36
HOST ROCKS	114	2.71	1.96	3.73

As some of the holes tested by Scintrex were outside the mineralized zone, a better comparison is made by comparing intervals from holes sampled by both ATAC and Scintrex. Figure 14-6 shows a scatterplot comparing density in intervals measure by both ATAC and Scintrex. These were not exactly the same intervals, however, as the Scintrex method was over intervals from 2 to 10 m while the ATAC samples were from small pieces of drill core contained within the Scintrex interval. The plot shows no bias with samples plotting on either side of an equal value line.

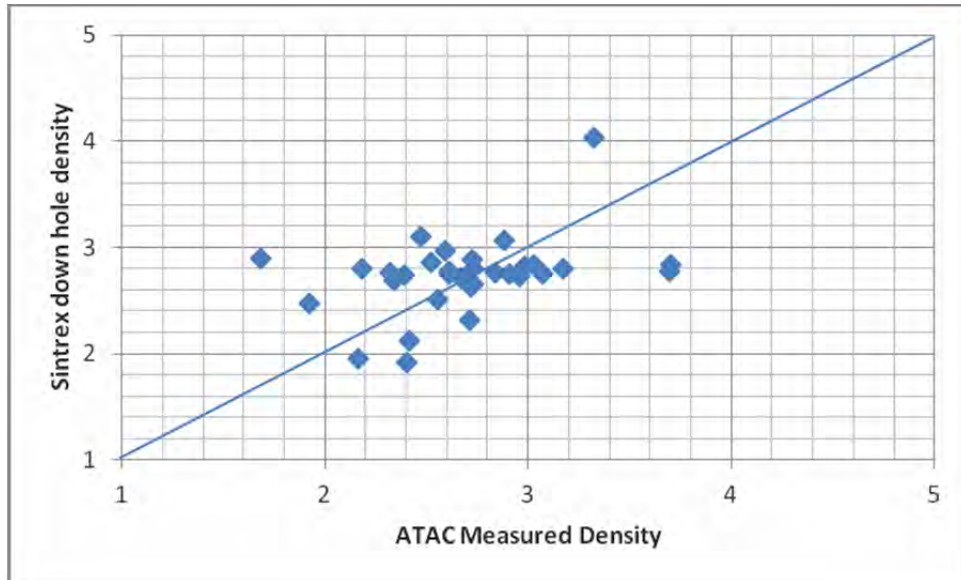


Figure 14-6: Scatterplot showing ATAC measured Density compared to Scintrex Density

14.65 Conclusions

Deposits containing significant oxide horizons present a challenge to bulk density determinations. The standard methods of measuring a sample in air and again in water do not work on this soft often poorly consolidated material. A number of different methods were tried on the Tiger Zone oxide samples. The results from method 1, using a measured volume and a weight in air seem reasonable when compared to other methods. For the purpose of this resource estimate a density of 2.38 was used for oxide material. For the mineralized dolomite unit (mineralized sulphide domain) a value of 3.38 was used which represents the average of 63 samples within the limits of two standard deviations above and below the mean of all mineralized Dolomite samples. The material outside the mineralized solids was assigned a density of 2.86 the average of 578 samples outside the solids.

14.7 Grade Interpolation

Grades for gold and silver were interpolated into the block model using Ordinary Kriging. The kriging exercise was completed four times, once each for gold and silver in blocks containing some percentage within the oxide solids and again for gold and silver in blocks containing some percentage within the sulphide mineralized solids. For kriging in oxides only oxide composites were used and for estimating grades in sulphides only sulphide composites were used.

The kriging exercise was completed for each variable in each domain in a series of four passes. Pass 1 used a search ellipse with dimensions equal to $\frac{1}{4}$ of the semivariogram range in each of the three principal directions. A minimum of four composites with a maximum of three coming from any one hole was required to estimate the block. For blocks not estimated in pass 1, a second pass using search ellipse dimensions equal to $\frac{1}{2}$ the semivariogram range was completed. Pass 3 using the full range and pass 4 using twice the range rounded out the exercise. In all cases if more than 12 composites were found the closest 12 were used.

For blocks containing some percentage of both oxide and sulphide material a weighted average was made. Since the ranges for silver in oxides were less than the ranges for gold, the pass 4 distances for silver were set to the pass 4 distances for gold. This ensured all blocks estimated for gold had a silver value. The parameters for the Ordinary Kriging runs are tabulated below.

Table 14-9: Kriging Parameters for Tiger Zone

Domain	Variable	Pass	Number Estimated	Az / Dip	Dist. (m)	Az / Dip	Dist. (m)	Az / Dip	Dist. (m)
Oxides 100% of Blocks Estimated	Au	1	2,726	172 / 0	50.0	83 / -55	17.0	263 / -35	5.0
		2	4,198	172 / 0	100.0	83 / -55	34.0	263 / -35	10.0
		3	1,532	172 / 0	200.0	83 / -55	68.0	263 / -35	20.0
		4	90	172 / 0	400.0	83 / -55	136.0	263 / -35	40.0
	Ag	1	61	172 / 0	12.5	83 / -55	5.5	263 / -35	8.0
		2	1,548	172 / 0	25.0	83 / -55	11.0	263 / -35	16.0
		3	4,482	172 / 0	50.0	83 / -55	22.0	263 / -35	32.0
		4	2,455	172 / 0	400.0	83 / -55	136.0	263 / -35	40.0
Sulphides 98.8 % of Blocks Estimated	Au	1	44	135 / 0	15.0	45 / 0	6.25	0 / -90	15.0
		2	2,018	135 / 0	30.0	45 / 0	12.5	0 / -90	30.0
		3	6,019	135 / 0	60.0	45 / 0	25.0	0 / -90	60.0
		4	2,320	135 / 0	120.0	45 / 0	50.0	0 / -90	120.0
	Ag	1	1,222	135 / 0	30.0	45 / 0	20.0	0 / -90	5.0
		2	5,964	135 / 0	60.0	45 / 0	40.0	0 / -90	10.0
		3	2,744	135 / 0	120.0	45 / 0	80.0	0 / -90	20.0
		4	471	135 / 0	240.0	45 / 0	160.0	0 / -90	40.0

14.8 Classification

Based on the study herein reported, delineated mineralization for the Tiger Zone, Rau Deposit is classified as a resource according to the following definitions from National Instrument 43-101 and from CIM (2005):

"In this Instrument, the terms "mineral resource", "inferred mineral resource", "indicated mineral resource" and "measured mineral resource" have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council, as those definitions may be amended."

The terms Measured, Indicated and Inferred are defined by CIM (2005) as follows:

"A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge."

"The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase 'reasonable prospects for economic extraction' implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports."

Inferred Mineral Resource

“An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, workings and drill holes.”

“Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.”

Geologic continuity for the deposit has been established through geologic mapping and drill hole logging. The geologic continuity has been used to constrain the oxide and sulphide mineralized domains. The grade continuity, which can be quantified by semivariograms, can be used to classify the estimate.

Blocks with gold estimated in Pass 1 or 2 using search ellipses of up to $\frac{1}{2}$ the semivariogram range were considered Indicated. All other blocks were classified as Inferred at this time. Figure 14-7 shows blocks classified as Indicated and Inferred. The resource is tabulated by Classification in Tables 14-10 and 11 and then broken into Oxide Zone in Tables 14-12 and 13 and Sulphide Zone in Tables 14-14 and 15. While no economic cut-off is known at this time a cut-off of 0.3 g/t is highlighted as a possible open pit cut-off. Note, due to rounding off, the totals for all blocks might not equal exactly the sums of oxides plus sulphides.

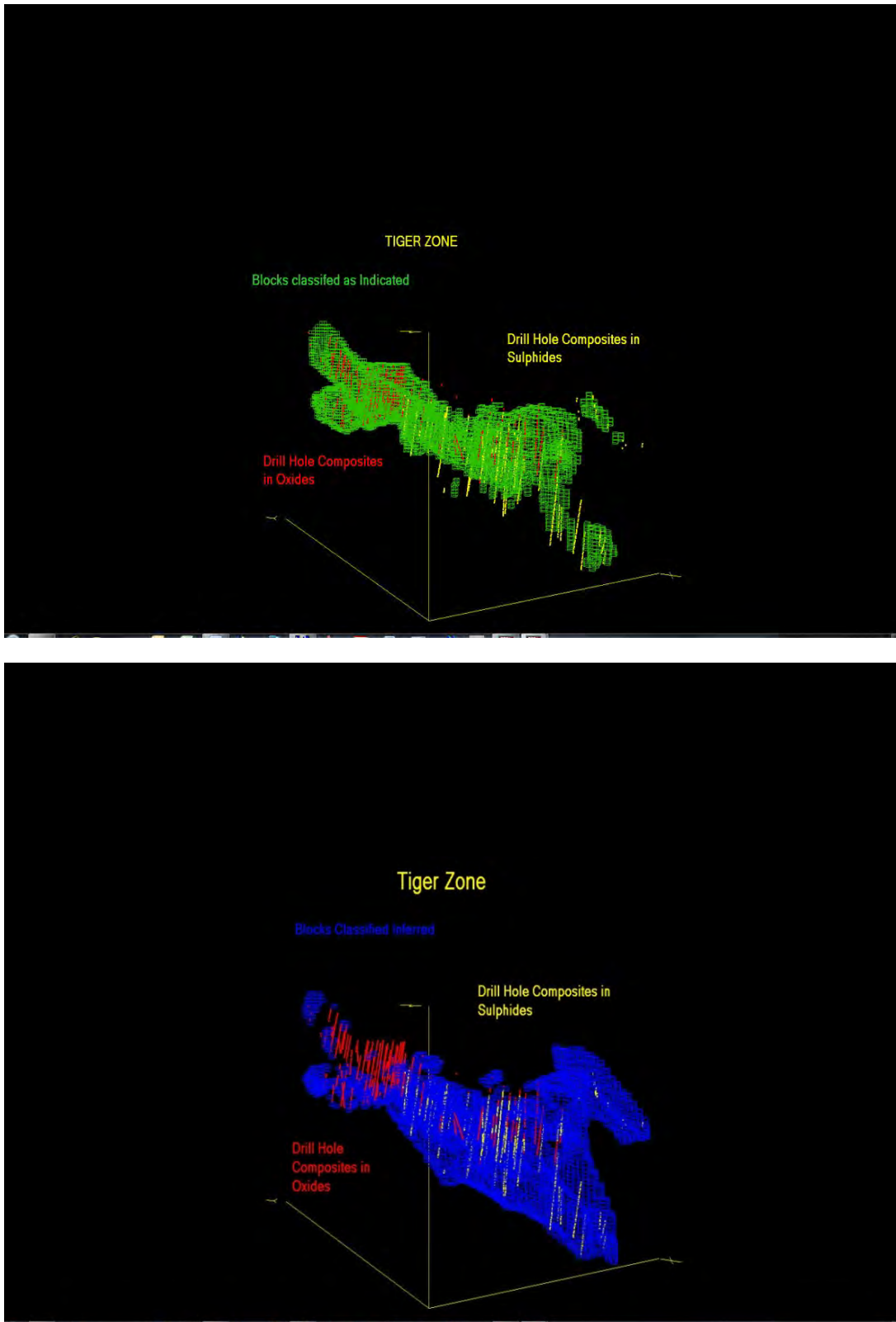


Figure 14-7: Isometric views looking NE Showing Classified Blocks

Table 14:10 : Tiger Zone All Blocks - Classified Indicated

Au Cut-off (g/t)	Tonnes > Cut-off (tonnes)	Grade>Cut-off		Contained Metal	
		Au (g/t)	Ag (g/t)	Au (ozs)	Ag (ozs)
0.10	8,180,000	1.96	3.82	515,500	1,004,600
0.20	7,700,000	2.07	3.76	512,500	930,800
0.30	7,150,000	2.21	3.68	508,000	846,000
0.40	6,650,000	2.35	3.65	502,400	780,400
0.50	6,220,000	2.49	3.68	498,000	735,900
0.60	5,850,000	2.61	3.71	490,900	697,800
0.70	5,500,000	2.73	3.80	482,800	672,000
0.80	5,190,000	2.85	3.84	475,600	640,800
0.90	4,830,000	3.00	3.90	465,900	605,600
1.00	4,550,000	3.13	3.98	457,900	582,200
1.20	4,070,000	3.36	4.10	439,700	536,500
1.40	3,680,000	3.58	4.19	423,600	495,700
1.60	3,260,000	3.85	4.26	403,500	446,500
1.80	2,940,000	4.09	4.23	386,600	399,800
2.00	2,640,000	4.34	4.24	368,400	359,900

Table 14:11 : Tiger Zone All Blocks - Classified Inferred

Au Cut-off (g/t)	Tonnes > Cut-off (tonnes)	Grade>Cut-off		Contained Metal	
		Au (g/t)	Ag (g/t)	Au (ozs)	Ag (ozs)
0.10	9,780,000	0.95	1.02	298,700	320,700
0.20	9,090,000	1.01	1.02	295,200	298,100
0.30	8,280,000	1.09	0.94	290,200	250,200
0.40	7,470,000	1.17	0.86	281,000	206,500
0.50	6,620,000	1.26	0.86	268,200	183,000
0.60	5,700,000	1.37	0.91	251,100	166,800
0.70	4,920,000	1.49	0.95	235,700	150,300
0.80	4,280,000	1.60	0.97	220,200	133,500
0.90	3,720,000	1.71	0.98	204,500	117,200
1.00	3,180,000	1.84	1.00	188,100	102,200
1.20	2,480,000	2.05	1.01	163,500	80,500
1.40	2,000,000	2.24	1.06	144,000	68,200
1.60	1,570,000	2.44	1.05	123,200	53,000
1.80	1,270,000	2.61	0.92	106,600	37,600
2.00	1,010,000	2.80	0.83	90,900	27,000

Table 14:12 : Tiger Zone Oxide Blocks - Classified Indicated

Au Cut-off (g/t)	Tonnes > Cut-off (tonnes)	Grade>Cut-off		Contained Metal	
		Au (g/t)	Ag (g/t)	Au (ozs)	Ag (ozs)
0.10	5,080,000	2.42	5.77	395,300	942,400
0.20	4,790,000	2.56	5.66	394,300	871,700
0.30	4,490,000	2.71	5.49	391,200	792,500
0.40	4,200,000	2.88	5.42	388,900	731,900
0.50	3,970,000	3.02	5.42	385,000	691,800
0.60	3,800,000	3.13	5.41	382,400	661,000
0.70	3,640,000	3.24	5.46	379,200	639,000
0.80	3,480,000	3.35	5.47	374,800	612,000
0.90	3,300,000	3.49	5.46	370,300	579,300
1.00	3,150,000	3.61	5.52	365,600	559,000
1.20	2,900,000	3.82	5.54	356,200	516,500
1.40	2,700,000	4.02	5.54	349,000	480,900
1.60	2,470,000	4.25	5.47	337,500	434,400
1.80	2,260,000	4.48	5.36	325,500	389,500
2.00	2,080,000	4.72	5.29	315,600	353,800

Table 14:13 : Tiger Zone Oxide Blocks - Classified Inferred

Au Cut-off (g/t)	Tonnes > Cut-off (tonnes)	Grade>Cut-off		Contained Metal	
		Au (g/t)	Ag (g/t)	Au (ozs)	Ag (ozs)
0.10	790,000	1.17	6.17	29,700	156,700
0.20	740,000	1.23	5.96	29,300	141,800
0.30	620,000	1.42	5.31	28,300	105,800
0.40	500,000	1.67	4.51	26,800	72,500
0.50	440,000	1.85	4.46	26,200	63,100
0.60	420,000	1.91	4.51	25,800	60,900
0.70	400,000	1.97	4.54	25,300	58,400
0.80	380,000	2.05	4.51	25,000	55,100
0.90	350,000	2.15	4.35	24,200	49,000
1.00	320,000	2.27	4.35	23,400	44,800
1.20	250,000	2.59	4.56	20,800	36,700
1.40	220,000	2.73	4.48	19,300	31,700
1.60	180,000	3.00	3.92	17,400	22,700
1.80	150,000	3.29	3.37	15,900	16,300
2.00	130,000	3.53	2.73	14,800	11,400

Table 14:14 : Tiger Zone Sulphide Blocks - Classified Indicated

Au Cut-off (g/t)	Tonnes > Cut-off (tonnes)	Grade>Cut-off		Contained Metal	
		Au (g/t)	Ag (g/t)	Au (ozs)	Ag (ozs)
0.10	3,060,000	1.20	0.58	118,100	57,100
0.20	2,830,000	1.29	0.58	117,400	52,800
0.30	2,590,000	1.38	0.57	114,900	47,500
0.40	2,360,000	1.48	0.55	112,300	41,700
0.50	2,180,000	1.57	0.54	110,000	37,800
0.60	1,990,000	1.67	0.53	106,800	33,900
0.70	1,810,000	1.77	0.51	103,000	29,700
0.80	1,660,000	1.86	0.50	99,300	26,700
0.90	1,480,000	1.98	0.49	94,200	23,300
1.00	1,360,000	2.07	0.50	90,500	21,900
1.20	1,140,000	2.26	0.52	82,800	19,100
1.40	960,000	2.44	0.52	75,300	16,000
1.60	760,000	2.69	0.53	65,700	13,000
1.80	650,000	2.86	0.51	59,800	10,700
2.00	550,000	3.04	0.51	53,800	9,000

Table 14:15 : Tiger Zone Sulphide Blocks - Classified Inferred

Au Cut-off (g/t)	Tonnes > Cut-off (tonnes)	Grade>Cut-off		Contained Metal	
		Au (g/t)	Ag (g/t)	Au (ozs)	Ag (ozs)
0.10	8,990,000	0.93	0.57	268,800	164,800
0.20	8,320,000	1.00	0.58	267,500	155,100
0.30	7,640,000	1.06	0.59	260,400	144,900
0.40	6,950,000	1.13	0.60	252,500	134,100
0.50	6,170,000	1.22	0.61	242,000	121,000
0.60	5,260,000	1.33	0.62	224,900	104,900
0.70	4,520,000	1.45	0.63	210,700	91,600
0.80	3,910,000	1.56	0.63	196,100	79,200
0.90	3,370,000	1.67	0.63	180,900	68,300
1.00	2,870,000	1.80	0.63	166,100	58,100
1.20	2,230,000	2.00	0.62	143,400	44,500
1.40	1,770,000	2.18	0.64	124,100	36,400
1.60	1,380,000	2.37	0.67	105,200	29,700
1.80	1,120,000	2.53	0.59	91,100	21,200
2.00	880,000	2.71	0.54	76,700	15,300

15.0 ADJACENT PROPERTIES

There are no mineral properties adjacent to the Rau Property.

16.0 OTHER RELEVANT DATA AND INFORMATION

The Authors is unaware of any additional information or data relevant to the Rau Property.

17.0 INTERPRETATION AND CONCLUSIONS

The Rau property hosts a significant new carbonate replacement gold discovery in Yukon referred to as the Tiger Zone. Gold mineralization occurs within a karsted limestone horizon belonging to the regionally mapped Bouvette Formation and is locally bounded by a northwest trending structural corridor that has resulted in limestone replacement by coarse- grained dolomite. Sulphide mineralization was introduced into the dolomite altered system in at least three sulphide phases of which at least two are interpreted to be gold bearing. Later north trending faults cut through the sulphide mineralization and serve as a conduits for fluids that are responsible for intense oxidation at the Tiger Zone and potential gold grade enhancement. The surface area defining the combined sulphide and oxide mineralization is 700 meters long, between 100 and 200 meters wide and up to 96 meters thick.

The nature of the gold mineralization in the Tiger Zone is referred to as micron and sub-micron. Scoping level metallurgical tests on a variety of composited samples from the sulphide portion of the deposit suggest conventional flotation and gold extraction by cyanidation is highly variable. Subsequent BIOX/CIL tests returned high yield oxidation residues and gold extraction using generic bacterial strains and conventional cyanidation processes. Scoping level metallurgical tests completed on oxide material returned highly favorable results again using conventional cyanidation processes with low residence periods. Neither of the metallurgical tests has been further expanded for optimization.

A total of 133 diamond drill holes (25 562.5 meters) were completed between 2008 and 2010 in the vicinity of the Tiger Zone and evaluated in some capacity for use in the Tiger Zone resource estimation. Drilling in the deposit area was done on survey controlled cut lines spaced between 20 to 50 meters apart. The majority of the drill sections is oriented northeast-southwest and drilled at nominal 25 meter grid spacings.

Analysis of the QA/QC data collected from the diamond drill programs between 2008 and 2010 did not identify any serious issues with the sample preparation and analyses of drill samples. The drill data in portions of the oxide zone show random gaps in the "from-to" record representing missing or unsampled intervals in waste areas and no recovery in mineralized zones. In this situation, values of 0.001 g/t were inserted for missing or unsampled intersections. Gaps where there was no material recovered, within mineralized sections, were left blank.

The determination of oxide bulk density can be very difficult in these environments given the porous nature of the host rocks and replacement mineralization. Use of conventional style determinations comparing wet and dry densities is not possible due to the delicate nature of the oxide material. This situation was mitigated by the implementation of four different methods to determine density values of the oxide mineralization and then comparing them statistically on a scatter plot for bias and variability. The comparison of the methods used showed no distinct bias and only modest variability.

The Tiger Zone resource estimate has been prepared using the "Ordinary Kriging" method. The gold resource is tabulated at a 0.30 g/t gold cut-off grade. Indicated resources for both oxide and sulphide categories total 7 150 000 tonnes averaging 2.214 g/t gold (509 000 ounces) and 3.68 g/t silver (846 000 ounces). Inferred resources for both categories total 8,280,000 tonnes averaging 1.087 g/t gold (289 400 ounces) and 0.94 g/t silver (250 200 ounces). A total of 63.75% of the resource attributed gold is categorized as Indicated and 52.58% of the gold calculated in all resource categories is contained within oxide.

No work has been done by way of a Preliminary Economic Assessment (PEA) to determine project costs, viability and potential return on capital expenditures.

The identification and confirmation of the structural controls at the Tiger Zone, particularly on the oxide mineralization, has provided a model with which to understand the Tiger Zone and to locate similar mineralization elsewhere along trend. North trending structures, identified from airphotos, near geochemical anomalies, such as the Cheetah, Puma, and Cougar should be a high priority exploration target for future exploration.

The Rau project has the potential to host district-scale deposits. Systematic drilling along strike of the Tiger Zone, at the other known showings should be the focus of future exploration. The risks to the Project are economic and the interpreted continuity of the gold content within the mineralized sulphide and oxide formations. A preliminary economic assessment will be directed to determine the optimum separation of drill holes to reduce the uncertainty of the gold grade continuity. The PEA will also determine the optimum mining methods to extract the mineralization and gold extraction of the sulphide formation. The price of gold will influence the cutoff grade for mining. All of these factors will influence the capital cost of developing a mine, cost of ongoing operations and potential economic recoveries.

18.0 RECOMMENDATIONS

Significant, relatively shallow oxide and sulphide gold resources have been outlined at the Tiger Zone. Although the mineralization remains open along strike, the most readily accessible gold bearing material has been identified locally within the current boundaries of the Tiger Zone. Numerous targets remain untested along strike of the Tiger Zone within a similar geological and structural setting which has yielded highly elevated gold-bearing surface samples supported by strongly elevated gold-in-soil geochemical signatures.

Further exploratory drilling at the Rau property is recommended to focus on advancing the gold targets along strike of the Tiger Zone and understanding the mechanisms of gold deposition. The discovery and definition of additional potential gold resources will highly benefit the economics of the current Tiger Zone resource especially if new discoveries are situated nearby.

A PEA is recommended for the Tiger Zone resource estimate given the current robust global gold market. The focus of the PEA to be directed toward fast-tracking the high-grade oxide material to production that would likely provide the best Internal Rate of Return (IRR) for the near term project economics. As part of the PEA, further detailed metallurgical studies should be investigated for optimization of oxide and sulphide processing. It is also recommended to continued environmental monitoring and hydrological studies in the vicinity of the Tiger Zone.

An approximate budget for this work is presented below:

An exploration program of diamond drilling on the peripheral carbonate replacement targets following a detailed evaluation of each showing to select drill targets. A portion of the diamond drilling would be allocated to deposit expansion and whole core metallurgical studies.

PROPOSED BUDGET – RAU PROPERTY

Diamond Drilling –	8 000 m @ \$150/m including fuel, core boxes, mob/demob	1 200 000
Helicopter & Fixed Wing		750 000
Bulldozer		100 000
Assay & Analytical		250 000
Labour		400 000
Expediting, Safety & Accounting		120 000
Report Preparation & Senior Supervision		200 000
Room & Board		350 000

Airfares, Ground Transportation & Shipping	100 000
Environmental & Heritage Surveys	170 000
Metallurgical & Mineralogical Studies	150 000
Mining Cost Analysis	120 000
Preliminary Economic Analysis	400 000
Government Fees	200 000
Consultant's Management Fee	250 000
Contingency @ 10%	476 000

Total (excluding HST) \$ 5 236 000

The Author has prepared the proposed budget and concludes that the funding is adequate to complete the proposed exploration program.

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20.0 CERTIFICATE OF AUTHOR

I, Robert W. Stroshein, P.Eng. do hereby certify that:

- 1) I am currently self-employed, with an office at
106 – #3 Glacier Lane
P.O. Box 10559 Station Main
Whitehorse, Yukon, Canada, Y1A 7A1
- 2) I graduated with a BSc. Degree in Geological Engineering from the University of Saskatchewan at Saskatoon, SK in 1973
- 3) I am a member of the Association of Professional Engineers of Yukon Territory (Registered Professional Engineer, No. 1165).
- 4) I have worked as an Exploration Geologist for a total of thirty-seven years since graduation from university. I have been employed on gold exploration programs in the Yukon since 1981 and was part of the team that discovered the Grew Creek Gold zone for Hudson Bay Exploration and Development Company Limited. My experience includes the discovery of additional gold resources at the Ketz River Mine for YGC Resources Ltd. that is a similar carbonate hosted, disseminated gold deposit and identified the potential copper-gold mineralized horizon at the Fire Lake Deposit for Placer Dome Exploration Ltd.
- 5) I have read the definition of “qualified person” set out in the National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
- 6) I am the Independent Author responsible for the reviewing, verifying and writing of the technical report titled “Preparation of the Tiger Zone Mineral Resource Estimate, Rau Property, Yukon” (the “Technical Report”) dated November 15, 2011. I am responsible for reviewing and approving all items in this report but have relied on the expertise of Giroux Consultants Ltd. to prepare the resource estimate.
- 7) I have examined the mineralization, in drill core and host lithologies in the field on August 25, 2009 and again visited the site on August 31, 2011 and verified the distribution of diamond drilling.
- 8) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose that makes the Technical Report misleading.
- 9) I am independent of the issuer and registered owner of the Property applying all of the tests in section 1.4 of NI 43-101.
- 10) I have read National Instrument 43-101 and Form 43-101F, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) As of November 15, 2011, to the best of the my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Whitehorse, Yukon this 15th day of November, 2011.

Robert W. Stroshein

Robert W. Stroshein, P.Eng.

CERTIFICATE G.H. Giroux

I, G.H. Giroux, of 982 Broadview Drive, North Vancouver, British Columbia, do hereby certify that:

- 1) I am a consulting geological engineer with an office at #1215 - 675 West Hastings Street, Vancouver, British Columbia.
- 2) I am a graduate of the University of British Columbia in 1970 with a B.A. Sc. and in 1984 with a M.A. Sc., both in Geological Engineering.
- 3) I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 4) I have practiced my profession continuously since 1970. I have had over 30 years' experience calculating mineral resources. I have previously completed resource estimations on a wide variety of precious metal deposits both in B.C. and around the world, including carbonate hosted deposits at Ketza River and Mickle Mine.
- 5) I have read the definition of "qualified person" set out in National Instrument 43-101 and certify that by reason of education, experience, independence and affiliation with a professional association, I meet the requirements of an Independent Qualified Person as defined in National Instrument 43-101.
- 6) I am responsible for the preparation of Section 14 of the technical report titled "**Preparation of the Tiger Zone Mineral Resource Estimate, Rau Property, Yukon**" dated November 15, 2011 (the "Technical Report"). I have visited the property on Sept. 7th -9th 2009 and August 30-31st, 2011.
- 7) I have not previously worked on this deposit.
- 8) As of the date of this certificate, to the best of my knowledge, information and belief, the portion of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the portion of the Technical Report for which I am responsible not misleading.
- 9) I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 15 day of November, 2011

(signed) G. H. Giroux
G. H. Giroux, P.Eng., MASc.

[Sealed]