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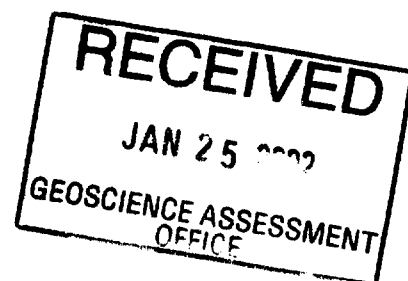
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Assessment Report for the Contact Bay English Option,  
Dryden, Ontario  
Kenora Mining District, April – November 2001

2.23076

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- Appendix 1 - Assay Certificate
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### BACK POCKET – GEOTECHNICAL MAPS

- Contact Bay Property – North Sheet (1:5000)
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## **Introduction**

In Spring of 2001 Atikwa Minerals entered into an agreement with P. English to option ten claims on Mile Lake at the southern end of Wabigoon Lake. These two contiguous claims were explored during June, July and August of 2001; this report summarizes this work.

## **Property Location and Access**

The English Option covered by this work consists of 10 claims located on the Wabigoon NTS 50,000 sheet (52 F/10), about 15 km south of Dryden, Ontario (Figure 1). The claims comprising the property extend from Contact Bay in the north to Trap Lake in the south, located at the extreme southern end of Wabigoon Lake. The claims are approximately bounded on the north by UTM 5505030N, on the south by UTM 5500580N, on the west by UTM 514330E and on the east by UTM 517680E. Access to the property was made by boat from three principal jump off points on Wabigoon Lake: 1) the public dock in Dryden, 2) Indian Point Lodge on the northwestern shore, and 3) a public launch on the west shore of Contact Bay. All three launch sites required a 20-30 minute boat ride to the claims.

A dense forest of young, scrubby pine, spruce and poplar cover the claims, making traversing difficult. Boats were used extensively on this property. The topography is moderate to gentle, with moderately steep slopes along the shorelines of the numerous lakes.

## **Claim Status**

The 10 contiguous claims comprising the Contact Bay English option were optioned from P. English in the Spring of 2001. Table 1 reports the recording date, units and due date of the claims covered in this report, which are shown in Figure 2.

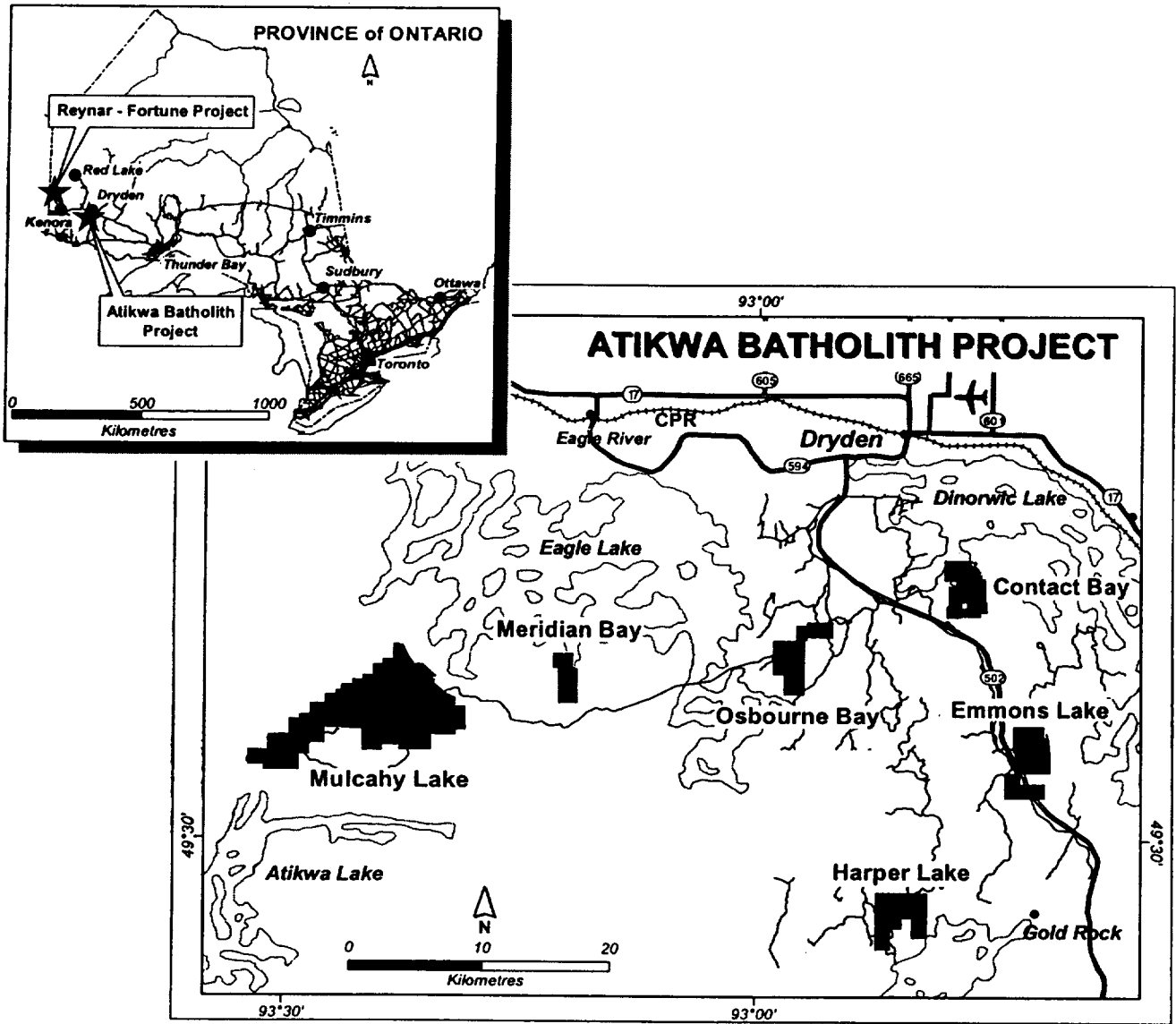
**Table 1**

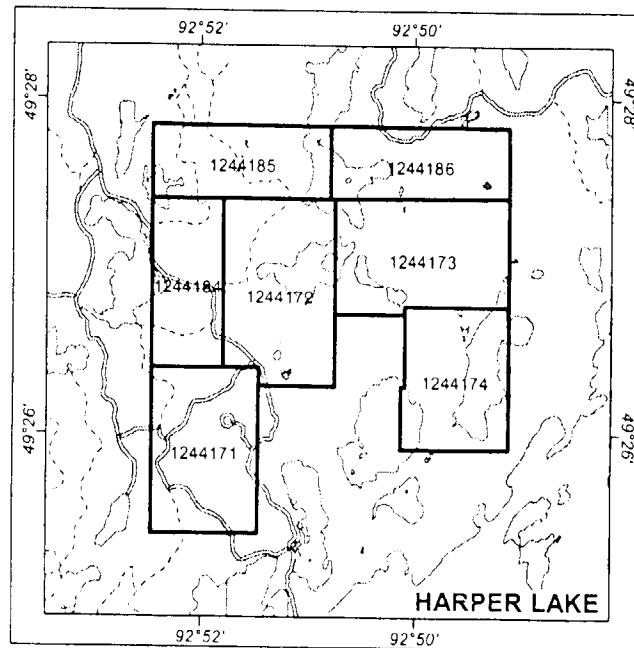
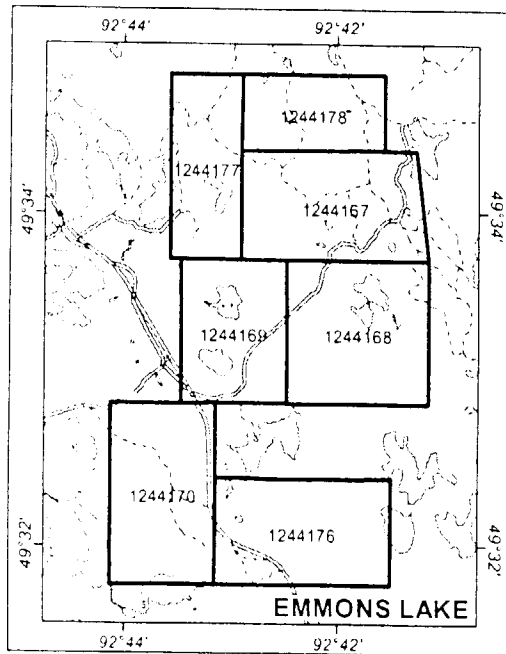
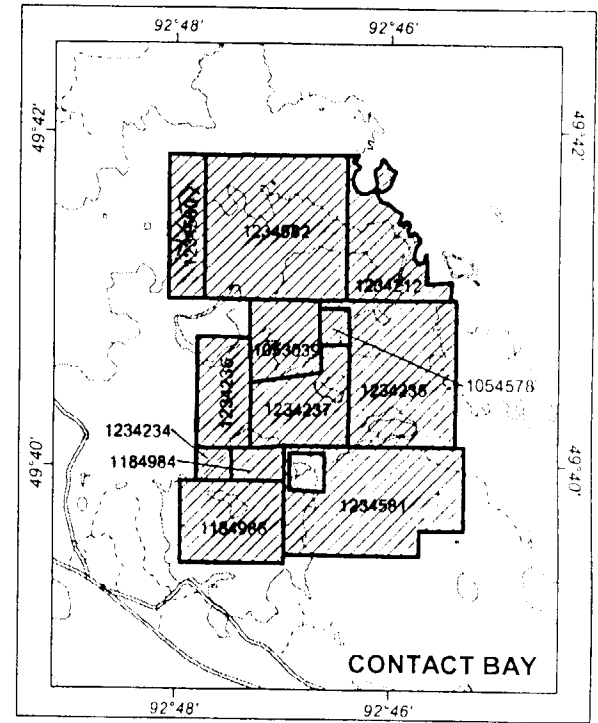
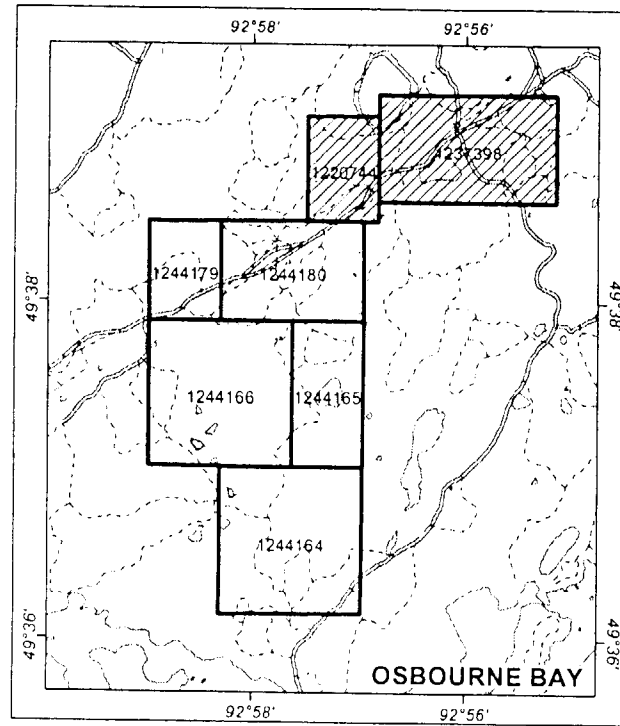
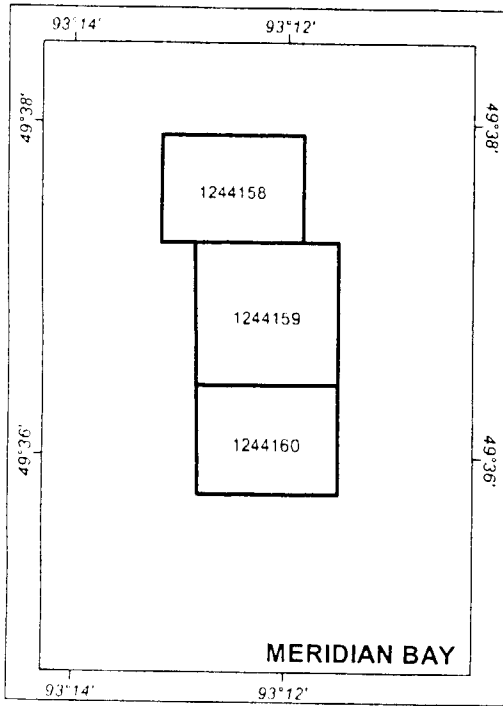
<b><u>Claim</u></b>	<b><u>Record Holder</u></b>	<b><u>Record Date</u></b>	<b><u># Units</u></b>	<b><u>Due Date</u></b>	<b><u>Amount Due</u></b>
1234580	Perry English	2001/04/25	4	2003/04/25	\$1,600
1234582	Perry English	2001/04/25	16	2003/04/25	\$6,400
1234212	Perry English	2001/04/25	6	2003/04/25	\$2,400
1234581	Perry English	2001/04/25	14	2003/04/25	\$5,600
1234236	Peter Matthews	2001/06/19	5	2003/06/19	\$2,000
1234237	Robert Heilman	2001/06/19	6	2003/06/19	\$6,400
1234234	Perry English	2001/06/19	1	2003/06/19	\$400
1184986	Perry English	2001/06/19	6	2003/06/19	\$6,400
1184984	Jerrold Williamson	2001/06/21	2	2003/06/21	\$800
1234235	James Buckner	2001/06/21	12	2003/06/21	\$4,800

## **Regional Geologic Setting**

The Contact Bay property is within the Wabigoon Subprovince of the Superior Province of the Canadian Shield. The Wabigoon Subprovince as a 900 km long, east-west trending granite-greenstone subprovince. It is composed of metavolcanic and subordinate metasedimentary rocks, surrounded and cut by granitoid batholiths. The subprovince has been divided into, west, central and east regions on the basis of major lithologic units and structural style. Atikwa's property is located in the western region which is characterized by broad expanses of supracrustal rocks with ovoid, synvolcanic, polyphase batholiths and minor gneissic units. Rocks have been subdivided

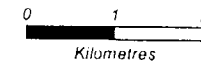
Figure 1  
**Atikwa Minerals Limited**  
Ontario, Canada  
*Project Location and Access*





**FIGURE 2**

**ATIKWA BATHOLITH PROJECT  
Claim Configuration  
July 15, 2001**



**Claims Legend**



into: 1.) Lower mafic sequences composed of tholeiitic and minor komatiitic basalt with lesser amounts of andesitic volcanics and volcanoclastics, 2.) Intermediate to felsic metavolcanics, 3.) Upper mafic sequences composed of komatiitic and tholeiitic flows and 4.) Metasedimentary sequences composed of turbidite, fluvial and minor platform sequences.

Granitic units include some pre-greenstone granitoid plutons, numerous synvolcanic, polyphase batholiths and post-tectonic stocks. Ultramafic intrusions are: 1.) coeval with mafic volcanism, 2.) coeval with felsic volcanism and early granitoid plutonism, 3.) coeval with late granitoid plutonism and 4.) serpentized, tectonically-bounded units. Predeformation supracrustal sequences are 2775 Ma to 2718 Ma and syndepositional metasedimentary sequences are less than 2714 Ma to 2696 Ma. The Wabigoon Subprovince has been subjected to at least two major structural events, and its margins are characterized by long, relatively narrow, shear-zone-bounded panels of supracrustal rocks. There are copper-nickel, chromite and platinum group element deposits associated with mafic and ultramafic intrusions.

The Atikwa-Lawrence plutonic-volcanic terrain is south of the town of Dryden. It forms a circular complex about 70 km in diameter. The arrangement of lithologies is roughly concentric with an outer sequence of folded mafic to felsic volcanic rocks intruded by gabbroic and tonalitic plutons which form a discontinuous, arcuate rim around the central batholith. These are intruded by massive and foliated trondhjemite and granodiorite phases which form the core of the batholith. The early phases of the Atikwa-Lawrence batholith are coeval with a number of layered mafic intrusions around the margins of the Atikwa batholith.

The Contact Bay property is centered on one of these mafic intrusives, a NNE-trending intrusion, located along eastern edge of the eastern lobe of the Atikwa Batholith. It is one of several Archean mafic-ultramafic intrusive complexes situated around the margins of the batholith. Of these mafic complexes, only the Mulcahy Gabbro, located 40 km to the west, has been radiometrically dated, yielding a 2733 Ma age. Volcanic rocks from the Populus Lake Volcanics, which are in contact with the Mulcahy Gabbro, yielded an age of 2732 Ma. Granitoid rocks of the Atikwa Batholith have yielded dates of 2731 to 2732 Ma, although at least one interior, more felsic granitoid of the Batholith yielded a date of 2718 Ma.

Such ages point to consanguinity of the mafic intrusives, as represented by the Mulcahy Gabbro, and the development of the mafic volcanic sequences of the region. They also point to the temporal relationship of the batholith to these activities, but suggest that development of the batholith continued beyond the earlier mafic intrusive activity with the emplacement and cooling of the interior felsic portions of the batholith.

The main target of exploration is PGE mineralization associated with magmatic sulphides.

### **Previous Exploration Activities**

J. Satterley of the Ontario Geological Survey mapped the area in 1939-1940 as part of a regional geological programme.

Falconbridge Nickel Mines Ltd. drilled 6 holes near the south shore of Contact Bay and 2 holes in Trap Lake in 1957. The Contact Bay holes intersected blue quartz-bearing gabbro, andesite and chlorite schist. Mineralization consisted of "minor amounts" of disseminated chalcopyrite,

pyrite and pyrrhotite. One of the two holes in Trap Lake intersected granite; the other peridotite, anorthosite, serpentine and soapstone. Little in the way of mineralization was recorded.

Mile Lake Showing. On the south side of Mile Lake, the initial discovery of sulfides was made by J.P. Harrison in 1969 (then known as the Harrison Showing). Chalcopyrite and pyrrhotite were found in 6 locations in gabbro. The discovery was followed by a magnetometer survey by Steep Rock Iron Mines Ltd. in 1971. In 1973, Nichro Mines drilled 32 holes in the Mile Lake-Contact Bay area. Many of the holes were vertical and primarily followed a NE-trending airborne EM anomaly underlying Mile Lake. Drill results reported by Nichro indicate the intersection of medium gray gabbro with pyrrhotite-pyrite-chalcopyrite mineralization. Higher grade assay reports from Nichro's hole #5 included 0.55% Cu, 0.45% Ni, and 8.5 g/t platinum-group elements.

During the 1980's and 1990's, the area was explored by Grand Oaks Exploration Inc., Eagle Lake Resources and Bond Gold. In the late 1980's Eagle Lake Resources reviewed the geology and examined prospects in the area. In addition, the company conducted ground magnetic and VLF surveys over the Mile Lake (Harrison) showings. Also in the late 1980's Bond Gold conducted a magnetometer and VLF study over the broader Mary Lake-Mile Lake-Trap Lake area. Grand Oaks (1991) conducted a brief examination of prospects in the area, with a focus on gold.

In 2000, prospector Sherridon Johnson and A. Raoul of the Ontario Geological Survey re-sampled selected core from the Nichro holes held on file at the Core Library in Kenora. The core on file is far from complete, and results from this exercise failed to reproduce the higher grade values (8.5 grams per tonne platinum group elements) that Nichro had reported.

### **2001 Atikwa Activities**

In 2001, Atikwa personnel conducted geological and geochemical traversing. Samples were shipped to Chemex Labs in Thunder Bay, where they were prepped. Analyses for Au, Pt, Pd, Cu and Ni were conducted at Chemex Labs in Vancouver, B.C.

Personnel involved with these activities were:

Eric Owens, Manager	1 day
Brenda Hodgins	4 days
Eddy Canova, Senior Geologist	3 days
Matt Stewart	2 days
Steven Gregory, Geological Technician	3 days
Dan Bihari, Geological Technician	3 days
Mark Idszizek, Geological Technician	3 days
Adam Seewald, Assistant	2 days
Sherridon Johnson, prospector	6 days
Kevin Prouty, assistant	1 day
Consultants	9 days

The crew was housed in a tent camp located near Meridian Bay on Eagle Lake, about 30 km west of the property. Access was made as described above via truck and boat.

### **Property Geology and Mineralization**

The Contact Bay intrusive trends NNE with dimensions of 3.5 km N-S by 2 km E-W. Lithologies within the Contact Bay intrusive complex show it to be a differentiated mafic to ultramafic intrusion. The dominant lithologies range from leucocratic gabbro and anorthositic gabbro to pyroxene gabbro and hornblende gabbro, pyroxenite, and serpentinite. These generally trend NW to NE and dip 60° to 88° SE. The variable trend in the layering suggests that the intrusive has been deformed. The leucogabbro and anorthositic gabbro occur as layers or irregular intrusions within gabbro. Ultramafic rocks occur south of the Mile Lake showing, along the shore and some of the islands of Mile Lake. Mafic to intermediate volcanics border the intrusive to the west and to the north. South of the mafic intrusives diorite, quartz diorite to granodiorite units have been mapped. These units may represent a portion of the Atikwa batholith.

Gabbro units are generally massive, with local subtle layering. Layering thicknesses are on the order of 1-1.5 meters, and is exhibited at the Mile Lake showing by thin, light colored anorthositic gabbro, with thicknesses on the order of 5 cm, which grade into more mafic gabbro layers with thicknesses on the order of 1.5 m.

The rocks are fine grained to coarse grained, with local pegmatitic pockets. Locally, rounded cognate inclusions of mela-gabbro and pyroxenite, ranging in size from 5 cm to 0.5m, occur in gabbro and leucocratic gabbro. Such features may be interpreted as liquid immiscibility between multiple magmas. Local areas with chlorite and sericite alteration, as at the main showing on Mile Lake, attest to the presence of late stage hydrothermal fluids. Blue quartz occurs as coarse discrete, disseminated grains and, at the Mile Lake showing, along fractures. Actinolite after hornblende and pyroxene is not widespread, but occurs locally, further suggestive of the interaction of late stage fluids with the host rocks. Finally, fine grained mafic dikes are common where stripping has exposed clean outcrop. In summary, all these features point to a dynamic mafic-ultramafic magmatic system, in which compositionally different magmas and late stage fluids interacted with one another during emplacement and crystallization.

On Trap Lake, serpentinitized ultramafic rocks occur on the islands in the lake and at one location on the northwestern shoreline. Gabbro, pegmatitic pyroxene-rich gabbro and leucogabbro underlie the north shore, and numerous sulfide-bearing sites were located. Samples 499464 and 499465 occur in a medium grained quartz-bearing gabbro with 4-5% pyrrhotite and 1-3% chalcopyrite as disseminated grains. To the east, samples 499299, 499300, 499467, 499468, and 499472-499475 occur in a coarse pyroxene gabbro which hosts segregations of green pegmatitic pyroxene-rich gabbro to leucocratic gabbro. Layering is present but not easily distinguishable and appears to trend NW. Extensive outcrops of this unit occurs on the northeast side of Trap Lake. The unit is mineralized with 3% sulfides, primarily pyrrhotite, with chalcopyrite and pyrite, as 0.5 to 1 cm blebs of both sulfides intergrown with coarse pyroxene grains.

The central part of the lake is underlain by ultramafic units that are serpentinitized, with nickel assays up to 0.1-0.2%. The south shore of the lake is underlain by quartz diorite to granodiorite and occasionally with fine grained sections which are highly siliceous and contain 1-2% pyrite. Samples 449295 and 449296 are altered gabbros to diorites with green altered feldspars, weakly



to moderately magnetic, with 1-2% pyrrhotite, trace to <1.0% chalcopyrite and traces of pyrite. The unit is just south of the serpentinized ultramafics.

The southern and northern contact between the ultramafics and adjacent gabbro, pyroxene gabbro and quartz gabbro hosts mineralization consisting of pyrite, pyrrhotite and chalcopyrite ranging from 1% to 7% combined sulfides. The ultramafics tend to contain higher nickel concentrations than the other rocks; this may simply reflect the ultramafic composition of the rocks.

On the south shore of Contact Bay, a small island (approximately @ 515400/ 5504700) contains disseminated sulfide mineralisation (2-4%) of pyrite, chalcopyrite and pyrrhotite hosted by an altered, medium grained, actinolitic gabbro. To the south of this island, the peninsula is underlain by leucocratic gabbros on the east and more mafic gabbros on the west. This package of mafic rocks is in contact with volcanic rocks (to the west); the N-trending contact skirts the western shoreline of the peninsula, and is characterized by numerous widely spaced quartz-sulfide veins oriented blique to the contact (trending 135°). Elsewhere on the peninsula, no surface sulfide mineralisation or oxidation of the outcrops was found.

### **Sample and Assay Results**

A total of 82 samples were taken. Sample locations and brief descriptions are provided below in Table 2A and are shown on the 1:5,000 scale maps and the in the back pocket. Assay results are outline on Table 2B. Assays certificates are presented in Appendix 1. Anomalous platinum/palladium values occur on the island near the south shore of Contact Bay where up to 73 ppb Pt+Pd was returned. At this location, copper and nickel concentrations up to 0.95% and 0.22%, respectively, were also obtained. Elsewhere on the property, anomalous concentrations of platinum/palladium occur on the north shore of Mile Lake and the north shore of Trap Lake.

Table 2A

SAMPLE NUMBER	Coordinates		Lithology
	East	North	
499291	516049	5501195	Quartz Diorite to Tonalite, siliceous section at 0.30 m, trend 090, pyrite 2%, trace chalcopyrite and pyrrhotite
499292	515993	5501275	Quartz Diorite to Diorite, sheared, quartz eyes 5%, actinolite, +/-chlorite, chalcopyrite 5%, pyrite 2-5%
499293	515993	5501275	Quartz Diorite to Diorite, sheared, quartz eyes 5%, actinolite, +/-chlorite, chalcopyrite 1-2%, pyrite 1-2%
499294	515995	5501241	Diorite to Granodiorite, silicified, blue quartz eyes 5%, weakly oxidized, cut by aphanitic-porphyratic diabase dyke, pyrite 2%, trace chalcopyrite
499295	516023	5501315	Gabbro to Diorite, altered, dark green, medium-grained, massive, feldspar <55% saussauritized, mafics 35-40%, weak to moderately magnetic, pyrrhotite 1-2%, chalcopyrite 0.25%
499296	516045	5501329	Gabbro to Diorite, altered, dark green, medium-grained, weak to moderately magnetic, weakly oxidized, +/-serpentine, +/-epidote, pyrrhotite 1-2%, trace chalcopyrite
499297	516302	5501522	Quartz Diorite, silicified, fine-grained, quartz eyes <5%, weakly oxidized, pyrite 2%, chalcopyrite <0.25%
499299	514973	5501700	Pyroxene Gabbro, coarse-grained, weakly layered, pegmatitic, sulfide blebs <2-4%, pyrrhotite and chalcopyrite and minor malachite
499300	515838	5501571	Gabbro, coarse-grained, pyroxene-rich patches (1cm), strongly oxidized, disseminated sulfide blebs 2%, pyrrhotite 1.5%, chalcopyrite 0.5%
499459	514810	5501360	Ultramafics, dark green-black, serpentinized, trace sulfides

499460	514452	5501433	Mafic Gabbro to Gabbro Norite, medium-coarse grained, trace pyrrhotite and chalcopyrite. North of Ultramafics.
499461	515120	5501150	Ultramafics, dark green-black, coarse-grained, serpentinized, moderate to strongly magnetic, strong brown surface weathering, trace sulfides
499462	514798	5501522	Pyroxene Gabbro, massive, medium-grained, weak talc/serpentine alteration, moderate oxidation, pyrite and pyrrhotite 1%
499463	514973	5501700	Gabbro, fine-grained, blue quartz 5%, moderately oxidized, pyrrhotite, disseminated chalcopyrite and pyrite 2%
499464	515838	5501571	Gabbro to Leucogabbro, grey-white, medium-grained, massive, equigranular, mafics 15-20%, blue quartz 5-10%, pyrrhotite <2%, chalcopyrite <0.5%
499465	515838	5501571	Gabbro to Leucogabbro, grey-white, medium-grained, massive, equigranular, mafics 15-20%, blue quartz 5-10%, moderately oxidized, moderately magnetic, pyrrhotite 2-4%, chalcopyrite <1-2%
499466	514907	5501636	Gabbro, medium-grained, cut by quartz diorite, fine-grained, grey, massive, strongly oxidized, 1m wide, pyrrhotite 5%
499467	515299	5501968	Pyroxene Gabbro, coarse-grained, green-white, feldspars <55%, mafics 30-40% (pyroxenes), blue quartz 5%, moderate to strong oxidation, pyrrhotite and chalcopyrite 2%
499468	515517	5502008	Pyroxene Gabbro, pegmatitic, feldspars ~50%, pyroxenes 20-40%, pyroxene segregations, actinolite weak to moderate, sulfide blebs 2% as pyrrhotite 1-1.5%, chalcopyrite 0.5-1%
499469	515600	5502050	Gabbro, talc/serpentine alteration, blue quartz 5%, moderate oxidation, pyrrhotite, disseminated and veinlets of chalcopyrite and pyrite 0.5%
499470	515640	5502100	Gabbro, minor talc/serpentine alteration, large plagioclase crystals, pyrrhotite and chalcopyrite <0.5%
499471	515520	5502100	Leucogabbro, weak to moderate oxidation, blue quartz eyes 5%, trace chalcopyrite, minor malachite staining
499472	515696	5501850	Pyroxene Gabbro, pegmatitic-coarse grained (1cm), pyroxene and feldspar segregations, greenish-white, weakly oxidized, disseminated sulfide blebs 2-4%, chalcopyrite 1-2%, pyrrhotite <1%
499473	515696	5501850	Pyroxene Gabbro, pegmatitic-coarse grained (1cm), pyroxene and feldspar segregations, greenish-white, weak oxidation, disseminated sulfide blebs 2-4%, pyrrhotite and chalcopyrite 2-5%
499474	515696	5501850	Pyroxene Gabbro, pegmatitic-coarse grained (1cm), pyroxene and feldspar segregations, greenish-white, weak oxidation, disseminated sulfide blebs 2-4%, pyrrhotite and chalcopyrite 1-2%
499475	515682	5501856	Leucogabbro to Gabbro, pegmatitic, feldspars 70-75%, mafics 20%, weakly layered, coarse pyroxenes, weak oxidation, pyrrhotite and chalcopyrite 3%
627003	515876	5502528	Ultramafic boulder, strongly magnetic, pyroxene, serpentinized olivine
627051	515378	5502970	Leucogabbro, light to dark green, feldspars 80%, mafics <20%, sulfides 1-2%, trace pyrrhotite and chalcopyrite
627052	515763	5501624	Ultramafic, dark green, mainly pyroxene and olivine, strongly serpentinized, moderately to strongly magnetic, trace pyrite and pyrrhotite
627053	515102	5501255	Ultramafic, dark green, massive, medium-grained, proxene, olivine, magnetite, serpentine, +/- biotite, weakly oxidized
627054	514875	5501240	Ultramafic, dark green-black, brown weathered surface, massive, medium-grained, proxene, olivine, magnetite (weak to moderately magnetic), subhorizontal serpentine layers and veinlets, +/- biotite, weakly to moderately oxidized, trace pyrrhotite
627055	514875	5501240	Ultramafic, dark green-black, brown weathered surface, massive, medium-grained, proxene, olivine, magnetite (weak to moderately magnetic), subhorizontal serpentine layers and veinlets, +/- biotite, weakly to moderately oxidized
627056	514505	5500917	Ultramafic, dark green-black, brown weathered surface, medium-grained, proxene, olivine, magnetite, serpentine, weakly oxidized
627057	514469	5501419	Ultramafic, pyroxene, olivine, minor serpentine, moderate to strongly magnetic, pyrrhotite <1%
627058	514654	5501424	Pyroxene Gabbro, green, massive, feldspars 40-50%, mineralized along joints, trace pyrite and pyrrhotite
627059	514784	5501930	Gabbro, altered, green, feldspars 50-55%, mafics 40-45% (pyroxenes, hornblende, actinolite), moderate to strongly magnetic, pyrrhotite 1-2%
627060	514809	5501984	Gabbro in contact with Blue Quartz Gabbro, massive, dark green, feldspars 75%, quartz 5%, pyrrhotite and pyrite 1%, trace chalcopyrite, joints 320/75N, 42/68SE
627352	515522	5503591	Metasediment, fine-grained, weak fabric, minor pyrite and pyrrhotite, trace chalcopyrite
627353	515432	5503646	Felsite Vein, fine-grained, silicified, trace pyrite and pyrrhotite
627354	515432	5503646	Gabbro-norite, medium-grained, green, trace pyrite
627355	515432	5503646	Gabbro, altered, green, medium-grained, fabric, chlorite altered, trace pyrite

627356	515432	5503646	Gabbro, oxidized, medium-grained, trace pyrite
627357	515432	5503646	Leucogabbro, felsic, oikocrysts, trace pyrite
627358	515843	5503929	Mafic and Ultramafic, altered, sheared, oxidized, trace pyrite
627359	515907	5503941	Ultramafic, sheared 270/38N, altered, trace pyrrhotite, chip sample of quartz vein
627360	515978	5503988	Gabbro, altered, pyrite <1%
627361	516314	5503929	Gabbro, chlorite alteration, silicified
627443	516619	5500872	Silicified band in Quartz Diorite, pyrite 1-2%
627444	516644	5500887	Quartz Vein cutting Quartz Diorite, trending 150
627445	516653	5500881	Silicified zone in Quartz Diorite, fine-grained, sheared, fine disseminated pyrite 1-2%
627446	515908	5500981	Diorite, grey-green, medium-grained, massive, quartz 5%, mafics 30%, weakly chloritized, disseminated pyrite 1-2%
627447	515923	5500964	Soils, clay to silt, pebbles 10%, in Quartz Diorite area
627448	516060	5501188	Quartz Diorite to Tonalite, grey, medium-grained, massive, blue quartz 15-20%, siliceous sections, grey-white (contact 344), fine-grained, pyrite 2%, trace chalcopyrite
627449	516032	5501174	Quartz Diorite to Tonalite, siliceous section, pyrite 2%, trace chalcopyrite
627450	516047	5501181	Quartz Diorite to Tonalite, siliceous section 2-3 m wide (felsite), pyrite 2%, chalcopyrite <0.25%, trace pyrrhotite
627807	514584	5505353	Intermediate Volcanics, Dacite, silicified, strong oxidation (gossan), weak porphyritic texture, disseminated pyrite and chalcopyrite ~2%
627808	515421	5504702	Gabbro to Amphibolite Gabbro, fine-grained, altered amphiboles 5%, blue quartz 1%, biotite and chlorite alteration, shear 118/48S with malachite, chalcopyrite and pyrrhotite 2-5%, trace pyrite and bornite, sample in float
627809	515417	5504723	Quartz vein, white, float, 0.30 m wide, trends 142/78SW, large blebs of pyrrhotite and chalcopyrite, outcrops of amphibolite gabbro in area
627810	515577	5503546	Metabasalt, grey, fine-grained, massive, sugary texture, silicified, moderately oxidized, disseminated chalcopyrite 1%
627811	515616	5503654	Volcanic tuffaceous bands, fine-grained, plagioclase phenocrysts, chlorite alteration, oxidized fractures
627812	515641	5503819	Volcanics, aphanitic, sugary texture, strongly silicified, trace sulfide
627813	515713	5503895	Gabbro, magnetic, plagioclase 60%, pyroxene 40%, medium-grained, minor bronzite, trace chalcopyrite and pyrrhotite
627814	515722	5503911	Pyroxenite, layers 0.50 m wide, serpentine in fractures
627815	515360	5504658	Gabbro, light grey, aphanitic to medium-grained in less altered gabbro, silicified, plagioclase 60%, blue quartz 2%, trace pyrite
627816	515360	5504658	Quartz Vein, sugary texture, grey, quartz eyes <2%, altered volcanic, pyrite and pyrrhotite 1%
627817	515375	5504651	Volcanic, quartzite, white-grey, fine-grained, sugary texture, quartz-rich (>95%), trace pyrite
627818	515380	5504641	Volcanic, dark grey, silicified, minor biotite and chlorite, quartz veins (<5cm) cross cutting, trace pyrite
627819	515382	5504648	Gabbro in contact with Volcanic, aphanitic, silicified, overprinted pyroxenes, blue quartz, plagioclase 40%, trace pyrite and chalcopyrite
627820	515472	5504502	Quartz vein in contact with Silicified Gabbro, 0.50 m quartz vein, dark gabbro, strong oxidation along contact, massive pyrite blebs, pyrrhotite and chalcopyrite, vein trends 275/30N
627821	515472	5504502	Gabbro, fine-grained, silicified, plagioclase 30% as green phenocrysts, cubic pyrite 1% disseminated
627822	515493	5504727	Gabbro, grey, medium-grained, plagioclase 80%, trace pyrite
627823	515486	5504478	Gabbro, altered, silicified, strongly oxidized, gossan band 0.75m (280/58N), minor malachite staining

627824	515499	5504415	Gossanous zone, 0.50 m wide in Siliceous Volcanic, zone follows quartz vein and shear zone, trace sulfide
627825	515359	5504336	Gossanous zone, 0.50 m wide in Siliceous Volcanic, strongly silicified, disseminated sulfides 1% (pyrrhotite)
627826	515745	5504604	Gabbro, medium-grained, blue quartz 3-5%, +/-biotite, chlorite alteration moderate near quartz veins, cut by white quartz veins with corroded texture, trace sulfides
627939	515358	5502951	Gabbro, green, coarse, blue quartz 5%, feldspars 70%, mafics 20%, pyrrhotite 2-3%, chalcopyrite 0.25%, trace pyrite, strongly oxidized
628312	515667	5504294	Granodiorite, medium-grained, blue quartz, re-crystallized, minor oxidation
628525	515414	5504716	Mafic Volcanic
628526	515414	5504716	Mafic Volcanic
628527	515351	5502974	Pegmatitic Gabbro
628528	515438	5502975	Leucogabbro
628529	515439	5502980	Gossan zone in Altered Gabbro

Table 2B

SAMPLE NUMBER	Au ppb	Pt ppb	Pd ppb	Cu ppm	Ni ppm
499291	1	<0.5	<1	44	2
499292	1330	<0.5	2	23500	248
499293	105	<0.5	<1	2320	112
499294	4	<0.5	<1	152	4
499295	<1	<0.5	<1	76	9
499296	<1	1.5	<1	48	13
499297	17	<0.5	<1	51	3
499299	39	10	9	1820	332
499300	37	22.5	14	1665	223
499459	<1	8	2	14	1330
499460	6	9.5	12	152	137
499461	1	8	2	25	891
499462	30	10.5	29	882	690
499463	21	4	3	1330	380
499464	6	1.5	4	1445	339
499465	4	4	6	871	192
499466	35	4.5	3	659	85
499467	2	<0.5	<1	458	7
499468	13	22.5	15	747	324
499469	9	6.5	17	491	132
499470	6	<0.5	<1	225	63
499471	11	2	1	1505	56
499472	29	8.5	17	1035	203
499473	47	14.5	22	397	333
499474	16	7.5	13	292	152
499475	54	11.5	8	1625	273
627003	4	0.5	<1	121	1
627051	1	1	3	84	42
627052	1	6	2	14	655
627053	<1	6	3	24	1880
627054	<1	7	2	19	1745

627055	<1	5	3	10	1375
627056	<1	5.5	2	9	1635
627057	1	10	7	47	512
627058	<1	2	2	14	217
627059	<1	<0.5	<1	43	10
627060	<1	<0.5	<1	99	35
627352	1	1.5	1	105	83
627353	2	<0.5	<1	93	8
627354	6	51.5	7	317	259
627355	1	1	<1	29	62
627356	<1	<0.5	<1	49	1
627357	5	3.5	<1	134	64
627358	8	8	12	147	242
627359	1	1.5	<1	43	108
627360	2	1	1	114	29
627361	<1	1.5	1	9	29
627443	1	<0.5	<1	105	6
627444	2	1.5	<1	3	2
627445	<1	<0.5	<1	95	2
627446	<1	1	<1	18	8
627447	1	1	1	31	40
627448	<1	0.5	<1	53	1
627449	<1	1	<1	44	3
627450	1	<0.5	<1	80	1
627807	2	<0.5	<1	786	55
627808	92	42	31	9070	2370
627809	41	26.5	30	9570	1765
627810	1	0.5	<1	56	34
627811	<1	<0.5	<1	8	110
627812	2	<0.5	<1	27	38
627813	1	5	6	25	352
627814	5	3.5	8	397	132
627815	<1	<0.5	<1	24	47
627816	19	<0.5	<1	85	3
627817	2	<0.5	<1	20	3
627818	<1	<0.5	<1	6	5
627819	<1	<0.5	<1	24	24
627820	3	<0.5	<1	188	84
627821	<1	<0.5	<1	30	27
627822	<1	2	<1	30	40
627823	6	<0.5	<1	182	1
627824	1	<0.5	<1	93	8
627825	8	<0.5	<1	157	<1
627826	<1	1	2	12	56
627939	30	4.5	5	1425	326
628312	1	5	7	180	78
628525	56	76.5	84	3660	1735
628526	9	9.5	8	1005	667
628527	2	1	1	184	100
628528	24	10.5	20	808	382
628529	57	8	33	14600	2260

## **Conclusions**

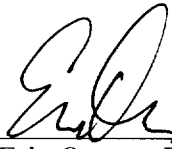
Anomalous platinum-group mineralization occurs in mafic intrusive rocks under the claim group. The host differentiated mafic intrusion, in conjunction with the metal signatures, encountered on the claims suggests that there is potential for magmatic-type base and precious metals deposits. It is recommended that further work be conducted on the claims, and that they be maintained in good standing.

**Certificate**

I, Eric Owens, hereby certify that the information contained within this report is correct. During the period of time presented in this report I was acting representative and manager of Atikwa Minerals Limited.

Dated at Toronto, Ontario, this day of January <sup>17<sup>th</sup></sup> 2002:

393372  
Prospectors License  
Atikwa Minerals

  
Eric Owens, PhD  
Manager

Jan 17, 2002  
Date

Atikwa Minerals Limited  
Summary of Costs, **Contact (English) Property**  
April 12, 2001 – November 14, 2001

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Field Equipment/Consumables	\$ 5134.00
Sampling and Assays	\$ 3579.00
Salaries	\$10022.00
Accommodation	\$ 1666.00
Transportation/Communication	\$ 3191.00
Drafting	\$ 4683.00
Mobilization/Demobilization	\$ 247.00
Total	\$28522.00



## References

- Anonymous (1988) Werner Lake Area (57L/7 NW). Ontario Geological Survey: Geological Data Inventory Folio GDIF 453.
- Anonymous (1988) Rex Lake Area (57L/7 NE). Ontario Geological Survey: Geological Data Inventory Folio GDIF 452.
- Anonymous (1963) Canadian Mines Handbook. Norpax Nickel Mines Ltd., pp. 215.
- Beakhouse, G. P. (1997) Precambrian Geology, Werner Lake-English River Area. Ontario Geological Survey: Preliminary Map P. 3371.
- Beakhouse, G.P. (1993) Project 92-03, Werner-Bug Lakes Area: Base Metal Mineralization in a High-grade Meta-sedimentary Terrane: Summary of Fieldwork and Other Activities 1993. Ontario Geological Survey Miscellaneous Paper 162, pp. 62-67.
- Blackburn, C.E. (1981) Kenora-Fort Frances Geological Compilation Series: Ontario Geological Survey: Map 2443.
- Breaks, F.W., et al. (1975) Operation Kenora-Sydney Lake, Eagle Lake Sheet, District of Kenora. Ontario Division of Mines: Preliminary Map P.1026, Scale 1:63,360.
- Breaks, F. W. (1991) English River Subprovince. In: General Geology of Ontario. Ontario Geological Survey, Special Volume 4, pt.1, pp. 239-277.
- Burr, S.V. (1960) Assessment report on Geology of the Emmons Lake Option, Dryden Area, Ontario. Report to New Consolidated Canadian Exploration Limited.
- Carlson, H. D. (1958) Geology of the Werner Lake-Rex Lake Area. Ontario Department of Mines, Annual Report 1957, vol. 66, pt. 4, pp.1-30.
- Davies, J.C. (1966) Atikwa Lake Area - West Half, ODM Preliminary Geology Map P.387, Scale 1:15,840.
- Davies, J.C. (1966) Atikwa Lake Area - East Half, ODM Preliminary Geology Map P.388, Scale 1: 15,840.
- Davies, J.C. (1973) Geology of the Atikwa Lake Area, District of Kenora, Ontario Department of Mines, Geological Report 111, pp. 1-58.
- Davis, D.W., and Edwards, G.R. (1982) Zircon U-Pb ages from the Kakagi Lake Area, Wabigoon Subprovince, Northwest Ontario. Canadian Journal of Earth Science, vol. 19, pp. 1235-1245.

- Davis, D.W., Sutcliffe, R.M. and Trowell, N.F. (1988) Geochronological Constraints on the Tectonic Evolution of a Late Archean Greenstone Belt, Wabigoon Subprovince, Northwest Ontario, Canada. *Precambrian Research*, vol. 39, pp. 171-191.
- Ferreira, W. S. (1997) Report on Diamond Drilling Work Done on the Pen Property Between April 20 and May 5, 1995: Unpublished Assessment Report, Canmine Resources Ltd.
- Glatz, A. (1990) Magnetic and VLF-EM Surveys of the Mining Claims K 1133302, K 1133303, District of Kenora. Unpublished Assessment Report.
- Hamilton, J.D. (1962) Diamond Drill Logs, Lantz Option, Emmons Lake Claim 31289, Turtlepond Lake Area, Kenora mining Division. Report for McIntyre Porcupine Mines Limited.
- Kidd, R. (1967a) Geophysical Results, Glatz Option. Unpublished Assessment Report for Agena Mining Company Limited
- Kidd, R. (1967b) Geophysical Results, Kozowy Option. Unpublished Assessment Report for Latin American Mines Limited
- King, H.L.(1971) Report on Copper-Nickel mineralization, Mile Lake, Contact Bay Area, Kenora Mining Division, Report to File
- Kremko, M. (1969) Area of Contact Bay, Report #15, Drill Logs prepared for Hollinger Mines Limited, Unpublished Assessment Report.
- Krisko, E.(1958) Area of Contact Bay Report #13, Unpublished Assessment Report.
- Kuabapeli, J.S. (1969) Unpublished Assessment Report, Emmons Lake Pty. 5-2 F10SE0045
- Langelaar, J. (1990) Nabish Lake Nickel-Copper, Final Submission Technical Report, Unpublished Report for OPAP.
- Lantz, D.O. (1972) Unpublished Assessment Report, Emmons Lake Pty 52F 10SE-53
- Lawson, G.E., and Zuberec, P. (1987) Platinum group element mineralization in the Werner-Rex Lakes area, northwestern Ontario; in *Summary of Field Work and Other Activities 1987*, Ont. Geol. Survey, Misc. Paper 137, pp. 265-270.
- Long, M. and Ramnath, S. (1999) Mulcahy Lake Assessment Report, Eagle Lake Area, ON, NTS 52F11, Unpublished Report to Gossan Resources Limited and FalconCrest Resources Limited.
- Macdonald, A. J., and Cherry, M.E. (1988) The Platinum Group of Elements in Ontario: Ontario Geological Survey, Open File Report 5681, pp. 1-279.

- MacTavish, A.D. (1987) Geological Report, Glatz Property, Private Report to St. Joe Canada Inc.
- MacTavish, A.D. (1987) Geological Report on the Nabish Lake Property, Private Report to St. Joe Canada Inc.
- Moorhouse, W.W. (1941) Geology of the Eagle Lake Area, Ontario Department of Mines, Annual report for 1939, Vol 48, Part 4
- Morrison, D.A. et al. (1985) Age of the Mulcahy Lake Intrusion, Northwest Ontario, and Implications for the Evolution of Greenstone-Granite Terrains, Earth and Planetary Science Letters, Vol. 73, Part 2, pp. 306-316
- Morrison, D.A., et al. (1986) Stratigraphy and Petrology of the Mulcahy Lake Layered Gabbro: An Archean Intrusion in the Woebegone Subprovince, Ontario: Jour. of Petrology, Vol. 27, pp. 303-341.
- Pan, Y., and There's C. (2000) The Werner Lake Co-Cu-Au Deposit of the English River Subprovince Ontario, Canada: Evidence for an Exhalative Origin and Effects of Granulite Facies Metamorphism: Econ. Geol., Vol. 95, pp. 1635-1656.
- Panagapko, D.A.(1988) Project 607, Emmons Lake Property, 1987 Exploration Program, Assessment Report, Report to Eldor Resources Limited
- Parker, J.R. (1989) Geology, Gold Mineralization, and Property Visits in the Area investigated by the Dryden-Ignace Economic Geologist, 1984-1987, Ontario Ministry of Northern Development and Mines, in Report of Activities for 1988
- Parker, J.R. (1991) Fornier Bay-Hardrock Bay Area, Ontario Geological Survey Preliminary Map P.3169, Scale 1: 4,800
- Parker, J. R. (1995a) Detailed Precambrian geology, alteration and mineralization at Almo lake, English River Subprovince; Ont. Geol. Survey, Prelim. Map P. 3313, 1:4800.
- Parker, J. R. (1995b) Detailed Precambrian geology, alteration and mineralization at Gordon Lake area, English River Subprovince; Ont. Geol. Survey, Prelim. Map P. 3314, 1:4800.
- Parker, J. R. (1995c) Detailed Precambrian geology, alteration and mineralization at Werner Lake area, English River Subprovince; Ont. Geol. Survey, Prelim. Map P. 3315, 1:4800.
- Parker, J. R. (1995d) Detailed Precambrian geology, alteration and mineralization at Fortune Lake area, English River Subprovince; Ont. Geol. Survey, Prelim. Map P. 3316, 1:4800.
- Parker, J. R. (1995e) Detailed Precambrian geology, alteration and mineralization at Rex Lake area, English River Subprovince; Ont. Geol. Survey, Prelim. Map P. 3317, 1:4800.

- Parker, J. R. (1998) Geology of nickel-copper-chromite deposits and cobalt-copper deposits at Werner-Rex-Bug Lakes, English River Subprovince, Northwestern Ontario: Ontario Geological Survey, Open File Report 5975, pp. 1-178.
- Parker, J. R., and Laporte, N. (1993) Precambrian geology of the Bug Lake area; Ont. Geol. Survey Open File Map 228, various scales.
- Redden, J.W. (1987) Preliminary Report on the Mile Lake/Trap Lake Property, Kenora Mining Division, Ontario, Canada. Private report to Eagle Lake Resources Limited
- Redden, J.W. (1988a) Report on Geological Survey of the West Part of the Mile Lake Property, Contact Bay Area, Kenora Mining Division, Ontario, Report for Eagle Lake Exploration Ltd.
- Redden, J.W. (1988b) Report on Geological Survey of the East Part of the Mile Lake Property, Contact Bay Area, Kenora Mining Division, Ontario, Report for Eagle Lake Exploration Ltd.
- Reed, L.E. (2001) Report on the Geophysical Interpretation of Helicopter Borne Magnetic and Electromagnetic surveys, Werner Lake Area, Kenora, Ontario; Unpublished Report for Atikwa Minerals Ltd.
- Satterly, J. (1941) Geology of the Dryden-Wabiggon Area, Ontario Department of Mines, Annual Report for 1943, Vol. 50, pp. 1-67.
- Scime, V.J. (1979) Meridian Bay Project, Diamond Drill Logs for Sherritt Gordon Mines Ltd.
- Sutcliffe, R.H. (1984) Geology of the Mulcahy Lake Gabbro Intrusion, in Summary of Field Work 1984, Ontario Geological Survey, Miscellaneous Paper 119, pp. 33-37
- Sutcliffe, R.H. (1984) Precambrian Geology of the Mulcahy Lake Intrusion, Ontario Geological Survey Preliminary Map P.2826, Scale 1:15,480
- Sutcliffe, R.H. (1988) Geology and PGE-Potential of Mafic Intrusions in the Western Wabiggon Subprovince, in The Platinum Group of Elements in Ontario, Ontario Geological Survey Open File Report 5681.
- Sutcliffe, R.H., et al. (1991) Stratigraphy and petrology of the lower part of the Mulcahy Gabbro, northwestern Ontario: Origin of reverse and normal fractionation trends and implications for tectonic setting of late Archean mafic magmatism: Can. J. Earth Sci. Vol. 28, pp. 1753-1768.
- Sutcliffe, R.H., and Smith, A.R. (1985) Precambrian Geology of the Mulcahy Gabbro, District of Kenora: Ontario Geological Survey, Map P.2826.

- Taylor, W. L. W. (1950) Copper-nickel sulphide deposits of the Werner Lake Ontario and Bird River, Manitoba areas: unpublished M.Sc. thesis, McGill University, Montreal, pp. 1-65.
- Thurston, P.C. (1991) Archean Geology of Ontario, Introduction: in General Geology of Ontario: Ontario Geological Survey, Special Volume 4, Pt. 1, pp. 73-78.
- Trapnell, M.L. (1988) Report on the May - June 1988 Exploration Program, Mulcahy Lake Property, District of Kenora, Kenora Mining Division (52F11): Ontario Dept. of Mines Assessment Report (52F11SW0004.2.11731) (Mulcahy Lake)
- Wagg, C. (1991) A Geological and Geophysical Reconnaissance of the Contact Bay Property, Private Report for Grand Oakes Exploration Inc.
- Watowich, S. N. (1957a) AEM Report A for Falconbridge Nickel Mines Ltd., on Claims, Kenora District: Ontario Dept. of Mines Assessment Report 52F11SW8184
- Watowich, S. N. (1957b) AEM Report B for Falconbridge Nickel Mines Ltd., on Claims, Kenora District: Ontario Dept. of Mines Assessment Report (52F11SW8184 63.647)
- Watowich, S. N. (1957c) Geological Report for Falconbridge Nickel Mines Ltd., on Claims, Kenora District: Ontario Dept. of Mines Assessment Report (52F11SW8184 63.647)
- Watowich, S.N. (1957d) Drilling Report #15 on Tail Bay Property, Ontario; Ontario Dept. of Mines. Assessment Report (52F11SW0018 14).
- Watowich, S.N. (1957e) Drilling Report #17 on McKinstry Lake Property, Ontario; Ontario Dept. of Mines. Assessment Report (52F11SW0017 17))
- Wright, J. F. (1932) Geology and mineral deposits of a parts of southeastern Manitoba; Geological Survey of Canada, Memoir 169, pp. 1-150.
- Youmans, W.C. (1991) Glatz-Kozowy Option, Nabish Lake Property, Contact bay Area (G-2579), Kenora District of Northwestern Ontario, Summary of 1991 Exploration Activities, Report to Societe Miniere Mimiska Inc.

## APPENDIX 1



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
 Ontario, Canada L4W 2S3  
 PHONE: 905-624-2806 FAX: 905-624-6163

To: ATIKWA MINERALS LTD.  
 201 - 121 RICHMOND ST.  
 TORONTO, ON  
 M5H 2K1

*contact (eng)*

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 03-SEP-2001  
 Invoice No. : I0123758  
 P.O. Number :  
 Account : SXJ

Project :  
 Comments: ATTN: ERIC OWENS CC: IAN ATKINSON

<b>CERTIFICATE OF ANALYSIS</b>	<b>A0123758</b>
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SAMPLE	PREP CODE	Cu %									
628529 - <i>Contact (E)</i>	212 --	1.46									

CERTIFICATION: \_\_\_\_\_ *[Signature]*



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
 Ontario, Canada L4W 2S3  
 PHONE: 905-624-2806 FAX: 905-624-6163

To: ATIKWA MINERALS LTD.  
 201 - 121 RICHMOND ST.  
 TORONTO, ON  
 M5H 2K1

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 24-SEP-2001  
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 P.O. Number :  
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Project : CHECK RESPLITS  
 Comments: ATTN: ERIC OWENS

<b>CERTIFICATE OF ANALYSIS</b>	<b>A0125155</b>
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CONTACT (E)  
 BOURNE  
 MULCAHY  
 STAKED

SAMPLE	PREP CODE	Cu %									
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628178 RESPLIT	212 --	2.51									
628244 RESPLIT	212 --	1.43									
628248 RESPLIT	212 --	1.43									

CERTIFICATION: \_\_\_\_\_





# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
 Ontario, Canada L4W 2S3  
 PHONE: 905-624-2806 FAX: 905-624-6163

To: ATIKWA MINERALS LTD.

201 - 121 RICHMOND ST.  
 TORONTO, ON  
 M5H 2K1

Page Number : 2  
 Total Pages : 2  
 Certificate Date : 24-AUG-20C  
 Invoice No. : I0122524  
 P.O. Number :  
 Account : SXJ

Project :  
 Comments: ATTN: TERRY BOTTRILL CC: IAN ATKINSON

## CERTIFICATE OF ANALYSIS A0122524

SAMPLE	PREP CODE	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Cu ppm	Ni ppm					
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627425 } 627426 } 627427 } 627428 } 627429 }	205 226 205 226 205 226 205 226 205 226	3 1 < 1 < 1 < 1	3.5 4.5 < 0.5 < 0.5 < 0.5	2 3 < 1 < 1 < 1	546 113 67 72 51	371 161 3 24 7					
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627445 } 627446 } 627448 } 627449 } 627450 }	205 226 205 226 205 226 205 226 205 226	< 1 < 1 < 1 < 1 1	< 0.5 1.0 0.5 1.0 < 0.5	< 1 < 1 < 1 < 1 < 1	95 18 53 44 80	2 8 1 3 1					
628297 628801	205 226 205 226	1 11	< 0.5 3.5	< 1 1	50 514	4 61					

CERTIFICATION: \_\_\_\_\_ +



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 5175 Timberlea Blvd., Mississauga  
 Ontario, Canada L4W 2S3  
 PHONE: 905-624-2806 FAX: 905-624-6163

To: ATIKWA MINERALS LTD.

201 - 121 RICHMOND ST.  
 TORONTO, ON  
 M5H 2K1

Page Number : 1  
 Total Pages : 2  
 Certificate Date: 24-AUG-2001  
 Invoice No. : 10122524  
 P.O. Number :  
 Account : SXJ

Project :

Comments: ATTN: TERRY BOTTRILL CC: IAN ATKINSON

## CERTIFICATE OF ANALYSIS

A0122524

SAMPLE	PREP CODE	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Cu ppm	Ni ppm					
499291	205 226	1	< 0.5	< 1	44	2					
499292	205 226	1330	< 0.5	2	>10000	248					
499293	205 226	105	< 0.5	< 1	2320	112					
499294	205 226	4	< 0.5	< 1	152	4					
499295	205 226	< 1	< 0.5	< 1	76	9					
499296	205 226	< 1	1.5	< 1	48	13					
499297	205 226	17	< 0.5	< 1	51	3					
499298	205 226	1	5.0	9	10	435					
499299	205 226	39	10.0	9	1820	332					
499300	205 226	37	22.5	14	1665	223					
499451	205 226	1	< 0.5	< 1	198	186					
499452	205 226	2	0.5	< 1	371	114					
499453	205 226	2	1.5	1	328	123					
499454	205 226	< 1	< 0.5	< 1	200	57					
499455	205 226	145	218	370	3830	1165					
499456	205 226	91	119.5	240	2660	394					
499457	205 226	1	1.0	2	35	29					
499458	205 294	1	< 0.5	< 1	151	1					
499459	205 226	< 1	8.0	2	14	1330					
499460	205 226	6	9.5	12	152	137					
499461	205 226	1	8.0	2	25	891					
499462	205 226	30	10.5	29	882	690					
499463	205 226	21	4.0	3	1330	380					
499464	205 294	6	1.5	4	1445	339					
499465	205 226	4	4.0	6	871	192					
499466	205 226	35	4.5	3	659	85					
499467	205 294	2	< 0.5	< 1	458	7					
499468	205 294	13	22.5	15	747	324					
499469	205 226	9	6.5	17	491	132					
499470	205 226	6	< 0.5	< 1	225	63					
499471	205 226	11	2.0	1	1505	56					
499472	205 226	29	8.5	17	1035	203					
499473	205 226	47	14.5	22	397	333					
499474	205 226	16	7.5	13	292	152					
499475	205 226	54	11.5	8	1625	273					
627415	205 226	1	< 0.5	< 1	123	183					
627416	205 226	2	3.5	< 1	75	81					
627417	205 226	1	8.0	4	123	107					
627418	205 226	1	2.5	3	90	73					
627419	205 226	8	9.0	4	683	234					

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# ALS Chemex

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Comments: ATTN: ERIC OWENS CC: IAN ATKINSON

## CERTIFICATE OF ANALYSIS

A0123304

SAMPLE	PREP CODE	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Cu ppm	Ni ppm					
628517	205 226	16	9.5	21	185	355					
628518	205 226	50	56.0	145	1305	1195					
628519	205 226	45	103.5	500	2940	3060					
628520	205 226	18	105.5	330	737	2700					
628521	205 226	42	120.0	550	1490	4380					
628522	205 226	28	148.5	600	1030	3400					
628523	205 226	9	1.5	4	375	73					
628524	205 226	360	1.5	4	1305	20					
628525	205 226	56	76.5	84	3660	1735					
628526	205 226	9	9.5	8	1005	667					
628527	205 226	2	1.0	1	184	100					
628528	205 226	24	10.5	20	808	382					
628529	205 226	57	8.0	33	>10000	2260					
628530	205 226	< 1	3.0	1	97	79					
628531	205 226	< 1	< 0.5	< 1	100	51					
628532	205 226	< 1	< 0.5	< 1	40	10					
628533	205 226	< 1	< 0.5	< 1	28	7					
628534	205 226	< 1	< 0.5	< 1	38	10					

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Project :

Comments: ATTN: TERRY BOTTRILL CC: IAN ATKINSON

## CERTIFICATE OF ANALYSIS

A0121035

SAMPLE	PREP CODE	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Cu ppm	Ni ppm					
627193	205 294	9	12.0	38	580	700					
627194	205 294	22	18.0	63	1310	1170					
627195	205 294	21	25.5	72	1220	1185					
627196	205 294	10	13.5	44	533	698					
627197	205 294	2	3.0	10	152	330					
627198	205 226	< 1	1.0	3	46	301					
627199	205 226	1	1.0	4	89	169					
627200	205 226	1	1.5	3	51	328					
627292	205 294	25	15.5	31	2000	417					
627351 - Cont (John)	205 294	48	17.0	43	9170	2880					
627352	205 226	1	1.5	1	105	83					
627353	205 226	2	< 0.5	< 1	93	8					
627354	205 294	6	51.5	7	317	259					
627355	205 294	1	1.0	< 1	29	62					
627356	205 294	< 1	< 0.5	< 1	49	1					
627357	205 226	5	3.5	< 1	134	64					
627451	205 226	< 1	< 0.5	< 1	7	48					
627452	205 226	< 1	0.5	1	21	48					
627453	205 226	< 1	0.5	< 1	21	72					
627454	205 226	2	< 0.5	< 1	248	20					
627455	205 226	4	1.0	2	67	24					
627456	205 226	28	32.0	56	1165	532					
627457	205 294	5	7.5	17	675	252					
627458	205 226	1	4.0	1	86	27					
627459	205 294	1	< 0.5	< 1	183	95					
627460	205 294	< 1	< 0.5	< 1	8	57					
628034	205 226	< 1	0.5	1	288	96					
628035	205 226	3	1.5	2	801	130					
628036	205 226	2	2.0	3	319	139					
628037	205 294	2	2.5	5	693	262					
628038	205 226	3	4.5	10	1175	307					
628039	205 226	2	0.5	4	879	459					
628040	205 226	6	0.5	< 1	199	88					
628041	205 226	< 1	0.5	1	167	75					
628042	205 226	3	1.0	2	445	157					
628043	205 226	1	< 0.5	< 1	192	62					
628044	205 226	1	0.5	< 1	54	42					
628045	205 226	9	26.5	22	901	168					
628046	205 226	11	28.5	19	1470	2250					
628047	205 226	8	5.5	5	541	107					

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Comments: ATTN: TERRY BOTTRILL CC: IAN ATKINSON

## CERTIFICATE OF ANALYSIS

A0121266

SAMPLE	PREP CODE	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Cu ppm	Ni ppm					
627358 } CONTACT	205 226	8	8.0	12	147	242					
627359 } (ENGLISH)	205 226	1	1.5	< 1	43	108					
627360 } (ENGLISH)	205 226	2	1.0	1	114	29					
627361 } (ENGLISH)	205 226	< 1	1.5	1	9	29					
627461 } (ENGLISH)	205 226	< 1	1.0	1	8	70					
627462 } OSBOURNE	205 226	< 1	< 0.5	< 1	11	118					
627463 } OSBOURNE	205 226	< 1	< 0.5	< 1	9	134					
627464 } OSBOURNE	205 226	< 1	< 0.5	< 1	10	53					
627465 } OSBOURNE	205 226	< 1	< 0.5	< 1	15	57					
627466 } OSBOURNE	205 226	< 1	< 0.5	< 1	25	102					
627467 } CONTACT (E)	205 226	45	40.0	94	2180	1375					
627468 } CONTACT (E)	205 226	56	48.5	130	2600	1525					
628312 } OSBOURNE	205 226	1	5.0	7	180	78					
628364 } OSBOURNE	205 226	15	14.0	24	822	258					
628365 } OSBOURNE	205 226	11	8.5	24	1165	408					
628366 } (OPTION)	205 226	3	0.5	1	326	108					
628367 } (OPTION)	205 226	24	23.0	53	1555	504					
628368 } (OPTION)	205 226	35	0.5	< 1	1650	392					
628751 } (OPTION)	205 226	2	4.0	11	97	212					
628752 } (OPTION)	205 226	< 1	2.5	8	44	204					
628753 } (OPTION)	205 226	< 1	1.5	2	26	166					
628754 } (OPTION)	205 226	21	23.0	84	1425	938					
628755 } (OPTION)	205 226	10	18.5	36	558	587					
628756 } (OPTION)	205 294	18	19.0	48	1040	882					
628757 } (OPTION)	205 226	20	28.5	77	782	595					
628758 } (OPTION)	205 294	12	15.5	40	739	771					
628759 } (OPTION)	205 294	8	8.5	27	531	548					
628760 } (OPTION)	205 294	6	5.5	18	390	376					
628761 } (OPTION)	205 226	1	1.0	3	71	152					
628762 } (OPTION)	205 226	1	0.5	1	47	57					
628763 } (OPTION)	205 226	< 1	1.5	3	50	153					
628764 } (OPTION)	205 226	< 1	1.0	3	40	131					
628765 } (OPTION)	205 226	3	0.5	1	47	191					
628766 } (OPTION)	205 294	< 1	1.5	4	275	62					

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## CERTIFICATE OF ANALYSIS A0118584

ONT  
 ENG)

SAMPLE	PREP CODE	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Cu ppm	Ni ppm				
627001 ] CONT (JOHN)	205 226	3	2.5	2	200	3				
627002 ]	205 226	48	1.0	< 1	1130	51				
627003 ]	205 226	4	0.5	< 1	121	1				
627050 ]	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd				
627051 ]	205 226	1	1.0	3	84	42				
627052 ]	205 294	1	6.0	2	14	655				
627053 ] CONTACT	205 226	< 1	6.0	3	24	1880				
627054 ] (ENG)	205 226	< 1	7.0	2	19	1745				
627055 ]	205 226	< 1	5.0	3	10	1375				
627056 ]	205 294	< 1	5.5	2	9	1635				
627057 ]	205 294	1	10.0	7	47	512				
627058 ]	205 226	< 1	2.0	2	14	217				
627059 ]	205 294	< 1	< 0.5	< 1	43	10				
627060 ]	205 226	< 1	< 0.5	< 1	99	35				
627061 ] CONT (JOHN)	205 226	1	9.0	6	22	776				
627062 ]	205 226	4	9.5	9	440	487				
627063 ]	205 226	< 1	< 0.5	< 1	75	50				
627064 ]	205 226	10	5.5	13	1825	228				
627065 ]	205 226	1	3.5	1	287	69				
627066 ] OSB (OPT)	205 294	5	< 0.5	< 1	349	128				
627067 ]	205 226	2	1.5	< 1	105	6				
627068 ]	205 226	2	1.5	< 1	243	97				
627069 ]	205 226	< 1	< 0.5	< 1	65	304				
627070 ]	205 226	24	16.5	48	1210	630				
627101 ]	205 294	1	0.5	< 1	104	30				
627102 ]	205 294	1	0.5	< 1	129	35				
627103 ]	205 294	< 1	< 0.5	< 1	9	1				
627104 ]	205 294	< 1	< 0.5	< 1	26	38				
627105 ]	205 294	< 1	0.5	1	43	35				
627201 ]	205 226	< 1	1.0	2	319	97				
627202 ]	205 226	< 1	1.5	2	183	125				
627203 ] OSB (OPT)	205 226	< 1	1.0	1	82	95				
627204 ]	205 226	< 1	3.0	6	30	118				
627205 ]	205 226	< 1	0.5	1	105	74				
627206 ]	205 226	1	3.5	1	758	32				
627207 ]	205 226	< 1	1.0	< 1	93	79				
627208 ]	205 226	2	2.5	4	937	254				
627209 ]	205 226	2	1.0	1	386	97				
627210 ]	205 226	3	2.5	2	752	136				
627211 ]	205 226	2	2.5	2	1525	134				

CERTIFICATION: \_\_\_\_\_



# ALS Chemex

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## CERTIFICATE OF ANALYSIS A0118584

SAMPLE	PREP CODE	Au ppb ICP-MS	Pt ppb ICP-MS	Pd ppb ICP-MS	Cu ppm	Ni ppm				
627807	205 294	2	< 0.5	< 1	786	55				
627808	205 294	92	42.0	31	9070	2370				
627809	205 294	41	26.5	30	9570	1765				
627810	205 294	1	0.5	< 1	56	34				
627811	205 294	< 1	< 0.5	< 1	8	110				
627812	205 294	2	< 0.5	< 1	27	38				
627813	205 294	1	5.0	6	25	352				
627814	205 294	5	3.5	8	397	132				
627815	205 294	< 1	< 0.5	< 1	24	47				
627816	205 294	19	< 0.5	< 1	85	3				
627817	205 294	2	< 0.5	< 1	20	3				
627818	205 226	< 1	< 0.5	< 1	6	5				
627819	205 226	< 1	< 0.5	< 1	24	24				
627820	205 226	3	< 0.5	< 1	188	84				
627821	205 226	< 1	< 0.5	< 1	30	27				
627822	205 226	< 1	2.0	< 1	30	40				
627823	205 226	6	< 0.5	< 1	182	1				
627824	205 226	1	< 0.5	< 1	93	8				
627825	205 226	8	< 0.5	< 1	157	< 1				
627826	205 226	< 1	1.0	2	12	56				
627827	205 226	80	53.5	92	3490	1870				
627828	205 226	12	6.5	4	493	162				
627829	205 226	7	8.5	9	403	146				
627830	205 226	86	36.5	46	2990	611				
627831	205 226	18	12.5	22	659	270				
627832	205 226	15	16.5	23	739	257				
627833	205 226	58	63.0	59	2720	843				
627834	205 226	22	16.0	22	1035	391				
627835	205 226	50	32.0	35	1910	504				
627836	205 226	65	69.5	69	3290	842				
627837	205 226	73	88.0	92	3290	1160				
627838	205 226	42	32.0	30	1505	439				
627839	205 226	105	71.0	71	3740	921				
627939	205 226	30	4.5	5	1425	326				
627940	205 294	16	26.0	14	1090	1600				
627941	205 294	3	31.5	27	1415	921				
627942	205 294	10	4.5	7	2120	268				
627943	205 226	64	4.0	3	2410	102				
627944	205 226	1	1.0	< 1	165	53				
627945	205 226	2	< 0.5	< 1	213	45				

CERTIFICATION: \_\_\_\_\_

<b>Sample</b>	<b>East</b>	<b>North</b>	<b>Unit</b>	<b>Mineralization</b>
499291	516049	5501195	Siliceous zone, fine, sugary textured, ox	1.5% py, 0.5% cpy
499292	515993	5501275	Massive sulfide vein in a quartz diorite, some quartz veining	5-7% cpy, 2-5% py
499293	515993	5501275	qtz diorite, med gr, 5% qtz eyes, ox	1-2% py, 1-2% cpy, < 1% po
499294	515995	5501241	Silicified zone in a qtz diorite, 5% qtz eyes.	2% py, tr cpy
499295	516023	5501241	Alt diorite-gab, dark grn, med gr, alt feldspars, ox wk mt	1-2% po, 0.25% cpy
499296	516045	5501329	Alt gab - norite, med gr, dk grn, wk - mod mt, ox, epidote	1-2% po, 0.25% cpy
499297	516302	5501522	Silicified section of qtz diorite, qtz eyes, fn gr, ox	2% po, 0.25% cpy
499299	515682	5501856	leuco gabbro, 20% mafics, pyroxene segregation, pyroxene rich	4% cpy, po, malachite
499300	515452	5501953	coarse pyroxene gabbro, ox blebs and along joints	2% po - cpy (3:2)
499459	514810	5501360	serpentinized ultramafics	trace sulfides
499460	514452	5501433	Med to coarse gabbro, mafic, near altramafic contact, non mt	tr po, cpy
499461	515120	5501150	serpentinized ultramafics, cg, mod to str Mt in spots	trace sulfides
499462	514798	5501522	med gr altered gabbro, mod ox, massive	< 1% cpy + po, finely disseminated
499463	514973	5501700	med gr gabbro, coarse segregations of pyx, 5% blue qtz.	2 % py + po + cpy, fine diss to blebs
499464	514838	5501571	med gr, grey white qtz diorite, equigranular, 10% qtz, 15% mafics	5% po, 2% cpy
499465	514838	5501571	med gr, grey white qtz diorite, equigranular, 10% qtz, 15% mafics	5% po, 2% cpy
499466	514907	5501636	siliceous dyke, grey fine gr, qtz diorite in a med gabbro, ox jts	5-7% fine po dess.
499467	515299	5501968	pyx gabbro, coarse gr, 30-40% mafics (pyx), 5% qtz, str ox	2% po-cpy
499468	515517	5502008	coarse, pegmatitic pyroxene gabbro, 20-40% pyx, some serp.	1-1.5% po, 0.5-1% cpy as blebs
499469	514831	5501565	gabbro,tacl alteration,blue qtz eyes, mod-str oxidation	<0.5%py+po+cpy, in veins and dissm
499470	515640	5502100	gabbro, oxidation on joints, minor talc alt, large plag xls,	<0.5% po+cpy(50:50)
499471	515520	5502100	lecogabbro, coarse g, wk-mod oxidation, blue qtz eyes	trace malachite
499472	515696	5501850	feldspar rich pyroxene gabbro, coarse gr, ox blebs	2-4% sulfide blebs, cpy mainly, po
499473	515696	5501850	coarse gr pyroxene gabbro, pyroxene segregations, ox blebs	2-4% sulfide blebs, po - cpy
499474	515696	5501850	coarse gr pyroxene gabbro, pyroxene segregations, ox blebs	2-4% sulfide blebs, po - cpy
499475	515682	5501856	coarse leuco gabbro, 20% mafics, white green, feldspar rich, pyx	4% cpy, malachite
627003	515876	5502528	Ultramafic large Boulders, Pyx, Oliv, Strongly Mt	
627051	516303	5502617	leucocratic gabbro (75% plag.)	
627052	515763	5501624	dk. green ultramafic, with pyx and oli, strongly mag.	tr. py & po
627053	515102	5501255	ultramafic: Mt+Serp+Bio. pyr-oli., massive	
627054	514875	5501240	ultramafic: dk. green to black, cut by serp. vein	tr. po
627055	514505	5500917	ultramafic:pyx+oli+serp., moderately mag.	
627056	514346	5500782	granodiorite, massive	
627057	514469	5501419	gabbro-pyroxenite: contact between mafic and ultramaf.	tr. disseminated fine po
627058	514654	5501424	pyx gabbro, massive	tr py and po, mainly along joints
627059	514784	5501950	pyx, amphi gabbro, mod-strong mag.	1-2% po
627060	514809	5501984	coarse grained and f.g gabbro(c.c.), f.g contains sulph.	2-3% disseminated po+cpy+py
627352	515522	5503591	gb, alt, high grade cu	rich sulf, massive
627353	515432	5503646	intermediate intrusive	trace sulfides
627354	515432	5503646	Gabbro-Norite	visible pyrite
627355	515432	5503646	Altered gabbro with fabric, chloritized	visible pyrite
627356	515432	5503646	Oxidized gabbro, medium grain	trace pyrite
627357	515432	5503646	Leuco gabbro, oikocrysts, felsic	pyrite trace
627358	515841	5503930	sheared ultramaf, oxidized ultramafic,	vis pyr,po
627359	515907	5503941	qtz vein, alt, ultra maf,	tr po, py
627360	515978	5503988	gb, alt,mal	py <1%
627361	516314	5503929	gb,alt,silic ,chl,	no sulf
627443	516619	5500872	Silicified qtz diorite, mineral alignment	1-2% py
627444	516644	5500887	Qtz vn 1.5 m wide cutting a quartz diorite	ox
627445	516653	5500881	silicified quartz diorite	1-2% py
627446	515908	5500981	Subcrop green grey, med gr, massive diorite, 5% qtz, chl	1-2% py
627447	516046	5501127	Soils sample	
627448	516046	5501127	V. fine, siliceous zone in a qtz diorite.	2% py, tr cpy
627449	516032	5501174	Siliceous zone, fine, ox	2% py, tr cpy
627450	516047	5501181	Siliceous zone, fine, sugary textured, ox	2% py, 0.25% cpy
627807	514584	5505353	gossanous silicified dacite	py/cpy disseminated and in veinlets
627808	515421	5504702	f.g. gabbro to amphibolitic gabbro	thin shear with malachite/copper, sample 2-



627809	515417	5504723	quartz vein on island 808	5% cpy-po-py-bo
627810	515577	5503546	f.g. silicified grey volcanic(basalt)	large amount of cpy
627811	515616	5503654	f.g. volcanic with chloritic alt.	disseminated cpy <1%
627812	515641	5503819	aphanitic volcanic strongly silicified	
627813	515713	5503895	clay altered magnetic gabbro 60/40 plag/px	minor bronzite, trace cpy/po (relic rock sawing)
627814	515722	5503911	pyroxenite blob/layer?	<1% pyr
627815	515360	5504658	aphanitic siliceous gabbro and slightly altered gabbro	<1% pyr
627816	515360	5504658	mafic volcanic altered to qtz-rich with plag	1% pyr+po in bands and cubes
627817	515375	5504651	silicified volcanic	trace pyr
627818	515380	5504641	silicified volcanic and qtz vn	trace pyr
627819	515382	5504648	gabbro at contact with volcanics	trace pyr+cpy
627820	515472	5504502	qtz vein in dark silicified gabbro (40% plag)	massive blebbs (upto 10cm) of cpy+po+pyr
627821	515472	5504502	f.g. silicified gabbro (30%plag)	1% cubed and disseminated pyr
627822	515493	5504727	m.g. grey gabbro (80% plag)	1% disseminated pyr
627823	515486	5504478	75cm wide gossanous silicified gabbro	trace sulphide, strong oxidized straining
627824	515499	5504415	gossanous zone following qtz vn and shear zone	trace sulphides
627825	515359	5504336	same as 824 but magnetic, less developed shears	aphanitic sulphides (magnetic=po?)
627826	515745	5504604	m.g. gabbro with biotite, 2-5% blue qtz, numerous qtz vns	trace pyr
627939	515358	5502951	Altered gabbro, grn, coarse gr, blue qtz, biot., amph., chl.	po-cpy 2-3%, tr py

## APPENDIX 2

12<sup>th</sup>, 2003

Atikwa Minerals Limited,  
Suite 201,  
12 Richmond Street West,  
Toronto,  
Ontario M5H 1K1

Perry Vern English,  
1304850 Ontario Inc.,  
P.O. Box 494,  
Red Lake  
Ontario P0V 2M0

Dear Mr. English,

**Re : 4 Claims, Contact Bay Map Sheet,  
Kenora Mining Division, Ontario.**

In writing further to our recent discussions concerning our interest in an option agreement on your four mining claims located on the Contact Bay Map Sheet, Kenora Mining Division, Ontario, and hereinafter referred to as the "Property".

This letter will serve to outline the terms of an agreement between 1304850 Ontario Inc. and Atikwa Minerals Limited for the aforementioned Property.

Atikwa Minerals is prepared to option the Property on the following terms and conditions:

**TERMS:**

- 1) Parties to the Option will be 1304850 Ontario Inc. as the Optionor and Atikwa Minerals as the Optionee.
- 2) The Optionor warrants that they hold a 100% interest in the four mining claims duly staked and recorded in the Mining Recorders Office and the claims are held free and clear of all encumbrances. The Optionor agrees that Perry Vern English can act on behalf of the Optionor.
- 3) Upon signature of the Option Agreement, the Optionor will transfer the title of the Property to the Optionee to be held in trust for the currency of the Option.

*P.V.*

- 4) The Optionor warrants and represents to the Optionee that there are no outstanding work orders or actions required to be taken relating to environmental matters in respect of the Property or any operations thereon.
- 5) The Optionee will be responsible for maintaining the Property in good standing during the currency of the Option (including the payment of land taxes).
- 6) The Property is comprised of 4 mining claim:

<u>Claim Number</u>	<u>Number of Claim Units</u>
1234580	4
1234581	14
1234582	16
1234212	7
Totals 4	41

- 7) The Optionee can earn a 100% interest, subject to a 2.0% Net Smelter Return Royalty (NSR), payable to the Optionor, by making the following cash payments to the Optionor:
  - a. [REDACTED] on signing of the option agreement
  - b. [REDACTED] on or before April 15<sup>th</sup> 2002
  - c. [REDACTED] on or before April 15<sup>th</sup> 2003
  - d. [REDACTED] on or before April 15<sup>th</sup> 2004
  - e. [REDACTED] on or before April 15<sup>th</sup> 2005

[REDACTED] Total Payments over 4 years

Any Net Smelter Return Royalty to be paid pursuant to this agreement shall be calculated in accordance with Schedule "A" attached hereto.

- 8) The Optionee shall have the right to purchase 50% of the 2.0% NSR payable to the Optionor for the amount of [REDACTED]
- 9) The Optionee will have the first right of refusal on the sale or transfer of any portion of the NSR held by the Optionor.
- 10) Should this Option be terminated by the Optionee before they earn a 100% interest, the Property shall be returned to the Optionor in good standing for one year.
- 11) Should the Optionee fail to meet any of the obligations referred to in Clause 7, above, the Option shall terminate and the Optionee shall have earned no interest in

P.E.  
3

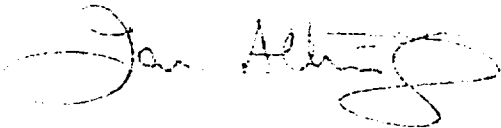
the Property.

- 12) The Optionee will provide the Optionor with copies of reports of work completed on the Property and copies of all data collected on the Property on an annual basis during the Option period. All such information shall be on a confidential basis and shall not be disclosed to a third party without the Optionee's written consent.
- 13) The Optionee may at any time sell, transfer or otherwise dispose of all or any portion of its interest in and to the Property and this agreement.
- 14) The Optionee will be responsible for all environmental liabilities incurred or created by its activities on the Property during the option period.

If you are in agreement with the terms outlined above please sign this letter agreement below and return two signed copies to me at the above address and keep one signed copy for your files. This letter will serve as the binding agreement between the two parties until replaced by a more formal agreement satisfactory to both parties. If you have any questions, please contact me at 936-321-6646.

Yours sincerely,

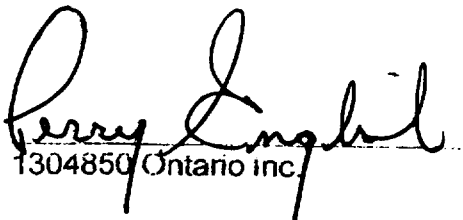
ATIKWA MINERALS LIMITED



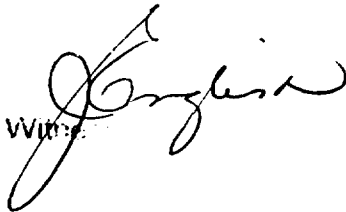
Ian Atkinson  
Director

Attachments: Schedule "A" to the Letter Agreement dated 12<sup>th</sup> April 2001

AGREED and ACCEPTED this 13 day of April 2001.



1304850 Ontario Inc.

Witness 



This is SCHEDULE "A" to the letter agreement  
dated April 12<sup>th</sup>, 2001 between:  
Atikwa Minerals Limited, ("Optionee") and  
1304850 Ontario Inc. ("Optionor")

NET SMELTER RETURN ROYALTY

1. The NSR which may be payable to a party (the "Payee") by a party (the "Payor") shall be calculated and paid to the Payee in accordance with the terms of this Schedule.
2. The NSR shall be calculated on a quarterly basis.
3. The following words shall have the following meanings:
  - (a) "Gross Revenue" shall mean the aggregate of the following amounts received in each monthly period:
    - (i) all revenue received by the Payor in such month from arm's length purchasers of mineral products
    - (ii) the fair market value of all mineral products sold by the Payor in such month to persons not dealing at arm's length with the Payor; and
    - (iii) any proceeds of insurance received in such month due to losses or damages in respect to mineral products
  - (b) "Permissible Deductions" shall mean the aggregate of the following charges (to extent not previously deducted or accrued in computing Gross Revenue) that are paid in each monthly period:
    - (i) sales charges levied by any sales agent in respect to the sale of mineral products;
    - (ii) transportation costs incurred in respect to the transportation of mineral products from the Property to the place of beneficiation, processing or treatment and, if applicable, thence to the place of delivery thereafter, including shipping, freight, handling and forwarding expenses, and export and import taxes;
    - (iii) all costs, expenses and charges of any nature whatsoever which are either paid or incurred by the Payor in connection with the refinement or beneficiation of mineral products after leaving the Property, including all weighing, sampling, assaying and representation costs, metal losses, any umpire charges and any

P.E.

penalties charged by the processor, refinery or smelter; and:

(iv) all insurance costs in respect of mineral products;

provided that where a cost or expense otherwise constituting a Permissible Deduction is incurred by the Payor in a transaction with a party with whom it is not dealing at arm's length (as that term is defined in the *Income Tax Act* (Canada)), such costs or expenses may be deducted, but only as to the lesser of the actual cost incurred by the Payor or the fair market value thereof, considering the time of such transaction and under all the circumstances thereof.

For purposes of clarity, custom-milling charges shall not be a "Permissible Deduction" pursuant to clause 3(b).

(c) "Net Smelter Returns" shall mean Gross Revenue less Permissible Deductions in respect to such month.

(d) "NSR" shall mean the applicable percentage of the Net Smelter Returns that is payable to the Payee.

4. The NSR shall be calculated and paid within 30 days after the end of each calendar quarter. Smelter settlement sheets, if any, and a statement setting forth calculations in sufficient detail to show how the payment was derived (the "Statement") shall be submitted with the payment.
5. In the event that final amounts required for calculation of the NSR are not available within the time period referred to in paragraph 4 of this Schedule, then provisional amounts shall be established, the NSR shall be paid on the basis of such provisional amounts and positive or negative adjustments shall be made to the payment in the succeeding month, as necessary.
6. All NSR payments shall be considered final and in full satisfaction of all obligations of the Payor with respect thereto, unless the Payee delivers to the Payor a written notice (the "Objection Notice") describing and setting forth a specific objection to the calculation thereof within 180 days after receipt by the Payee of the Statement. If the Payee objects to a particular Statement as herein provided, the Payee shall, for a period of 180 days after the Payor's receipt of such Objection Notice, have the right, upon reasonable notice and at a reasonable time, to have the Payor's accounts and records relating to the calculation of the NSR in question audited by the auditors of the Payee. If such audit determines that there has been a deficiency or an excess in the payment made to the Payee, such deficiency or excess will be resolved by adjusting the next monthly NSR payment due hereunder. The Payee shall pay all the costs and expenses of such audit unless a deficiency of 2-1/2% or more of the amount due is determined to exist. The Payor shall pay the costs and expenses of such audit if a deficiency of 2-1/2% or more of the amount due is

P.R.  
13

determined to exist. All books and records used and kept by the Payor to calculate the NSR due hereunder shall be kept in accordance with Canadian generally accepted accounting principles. Failure on the part of the Payee to make claim against the Payor for adjustment in such 180-day period by delivery of an Objection Notice shall conclusively establish the correctness and sufficiency of the Statement and NSR payment for such month.

P.L.  
200



August 27<sup>th</sup>, 2001

Atikwa Minerals Limited,  
Suite 201,  
121 Richmond Street West,  
Toronto,  
Ontario, M5H 2K1

Perry Vern English,  
1304850 Ontario Inc.,  
P.O. Box 494,  
Red Lake,  
Ontario P0V 2M0.

Dear Mr. English,

**Re : Additional Staking Contact Bay Area.**

I am writing further to our recent discussions concerning our interest in optioning certain properties in the Contact Bay Area. This letter is to confirm our understanding that you have been successful in acquiring the property formerly covered by mining claims 1220711, 1220712, 1220713, and 1220714.

By way of our letter agreement dated the 12<sup>th</sup> April 2001, Perry Vern English and Atikwa Minerals Limited agreed that if, and when this property became available for staking in June 2001, and if Perry Vern English was successful in staking the property, then Atikwa would option the property from Perry Vern English on the terms and conditions outlined in our letter agreement dated the 12<sup>th</sup> April 2001.

This letter will confirm that Atikwa Minerals will option the additional claims listed below on the following terms and conditions:

1. The property will become part of the agreement dated 12<sup>th</sup> April 2001 between Atikwa Minerals and 1304850 Ontario Inc. covering 4 claims on the Contact Bay Map Sheet, Kenora Mining Division, Ontario

*PK TA*

2. Atikwa Minerals will pay 1304850 Ontario Inc. an additional \$3500 to cover the cost of staking the additional property.
  
3. The terms of the agreement dated 12<sup>th</sup> April 2001 between Atikwa Minerals Limited and 1304850 Ontario Inc. will be amended as outlined below:
  - a. Clause 6 of the above mentioned agreement will be changed to include the new claims acquired in addition to those already listed in the agreement.

The property will now comprise of 10 mining claims listed below:

<u>Claim Number</u>	<u>Number of Claim Units</u>
1234580	4
1234581	14
1234582	16
1234212	6
1234234	1
1234235	12
1234236	5
1234237	6
1184984	2
1184986	6
Totals 10	72

This list includes the four claims in the agreement dated 12<sup>th</sup> April 2001, shown first in the list above, together with the six new claims to be included in the agreement.

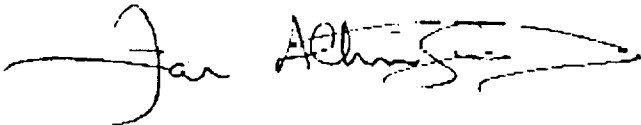
- b. The cash payment schedule outlined in clause 7 of the above mentioned agreement will be replaced by the following cash payment schedule:

- ██████ on or before April 15<sup>th</sup> 2002
- ██████ on or before April 15<sup>th</sup> 2003
- ██████ on or before April 15<sup>th</sup> 2004
- ██████ on or before April 15<sup>th</sup> 2005

If you are in agreement that this letter outlines our understanding with respect to the additional property acquired and the amendments to the agreement dated 12<sup>th</sup> April 2001 described above, please sign this letter below and return a signed copy to me at the above address. If you have any questions please contact me at 936-321-6646.

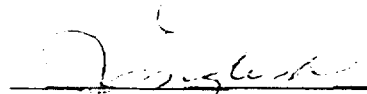
Yours sincerely,

**ATIKWA MINERALS LIMITED**



Ian Atkinson  
President & Director

Agreed and Accepted this 27 day of August 2001.

  
Perry Vern English  
Witness



Date: 2002-MAY-17

GEOSCIENCE ASSESSMENT OFFICE  
933 RAMSEY LAKE ROAD, 6th FLOOR  
SUDBURY, ONTARIO  
P3E 6B5

Tel: (888) 415-9845  
Fax: (877) 670-1555

ATIKWA MINERALS LIMITED  
201-121 RICHMOND STREET WEST  
TORONTO, ONTARIO  
M5H 2K1 CANADA

**Submission Number:** 2.23076  
**Transaction Number(s):** W0210.00373

Dear Sir or Madam

**Subject: Deemed Approval of Assessment Work**

We have approved your Assessment Work Submission with the above noted Transaction Number(s) as per 6(7) of the Assessment Work Regulation. Only eligible assessment work is deemed approved for assessment work credit. The attached Work Report Summary indicates the results of the approval.

NOTE: The report has not been reviewed for technical deficiencies and reported expenses were not evaluated based on the Industry Standard.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

Please note, only eligible work types may be deemed approved. Management costs are not an eligible work type under the Assessment Work Regulations. Accordingly, the cost associated with Management (\$300.00) has been removed from the submission total. This submission has been deemed approved for \$28,223.00.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at [steve.beneteau@ndm.gov.on.ca](mailto:steve.beneteau@ndm.gov.on.ca) or by phone at (705) 670-5855.

Yours Sincerely,



Ron Gashinski  
Senior Manager, Mining Lands Section

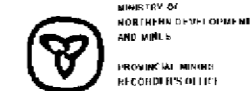
**Cc:** Resident Geologist

Eric Olinder Owens  
(Agent)

Atikwa Minerals Limited  
(Assessment Office)

Assessment File Library

Atikwa Minerals Limited  
(Claim Holder)



MINING LAND TENURE

MAP

Date / Time of Issue May 14 2002 18:23h Eastern

TOWNSHIP / AREA PLAN CONTACT BAY ARE G-2679

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division Kenora Land Titles/Registry Division KENORA Ministry of Natural Resources District DRYDEN

TOPOGRAPHIC

- Topographic symbols including contours, roads, rivers, and structures.

LAND TENURE

- Land tenure symbols including Mining Claims, Mining Licenses, and various types of Mining Leases.

LAND TENURE WITHDRAWALS

- Land tenure withdrawal symbols including Areas Withdrawn from Disposition and various types of Withdrawals.

IMPORTANT NOTICES

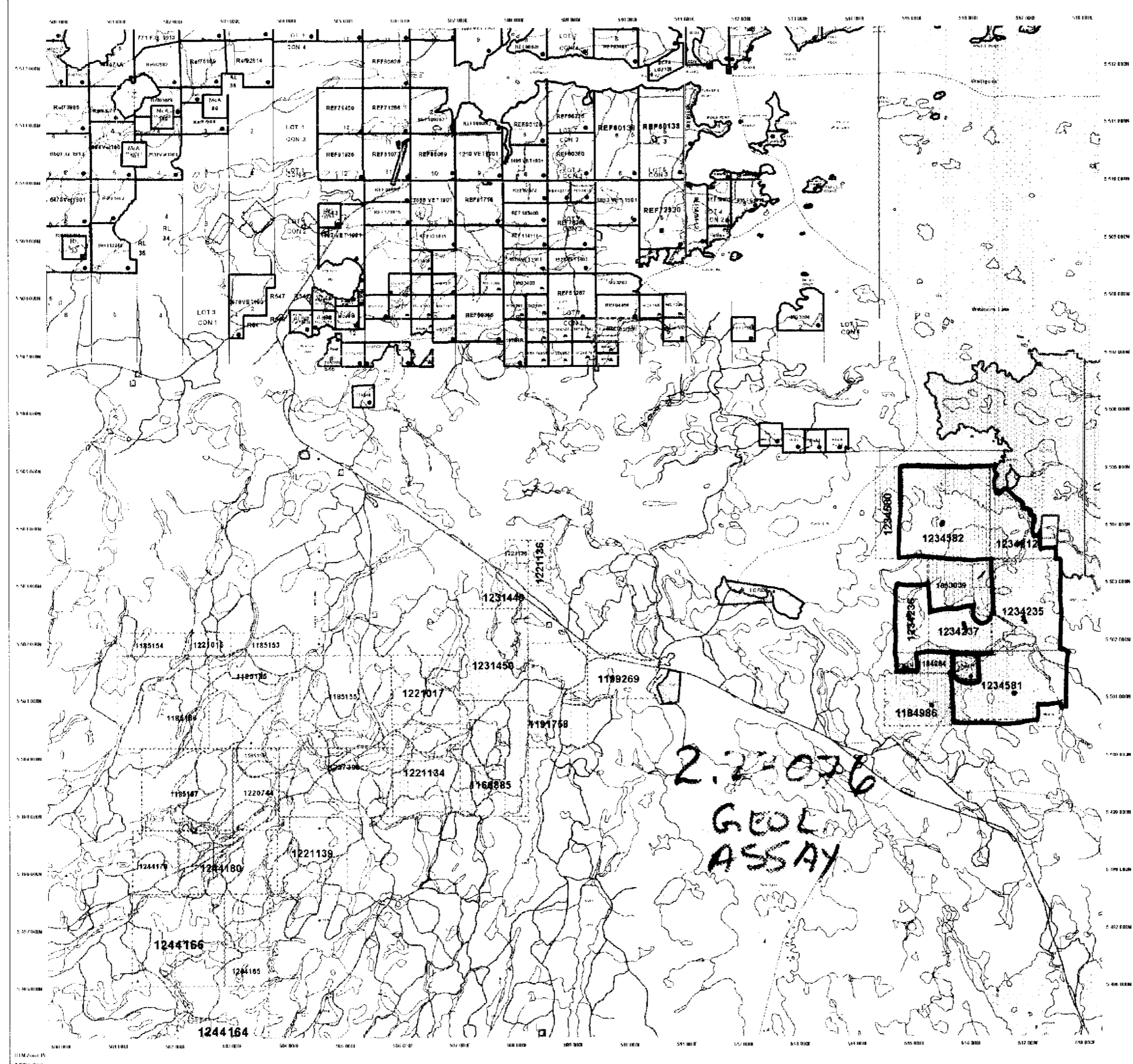
- Important notice symbols including Mining Claims and other land tenure features.

LAND TENURE WITHDRAWAL DESCRIPTIONS

Table with columns: MINING CLAIM, DATE, DATE, DESCRIPTION. Lists various mining claim withdrawal events with dates and descriptions.

IMPORTANT NOTICES

Areas under which special applications, applications, commitments and other special proceedings, mining and mineral development activities.



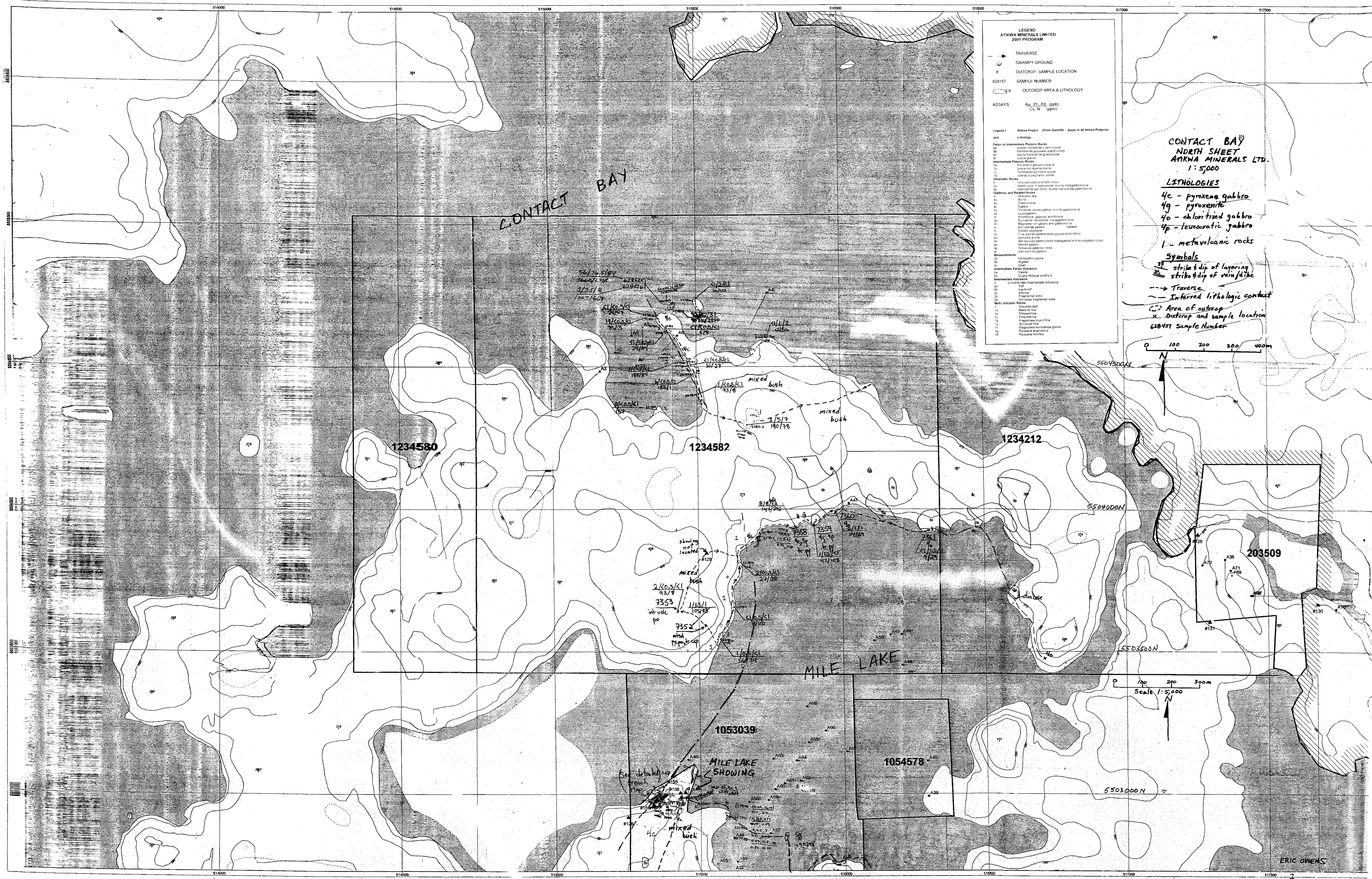
2-2-036  
GEOLOGICAL  
ASSAY

52P10M2003 2.23076 CONTACT BAY ARE 200

These symbols are provided for information only and should not be used as a basis for any legal or financial decision. The information is provided for information only and should not be used as a basis for any legal or financial decision.

General Information and Limitations This map was prepared using the best available information and is not intended to be used as a basis for any legal or financial decision. The information is provided for information only and should not be used as a basis for any legal or financial decision.

This map was prepared using the best available information and is not intended to be used as a basis for any legal or financial decision. The information is provided for information only and should not be used as a basis for any legal or financial decision.



**LEGEND**  
**ATIKWA MINERALS LIMITED**  
**2001 PROGRAM**

→ TRAVERSE  
 X OUTCROP, SAMPLE LOCATION  
 628157 SAMPLE NUMBER  
 5 OUTCROP AREA & LITHOLOGY

ASSAYS Au, Pt, Pd, (ppb)  
 Cu, Ni (ppm)

Legend 1 Atikwa Project (From Subtitle - Apply to all Atikwa Projects)

**Unit** Lithology

Felsic to Intermediate Plutonic Rocks  
 1a Quartz monzonite quartz diorite  
 1b Hornblende gabbro quartz diorite  
 1c Basalt and/or gabbro diorite  
 1d Gabbro diorite  
 1e Quartz monzonite  
 1f Hornblende gabbro  
 1g Hornblende gabbro quartz diorite  
 1h Quartz monzonite  
 1i Hornblende gabbro quartz diorite  
 1j Quartz monzonite  
 1k Hornblende gabbro quartz diorite  
 1l Hornblende gabbro quartz diorite  
 1m Hornblende gabbro quartz diorite  
 1n Hornblende gabbro quartz diorite  
 1o Hornblende gabbro quartz diorite  
 1p Hornblende gabbro quartz diorite  
 1q Hornblende gabbro quartz diorite  
 1r Hornblende gabbro quartz diorite  
 1s Hornblende gabbro quartz diorite  
 1t Hornblende gabbro quartz diorite  
 1u Hornblende gabbro quartz diorite  
 1v Hornblende gabbro quartz diorite  
 1w Hornblende gabbro quartz diorite  
 1x Hornblende gabbro quartz diorite  
 1y Hornblende gabbro quartz diorite  
 1z Hornblende gabbro quartz diorite

Intermediate Plutonic Rocks  
 2a Quartz monzonite  
 2b Hornblende gabbro  
 2c Quartz monzonite  
 2d Hornblende gabbro  
 2e Quartz monzonite  
 2f Hornblende gabbro  
 2g Quartz monzonite  
 2h Hornblende gabbro  
 2i Quartz monzonite  
 2j Hornblende gabbro  
 2k Quartz monzonite  
 2l Hornblende gabbro  
 2m Quartz monzonite  
 2n Hornblende gabbro  
 2o Quartz monzonite  
 2p Hornblende gabbro  
 2q Quartz monzonite  
 2r Hornblende gabbro  
 2s Quartz monzonite  
 2t Hornblende gabbro  
 2u Quartz monzonite  
 2v Hornblende gabbro  
 2w Quartz monzonite  
 2x Hornblende gabbro  
 2y Quartz monzonite  
 2z Hornblende gabbro

Ultramafic Rocks  
 3a Ultramafic gabbro  
 3b Ultramafic gabbro  
 3c Ultramafic gabbro  
 3d Ultramafic gabbro  
 3e Ultramafic gabbro  
 3f Ultramafic gabbro  
 3g Ultramafic gabbro  
 3h Ultramafic gabbro  
 3i Ultramafic gabbro  
 3j Ultramafic gabbro  
 3k Ultramafic gabbro  
 3l Ultramafic gabbro  
 3m Ultramafic gabbro  
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 3w Ultramafic gabbro  
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 3y Ultramafic gabbro  
 3z Ultramafic gabbro

Quartzite and Metasediments  
 4a Quartzite  
 4b Quartzite  
 4c Quartzite  
 4d Quartzite  
 4e Quartzite  
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 4g Quartzite  
 4h Quartzite  
 4i Quartzite  
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 4z Quartzite

Metasediments  
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 5x Metasediment  
 5y Metasediment  
 5z Metasediment

Intermediate Felsic Volcanics  
 6a Intermediate felsic volcanic  
 6b Intermediate felsic volcanic  
 6c Intermediate felsic volcanic  
 6d Intermediate felsic volcanic  
 6e Intermediate felsic volcanic  
 6f Intermediate felsic volcanic  
 6g Intermediate felsic volcanic  
 6h Intermediate felsic volcanic  
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 6y Intermediate felsic volcanic  
 6z Intermediate felsic volcanic

Intermediate Volcanics  
 7a Intermediate volcanic  
 7b Intermediate volcanic  
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 7d Intermediate volcanic  
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 7g Intermediate volcanic  
 7h Intermediate volcanic  
 7i Intermediate volcanic  
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 7v Intermediate volcanic  
 7w Intermediate volcanic  
 7x Intermediate volcanic  
 7y Intermediate volcanic  
 7z Intermediate volcanic

Mafic Volcanic Rocks  
 8a Mafic volcanic rock  
 8b Mafic volcanic rock  
 8c Mafic volcanic rock  
 8d Mafic volcanic rock  
 8e Mafic volcanic rock  
 8f Mafic volcanic rock  
 8g Mafic volcanic rock  
 8h Mafic volcanic rock  
 8i Mafic volcanic rock  
 8j Mafic volcanic rock  
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 8t Mafic volcanic rock  
 8u Mafic volcanic rock  
 8v Mafic volcanic rock  
 8w Mafic volcanic rock  
 8x Mafic volcanic rock  
 8y Mafic volcanic rock  
 8z Mafic volcanic rock

**CONTACT BAY**  
**NRTH SHEET**  
**ATIKWA MINERALS LTD.**  
**1:5000**

**LITHOLOGIES**

4c - pyroxene gabbro  
 4g - pyroxenite  
 4o - chloritized gabbro  
 4p - leucocratic gabbro

1 - metavolcanic rocks

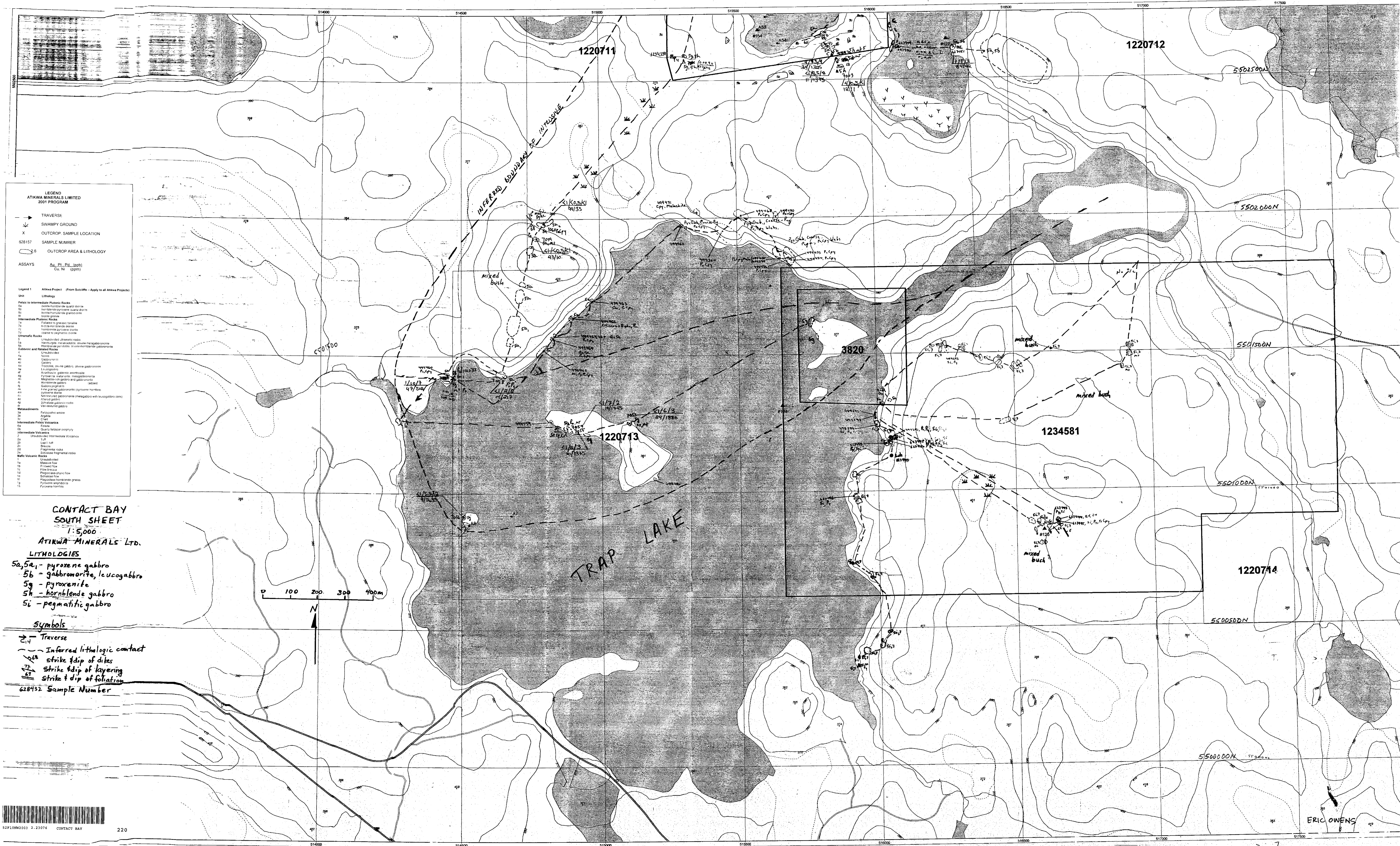
**Symbols**

38 strike & dip of layering  
 39 strike & dip of vein/dike

→ Traverse  
 - - - Inferred lithologic contact  
 5 Area of outcrop  
 X Outcrop and sample location  
 628157 Sample Number

0 100 200 300 400m

0 100 200 300m  
 Scale 1:5,000  
 N



**LEGEND**  
**ATIKWA MINERALS LIMITED**  
**2001 PROGRAM**

→ TRAVERSE  
 X OUTCROP SAMPLE LOCATION  
 628157 SAMPLE NUMBER  
 ○ OUTCROP AREA & LITHOLOGY

ASSAYS  
 Au, Pt, Pd (ppb)  
 Cu, Ni (ppm)

**Legend 1** Atikwa Project (From Sub-life - Apply to all Atikwa Projects)

**Unit** Lithology

**Felsic to Intermediate Plutonic Rocks**  
 F1 Intrusive hornblende quartz diorite  
 F2 Intrusive hornblende quartz diorite  
 F3 Intrusive hornblende quartz diorite  
 F4 Intrusive hornblende quartz diorite  
 F5 Intrusive hornblende quartz diorite  
 F6 Intrusive hornblende quartz diorite  
 F7 Intrusive hornblende quartz diorite  
 F8 Intrusive hornblende quartz diorite  
 F9 Intrusive hornblende quartz diorite  
 F10 Intrusive hornblende quartz diorite  
 F11 Intrusive hornblende quartz diorite  
 F12 Intrusive hornblende quartz diorite  
 F13 Intrusive hornblende quartz diorite  
 F14 Intrusive hornblende quartz diorite  
 F15 Intrusive hornblende quartz diorite  
 F16 Intrusive hornblende quartz diorite  
 F17 Intrusive hornblende quartz diorite  
 F18 Intrusive hornblende quartz diorite  
 F19 Intrusive hornblende quartz diorite  
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 F100 Intrusive hornblende quartz diorite

**CONTACT BAY**  
**SOUTH SHEET**  
**1:5,000**  
**ATIKWA MINERALS LTD.**

**LITHOLOGIES**  
 S1 - pyroxene gabbro  
 S2 - gabbromonite, leucogabbro  
 S3 - pyroxenite  
 S4 - hornblende gabbro  
 S5 - pegmatitic gabbro

**Symbols**  
 → Traverse  
 - - - Inferred lithologic contact  
 628157 strike & dip of dikes  
 628158 strike & dip of layering  
 628159 strike & dip of foliation  
 628157 Sample Number