

**GEOLOGICAL REPORT  
CANADIAN ARROW MINES LTD.**

***“Emmons Lake Property”***

**Dryden, Ontario**

**N.T.S. 052F/10SE**

**Sudbury, Ontario  
January 15, 2009**

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## **SUMMARY**

In 2008, Canadian Arrow Mines Ltd explored for nickel copper sulphides and platinum group elements on the Emmons Lake Property. Canadian Arrow Mines optioned the property from Edward Barkauskas (25%) and Sherridan Johnson (75%) in 2007. The Emmons Lake Property is located 40 km south of the City of Dryden and easily accessible by 502 Highway.

In 2008, an exploration program consisting of airborne VTEM-MAG, geological mapping, line cutting, ground geophysics and sampling was carried out on Canadian Arrow Mines Ltd. Emmons Lake Property in the Turtlepond Lake area of northwestern Ontario. Claims K-1247471, K-4219028, K-4219029, K-4219031, K-4219032, are part of a larger group of claims controlled by Canadian Arrow Mines Ltd in the Turtlepond Lake Area, south of Dryden. The work was designed as a preliminary evaluation of the property prior to a diamond drilling program.

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## **INTRODUCTION**

During the months of January, June and July of 2008, Canadian Arrow Mines Ltd. completed an integrated exploration program on the claim K-1247471, K-4219028, K-4219029, K-4219031, and K-4219032, located on the northeast lobe of the felsic to intermediate Atikwa-Lawrence Plutonic-Volcanic Complex. This report has been prepared primarily for the purpose of fulfilling assessment requirements on the property.

Background work involved in the preparation of the report included a review and compilation of exploration work activities by previous operators and a review and compilation of work completed by Canadian Arrow Mines Ltd during the 2008 exploration programs.

Work on the Emmons lake Property was carried out by Canadian Arrow Mines exploration personnel, Jessica Bjorkman (Prospector) Tamaras Taras (Student Geologist), Fred Paulus (Student Geologist), Jason Patterson (Student Geologist), Peter McChesney (Senior Geologist), Jean Bernard (Senior Geologist) and Todd Keast (P.Ge. Manager). The program was directed at evaluating the mafic-ultramafic rocks favourable for hosting nickel-copper-PGM sulphide mineralization.

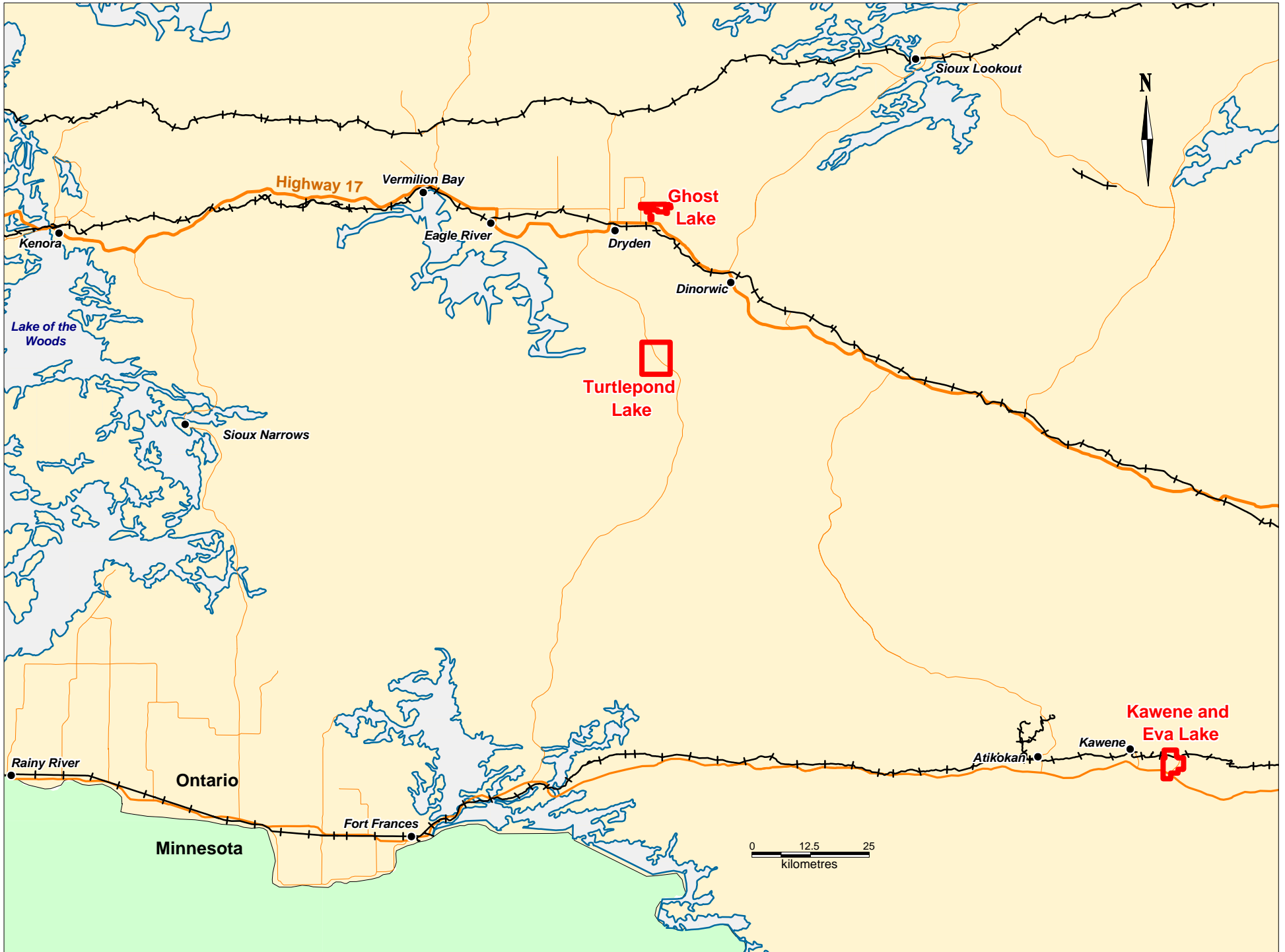
## **LOCATION, ACCESS AND OWNERSHIP:**

The Emmons Lake Property is located approximately 40 kilometres south of Dryden Ontario. The center of the property is latitude 49°35'N, longitude 92°45'W and UTM Nad 83 (Zone 15) coordinates 520068E, 5488463N. The property is situated on claim map TurtlePond Lake (G-2595), NTS: 052F/10SE.

The property is accessed by travelling from Dryden south along Highway 502 for approximately 40 km. The Domtar logging road (Snow Flake) runs east from Highway 502. Approximately 400metres east along the Snow Flake road is a south trending ATV trail which provides excellent access to north portion of the property, the west side of Emmons Lake and the main nickel showing.

The Emmons Lake Project consists of 1 claim covering four units, situated within Turtlepond Lake Township (Map G2595) of the Kenora Mining Division (Figure 1). Edward Barkauskas (25%) and Sherridan Johnson (75%) are the registered holders (100%) of the claim K-1247471. Canadian Arrow Mines has an option agreement with the claim holders to earn a 100% interest in this property.

The Emmons Lake claim K-1247471, is surrounded by 4 unpatented claims consisting of 15 claim Units each one, which together encompass an area of 960 hectares (**Figure 1**). Canadian Arrow Mines Ltd has a 100% interest in these 4 claims. A detailed description of the property is included in **Table 1**.



The Emmons Lake claims are characterized by moderately abundant bedrock exposures over parts of the area and extensive glacial deposits. Outcrop exposure is better in the central and northwestern portions of the claim group. Associated with the outcrop areas is a thin cover of glaciolacustrine sand and boulder till. Several small lakes are located in the western and central parts of the claims group. Minor swamps are located around the Emmons Lake Showing, particularly on the west and the north parts of the Emmons Lake grid (**Figures 3 and 6**).

**Table 1 - List of Claims**

<b>Claim Number</b>	<b>Recorded</b>	<b>Due Date</b>	<b>Work Required</b>	<b>Total Reserves</b>	<b>Claim Units</b>	<b>Surface (Hectares)</b>
K-1247471	2006-02-03	2009-02-03	\$1 600	\$2 995	4	64
K-4219028	2007-12-19	2009-12-19	\$6 000	\$5 381	15	240
K-4219029	2007-12-19	2009-12-19	\$5 200	\$4 663	15	240
K-4219031	2007-12-19	2009-12-19	\$6 000	\$5 381	15	240
K-4219032	2007-12-19	2009-12-19	\$6 000	\$5 381	15	240

## **GEOLOGY**

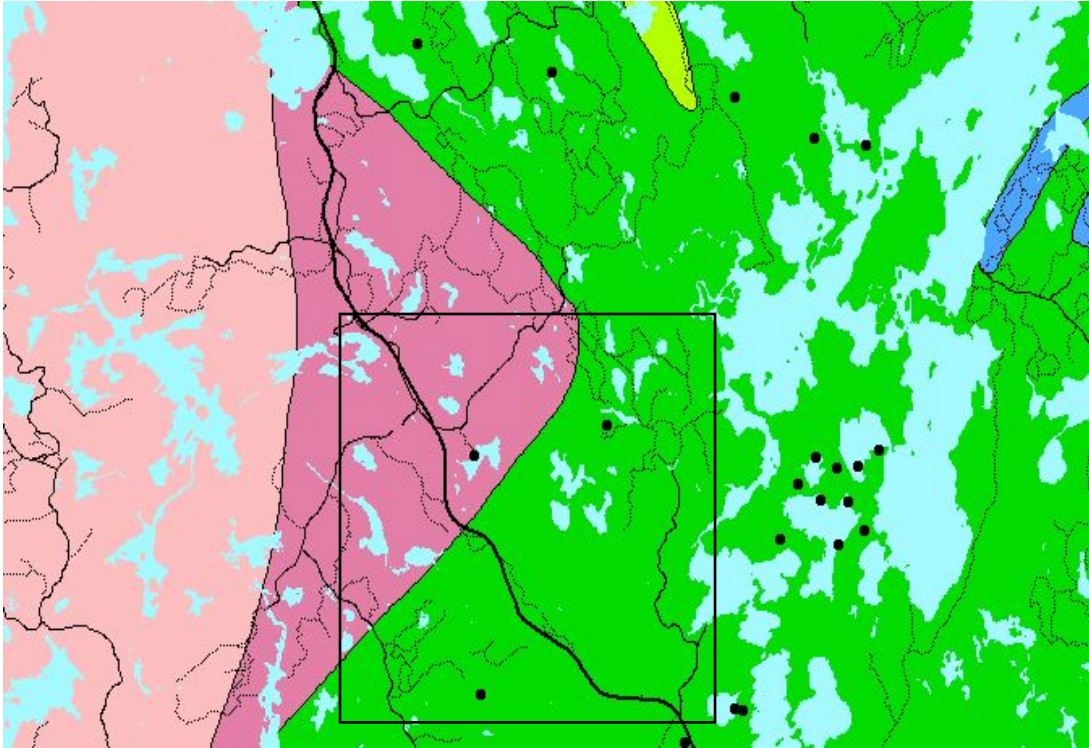
The Emmons Lake Property is underlain by Archean Aged rocks of the Superior Province of the Canada Shield. The Emmons Lake property is situated along the western margin of the Dinorwic Lake - Upper Manitou Lake greenstone belt (figure 2).

Satterly (Vol. L, Part 2, OEM Annual Report, 1941, Map No. 50e, The Dryden-Wabigoon Area) indicates that the present property is underlain by diorites, quartz-hornblende diorites, and some porphyritic biotite granodiorites that comprise the extreme eastern border zones of the very large Atikwa Batholith. Satterly's contact between the felsic to intermediate batholithic rocks, and a very thick pile of north-south striking, slightly metamorphosed, intermediate to mafic volcanic rocks occurs approximately 100m north of Emmons Lake. On Satterly's map gabbroic rocks occur in minor quantities immediately south of Emmons Lake, however later exploration work indicates that most of the rocks near Emmons Lake are mafic volcanic medium-grained gabbro, pyroxenite, peridotite and locally aplitic dikes and sills.

The majority of the intrusive rocks which underly the property can be classified as border phases of the large Atikwa Batholith, which is centered some 30 kilometers to the west. The most recent mapping which covers the Emmons Lake area goes back to 1940 (Satterly, 1940). Canadian Arrow Mines Ltd geologists identified the following rock types as underlying the property:

### **1) Aplitic dikes and sills:**

Porphyry dykes and sills are found, varying from a few centimeters to 15 or 30 meters in width. The siliceous porphyry is definitely an intrusive rock. The best area to observe the aplitic dike is at the proximity of the nickel-copper showing and north east of the grid. The felsic body trends northwest over 150 meters and parallels the mineralized zone. According to the old diamond drill holes, several diorite porphyry and aplitic sills and dikes were intersected on the east portion of the grid and intruded the mafic to the ultramafic rocks.



Historical Mineral Showings, 1.Glatz, 2,Emmons Lake, 3. Prigg

## **2) Mafic Volcanics:**

The volcanic rocks occupy the north-eastern part of the claim K-1247471 and the contact with the mafic intrusive rocks to the north and the south and strikes approximately east-west (figure 6). The contact appears to be faulted to the west by about 100 meters along the ridge. This fault is based on the relative shearing structural feature. A typical mafic volcanic is medium to dark green in hand specimen, is moderately. The rocks are fine-grained and non-magnetic. The volcanic rocks are locally silicified and appear to be intermediate in composition. Foliations, where present, are at N80°.

## **3) Gabbro:**

This rock is generally medium to coarse grained, although finer-grained phases are locally developed throughout most of the property. It is medium to dark green in hand specimen. Contacts between the fine and coarse grained phases appear to be highly irregular and sometimes are difficult to map. This rock type was originally called leucogabbro to a melanogabbro in the field, because of its high mafic content. However, on close inspection, essential blue quartz eyes was observed in the rock, thus the term leucogabbro has been used. The typical gabbro contains 5-7% fine to medium grained biotite. The gabbro is massive to weakly foliated (finer-grained phases). Magnetite is locally abundant in the gabbro. This unit is in contact on east side of the mineralized zone.

## **4) Pyroxenite-peridotite:**

Pyroxenite underlies several small areas on the property, especially in the area of the nickel-copper Showing. The two most prominent pyroxenite bodies are located in the western and southern parts of the grid in the vicinity of claim K1247471 and along the Snow Flake Road north of the Emmons Lake Showing. The pyroxenite is commonly very dark green with occasional brown rust staining. It is coarse grained, massive and equigranular. Magnetite is often associated with this rock. All the ultramafic intrusive rocks have been metamorphosed, resulting in the partial replacement of clinopyroxene to talc and magnetite. The pyroxenite is interpreted to be the host rock of the mineralized zone and all the exposures are located on the west or inside of the ore zone.

## **PREVIOUS WORK**

In 1960, geological surveys, geophysical surveys and 10 pack sack diamond drill holes (N1 to N10) totalling 112.5m were completed by Newcomex Ltd on the Lantz Option. Geological mapping at that time showed diorite (host rock) intruded by diorite porphyry and later northwest trending granite porphyry dikes. Sulphide mineralization was encountered as finely disseminated sections over core lengths up to 25 feet, with some heavier concentrations over a few inches. The mineralization occurred in the medium grained diorite and to a lesser extent in the coarse diorite and quartz diorite. Geophysical surveys including electromagnetic, magnetometer and induced polarization surveys were carried out around the occurrence (**Table 2**).

In 1962, McIntyre-Porcupine Mines Limited optioned the Lantz Property on Emmons Lake. Four drill holes (237-1 to 237-4) totalizing 307m intersected andesite, quartz-hornblende epidiorite, epidiorite, which were intruded by aplitic dykes and sills. A geological cross section of the drilling was included. Copper-nickel mineralization was located within the epidiorite zones (**table 2**). Assay data was not recorded for all the McIntyre diamond drill holes.



In 1970, A. Lantz (prospector) and H.L. King (Ontario Department of Mines) visited this site. King stated: “A dark grey, gabbroic rock with unaltered pyroxene containing inclusions of light grey diorite and fine grained andesite, is the host rock for the mineralization. A breccia texture characterized by rounder fragments (or inclusions) occurs within the mineralized zone. Several quartz veins and narrow granitic dykes (several inches to 2’ wide) cut the mafic rocks.” Patches of disseminated sulphides consisting of pyrrhotite, chalcopyrite and pyrite have been exposed in 6 trenches, which occur over an area of about 100m by 40m. Mineralization is generally confined to the pyroxenite.

In 1971, A. Lantz drilled two boreholes (98 m) through the mineralized occurrence. Holes L-1 and L-2, intersected diorite and granitic dike with 7.6 m of pyrrhotite and chalcopyrite in both holes. Assay data was not recorded (**Table 2**). However, the two holes appear on the 1962 McIntyre Diamond Drill Location Map.

In 1982, the Manitou-Stormy Lakes Area Airborne Electromagnetic and Magnetic Survey (Ontario Geological Survey, 1982) covered the west end of the property area. Two weak EM anomalies were detected. One EM anomaly was located 50-75 meters west of the showing and probably represents the showing. Location accuracy is within a 100 m (to 200 m) radius when investigating these anomalies on the ground due to the poor navigation equipment at the time of the survey. A second EM anomaly was located 125-150 meters northeast of the showing and has not been explained. However, according to Newcomex mapping, it is represented by the same diorite unit, which hosts the main showing, but limited outcrop was found. The magnetic survey was discontinued 300 meters west of the showing.

In 1998, P. Hinz visited this site in his preliminary survey of the Atikwa Batholith for PGE potential (Hinz, 1998). Anomalous copper-nickel and elevated platinum-palladium was detected in the main trench at the Emmons Occurrence.

**Table 2 – Previous Work**

Hole No.	Dip	Ni %	Cu %	From (ft)	To (ft)	Footage (ft)	Footage (m)	Comments
N-1	-90	1.34	1.02	0	17,2	17.2	5.24	
N-1	-90	0.85	0.80	26,3	37,4	11.1	3.4	
N-2	-90	0.26	0.44	2,6	20,2	17.6	5.2	
N-3	-90	NA	NA	3	28	25	7.6	Heaviest Disseminations 20%
N-4	-90	-	-	-	-	-	-	Aplitic Dike
N-5	-90	0.17	0.38	6,6	16,6	10.0	3.04	
N-5	-90	0.40	0.37	24,1	30,7	5.6	1.7	
N-6	-90	0.26	0.45	24,7	31,7	6.4	1.95	
N-7	-90	NA	NA	14,1	29,6	15.5	4.7	Disseminated Sulphide
N-8	-90	-	-	-	-	-	-	Aplitic sill.
N-9	-45	0.28	0.63	26	46	20.0	6.09	Aplitic sill.
N-10	-90	0.54	0.65	1,3	18,4	17.1	5.21	
237-1	-45	NA	NA	136	255,6	119,6	36,4	Mineralized Epidiorite
237-2	-45	NA	NA	36	105	69	21	Mineralized Epidiorite
237-3	-45	NA	NA	131	141	10	3,04	Disseminations of Po-Cpy-Py
237-4	-45	NA	NA	113	141	28	8.6	Mineralized Epidiorite
L-1	-45	NA	NA	0	25	25	7.6	Scattered Po-Cpy
L-2	-30	NA	NA	64	89	25	7.6	Heavily mineralized

\*NA: Assay data not reported

## CANADIAN ARROW 2008 EXPLORATION PROGRAM

During the winter and the summer of 2008, Canadian Arrow Mines Ltd conducted reconnaissance prospecting, mapping and sampling on the old work area. In January 2008, 21 grab samples were collected in and around the vicinity of the Emmons Lake Showing and 12 more grab samples were taken in the summer of 2008. In the summer of 2008, a grid was established to cover the showings, detailed geological mapping, prospecting and ground geophysics surveys were carried out on the Emmons Lake Showing (**Map 1**)

A north-south baseline was put in using the GPS-control along the approximate centre of the claim K-1247471. East-west grid lines were established at 25 meters intervals from 10+00N to 12+00N and one line at 100 meters interval for L13+00N. These lines were picketed every 25 meters to allow for detailed geological mapping and ground geophysical surveys. All lines were cut to the eastern boundaries of the Emmons Lake lakeshore. A total of 1.525 kilometers of lines were cut on the Emmons Lake Property (**Map 1**).

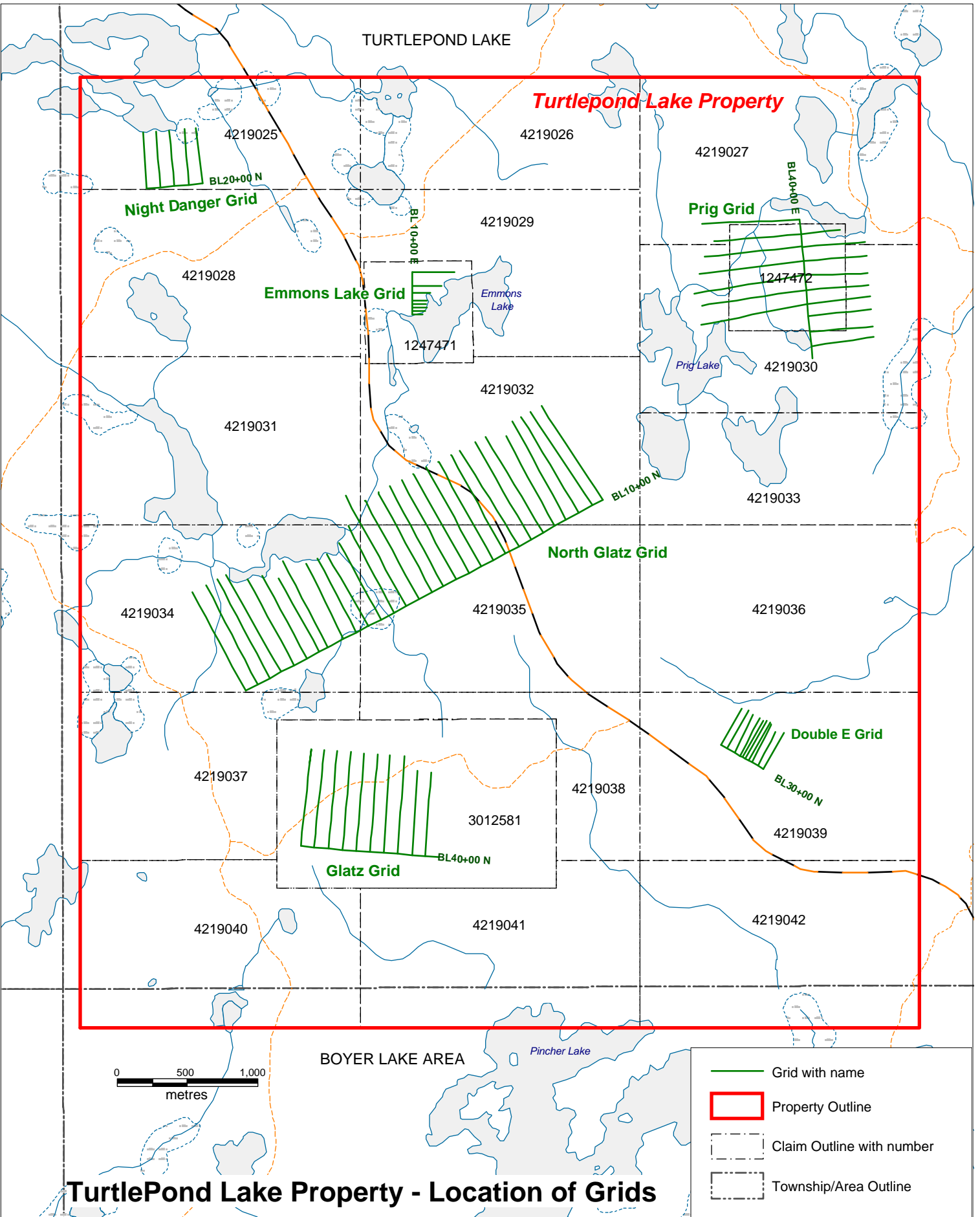
In August 2008, R.J Meikle & Associates was contracted by Canadian Arrow to conduct ground magnetic, IP and Mise a la Masse surveys over the Emmons Lake Occurrence. The surveys were carried out to assist in the exploration for Ni-Cu-PGM sulphide deposits associated with mafic to ultramafic bodies. Results of the geophysics are included in a separate report.

A summary of field work completed during the 2008 programs are show in **Table 3**. Grid location, geology and old drill holes location, old trenches, pit, and grab samples are show on **Map 1**. A detailed geological map on the Emmons Lake Occurrence is shown as an insert on **Map 1** at a scale of 1:500.

**Table 3 - Summary field work**

<b>Grid Name</b>	<b>Gridding (km)</b>	<b>Mise-a la-Masse (m)</b>	<b>IP (m)</b>	<b>Mag (km)</b>	<b>Grabs</b>
Emmons Lake	1.525	700	500	1,525	33

The sulphide-bearing gabbro-pyroxenite samples 177209, 177210, 177214, 177215 and 177216 were collected in the four-meter wide, mineralized zone within the main trench. The main showing is approximately 25m by 10m wide. The width of this zone is partially obscured at surface due to intense blasting and oxidation of the mineralization. Newcomex (1960) encountered drill intercepts of 5-7m of mineralization. The mineralized zone is typically 5-20% chalcopyrite, pyrrhotite and sometimes pyrite. The nickel values from the grab samples ranges between 0.34% to 1.57% Ni and between 0.3% to 1.22% Cu (**Tables 4 and 5**).



**TurtlePond Lake Property - Location of Grids**

A second smaller historical showing is located on the lakeshore 30m east from the main showing. The second showing is approximately 10m by 5m in size. Three grab samples (177207, 177208 and 177213) collected returned values between 0.7% and 0.9 % Ni and 0.8% Cu (Tables 4 and 5).

Within 50m south of the main showing, two other mineralized outcrops yielded up to 7% copper. From the 33 grab samples collected on Emmons Lake Showing, 10 samples contained elevated (combined Au-Pt-Pd) values between 0.141 to 1.24ppm PGM (Table 6)

**Table 4 Nickel values >0.2%**

Lab Sample	Rock Type	Sulphides	Ni	Cu	Co	S
177210	melagabbro	5-10% cpy, p (poss pent)	1.5731	0.4345	0.0374	6.46
177209	melagabbro	5-10% cpy, po, py	1.1952	1.2279	0.0215	0
177211	gabbro	5% cpy, py	0.9936	0.9632	0.028	5.45
177214	gabbro	5% cpy, py	0.9839	1.0787	0.0246	0
177208	melagabbro	trace sulfide	0.918	0.0638	0.004	5.75
177207	melagabbro	5% fine chalcopyrite, po	0.709	0.8776	0.0179	0
177216	melagabbro	5% cpy+py	0.5091	0.8197	0.0102	0
177215	gabbro	1% cpy, py	0.3406	0.7477	0.0084	9.61
397718	Gabbro-pyrox	1-2% PO	0.225	0.209	0.014	1.68

**Table 5 Copper values >0,2%**

Lab Sample	Rock Type	Sulphides	Cu	Ni	Co	S
177217	gabbro	Local massive cpy, py	7.0978	0.0438	0.0033	2.5
177209	melagabbro	5-10% cpy, po, py	1.2279	1.1952	0.0215	0
177214	gabbro	5% cpy, py	1.0787	0.9839	0.0246	0
177211	gabbro	5% cpy, py	0.9632	0.9936	0.028	5.45
177207	melagabbro	5% fine chalcopyrite, po	0.8776	0.709	0.0179	0
177216	melagabbro	5% cpy+py	0.8197	0.5091	0.0102	0
177215	gabbro	1% cpy, py	0.7477	0.3406	0.0084	9.61
177210	melagabbro	5-10% cpy, p (poss pent)	0.4345	1.5731	0.0374	6.46
177218	gabbro	minor pyrite	0.2561	0.0647	0.0044	6.83
397718	Gabbro-pyrox	1-2% PO	0.209	0.225	0.014	1.68

**Table 6 PGM\* values>0,1ppm**

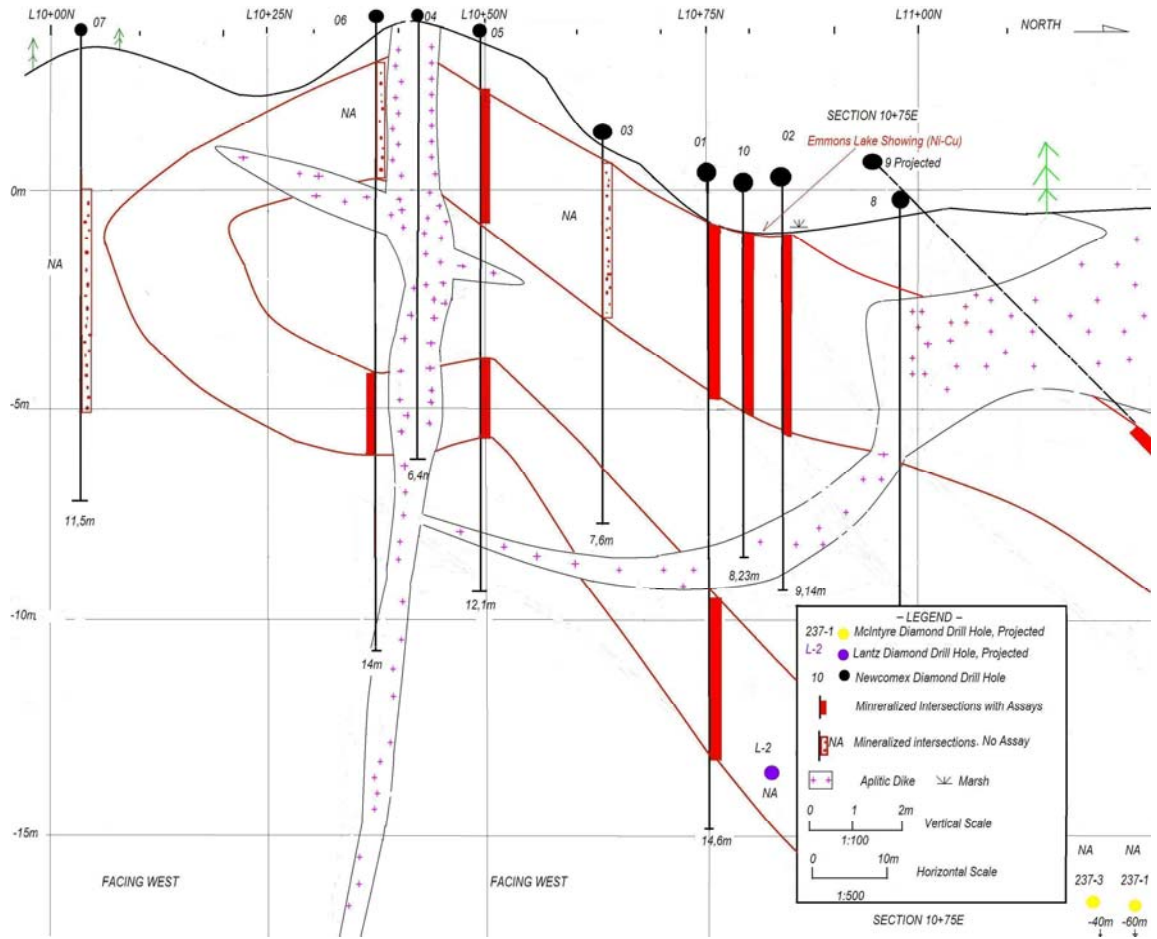
<b>Lab Sample</b>	<b>RockType</b>	<b>Sulphides</b>	<b>Pt</b>	<b>Pd</b>	<b>Au</b>	<b>Total PGM*</b>
177217	gabbro	local massive cpy, py	0.531	0.201	0.542	1,274
177214	gabbro	5% cpy, py	0.268	0.175	0.17	0,613
177218	gabbro	minor pyrite	0.249	0.038	0.061	0,348
177216	melagabbro	5% cpy+py	0.219	0.085	0.222	0,526
177207	melagabbro	5% fine chalcopyrite, po	0.177	0.108	0.299	0,584
177209	melagabbro	5-10% cpy, po, py	0.146	0.088	0.171	0,405
177215	gabbro	1% cpy, py	0.14	0.053	0.132	0,325
177211	gabbro	5% cpy, py	0.126	0.096	0.228	0,450
177208	melagabbro	trace sulfide	0.093	0.054	0.122	0,269
177210	melagabbro	5-10% cpy, p (poss pent)	0.046	0.107	0.028	0,181

\*PGM: Combined platinum, palladium and gold values

## **CONCLUSION AND RECOMMENDATIONS**

The geophysical and geology surveys indicate a northwest orientation to the Emmons lake mineralization. The gabbro-pyroxenite units are preferred host rocks for nickel copper mineralization, however due to remobilization, other host rocks must be considered. The Emmons lake occurrence has significant nickel copper platinum palladium assay results. The geology, geophysical surveys and historical diamond drill holes indicate a well-defined northern plunge to the mineralization, which is defined along a 250-metre trend.

It is recommended that additional exploration programs be conducted at Emmons Lake. Line cutting, magnetometer, and IP surveys should be extended on the north end of the existing grid to better define the north plunge to the mineralization. Enough work has been completed on the showing to date to proceed with a diamond drill program. Shallow tightly spaced drill holes are recommended to delineate the geometry and extent of the mineralized zone. Aplite dykes cross cut the mineralized zone, (Figure 4), and should be carefully documented during the drill program.



**Figure 3 Cross Section Emmons Property**

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**APPENDIX I**

**GRAB SAMPLES ASSAY RESULTS**



LAB Sample	UTM Nad 83 Zone 15		Rock	Sulphides	Ni	Cu	Co	S
No	Easting	Northing	Type					
397711	522035.0	5490430.0	V3	5-10% Py	0.025	0.028	0.014	12.4
397712	522036.0	5490428.0	V3	5-10% Py	0.019	0.016	0.004	1.83
397713	522044.0	5490419.0	V3	1-3% Py	0.021	0.011	0.005	4.23
397714	522072.0	5490466.0	V3	trace - 1% py	<0.005	0.01	0.003	0.29
397715	522061.0	5490452.0	V3	Rusty	0.012	0.01	0.003	4.49
397716	522000.0	5490379.0	V3	trace - 1% po	0.019	0.063	0.005	0.2
397717	521689.0	5489907.0	V3	3-5% Py	0.013	0.013	0.004	2.25
397718	520996.0	5489454.0	I3A-14B	1-2% PO	0.225	0.209	0.014	1.68
397719	521180.0	5489560.0	V3	3-5% Py	0.018	0.008	0.003	5.62
397720	521045.0	5489530.0			0.067	0.053	0.007	0.31
177201	520804	5488243	I3A	fine pyrite	0.0097	0.0046	0.0039	0
177202	520838	5488050	I3A	trace pyrite	0.0171	0.0078	0.0046	0
177203	520825	5488010	I3A	minor py on fracture	0.0068	0.0078	0.0033	0
177204	520814	5487968	I3A	1% py on fracture, locally cubic py	0.0059	0.00107	0.0042	0
177205	520803	5487959	I3A	minor py	0.0081	0.0095	0.0046	0
177206	520696	5488013	V3	tr-minor pyrite	0.0067	0.0059	0.0034	0
177207	520697	5487982	I3A	5% fine chalcopyrite, po	0.709	0.8776	0.0179	0
177208	520695	5487980	I3A	trace sulfide	0.918	0.0638	0.004	5.75
177209	520676	5487988	I3A	5-10% cpy, po, py	1.1952	1.2279	0.0215	0
177210	520671	5487982	I3A	5-10% cpy, p (poss pent)	1.5731	0.4345	0.0374	6.46
177211	520684	5487959	I3A	5% cpy, py	0.9936	0.9632	0.028	5.45
177212	520675	5488072	pink felsic		0.056	0.0389	0.0018	5.7
177213	520701	5487972	I3A	trace pyrite	0.0161	0.0118	0.0034	0
177214	520673	5487983	I3A	5% cpy, py	0.9839	1.0787	0.0246	0
177215	520674	5487988	I3A	1% cpy, py	0.3406	0.7477	0.0084	9.61
177216	520675	5487986	I3A	5% cpy+py	0.5091	0.8197	0.0102	0
177217	520700	5487940	I3A	local massive cpy, py	0.0438	7.0978	0.0033	2.5
177218	520700	5487940	I3A	minor pyrite	0.0647	0.2561	0.0044	6.83
177219	520828	5487710	I3A		0.0074	0.016	0.0031	0
177220	520926	5487884	V3		0.0071	0.0154	0.0032	0
177221	520989	5487921	I3A		0.0124	0.033	0.0033	0
397655	520552	5488102	I3A		0.016	0.015	0.004	0.09

LAB Sample No	UTM Nad 83 Zone 15		Rock	Sulphides	Pt	Pd	Au	S
	Easting	Northing	Type					
397711	522035.0	5490430.0	V3	5-10% Py	<0.005	0.002	0.016	12.4
397712	522036.0	5490428.0	V3	5-10% Py	<0.005	0.002	0.001	1.83
397713	522044.0	5490419.0	V3	1-3% Py	<0.005	0.001	0.002	4.23
397714	522072.0	5490466.0	V3	trace - 1% py	<0.005	<0.001	<0.001	0.29
397715	522061.0	5490452.0	V3	Rusty	<0.005	<0.001	<0.001	4.49
397716	522000.0	5490379.0	V3	trace - 1% po	<0.005	0.001	0.007	0.2
397717	521689.0	5489907.0	V3	3-5% Py	<0.005	0.001	0.001	2.25
397718	520996.0	5489454.0	I3A-I4B	1-2% PO	0.01	0.008	0.035	1.68
397719	521180.0	5489560.0	V3	3-5% Py	<0.005	<0.001	0.001	5.62
397720	521045.0	5489530.0			<0.005	0.002	0.005	0.31
177201	520804	5488243	I3A	trace-minor fine pyrite	0	0	0	0
177202	520838	5488050	I3A	trace pyrite	0	0	0	0
177203	520825	5488010	I3A	minor py on fracture	0	0	0	0
177204	520814	5487968	I3A	1% py on fracture, locally cubey py	0	0	0	0
177205	520803	5487959	I3A	minor py	0	0	0	0
177206	520696	5488013	V3	tr-minor pyrite	15	0	0	0
177207	520697	5487982	I3A	5% fine chalcopyrite, po	0.177	0.108	0.299	0
177208	520695	5487980	I3A	trace sulfide	0.093	0.054	0.122	5.75
177209	520676	5487988	I3A	5-10% cpy, po, py	0.146	0.088	0.171	0
177210	520671	5487982	I3A	5-10% cpy, p (poss pent)	0.046	0.107	0.028	6.46
177211	520684	5487959	I3A	5% cpy, py	0.126	0.096	0.228	5.45
177212	520675	5488072	pink felsic		.	0	0	5.7
177213	520701	5487972	I3A	trace pyrite	0	0	0	0
177214	520673	5487983	I3A	5% cpy, py	0.268	0.175	0.17	0
177215	520674	5487988	I3A	1% cpy, py	0.14	0.053	0.132	9.61
177216	520675	5487986	I3A	5% cpy+py	0.219	0.085	0.222	0
177217	520700	5487940	I3A	local massive cpy, py	0.531	0.201	0.542	2.5
177218	520700	5487940	I3A	minor pyrite	0.249	0.038	0.061	6.83
177219	520828	5487710	I3A		0	0	0	0
177220	520926	5487884	V3		0	0	0	0
177221	520989	5487921	I3A		0	0	0	0
397655	520552	5488102	I3A		<0.005	0.002	0.003	0.09

**APPENDIX 2**

**LAB CERTIFICATES**



# ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: CANADIAN ARROW MINES LTD.

BRADY SQUARE

233 BRADY STREET, UNIT #8

SUDBURY ON P3B 4H5

Page: 1

Finalized Date: 12-JUL-2008

Account: CNARMN

## CERTIFICATE TB08081561

Project:

P.O. No.:

This report is for 58 Rock samples submitted to our lab in Thunder Bay, ON, Canada on 20-JUN-2008.

The following have access to data associated with this certificate:

TODD KEAST

DEAN MACEACHERN

ACCOUNTS PAYABLE

## SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test
PUL-31	Pulverize split to 85% <75 um

## ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP81	ICP Fusion - Ore Grade	ICP-AES
Ag-AA62	Ore grade Ag - four acid /AAS	AAS
Au-AA23	Au 30g FA-AA finish	AAS
PGM-ICP23	Pt, Pd, Au 30g FA ICP	ICP-AES

To: CANADIAN ARROW MINES LTD.

ATTN: TODD KEAST

BRADY SQUARE

233 BRADY STREET, UNIT #8

SUDBURY ON P3B 4H5

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager



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EXCELLENCE IN ANALYTICAL CHEMISTRY  
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212 Brooksbank Avenue  
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Page: 2 - A  
Total # Pages: 3 (A)  
Finalized Date: 12-JUL-2008  
Account: CNARMN

## CERTIFICATE OF ANALYSIS TB08081561

Sample Description	WEI-21 Recvd Wt. kg	ME-ICP81 Ni %	ME-ICP81 Cu %	ME-ICP81 Co %	PGM-ICP23 Pt ppm	PGM-ICP23 Pd ppm	PGM-ICP23 Au ppm	Ag-AA62 Ag ppm	ME-ICP81 S %	Au-AA23 Au ppm
	0.02	0.005	0.005	0.002	0.005	0.001	0.001	1	0.01	0.005
396480	1.16	0.008	0.010	0.002	<0.005	0.002	<0.001	1	0.82	
396481	0.97	<0.005	<0.005	<0.002	<0.005	<0.001	0.082	<1	0.11	
396482	0.95	0.009	0.046	0.006	<0.005	0.001	0.002	1	3.12	
396483	0.91									<0.005
396484	1.20									<0.005
396485	1.51									<0.005
396486	1.08									<0.005
396487	0.95									0.148
396488	1.55									0.216
396489	1.43									0.273
396490	1.15									0.105
396491	2.26									0.059
396492	2.24									0.170
396493	1.04									<0.005
396494	1.77	0.009	0.008	0.005	<0.005	<0.001	<0.001	<1	0.23	
396495	0.76	0.017	0.097	0.008	<0.005	0.001	0.501	2	2.00	
396496	1.48	<0.005	1.140	0.004	<0.005	0.014	0.289	8	1.34	
396497	1.31	0.016	0.193	0.005	<0.005	0.003	0.036	3	0.52	
396498	0.99	0.105	0.081	0.030	<0.005	0.007	0.021	2	14.75	
396499	1.27	0.033	0.215	0.008	<0.005	0.004	<0.001	1	0.18	
396500	1.20	0.100	0.359	0.011	0.048	0.045	0.017	2	1.33	
397601	1.38	0.038	0.030	0.006	<0.005	0.008	<0.001	<1	0.74	
397602	1.87	0.389	1.045	0.257	0.013	0.094	0.008	1	23.1	
397709	1.32	0.107	0.064	0.010	0.188	0.261	0.008	<1	0.54	
397710	0.58	0.212	0.431	0.009	0.208	0.156	0.090	2	1.05	
397711	2.48	0.025	0.028	0.014	<0.005	0.002	0.016	<1	12.40	
397712	1.74	0.019	0.016	0.004	<0.005	0.002	0.001	<1	1.83	
397713	2.49	0.021	0.011	0.005	<0.005	0.001	0.002	<1	4.23	
397714	1.55	<0.005	0.010	0.003	<0.005	<0.001	<0.001	<1	0.29	
397715	2.06	0.012	0.010	0.003	<0.005	<0.001	<0.001	<1	4.49	
397716	0.71	0.019	0.063	0.005	<0.005	0.001	0.007	<1	0.20	
397717	3.52	0.013	0.013	0.004	<0.005	0.001	0.001	<1	2.25	
397718	1.12	0.225	0.209	0.014	0.010	0.008	0.035	<1	1.68	
397719	1.21	0.018	0.008	0.003	<0.005	<0.001	0.001	<1	5.62	
397720	2.14	0.067	0.053	0.007	<0.005	0.002	0.005	<1	0.31	
397721	2.19	0.202	0.587	0.006	0.204	0.148	0.088	1	3.87	
397722	1.39	<0.005	0.012	<0.002	<0.005	<0.001	0.058	<1	1.28	
397723	1.66	0.115	0.093	0.011	0.067	0.044	0.049	<1	0.93	
397724	1.34	0.006	<0.005	<0.002	<0.005	<0.001	0.001	<1	1.26	
397725	1.84	<0.005	0.026	0.002	<0.005	<0.001	0.007	1	0.16	



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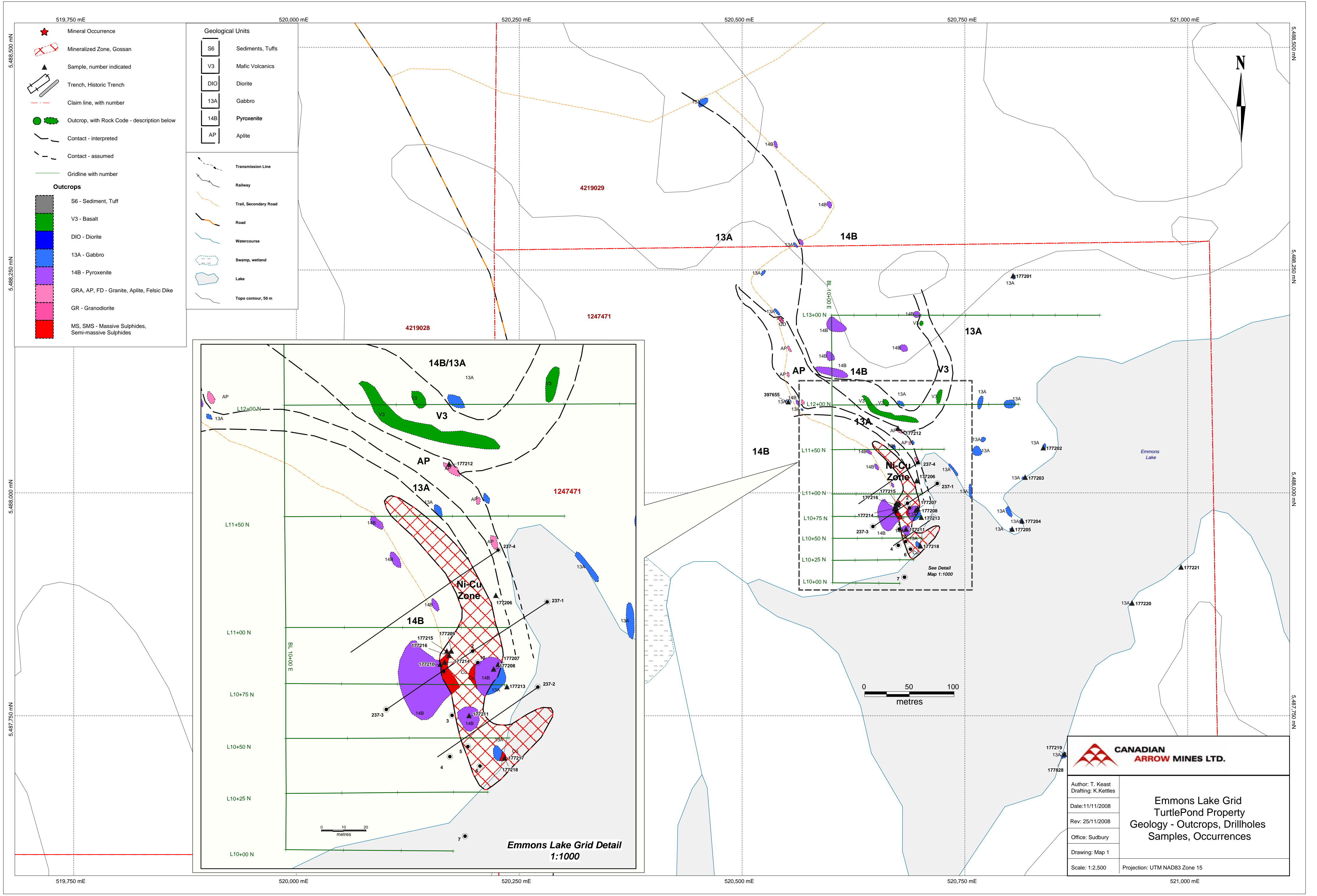
212 Brooksbank Avenue  
North Vancouver BC V7J 2C1  
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: CANADIAN ARROW MINES LTD.  
BRADY SQUARE  
233 BRADY STREET, UNIT #8  
SUDBURY ON P3B 4H5

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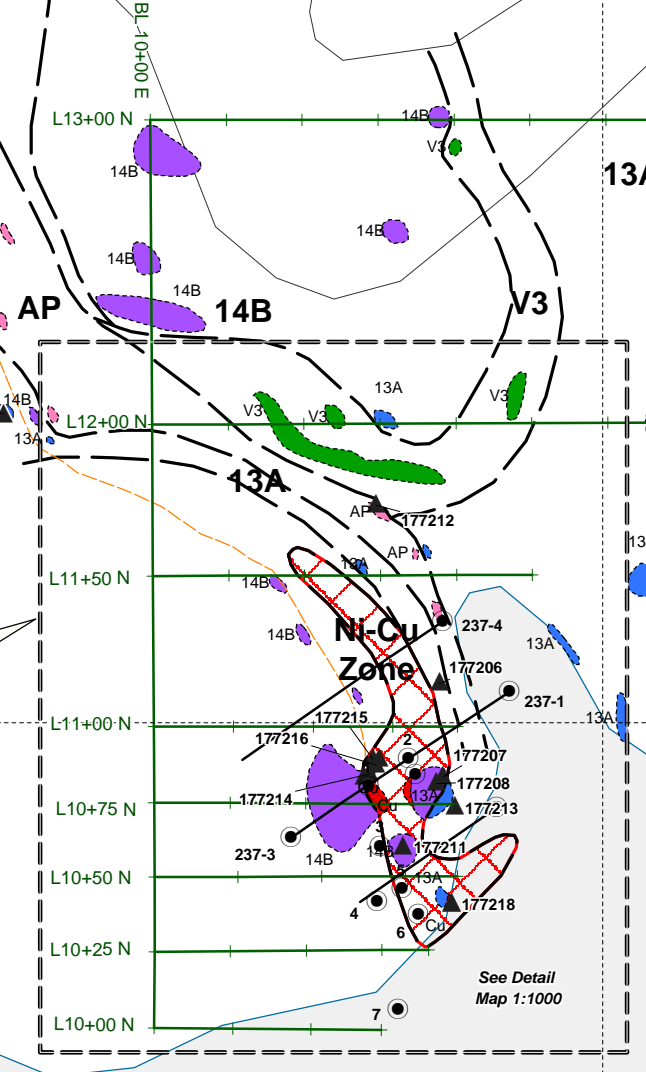
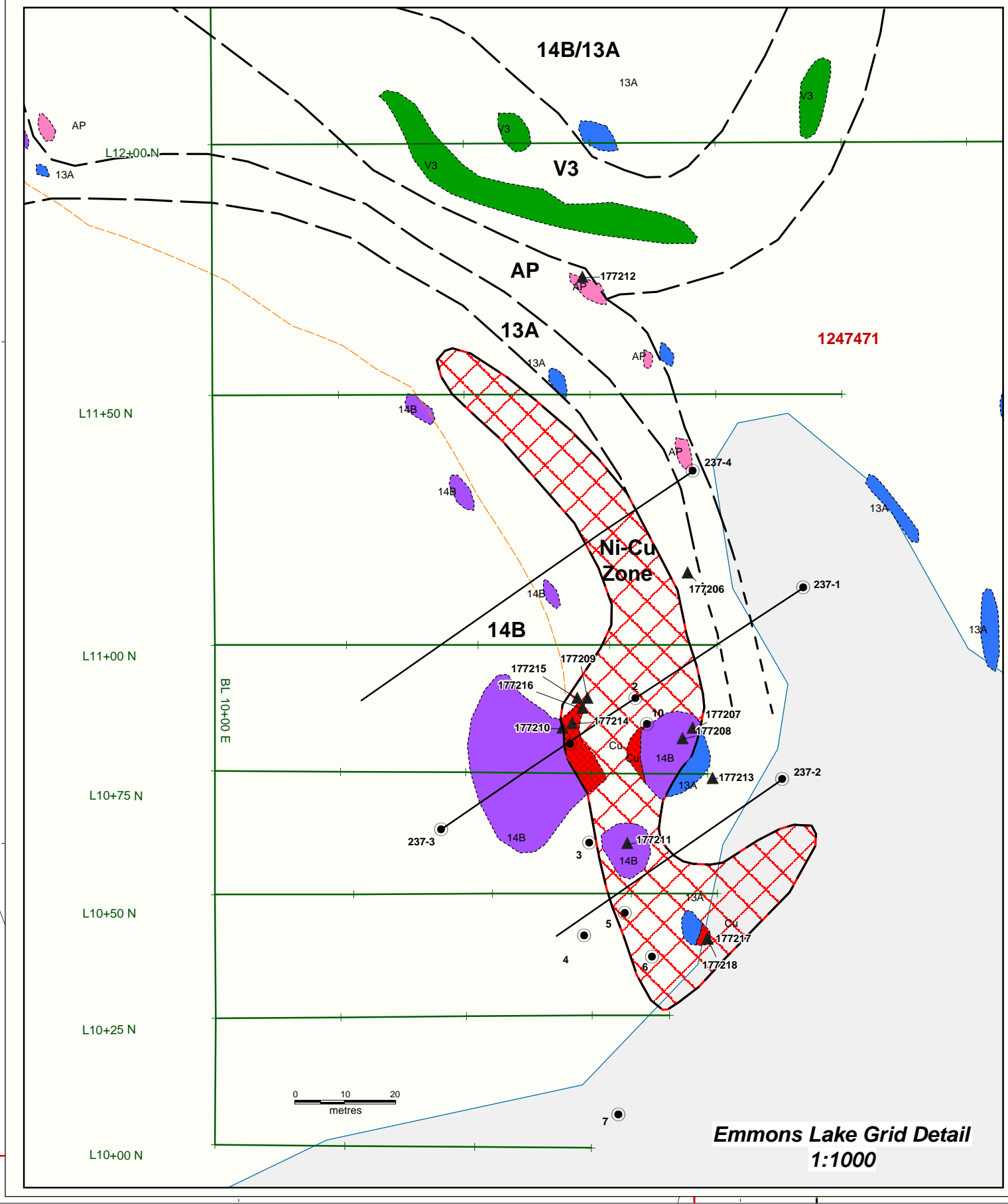
## CERTIFICATE OF ANALYSIS TB08081561

Method Analyte Units LOR	WEI-21 Recvd Wt. kg	ME-ICP81 Ni %	ME-ICP81 Cu %	ME-ICP81 Co %	PGM-ICP23 Pt ppm	PGM-ICP23 Pd ppm	PGM-ICP23 Au ppm	Ag-AA62 Ag ppm	ME-ICP81 S %	Au-AA23 Au ppm
Sample Description	0.02	0.005	0.005	0.002	0.005	0.001	0.001	1	0.01	0.005
397726	1.46	0.013	0.018	0.002	<0.005	0.002	0.004	<1	0.13	
397727	1.33	0.025	0.031	0.013	<0.005	0.004	0.003	2	14.55	
397728	1.15	<0.005	<0.005	<0.002	<0.005	<0.001	<0.001	<1	0.06	
397729	1.36	<0.005	<0.005	<0.002	<0.005	<0.001	<0.001	1	0.03	
397730	0.96	0.019	0.026	0.007	0.005	0.001	0.004	1	1.33	
397731	2.01	0.015	0.105	0.011	<0.005	0.002	0.001	1	4.03	
397801	1.86	0.158	0.360	0.014	0.032	0.034	0.014	2	1.55	
397802	1.08	0.043	0.515	0.006	0.098	0.101	0.033	6	0.74	
397803	1.74	0.077	1.025	0.006	0.260	0.383	0.049	8	1.24	
397804	0.71	0.056	0.208	0.014	0.013	0.021	0.009	1	2.61	
397805	1.61	0.029	0.155	0.006	0.028	0.034	0.007	1	0.96	
397806	2.22	0.171	0.402	0.014	0.066	0.047	0.028	2	2.27	
397807	2.59	0.173	0.234	0.020	<0.005	0.006	0.009	1	2.32	
397808	1.99	2.23	0.086	0.188	0.018	0.086	0.012	1	28.4	
397809	1.23	2.49	0.401	0.315	0.012	0.050	0.040	2	36.9	
397810	0.57	2.37	0.435	0.202	<0.005	0.075	0.011	1	29.2	
397811	0.81	0.133	0.593	0.015	0.037	0.048	0.072	2	1.99	
397812	1.36	0.190	0.215	0.022	0.005	0.007	0.007	1	2.33	



- ★ Mineral Occurrence
  - ▭ Mineralized Zone, Gossan
  - ▲ Sample, number indicated
  - ▭ Trench, Historic Trench
  - Claim line, with number
  - Outcrop, with Rock Code - description below
  - Contact - interpreted
  - - - Contact - assumed
  - Gridline with number
- Outcrops**
- S6 - Sediment, Tuff
  - V3 - Basalt
  - DIO - Diorite
  - 13A - Gabbro
  - 14B - Pyroxenite
  - GRA, AP, FD - Granite, Aplite, Felsic Dike
  - GR - Granodiorite
  - MS, SMS - Massive Sulphides, Semi-massive Sulphides

- Geological Units**
- S6 Sediments, Tuffs
  - V3 Mafic Volcanics
  - DIO Diorite
  - 13A Gabbro
  - 14B Pyroxenite
  - AP Aplite
- Transmission Line
- Railway
- Trail, Secondary Road
- Road
- Watercourse
- Swamp, wetland
- Lake
- Topo contour, 50 m



**CANADIAN ARROW MINES LTD.**

Author: T. Keast  
 Drafting: K. Kettles  
 Date: 11/11/2008  
 Rev: 25/11/2008  
 Office: Sudbury  
 Drawing: Map 1  
 Scale: 1:2,500  
 Projection: UTM NAD83 Zone 15

**Emmons Lake Grid  
 TurtlePond Property  
 Geology - Outcrops, Drillholes  
 Samples, Occurrences**