# Technical Report

**and**

# Proposed Exploration Program

**for the**

# Buffalo Nickel Project
# Manitoba

**prepared for**

## Stinton Exploration Ltd.
## Winnipeg, MB

**by**

**Daniel A. Beauchamp, P.Geol., M.B.A.**
**Consulting Geologist**

| | |
|---|---|
| **Longitude:** | **95°20’00” W** |
| **Latitude:** | **49°09'00” N** |
| **NTS:** | **52E/03** |
| **Province:** | **Manitoba** |
| | |
| **Date:** | **26 June 2012** |

# Table of Contents

# List of Tables



# List of Figures

## 1. Executive Summary

The Buffalo Nickel Project is an early stage mineral exploration property located about 150 km southeast of Winnipeg, Manitoba, and 16 km north of the boundary with the state of Minnesota, USA. The coordinates for the property are 95°20’00”W and 49°09'00”N in NTS 52E/03. Access to area from the Trans Canada Highway is by well-maintained paved and gravel roads from which a trail can be used to reach the northeast corner of the property.

The Buffalo Nickel Project comprises 13 unpatented claims and covers an area of 2995 hectares. The earliest renewal date for one of the claims is 13 February 2013. The other 12 claims have renewal dates of 4 April 2013 to 18 October 2013. The claims are in the Buffalo Point First Nation Community Interest Zone, an area from which the First Nation Band has rights to select its entitlement lands. There are no known environmental liabilities and the land is free of liens and pending legal action.

The claims are currently held 100% by William C. Hood, of Beauséjour, MB. Stinton Exploration has purchased a 25% interest in the property in exchange for 700,000 shares of Stinton and a Net Smelter Return of 2% for Mr. Hood. Stinton has an option to purchase the remaining 75% of the property, but only in its entirety, for an additional 1,300,000 shares subject to the same 2% Net Smelter Return.

Stinton Exploration Ltd. is a private company and its objective is to prepare an initial public offering with the Buffalo Nickel Project as its principal asset.

No outcrops have been mapped on the Buffalo Nickel Project area and most of the exploration in the region has been carried out 15-50 km north and northwest of the project area.

In the early 1960s Selco Exploration flew airborne magnetic and electromagnetic (EM) surveys 50 km north and 30 km northwest of the project area. Two drill holes revealed barren sulphides in iron formation in this area. In 1967, Texas Gulf Sulphur flew another survey about 15 km north of the Buffalo Nickel Property and intersected visible coarse sphalerite and chalcopyrite in drill holes, but no assays were reported. In 1971 Asarco flew a magnetometer and EM survey over the same area and identified four conductors and three single anomalies. There is no report of follow-up work submitted as assessment.

From 1982 to 1989, a number of airborne magnetometer and EM surveys were flown by several companies over these same areas. Although hampered by conductive overburden, many bedrock conductors were identified. Massive and semi-massive sulphides were identified in drilling but relatively low values of copper, zinc and gold were reported.

In 1987, Granges carried out an airborne magnetic and electromagnetic survey in the region and several EM conductors were identified on the Buffalo Nickel Project. In 1988, ground geophysical surveys confirmed the conductors on several grids including four on the Buffalo Nickel Project. Although some of the conductors were drilled, none of the ones on the Buffalo Nickel Property were.

In 1991 and 1992 a program of till sampling and overburden drilling was carried out by the Geological Survey of Canada in cooperation with Manitoba Energy and Mines. Two of the 23 holes were drilled to bedrock in 11 km south of the Buffalo Nickel Project and one of these reported anomalous chrome, iron nickel, zinc and cobalt at a depth of 38.6m, at the base of the till.

Four surface till samples from an area 6.5 km north of the property and three others taken near the US boundary 10-12 km southwest of the property reported low values for most elements.

In 1995 and 1996, Indicator Explorations Ltd. performed ground magnetometer surveys in the northeast part of the Buffalo Nickel Property and drilled several holes, one of which intersected altered peridotite from bedrock at 65.5m to the end of the hole at 90.8m and reported more than 1000 ppm Ni over 17m.

The project area is in the western part of the Wabigoon Subprovince of the Superior Province in the Canadian Shield. The area is underlain by Archean volcanosedimentary rocks that have been intruded by Archean granodiorite. Mafic and ultramafic intrusions are present in the Wabigoon Subprovince and in the Quetico Subprovince to the south.

Many occurrences of copper, nickel and platinum group elements (PGE) are reported from the mafic and ultramafic intrusions in the Wabigoon Subprovince, including the Lac des Iles platinum group element (PGE) mine in Ontario.

In this type of occurrence copper-nickel mineralization usually occurs with PGE in mafic and ultramafic intrusions where they usually coalesce with the sulphide fraction of the melt and form immiscible droplets that gravitate to the bottom in a

magma that cools slowly. If the magma cools more quickly, the sulphides remain dispersed within the intrusion and the principal potentially economic minerals become the PGE mineralization because the copper-nickel mineralization is too dispersed to be economic.

Stinton Exploration Ltd. has not carried out any work and the last recorded exploration activity on the Buffalo Nickel property was in 1996 by Indicator Explorations Ltd. No outcrop has been mapped on the property.

Peat quarrying operations occur 23 km north of the property.

The Buffalo Nickel Project has several EM conductors identified by an airborne survey in 1987, some of which were subsequently confirmed by ground surveys. A few of these conductors are coincident with magnetic anomalies. The drill intersection of altered peridotite in 1996 confirms the presence of ultramafic rocks in the region.

The Buffalo Nickel Property is a project of merit and a program of ground geophysics is recommended to evaluate the potential for copper-nickel and PGE mineralization in mafic and ultramafic intrusions. Upon the identification of valid conductors, a follow-up drill program is recommended to test the conductors.

The program recommended consists of an initial 45 km of ground magnetometer and horizontal loop electromagnetic surveys in three areas of the properties to confirm and delineate the existing peridotite in the northeast part of the property and the historic EM conductors and magnetic anomalies elsewhere on the property.

An airborne magnetometer and EM survey could be carried out instead if total costs were comparable. Airborne surveys are as valuable and precise as ground surveys but are usually more expensive on small project areas such as this one because of mobilization costs and minimum survey size. If mobilization could be shared or reduced an airborne survey would have the advantage that it could be carried out at any time of the year.

Upon the return of favourable results from the geophysical surveys a short program of six diamond drill holes for a total of 750m is recommended to test the anomalies identified. The total budgeted cost for both phases is $400,000.

Additional claims should be staked to the northeast and to the southwest of the current claim block to protect the areas of interest.

## 2. Introduction

S. Mark Francis, Director of Stinton Exploration Ltd., a private company based in Winnipeg, Manitoba, contracted Daniel Beauchamp, P.Geol. to write this Technical Report. The report was prepared after a detailed review of assessment reports by other companies, of government data and of current exploration activity in the region. This report includes a proposed exploration program and budget to evaluate the mineral potential of the property.

This Technical Report is prepared in compliance with National Instrument 43-101 (NI 43-101), regulations published by Canadian Securities Administrators, for an anticipated Initial Public Offering (IPO) by Stinton Exploration.

Assessment reports on the property and in the surrounding area available from the Manitoba Innovation, Energy and Mines were consulted. Other public documents, information and geological reports were also included in the study and the project was discussed with other geologists.

As Qualified Person, D.A. Beauchamp has worked in mineral exploration for more than 30 years. The author has worked as a geologist throughout Canada and has supervised and managed projects in the field in many geological environments from the Archean to the Cenozoic carrying out geological mapping, geochemical and geophysical surveys, diamond drilling and core logging. The author has an honours B.Sc. in geology and an MBA in finance, and has been registered as a P.Geol. with APEGGA in Alberta for 30 years.

The author carried out a property site visit of the Buffalo Nickel Property and examined drill core from the property on July 11th, 2007 and made a return visit to the property on August 15th 2010.

## 3. Reliance on Other Experts

This Technical Report contains information from government documents, company reports, public documents and other technical reports. These reports are historic in nature and may not have been written by Qualified Persons as currently defined by NI 43-101. The pertinent information has been reviewed by the author and although there do not appear to be significant discrepancies among the reports, the author has not verified the assays or other technical data from these reports by carrying out independent sampling.

Although the author has visited the Buffalo Nickel Property, not all sites referred to in the documents have been examined in the field.

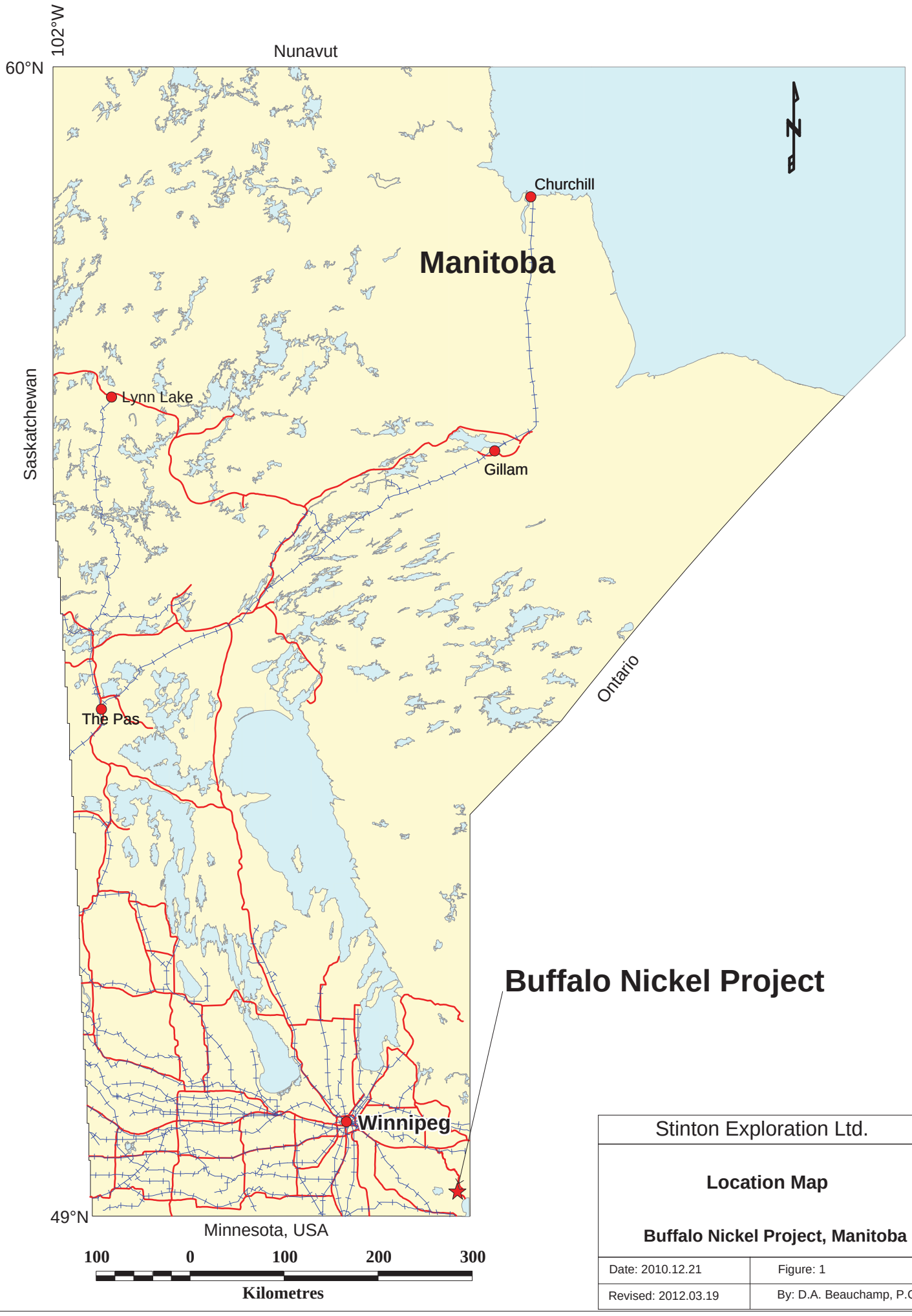
## 4. Property Description and Location

The Buffalo Nickel Project is located in the extreme southeastern part Manitoba, 150 km southeast of Winnipeg and 16 km north of the boundary with the state of Minnesota, USA (Figure 1). About 13 km east of the centre of the claims is the boundary with the Northwest Angle, a part of the USA that extends north of the 49$^{th}$ parallel.

The claims are centred at 95°20’00” W and 49°09'00”N in NTS 52E/03 to the west of Buffalo Bay, at the western end of Lake of the Woods (Figure 2).

The claims in the surveyed areas of southern Manitoba are not staked by placing posts on the ground, as they are in other parts of the province, but are registered by township, range and section name in the office in Winnipeg. A review of the data provided by the Manitoba Innovation, Energy and Mines shows that the location of the claims is believed to be accurate.

The property comprises 13 unpatented mining claims with a total area of about 2995 hectares (7399.75 acres). The claims form part of Townships 2 Ranges 16 and 17 East of the Prime Meridian and extend north to Township 3 Range 17 East of the Prime Meridian (Figure 3).




| Stinton Exploration Ltd. | |
|---|---|
| **Location Map** | |
| **Buffalo Nickel Project, Manitoba** | |
| Date: 2010.12.21 | Figure: 1 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |

Detailed information for the claims on the property is presented in Table 1 and shown in Figure 3.

**Table 1**
**List of Mineral laims**

| Name | Claim Number | Owner | Date Recorded | Date of Renewal | Hectares |
|---|---|---|---|---|---|
| JAM 1 | SV11366 | William C. Hood | 19-Aug-09 | 18-Oct-13 | 17 |
| JAM 2 | SV10916 | William C. Hood | 19-Apr-93 | 18-Jun-13 | 52 |
| JAM 13 | SV11744 | William C. Hood | 27-May-10 | 26-Jul-13 | 261 |
| JAM 14 | SV11745 | William C. Hood | 27-May-10 | 26-Jul-13 | 254 |
| JAM 15 | SV11763 | William C. Hood | 15-Dec-10 | 13-Feb-13 | 269 |
| JAM 16 | SV11746 | William C. Hood | 27-May-10 | 26-Jul-13 | 269 |
| MOS 3 | SV11588 | William C. Hood | 3-Feb-10 | 4-Apr-13 | 279 |
| MOS 7 | SV11589 | William C. Hood | 3-Feb-10 | 4-Apr-13 | 274 |
| MOS 11 | SV11740 | William C. Hood | 27-May-10 | 26-Jul-13 | 266 |
| MOS 12 | SV11741 | William C. Hood | 27-May-10 | 26-Jul-13 | 269 |
| MOS 14 | SV11747 | William C. Hood | 27-May-10 | 26-Jul-13 | 239 |
| MOS 15 | SV11742 | William C. Hood | 27-May-10 | 26-Jul-13 | 272 |
| MOS 16 | SV11743 | William C. Hood | 27-May-10 | 26-Jul-13 | 274 |
| Total | | | | | 2995 |

The property is currently held 100% by William C. Hood of Beauséjour, MB. Stinton Exploration has purchased a 25% interest in the property in exchange for 700,000 shares of Stinton and a Net Smelter Return of 2% for Mr. Hood. Stinton has an option to purchase the remaining 75% of the property, but only in its entirety, for an additional 1,300,000 shares subject to the same 2% Net Smelter Return.

In Manitoba, claims are initially valid for two years and 60 days, after which they can be renewed annually. The complete specifications for required work, eligible expenditures, and reporting are described in Schedule B, Manitoba Regulation 64/92 (Mineral Disposition and Mineral Lease Regulation, 1992).

Claims larger than 16 hectares can be reduced in size anytime after the first anniversary of the claim at the anniversary date. Claims can be grouped to apply assessment work completed on one claim to any of the claims of the same group. The maximum area allowed in a single group is 3200 hectares.

From year 2 to year 10, claims can be renewed as long as a report is submitted within 60 days of the anniversary date, documenting a minimum expenditure of $12.50 per hectare on the property and by paying a renewal fee of $12 per claim.

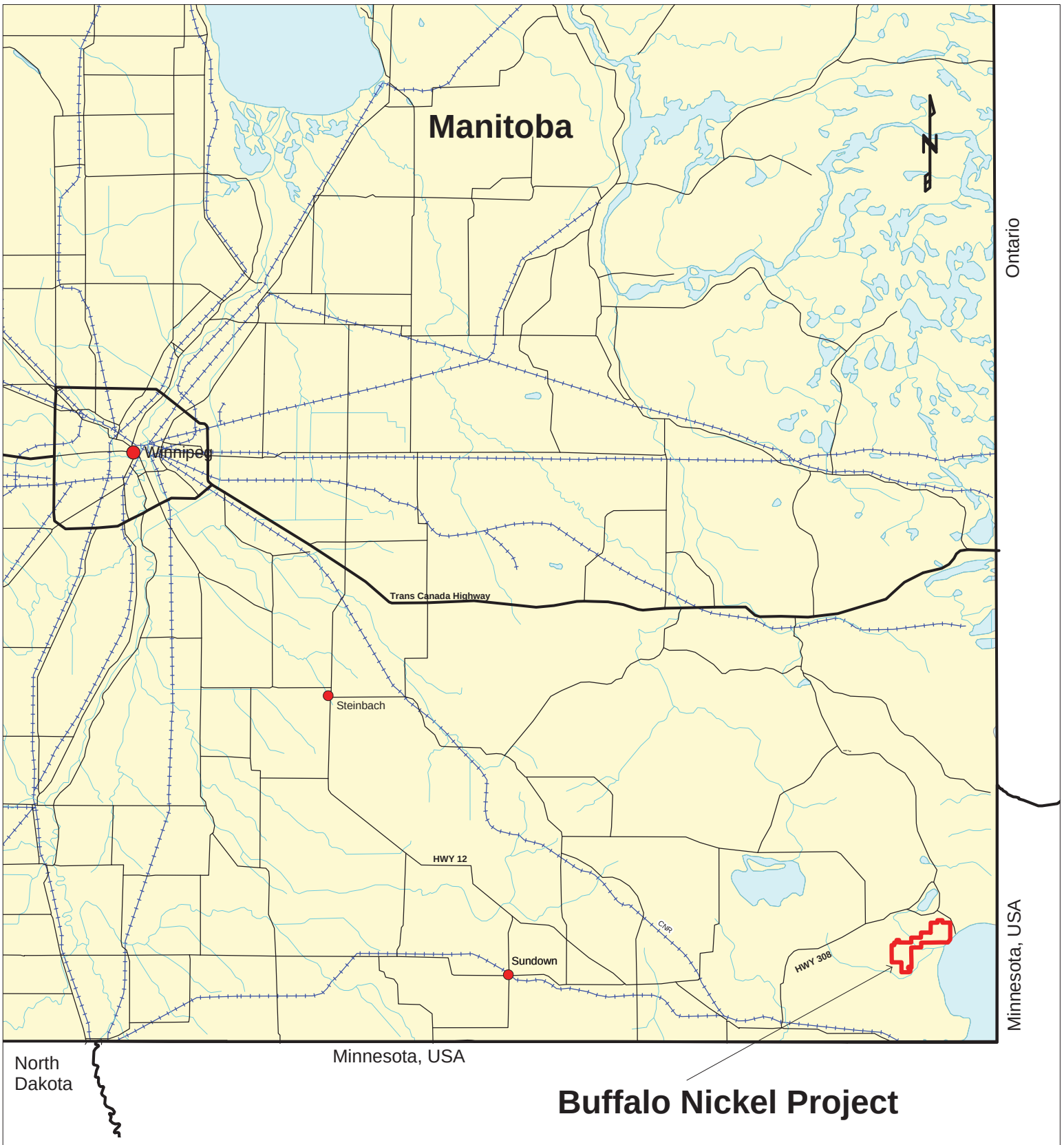
Cash in lieu of exploration can be paid to Manitoba Innovation, Energy and Mines. These payments are recoverable from the government within five years if work in excess of the minimum required is performed on the property. From year 11 onward, the work requirement doubles to $25 per hectare.

The current obligation on the Buffalo Nickel Property to maintain all the claims beyond their current period of validity is $37,437.50 per year along with renewal fees of $156 for the 13 claims. The earliest renewal date is 13 February 2013 for the JAM 15 claim at which time assessment work of $3362.50 must have been completed or cash equivalent must be paid.

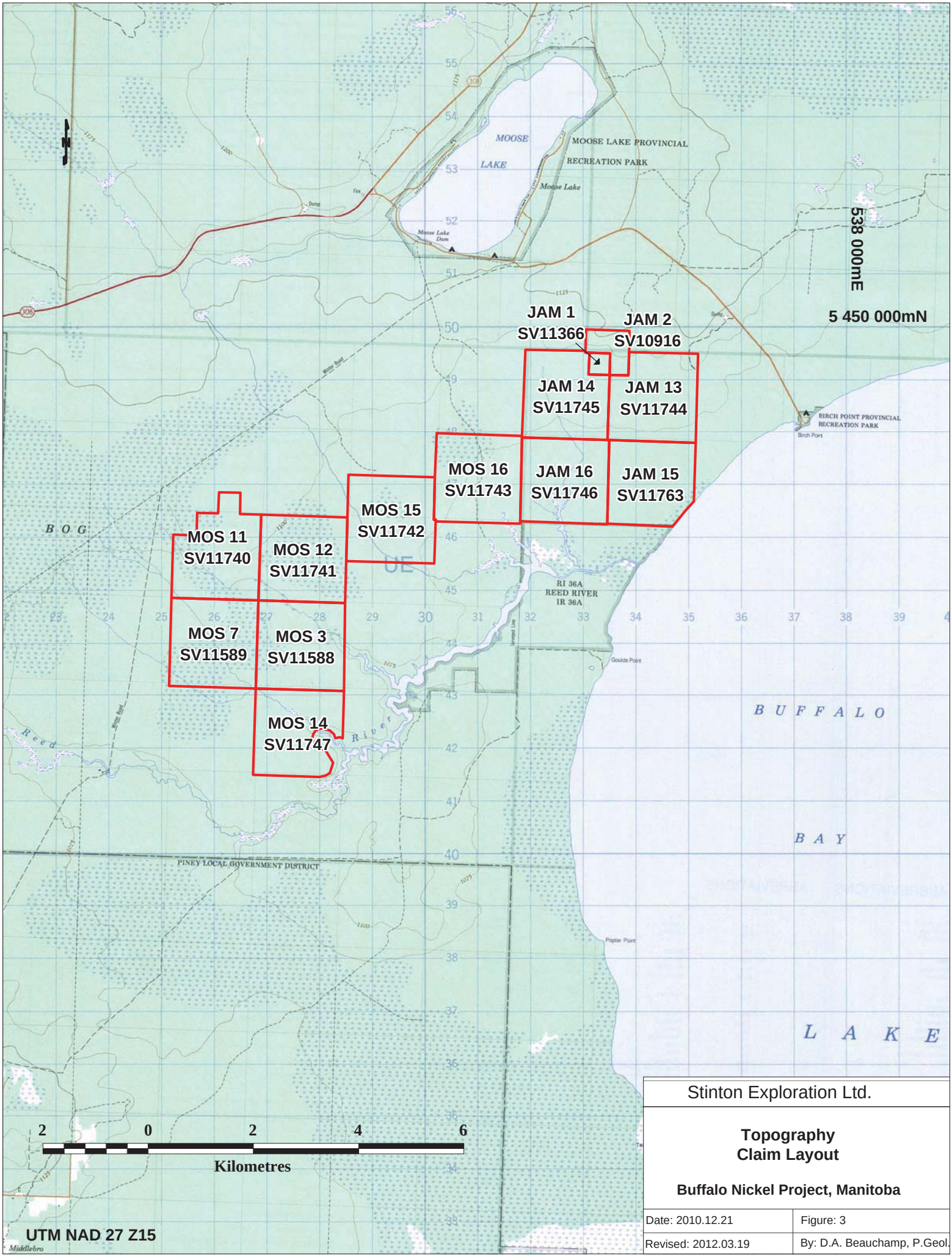
The Reed River First Nation Indian Reserve 36 and the Buffalo Point First Nation Indian Reserve 36A adjoin to the east and south of the Buffalo Nickel Property. All claims are within the Community Interest Zone (CIZ) of the Buffalo Point First Nation, an area extending 30 km from the exterior boundary of the main Reserve of each Entitlement First Nation.

Land underlain by a Community Interest Zone is not held by the First Nation and does not limit the rights of a mining or exploration company to stake or develop mineral claims, or to obtain mineral leases, but exploration permits must be reviewed by the interested First Nation to prevent large areas within the Community Interest Zone from being staked, making them unavailable for land selection by the First Nation.

Several of the claims are also on the Lake of the Woods Water Power Reserve. Ministerial approval is required to divert, use or store water for generating power and for activities that impact water within the water power reserve. The Lake of the Woods Control Board Act was enacted in 1987 and established a four-member board to regulate Lake of the Woods and Lac Seul, to provide the most dependable flow and the most advantageous and beneficial use of the Winnipeg River and the English River.




| Stinton Exploration Ltd. | |
|---|---|
| **Regional Access** | |
| **Buffalo Nickel Project, Manitoba** | |
| Date: 2010.12.21 | Figure: 2 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |

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**Topography**
**Claim Layout**

**Buffalo Nickel Project, Manitoba**

| | |
|---|---|
| Date: 2010.12.21 | Figure: 3 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |

There are currently no known existing environmental liabilities to which the property is subject. The surface waters of the claims drain east and southeast over lands owned by the Buffalo Point First Nation. The property is otherwise free of liens or pending legal actions, back-in rights, payments or other encumbrances.

There are no known land improvements, mineralized zones, mine workings or tailings ponds on the property. The property is at an early stage of exploration and permits are required from the Manitoba Innovation, Energy and Mines before building trails and road access. These permits are available to the company.

## 5. Accessibility, Climate, Local Resources, Infrastructure and Physiography

### Access

The property is located about 150 km southeast of Winnipeg, Manitoba, and 16 km north of the boundary with the state of Minnesota, USA.

From Winnipeg, the property area can be reached by travelling along the TransCanada Highway toward the east for 117 km, then south on Highway 308, initially paved to the locality of East Braintree but changing to gravel, for a distance of about 64 km along the west side of Moose Lake.

Travel is then toward the Buffalo Nickel Property along a gravel road for about 9 km, from which access to the northeast corner of the property is by an old trail. The trail can be used by all-terrain vehicles to provide access to the property and could possibly be extended to the areas of interest.

The Greater Winnipeg Water District (GWWD) Railway extends along the TransCanada Highway from Winnipeg to near the Ontario Boundary and the CNR Railway line is a further 23 km to the north.

An alternative access route from Winnipeg is along the TransCanada Highway, for about 48 km, then south for about 120 km along Highway 12 toward Steinbach to South Junction and Sprague, then north 32 km along Highway 308 to Moose Lake. Another CNR Railway traces this path and then cuts south for 62 km into Minnesota before re-entering Canada at Rainy River, Ontario.

A major international airport is located at Winnipeg and a secondary airport is present at Steinbach.

### Climate

Southeastern Manitoba has a continental climate, with generally stable weather. Summers are usually warm with temperatures rising to 30-35°C. Winters are normally cold, with temperatures dropping to as low as -35°C. Snow conditions are variable and most of the precipitation falls during the summer.

### Resources and Infrastructure

Winnipeg is located about 200 km and 2½ hours by road from the project area. As a major supply location and the capital of the province any equipment, supplies and manpower is readily available from Winnipeg. The road is along the paved four-lane TransCanada Highway for about 125 km and then by a well-maintained gravel road to the property.

Older winter roads are on maps to the north within one or two kilometres of the property and could be investigated for additional access to the property.

The Reed River First Nation Reserve is located immediately southeast of the project area on the shore of Buffalo Bay, and the Buffalo Point First Nation Reserve is located about 12 km south, along the border with the USA. The First Nations have identified a region with a radius of 30 km which has been termed a Community Interest Zone, which entitles them to be notified prior to any land development taking place. The Buffalo Nickel Project is entirely within the Buffalo Point First Nation Reserve Community Interest Zone (Figure 4).

Other than mineral exploration, current industry activity in the immediate area includes several peat processing plants 18 and 28 km north, 40 km northeast and 55 km northwest of the property (Domsodi and Hajdu, 1982). The peat processing plants are secured by quarry leases over their properties. Another quarry lease is present about 9 km west of the Buffalo Nickel Property.

There are no registered trap lines in the area.

### Physiography

The terrain of the immediate region is relatively flat and low-lying, and is part of the Agassiz Lowlands section that covers parts of western Ontario, southeast Manitoba and northern Minnesota. The region was covered by Glacial Lake Agassiz at the end of the Wisconsin Ice Age when drainage to the north was obstructed by the receding glaciers.

The topography is that of a flat glacial lake plain containing low-lying moraines and sand beach ridges and extensive bogs are present throughout the area. Over a distance of about 20 km the maximum rise is about 140m.

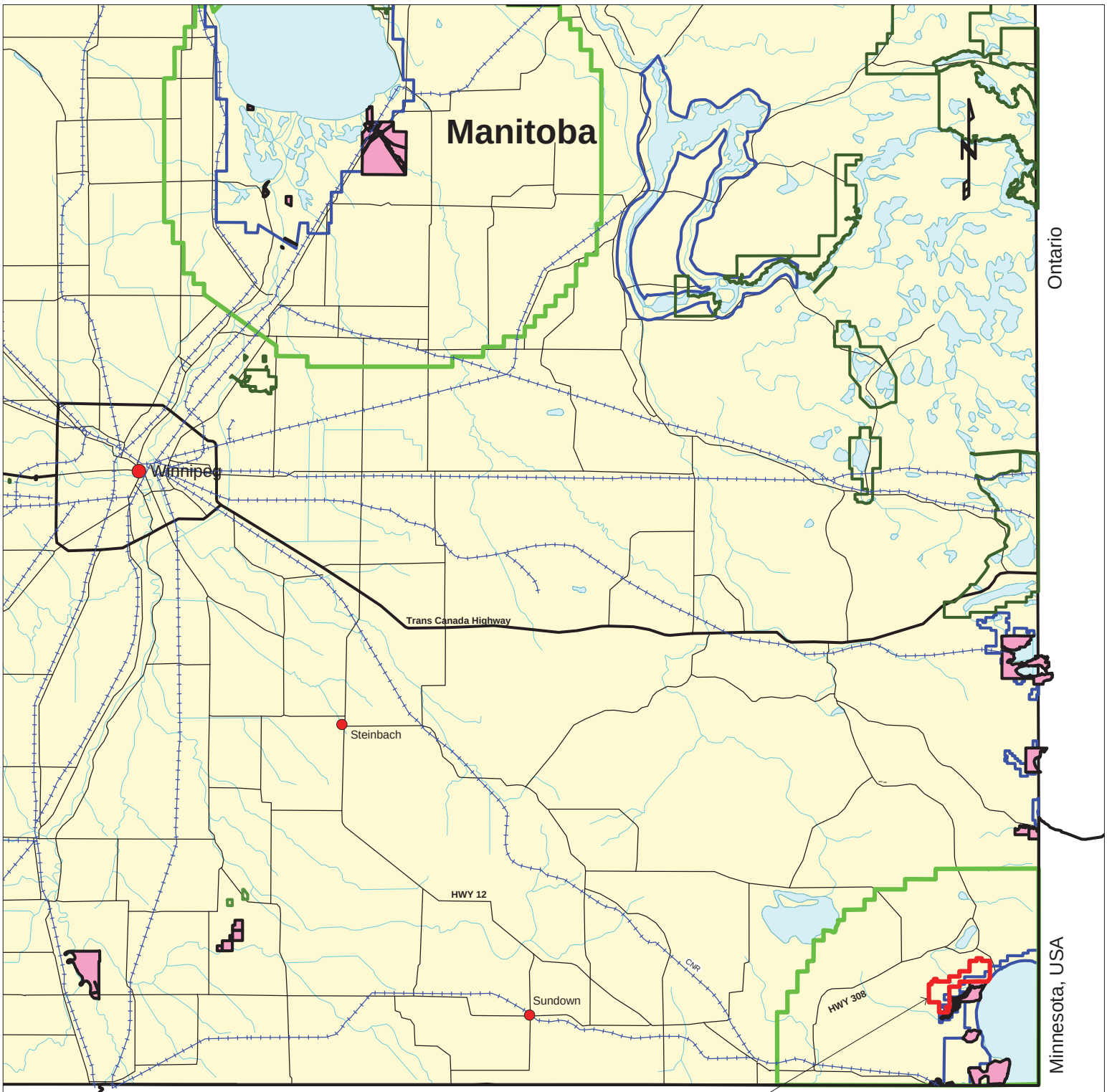
The vegetation of the area is part of the Laurentian mixed forest and consists of aspen, birch, jack pine and spruce. The region is in a transition zone between boreal forests to the north and broadleaf deciduous forests to the southeast.

## 6. History

Although the area is underlain by Archean volcanosedimentary belts that have been intruded by felsic and mafic bodies, since there are so few outcrops in the region much of the knowledge of the area's geology has been derived from the airborne and ground geophysical surveys that were followed by a few diamond drilling programs. Most of the information presented below is from assessment reports submitted to the Manitoba government (Figure 5).

The first recorded exploration program in the area was performed in 1961, when Selco Exploration Company Limited flew an airborne electromagnetic (EM) and magnetometer survey about 50 km northwest of the Buffalo Nickel Property (Lazenby, 1961). The survey covered about 164 $km^2$ over mafic volcanic rocks and identified three EM conductors with coincident magnetic anomalies in the southern part of the survey area, and another eight conductors with coincident magnetic anomalies toward the northern part of the area. The company estimated that there was little overburden in the northeastern part of the area, increasing to a maximum of 60m in the southwest part of the survey area. There is no report of follow-up surveys.

In 1962, another combined magnetic and electromagnetic survey was flown for Selco to the north of Whitemouth Lake, about 30 km northwest of the Buffalo Nickel Property and most of the 45 conductors that were identified were followed-up with by gravity surveys. Of these, two were drilled, revealing narrow bands of barren pyrrhotite and pyrite in metamorphosed iron formation.




# Buffalo Nickel Project

First Nation Reserve

Water Power Reserve

Park or Wildlife Management Area

Community Interest Zone

10 0 10 20 30 40

Kilometres

Stinton Exploration Ltd.

**Special Areas**

**Buffalo Nickel Project, Manitoba**

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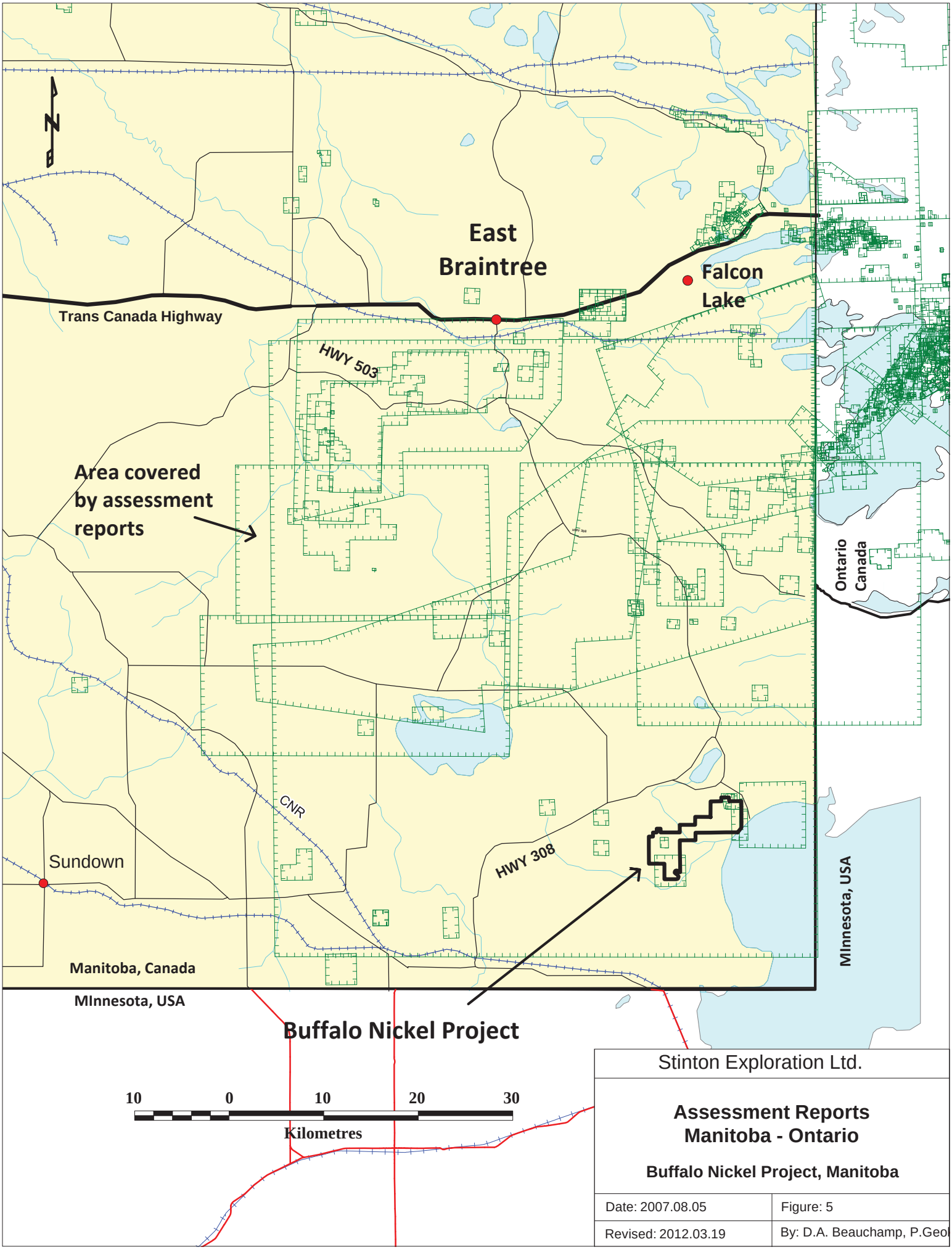
| Date: 2007.08.05 | Figure: 4 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |




Stinton Exploration Ltd.

**Assessment Reports**
**Manitoba - Ontario**

**Buffalo Nickel Project, Manitoba**

| | |
|---|---|
| Date: 2007.08.05 | Figure: 5 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol |

In 1965, Texas Gulf Sulphur Co. flew an airborne geophysical survey over the belt of volcanic rocks from about 15 km north of the Buffalo Nickel Property to the Manitoba-Ontario boundary about 35 km northeast of the property (Watson, 1967). The survey gave poor results because of a malfunctioning magnetometer and because of equipment and geological noise, attributed to flying at 40m above terrain over conductive overburden, and because of atmospheric noise, the result of intense thunderstorm activity in the area.

Nevertheless, a few significant anomalies were identified. Two of these anomalies were followed up with ground geophysical surveys and drilled. One hole intersected andesite containing 30-50% pyrite and pyrrhotite over 5m, and another hole reported 5-10% pyrrhotite and pyrite over about 16m, including moderately coarse sphalerite over about 6 cm and a visual estimate of 0.4% copper. No assays were reported and no additional surveys were submitted for assessment.

In 1971, Asarco flew an airborne electromagnetic and magnetometer survey over a large area about 16 km north of the Buffalo Nickel Property over the belt of volcanic rocks (Hendry, 1971). Although the interpretation was hampered by conductive overburden, at least four conductors and three single line anomalies were recommended for follow-up. The entire region is covered by thick glacial till and lacustrine deposits from Glacial Lake Agassiz. There is no report of follow-up exploration work.

In 1982 another airborne electromagnetic survey was flown about 30 km northwest of the Buffalo Nickel Property, to the north and west of Whitemouth Lake. Although most of the anomalies identified were attributed to conductive overburden, four zones of interest were recommended for follow-up work (DeCarle, 1982).

In 1982 Selco performed another airborne geophysical survey over a large area north of Whitemouth Lake. Three of the 14 conductors identified were recommended for follow-up work and the depth of the conductors was estimated at 60-90m (DeCarle 1982). No further work was submitted as assessment by Selco.

In 1982 and 1983 File Explorco flew an airborne electromagnetic and magnetometer survey about 35 km north of the Buffalo Nickel Project. Several zones were identified for follow-up (Desnoyers, 1984a and 1984b). In 1983, the

company performed ground horizontal loop EM and magnetometer surveys on several grids and later drilled eight holes for a total of 1254m north of Whitemouth Lake about 44 km northwest of the Buffalo Nickel property (Desnoyers, 1984c).

Although significant base or precious metal anomalies were not detected, the company identified felsic flows and quartz porphyry and additional work was recommended. The company also carried out ground geophysics on two areas located 40 and 50 km north of the Buffalo Nickel Property. In 1984 diamond drilling of 192m in five holes intersected massive and semi-massive pyrite and pyrrhotite in felsic to mafic volcanics and in quartz feldspar porphyry. The samples of core submitted for analysis returned maximum values of 260 ppm Cu, 1700 ppm Zn, and 41 ppb Au in three separate samples.

Drill hole 49-A2 intersected 11m of moderately conductive but non-magnetic ultramafic rock containing 2-3% pyrite starting at the overburden-bedrock interface. The rock may have lost its magnetic character as a result of pre-glacial weathering near the surface. Analyses for copper, zinc, silver and gold gave background values. The hole drilled at a dip of -60° intersected mostly metasedimentary rocks dipping 27-35° to core axis further down the hole.

In 1984, File Explorco carried out ground magnetic and electromagnetic surveys on several grids located 16-30 km north of the Buffalo Nickel Property. Several discontinuous, vertical or north-dipping conductive features were identified and one drill hole was reported. Metavolcanic rocks and paragneiss were intersected and slightly anomalous values were reported for zinc and copper.

In 1987, Almaden Resources Corporation carried out an airborne magnetic and electromagnetic survey over an area north of Whitemouth Lake, about 25 km northwest of the Buffalo Nickel Property. Ground follow-up consisted of horizontal loop EM and magnetometer surveys over strong airborne anomalies. Basal till sampling was carried out in 33 holes in the overburden and five late Wisconsin glacial tills were identified, two of which were from the northeast and three from the northwest (Brown, 1988).

In 1987, in a joint venture with Polestar Exploration Inc., Almaden also contracted an airborne magnetic and electromagnetic survey over an area located about 55 km northwest of the Buffalo Nickel Property where many airborne anomalies were identified. Ground magnetometer, horizontal loop EM and Induced Potential

(IP) surveys were followed by three reverse circulation drill holes totalling 194m, and five diamond drill holes totalling 802m. Additional work was recommended on several anomalies (Wolfe, 1987).

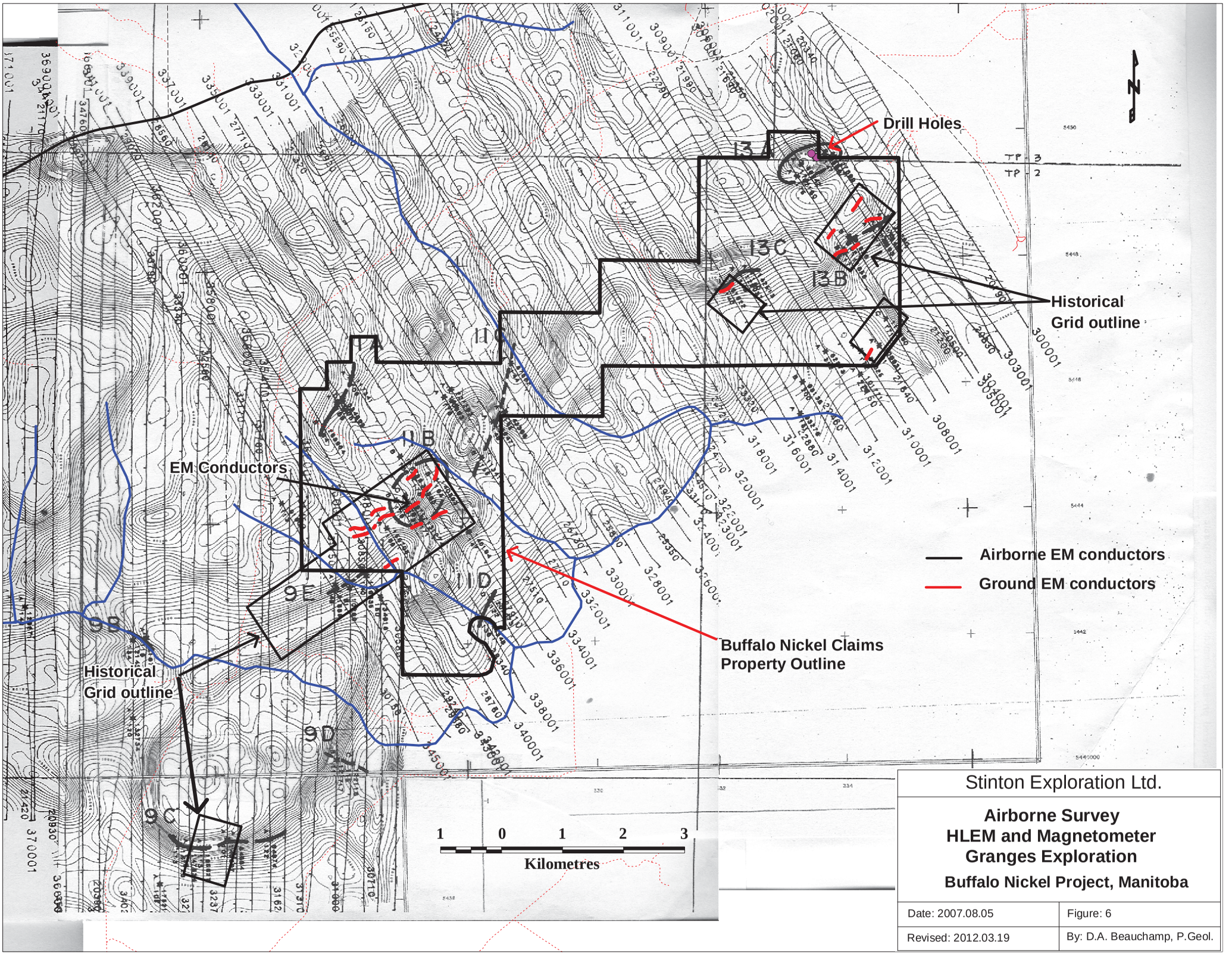
In 1987, Granges Exploration Ltd. contracted A-cubed of Mississauga, ON, to perform an airborne magnetic and electromagnetic survey over an area of 264 $km^2$ to the west of Buffalo Bay and covering the current Buffalo Nickel Project claims (Figure 6). This data was not submitted for assessment but was acquired by a colleague of Mr. Hood and provided to the author of this report.

The survey was carried out at a line spacing of about 300m along flight lines oriented northwest and north. The magnetometer data shows gradients striking mostly northeast with cross-cutting faults striking northwest and also shows the outline of several large batholiths. The EM data identified several conductors that extend for up to two kilometres, and many single-line anomalies, particularly on the Buffalo Nickel Project.

Later in 1987, Granges followed up the airborne survey by carrying out horizontal loop electromagnetic surveys on 12 grids in eight areas, including four grids on the current Buffalo Nickel Project area (Figure 7). The ground EM surveys confirmed most of the conductors identified by the airborne survey. Although none of the five drill holes was performed on the Buffalo Nickel Property, all intersected massive granodiorite with 67 to 98m of overburden, and geochemical analyses for gold, silver and zinc proved to be low (O'Donnell, 1990). The company suggested that a saltwater aquifer in sand and clay in the overburden at a depth of about 150 feet (46m) may be responsible for the ground EM anomalies.

On the four grids that were surveyed by ground geophysics on the current Buffalo Nickel Property in 1987, several conductors were confirmed but none of these were drilled. The hole closest to the property that was drilled by Granges is 12 kilometres to the west-northwest.

In 1988, Granges performed additional horizontal loop EM surveys on 17 grids and 23 diamond drill holes for a total of 2041m on a property of 31,080 hectares about 50 km northwest of the Buffalo Nickel Property (Zbitnoff, 1989a and 1989b).

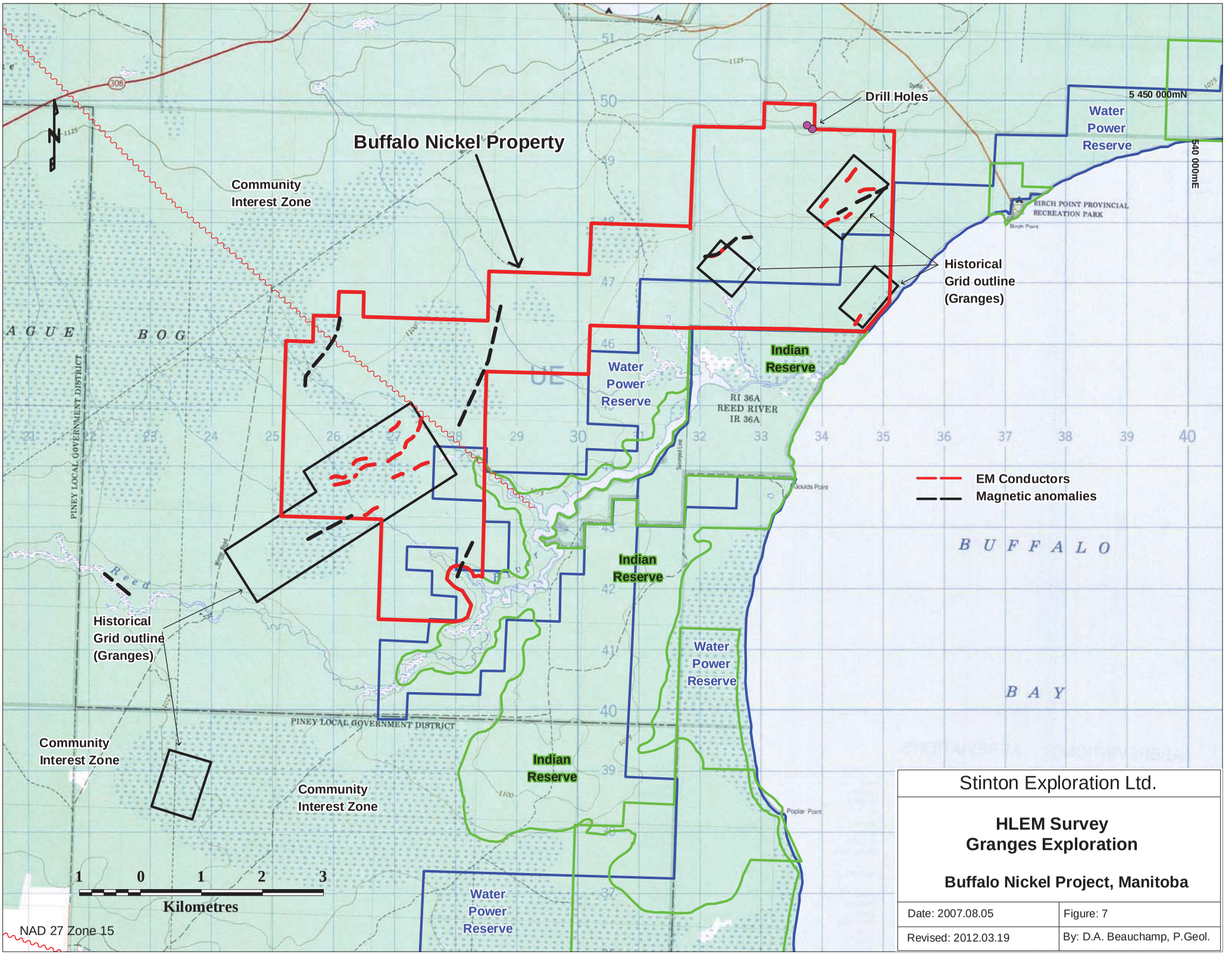



Stinton Exploration Ltd.

**Airborne Survey**
**HLEM and Magnetometer**
**Granges Exploration**

**Buffalo Nickel Project, Manitoba**

| | |
|---|---|
| Date: 2007.08.05 | Figure: 6 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |




Stinton Exploration Ltd.

**HLEM Survey**
**Granges Exploration**

**Buffalo Nickel Project, Manitoba**

| | |
|---|---|
| Date: 2007.08.05 | Figure: 7 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |

In 1993, Indicator Explorations Ltd., a private company held by John Lee, of Winnipeg, acquired many widely-scattered claims in the region that were staked over regional airborne magnetic anomalies identified on a map published by the federal government (Lee, 1994). The map was from a survey that had been flown in 1957 at 400m line spacing. The claims were acquired as possible targets in the search for kimberlite. In 1995, Rhonda Mining of Calgary staked many additional claims also in the search for kimberlite in the area.

In 1991 and 1992 a program of till sampling and overburden drilling was undertaken by the Geological Survey of Canada in cooperation with Manitoba Energy and Mines (Thorleifson and Matile, 1993). A total of 149 surface samples were taken and 23 holes were drilled to bedrock in southeastern Manitoba in the search for kimberlite indicator minerals. Samples were sieved and analyzed for many elements, and the mineralogical and rock type composition was determined for the samples.

Samples collected near the bedrock in one of two holes drilled to bedrock south and southwest of the property show anomalous values for mafic elements. Located about 11 km southwest of the property, drill Hole J encountered values of 720 ppm Cr (background 59.8 ppm), 8.5% Fe (2.21%), 200 ppm Ni (16 ppm), 220 ppm Zn (52 ppm), 50 ppm Co (8 ppm) at a depth of 38.6m, at the base of the till.

The geochemical analysis of the <0.063 mm fraction was performed by INAA (instrumental neutron activation analysis) and similar anomalies were reported from analyses of the heavy mineral concentrates and by ICP (inductively coupled plasma) on the samples which were composed mostly of granitic pebbles. Bedrock was reported as greenish-grey very fine-grained metavolcanic rock.

Drill hole I, located 11 km south of the property reported mostly background values for all elements and bedrock was reported as green very fine-grained mafic metavolcanic and ultramafic rock with white feldspar phenocrysts.

Four surface till samples taken 6.5 km north of the property and three others taken near the US boundary 10-12 km to the southwest showed low values for most elements and few indicator minerals.

In 1994, Indicator Explorations performed a ground magnetometer survey on a small claim about 30 km west of the Buffalo Nickel Property and concluded that because of the shape and amplitude, the anomaly could be caused by a kimberlite. Depth to bedrock was estimated at 70m. Early in 1995, the company carried out ground magnetometer surveys over its claims, and two of these grids were surveyed in the northeastern part of the current Buffalo Nickel Property.

Elsewhere on the Kim 20-21 claims an oval-shaped magnetic depression from the airborne data was ground tested and found to be undetectable on the ground geophysical survey. The data was very noisy and filtering of the data did not succeed in identifying the magnetic depression.

On the JAM 25 claim (located on the current JAM 2 claim), a positive aeromagnetic anomaly of 130 nT on the airborne survey was replicated on a ground survey and found to be 400 nT on the ground. The anomaly was estimated to be 350×500m, elongated east-west and bedrock was estimated to be at a depth of 50m. It was thought to be related to a diatreme of possible kimberlitic origin and the anomaly was recommended for drilling.

In mid-December, 1995, the JAM 25 claim was drilled and drill hole SEM 95-2 intersected the regolith at 66m and, although poor recovery of the following 32m of core, intersected foliated granodiorite at depths from 89 to 98m (Figure 7, drill holes).

In 1996, Indicator drilled rotary/percussion drill holes SEM 96-4 and, about 105m to the northwest, SEM 96-5 in the same area in the search for kimberlite. SEM 96-4 intersected 68.4m of overburden, followed by 19m of kaolinized granodiorite, followed by fresh granodiorite to 90.7m. Low values were reported for magnesium, chrome and vanadium.

Drill hole SEM 96-5 was centred on the magnetic anomaly about 105m northwest of SEM 96-4 and intersected peridotite at a depth of 65.5-90.8m. Petrographic studies confirmed that the rock is partially altered peridotite. Two whole rock analyses from fresh rock at 87-88m reported 43.9 and 46.9% SiO2, 29.2 and 27.7% MgO, 0.07 and 0.06% K2O and 0.64 and 0.74% Na2O.

As a result of surface weathering the values are lower at shallower depths but from 65m to the end of the hole increase rapidly to more than 1500 ppm Cr, 39% MgO and greater than 1000 ppm Ni. Values for silica decrease over the same interval.

The peridotite body has been estimated at 50m wide, elongated 400m east-west and dipping south.

In 2000, Avalon Development Corp performed geological mapping, magnetometer surveys and rock sampling on tantalum-bearing pegmatite about 55 km north of the Buffalo Nickel Property, and in February 2001, ten holes were drilled for a total of 1442m and additional drilling of 1800m was recommended (Pederson, 2000).

In 2004 William Hood carried out sampling of overburden at two sites east and north of the Buffalo Nickel Project for kimberlite indicator minerals in the search for kimberlite. No indicator minerals were identified in the samples. The northernmost sample of overburden is predominantly from the northeast and composed of pebbles mostly sourced from the Precambrian while the eastern sample is sourced mostly from the Paleozoic carbonate to the northwest (Hood, 2004a).

In 2004 William Hood performed several small geochemical and geophysical surveys on single claims in the Whitemouth area about 30 km northwest of the Buffalo Nickel Project (Hood, 2004b).

Apart from the Buffalo Nickel Property, the only current valid claims in the region are located 23 km north of the project area where of 16 claims area owned by William Hood cover areas mapped as mafic volcanic rocks. These claims adjoin several others owned by William Hood to the east in Ontario.

About 50 km northwest of the Buffalo Nickel Project 33 claims are owned by Shaun Spelliscy and two more by Jean-Pierre Neault in a square block. Claim data for Minnesota is difficult to obtain and no data is available on this area.

Several quarry Leases for mining of peat are valid nine and 20 kilometres to the west. A few are located 10 km to the north but a major quarrying operation is centred about 23 kilometres to the north of the Buffalo Nickel Property.

# 7. Geological Setting and Mineralization

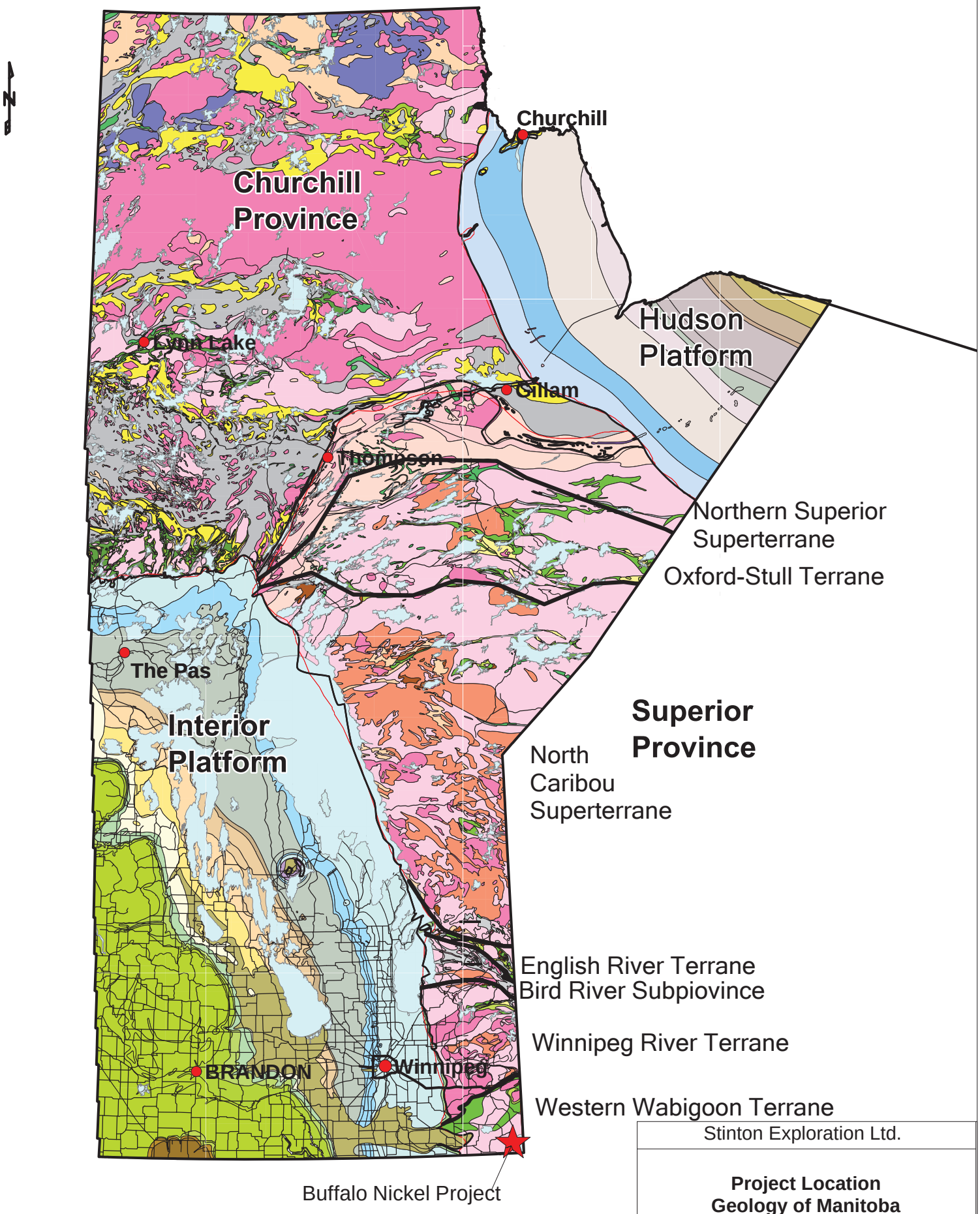
The Buffalo Nickel Property is underlain by rocks of the Wabigoon Subprovince, which forms part of the Superior Province (Figure 8). The Superior Province is a significant geological constituent of the Canadian Shield that covers most of the north-central and north-eastern parts of the North American continent and is composed of rocks of early and middle Archean age that were accreted during the period 2.77-2.72 Ga. After accretion, the Superior Province underwent rifting and faulting, basin sedimentation and the injection of mafic dyke swarms during the Proterozoic.

## Regional Geology

The Wabigoon Subprovince is about 100 km wide and extends about 900 km from southern Manitoba and Minnesota, eastward to the Proterozoic cover of the Nipigon Embayment. Further east, it is covered by the Phanerozoic rocks of the Hudson Bay Lowlands. It may extend to the east of James Bay into Quebec, near the Opinaca River Belt. In central and western Manitoba the Wabigoon Subprovince extends to the west-southwest under the Phanerozoic rocks of the Western Plains where it is cut by the Trans-Hudson Collisional Orogeny.

The following description is largely from Percival (2006). The Wabigoon Subprovince, aged 2.77-2.72 Ga, amalgamated with rocks of the Winnipeg River Subprovince to the north, aged 3.5-2.8 Ga, at about 2.72 Ga and the combined Wabigoon-Winnipeg River Subprovince collided with the southern edge of the Superior Province at about 2.7 Ga. The English River Subprovince, composed of turbidite and located north of the Winnipeg River Subprovince, is thought to have formed as a result of the subduction of Wabigoon-Winnipeg River terrain under the Superior.

The Buffalo Nickel Project is located in the western part of the Wabigoon Subprovince, about half-way between the contacts with the Winnipeg River Subprovince to the north and the Quetico Subprovince to the south.

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**Project Location**
**Geology of Manitoba**

**Buffalo Nickel Project, Manitoba**

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| Date: 2007.08.05 | Figure: 8 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |

Gravity surveys carried out in the western part of the Wabigoon Subprovince indicate that the greenstone belts in the Buffalo Nickel project area may extend to a depth of about 5 km, the batholith complexes to 4-7 km and the late plutons to about 2 km (Card, 1990)

The Western Wabigoon Subprovince contains mostly belts of supracrustal mafic volcanic and sedimentary rocks that have been intruded by large plutons. The supracrustal rocks were emplaced over basement rocks dated at about 2.9 Ga.

The volcanic rocks are dated at 2.74-2.72 Ga and are of tholeiitic composition, representing ocean floor environments, or of calc-alkaline composition representing arc environments. Local sedimentary sequences are present within the belts of volcanic rocks. The plutonic rocks are slightly younger at 2.73-2.66 Ga and the composition ranges from granodiorite to tonalite, diorite, and gabbro.

About 65% of the rocks in the Wabigoon Subprovince are of plutonic origin and 35% are supracrustal rocks, of mostly amphibolite to granulite facies metamorphism. Of the supracrustal sequences, about 90% are mostly tholeiitic and calc-alkaline volcanic rocks and 10% are sedimentary rocks.

Located 57 km north of the Buffalo Nickel Property and 10 km south of the contact with the Winnipeg River Subprovince, the Falcon Lake Intrusive Complex is a concentrically-zoned mafic intrusion similar to an Alaskan-type intrusions, including an elliptical shape, and concentric bands with tholeiitic to alkaline geochemical composition that intruded the supracrustal volcanosedimentary assemblage that extends west from the Lake of the Woods greenstone belt in Ontario. It has been interpreted to be a late- to post-tectonic intrusion composed of gabbro and diorite. Two breccia pipes from the centre of the complex contain gold associated with sulphides in the concentric fracture system.

Located south of the Wabigoon Subprovince, the Quetico Subprovince is composed of mostly steeply-dipping greywacke aged 2.69 Ga, and of migmatite and intrusions consisting of tonalite, mafic to ultramafic intrusions, nepheline syenite and carbonatite.

Throughout the area, extensive zones of glacial till and lacustrine clay from glacial Lake Agassiz, of Pleistocene age, cover the bedrock to a depth of up to 95m. The immediate project area is underlain by organic deposits composed of peat and muck, of very low wetland deposits accumulated in fen, bog, swamp and marsh settings (Matile, 2004).

## Local Geology

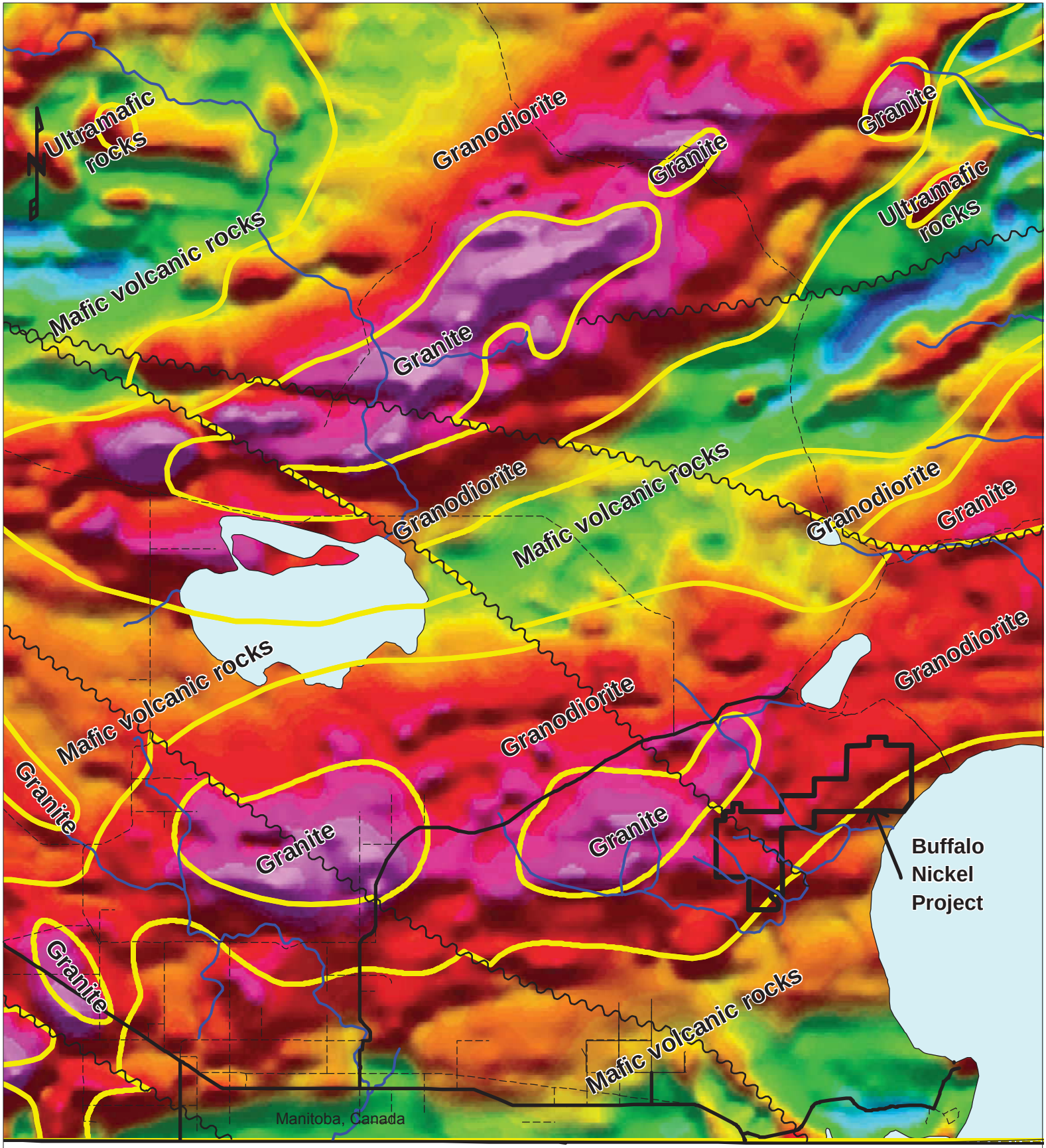
Much of the geology in the local area has been interpreted from a few outcrops located in the northern part of the region, from airborne and ground magnetic surveys over the area, and from a few drill holes (Figure 9).

The Buffalo Nickel Project is situated near the centre of the Wabigoon Subprovince which is underlain by belts of Archean basaltic and andesitic volcanic rocks, occasionally komatiitic, intercalated with tuff, iron formation and sedimentary rocks. The belts strike generally east-northeast and have been intruded by Archean batholiths of granodiorite, quartz diorite and quartz monzonite, some of which have a core of granite. The granitic rocks have also been stretched to the east-northeast (Figure 10).

All rocks have been cut by major faults striking west-northwest and northwest that have both left-lateral and right-lateral displacements. Near the southern boundary of the Wabigoon Subprovince with the Quetico Subprovince 70 km to the south, several major fault zones appear to be thrust zones that may have been created when the Quetico Subprovince was thrust toward the north against the Wabigoon Subprovince.

Mafic and ultramafic intrusive rocks of Archean age dated at about 2680 Ma (Lassen et al., 2000) have been mapped within the Wabigoon and Quetico Subprovinces. These intrusions are earlier in age than the Proterozoic rift-related mafic sills of the Duluth Complex in Minnesota. In Manitoba, they have been mapped as anorthosite, gabbro and peridotite plugs up to 1.5×4.0 km, and are located 30 and 48 km north and 49 km northwest of the Buffalo Nickel Property.

Several of these mafic and ultramafic intrusions also occur in northern Minnesota within the Wabigoon and Quetico Subprovinces. Some of these intrusions have been studied and were described as Archean subvolcanic mafic and ultramafic sills that intrude Archean greenstone belts. They are composed of tholeiitic to komatiitic peridotite, pyroxenite, gabbro and diorite, have been interpreted as pre-tectonic to syn-tectonic in age and are of low to moderate grade of metamorphism.

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Stinton Exploration Ltd.

**Regional Airborne Magnetic Survey Geological Interpretation**

**Buffalo Nickel Project, Manitoba**

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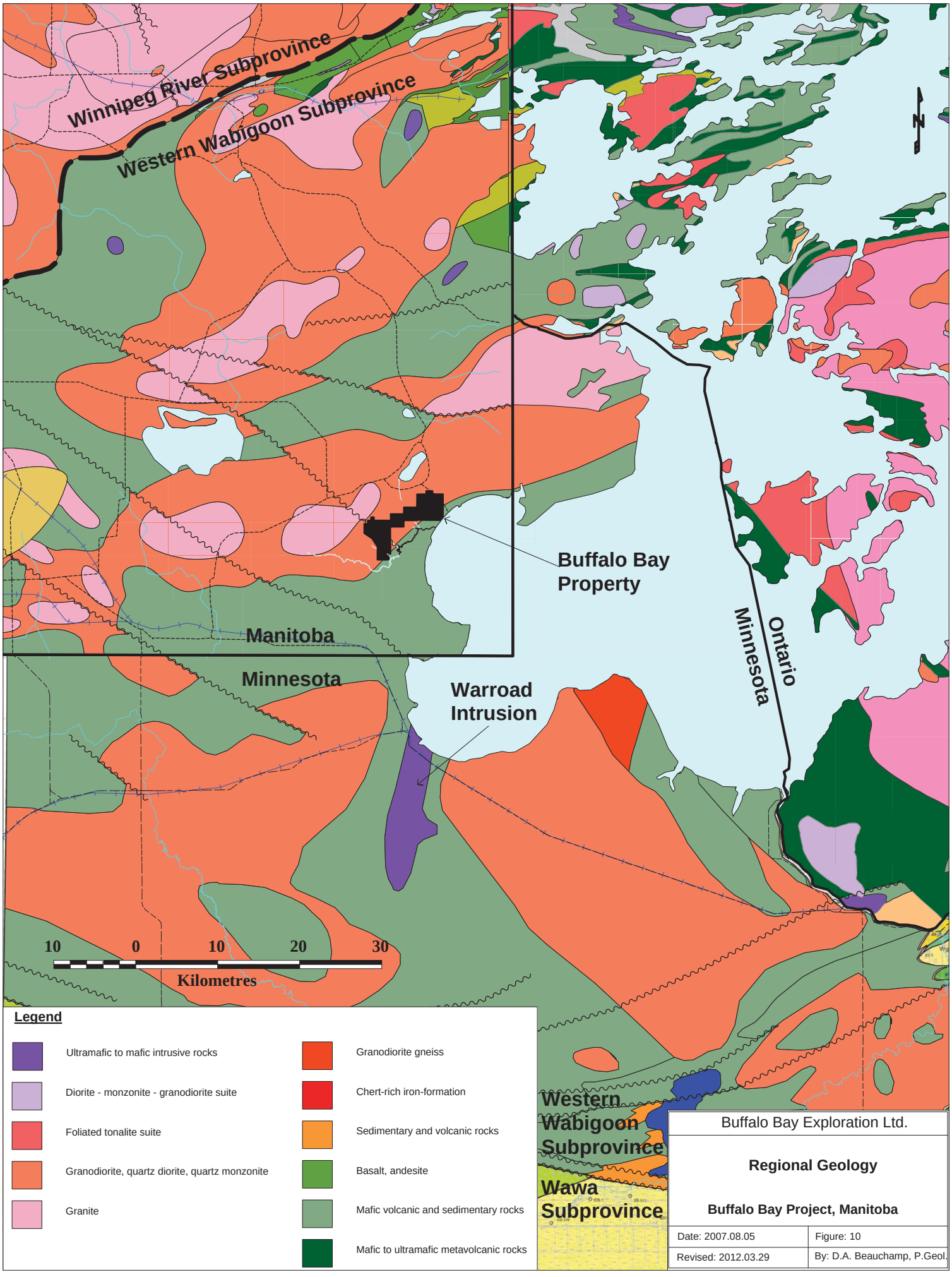
| Date: 2007.08.05 | Figure: 9 |
| Revised: 2012.03.19 | By: D.A. Beauchamp, P.Geol. |




Buffalo Bay Exploration Ltd.

**Regional Geology**

**Buffalo Bay Project, Manitoba**

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| Date: 2007.08.05 | Figure: 10 |
| Revised: 2012.03.29 | By: D.A. Beauchamp, P.Geol. |

At about 5×22 km, the Warroad Intrusion is one of the larger mafic intrusions and strikes north. It is centred in northern Minnesota about 30 km to the south of the Buffalo Nickel project area and has been intersected in at least seven drill holes (Klein et al., 1999). The rocks from the northernmost drill hole, W13-1, consist of gabbro, pyroxenite and peridotite and, one was reported to contain 28.7% MgO, 0.3% Cr, 0.19% TiO2 and 1054 ppm Ni (Lee, 2002). The regional aeromagnetic survey indicates that the Warroad intrusion may extend north into Canada near the Buffalo Point First Nation Reserve, and possibly further northeast into Buffalo Bay.

One of the smaller mafic intrusions in Minnesota, the Winterfire intrusion is located about 100 km southeast of the project area. It shows a sulphide-rich basal contact zones that reported values of 500-1000 ppb Pd, 100-400 ppb Pt, and 50-200 ppb Au over 1-3 m intervals (Klein et al., 1999). About 50 km to the east, in the Rainy River area of Ontario, the intrusions have been extensively explored for platinum-group elements (Lassen et al, 2000).

A series of circular to elliptical aligned airborne magnetic anomalies extending from the Warroad Intrusion to the Buffalo Nickel Property and continuing as far north as the boundary Winnipeg River and Wabigoon Subprovinces has been termed the Warroad or Moose Lake Trend (Lee, 2002).

### Mineralization

A reverse-circulation drill hole intersected peridotite at depths of 55m at the interface of overburden and bedrock down to a depth of 90m and analyses of the material recovered show about 0.1% Ni in the unweathered section of the interval from 65 to 90m. Analyses for platinum group elements have not been reported. There are currently no other mineralized showings or mineralization on the property, but no outcrops have been reported on the property.

# 8. Deposit Types

The geological model for the exploration at the Buffalo Nickel Project is based on nickel-copper vein-type deposits and on disseminated platinum group elements (PGE) in mafic and ultramafic intrusions.

## Nickel-Copper Vein-Type Deposits

Nickel-copper vein-type mineralization occurs with PGE in mafic and ultramafic intrusions in many areas on every continent of the world. The deposits form in mafic and ultramafic magma that forms in the upper mantle and is injected in the crust along major deep-seated faults. These faults play an important role in the localization of the mafic intrusions and for this reason small and larger plugs of ultramafic intrusions can often occur in clusters over a strike length of several tens of kilometres.

The magma usually contains minor quantities of nickel, copper, cobalt, gold and platinum group elements with small quantities of sulphur. As the magma ascends, it cools and the metals coalesce with the sulphur to form immiscible droplets. Some of the sulphur can be sourced from crustal rocks that are incorporated into the magma as it rises (Eckstrand and Hulbert, 2006).

If the magma cools very slowly the sulphide droplets gravitate to the base and may form layered sulphide-rich bands that can contain sufficient nickel, copper and cobalt to become economic, and PGE can be produced as by-products in nickel-copper deposits. If the magma cools more quickly, the copper and nickel sulphide remains disseminated and the economic metals become the PGE and gold which are dispersed in the magma. If there is insufficient sulphur, the metals will concentrate in the silicate minerals and the mineralization becomes sub-economic.

Magmatic deposits are currently the most important source of nickel-copper in the world. Although the deposits can be classified into several sub-types, the major sources of magmatic Ni-Cu-PGE are in Sudbury, Ontario, and at Noril'sk-Talnakh, Russia, but more common examples are at Thompson, Manitoba, at Raglan, Quebec, in the Kambalda, Australia, the Bushveld Complex in South Africa, at Voisey’s Bay, in Labrador and at Lac des Iles, Ontario.

In the Canadian Shield, there are many occurrences of magmatic nickel-copper-PGE deposits, many of which are being re-evaluated and explored as a result of the recent increase in the value of these metals.

Four major types of nickel-copper deposits have been defined by Eckstrand and Hulbert (2006), as follows:

1. Meteorite-impact mafic melt sheet: Deposits at Sudbury, Ontario are the only known examples in the world.
2. Rift- and continental flood basalt-associated mafic sills and dyke-like bodies: Noril'sk-Talnakh, Russia; Jinchuan, China; Duluth Complex, Minnesota; Muskox, Nunavut; and Crystal Lake Intrusion, Ontario.
3. Komatiitic volcanic flows and related sill-like intrusions: Thompson, Manitoba; Raglan and Marbridge, Quebec; Langmuir, Ontario; Kambalda and Agnew, Australia; and Pechenga, Russia.
4. Other mafic/ultramafic intrusions such as at Voisey's Bay, Labrador; Lynn Lake, Manitoba; Montcalm, Ontario; Giant Mascot, BC; Kotalahti, Finland; Råna, Norway; and Selebi-Phikwe, Botswana.

Because of the nature of the geology of the Buffalo Nickel Project area the model-type is of type 4.

The Montcalm nickel-copper deposit is located about 70 km west of Timmins, Ontario, and contains a total resource endowment of about 3.56 million tonnes to a depth of 300m, with an average grade of 1.44% Ni, 0.68% Cu and low PGE content. These resources are not compatible with NI-43-101 and are not located on the Buffalo Nickel property. There is no certainty that such resources can be found on the Buffalo Nickel property.

The sulphide mineralization is hosted within cumulate gabbroic rocks of the Montcalm Gabbroic Complex, dated at 2702 Ma that covers an area of 85 $km^2$. The intrusion is crescent-shaped over an area 8×15km and has intruded iron-rich tholeiitic basalt, and calc-alkaline andesite and dacite (Barrie and Naldrett, 1990). The Montcalm Gabbroic Complex is differentiated into a pyroxenite zone, a gabbro-anorthosite zone and an iron-gabbro. Four types of dykes cut the Complex, including peridotite, pyroxenite, gabbro and granitic dykes. The nickel-copper mineralization is concentrated along bands of sulphidic iron formation that have been identified from magnetic surveys.

Mineralization types at Montcalm include disseminated sulphide, massive and net-textured sulphide, and inclusion-breccia sulphide, the last two of which contain more than 50% sulphide, composed mainly of pyrrhotite, pentlandite and chalcopyrite with minor magnetite, pyrite and violarite ($(Ni, Fe)_3S_4$).

Another nickel-copper occurrence that initiated an important staking rush in 1998 is the discovery at Lac Rocher in northern Quebec where a drill hole intersected 10.8% Ni, 0.25% Cu, 0.23% Co, 601 ppb Pt and 363 ppb Pd over 3.2m in gabbronorite and pyroxenite of the Archean Opatica Subprovince. The mafic rocks intrude the Nipukatasi Granite and Pegmatite Massif near the contact with paragneiss, iron formation, diorite and amphibolite (Bandyayera and Morin, 1999). The Opatica Subprovince has been compared to the Quetico Subprovince of the western Superior Province.

In the southern part of the Wabigoon Subprovince, 100 km southeast of the Buffalo Nickel Project area, massive and net textured sulphide mineralization was discovered by Nuinsco Resources in a mafic-ultramafic host at the Rainy River Project. Drill hole NR95-34 intersected 1.31% Ni, 0.94% Cu, 2.44 g/t Au, 1.25 g/t Pt and 3.32 g/t Pd over 4.86m and later drill hole NR96-51 cut 0.54 g/t Au, 2.26% Cu, 3.81% Ni, 3.97 g/t Pt and 9.04 g/t Pd over 2.47m. The mineralization was traced along a strike length of about 350m and although the zone of mineralization appears small, the width has not been determined (Nuinsco, 2004).

About 1200m southwest of the intersection by Nuinsco, in 2011 Rainy River Resources intersected massive pyrite and pyrrhotite in ultramafic rocks that have intruded altered dacite to rhyolite. The assays reported 3.6% Ni, 1.3% Cu, 1.38 g/t Au and 9.7 g/t Ag over 2.35 m. Two other holes were drilled nearby and intersected mafic and ultramafic rocks that contain sulphide mineralization (Rainy River, 2011).

### Disseminated PGE Mineralization

Disseminated PGE mineralization often occurs in mafic and ultramafic rocks that have not undergone slow cooling process that is often associated with nickel-copper occurrences.

**Table 2**
**Classification of PGE Mineralized Intrusions of Ontario**
**(Vaillancourt et al., 2002)**

| Mineralization Type | Subtype | Examples | Tectonic Subdivision | Tectonic Setting | Composition | Chemical Affinity | Age (Ga) | Mineral Association |
|---|---|---|---|---|---|---|---|---|
| **Type I** (stratiform contact) | | East Bull Lake, River Valley intrusion | SP | CR | M > UM | High-Al-TH | 2.5 | SUL |
| | | Nipissing Diabase | | Large dyke swarm | M >> UM | TH | 2.2 | SUL |
| | | Coldwell Complex | MCR | CR | F-I >> M | ALK | 1.1 | SUL |
| | | Seagull intrusion/ Wolf Mountain | MCR | CR | UM > M | TH | 1.1? | SUL |
| **Type II** (stratabound disseminated) | | Entwine Lake | WBG | RA? | I >> M | CAL | 2.7 | SUL |
| **Type III** (stratiform reef) | Lowermost zone | Coldwell Complex | MCR | CR | F-I >> M | ALK | 1.1 | MAG+ SUL |
| | Ultramafic zone | Chrome-Puddy Lake | WBG | Alpine intrusion? | UM >> M | TH? | 2.7 | CHR |
| | | Nordica | AGB | RA | UM ~ M | TH | 2.7 | CHR |
| | | Mann intrusion | AGB | RA | UM > M | TH - KOM | 2.7 | SIL |
| | Ultramafic-mafic transition zone | Centre Hill Complex | AGB | RA | M ~ UM | TH | 2.7 | SUL |
| | Mafic zone | Crystal Lake Gabbro | MCR | CR | M | TH? | 1.1 | CHR+SUL |
| **Type IV** (hydrothermally mobilized magmatic) | | Lac des Iles | WBG | RA | M >> UM | TH | 2.7 | SUL? |
| **Type V** (tectonically /metamorphically mobilized) | | Rathburn Lake | | CR | M | TH? | ~2.5? | SUL |
| **Other** | | Otto Stock | AGB | RA | F-I > M | ALK | 2.7 | SIL+SUL? |

*Tectonic subdivision: WBG = Wabigoon, SP = Southern Province, AGB = Abitibi greenstone belt, MCR = Mid continent rift; Tectonic setting: CR = continental rift, RA = rifted arc; Composition: F = felsic, I = intermediate, M= mafic, UM = ultramafic; Geochemical affinity: TH = tholeiitic, ALK = alkaline, CAL = calc-alkaline, KOM = komatiitic; Mineralogical association: SUL = sulphide, MAG = magnetite, CHR = chromitite, SIL = silicate.*

From the sampling and study of more than 100 different intrusions, Vaillancourt et al. (2002) developed a classification system for mafic and ultramafic intrusions based on the style of the intrusion and on the resulting PGE accumulations (see Table 2).

Vaillancourt et al. conclude that PGE mineralization occurs in mafic to ultramafic cumulate rocks that are typically in layered intrusions or layered flows, and is associated with many magma types, including komatiitic, tholeiitic, and alkaline magmas. The deposits occur in a several rift-related settings and appear to be most significant in the largest intrusions.

Typical of such mineralization is in far north Quebec at the Qullinaaraaluk occurrence, where Soquem discovered massive, medium-grained olivine pyroxenite with peridotite horizons of probable Archean age that occurs in an intrusion about 250m×750m (Clark, 2001).

The mafic magma has intruded Archean migmatite dated at 2.7 Ga (Baker and Constantin, 2003). The intrusion appears to be unmetamorphosed and has been interpreted as being post-tectonic. Within the intrusion, an area about 10m×30m containing up to 70% sulphides has been mapped where values of up to 2.33% Ni. In other samples the values are up to 1.8% Cu, 0.27% Co, 140 ppb Au, 93 ppb Pd and 323 ppb Pt (Labbé et al., 2005). There have been no resource calculations on this occurrence.

A type-example that is geographically closer is the Lac des Iles PGE deposit within the Wabigoon Subprovince, in Ontario, 411 km east of the project area. The Lac des Iles Mine operated for several years, suspended operations for about 18 months because of low metal prices but restarted production in April 2010.

North American Palladium provided a mineral resource estimate of 8.6 Mt of indicated resources grading 6.29 g/t Pd, 0.419 g/t Pt, 0.395 g/t Au, 0.110% Cu, and 0.136% Ni, and 3.3 Mt of inferred resources grading 5.7 g/t Pd, 0.352 g/t Pt, 0.233 g/t Au, 0.074% Cu and 0.095% Ni. An additional potentially mineable resource of 11.3 Mt with similar grades was also reported (North American Palladium, New Release 16 August 2010). These resources are compatible with NI-43-101 but are not located on the Buffalo Nickel property and there is no certainty that such resources can be found on the Buffalo Nickel property.

The palladium mineralization is low in sulphide content and occurs in the mafic igneous rocks of the Lac des Iles Complex, dated at 2.69 Ga, where the high grade material formed in a breccia zone that contains about 4 g/t Pd. Although the entire Lac Des Iles Complex contains anomalous concentrations of palladium, only the Central Mine Block Intrusion contains economic mineralization. Here, rock types include leucogabbro, melanocratic gabbro, pyroxenite and a few late pegmatite dykes.

Although the deposit has been compared to contact-type PGE mineralization where part of the host rock was assimilated, there is no evidence of assimilation and the mineralization is not located near the contacts. The type of mineralization is more closely associated with the large layered intrusions but the mineralization is in breccia.

The Lac des Iles Complex is one of several mafic and ultramafic intrusions in a region about 40×40km in extent and includes the Legris Lake, Tib Lake, Demars Lake, Wakinoo Lake, Towle Lake, Buck Lake, Taman Lake, and Dog River intrusions as well as several other smaller mafic and ultramafic intrusions (Pettigrew and Hattori, 2002).

## 9. Exploration

No exploration work has been reported on the project area by the current property owner in the last three years.

The last recorded or known exploration consists of ground geophysical surveys and diamond drilling by Indicator Explorations Ltd. in 1995-96 and an airborne survey that was carried out by Granges Exploration prior to that in 1994. The airborne survey was not submitted for assessment to the government but was acquired by a colleague of the current claim owner.

## 10. Drilling

No drilling has been reported on the project area by the current property owner in the last three years.

Three drill holes were performed on the property: One in 1995 and two in 1996 by Indicator Explorations Ltd, of Winnipeg.

Diamond drill hole SEM 95-2 intersected the regolith at 66.0m, reported very poor recovery to a depth of 89m because of kaolinization and then foliated granodiorite to the end of the hole at 98m. The source of the magnetic anomaly that was drilled was not intersected but “magnetic sediment clasts” were reported from the basal till.

In 1996, two rotary and percussion holes were drilled: SEM 96-4 and SEM 96-5. SEM 96-4 intersected kaolinized granodiorite from 68.6m, then fresher granodiorite from 85.3m to 90.7m (EOH). About 105m further northwest, SEM 96-5, centred on the magnetic anomaly, intersected magnetic peridotite at a depth of 65.5-90.8m. Additional details are presented in section 6.0 (Lee, 1996).

## 11. Sample Preparation, Analyses, and Security

Sampling has not been performed by the current claim owners. The material available at the core laboratory is altered, and would be of limited usefulness and reliability in assessing the mineralization because it is from old drill cuttings.

Sampling was performed on the drill holes on the property by Indicator Explorations Ltd. in 1995 and 1996. Although the samples were processed mainly for diamond exploration whole rock and a few metal analyses were carried out on the core samples.

No outcrop has been mapped on the property.

## 12. Data Verification

Because outcrops have not been mapped on the property rock samples have not been analyzed by the author, by the current claim owner or by Stinton Exploration Ltd.

The core available was examined at the provincial core laboratory in Winnipeg. The core from drill hole SEM-95-2 and the drill cuttings from reverse circulation drill hole SEM-96-5 were viewed with a binocular microscope. Although the material from SEM-96-5 is highly weathered and has the consistency of fine sand, the light apple green grains can be readily identified as serpentine, as identified by Lakefield Research in its report (Lee, 1996).

## 13. Mineral Processing and Metallurgical Testing

Not applicable to this property. Mineral processing or metallurgical testing analyses have not been carried out on the property.

## 14. Mineral Resource Estimates

Not applicable to this property. Mineral resource estimates have not been performed on the property.

## 15. Adjacent Properties

There are no immediately adjoining properties.

## 16. Other Relevant Data and Information

Not applicable to this property.

## 17. Interpretation and Conclusions

Mineral occurrences and deposits of copper, nickel and platinum group elements are present in mafic and ultramafic intrusions in many parts of the Wabigoon and Quetico Subprovinces of the Canadian Shield.

Although there are no outcrops on the Buffalo Nickel Project area an airborne magnetic anomaly of 130 nT was confirmed by a follow-up ground survey to correspond to an anomaly of 400 nT elongated to the east. One of three drill holes in 1996 intersected highly altered peridotite from bedrock at 65.5m to the end of the hole at 90.8m.

An airborne magnetic and electromagnetic (EM) survey contracted by Granges Exploration in 1994 shows this magnetic anomaly and several others, some of which are associated with single or multi-line EM conductors on the Buffalo Nickel property. Granges confirmed a number of them by ground geophysical surveys but did not drill any of them.

Since mafic and ultramafic bodies often occur in clusters, the presence of the drilled peridotite indicates that the other magnetic and electromagnetic anomalies are prospective for the discovery of additional, possibly mineralized, mafic bodies on the Buffalo Nickel Project.

The peridotite drilled in 1996 has not been fully evaluated and none of the other magnetic anomalies that are associated with EM conductors on the Buffalo Nickel Project have been drilled. The EM anomalies and conductors associated with some of the magnetic anomalies could represent zones of sulphides in mafic intrusions.

The Buffalo Nickel Project is a property that deserves additional exploration.

## 18. Recommendations

Although some of the areas have been interpreted as granodiorite, a certain number of EM conductors and magnetic anomalies have not been adequately explained and a peridotite intrusion on the property has not been properly evaluated.

It is recommended that an exploration program be carried out on the Buffalo Nickel Project to further evaluate the potential for copper-nickel and PGE mineralization associated with a peridotite that has been identified in a drill hole and with other mafic and ultramafic intrusions that may be present along the EM conductors and magnetic anomalies that were identified 23 years ago on the property and that have not been assessed.

Since outcrops have not been identified on the property and overburden appears to be at least 30-50m thick a ground geophysical program consisting of horizontal loop EM and magnetometer surveys is recommended.

Because of the swampy and low-lying nature of the terrain, the work should be carried out in late fall and winter. Depending on how cold the season, the grid work and ground geophysics could be started in early February, followed by drilling in early March, when the ground is still frozen.

The initial Phase 1 exploration program should comprise about 45 line kilometres of ground magnetometer and horizontal loop EM surveys centred over three grids with known peridotite in the northeast part of the property and with coincident EM conductors and magnetic anomalies elsewhere (See Figure 11). On Figure 6, these areas correspond to zones 13A, B and C, and 11B.

Alternatively, an airborne magnetometer and EM geophysical survey could be carried out over the property if the costs were comparable. The quality and accuracy of airborne surveys are excellent and sufficiently accurate to plan diamond drilling if the results justified it. Results of airborne surveys are as good as ground surveys but they are usually more expensive on smaller projects such as this one because of costs of mobilization and minimum survey size.

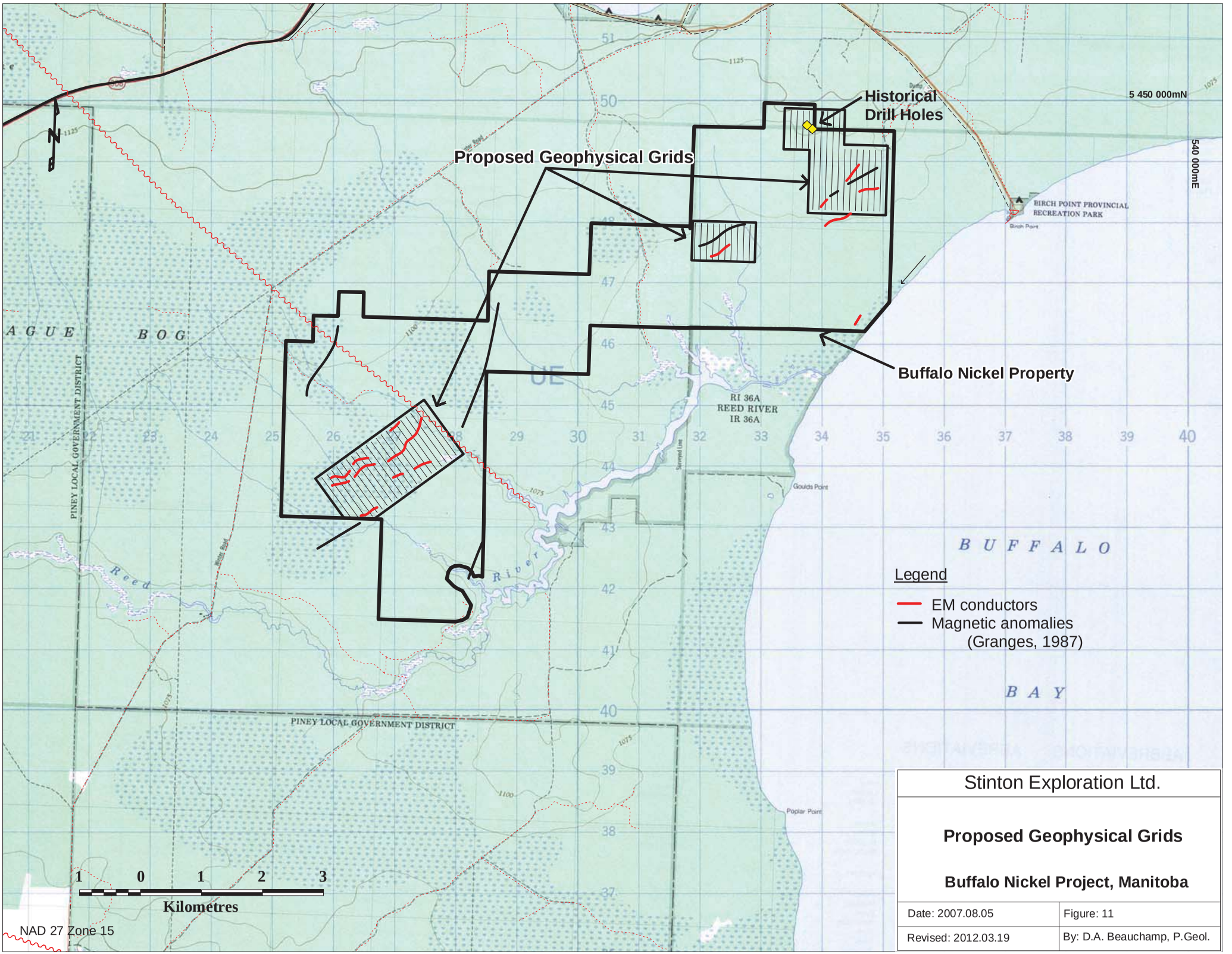
An additional advantage of an airborne survey is that it could be carried out at any time of the year. If a geophysical contractor were shipping equipment across the country or to the region for another property owner Stinton could take advantage of these reduced costs.

Upon the confirmation of the presence of valid geophysical conductors and anomalies, diamond drilling should be carried out on the targets identified. An initial program of six drill holes to a depth of about 125m for a total of 750m of drilling has been budgeted as Phase 2 of the program (Table 3). If disseminated mineralization is intersected in the core induced polarization surveys could be used to further define the target.

Staking of additional claims should also be considered, especially in the northeast part of the claim block, to protect the full extent of the known peridotite. If additional mafic or ultramafic intrusions are discovered, other targets in the region consisting of magnetic high with EM conductors should also be staked, particularly to the southwest of the current claims.

**Table 3**
**Proposed Exploration Budget**

| Activity | | | | | | Total |
|---|---|---|---|---|---|---|
| **Phase 1** | | | | | | |
| Winter road and trails | | | | | $ 10,000 | |
| Linecutting | 45 km | @ | $800 | /km | $ 36,000 | |
| Equipment and supplies | | | | | $ 15,000 | |
| Geophysics: Magnetometer | 45 km | @ | $300 | /km | $ 13,500 | |
| Geophysics: HLEM | 45 km | @ | $800 | /km | $ 36,000 | |
| Geophysical consulting | | | | | $ 3,000 | |
| Contingency | | | 15% | | $ 17,500 | |
| Subtotal: Phase 1 | | | | | | $ 131,000 |
| **Phase 2** | | | | | | |
| Geological consulting | | | | | $ 15,000 | |
| Core sampling | 100 analyses | @ | $ 40 | /sample | $ 4,000 | |
| Drilling | 750 m | @ | $240 | /m | $ 180,000 | |
| Mobilization | | | | | $ 10,000 | |
| Equipment and supplies | | | | | $ 25,000 | |
| Contingency | | | 15% | | $ 35,000 | |
| Subtotal: Phase 2 | | | | | | $ 269,000 |
| Grand Total | | | | | | $ 400,000 |


Historical
Drill Holes
Proposed Geophysical Grids
Buffalo Nickel Property
5 450 000mN
540 000mE
BIRCH POINT PROVINCIAL
RECREATION PARK
RI 36A
REED RIVER
IR 36A
PINEY LOCAL GOVERNMENT DISTRICT
PINEY LOCAL GOVERNMENT DISTRICT
A G U E
B O G
B U F F A L O
B A Y
Reed
River
Goulds Point
Poplar Point
Legend
EM conductors
Magnetic anomalies
(Granges, 1987)
1 0 1 2 3
Kilometres
NAD 27 Zone 15
Stinton Exploration Ltd.
Proposed Geophysical Grids
Buffalo Nickel Project, Manitoba
Date: 2007.08.05
Figure: 11
Revised: 2012.03.19
By: D.A. Beauchamp, P.Geol.

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Dated in Calgary this 26th day of June 2012.

Signed

Daniel A. Beauchamp


Daniel A. Beauchamp, P.Geol., M.B.A.
24 Malibou Road SW
Calgary AB T2V 1W6

## 20. Date and Signature Page

I, Daniel A. Beauchamp of 24 Malibou Road SW, Calgary, AB, hereby certify that:

1. I am an independent consulting geologist;
2. I graduated from the University of Ottawa in 1974 with a honours B.Sc. in Geology;
3. I graduated from the University of Calgary in 1984 with a M.B.A. (Masters in Business Administration) with specialization in finance;
4. I have been a registered member of the Association of Professional Engineers Geologists and Geophysicists of Alberta (APEGGA) since 1980 and my membership number is M29299;
5. I have been a member of the Ordre des géologues du Québec since November 2011 and my membership number is 1614;
6. Except for two years of post-graduate studies and two years of work in the oil and gas industry I have practiced my profession as a geologist since graduation from university in 1974 with companies, both as an employee and as a consultant. I have worked throughout Canada and have managed mineral exploration projects from the grass roots level to early stages of mine development;
7. I have worked as a geologist directing and managing projects in the field in many geological environments including in rocks of Archean to Phanerozoic age throughout Canada carrying out geological mapping, supervising geochemical and geophysical surveys, diamond drilling programs and core logging.
8. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101;
9. I personally examined and studied the literature, assessment reports and company surveys on the property for Stinton Exploration Ltd. and I am familiar with the project area. I visited the property on July 11th, 2007 and on August 15th, 2010;
10. I have had no prior involvement with the property that is the subject of this Technical Report;
11. I am not aware of any material fact or material change with respect to the subject matter that is not reflected in the Technical Report, the omission to disclose which would make the Technical Report misleading;

12. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101. I do not own, directly or indirectly, nor am I under an agreement, arrangement or understanding or expect to acquire any securities of Stinton Exploration Ltd. or any affiliated entity of the Company. I hold no interest, directly or indirectly, in the mineral properties that are the subject of the foregoing report or in any adjacent mineral properties in the area;
13. I have read the National Instrument 43-101 and Form 43-101F1 and this report has been prepared in accordance with these regulations;
14. I consent to the filing of the report titled "Technical Report and Proposed Exploration Program for the Buffalo Nickel Project, Manitoba, prepared for Stinton Exploration Ltd., Winnipeg, MB" and dated 26th June 2012 with any Stock Exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public.
15. As of June 26, 2012 and to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
16. I am responsible for all sections of the report titled "Technical Report and Proposed Exploration Program for the Buffalo Nickel Project, Manitoba, prepared for Stinton Exploration Ltd., Winnipeg, MB" and dated 26th June 2012.

Dated in Calgary this 26th day of June 2012.

Signed

Daniel A. Beauchamp

Daniel A. Beauchamp, P.Geol., M.B.A