GM 67531

Technical report on the Bourier property

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InnovExplo

RESSOURCES MONARQUES RESOURCES

GM 67531

TECHNICAL REPORT ON THE BOURIER PROPERTY

(according to Regulation 43-101 and Form 43-101F1)

Project location

James Bay Region
Province of Québec, Canada
(NTS: 32O14 and 32O15)

(UTM 493790E, 5752240N)
NAD 83, Zone 18

Prepared for:

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1.0 SUMMARY

InnovExplo Inc. ("InnovExplo") was mandated in March 2012 by Yves Caron, Vice-President Exploration of Monarques Resources Inc ("Monarques" or "the issuer"), to complete an evaluation of the project and a Technical Report ("the report") in compliance with Regulation 43-101 and Form 43-101F1 on the Bourier property ("the property") situated in the Nemiscau area of Québec, Canada. The issuer, Monarques Resources Inc, is a Canadian mineral exploration company listed on the TSX Venture Exchange under the symbol MQR. InnovExplo is an independent Mines and Exploration Consulting Firm based in Val-d'Or, Québec.

The author, Bruno Turcotte, MSc, PGeo (OGQ no.453), assisted by Tafadzwa Gomwe, a geologist in training (GIT), completed the report and reviewed all available surveys, data and information deemed adequate and reliable. The author, accompanied by Tafadzwa Gomwe, visited the Bourier property on March 20 and 21, 2011. The author is Qualified and Independent Person as defined by Regulation 43-101.

The Bourier property is approximately 85 km ENE of the village of Nemaska, Québec, on NTS map sheets 32N09 and 32O12. The project is located approximately 450 km NNE of the town of Val-d'Or, Québec (Fig. 4.1). The UTM coordinates for the approximate geographic centre of the property are 493790E and 5752240N (NAD 83, Zone 18).

A claims status list was supplied by Yves Caron, Vice-President Exploration for Monarques. This data was verified using GESTIM, the Québec government's claim management system available from the *Ministère des Ressources naturelles et de la Faune* (MRNFP) via their website at the following address: http://gestim. mines.gouv.qc.ca. The current Bourier property is composed of one block totalling 316 claims covering an area of 15,893.97 ha.

The Bourier property is located within the Opinaca Subprovince. Metagraywacke, derived migmatite, and granite characterize this subprovince. Poly-deformed schists occur at the belt margins, whereas the interior portions are metamorphosed to amphibolite and granulite facies (Percival, 2007). Mineralization in the Opinaca subprovince includes rare-metal occurrences within peraluminous granites and associated pegmatites.

The Bourier property area is characterized by metasedimentary rocks, mainly biotite paragneiss containing minerals typical of regional amphibolite metamorphic facies, and amphibole–plagioclase gneisses (amphibolites) of volcanic origin. The northern boundary of the property is marked by intrusive pink granite. The metasedimentary rocks in the centre of the property are intruded by mafic and ultramafic rocks, granites, pegmatites, and late diabase dykes, the youngest rocks of the area. The amphibolites contain numerous lenses of ultramafic tremolite schist that follow the foliation of these amphibolites.

The property is at an early stage of exploration and some portions are more at a grass-roots stage of exploration. The property has a potential for SEDEX zinc-copper deposits. The area is characterized by metasedimentary rocks, granites and pegmatites. Mineralization is typically semi-massive to massive sulphides composed of pyrrhotite, pyrite and chalcopyrite. Sphalerite, along with thin layers of hydrozincite, is also present within the sulphide assemblage. Magnetite and banded iron formations occur within the area.

The Lapointe site yielded the best channel and grab sample results. Grab samples in this area returned up to 0.3% Zn and up to 1.1% Ag, highlighting a Zn-enriched but Cu-poor area (only 0.008 to 0.03 ppm Cu). The Opera and Cesar sites in the northeast part of the property also showed some of the best results, but mainly for copper (up to 0.2% Cu).

For the soil sampling program, the southwestern end of the property shows higher concentrations in Cu, and Pb. The Lapointe area shows high concentrations in Zn, Ag, and Pb. The area is notably enriched in Zn and depleted in Cu. Other notable sites are Pepino RH T1 and Geai Bleu for their high Au, Ag Cu and Zn concentrations.

The Opera and Caesar sites show Au, Ag and Cu anomalies, but low Zn concentrations. The Au anomalies may indicate the presence of a disseminated replacement gold deposit. This area may resemble the Duval showing or may be an extension of the Duval shear zone.

The drill program targeted an EM and Mag anomaly and confirmed the presence of a SEDEX-type zinc and silver zone. Holes BOU-11-03 (2.2 ppm Ag over 4 m) and BOU-11-09 (1% Zn over 1 m) yielded the anomalous results. Mineralization was intercepted at a vertical depth of 100 m and the data indicates it is open to the east and west. This demonstrates that the EM and Mag anomalies may be close to surface and that these sites should be further explored through soil, grab and channel sampling.

The Bourier property contains geological features that demonstrate a potential for SEDEX-type deposits. However, more exploration work is required to confirm the extension of known sulphide mineralization.

The author is of the opinion that the Bourier property has sufficient merit to continue exploration work. A two-phase program is recommended. **Phase 1** would consist of basic compilation work using GIS software and would include the integration of all diamond drill holes into a single database to complete the compilation maps. A review of all available core should also be performed to standardize lithological descriptions in each drill hole and to produce a lithological interpretation between diamond drill holes. Furthermore, verification of unsampled sections should be done to confirm the absence of mineralization. A new adequate QA/QC protocol designed for the mineralization type observed on the Bourier property should be used. This step would require modifying Monarques' existing internal QA/QC.

A soil sampling program should be conducted over the area where the 2010 diamond drilling program was carried out. This would serve as an evaluation survey to establish the characteristics of the soil over a known occurrence. A follow-up on the Opera and Cesar (northeast) area where a gold anomaly was identified requires more detailed soil analysis involving the reduction of spacing between stations and trenching.

The **Phase 2** objective would be to use the information obtained in Phase 1 to prepare a diamond drilling or stripping and channel sampling program. Notable sites would be the Lapointe, Opera and Cesar areas.

Phase 1 is estimated at $120,000 and Phase 2 at $1,830,000 for a total of $1,950,000. The estimated budget for the exploration program is subject to potential incidentals (e.g., no flying hours due to bad weather conditions) and the real cost may thus differ from the estimated costs.

2.0 INTRODUCTION AND TERMS OF REFERENCE

InnovExplo Inc. ("InnovExplo") was mandated in March 2012 by Yves Caron, Vice-President Exploration of Monarques Resources Inc ("Monarques" or "the issuer"), to complete an evaluation of the project and a Technical Report ("the report") in compliance with Regulation 43-101 and Form 43-101F1 on the Bourier property ("the property") situated in the Nemiscau area of Québec, Canada. The issuer, Monarques Resources Inc, is a Canadian mineral exploration company listed on the TSX Venture Exchange under the symbol MQR. InnovExplo is an independent Mines and Exploration Consulting Firm based in Val-d'Or, Québec.

In 2011, Monarques was created as a spin-off from Nemaska Exploration Inc (now Nemaska Lithium Inc; TSX-V: NMX), a lithium exploration and development company. Nemaska Lithium is a major shareholder of Monarques. The report represents the first report since the transfer of Lac Arques property owned by Nemaska Exploration to Monarques, which resulted in the formation of a new property named Bourier.

InnovExplo has reviewed the data provided by the issuer and/or by its agents. InnovExplo has also reviewed other information sources such as government databases that handle assessment work and the status of mining titles.

The author, Bruno Turcotte, MSc, PGeo (OGQ no.453), assisted by Tafadzwa Gomwe, a geologist in training (GIT), completed the report and reviewed all available surveys, data and information deemed adequate and reliable. The author, accompanied by Tafadzwa Gomwe, visited the Bourier property on March 20 and 21, 2011. The author is Qualified and Independent Person as defined by Regulation 43-101. Technical support at InnovExplo was provided by Marcel Naud. Venetia Bodycomb of Vee Geoservices performed the linguistic revision.

InnovExplo has reviewed and appraised the information used in the preparation of this report, and believes the information used to prepare the report and to formulate the interpretations, conclusions and recommendations herein is valid and appropriate considering the status of the project and the purpose for which the report is prepared. The author has a good knowledge of mineral deposit exploration models in Archean and Proterozoic terranes. The author fully researched and documented the conclusions and recommendations made in this report.

3.0 RELIANCE ON OTHER EXPERTS

The author, Bruno Turcotte, MSc, PGeo (OGQ no.453), a Qualified and Independent Person as defined by Regulation 43-101, was contracted by the issuer to study technical documentation, visit the property, and recommend a work program if warranted. The main author reviewed the mining titles, their status, any related agreements, and any technical data supplied to them by the issuer (or its agents) or collected from public technical information sources.

Yves Caron, Vice-President Exploration of Monarques, supplied documentation for the Bourier property mining titles and their status. InnovExplo is not qualified to express a legal opinion with respect to the property titles, current ownership, or possible encumbrance status.

Many of the geological and technical reports that cover the property area were prepared prior to the implementation of National Instrument 43-101 in 2001 and Regulation 43-101 in 2005. However, the authors of such reports appear to have been qualified and the information prepared according to standards that were acceptable to the exploration community at the time. In some cases, the data is incomplete or does not fully meet the current requirements of Regulation 43-101. The author has no reason to believe that any information used in the preparation of the present report is invalid or contains misrepresentations.

The author, Bruno Turcotte, MSc, PGeo (OGQ no.453), believes that the information used to prepare the report and its conclusions and recommendations is valid and appropriate considering the status of the project and the purpose for which the report is prepared.

The author, Bruno Turcotte, MSc, PGeo (OGQ no.453), by virtue of his technical review of the project's exploration potential, affirms that the work program and recommendations are compliant with Regulation 43-101 and CIM technical standards.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Bourier property is approximately 85 km ENE of the village of Nemaska, Québec, on NTS map sheets 32N09 and 32O12. The project is located approximately 450 km NNE of the town of Val-d'Or, Québec (Fig. 4.1). The UTM coordinates for the approximate geographic centre of the property are 493790E and 5752240N (NAD 83, Zone 18).

4.2 Mining titles status

A claims status list was supplied by Yves Caron, Vice-President Exploration for Monarques. This data was verified using GESTIM, the Québec government's claim management system available from the *Ministère des Ressources naturelles et de la Faune* (MRNFP) via their website at the following address: http://gestim. mines.gouv.qc.ca.

In May 2008, Nemaska Exploration Inc (now Nemaska Lithium Inc) signed an agreement to acquire a 100% interest in the Lac Arques property in the province of Québec. At the time, Lac Arques was composed of 775 map designated claims. This property contained the Bourier area claims. This agreement was modified in November 2008. In relation with this agreement, Nemaska Exploration issued 5,000,000 common shares and made payments amounting to $420,000. Nemaska Exploration was also committed to pay to Alain Champagne, who represents six (6) other people (Jean Lafleur, Guy Bourassa, René Lessard, François Champagne, Thérèse Proulx and Nicole Arpin), a maximum of $1,000,000 according to the achievement of certain stages of work and results on the property, which are defined as follows:

a) $50,000 if and when the Company will have realized a $2,500,000 minimum of exploration expenses on the property;
b) $150,000 if and when the Company will have realized $5,000,000 of cumulative exploration expenses on the property;
c) $300,000 upon obtaining an independent pre-feasibility study; and
d) $500,000 upon obtaining an independent feasibility study confirming the feasibility of production stage of the property.

In the case of a commercial production on the Lac Arques property, Nemaska Exploration must pay Alain Champagne (2.4%) and Guy Bourassa (0.6%), a total of 3% NSR on all metals produced from the property. According to the terms of the Lac Arques Purchase and Sale Agreement, Nemaska Exploration could, at any time before the expiry of a 3-month delay after declaration of production, reduce the NSR to 2% by paying an amount of $1,000,000 in two equal instalments. The first instalment was payable at the date of exercise of the right, and the second, at the latest 90 days from the first payment.

Pursuant to the letter of amendment to the Lac Arques Purchase dated November 12, 2008, Nemaska Exploration acquired 26 additional claims from Alain Champagne for a consideration of $1,200 representing claiming costs. Such claims are located in the eastern part of the Lac Arques property. Since November 12, 2008, Nemaska Exploration has abandoned 217 map-designated claims.

In June 2011, Monarques agreed to purchase all rights, titles and interests owned by Nemaska Exploration (now Nemaska Lithium Inc) in the Lac Arques, Lac des Montagnes and Lac Levac properties for a purchase price of $7,500,000 by issuing an aggregate of 18,750,000 common shares at a price of $0.40 per common share. At the time, the Bourier property was composed of one block totaling 291 claims covering an area of 14,506 ha.

On September 21, 2011, Monarques acquired 25 claims to the northeast of the Bourier property. The current Bourier property is composed of one block totalling 316 claims covering an area of 15,893.97 ha (Fig. 4.2).

4.3 Environment

According to GESTIM, the Bourier property is subject to an exclusion area where exploration is prohibited (Fig. 4.2). This area is designated to Reservoir R11, part of Hydro-Québec's hydroelectric installations.

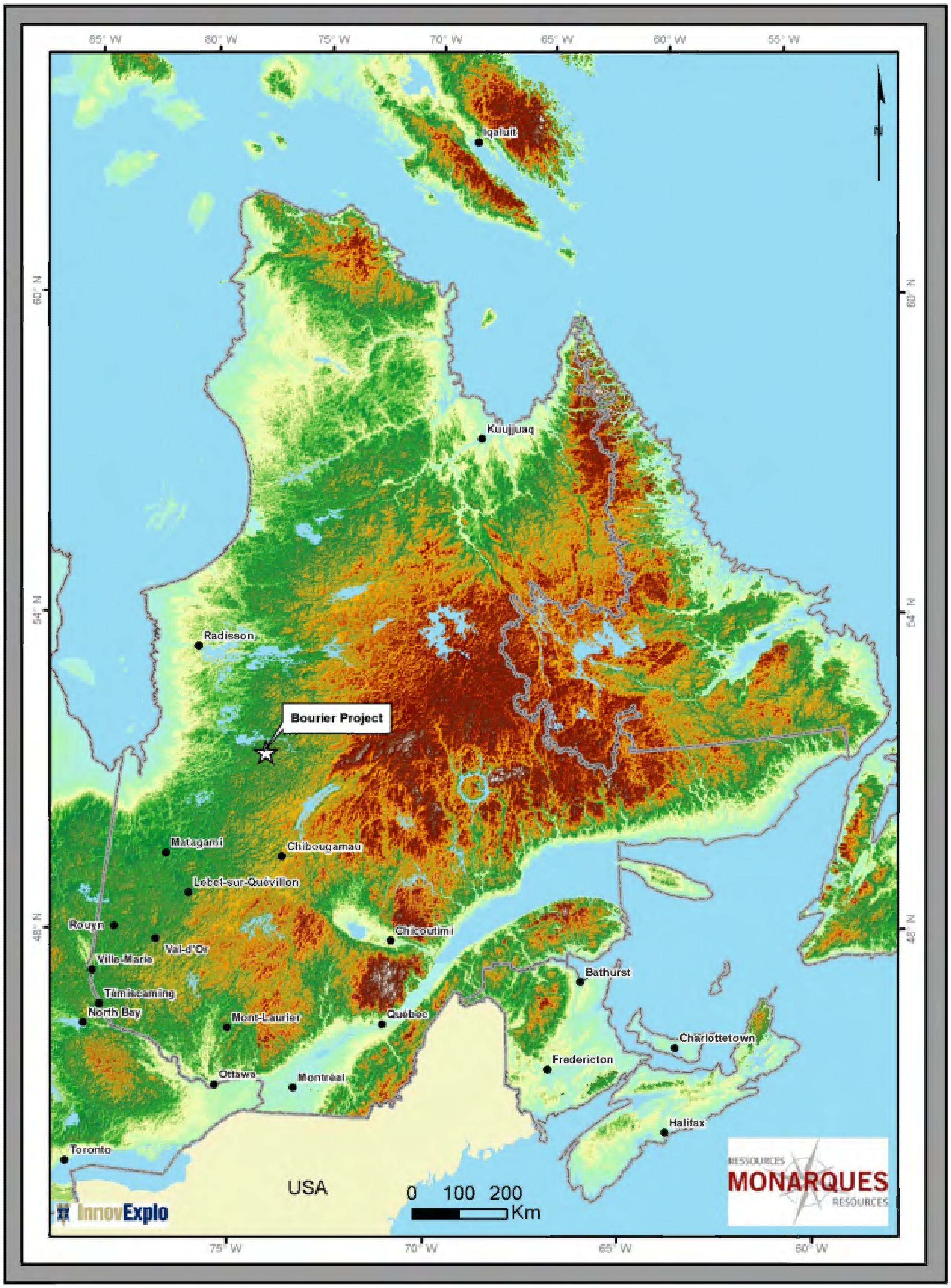

Figure 4.1 – Location of the Bourier property in the province of Québec

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5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Because of the size of the property, which extends 50 km in an NE-SW direction, a helicopter must be used to access most parts of the property. The SW part of the property can be also be accessed via a gravel road (Fig. 5.1).

The climate of the area is sub-arctic. This climatic zone is characterized by long, cold winters and short, cool summers. Daily average temperatures range from -20°C in January to +17°C in July. Break-up usually occurs early in June, and freeze-up in early November.

There is no mining infrastructure on the Bourier property. However, Hydro-Québec has several facilities in the area of the Bourier property, including the Poste Albanel and Nemiscau electrical stations (Fig. 5.1). The village of Nemaska and the *Relais Routier Nemiscau* (Nemiscau truck stop and camp) belonging to the Cree Construction and Development Corporation (CCDC), located approximately 70 km west of the Bourier property, can also be used to house workers and service the property. The Nemiscau airport, 75 km west of the Bourier property, is serviced by Air Creebec and chartered flights.

The Bourier property shows a relatively flat topography (Fig. 5.2) where the maximum difference in elevation between the lowest and highest point does not exceed 55 metres. Like much of the surrounding area, the Bourier property is covered by a mix of swamp and black spruce forest. As observed in drill holes on and in the vicinity of the property, overburden thickness generally varies from 0 to 15 metres. There is no permafrost at this latitude.

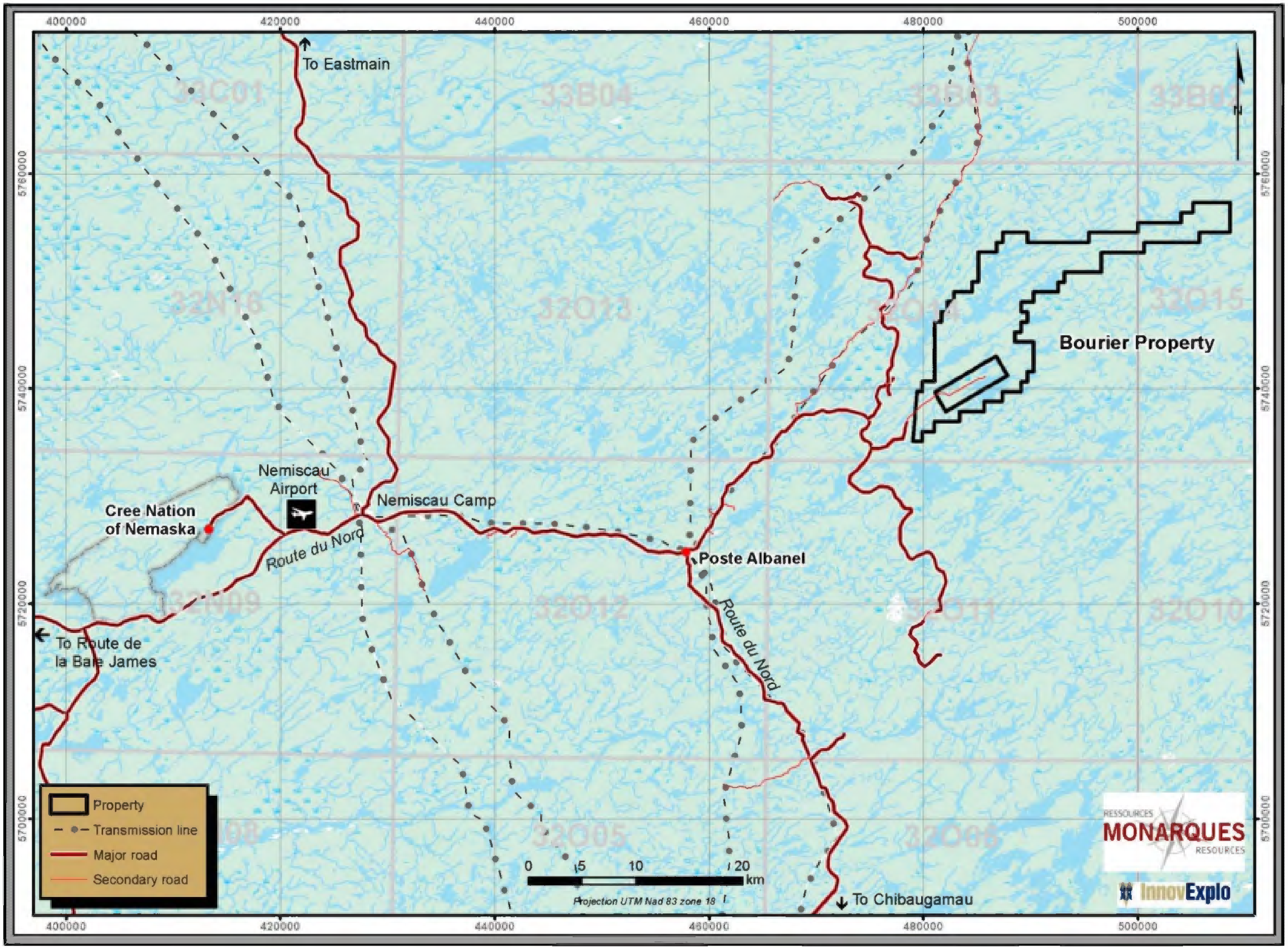

Figure 5.1 – Accessibility and physiography in the Bourier property area

Figure 5.2 – Picture showing the topography and an old emplacement of a Monarques exploration camp on the Bourier property

6.0 HISTORY

The Bourier area was subject to geological surveys and studies by the Québec Government in the 1960s (Valiquette, 1964, 1965) as part of the James Bay area, and a geological map was published in 1975 (Valiquette, 1975). To date there have been no mineral resource or reserve estimates calculated for this property.

Extensive lake geochemistry and lake sediment data compilation was carried out in the area in 1975 and 1976 (Gleeson, 1976; Cannul, 1975). Dubé et al. (1975) compiled the geological data, producing a summary report on the rock types occurring in this area. The southwestern section of the property was covered by a regional magnetic airborne INPUT survey carried out in 1981 by *Société de Développement de la Baie James* (SDBJ) (Fortin, 1981). This survey highlighted several inputs associated with magnetic highs. SDBJ also carried a preliminary study on the mineral potential of this area (Marleau, 1979).

In 2006-2007, Landmark Minerals carried out exploration work for uranium that included the southwest part of the property. Samples were collected (Penney and Hulstein, 2008) based on an airborne magnetic and radiometric study (Ghanem and Boileau 2006). Landmark was looking specifically for pegmatites enriched in uranium. The findings identified multiple zones of bedrock mineralization in pegmatites that closely coincide with airborne radiometric anomalies. Results of up to 448 ppm U across 1 metre were identified, and selected grab samples returned up to 890 ppm U and soil samples up to 1260 ppm U.

In June 2009, Geophysics GPR International Inc was mandated by Nemaska Exploration Inc to survey the Lac Arques property. GPR flew a helicopter-borne magnetic, time-domain electromagnetic and gamma-ray spectrometry geophysical survey (Létourneau and Boivin, 2009). The survey was composed of two (2) partially superimposed blocks for a minimum coverage. The survey was conducted on the Lac Arques property, including the southwestern section of the Bourier property. In the summer of 2009, thirteen (13) of the EM anomalies were visited as part of an exploration program. An advanced interpretation of these results was carried out in 2009 (Boivin, 2009) at the request of Nemaska Exploration Inc. Boivin identified a possible Ni-Cu anomaly (NI-10) that is located to the south west section of the Bourier property, i.e., the eastern extreme of the area covered by the survey. To the north of Cabot Lake, which lies in the Bourier property, sulphide rich samples in ultramafic rocks were discovered. Samples from this outcrop returned high Ni (1,236 and 1,016 ppm) and Cu (2,261 ppm) values.

In 2010, a time-domain EM helicopter-borne and magnetic survey was flown east of Bourier Lake as a follow-up to the EM conductor discovered in 2009. This was carried out by Geophysics GPR international Inc (Létourneau and Paul 2010). This program covered the eastern section of the Bourier property, giving a more complete coverage of the area. Numerous anomalies associated with both the Mag and EM features were located. In 2011, Nemaska Exploration Inc requested an advanced interpretation of the results obtained from the 2010 survey (Boivin 2011). This advanced report identified several near surface Ni-Cu anomalies that were recommended for exploration.

In 2010, Nemaska Exploration also conducted an extensive geochemical soil survey, 324 soil samples were taken in the Bourier lake area. The survey concentrated on the EM anomalies discovered in 2009 and 2010. Surface observations identified an exhalative horizon with rhyolites, (which are most likely - metasediments) outcropping along an identified EM anomaly (Théberge, 2010). Three (3) areas containing anomalous As, Zn, Cu and Fe were identified. These areas were interpreted as good indicators of possible volcanogenic massive sulphide (VMS-type) orebodies. The areas were stripped and four (4) grab samples and some channel samples were taken from some of the identified EM anomalies, although the results were never published. Various anomalies were identified during this program, including the presence of sphalerite mineralization (internal unpublished data).

Table 6.1 – Summary of historic work carried out on the Bourier property

Year	Company	Work	Results	Reference
1964 - 1965	MRNF	• Geological mapping	• Map	Valiquette (1964, 1965)
1975	MRNF	• Geological characterization	• Identification of greenstone belts and map of the Nemiscau River area	Valiquette (1975)
1975 - 1981	SDBJ, Ministère des Ressources naturelles	• Lake sediment geochemistry • Data compilation of exploration work • Magnetic airborne survey	• Identification of several inputs • Identification of iron oxide deposits and Cu-rich potential in this area.	Gleeson (1976) Cannul (1975) Dubé et al. (1975) Marleau (1979) Fortin (1981)
2006 - 2007	Landmark Minerals	• Helicopter-borne magnetic and radiometric spectrometer survey • Prospecting – soil and grab sampling	• Identification of several anomalies • Confirmation of anomalies and some anomalous U values coinciding with radiometric anomalies	Penney and Hulstein (2008) Ghanem and Boileau (2006)
2009	Nemaska Exploration Inc	• Helicopter-borne EMosquito II electromagnetic, magnetic and radiometric survey • Advanced interpretation of above study	• Report with recommendations for ground follow-up and drilling • Identification of anomalous high (NI-10), recommended for Ni-Cu exploration targeting	Letourneau and Boivin (2009) Boivin (2009) Geophysics GPR International Inc
2009		• Geological mapping and prospecting • Compilation of airborne surveys	Identification of possible Ni-Cu targets	Théberge (2011b)
2010		Helicopter-borne time-domain EM survey covering the eastern section of the Bourier property	Numerous EM anomalies identified	Letourneau and Paul (2010)
2010		• Mapping of Mag and EM anomalies • Geochemical soil sampling • Locate peridotite and any mineralization • Mechanical stripping of zone identified by grab samples	• Maps determining source of anomalies • Identification of As-Zn-Cu-Fe anomalies • Mineralization details • Massive sulphide showing identified at stripped location	Théberge (2010) Michaud Lévesque et al. (2011)
2011		• Advanced interpretation of 2010 survey	• Identification of several near-surface probable Ni-Cu anomalies	Boivin (2011) for Geophysics GPR International Inc.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional geological setting

The Archean Superior Province (Fig. 7.1) forms the core of the North American continent and is surrounded by provinces of Paleoproterozoic age to the west, north and east, and Mesoproterozoic age (Grenville province) to the southeast. Tectonic stability has prevailed since approximately 2.6 Ga in large parts of the Superior Province. Proterozoic and younger activity is limited to rifting of the margins, emplacement of numerous mafic dyke swarms (Buchan and Ernst, 2004), compressional reactivation, and large-scale rotation at approximately 1.9 Ga and failed rifting at approximately 1.1 Ga. With the exception of the northwestern and northeastern Superior margins that were pervasively deformed and metamorphosed at 1.9 to 1.8 Ga, the craton has escaped ductile deformation.

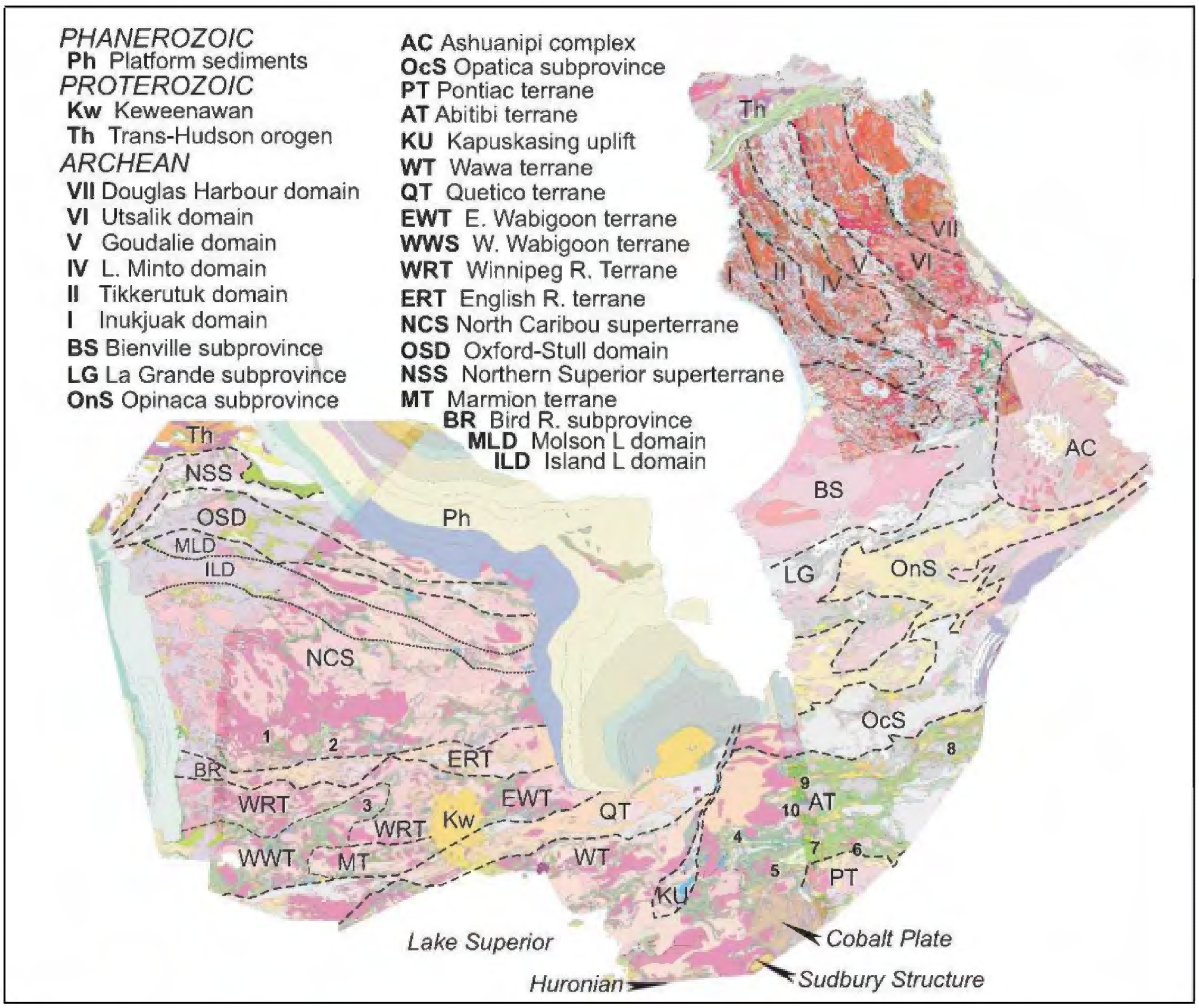

Figure 7.1 – Mosaic map of the Superior Province showing major tectonic elements, from Percival (2007). Data sources: Manitoba (1965), Ontario (1992), Thériault (2002), Leclair (2005).

A first-order feature of the Superior Province is its linear subprovinces of distinctive lithological and structural character, accentuated by subparallel boundary faults (e.g., Card and Ciesielski, 1986). Trends are generally east-west in the south, west-northwest in the northwest, and northwest in the northeast (Fig. 7.1). The term "terrane" (Fig. 7.1) is used in the sense of a geological domain with a distinct geological history prior to its amalgamation into the Superior Province during the 2.72 Ga to 2.68 Ga assembly events. A "superterrane" shows evidence for internal amalgamation of terranes prior to the Neoarchean assembly. "Domains" are defined as distinct regions within a terrane or superterrane.

The Bourier property is located within the Opinaca Subprovince (Fig. 7.1). Metagraywacke, derived migmatite, and granite characterize this subprovince. Poly-deformed schists occur at the belt margins, whereas the interior portions are metamorphosed to amphibolite and granulite facies (Percival, 2007). Mineralization in the Opinaca subprovince includes rare-metal occurrences within peraluminous granites and associated pegmatites.

7.2 Local Geological Setting and Property Geology

According to the regional geology published by the *Ministère des Ressources naturelles et de la Faune du Québec* (MRNF), the northeast part of the Bourier property is situated within the Lac des Montagnes volcano-sedimentary belt.

The area is characterized by metasedimentary rocks, mainly biotite paragneiss containing minerals typical of regional amphibolite metamorphic facies, and amphibole–plagioclase gneisses (amphibolites) of volcanic origin (Valiquette, 1975). The northern boundary of the property is marked by intrusive pink granite (Fig. 7.2). The metasedimentary rocks in the centre of the property are intruded by mafic and ultramafic rocks, granites, pegmatites, and late diabase dykes, the youngest rocks of the area. The amphibolites contain numerous lenses of ultramafic tremolite schist that follow the foliation of these amphibolites.

The biotite paragneiss crops out mainly in the low-lying ground. The paragneiss incorporates sills of mafic rock (amphibolites) and ultramafic rocks, metavolcanic layers, granite stocks and dykes, and pegmatite masses. These rocks dip on average 35° to the southwest (Valiquette 1975).

The ultramafic rock in outcrop is mainly serpentinite, although narrow sills of ultramafic amphibole rocks are also present. These rocks may be crosscut by pegmatite dykes.

Several granite intrusions cut the metasedimentary rocks. In some areas the granite intrudes the biotite gneisses. This granite is usually massive with very weak gneissic texture.

The pegmatite dykes or sills cross-cut all the other rocks with the exception of the diabase. The pegmatites occur as two (2) sorts: pink, associated with oligoclase gneisses and granite, and white, associated with metasedimentary rocks. White pegmatites are generally fine to coarse grained containing muscovite, almandine garnet, black tourmaline (schorl), magnetite and biotite. Muscovite grains can be up to a few centimetres in size

The pink pegmatite ranges from fine to a very coarse grained variety comprising very large microcline crystals reaching up to 30 cm long. Besides quartz, microcline and plagioclase, the pegmatites also contain magnetite as large crystals up to 15 cm in length. Accessory minerals are apatite and garnet with trace amounts of spodumene.

Diabase cuts the other formations in two preferential directions: N35° and N60°. On the map in Figure 7.2, there are two distinct dykes that crosscut the rock assemblages, but only one (1) cuts across the Bourier property and this dyke is not described by Valiquette, although it may have a similar texture to the dyke described to the west of Lac Lemare. This dyke is medium to coarse grained at its centre with grain size gradually decreases to aphanitic at the contact. Alteration is mainly epidote.

7.3 Mineralization

Recent mapping of the northeast sector of the Bourier property identified several mineralized outcrops (Michaud Levesque and Auclair, 2011). The findings are summarized here. These observations are similar to those observed in the central and western parts of the Bourier property.

Mineralization typically consists of semi-massive to massive sulphides composed of pyrrhotite, pyrite and local trace amounts of chalcopyrite. The sulphide layer varies from a few centimetres to almost 2.5 metres in thickness to a total normally between 7 and 10 metres. Where visible, chalcopyrite is present as disseminated grains within the massive sulphide. Sphalerite was difficult to identify, being present in very low concentrations, and may be present only locally. Certain samples contained thin layers of a zinc carbonate, possibly hydrozincite, an alteration product of the sphalerite present in the rocks. The host rocks are primarily metasediments, quartzite, and the contact with small pegmatitic bodies. In numerous cases the sulphide bands contain metre-sized quartzite enclaves rich in garnet, biotite and minor amphibole. The garnet-rich metasediments are deformed, and in outcrops they are usually lenticular, gossanous, and form positive relief features.

Magnetite and the larger banded iron formation layers are locally mineralized. Mineralization is low, at 10% pyrite and pyrrhotite. In some cases weakly mineralized garnet-rich sediment layers are located adjacent to magnetite layers. Pyrite and pyrrhotite are present as disseminated fine grains or as massive layers. Certain layers contain quartz eyes and cherty clasts indicative of exhalative sulphide deposits. In some localities the sulphide appears to have been remobilized; white quartz bands and pegmatitic breccias are in direct contact with the sulphides at these localities.

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8.0 DEPOSIT TYPE

8.1 Sedimentary exhalative (SEDEX) deposits

As stated by Goodfellow and Lydon (2007), sedimentary exhalative deposits (SEDEX) are bodies composed of Zn, Pb and Ag bound in sphalerite and galena. These deposits are normally tabular and are interbedded with iron sulphides and basinal sedimentary rocks. The formations were deposited on the seafloor and in associated sub-seafloor vent complexes from hydrothermal fluids vented into mostly reduced sedimentary basins in continental rifts.

The bulk of the ore is contained in a stratiform sulphide body with a typically high aspect ratio (lateral extent to maximum stratigraphic thickness). Because most SEDEX deposits have an aspect ratio of 20 or more, the most common morphology is represented by sheets and tabular lenses of stratiform sulphides up to a few tens of metres in thickness and more than a kilometre in length (Large, 1983).

Vent-proximal deposits are characterized by four distinct facies: 1- bedded sulphides, 2- vent complex, 3- sulphide stringer zone, and 4- distal hydrothermal sediments. Near the center of the fluid-up-flow represented by the stringer zone, the bedded sulphides are characteristically in-filled, veined, and variably replaced by a higher-temperature mineral assemblage, producing a vent complex (Goodfellow et al., 1993). The distal hydrothermal sediment probably represents plume fallout that has been dispersed by bottom currents or, alternatively, clastic sulphides shed from sulphide mounds. Vent distal deposits, however, are typically weakly zoned, well bedded, and conform to the basin morphology. There is no evidence of the type of zone refining that accompanies veining, infilling, and replacement of bedded sulphides by typically higher-temperature assemblages. This is what characterizes vent-proximal deposits (Goodfellow et al., 1993).

The bedded facies in both distal and proximal deposits is composed of sulphide minerals, other hydrothermal products such as carbonate, chert, barite and apatite, and non-hydrothermal clastic, chemical and biogenic sedimentary rocks. The dominant sulphide mineral in most deposits is pyrite, although in some deposits, pyrrhotite is predominant. The main economic minerals are sphalerite and galena, although chalcopyrite is an economically important mineral in a few deposits.

Although many SEDEX deposits are closely associated with an underlying hydrothermal feeder zone, hydrothermal alteration has not been well documented and mapped at most deposits. Alteration minerals that have been reported for SEDEX deposits include quartz, muscovite, chlorite, ankerite, siderite, tourmaline, and sulphides. The sulphide content of an alteration zone is typically low, but pyrite, pyrrhotite, galena, sphalerite, chalcopyrite, tetrahedrite, and arsenopyrite may be present. Hydrothermal alteration associated with SEDEX deposits is commonly widespread and extends for hundreds of metres into the pre- and post-ore sedimentary sequence and up to several kilometres laterally from the deposit. The nature and extent of hydrothermal alteration and mineralization in the feeder zone depends to a large degree on the mineralogy and physical properties of footwall sediments, the temperature and chemical composition of hydrothermal fluids, and hydrostatic pressure or water depth (Goodfellow et al., 1993).

SEDEX deposits occur in intra-cratonic and epicratonic sedimentary basins (Large, 1980). The tectonic settings include intra-cratonic rifts driven by mantle plume, reactivated rifted margins, and far-field back-arc rifting. Most SEDEX deposits formed during periods of tectonism typically manifested by fault reactivation, intrabasin clastic sedimentation, and in many cases magmatism represented by volcanism and/or sill emplacement. Most deposits occur in reduced marine basins that formed during the sag phase of basin history, adjacent to deeply penetrating faults. The ideal basinal architecture for the formation of SEDEX deposits is a continental rift basin with at least 2 to 5 km of coarse-grained permeable clastics and related volcanics and/or volcaniclastics that form the syn-rift phase overlain by an impermeable cap or seal of basinal shales and/or carbonates (Lydon, 1983; Large, 1986).

8.2 Disseminated and replacement gold deposit

Disseminated and replacement gold deposits occur in host rocks of both volcanic and sedimentary origin (Poulsen, 1996). The best Archean example of a volcanic-associated deposit is Hemlo (Ontario) in the Superior Province. Sulphide "replacement" orebodies, such as those at Island Mountain, British Columbia and Kretza River, Yukon Territory, are examples of sediment-associated deposits of this type.

Disseminated and replacement gold deposits have notable similarities and significant differences in their geological settings at the district scale (Poulsen, 1996). In most cases, the deposits occur in linear belts containing a diversity of lithological units with subparallel contacts. Mafic rocks can be regionally important. When they are present and well preserved, the mafic units are interpreted to be volcanic flows. Felsic rocks at these deposits can be ascribed to both volcanic and sedimentary origins. In the Hemlo district, both volcaniclastic rocks and wacke are present.

Intrusions form a significant proportion of the rocks in most of the districts containing disseminated gold deposits (Poulsen, 1996). These take the form of stocks and dykes, ranging from mafic to felsic composition and from pre- to post-tectonic timing.

Regional dynamothermal metamorphism of low to medium grade affected the rocks in all districts containing these deposits (Poulsen, 1996). Deposits can occur in rocks at the transition from greenschist to amphibolite facies. Where rocks of the upper greenschist and amphibolite facies are present, the presence of diagnostic minerals, such as cordierite and andalusite, and co-existing sillimanite-kyanite indicates the metamorphism was of low to moderate pressure.

The rocks were penetratively deformed during the regional metamorphism, and this has resulted in at least one generation of tectonic fabrics that overprints the main lithological units (Poulsen, 1996). In most cases, a strong foliation, amplified in discrete fault zones, strikes subparallel to the regional lithological trend. Again in most cases, minor folds have been noted to be contemporaneous with foliation, and the transposition of bedding into parallelism with foliation is an attribute in all known cases.

Disseminated and replacement deposit gold orebodies are commonly stratabound at the scale of a district (Poulsen, 1996). This is attributed to the fact that they occur within, and along strike of, well-defined lithotectonic packages of rocks. Furthermore, they commonly occur at contacts between distinctive lithological units or solely within a particular unit. The lenticular to tabular shape of most orebodies is such that they are geometrically concordant with their host rocks. Individual deposits commonly comprise several subparallel orebodies that are arranged in a stacked fashion or along strike from one to another. The long axes of orebodies are commonly parallel to other linear fabrics in a district.

Ore within these deposits are sulphide-bearing, commonly schistose rocks in which the proportions of sulphides and the nature of the silicate hosts differ from orebody to orebody and from deposit to deposit (Poulsen, 1996). The ore is composed mainly of pyrite, pyrrhotite, arsenopyrite, chalcopyrite, sphalerite and galena. With few exceptions, deposits have low base metal contents (less than one percent combined metal), and gold contents exceed those for silver. Arsenopyrite is a common constituent.

Sericitic alteration is a common feature of most deposits (Poulsen, 1996). The sericite or muscovite and/or biotite in higher grade metamorphic assemblage occurs with quartz in mineral assemblages containing few phases, and in abundances that preclude formation by metamorphism of an unaltered protolith. Orebodies in volcanic environments are closely associated with zones of potassic (microcline) alteration or zones of silicification enclosed by aluminous alteration (andalusite, pyrophyllite, paragonite, cordierite, chloritoid, and staurolite).

The sulphide contents of many of these deposits are sufficient to produce geophysical responses and, owing to the disseminated nature of the sulphides, induced polarization methods should be the most effective (Poulsen, 1996).

9.0 EXPLORATION

From mid-July to early August 2011, exploration, drilling and mapping work was carried out on the Bourier property. Figure 9.1 shows the Bourier property and all the work carried out in 2011. The main objective of the program was to identify the source for the electromagnetic anomaly (EM) identified on the geophysical report submitted in 2010 (Boivin 2011). A secondary objective concentrated on the eastern section of the property was to collect more information on an exposed escarpment identified in 2010. A total of 509 grab samples, 273 channel samples and 1,662 soil samples were analyzed for base and precious metal concentrations. Prospecting was carried out using a Beep Mat to detect geophysical anomalies to a depth of 2 to 3 metres. Where the overburden permitted, the exploration team was able to expose some of the rock that was conductive or magnetic. Where the overburden was too deep for manual stripping, the location and the Beep Mat signal were noted. Exposed outcrops were mapped and a total of 737 GPS points were collected.

9.1 Mag and TDEM Survey

In September, Prospectair conducted a helicopter-borne magnetic (Mag) and time-domain electromagnetic (TDEM) survey for Monarques. The survey covered most of the properties with the eastern section passing over part of the Bourier project (Desaulniers, 2011).

9.2 Mapping

The outcrops were mapped and the identified rocks correspond with those mapped by the MRNF. The identified units comprised gneiss and quartz-biotite schist. In this area, the orientation is N70° with a subvertical dip.

The metasediments in the central portion of the property are enriched in mica and garnet and show an east-west orientation. Towards the north the metasediments are more gneissic or banded in texture with intercalated layers of amphibolite. The massive and semi-massive sulphide layers are principally within the region containing the garnet-rich metasediments. Layers of quartzite are also associated with the mineralized layers. In various areas, layers of magnetite are intercalated within the metasediments. The most significant iron formation layer, up to 10 metres in thickness, is located to the southwest of the study area and in contact with the central garnet-rich metasediment. Granitoid formations are situated mainly to the southwest. Pegmatitic intrusions, generally metres in size, are prevalent throughout the study area.

9.3 Grab Samples

During 2011, various grab samples were collected throughout the property (Fig. 9.8) in conjunction with the channel sampling. In one case, sampling concentrated on an outcrop of rusted iron rich meta-sediments in the southwest part of the property. This area had been sampled before by Nemaska Exploration in 2010, but the sample density was deemed insufficient.

The base metal concentrations for the grab samples are relatively low; the highest concentration is 0.37% for Zn and 0.39% for Cu. Analysis of the data shows that the results may be divided into two (2) distinct sectors: one (1) where the Zn concentration is high (>0.1%) but Ag and Cu concentrations are very low; the other where Cu concentration is high (>0.1%) but samples are depleted in Zn and Au. One (1) sample has up to 3.0 g/t silver, although both Zn and Cu are low. Concentrations in Au and Pb are negligible.

The Zn-rich samples occur within quartzite containing between 1 and 25% pyrrhotite and between 1 and 10% pyrite. Sulphides are mainly disseminated with some isolated mineral clusters. The Cu-rich samples are located within metasedimentary or schist with up to 15% pyrrhotite, 2% pyrite and up to 2% chalcopyrite. The Ag-rich sample is located within a horizon of massive sulphides 2.5 metres in length but open to the north and south. The sulphides comprise 80% pyrite with 5% chloritized feldspar and 5% black chert. The best results are summarized in Table 9.1 and located in Figure 9.2.

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Table 9.1 – Best grab sample results from the Bourier property

Sample	Sector	Easting (UTM NAD 83 Zone 18)	Northing (UTM NAD 83 Zone 18)	Elevation (m)	Description	Ag (ppm)	Cu (ppm)	Zn (ppm)
42007	Central	491378	5750022	317.6	Quartzite with 2% PO	0.41	930	1,160
42016		491357	5749975	315.0	Quartzite with 20 to 25% PO and 1% PY.	0.92	236	3,640
42028		491311	5749899	301.5	Quartzite with blue quartz eyes. Disseminated 10% PO and 10% PY.	1.11	298	1,120
42034	North-east	501014	5754277	381.5	Quartzite with 10% PO and 1% PY clusters, trace CP. Zones with coarser grains. Presence of green quartz eyes.	0.20	99.8	1,120
42035		500839	5754159	393.8	Quartzite with PY clusters (3%) and 1% disseminated PO. Minor mica.	0.60	79.8	3,270
42510		500991	5754127	392.1	PO (2-4%) 1-4 mm, PY (1-2%) 1-3 mm, CP within metasediments rich in garnet and biotite. The conductor continues 10 m to the east, under the overburden.	1.40	1,080	64
42512		501198	5754221	376.7	Small layer with <5% PO +PY, disseminated garnet and mica, chloritized. Host is schist.	1.69	2,030	49
42518		501245	5754244	391.4	Garnet-rich layer with PO (5%) + PY (3%). Pervasive chloritization, occurrence of micas. 20x30 cm zone with fine-grained PO (<0.1 mm) up to 15% locally. Layers of magnetite within 1 or 2 m sulphides. Metasediments are generally schistose with lineation.	2.13	3,900	19
42519		501870	5754389	399.1	Rust-coloured zone 1 m in size, folded. Garnet abundant + BO (5-8 mm) PY 2% and PO 1%	1.25	1,355	18
42520		501965	5754063	369.3	Garnet-rich metasediment. Disseminated PO 2% + PY 3% trace magnetite, with chlorite + QZ. Host rock schistose and strongly folded.	1.05	1,250	18

Sample	Sector	Easting (UTM NAD 83 Zone 18)	Northing (UTM NAD 83 Zone 18)	Elevation (m)	Description	Ag (ppm)	Cu (ppm)	Zn (ppm)
42523	Bourier 2	491378	5750022	317.6	Possible metasediments, PO <15-20% locally, PY 2%, CP tr-1%. Sulphide zone is 0.3 m: small beds alternating with QZ (1-2 cm). Layers rich in PO (30-40%) with disseminated BO <1 mm. Alteration is chlorite and amphibolite. Foliation 70° or subvertical.	1.03	1,055	44
42681	Bourier 2	491357	5749975	315.0	Sulphide horizon, generally massive, 2.5 m in length but open to north and south. 80% PY 3-10 mm in size. Located in fine mm bedding of exhalative nature. 5% chloritization and feldspar, black chert (5%) 1-3 mm and CP 1-3 mm. Moderate magnetism, <2% PO fine grained and disseminated. Some zones with semi-massive sulphides containing 20-40% PY with QZ and CL	3.05	176.5	22

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9.4 Channel Sampling

Certain outcrops were selected for sampling of long sections of rock. Samples were selected based on recorded conductor strength, observed mineralization, and accessibility of the rock surface using a rock saw. Thirteen (13) sites were sampled.

A total of 87 channel samples were taken. Figure 9.3 identifies the samples sites and highlights the best concentrations. The samples were analyzed for base metal and precious metal concentrations at the ALS Chemex laboratories in Val-d'Or.

Gold values in channel samples reached a maximum of 0.008 ppm and will not be discussed further; likewise for lead, which had a maximum value of 94 ppm Pb. The elements of greatest interest are Zn, Cu and Ag, and the highest concentrations are summarized in tables 9.2 to 9.5. The best results are from the Lapointe area, with other high values clustered in the southwest, central and northeast parts of the property (Fig. 9.3).

Notable sites are RH T2 with 0.18% Zn over 6 metres containing 0.41% Zn over 0.5 metre, Pepino (T1) yielded 0.13% Zn over 5 metres containing several 0.5-metre samples ranging from 0.11% to 0.23% Zn. The Opera site yielded 1.5 ppm Ag over 1.5 metres, but zinc values are low (0.002% to 0.006% Zn). The Lapointe area contains two (2) sites of interest, one (1) with 0.18% Zn over 4 metres and the second with 0.18% Zn over 1.5 metres. Copper concentrations are low, returning less than 0.05%.

Field observations included massive sulphides hosted by quartz-rich sediments at the Whitefly locality, and an exhalative horizon within quartz-rich sediments at the Pepino locality. Both sites were identified by Beep Mat and are covered by 30 to 60 cm of overburden. A summary of the geological observations for each site, along with the best results, is provided in tables 9.2 to 9.5.

Table 9.2 – Best results from the channel samples from the Bourier property

Sample	Site	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	From (m)	To (m)	Description	Ag (ppm)	Cu (ppm)	Zn (ppm)
42209	Whitefly	489741	5751459	329.9	3.5	4	Massive PO, trace CP. Qtz eyes 3 to 20 mm.	0.77	195	1340
42218	Whitefly	489740	5751461	322.4	7.5	8	Massive PO, 1% SP and 5% PY.	0.66	138	1210
42233	Whitefly	489744	5751456	325.8	2.5	3	Semi-massive PY within greenish quartzite and chert.	1.61	48	304
42254	Pepino T1	492951	5752346	323.1	6	6.5	Silicified rock, 5% SP, 2% PO+PY	0.35	153.5	1140
42255		492951	5752346	323.8	6.5	7	Silicified rock, 3% SP.	0.35	143	1320
42256		492950	5752347	323.8	7	7.5	Silicified rock, trace CP and SP, 2% PO and PY. Clusters of PY and CP associated with a QZ vein.	0.3	532	1890
42257		492950	5752347	324.8	7.5	8	Silicified rock, trace CP, 1-2% SP, 2% PY and trace PO within a fractured structure.	0.34	153	2280
42258		492950	5752348	325.3	8	8.5	Silicified rock, host to QZ vein with trace CP, clusters of PY and PO (1-2%), 1% SP.	0.27	218	776
42259		492949	5752348	325.5	8.5	9	Silicified rock, massive PO and PY vein of 2 cm, trace CP, 1% SP. 5% PO and PY.	0.38	185.5	943
42260		492949	5752349	325.5	9	9.5	Quartzite with trace CP and SP. 2% PO and PY. Sulphides along fractures in breccia. Chert present.	0.66	732	1130
42261		492949	5752349	324.8	9.5	10	Quartzite with trace SP and trace CP associated with fractures, disseminated 2-3% PY and PO. Chert present.	0.37	499	1660
42263		492949	5752349	324.1	10	10.5	Quartzite with beige chert, trace SP, PO and PY found along fractures in breccia. In total, 2% disseminated sulphides.	0.24	294	685
42264		492948	5752350	323.4	10.5	11	Grey quartzite. Chlorite present. Trace CP and SP, 3% PY. Possible amphibole.	0.31	301	1360
42267	Pepino T2	492969	5752341	316.4	1	1.5	Silicified rock with trace CP and 1% PY+PO disseminated. 5 cm zone of massive sulphide, mainly PO. Quartz eyes.	1.14	1760	535

Table 9.3 – Best results from the channel samples from the Bourier property

Sample	Site	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	From (m)	To (m)	Description	Ag (ppm)	Cu (ppm)	Zn (ppm)	Zn weighted average (ppm/m)
42287	Creuse1	493780	5752241	493780	9.5	10	Fine-grained quartzite with massive sulphides. 60% PO, zones of massive PO and zones of layered PO. 5% PY clusters. 2% CP. Presence of large QZ eyes up to 3 cm. Trace SP.	0.64	1165	971	
42298	RH T1	493720	5752217	319.5	4.5	5	Semi-massive to massive PO with 1% SP, 1% CP and 10% QZ eyes.	0.43	558	1080	1646.7/6
42299		493719	5752217	319.5	5	5.5	15 cm massive sulphide, mainly PO with 2% PY. Mica in host rock metasediment.	0.73	356	2040	
42300		493718	5752218	319.8	5.5	6	Fine-grained sediment, chert zone with 85° dip. 5-10% sulphides, galena?	0.29	127	1820	
42305	RH T2	493701	5752228	317.4	0	1	Grey schist, fine-grained, non-magnetic, presence of SP, GL and PY (up to 10%). Trace CP.	0.68	191	1520	
42306		493700	5752229	316.4	1	1.5	Semi-massive galena, 1-2% PO, host rock chert.	0.64	197	1620	1771.6/6
42307		493700	5752229	316.2	1.5	2		0.55	181	1800	
42308		493700	5752230	316.2	2	2.5		0.72	220	1020	
42309		493699	5752230	316.4	2.5	3	Fine-grained quartzite with white mica, 20% PO, 10% GL. Trace SP.	0.76	378	2000	
42310		493699	5752231	316.4	3	3.5		0.55	191.5	2110	
42312		493699	5752231	316.6	3.5	4	Trace sphalerite, 2% PY clusters, 2% PO, semi-massive GL in silicate-rich host rock.	0.95	399	1940	
42313		493698	5752232	317.1	4	4.5		0.47	204	4130	
42314		493698	5752232	317.8	4.5	5	1% CP, 20% PO, 15% GL, silicate-rich host rock.	0.55	401	829	
42315		493698	5752233	318.3	5	5.5	25 cm of PO, trace to 1% CP. Sharp contact with following layer.	0.78	400	550	
42316		493697	5752233	319.3	5.5	6	QZ Vein with 5% sphalerite and 1-2% CP. Host rock is silicate-rich. 10% PO, disseminated.	0.52	598	2220	

Table 9.4 – Best results from the channel samples from the Bourier property

Sample	Site	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	From (m)	To (m)	Description	Ag (ppm)	Cu (ppm)	Zn (ppm)	Zn weighted average ppm/m
42327	Geai Bleu	494527	5751915	326.5	0.5	1	Metasediment with garnet, white-green QZ, 1% PO, trace SP.	0.17	126	1460	1250/1
42328		494527	5751915	326.5	1	1.5	10 cm metasediment with garnet, QZ (chert). 40 cm of massive sulphide, Followed by CL, white QZ, 1-2% CP, 15% PY clusters, trace SP, rest is PO.	0.82	879	1040	
42334		494525	5751919	326.5	3.5	4	Folded green chert within metasediment with garnet, 5% PO and 5% PY.	0.45	361	2990	
42335		494524	5751919	326.5	4	4.5	Massive sulphides PO with 3% PY, trace CP, 10% QZ grains, 3% CL-rich clasts.	1	1055	591	
42344	BF1	494603	5751893	317.8	2.5	3	Quartzite? 50% layered PO+PY, 5% GL, 1% SP, trace CP.	0.69	198.5	4840	3310/1
42345		494603	5751893	317.8	3	3.5	Quartzite with 20% layered PO+PY, trace GL.	0.71	236	1780	
42359	AD	494238	5751967	335.3	0.5	1	30 cm of metasediment with 10% Garnet and 10% PO. 20 cm of massive PO, trace SP, flow texture, and clasts (3%).	0.2	275	1380	
42373	Lapointe 1	491370	5750004	306.3	1	1.5	Mineralized bluish layer with 15% PY+PO.	0.36	150	1460	1841.5/4
42374		491369	5750004	306.3	1.5	2	Qtz vein. Green colouration, with trace SP and 5% PY+PO	0.42	185.5	592	
42376		491369	5750004	306.5	2	2.5	20% of PY+PO.	0.4	207	3170	
42377		491368	5750004	306.8	2.5	3	Quartzite (grey) with 20% blue quartz and 10% PY+PO.	0.39	191	602	
42378		491367	5750005	307.0	3	3.5	Quartzite (grey) with 5 to 10% PY+PO. Trace sphalerite. Host rock schistose.	0.29	185	98	
42379		491367	5750005	306.5	5	5.5		0.6	241	3100	
42380		491366	5750006	306.5	5.5	6		0.35	203	3680	
42381		491366	5750006	306.8	6	6.5	Quartzite (grey) with 5% PO and clasts of blue QZ.	0.27	153.5	2030	

Table 9.5 – Best results from the channel samples from the Bourier property

Sample	Site	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	From (m)	To (m)	Description	Ag (ppm)	Cu (ppm)	Zn (ppm)	Zn weighted average ppm/m
42390	Lapointe 1	491361	5750010	309.2	10	10.5	25 cm of quartzite, 25 cm of mica schist with 15% PO and trace GL.	0.2	106	2400	1773.3/1.5
42392		491361	5750011	309.7	10.5	11	Quartzite with 15% PO+PY disseminated, schistose with white mica. QZ vein present.	0.27	155	1880	
42393		491360	5750012	310.1	11	11.5	Horizontal contact is sharp. 25% sulphides with trace SP. Broken fragments of white QZ. Increasing sulphides with depth.	0.19	74.8	1040	
42412	Lapointe 2	491341	5749934	303.2	5.5	6	Massive sulphide: 70% PO + 1% PY, trace CP, trace SP and 30% QZ eyes.	0.47	412	1140	
42589	César T2	500359	5753975	384.2	1.5	2	Banded metasediment 1-10 mm, 15% PO and 5% PY concentrated in layers rich in garnet and mica. Garnet only present in sulphide-rich layers.	0.63	41.1	1340	
42665	Opéra	499513	5753892	334.7	0.5	1	Massive sulphide with 85% PY, fractured. Bedding alternates 97% PY and 80% PY. 2% QZ fragments sub-rounded 5-8 mm, 10% angular chert 1-5 mm, and 3% chlorite fragments 1-3 mm. Weakly magnetic, 1% PO.	1.56	277	37	1.5/1.5 (Cu)
42666		499513	5753891	334.4	1	1.5	Massive sulphide (70%) with 90% PY, 3% QZ fragments sub-angular 4-8 mm, 17% chert 2 mm. 30% layers (1-2 mm thick) rich in white QZ (1-5 mm) containing 10% PY+PO (<1 mm).	1.36	217	56	
42667		499513	5753890	334.4	1.5	2	Massive sulphide with 85% PY, massive, and 2% PO, trace disseminated CP, 5% QZ fragments sub-angular. Grey 5-25 mm, 10% chert <1 mm aligned and angular, chloritized fragments, thinly layered. A few layers 5-10 mm with BO+QZ+GR , and SP.	1.6	270	17	

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9.5 Soil Geochemistry Study

In August of 2011, a geochemical study was carried out mainly on the 2010 EM and Mag anomalies. The aim of the study was to provide additional information in order to better detect geochemical anomalies that would identify future target sites for stripping.

A grid was planned with a spacing of 100 m between lines and 25 m between samples. A total of 1,605 samples were collected. Samples were taken from the enriched B horizon. Samples were not collected at all stations due to constraints on accessibility (presence of water) and the composition of the suitable soil type, i.e., the absence of the B horizon.

Significant results for Au, Zn, Ag, Cu and Pb are shown in figures 9.4 to 9.8. Gold concentrations range from trace amounts to 0.2 ppm Au and appear scattered with some minor grouping in the centre of the Bourier property. High concentrations are also located to the eastern portion of the property. Zinc concentrations range from trace amounts to 115 ppm Zn, and the highest concentrations are located in the central part of the property. Concentrations of silver range from trace amounts to 0.69 ppm Ag, and the highest concentrations are located in the southwest and central parts of the property, with one occurrence to the northeast. Copper concentrations range from trace amounts to 170 ppm, and are also concentrated in the same vicinity as the zinc results, although there are few samples that are enriched in both Zn and Cu. Concentrations of lead range from 19 to 25 ppm Pb. The higher concentrations are near the centre and in the southwest of the property.

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10.0 DRILLING

In 2011, Monarques Resources drilled 15 NQ holes on the Bourier property, for a total of 2,214 metres. Drill hole locations are summarized in Table 10.1. The drill company was Forage NQ of Val-d'Or. Drill holes were spaced 200 and 300 m apart, drilling mainly towards the south. Figure 10.1 shows the locations of the drill holes.

Holes were surveyed every 50 metres down-hole using a Reflex unit (single shot - FLEXIT). At the end of the hole, the location was verified using a handheld GPS. A total of 459 samples were prepared and assayed at the ALS Chemex laboratories in Val-d'Or. The data was transferred to a central database upon completion of the drill program.

Table 10.1 – Bourier property diamond drill holes from 2011

DDH	YEAR	Easting (UTM83 Z18)	Northing (UTM83 Z18)	Elevation (m)	Azimuth	Dip	Length
BOU-11-01	2011	481920	5743590	350.0	130	-45	150
BOU-11-02	2011	482130	5743900	300.0	130	-45	114
BOU-11-03	2011	482570	5744370	315.4	150	-45	150
BOU-11-04	2011	482805	5744551	323.6	150	-45	162
BOU-11-05	2011	483272	5744821	317.6	150	-45	132
BOU-11-06	2011	483659	5745015	312.8	150	-45	150
BOU-11-07	2011	483886	5745110	313.0	150	-45	150
BOU-11-08	2011	484152	5745213	303.4	150	-45	156
BOU-11-09	2011	484386	5745321	303.2	150	-45	150
BOU-11-10	2011	484625	5745510	299.8	150	-45	183
BOU-11-11	2011	484887	5745608	305.8	150	-45	153
BOU-11-12	2011	485254	5745833	325.8	150	-45	165
BOU-11-13	2011	485496	5745931	311.8	150	-45	138
BOU-11-14	2011	485782	5746063	314.5	150	-45	132
BOU-11-15	2011	486028	5746221	322.6	150	-45	129
TOTAL BOURIER							**2 214**

The objective of this program was to test the observed EM and magnetic anomalies and to test the continuity of the sulphide mineralization. All holes except BOU-11-08 intercepted sulphides down to a vertical depth of 100 m and data interpretation indicates continuity of the mineralized horizon. In BOU-11-03, a semi-massive sulphide mineralization covers 10 m of core and has a weighted average concentration of 0.18% Zn, 0.029% Cu and 0.98 ppm in Ag. This sulphide mineralization is located very close to surface, at only 10 m down the hole. Sulphide occurrences and zinc concentrations are summarized in Table 10.2. Overall, the Zn values in the sulphides range from 0.006% to about 0.18%. The exception is for hole BOU-11-06 where the Zn concentration is 1.12% over 0.5 m and this is within an interval of sulphide-rich graphite.

Overall the high silver concentrations range between 1.8 and 2.6 ppm Ag (Table 10.3). The highest gold value is 0.08 ppm Au and will not be discussed further. Copper concentrations are also low with the highest concentration at 511 ppm. Although Pb concentrations are very low, 3 samples yielded high values above 0.1%. Zinc is the most interesting element, with values up to 1.2% Zn (Table 10.3).

The drill logs do not show thickening and/or enrichment of mineralization as targeted. The descriptive data and key laboratory results demonstrate a zinc and silver mineralized SEDEX-type zone. In hole BOU-11-03, schistose metasediments containing trace sphalerite and galena yielded 2.2 ppm Ag and 0.11% Zn over 4 m. In BOU-11-09, graphite-rich metasediments with up to 12% pyrite, 7% pyrrhotite and 1% sphalerite yielded 1% Zn over 1 m, with a weighted average of 0.77% over 1.9 m, and 1.3 ppm Ag over the same length. In BOU-11-11, fractured quartzite and graphite host rock with 2% combined pyrrhotite and pyrite yielded 0.7% Zn and 1.9 ppm Ag over 1.5 m. Table 10.3 shows the significant intercepts during the drill program.

Table 10.2 – Summary of Sulphide mineralization in Drill holes

Hole No.	Sulphides present	From (m)	To (m)	Length (m)	Description	% Zn
BOU-11-01	Yes	47.6	48.10	0.5	70% Py and 30% Qtz fragments.	0.06
BOU-11-02	Yes	15.85	16.20	0.35	30% Po as disseminated clusters.	0.009
		45.1	53.1	8.0	Exhalative sediment grading towards a massive sulphide.	0.50
BOU-11-03	Yes	6.1	16.30	10.20	10% Py+Po clusters or veinlets within graphitic metasediment.	0.18
BOU-11-04	Yes	48	52.6	4.6	Layers of massive sulphide, 60-70% sulphides, intercalated with quartzite.	0.02
		52.6	68.6	16.0	Exhalative sediments with 10% Py, 5% Po and fragments of Qtz; magnetite also present.	0.05
BOU-11-05	Yes	63.5	65.62	2.1	Semi-massive sulphide hosted by quartzite. 30% Py, 15% Po, trace sphalerite.	0.05
		65.6	66.5	0.9	Massive sulphide with 85% Po and 3% Py. Presence of rounded quartz grains.	0.05
BOU-11-06	Yes	77.7	83.90	6.2	Mineralized quartzite. Breccia with 20% Po and 10% Py.	0.05
		83.9	84.4	0.5	Graphite-rich sulphides with 20% Py, 10% Po and 3% Sp, all present as clusters.	1.12
BOU-11-07	Yes	49.4	51.1	1.7	Massive sulphide with 75% Po, 8% Py, trace Cp and trace AsPy.	0.03
BOU-11-08	No				Graphite horizon 31 m below the overburden.	
BOU-11-09	Yes	32	33	0.4	Quartzite vein (40 cm) with 15% Po, 7% Py and 5% sphalerite	0.14
BOU-11-10	Yes	139.7	143.4	3.7	Semi-massive sulphide with 15% Py and 10% Po.	0.03
		149.1	152.6	3.5	Semi-massive to massive sulphide with 70% Po and 12% Py.	0.02
BOU-11-11	Yes	126.2	126.45	0.25	Massive sulphide with 80% Po and 15% Py.	0.04
		128	128.3	0.3	Semi-massive with 45% Po and 5% Py.	0.02
		132	134.7	2.7	Massive sulphide with 78% Po and 12% Py and 10% Qtz eyes and fragments.	0.02
		136.4	137.2	0.8	Massive sulphide, 50% Po and 15% Py, and 30% Qtz.	0.0006
BOU-11-12	Yes	148.8	150.8	2.0	Semi-massive sulphide with 35% Po, 15% Py and 10% Qtz eyes.	0.0077
		150.8	153.1	2.3	Massive sulphide with 70% Po, 15% Py and 20% Qtz eyes.	0.0095

Hole No.	Sulphides present	From (m)	To (m)	Length (m)	Description	% Zn
BOU-11-13	Yes	74	80	6	Exhalative sediment with up to 70% Po and 3-5% Py.	0.016
BOU-11-14	Yes	75.6	75.9	0.3	Semi-massive sulphide with 50% Po, 5% Py and 20% Qtz (5 cm fragments).	0.0115
		75.9	77.7	1.8	Massive sulphide with 88% Po and 2% Py.	0.0037
		77.7	78.8	1.1	Semi-massive sulphide with 30% Po, and trace Py.	0.014
		78.8	80.8	2.00	Massive sulphide with 75% Po and 3% Py and 12% Qtz eyes and 10% disseminated chert grains.	0.0067
		80.8	81.20	0.4	Semi-massive sulphide with 25% Po.	0.017
		84.9	85.8	0.9	Massive sulphide with 65% Po, 5% Py and 10% Qtz eyes (1-10 mm)	0.016
BOU-11-15	Yes	89.5	90.3	0.8	Massive clusters of sulphide comprising 20% Po and 10% Py.	0.015
		110.7	118	7.3	Exhalative sediment 2-80% Po and trace Py intercalated with Qtz and pegmatite layers	0.022
		110.7	111.5	0.8	Massive sulphide within exhalative sediment. 80% Po and trace Py.	0.017

Table 10.3 – Significant Zn and Ag intercepts from the 2011 drill program

Hole No.	From (m)	To (m)	Length (m)	Description	Zn (%)	Ag (ppm)	Zn weighted average (%/m)	Ag Weighted average (ppm/m)
BOU-11-03	47.2	48.7	1.5	Felsic intrusive containing 5% Py.	0.18	2.6		
	51	52.5	1.5	Schistose meta-sediments with trace sphalerite and galena.	0.06	1.89	0.11 / 4	2.2 / 4
	52.5	54	1.5		0.15	2.54		
	54	55	1		0.18	2.13		
BOU-11-04	76.8	77.9	1.1	Quartz vein containing 3% Py and trace Po.	0.002	2.16		
BOU-11-06	83.9	84.4	0.5	Graphite-rich sulphides with 20% Py, 10% Po and 3% Sp, all present as clusters.	1.12	0.39		
BOU-11-09	36.2	37.1	0.9	Graphite-rich meta-sediment containing 12% Py, 7% Po and 1% Sp.	0.55	2.15	0.78 / 1.9	1.3 /1.9
	37.1	38.1	1	Meta-sediment graphite-rich containing white quartz. 5% Py-Po.	0.98	0.55		
BOU-11-11	148.5	150	1.5	Fractured quartzite and graphite, with 2% Po-Py.	0.78	1.97		

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11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The protocol for soil, grab, channel and drill core sampling was established by Yvan Buissières of Solumines. During the visit to the core logging facilities at the Nemiscau truck stop and camp (*Relais Routier Némiscau*), the author found no indication of anything in the drilling, core handling or in the sampling procedures, methods and approach that could have had a negative impact on the reliability of the assay results reported by Monarques.

The following sections describe the established protocols.

11.1 Grab Samples

Grab samples were selected in the field based on the signal recorded by the Beep Mat and the presence of sulphides. Samples also included pegmatite and banded iron formations to increase the geological knowledge of the area.

Samples were broken with the aid of either a sledge hammer or chisel into one or more piece or pieces with a total size of 1 dm^3. Each sample was labelled and bagged and the location of the sample clearly marked using flagging tape to facilitate re-localization at a future date. A representative sample was taken and identified with the same sample number as the original. The date, GPS co-ordinates, sample number, sample description and analytical method were noted in the field sample note book and later transferred to a digital database.

Batches of 100 samples were sent to the ALS Chemex facilities in Val-d'Or. For QA/QC purposes, duplicates, silicate blanks and certified standards were added to the sample batches. Field duplicates were prepared directly in the field and involved splitting of the original sample into two equal portions. Numbers ending in the following digits were selected for the QA/QC samples:

- 11 or 61: standard
- 24 or 74: duplicate of preceding sample
- 37 or 87: silicate blank
- 49 or 99: duplicate of preceding sample

The field blank used for the program is a sample from the Sitec mine (siliceous rock tested by different laboratories). The field blanks were submitted as regular samples, blind to the laboratory, to detect contamination during preparation.

11.1.1 Blank

Blanks were inserted in every batch of 100 samples at a percentage shown in Table 11.1. InnovExplo implemented a cut off for the base metals at 100 times the detection limit (e.g., 200 ppm Zn and 20 ppm Cu); for precious metals, the cut off was set at 10 times (e.g., 0.1 ppm Ag). All blank samples fell below the cut-off grade.

Table 11.1 – Proposed percentages of QA/QC per batch

Batch of 100 samples (equivalent to 2 sample booklets)		
Rock	88	Percentage
Duplicate	5	6
Blank	5	6
Standard	2	2
Total		**14%**

11.1.2 Field Duplicate

The results for field duplicates can be used to determine total precision (i.e., reproducibility) of the sample analysis process, from sampling through to sample preparation. When used in conjunction with other sample preparation duplicates, the incremental loss of precision can be determined for each of the various stages of the sampling, preparation and assaying process. For the field duplicate increment, this can indicate whether loss of precision can be attributed to initial sample size.

The original and duplicate results were tabulated and an x-y graph created. The original data was plotted along the x-axis and the duplicate results along the y-axis. A regression line characterizing the distribution of the data was plotted. The slope of the regression line (y) was calculated along with the correlation coefficient (R).

For the grab samples, the duplicate samples generally show good correlation for Ag and Zn but relatively low correlation for Cu (Table 11.2). There is a positive bias with respect to Zn and a negative bias with respect to Cu and Ag. The very low regression slope for Cu may be attributed to the way the duplicate samples were collected, resulting in a sample that is not 100% representative of the original, or it may indicate that the minerals hosting copper are not evenly distributed within the samples.

Table 11.2 – Correlation coefficient (R) and regression slope (y) for grab sample duplicates

	R	y
Ag	0.80	0.59
Cu	0.45	0.28
Zn	0.93	2.18

11.1.3 Certified Reference Material

The certified standard for the grab sampling program is of unknown origin and could not be verified by InnovExplo.

11.2 Channel sampling

Channel samples were selected on the basis of the thickness of the detected conductor, the type of mineralization observed, and the accessibility of the material with a rock saw. The geologist marked the sample area with non-permanent ink, and the technical team, with the aid of a rock saw, cut the sample. A hammer and chisel were used to cut the rock out. The geologist described each sample and took photos before placing them in plastic bags that are securely sealed. The date, GPS co-ordinates, sample number, sample description and analytical method were noted in the sample book and later entered into a digital database.

For QA/QC purposes, duplicates, silicate blanks and certified standards were added to the sample batches. The field duplicates were selected in the field. Duplicates were created by cutting another channel adjacent to the original sample. The length of the sample corresponded to the original. Numbers ending in the following digits were used for QA/QC samples:

- 11 or 61: standard
- 24 or 74: duplicate of preceding sample
- 37 or 87: silicate blank
- 49 or 99: duplicate of preceding sample

The field blank used for the program is a sample from the Sitec mine (siliceous rock tested by different laboratories). The field blanks were submitted as regular samples, blind to the laboratory, to detect contamination during preparation.

11.2.1 Blank

Blanks were inserted in every batch of 100 samples at a percentage shown in Table 11.1. InnovExplo implemented a cut off for the base metals at 100 times the detection limit (e.g., 200 ppm Zn and 20 ppm Cu); for precious metals, the cut off was set at 10 times (e.g., 0.1 ppm Ag). All blank samples fell below the cut-off grade.

11.2.2 Field Duplicate

The original and duplicate results were tabulated and an x-y graph created. The original data was plotted along the x-axis and the duplicate results along the y-axis. A regression line characterizing the distribution of the data was plotted. The slope of the regression line (y) was calculated along with the correlation coefficient (R).

The channel samples show very good correlation, for Ag, Cu and Zn respectively (Table 11.3). Zn shows the best regression slope (y) at 0.99, whereas Ag shows a positive bias towards the duplicate sample.

Table 11.3 – Correlation Coefficient (R) and regression slope (y) for Channel sample duplicates

	R	y
Ag	0.97	1.12
Cu	0.84	0.86
Zn	0.97	0.99

11.2.3 Certified Reference material

The certified standard for the Channel sampling program is of unknown origin and could not be verified by InnovExplo.

11.3 Drill Core sampling

The drill company transported the core at the end of each shift to the Nemaska Lithium Inc project office and core logging facilities (Fig. 11.1) at the Nemiscau truck stop and camp. Core was always received by a Monarques geologist on duty.

The core was sampled selectively based on the presence of sulphides, alteration or interesting geological units (peridotite, pyroxenite, amphibolite, etc). Samples were typically 1 metre long, but varied from 0.3 to 1.5 metres. The core of the selected interval was first cut in half using a typical table-feed circular rock saw. A team of technicians led by geologist was in charge of splitting the samples. Half the core was sent for analysis; the other half was left in the core box for future reference (Fig. 11.2). The sample to be sent for analysis was placed in a numbered plastic bag. Samples were described in booklets, with one tag inserted in the plastic bag and the other left in the core box with the witness sample (Fig. 11.2). Sample numbers are sequential. Booklets are kept in archives.

Samples were logged in an Excel database, which included their identification, position, date and description. This database was subsequently exported into a Downhole Explorer database. Samples were shipped to the ALS-Chemex facility in Val-d'Or, Québec, by Monarques personnel. All core from the 2011 program is stored in tagged core boxes (Fig. 11.3) at the Nemaska Lithium Inc core shack (Fig. 11.4) on the Whabouchi property to the east of the Nemiscau truck stop and camp.

Figure 11.1 – Nemaska Lithium core logging facilities at the Nemiscau truck stop and camp (*Relais Routier Némiscau*)

Figure 11.2 – Representative half-core left in core box with sample tag

Figure 11.3 – Tagged core box from hole BOU-11-09

Figure 11.4 – Nemaska Lithium Inc core shack on the Whabouchi property east of the Nemiscau truck stop

11.3.1 Blank

Blanks were inserted in every batch of 100 samples at a percentage shown in Table 11.1. InnovExplo implemented a cut off for the base metals at 100 times the detection limit (e.g., 200 ppm Zn and 20 ppm Cu); for precious metals, the cut off was set at 10 times (e.g., 0.1 ppm Ag). All blank samples fell below the cut-off grades.

11.3.2 Field Duplicate

A field duplicate was prepared from one sample selected from each field sub-batch and included as a regular sample, blind to the laboratory. The original sample was sawed into two equal parts to form a ¼-core duplicate.

The original and duplicate results were tabulated and an x-y graph created. The original data was plotted along the x-axis and the duplicate results along the y-axis. A regression line characterizing the distribution of the data was plotted. The slope of the regression line (y) was calculated along with the correlation coefficient (R).

Drill core populations show very good correlations for Ag, Cu and Zn (Table 11.4). There is a good regression slope for Ag and Cu, with Zn showing a positive bias towards the duplicate samples.

Table 11.4 – Correlation coefficient (R) and regression slope (y) for drill core duplicate

	R	y
Ag	0.980	0.98
Cu	0.920	0.94
Zn	0.996	1.19

11.3.3 Certified Reference Material

For the drill core samples, one certified reference material (standard) was inserted in each batch of 100 samples. Standard OREAS 13b from Ore Research & Exploration Pty Ltd in Australia was used for the 2011 program. Monarques was originally under the impression they were operating within the context of a Ni-Cu PGE deposit setting based on EM and Mag study reports suggesting such a potential (Boivin 2009, 2011), hence the use of OREAS 13b, which is better suited for this type of mineralization. The certified values of gold, copper, nickel, platinum and palladium are respectively 211 ppb, 2,327 ppm, 2,247 ppm, 197 ppb and 131 ppb. The zinc value is 133 ppm and silver is 0.86 ppm (Table 11.5).

Monarques' internal control protocol stipulates that if any standard yields a Au, Cu, Ni, Pt or Pd value above or below thrice the standard deviation (lower or upper limit in Table 11.5) given by Ore Research and Exploration, then the entire batch should be re-analyzed. The values obtained throughout the drill program were well within or very near these limits and therefore no batches were re-analyzed. Figures 11.5 and 11.6 provide a graphical representation of Ag and Cu values from the drill program.

Data from the samples collected on the Bourier project was analysed by InnovExplo. Considering the anomalous Zn values observed in the drill core samples, it was noted that the value of the standard sample for Zn was consistently below the lower limit (Fig. 11.7). It is important to note that the analytical method for the standard is not the same as that used for the certification (Aqua-regia versus 4-Acid Digestion), and this would account for the extremely low concentrations reported for Zn. The samples that contained the highest Zn concentrations (BOU-11-06, BOU-11-09 and BOU-11-11; see Chapter 10) were verified in the field. Approximately 3% sphalerite was observed in the representative half core. InnovExplo personnel did not, however, verify all the core samples. InnovExplo is of the opinion that the standard used is not appropriate for the typical type of mineralization encountered on the Bourier property.

Table 11.5 – Certified values for standard OREAS 13b

		Certified Value	3SD	Lower Limit	Upper Limit
Au	(ppb)	211	39	172	250
Cu	(ppm)	2,327	144	2,183	2,471
Ni	(ppm)	2,247	465	1,782	2,712
Pt	(ppb)	197	39	158	236
Pd	(ppb)	131	27	104	158

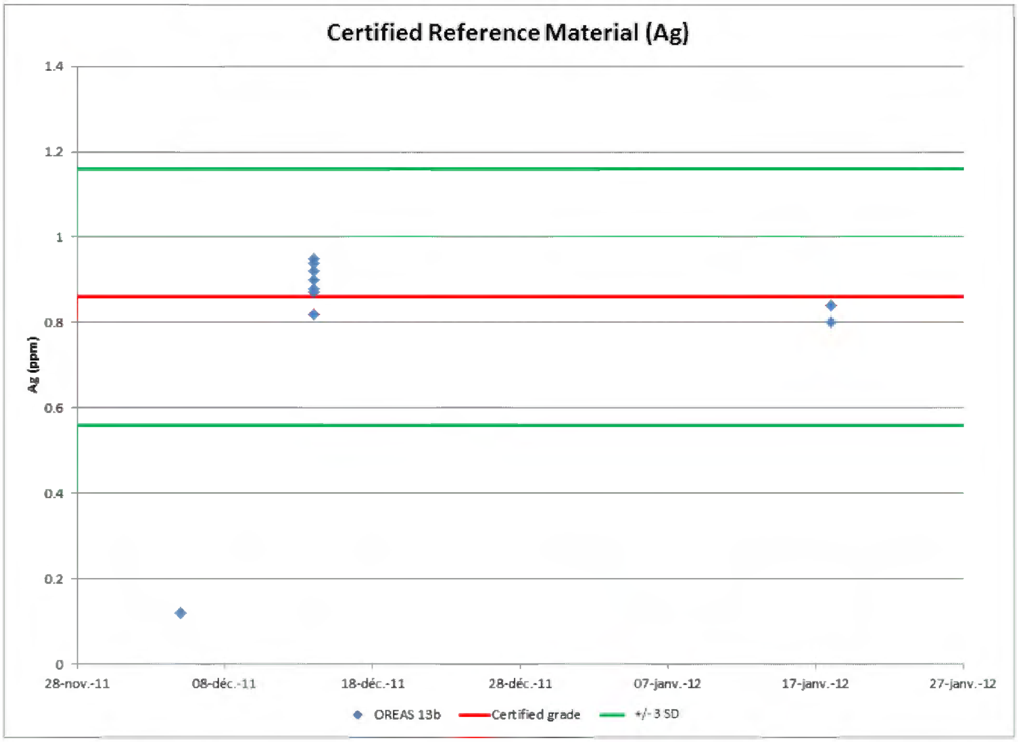

Figure 11.5 – Drill core certified reference samples for Ag (ppm)

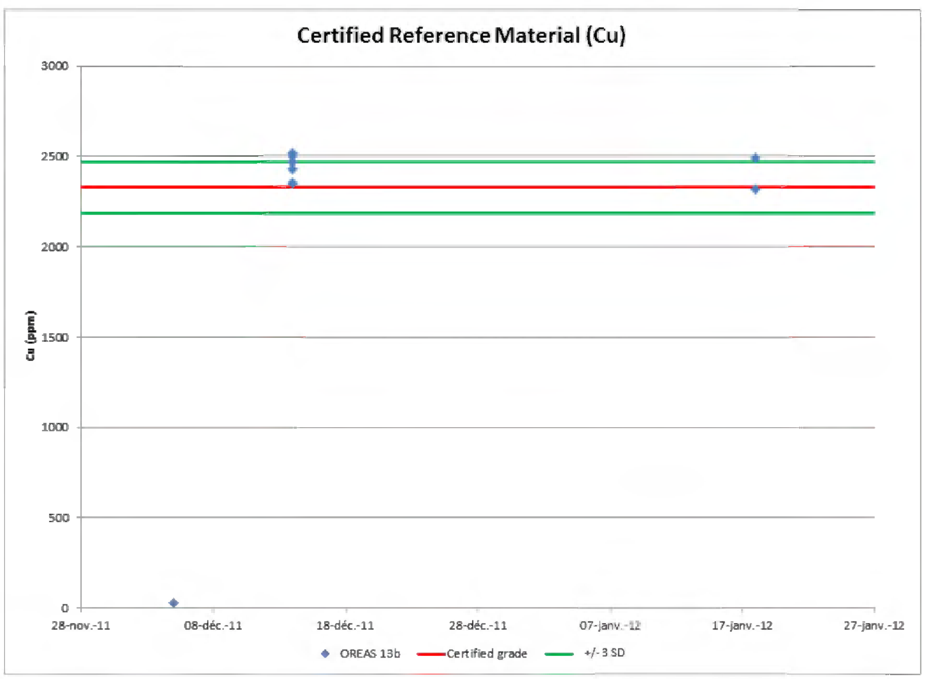

Figure 11.6 – Drill core certified reference samples for Cu (ppm)

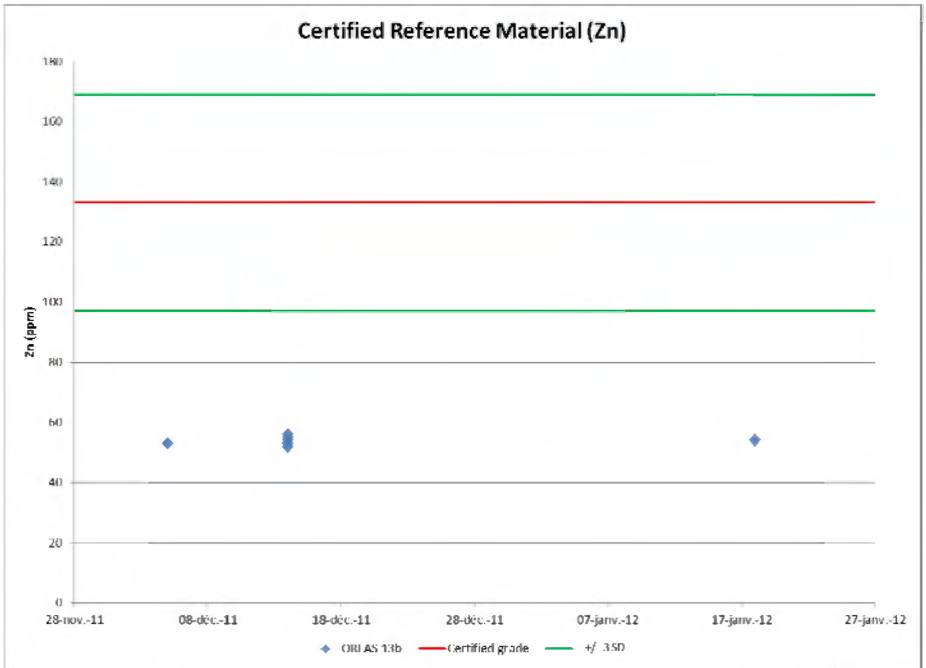

Figure 11.7 – Drill core certified reference samples for Zn (ppm)

11.4 Soil sampling

Monarques personnel sampled the B soil horizon using an auger. Where the B horizon was absent, no sample was taken. Each sample was placed in a paper bag which was then inserted into a plastic bag. The sample was labelled and the bag sealed. The sample position was noted using a hand-held GPS (Garmin GPSmap 60Cx) and continually updated to the sample list. Each step in the sampling process was performed under the direct supervision of a geologist. Monarques dropped off samples directly at the ALS Chemex facility in Val-d'Or by truck. Two analytical methods were used for the soil sample program: Inductively Coupled Plasma–Atomic Emission Spectroscopy (ICP-AES) and Inductively Coupled Plasma–Mass Spectrometry (ICP-MS) (respective laboratory codes of ME-MS41 and ME-MS41L).

11.4.1 Blank

During the soil geochemistry program, Monarques sampled "the same location within the un-enriched soil horizon that was homogenized". Results for Au, Ag, Cu, Pb and Zn varied throughout the property. Table 11.6 summaries the variation of blank sample values.

Table 11.6 – Summary of blank sample values obtained for the Bourier soil sampling program

	ME MS 41		ME MS-41L	
	Min	Max	Min	Max
Au (ppm)	<0.001	0.011	<0.0002	0.0057
Ag (ppm)	<0.01	0.07	0.008	0.028
Cu (ppm)	1.9	5.7	2.75	3.82
Pb (ppm)	2.9	5.2	3.7	5.64
Zn (ppm)	3.0	7.0	4.0	6.6

Values are lower than the maximum values obtained from the soil sampling program for all the elements. InnovExplo cannot process the data further as there is no typical value known for the blank sample for the Bourier area.

11.4.2 Field Duplicate

A field duplicate was prepared by homogenizing the original sample and dividing it into two portions. The distribution of the duplicate samples is the same as for the grab and channel samples (Table 11.1).

The original and duplicate results were tabulated and an x-y graph created. The original data was plotted along the x-axis and the duplicate results along the y-axis. A regression line characterizing the distribution of the data was plotted. The slope of the regression line (y) was calculated along with the correlation coefficient (R).

There is relatively poor correlation with respect to Ag and Au. The best regression slopes are for Cu and Pb, with Zn, Pb and Au having a negative bias towards the original sample.

For the MS 41L procedure, the best correlation was for Zn followed by Cu and Pb (Table 11.7). For the MS 41 method, the best correlations were for Zn, Cu and Pb, although the values are lower than for the MS41L method (Table 11.7). The correlation for Au and Ag is by far the lowest for both methods. The regression slopes also have lower values (i.e., negative bias) for Pb, Zn, Au and Ag. The element Cu has a positive bias towards the duplicate sample (Table 11.7).

Table 11.7 – Correlation coefficient (R) and regression slope for soil sample duplicates

	R	y
Au (MS41L)	0.65	0.55
Ag (MS41L)	0.50	0.64
Cu (MS41L)	0.79	0.86
Pb (MS41L)	0.70	0.85
Zn (MS41L)	0.94	0.68
Au (MS41)	0.16	0.15
Ag (MS41)	0.40	0.78
Cu (MS41)	0.75	1.12
Pb (MS41)	0.66	0.59
Zn (MS41)	0.80	0.57

11.4.3 Certified Reference material

There was no certified reference material used for the soil sampling program.

11.5 Conclusion

Analysis of the data from the samples collected on the Bourier project during the grab, channel, soil and drill programs were reviewed in detail by the author. The author did not find any issues that would have had a negative impact on the reliability of the assay results reported by Monarques.

11.6 Sample preparation and analyses for grab, channel and core samples

All samples received at the ALS-Chemex facility underwent the same sample preparation. Each sample was logged in the tracking system, weighed, dried and finely crushed to better than 70% passing a 2 mm screen (Tyler 9 mesh, US Std. No.10). A split of up to 250 g was taken and pulverized to better than 85% passing a 75 micron screen (Tyler 200 mesh, US Std. No. 200).

Table 11.8 – Rock sample preparation at ALS-Chemex corresponding to ALS code PREP-31

Method Code	Description
LOG-22	Sample is logged in tracking system and a bar code label is attached.
DRY-21	Drying of excessively wet samples in drying ovens. This is the default procedure for most rock chip and drill samples.
CRU-31	Fine crushing of rock chip and drill samples to better than 70% of the sample passing 2mm.
SPLIT-21	Slit sample using riffle splitter.
PUL-31	A sample split of up to 250 g is pulverized to better than 85% of sample passing 75 microns.

All samples were assayed by ultra-trace level methods (51 elements) using Inductively Coupled Plasma–Atomic Emission Spectroscopy (ICP-AES) and Inductively Coupled Plasma–Mass Spectrometry (ICP-MS) (ALS code: ME-MS41). A prepared sample (0.50 g) is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted with deionized water, mixed and analyzed by ICP-AES. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver and tungsten and diluted accordingly. Samples are then analyzed by ICP-MS for the remaining suite of elements. The analytical results are corrected for inter-element spectral interferences.

All samples were also assayed for Au using the ICP-MS or Atomic Absorption Spectrometry (AAS) analytical method Au-TL43. A finely pulverized sample (25 g) is digested in a mixture of 3 parts hydrochloric acid and 1 part nitric acid (aqua regia). This acid mixture generates nascent chlorine and nitrosyl chloride, which will dissolve free gold and gold compounds such as calaverite, $AuTe_2$.

The dissolved gold is complexed and extracted with Kerosene/DBS and determined by graphite furnace AAS. Alternatively gold is determined by ICP-MS directly from the digestion liquor. This method allows for the simple and economical addition of extra elements by running the digestion liquor through the ICP-AES or ICP-MS.

If the assay result obtained by the ME-MS41 analytical method is higher than 10,000 ppm for Zn, the sample is assayed by the ICP-AES analytical method ME-OG46.

A prepared sample (0.5 g) is digested in 75% aqua regia for 120 minutes. After cooling, the resulting solution is diluted to volume (100 mL) with de-ionized water, mixed and then analyzed by ICP-AES or AAS.

11.7 Sample preparation and analyses for soil samples

All samples received at the ALS-Chemex facility underwent the same sample preparation. Each sample was logged in the tracking system, weighed, dried and then dry-sieved using a 180 micron screen (Tyler 80 mesh). The plus fraction is retained unless disposal is requested.

Table 11.9 – Soil sample preparation at ALS-Chemex corresponding to ALS code PREP-41

Method Code	Description
LOG-22	Sample is logged in tracking system and a bar code label is attached.
DRY-22	Low temperature drying of excessively wet samples where the oven temperature is not to exceed 60°C. This method is suitable for more soil and sediment samples that are analyzed for volatile elements.
SCR-41	Sample is dry-sieved to -180 micron and both the plus and minus fraction are retained.

All samples were assayed by ultra-trace level methods (51 elements) using Inductively Coupled Plasma–Atomic Emission Spectroscopy (ICP-AES) and Inductively Coupled Plasma–Mass Spectrometry (ICP-MS) (ALS code: ME-MS41 or ME-MS41L). A prepared sample (0.50 g) is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted with deionized water, mixed and analyzed by ICP-AES. Following this analysis, the results are reviewed for high concentrations of bismuth, mercury, molybdenum, silver and tungsten and diluted accordingly. Samples are then analyzed by ICP-MS for the remaining suite of elements. The analytical results are corrected for inter-element spectral interferences. Of the 1,665 soil samples, 1,193 were assayed using the ME-MS41 method. The difference between ME-MS41 and ME-MS41L is that the lower detection limit for all elements is better with ME-MS41L than ME-MS41.

The 1,193 samples were also assayed for Au using the ICP-MS or Atomic Absorption Spectrometry (AAS) analytical method Au–TL43. A finely pulverized sample (25 g) is digested in a mixture of 3 parts hydrochloric acid and 1 part nitric acid (aqua regia). This acid mixture generates nascent chlorine and nitrosyl chloride, which will dissolve free gold and gold compounds such as calaverite, $AuTe_2$.

The dissolved gold is complexed and extracted with Kerosene/DBS and determined by graphite furnace AAS. Alternatively, gold is determined by ICP-MS directly from the digestion liquor. This method allows for the simple and economical addition of extra elements by running the digestion liquor through the ICP-AES or ICP-MS.

12.0 DATA VERIFICATION

On March 19 2012, as part of the data verification process, the author reviewed all exploration work done by Monarques with Maude Lévesque Michaud, an engineer in training employed by Monarques. With the assistance of Tafadzwa Gomwe, the author validated all exploration work, the reported results, and the QA/QC protocol. Maude Lévesque-Michaud had been involved in the exploration work taking place on the Bourier property in 2011 and satisfactorily answered all the author's questions.

During a site visit from March 20 to 21 2012, the author, accompanied by Maude Lévesque-Michaud and Tafadzwa Gomwe, examined core from the mineralized zones reportedly intersected in holes BOU-11-03, BOU-11-09, BOU-11-11. The review consisted of verifying the geological context associated with mineralization and the Zn anomalies. The review was performed at the Nemaska Lithium core shack on the Whabouchi property east of the Nemiscau truck stop area (Fig. 12.1). The author flew over the Bourier property with a plane on March 21, 2012 (Fig. 5.2).

Figure 12.1 – Review of the core at the Nemaska Lithium core shack on the Whabouchi property east of the Nemiscau truck stop area.

The analytical data in the Monarques database has been validated using the values from the ALS Chemex certificates of analysis. The validation consisted of verifying all Ag, Cu and Zn results reported in diamond drill holes BOU-11-01 to -15 drilled by Monarques in 2011. No errors were noted during the validation.

During the data verification, the author found no indication of anything in the exploration work, drilling or analytical data that could have had a negative impact on the reliability of the assay results reported by Monarques.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Mineral processing and metallurgical testing have not yet been performed on the Bourier property.

14.0 MINERAL RESOURCE ESTIMATES

Mineral resources have not yet been outlined on the Bourier property.

15.0 MINERAL RESERVE ESTIMATES

Mineral reserves have not yet been outlined on the Bourier property.

16.0 MINING METHODS

Mining methods have not yet been evaluated for the Bourier property.

17.0 RECOVERY METHODS

Recovery methods have not yet been tested on samples from the Bourier property.

18.0 PROJECT INFRASTRUCTURE

Project infrastructure has not yet been evaluated for the Bourier property.

19.0 MARKET STUDIES AND CONTRACTS

Market studies have not yet been performed for the Bourier property. Contracts have not been issued for the Bourier property.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

Environmental studies have not yet been done regarding the Bourier property.

Permitting requirements have not yet been established for the Bourier property.

The Bourier property is on Category II land and is bound by the James Bay and Northern Québec Agreement (*La Convention de la Baie James et du Nord Quebecois*) signed in 1975. This agreement covers a number of provisions including lands, environmental and social protection, economic development, and financial compensation, among others. Under the provision for the environment, the agreement provides for a consultative committee that advises the government on this policy. The agreement also established a system of environmental evaluation for new development projects, which involves the oversight of both the Québec government and Native communities.

There is no written agreement between the Local Cree community at Nemaska and Monarques Resources; however the company is aware of the responsibilities to which it must adhere. The Cree community is consulted each year and the plans of the company are made clear before any exploration or drilling activity on the property.

21.0 CAPITAL AND OPERATING COSTS

Capital and operating costs have not yet been calculated for the Bourier property.

22.0 ECONOMIC ANALYSIS

An economic analysis has not yet been prepared for the Bourier property.

23.0 ADJACENT PROPERTIES

The two most significant adjacent properties in the Bourier property area include advanced-stage Nisk property owned by Monarques Resources, which hosts the Nisk-1 Ni-Cu-Co-PGE deposit, and Nemaska Lithium's Whabouchi property, which hosts the Whabouchi lithium deposit.

The mineralized zone of Monarques' Nisk-1 deposit is located in an ultramafic sill within a paragneiss sequence (Trudel, 2009). The sill strikes N65°E and dips sharply (75° to 85°) to the NW. The sill is a composite, consisting of at least two separate intrusive phases: an unmineralized grey serpentinized peridotite and a mineralized black serpentinized peridotite containing Ni-Cu-Co-Fe sulphides. The sulphide layer lies within the black serpentine body, near its base, on the northwest side. Sulphide mineralization ranges from massive to disseminate. It consists primarily of pyrrhotite, with lesser quantities of pentlandite, chalcopyrite and pyrite. According to Trudel (2009), the deposit model is magmatic sulphide accumulation at the base of an ultramafic sill. A Mineral Resource Estimate and Technical Report were prepared for the Nisk-1 deposit in compliance with Regulation 43-101 and Form 43-101F1 (Trudel, 2009). The Nisk-1 mineral resource estimate is presented in Table 23.1.

Table 23.1 – Mineral Resource Estimate for the Nisk-1 deposit owned by Monarques Resources (Trudel, 2009)

	Tonnes	%Ni	%Cu	%Co	g/t Pd	G/t Pt
Measured Resources	1,255,000	1.09	0.56	0.07	1.11	0.20
Indicated Resources	783,000	1.00	0.53	0.06	0.91	0.29
Inferred Resources	1,053000	0.81	0.32	0.06	1.06	0.5

Note: Cut-off grade was established at 0.4% Ni

Nemaska Lithium's Whabouchi deposit consists of a spodumene-bearing pegmatite in the centre of the Whabouchi property. It comprises a series of subparallel and generally subvertical pegmatites up to 130 metres wide overall (Laferrière et al., 2011). The mineralized pegmatite swarm has a generally NE-SW orientation, extending 1.3 kilometres along strike and reaching a depth of more than 500 metres below surface. Lithium occurs mainly in the mineral spodumene, with lesser amounts in petalite and lithium-bearing muscovite accessory minerals. A Mineral Resource Estimate and a Technical Report for the Whabouchi lithium deposit was prepared in compliance with Regulation 43-101 and Form 43-101F1 (Laferrière et al., 2011). The Whabouchi resource estimate is presented in Table 23.2.

Table 23.2 – Mineral Resource Estimate for the Whabouchi deposit owned by Nemaska Lithium (Laferrière et al., 2011)

	Tonnes	$\%Li_2O$
Measured Resources	11,294,000	1.58
Indicated Resources	13,785,000	1.50
Inferred Resources	4,401,000	1.50

Note: Cut-off grade was established at 0.4% Li_2O

In addition to the Nisk property, Monarques owns nine other properties in the Bourier property area that were the subject of exploration work in 2011. The Duval property, located southeast of the Bourier property, hosts several gold showings and the Lac des Montagnes chrome showing. Exploration work by Nemaska Exploration (now Nemaska Lithium) revealed that the Duval gold showings are located in a zone of altered pyroxenite containing disseminated to semi-massive sulphides (Théberge, 2011a). The mineralization is included found within a package of altered and sheared pyroxenite and gabbro varying in thickness from 40 to 70 metres. The zones strike N045° with a SE dip. The best results obtained in grab samples were 18.4 g/t Au, 115 g/t Ag, 0.006 g/t Pt, 0.57 g/t Pd, 0.46% As, 6.09% Cu and 1.22% Ni (Théberge, 2011a).

Tucana Lithium Corp. owns an exploration property located between the Nisk and Whabouchi properties. To date, no significant mineralized zones have been discovered on the property (Théberge, 2011b).

The Rupert South property, owned by Eloro Resources Ltd and located about 10 km southwest of Bourier, returned many copper and silver values from grab samples, with recently reported grades of 6.02% Cu (sample no. 929364), 3.24% Cu (no. 929365) and 1.88% Cu (no. 929363). The samples were taken from outcrop, within a well-mineralized copper showing, containing up to 10% sulphide mineralization, comprised mainly of chalcopyrite and pyrite. The host rock is composed of a well-sheared sillimanite-biotite-garnet paragneiss. (Eloro Resources website)

Prospectors hold other mining titles in the Bourier property area. Details of the exploration work carried out on those titles are not available.

NUMÉRIQUE

Page(s) de dimension(s) hors standard numérisée(s) et positionnée(s) à la suite des présentes pages standard

DIGITAL FORMAT

Non-standard size page(s) scanned and placed after these standard pages

24.0 OTHER RELEVANT DATA AND INFORMATION

No other relevant data or information is provided in this technical report.

25.0 INTERPRETATION AND CONCLUSIONS

The property is at an early stage of exploration and some portions are more at a grass-roots stage of exploration. Figure 9.1 shows the work carried out by Monarques to date. The property has a potential for SEDEX zinc-copper deposits. The area is characterized by metasedimentary rocks, granites and pegmatites. Mineralization is typically semi-massive to massive sulphides composed of pyrrhotite, pyrite and chalcopyrite. Sphalerite, along with thin layers of hydrozincite, is also present within the sulphide assemblage. Magnetite and banded iron formations occur within the area.

The Lapointe site (Fig. 9.1) yielded the best channel and grab sample results. Grab samples in this area returned up to 0.3% Zn and up to 1.1% Ag, highlighting a Zn-enriched but Cu-poor area (only 0.008 to 0.03 ppm Cu). The Opera and Cesar sites (Fig. 9.1) in the northeast part of the property also showed some of the best results, but mainly for copper (up to 0.2% Cu).

For the soil sampling program, the southwestern end of the property shows higher concentrations in Cu, and Pb. The Lapointe area shows high concentrations in Zn, Ag, and Pb. The area is notably enriched in Zn and depleted in Cu. Other notable sites are Pepino RH T1 and Geai Bleu for their high Au, Ag Cu and Zn concentrations.

The Opera and Caesar sites show Au, Ag and Cu anomalies, but low Zn concentrations. The Au anomalies may indicate the presence of a disseminated replacement gold deposit. This area may resemble the Duval showing or may be an extension of the Duval shear zone (Théberge, 2011b).

The drill program targeted an EM and Mag anomaly and confirmed the presence of a SEDEX-type zinc and silver zone. Holes BOU-11-03 (2.2 ppm Ag over 4 m) and BOU-11-09 (1% Zn over 1 m) yielded the anomalous results. Mineralization was intercepted at a vertical depth of 100 m and the data indicates it is open to the east and west. This demonstrates that the EM and Mag anomalies may be close to surface and that these sites should be further explored through soil, grab and channel sampling.

26.0 RECOMMENDATIONS

The Bourier property contains geological features that demonstrate a potential for SEDEX-type deposits. However, more exploration work is required to confirm the extension of known sulphide mineralization.

The author is of the opinion that the Bourier property has sufficient merit to continue exploration work. A two-phase program is recommended. **Phase 1** would consist of basic compilation work using GIS software and would include the integration of all diamond drill holes into a single database to complete the compilation maps. A review of all available core should also be performed to standardize lithological descriptions in each drill hole and to produce a lithological interpretation between diamond drill holes. Furthermore, verification of unsampled sections should be done to confirm the absence of mineralization. The QA/QC protocol and analytical procedures should be adapted to all target commodities and mineralization types (Zn SEDEX-type, and Au in shear-hosted gold).

Phase 2 would consist of follow-up field work on the best electro-magnetic and magnetic anomalies. The work would comprise ground geophysics, prospecting, and geological mapping to document geological contacts, particularly at the locations of the magnetic anomalies. A soil sampling program should be conducted over the area where the 2010 diamond drilling program was carried out. This would serve as an evaluation survey to establish the characteristics of the soil over a known occurrence. A follow-up on the Opera and Cesar (northeast) area where a gold anomaly was identified requires more detailed soil analysis involving the reduction of spacing between stations and trenching.

The **Phase 2** objective would be to use the information obtained in Phase 1 to prepare a diamond drilling or stripping and channel sampling program. Notable sites would be the Lapointe, Opera and Cesar areas.

Phase 1 is estimated at $120,000 and Phase 2 at $1,830,000 for a total of $1,950,000. The recommended program is described below. Estimated budgets are presented in Tables 26.1 and 26.2. The estimated budget for the exploration program is subject to potential incidentals (e.g., no flying hours due to bad weather conditions) and the real cost may thus differ from the estimated costs.

Table 26.1 – Phase 1 – Bourier exploration program

PHASE 1	Phase 1 – Property-scale compilation	Estimated cost $CAN
Compilation and geology	GIS (MapInfo or ArcGIS) compilation of all geographic and geoscience information available on the project (lakes, outcrops, samples [rock, soil, till, stream, lake-sediment], geochemistry, geophysics, diamond drill holes). All information will be recorded using a single coordinate system (UTM, NAD 83, zone 18). The compilation will be used for target area selection.	$100 000
	Contingencies (20%)	$20 000
Phase 1 Total		**$120 000**

Table 26.2 – Phase 2 – Proposed Bourier exploration program

PHASE 2	Detailed exploration work for Nickel-Copper-PGE and Gold	
Ground geophysics	Field-based follow-up on the best airborne anomalies	$50 000
	Mobilization/demobilization	$30 000
	Camp site, lodging and accommodation for geophysics team	$20 000
	Contingencies (20%)	$20 000
Field geology and prospecting	One-month period of field work on the property (geology and prospecting). Add details to geology map, characterize lithological units, and locate all mafic and ultramafic intrusions in area. A whole-rock geochemistry program and an assay program for all mineralized rocks. Complementary soil, till and stream-sediment sampling when possible.	$150 000
	Mobilization/demobilization	$10 000
	Camp site, lodging and accommodation for geology team.	$75 000
	Contingencies (20%)	$47 000
Geology and target selection	Integration of new geophysical results and revised interpretation of the area. Target area selection for field work.	$40 000
	Contingencies (20%)	$8 000
Trenching	Trenching follow-up on new targets generated by the GIS compilation and airborne/ground geophysics.	$100 000
	Mobilization/demobilization	$50 000
	Camp site, lodging and accommodation	$75 000
	Contingencies (20%)	$45 000
Diamond drilling	Drilling follow-up on new targets generated by the GIS compilation and airborne/ground geophysics (2,000 m @ $400/m).	$800 000
	Mobilization/demobilization	$50 000
	Camp site, lodging and accommodation	$75 000
	Contingencies (20%)	$185 000
Phase 2 Total		**$1 830 000**

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28.0 SIGNATURE PAGE

TECHNICAL REPORT
ON THE
BOURIER PROPERTY
(According to Regulation 43-101 and Form 43-101F1)

Prepared for

MONARQUES RESOURCES INC.
450, Gare-du-Palais Street
1st floor
Québec, (Québec)
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GÉOLOGUE / GEOLOGIST * BRUNO TURCOTTE # 453 QUÉBEC *

Bruno Turcotte, MSc, PGeo
InnovExplo Inc
560-B, 3e Avenue, Val-d'Or
Québec, Canada J9P 1S4

Signed at Val-d'Or, on April 11, 2012

REÇU AU MRNF
08 MAI 2013
DIRECTION DES TITRES MINIERS

1306260

29.0 CERTIFICATE OF AUTHOR

I, Bruno Turcotte, PGeo (OGQ no. 453) do hereby certify that:

1. I am Consulting Geologist of InnovExplo Inc at 560-B 3e Avenue, Val-d'Or, Québec, Canada, J9P 1S4.

2. I graduated with a Bachelor of Geology degree from Université Laval in Québec City in 1995. In addition, I obtained a Master's in Earth Sciences degree from Université Laval in Québec City in 1999.

3. I am a member of the Ordre des Géologues du Québec (OGQ, no. 453).

4. I have worked as a geologist for a total of 16 years since my graduation from university. My exploration expertise has been acquired with Noranda Exploration Inc, Breakwater Resources Ltd, South-Malartic Exploration Inc, and Richmont Mines Inc. My mining expertise was acquired on the Croinor pre-production project and at the Beaufor mine. I have been a consulting geologist for InnovExplo Inc since March 2007.

5. I have read the definition of "qualified person" set out in Regulation 43-101 (formerly "NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in Regulation 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of Regulation 43-101.

6. I am responsible for the preparation of the technical report titled "Technical Report on the Bourier Property (according to Regulation 43-101 and 43-101F1)" dated April 11, 2012 (the "Technical Report"). I visited the Bourier property on March 20 and 21, 2012. I examined some of the core drilled by Monarques in 2011 on the Bourier property.

7. I have had prior involvement with the property that is the subject of the Technical Report. The nature of my prior involvement was to examine and describe some of the core from the 2007 drilling program and to supervise another InnovExplo geologist who also logged core.

8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report and that the omission to disclose would make the Technical Report misleading.

9. I am independent of the issuer applying all of the tests in section 1.5 of Regulation 43-101.

10. I have read Regulation 43-101 respecting standards of disclosure for mineral projects, as well as Form 43-101F1, and the Technical Report has been prepared in accordance with that regulation and form.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority, and any publication by them of the Technical Report for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public.[1]

Dated this 11th day of April 2012 at Val-d'Or.

GÉOLOGUE / GEOLOGIST BRUNO TURCOTTE #453 QUÉBEC

Bruno Turcotte, M.Sc., P.Geo. (OGQ no.453)

[1] If an issuer is using this certificate to accompany a technical report that it will file only with the exchange, then the exchange recommends that this paragraph is included in the certificate.

APPENDIX I

UNITS, CONVERSION FACTORS, ABBREVIATIONS

Units

Units in this report are metric unless otherwise specified. Precious metal content is reported in grams of metal per metric ton (g/t Au or Ag), unless otherwise stated. Tonnage figures are dry metric tons ("tonnes") unless otherwise stated. Ounces are troy ounces.

Abbreviations used

°C	degrees Celsius	oz	troy ounces
g	grams	avdp	avoirdupois pound
ha	hectares	oz/t	ounces per short ton
kg	kilograms	g/t	grams per metric ton
km	kilometres	ppb	parts per billion
masl	metres above sea level	ppm	parts per million
mm	millimetres	cps	counts per second
'	feet	st	short ton
$ or $CAN	Canadian dollars	t	metric ton (tonne)

Conversion factors for measurements

Imperial Unit	Multiplied by	Metric Unit
1 inch	25.4	mm
1 foot	0.3048	m
1 acre	0.405	ha
1 ounce (troy)	31.10348	g
1 pound (avdp)	0.454	kg
1 ton (short)	0.907	t
1 ounce (troy) / ton (short)	34.2857	g/t

APPENDIX II

DETAILED LIST OF MINING TITLES

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2157162	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157163	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157164	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157165	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157166	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157167	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157168	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157169	53.21	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2157170	53.18	Designated Cells	Active	June 2, 2008	June 1, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158280	53.24	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158281	53.24	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158282	53.24	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158288	34.9	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158289	53.23	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158290	53.23	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158291	53.23	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158298	7.72	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158299	48.14	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158300	53.22	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158301	53.22	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158302	53.22	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158303	53.22	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158306	49.71	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158307	31.93	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158308	46.93	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158309	53.21	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158310	53.21	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158311	53.21	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158312	53.21	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2158313	53.21	Designated Cells	Active	June 5, 2008	June 4, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159197	53.27	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159198	53.27	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159203	12.76	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159204	32.17	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159205	49.92	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159206	53.26	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159207	53.26	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159208	53.26	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159212	1.65	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159213	17.7	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159214	37.08	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159215	52.17	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159216	53.25	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159217	53.25	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2159218	53.25	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159219	4.28	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159220	22.56	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159221	41.92	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159222	53.17	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2159223	8.1	Designated Cells	Active	June 6, 2008	June 5, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160054	17.52	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160055	53.28	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160056	53.28	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160059	10.21	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160060	53.27	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160061	53.27	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160062	53.27	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160063	53.27	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160064	53.22	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160067	2.92	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160068	53.22	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160069	53.26	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160070	53.26	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160071	52.55	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160072	16.61	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160076	48.8	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160077	53.25	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160078	53.25	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160079	21.27	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160085	53.24	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160086	53.24	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160087	47.23	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160088	28.15	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160089	8.65	Designated Cells	Active	June 9, 2008	June 8, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160627	24.83	Designated Cells	Active	June 11, 2008	June 10, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160628	53.29	Designated Cells	Active	June 11, 2008	June 10, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2160631	53.28	Designated Cells	Active	June 11, 2008	June 10, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2244543	53.15	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244544	53.15	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244545	53.14	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244546	53.14	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244547	53.14	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244548	53.14	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244549	53.14	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244550	53.14	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244551	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244552	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244553	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2244554	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244555	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244556	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244557	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244558	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244559	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244560	53.13	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244561	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244562	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244563	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244564	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244565	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244566	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244567	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244568	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244569	53.12	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244570	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244571	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244572	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244573	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244574	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244575	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244576	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244577	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244578	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244579	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244580	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244581	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2244582	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244583	53.11	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244584	53.1	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244585	53.1	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244586	53.1	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244587	53.1	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244588	53.1	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244589	53.1	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O15	2244590	53.1	Designated Cells	Active	August 4, 2010	August 3, 2012	Monarques Resources Inc. 100%	None
32O14	2245012	53.13	Designated Cells	Active	August 11, 2010	August 10, 2012	Monarques Resources Inc. 100%	None
32O14	2245013	53.13	Designated Cells	Active	August 11, 2010	August 10, 2012	Monarques Resources Inc. 100%	None
32O14	2245014	53.12	Designated Cells	Active	August 11, 2010	August 10, 2012	Monarques Resources Inc. 100%	None
32O14	2245015	53.12	Designated Cells	Active	August 11, 2010	August 10, 2012	Monarques Resources Inc. 100%	None
32O14	2245016	53.11	Designated Cells	Active	August 11, 2010	August 10, 2012	Monarques Resources Inc. 100%	None
32O14	2247321	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O14	2247322	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2247323	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O14	2247324	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O14	2247325	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O14	2247326	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O14	2247327	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O14	2247328	53.1	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O15	2247329	53.09	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O15	2247330	53.09	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O15	2247331	53.09	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O15	2247332	53.09	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O15	2247333	53.09	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O15	2247334	53.09	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O15	2247335	53.09	Designated Cells	Active	August 24, 2010	August 23, 2012	Monarques Resources Inc. 100%	None
32O14	2248011	53.18	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248012	53.18	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248013	53.17	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248014	53.17	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248015	53.17	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248016	53.16	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248017	53.16	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248018	53.15	Designated Cells	Active	August 30, 2010	August 29, 2012	Monarques Resources Inc. 100%	None
32O14	2248070	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248071	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248072	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248073	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248074	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248075	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248076	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248077	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248078	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248079	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248080	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248081	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248082	53.11	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248083	53.1	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248084	53.1	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248085	53.1	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248086	53.1	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248136	53.18	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248137	53.18	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248138	53.18	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248139	53.17	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248140	53.17	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248141	53.17	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2248142	53.17	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248143	53.17	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248144	53.16	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248145	53.16	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248146	53.16	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248147	53.16	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248148	53.16	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248149	53.16	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248150	53.16	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248151	53.15	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248152	53.15	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248153	53.15	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248154	53.15	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248155	53.15	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248156	53.15	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248157	53.14	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248158	53.14	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248159	53.14	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248160	53.14	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248161	53.14	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248162	53.14	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248163	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248164	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248165	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248166	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248167	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248168	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248169	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248170	53.13	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248171	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248172	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248173	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248174	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2248175	53.12	Designated Cells	Active	August 31, 2010	August 30, 2012	Monarques Resources Inc. 100%	None
32O14	2253887	53.15	Designated Cells	Active	October 15, 2008	October 13, 2012	Monarques Resources Inc. 100%	None
32O14	2253888	53.15	Designated Cells	Active	November 4, 2008	October 13, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2253889	53.14	Designated Cells	Active	November 4, 2008	October 13, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2253890	53.14	Designated Cells	Active	November 4, 2008	October 13, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2172917	1.56	Designated Cells	Active	November 4, 2008	October 14, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174096	53.23	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174097	53.23	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174098	53.2	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174099	42.33	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174100	22.81	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2174101	4.37	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174102	53.22	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174103	53.22	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174104	53.22	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174105	53.22	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174106	53.22	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174107	52.16	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174108	37.03	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174109	17.54	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174110	53.22	Designated Cells	Active	November 4, 2008	November 3, 2012	Monarques Resources Inc. 100%	3% NSR
32O14	2174111	53.21	Designated Cells	Active	October 14, 2010	November 3, 2012	Monarques Resources Inc. 100%	None
32O14	2174112	53.21	Designated Cells	Active	October 14, 2010	November 3, 2012	Monarques Resources Inc. 100%	None
32O14	2174113	53.21	Designated Cells	Active	October 14, 2010	November 3, 2012	Monarques Resources Inc. 100%	None
32O14	2174114	53.21	Designated Cells	Active	October 14, 2010	November 3, 2012	Monarques Resources Inc. 100%	None
32O14	2117799	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117801	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117803	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117805	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117807	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117809	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117811	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117813	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117815	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117817	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117819	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117821	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117823	53.2	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117825	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117827	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117829	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117830	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117831	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117832	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117833	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117834	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117835	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117836	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117837	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117838	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117839	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117840	53.19	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2117841	53.18	Designated Cells	Active	August 16, 2007	August 15, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2118963	53.18	Designated Cells	Active	August 19, 2011	August 22, 2013	Monarques Resources Inc. 100%	
32O14	2118964	53.18	Designated Cells	Active	August 19, 2011	August 22, 2013	Monarques Resources Inc. 100%	

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2118965	53.18	Designated Cells	Active	August 19, 2011	August 22, 2013	Monarques Resources Inc. 100%	
32O14	2118966	53.18	Designated Cells	Active	August 19, 2011	August 22, 2013	Monarques Resources Inc. 100%	
32O14	2118967	53.18	Designated Cells	Active	August 19, 2011	August 22, 2013	Monarques Resources Inc. 100%	
32O14	2118968	53.18	Designated Cells	Active	August 19, 2011	August 22, 2013	Monarques Resources Inc. 100%	
32O14	2118969	53.18	Designated Cells	Active	August 19, 2011	August 22, 2013	Monarques Resources Inc. 100%	
32O14	2121354	53.22	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121355	53.22	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121356	53.22	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121357	53.22	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121362	53.21	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121363	53.21	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121364	53.21	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121365	53.21	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121366	53.21	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121367	53.21	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O14	2121368	53.21	Designated Cells	Active	September 14, 2007	September 13, 2013	Monarques Resources Inc. 100%	3% NSR
32O15	2312681	53.1	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312682	53.1	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312683	53.1	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312684	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312685	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312686	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312687	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312688	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312689	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312690	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312691	53.09	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312692	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312693	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312694	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312695	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312696	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312697	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312698	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312699	53.08	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312700	53.07	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312701	53.07	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312702	53.07	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312703	53.07	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312704	53.07	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O15	2312705	53.07	Designated Cells	Active	September 21, 2011	September 20, 2013	Monarques Resources Inc. 100%	
32O14	2199400	53.17	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199401	53.17	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199402	53.17	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None

NTS	TITLE NUMBER	AREA (ha)	MINING TITLE TYPE	STATUS	DATE OF STAKING	EXPIRY DATE	OWNERSHIP	ROYALTY
32O14	2199403	53.17	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199404	53.16	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199405	53.16	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199406	53.16	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199407	53.16	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199408	53.15	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199409	53.15	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None
32O14	2199410	53.15	Designated Cells	Active	January 14, 2010	January 13, 2014	Monarques Resources Inc. 100%	None