Interim Technical Report for the Mc Watters Nickel Project, Ontario, Canada

Report Prepared for

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Amended on December 16, 2008
Interim Technical Report for the Mc Watters Nickel Project, Ontario, Canada

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Executive Summary

Introduction

The assets of Liberty Mines Inc. (“Liberty”) include an interest in the McWatters Nickel Project (“Mc Watters”), which is located approximately 25 kilometres south east of Timmins, Ontario, Canada. Liberty has recently completed an aggressive surface drill program. All permitting for the project has been completed, the project has advanced to development stage, but has recently been placed on care and maintenance.

In December 2007, SRK Consulting (Canada) Inc. (“SRK”) was retained by Liberty to compile a resource and reserve estimation as part of an engineering study for the McWatters Nickel Mine. The scope of work included three site visits to examine the property (conducted in December 2007, February 2007, and May 2007) review available technical information, interview project personnel and collect of all relevant information for the compilation of the technical report and resource estimation according to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines in conformity with generally accepted CIM “Exploration Best Practices” and “Estimation of Mineral Resource and Mineral Reserves Best Practices” guidelines.

This technical report summarizes the mineral resource estimated for the Mc Watters project.

Work Program

SRK staff received the final edited database for the resource estimation from Liberty on the 14th of January, 2008. This database included validated drillhole files, topographic and bedrock surfaces, modelled geological units including volcanic stratigraphy and intrusive rocks where possible, a specific gravity database, and three verified wireframes of the mineralized zone domains used in the resource estimation. The latter wireframes consisted of a broad zone defined by 0.3% Ni cut-off grade that encapsulates a disseminated sulphide dominated zone (0.6% Ni cut-off) and a basal massive sulphide zone. These datasets formed the basis of the resource estimation conducted by SRK.

Geostatistic, block modelling and resource estimation was completed by Mr. Glen Cole of SRK in Toronto, Ontario, Canada. This resource statement was subsequently used by Liberty’s engineering department to produce a preliminary mine plan and reserve estimate, which included a basic layout of underground workings, mining methods, production rates, geotechnical data, and metallurgical recoveries.

The final results of the engineering study were reviewed by Liberty on 2nd April 2008, at which point a press release was issued containing the salient points. The requisite technical report was produced during April and May 2008. The report was compiled and edited by Liberty with invaluable assistance from SRK. This report is superseded by the present interim report, in order to address the deficiencies unearthed during a recent Alberta Securities Commission review (Liberty press release dated 14 October 2008).

The engineering study estimates have been modified by actual production results. SRK therefore considers these estimates no longer applicable.
Liberty with the assistance of SRK, and other third parties as required, is undertaking economic analysis, geotechnical studies, and an environmental review of the property. As of December 16, 2008, work related to these studies has not advanced to a stage at which material changes about mineral reserve estimates, mining and environmental considerations, financial analysis, and other components required by National Instrument 43-101 for development and production properties can be reported. The results will be released in a future technical report.

Property Description

The Mc Watters Property is located approximately 25 kilometres southeast of the city of Timmins, Ontario. The property is within the boundaries of the city of Timmins and is centered at approximately UTM (NAD83 Z17) coordinates 5,350,860 mN and 497,570 mE. The property is in Langmuir Township, within the Porcupine Mining Division, and is accessed from the city of Timmins/South Porcupine by a series of all-weather gravel roads.

The Mc Watters Property consists of two patented mining claims held by Liberty. These claims total 295.6 hectares, and have been legally surveyed. Liberty owns 100% of the Mc Watters property with no subsidiary involved.

The Mc Watters site is large enough to accommodate all the required construction of mining facilities. Completed infrastructure on site consists of a mechanical maintenance shop, office complex, mine dry, compressor house, security gate, and settling and treatment ponds. The mine is accessed via a portal, completed in early 2008, from which the ramp initiates.

Geology and Mineralization

The Mc Watters deposit is hosted by ultramafic rocks that form part of, or intrude, the Tisdale assemblage that flank the Shaw Dome and form part of the Abitibi greenstone belt (AGB). The Abitibi greenstone belt is one of the youngest parts of the Archean Superior Province forming what is considered one of the largest and best-preserved belts of its kind in the world. To date five Ni-Cu-(PGE) deposits have been discovered in the Shaw Dome (Redstone, Hart, Mc Watters, Langmuir #1, Langmuir #2), and numerous showings have been identified.

The Mc Watters deposit differs markedly from the rest of the known deposits in the Shaw Dome. The ultramafic body hosting the Mc Watters deposit is discordant, evidently cutting up through the iron formation that sits immediately on its north flank, as indicated by recent, more detailed magnetic surveys conducted by Liberty. The discordant nature of this ultramafic unit suggests that it is intrusive.

The Mc Watters mineralized zone can be readily subdivided in two distinct zones: an upper zone of altered dunitic rocks containing disseminated sulphides, and a basal, lower zone consisting of massive sulphides. The upper zone directly overlies the lower zone, which is principally in contact with wedges of andesitic, footwall volcanic rocks. The combined two zones measure approximately 150 metres in strike length by 30 to 40 metres in width extending down to a depth of approximately 160 metres. The sulphide assemblage consists almost exclusively of pyrite and heazlewoodite. Heazlewoodite (Ni$_3$S$_2$) is one of the most nickel rich sulphide minerals, and is generally though to be of hydrothermal origin, most often found in dunites and lherzolites.
Mineral processing and metallurgy

On the 17th of July, 2007, Liberty commissioned the Redstone Nickel concentrator, located on the Redstone Mine site. The plant is designed to process up to 2,000 tonnes per day or high MgO Ni-Cu-PGE mineralization. The plant has been processing mineralized material from Liberty’s Redstone and McWatters Nickel Mines.

Mc Watters mineralized material will be processed at the Redstone nickel concentrator, which is approximately 9 km due west of the Mc Watters site. Predicted nickel recoveries for the Mc Watters Mine material are based on previous plant performance, future upgrades, and metallurgical testing performed on drill core from the Mc Watters deposit.

The plant started processing Mc Watters development material on September 20, 2008 through to October 31, 2008. During this period 9,760 wet tonnes of mineralized material were processed. An average head grade of 0.57 percent nickel was measured at the mill, achieving average nickel recovery of 83 percent. Recovery fluctuated between 64 and 95 with head grades ranging from 0.33 to 1.15 percent nickel.

Mineral Resources

The January 28, 2008 SRK Mineral Resource Statement for the Mc Watters Nickel Deposit is summarized in Table i.


<table>
<thead>
<tr>
<th>Zone</th>
<th>Tonnes</th>
<th>Ni (%)</th>
<th>Contained Ni (t)</th>
<th>Contained Ni (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicated:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disseminated Zone (Upper)</td>
<td>665,308</td>
<td>0.72</td>
<td>4,790</td>
<td>10,557,640</td>
</tr>
<tr>
<td>Massive Zone (Lower)</td>
<td>49,562</td>
<td>3.93</td>
<td>1,948</td>
<td>4,282,922</td>
</tr>
<tr>
<td>Sub total:</td>
<td>714,870</td>
<td>0.94</td>
<td>6,738</td>
<td>14,850,561</td>
</tr>
<tr>
<td><strong>Inferred:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massive Zone (Lower)</td>
<td>13,829</td>
<td>3.39</td>
<td>469</td>
<td>1,033,242</td>
</tr>
<tr>
<td>Sub total:</td>
<td>13,829</td>
<td>3.39</td>
<td>469</td>
<td>1,033,242</td>
</tr>
</tbody>
</table>

The independent mineral resource estimate prepared by SRK is reported in accordance with Canadian Securities Administrators’ National Instrument 43-101 and conforms to generally accepted Canadian Institute of Mining (“CIM”) “Estimation of Mineral Resources and Mineral Reserves Best Practices” guidelines.

Nickel mineralization is broadly confined to a higher grade lower massive zone and to lower grade overlaying disseminated zone. The resource estimate is based on a domainal three dimensional (3-D) geological interpretation of the mineralization that
integrated information from a total of one hundred and fifty three diamond drill holes largely drilled on twenty five metre centres. Drill data was appropriately composited and capped prior to grade estimation.

The Mc Watters block model was created using Datamine with 2.5x2.5x2.5m blocks. Block grades were estimated using ordinary kriging (OK) methodology. Resource blocks situated within the primary ranges defined by variography are assigned to the Indicated classification; all other resource blocks within four times the primary variography ranges are assigned an Inferred classification.

The resource model was completed by Mr Glen Cole, P. Geo., Principal Resource Geologist, of SRK Consulting (Canada) Inc., Toronto. By virtue of his background and professional experience, Mr Cole is a “Qualified Person” as defined by National Instrument 43-101.

Additional Requirements for Technical Reports on Development Properties and Production Properties

The Mc Watters project is under development. As a result, the engineering study projections and forecasts expressed in an earlier technical report are no longer considered accurate. Therefore, Liberty has undertaken economic analysis, geotechnical studies, and an environmental review of the property. As of December 16, 2008, work related to these studies has not advanced to a stage at which material changes about mineral reserve estimates, mining and environmental considerations, financial analysis, and other components required by National Instrument 43-101 for development and production properties can be reported. The results will be released in a future technical report.

Summary and Recommendations

Significant nickel mineralization has been identified at the Mc Watters Mine. An indicated mineral resource estimate of 714,900 tonnes grading an average 0.93% Ni (calculated based on a 0.5% Ni cut-off grade) was indentified.

The confidence in estimating mineral resources at Mc Watters is high as the geological constraints are well understood and the drilling density is high. As a consequence the mineral resource estimate is of high enough confidence to consider the formulation of a mine plan, schedule, and financial analysis.

The Mc Watters mineralized body consists of a sub-vertical, large zone of disseminated nickel sulphides over-lying a sub-horizontal massive sulphide basal layer. The two zones present distinct sizes and geometry and are, therefore, conducive to two distinct underground mining techniques: longhole stope mining and conventional panel stope mining.

Stopes are to be accessed via an underground ramp from surface. This same ramp will also serve as a haulage route utilized to transport mineralization to surface using underground haulage trucks. Mineralization is then transported by a series of all weather gravel roads to the Redstone processing plant 9 kilometres away.

The results of the engineering study are highly dependent on the accuracy and quality of the data used to calculate key parameters. While the majority of the data was derived from reliable and accurate information, there are key areas that would benefit from increased investigations:
• Prior to reaching the target mining zone, conduct advanced rock quality tests on available and relevant drill core;
• Use the information gathered above to generate spatially sensitive models of rock quality characteristics that can aid in determining predicted ground conditions;
• Plan pillar dimensions and locations using the above data;
• Once underground conduct further geotechnical investigations prior to final stope layout and crown pillar determination;
• Conduct and complete an extensive underground sampling program following industry best practices. Use these results to compare and update the generated block model to reflect the increased data density and confidence. This should also occur prior to final stope layout. This could prove particularly important in the upper disseminated zone;
• Upon underground excavations reaching the relevant horizons, SRK recommends that sampling, mapping be conducted to support an update to the models of the massive sulphide zones. Many of these zones are located in the deepest part of the deposit where drill hole inaccuracies are greatest;
• Proposed mining methods for massive sulphide zones should be optimized based on the updated models;
• Assess structural controls on mineralization once underground exposures are available;
• Further assess the depth potential of the ultramafic body; as well investigate the strike potential based on geological observations and interpretations.

SRK understands that Liberty is advancing work on mine planning, a Mineral Reserve estimate, environmental considerations, financial analysis, and other relevant information required under National Instrument 43-101 for development and production properties. This work has not advanced sufficiently to be reported as of December 16, 2008. Results will be released in a future technical report.

SRK recommends that Liberty complete an updated National Instrument 43-101 Technical Report as soon as possible for the Mc Watters project.

The technical report should provide up to date information on all aspects of the Mc Watters project to meet the requirements of National Instrument 43-101 for development and production properties. This includes aspects such as:

- Environment;
- Mine geotechnical;
- Mine planning and production schedule;
- Financial analysis;
- Statement of estimated Mineral Reserves.

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1 Introduction

1.1 Background of the project

Liberty Mines Inc (“Liberty”) has worked with SRK Consulting (Canada) Inc. (“SRK”) staff in the past with positive results and feedback. Liberty approached SRK staff during the latter stages of December 2007 to commission a National Instrument 43-101 compliant resource and reserve estimate on the Mc Watters deposit. Liberty planned to mine the Mc Watters Nickel deposit and needed a third party to assist with the estimates, financial analysis, and mine planning logistics.

During the ensuing months SRK and Liberty worked together to compile a validated database to be used for resource modelling and estimation processes.

Liberty’s engineering staff subsequently received the validated block model and produced a tentative mine plan and mineable reserve. SRK engineering staff from Sudbury, Ontario, was retained to review and complete this mine plan based on a series of assumptions and parameters provided by Liberty. These inputs and assumptions were based on previous data, knowledge and experience derived from the Redstone Nickel Mine. Furthermore, SRK and Liberty worked together to produce an engineering study for the Mc Watters Mine, including a final mineable reserve and financial analysis.

On April 2nd, 2008, a press release was issued by Liberty providing a summary and overview of the findings of the engineering study. The release was reviewed and approved by SRK geologists and engineers involved in the study, as well as by Liberty management.

This report is to be superseded by the present interim report, in order to address the deficiencies outlined during the recent Alberta and British Columbia Securities Commission review (refer to Liberty’s press release dated October 14, 2008; www.libertymines.com).

The engineering study estimates have been modified by actual production results. SRK therefore considers these estimates no longer applicable.

Liberty with the assistance of SRK, and other third parties as required, is undertaking economic analysis, geotechnical studies, and an environmental review of the property. As of December 16, 2008, work related to these studies has not advanced to a stage at which material changes about mineral reserve estimates, mining and environmental considerations, financial analysis, and other components required by National Instrument 43-101 for development and production properties can be reported. The results will be released in a future technical report.
1.2 Qualification of SRK

The SRK Group comprises over 500 professionals, offering expertise in a wide range of resource engineering disciplines. The SRK Group’s independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This permits SRK to provide its clients with conflict-free and objective recommendations on crucial judgment issues. SRK has a demonstrated track record in undertaking independent assessments of Mineral Resources and Mineral Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs.
1.3 Project team

This technical report was compiled by Mr. Glen Cole, P.Geo. (APGO#1416) and Mr. Carlo Cattarello, P.Eng (PEO#1922) and was reviewed by Dr. Jean-Francois Couture, P.Geo (APGO#0197).

Mr. Cole is a Principal Resource Geologist with SRK. He has been practicing his profession continuously since 1986 and has extensive experience in estimating mineral resources for base and precious metals projects in North America as well as in Southern and West Africa. Mr. Cole visited the project on January 14, 2008.

Mr. Cattarello, P.Eng is a Metallurgical Engineer with over fifty years of experience as a processing engineer in Canada and Mexico. Mr. Cattarello visited the Redstone Mill on numerous occasions since March 2006. The most recent site visit was completed on October 9, 2008.

Dr. Couture is a Principal Geologist with SRK and has been employed by SRK since 2001. He has been engaged in mineral exploration and mineral deposit studies since 1982. Since joining SRK, Dr. Couture has prepared independent technical reports on several exploration projects in Canada, United States, China, Kazakhstan, Northern Europe, West Africa and South Africa. Dr. Couture did not visit the project area. Dr. Couture did not visit the project.

Mr. William Randall, P.Geo (APGO#1516) an employee of Liberty aggregated the data and prepared the geological model used for resource estimation. Mr Randall also contributed to Sections 3 to 9 of this report under the supervision of SRK. The mineral resource modelling work was completed by Mr. Glen Cole, P.Geo (APGO#1416). This technical report was compiled by Mr. Randall and Mr. Cole; and reviewed by Dr. Jean-Francois Couture, P.Geo (APGO#0197). Mr. Cole reviewed the data provided by Liberty and reviewed the work of Mr. Randall. By virtue of his education and relevant work experience, Mr. Cole is an independent Qualified Person as this term is defined by National Instrument 43-101.

Mr. Randall is the Vice-President of Exploration for Liberty Mines Inc. Mr. Randall’s area of expertise is the exploration and development of Ni-Cu-PGE properties, having acquired the majority of his experience working in the Cape Smith Belt that contains the prolific Raglan trend. Mr. Randall has been closely involved with the project since late 2006.

1.4 Basis of the Technical Report

This report is based on information provided to SRK by Liberty as well as information collected during the site visits.
SRK conducted certain verifications of exploration data from the Liberty drilling program from drill core, files and records maintained by Liberty Mineral Exploration staff. Limited data verifications were possible for pre-Liberty data. This technical report is based on the following sources of information:

- Discussions with Liberty VP: Exploration Mr William Randall;
- Datasets provided by Liberty;
- Mining and processing data provided by Liberty Engineering Department;

1.5 Site visit

In compliance with NI 43-101 guidelines, each of the acting qualified persons responsible for this report visited the Mc Watters Mine site.

Mr. Glen Cole visited the Mc Watters site on January 14, 2008. The main purpose of this visit was to conduct geological investigations and inspections of available diamond drill core from the Liberty drilling program. Validation samples of split core were taken by SRK.

Mr. Carlo Cattarello visited the Redstone Mill on October 9, 2008.

The site visits also enabled technical discussions with project staff and for the site compilation of information required for the technical report.
2 Reliance on other Experts

The technical work referenced in this report is the combined result of technical inputs from Liberty as well as SRK technical staff. SRK’s opinion contained herein and effective May 16, 2008, is based on information provided to SRK by Liberty throughout the course of SRK’s investigations, which in turn reflect various technical and economic conditions at the time of writing. Given the nature of the mining business environment, these conditions can change significantly over relatively short periods of time. Consequently actual results may be significantly more or less favourable.

A portion of the project database originates from historically derived exploration programs and sampling activities. This data cannot always be adequately verified and a reliance on the integrity of such data received from Liberty exists.

This report includes technical information, which requires subsequent calculations to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, Liberty and SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Liberty, and neither SRK nor any affiliate has acted as advisor to Liberty or its affiliates in connection with this project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

SRK has not performed an independent verification of land title and tenure as summarized in Section 3 of this report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties but have relied on the client’s solicitor(s) to have conducted the proper legal due diligence. SRK verified the tenure information on the Ministry of Northern Development and Mines Mining Claims Information System as of the effective date of this technical report.

The qualified persons preparing this technical report are not experts in the assessment of potential environmental liabilities associated Mc Watters project. The Mc Watters project is an underground mine under development by Liberty. The environmental aspect of the Mc Watters Mine is currently under review and will be discussed in a forthcoming technical report that will summarize the Additional Requirements for Technical Reports on Development Properties and Production Properties.
3 Property Description and Location

The general location of the Mc Watters Mines is shown in Figure 3-1. The Mc Watters Property is located approximately 25 kilometres southeast of the city of Timmins, Ontario. The property is within the boundaries of the city of Timmins and is centered at approximately UTM (NAD83 Z17) coordinates 5,350,860 mN and 497,570 mE. The property is in Langmuir Township, within the Porcupine Mining Division, and is accessed from the city of Timmins/South Porcupine by a series of all-weather gravel roads. A detailed location map of the Mc Watters Mine in relation to the City of Timmins is shown in Figure 3-2.

Figure 3-1 Map of Ontario showing Mc Watters Mine location.
Figure 3-2  Detailed location map showing the Mc Watters Mine property in relation to the City of Timmins.
3.1 Land Tenure

The Mc Watters Property consists of two patented mining leases held by Liberty (295.6 hectares). They have been legally surveyed (Figure 3-3 and Table 3-1).

![Mc Watters Property mining claims plan](image)

**Figure 3-3 Mc Watters Property mining claims plan.**

**Table 3-1 Mc Watters Property Mineral Tenure Status.**

<table>
<thead>
<tr>
<th>Licence Number</th>
<th>Description</th>
<th>Area (Ha)</th>
<th>Title</th>
<th>Start Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>108068</td>
<td>CLM 453</td>
<td>31.9</td>
<td>Liberty Mines Inc</td>
<td>2007-Sep-01</td>
<td>2028-Aug-31</td>
</tr>
<tr>
<td></td>
<td>P 1243153</td>
<td>263.7</td>
<td>Liberty Mines Inc</td>
<td>2007-Sep-01</td>
<td>2028-Aug-31</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td><strong>295.9</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2 Underlying Agreements

The company 2004428 Ontario Inc, whom among other properties owned the Mc Watters property, was vended into Liberty Mineral Exploration Inc. on November 15th, 2001 in exchange for 3,000,000 shares of the company and $450,000. The name ‘Liberty Mineral Exploration Inc’ was then changed to Liberty Mines Inc. on June 30th, 2005, so that now Liberty Mines Inc. owns 100 percent of the Mc Watters property with no subsidiary involved. The property is subject to a 3 percent Net Smelter Royalty retained by some of the original shareholders of 2004428 Ontario Inc. One half, or 50 percent, of this Net Smelter Royalty may be purchased by Liberty for the sum of $1,000,000.
4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

4.1 Accessibility, Local Resources and Physiography

The Mc Watters Property is proximal to the city of Timmins, Ontario, which has a population of 48,000. The population consists of a skilled workforce with considerable experience and history in mining and mineral processing. Infrastructure is adequate to supply potential power and services for developing local resources.

The property is accessed from the city of Timmins by a series of gravel roads. Approximately twenty-five kilometres southeast of Timmins, a road branches east to the Mc Watters Mine site. Approximately six kilometres east along this road, the western part of the property is reached, where a security gate has been installed by Liberty. The access roads are used in all seasons, and are winter safe.

The Mc Watters deposit is located in an area that is relatively flat with poor drainage. The deposit location is generally low-lying with a few local rock outcrops and ranges in elevation from the low 290’s to a high of approximately 300 metres above sea level at a rock outcrop immediately to the south east that is three to five metres higher that the surrounding topography. The topography in the general area slopes gently from north to south. Higher relief is shown in a north/south trending outcrop that is located approximately one kilometre southeast of the deposit.

No waters flow through the site. The site naturally drains to the south into the Forks River at a location that is less than 2 kilometres upstream of the confluence with the Night Hawk River. The property lies entirely within the Night Hawk Lake sub-watershed. The Forks River drains northeasterly into the Night Hawk River which flows northeasterly into Night Hawk Lake. Night Hawk Lake in turn drains to the Frederickhouse River. The Frederickhouse River drains to the Abitibi River (north of Cochrane) then to Moose River, which ultimately discharges into James Bay.

The terrestrial vegetation (as described in the Liberty Mines Inc. – Mc Watters Mine Background Environmental Report – 2006 by B. Z. Environmental Consulting) was assessed at two sampling stations to best represent the dominant soil and vegetation types of the area. The vegetation type was identical at both stations, and was classified as V 28, typical of black spruce-lowland areas. This vegetation type tends to represent a forest to wetland transition zone, and is characterized by black spruce, bog rosemary, pale laurel, and sphagnum.
Wildlife communities around the Mc Watters Project are typical of other poorly drained northern boreal forest areas. The majority of the several species present are small mammals and songbirds that are common and widely distributed. Other species include ungulates, furbearers and raptors. Moose populations in the area are low to moderate. Furbearers in the vicinity include beaver, marten, mink, muskrat, fox, lynx and black bear. Other animal types include the snowshoe hare, fisher and wolf.

4.2 Infrastructure

The Mc Watters site is large enough to accommodate all the required construction of mining facilities. Completed infrastructure on site consists of a mechanical maintenance shop, office complex, mine dry, compressor house, security gate, and settling and treatment ponds. The mine is accessed via a portal, completed in early 2008, from which the ramp initiates.

Figure 4-1 shows the vegetation of the McWatters, as well as a layout if the surface infrastructure, in relation to the mining leases. Figure 4-2 shows a photograph of the portal collared during the winter months of 2008.
Figure 4-2  Photograph of the Mc Watters Mine portal during winter (2008).
5 History

A diligent summary of the exploration activities on the property has been prepared by Todd Keast. The following has been extracted from his report (2003).

Exploration on the Mc Watters Property dates back to 1947, and has included prospecting, trenching, airborne geophysical surveys, ground geophysical surveys, and diamond drilling. Government sponsored work in the area has included a 1967 mapping program of Langmuir and Blackstock Townships by the Ontario Department of Mines (O.D.M.), and a 1988 airborne electromagnetic (EM) and Magnetometer (magnetic) survey over the Timmins Area, which included Langmuir Township, by the Ontario Geological Survey (O.G.S.). A summary of all documented government surveys and exploration activities by companies covering the Mc Watters Property is listed below in Table 5-1.

Table 5-1 Summary of Previous Work on the Mc Watters Property

<table>
<thead>
<tr>
<th>Year</th>
<th>Company</th>
<th>Type of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>Dominion Gulf Company</td>
<td>Airborne Magnetics.</td>
</tr>
<tr>
<td>1961-</td>
<td>McWatters Gold Mines Limited</td>
<td>Mag, EM, and geological surveys, Drilling 25,735 ft.</td>
</tr>
<tr>
<td>1967</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>Urban Quebec Mines Limited</td>
<td>Diamond drilling (2,476 ft)</td>
</tr>
<tr>
<td>1965</td>
<td>National Explorations Limited</td>
<td>Ground geophysics, drilling (3,786 ft)</td>
</tr>
<tr>
<td>1966</td>
<td>Silverplace Mines Limited</td>
<td>Drilling (1,004 ft).</td>
</tr>
<tr>
<td>1967</td>
<td>Ontario Department of Mines</td>
<td>Mapping Langmuir and Blackstock Townships (Geological Report 86)</td>
</tr>
<tr>
<td>1967</td>
<td>E. Galata</td>
<td>Drilling (2,000 ft)</td>
</tr>
<tr>
<td>1969-70</td>
<td>Falconbridge Nickel Mines</td>
<td>Drilling (3,031.5 ft)</td>
</tr>
<tr>
<td>1971</td>
<td>Cantrri Mines Limited</td>
<td>Drilling (1,769 ft)</td>
</tr>
<tr>
<td>1971</td>
<td>Seaway Copper Mines Limited</td>
<td>Prospectus</td>
</tr>
<tr>
<td>1971</td>
<td>International Nickel Company</td>
<td>Ground Magnetics</td>
</tr>
<tr>
<td>1975</td>
<td>Pamour Porcupine Mines</td>
<td>Drilling (404 ft)</td>
</tr>
<tr>
<td>1977</td>
<td>Noranda Exploration Co</td>
<td>Ground geophysics</td>
</tr>
<tr>
<td>1987</td>
<td>Canadian Nickel Company</td>
<td>Airborne Geophysics, RC Drilling</td>
</tr>
<tr>
<td>1988</td>
<td>Ontario Geological Survey</td>
<td>Airborne Surveys</td>
</tr>
<tr>
<td>1991</td>
<td>Timmins Nickel</td>
<td>Ground magnetometer, HLEM</td>
</tr>
<tr>
<td>1994,</td>
<td>Outokumpu Mines Ltd.</td>
<td>Ground geophysics, trenching drilling (7,011 ft)</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>Liberty Mineral Exploration</td>
<td>Diamond drilling</td>
</tr>
</tbody>
</table>
5.1 Historical Work

5.1.1 Dominion Gulf Company (1947)

In 1947, Dominion Gulf Company conducted an airborne magnetometer survey. The company did not report any follow up work.

5.1.2 Mc Watters Gold Mines Limited (1961)

In 1961, Mc Watters Gold Mines Limited, in partnership with Quebec Manitou Mines Limited, staked a group of 54 unpatented mining claims. During the same year the companies completed ground magnetic, electromagnetic and geological surveys on the property. In 1962 the company drilled 13 diamond drill holes totaling 3,502 feet. Ten of these holes tested magnetic anomalies with coincident electromagnetic anomalies, which turned out to be sulphide bearing iron formation with no base metal concentrations (Ontario Department of Mines Geological Report 86). The other three holes investigated magnetic anomalies. The final drill hole of the program tested a magnetic feature 3,400 ft long and 200-300 ft wide, and was found to host Ni sulphide mineralization. The mineralization, hosted within a serpentinized dunite, returned an average of 0.428 percent Ni for 199 ft of core length, with a value of 0.65 percent Ni for 51.8 ft of core length (Ontario Department of Mines Geological Report 86). Later in the year an additional 11 diamond drill holes (5,192 ft), were completed along the mineralized magnetic anomaly. One of these holes was reported to have 0.63 percent Ni for a 36 ft core length and 0.74 percent Ni for a 45 ft core length (Ontario Department of Mines Geological Report 86). This drilling outlined a small sub-economic Ni sulphide deposit.

In 1964 and 1965, drilling resumed with 24 vertical holes (15,028 ft) completed on the mineralized zone. Some of the drill holes returned encouraging results, with some values greater than 1 percent Ni for lengths of 100-300 ft. (ODM Report 86). One 10 ft section returned more than 5 percent Ni (Northern Miner 1964, p.1113), and another 9.71 percent Ni (Northern Miner 1965 p.297). In addition one inclined hole was drilled to test a magnetic anomaly. This drilling delineated an upper and lower zone to the deposit, but significant mineralization was not located beneath or along strike to the deposit. The complete set of drill logs for the 1964-1965 drilling is not on file at the Ministry of Northern Development and Mines.

In 1967 three diamond drill holes totalling 1,298 ft were completed, fulfilling sufficient assessment work to bring the claims to lease. These holes were not drilled on the main mineralized ultramafic body. This work failed to indicate any economic mineralization
5.1.3 Urban Quebec Mines Ltd. (1965)

In 1965, Urban Quebec Mines Ltd. completed 10 diamond drill holes (2,476 ft) on a small group of claims in the northwest corner of what is now the McWatters Property. The drill holes intersected mafic volcanics, rhyolite, rhyolite porphyry and serpentinized peridotite. Mineralization within the peridotite consisted of 1-3 percent, locally 3-5 percent disseminated pyrite and pyrrhotite. Assay results from the Urban Quebec drill program indicate anomalous Ni results in five holes (Table 5-2). Urban Quebec did not report any follow up work.

Table 5-2 Select Drill Results Urban Quebec Mines Ltd.

<table>
<thead>
<tr>
<th>Hole #</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q-1</td>
<td>0.33% Ni / 20 ft</td>
</tr>
<tr>
<td>Q-2</td>
<td>0.17% Ni / 15 ft</td>
</tr>
<tr>
<td>Q-3</td>
<td>0.35% Ni / 7.0 ft</td>
</tr>
<tr>
<td>Q-4</td>
<td>0.13% Ni / 5.0 ft, 0.17% Ni, 5.0 ft</td>
</tr>
<tr>
<td>Q-5</td>
<td>0.29% Ni / 31.5 ft</td>
</tr>
</tbody>
</table>

5.1.4 National Explorations Limited (1965)

In 1965, National Explorations Limited conducted ground geophysical surveys, and completed 10 diamond drill holes (3,786 ft) on a group of claims which is now the central part of the Mc Watters Property. Drill holes intersected felsite, andesite, monzonite, altered syenite, and peridotite. Up to 5 percent disseminated pyrite was intersected within the andesite, but did not return anomalous Ni assays. Follow Up work was not reported.

5.1.5 Silverplace Mines Limited (1966)

In 1966, Silverplace Mines Limited completed 2 diamond drill holes (704 ft) on a claim which is now situated on the east end of the Mc Watters property. The holes intersected granite, greenstone breccia, and serpentinitite. Core was assayed for gold and silver only. Follow up work was not reported.

5.1.6 Ontario Geological Survey (1967)

In 1967 the Ontario Department of Mines completed a mapping program which covered Langmuir Townships (Pyke 1970). The geology was mapped as a northeast-southwest series of peridotite intrusions in contact with a sequence of felsic volcanic rocks, sediments and narrow iron formations.

5.1.7 E. Galata (1967)

In 1967, E Galata completed 4 diamond drill holes (2,000 ft) on small block of claims which is now the northwest corner of the Mc Watters property. The
drill holes intersected diorite, rhyolite, granite porphyry and peridotite. Hollinger Mines completed a property visit and documented a Ni- Cu showing which contained 1.5 percent Ni, 0.14 percent Cu from trench grabs. The mineralization was located at the contact of the peridotite with the rhyolite. Follow up work was not reported.

5.1.8 Falconbridge Nickel Mines Ltd (1969, 1970)

In 1969, Falconbridge Nickel Mines Ltd. conducted ground geophysical surveys and completed seven diamond drill holes (3,031.5 ft) on a group of claims, which are now the northwest portion of the Mc Watters property. The drill holes intersected a variety of volcanics rocks types including peridotite. Traces of pyrite and chalcopyrite were noted on the logs, however assays were not reported. Follow up work was not reported.

5.1.9 Tontine Mining Limited, 1970

Under the terms of an agreement dated February 23, 1970, Tontine Mining Limited purchased the assets of Mc Watters Gold Mines.

5.1.10 Canadian Jamieson Mines Limited, 1970, 1971

In 1970 Canadian Jamieson Mines Limited reached an agreement with Tontine Mining Limited whereby Canadian Jamieson would evaluate previous work on the property and if warranted, bring the property into production. In 1971 Canadian Jamieson Mines Limited conducted geophysical surveys, metallurgical testing and diamond drilling on the property. Results of the work were inconclusive. The reports pertaining to the Canadian Jamieson evaluation are not on file at the Ministry of Northern Development and Mines. The work is referenced from (OGS Study 20).

5.1.11 Cantri Mines Limited (1971)

In 1971, Cantri Mines completed 4 diamond drill holes (1,769 ft), on a small group of claims situated on what is now the eastern edge of the Mc Watters property. Drill holes were planned to test geophysical responses obtained from surveys of previous operators. Rhyolite, felsite, porphyry and serpentinite were intersected in the drill holes. Disseminated pyrite was noted in the drill holes, with the highest assay of 0.13 percent Ni over an unknown width (assays not documented on drill logs). Hole 2 was abandoned and was recommended for re-drilling during a later program. Cantri Mines did not report any follow up work.

5.1.12 Seaway Copper Mines Limited (1971)

In 1971 Seaway Copper Mines Limited acquired the claims held by Cantri Mines. A prospectus for work on the project was prepared, however work was not reported.
5.1.13 International Nickel Company (1971)

In 1971 International Nickel Company completed a ground magnetometer survey on a small group of claims in what is now the northeast corner of the Mc Watters Property. Further work was not reported by International Nickel.

5.1.14 Pamour Porcupine Mines Ltd. (1975)

In 1975, Pamour Porcupine Mines Ltd. completed a single drill hole (404 ft) on a single claim in the northwest corner of what is now the Mc Watters Property. Diorite and Serpentinitized peridotite were intersected in the drill hole, with only a trace of pyrite. The highest assay result was 0.17 percent Ni / 6.0 ft. Follow up work was not reported.

5.1.15 Noranda Exploration Co. Ltd. (1977)

In 1977, Noranda Exploration Co. completed geological and geophysical surveys on two claims on what is now the north part of the Mc Watters property. A weak zone of conductivity was identified but was not recommended for drilling. Follow up work was not reported.

5.1.16 Canadian Nickel Co. Ltd. 1987

In 1987 Canadian Nickel Co. Ltd completed airborne electromagnetic surveys parts of Langmuir and Eldorado townships. The survey covered the majority of what is now the Mc Watters Property. Canadian Nickel did not report any follow up work.

5.1.17 Ontario Geological Survey (1988)

In 1988, the O.G.S. completed an airborne electromagnetic and magnetic survey over the Timmins Area, which included Langmuir Township. A number of strong airborne electromagnetic and magnetic features were identified, many which may not have been evaluated.

5.1.18 Timmins Nickel Inc. (1991)

In 1991, Timmins Nickel Inc. completed ground HLEM and magnetic surveys over a small portion of what is now the Mc Watters Property. Timmins Nickel did not report any follow up work on the Mc Watters portion of the property.

5.1.19 Outokumpu Mines Ltd. (1994, 1995)

In 1994 Outokumpu Mines Ltd completed ground geophysical surveys, mechanical stripping, and diamond drilling (7,011 ft) on the northwest corner of what is now the Mc Watters property. Thick sequences of ultramafic rocks were intersected; however sulphide mineralization was not encountered. Mechanical stripping was completed on an area 246 ft by 246 ft, to expose the ultramafic/volcanic contact, and the historical showing identified by Galata (1967). Outokumpu did not complete any additional work.
5.2 Exploration Work by Liberty

5.2.20 Liberty Mineral Exploration Inc. (2001 - 2004)

In 2001, Liberty Mineral Exploration Inc. purchased the assets 2004428 Ontario, which included the nine claims that formed the Mc Watters Property. Liberty Mineral Exploration conducted a drill program on the Mc Watters deposit that spanned over three years totalling 7,965 metres of drill core.

5.2.21 Liberty Mines Inc. (2005 – present)

Liberty Mineral Exploration Inc. name was then changed to Liberty Mines Inc. on June 30th, 2005. Based on the diamond drilling conducted by Liberty Mineral Exploration a NI 43-101 compliant resource estimate by Roscoe Postle Associates Inc. was commissioned by Liberty. The result was an indicated resource of 540,400 tonnes at an average grade of 1.06 percent Ni, reported at a 0.5 percent Ni cut-off grade.

During 2006 and 2007 Liberty carried out a drill program consisting of 12,676 metres of drill core. The program was designed both as an exploration and infill drill program, considering future mining operations on the deposit.
6  Geological Setting

6.1  Regional Geology

The Mc Watters deposit is hosted by ultramafic rocks that form part of, or intrude, the Tisdale assemblage that flank the Shaw Dome and form part of the Abitibi greenstone belt (AGB). The Abitibi greenstone belt is one of the youngest parts of the Archean Superior Province forming what is considered one of the largest and best-preserved belts of its kind in the world. The Abitibi belt developed between 2.8 to 2.6 Ga (Jackson and Fyon, 1991) and has been subdivided in 9 lithotectonic assemblages (Ayer et al., 2002; Sproule et al., 2002). The relationships between these assemblages are ambiguous and may represent a superposition of allochthonous terranes (each terrane having been formed in a different tectonic environment), or a tectonically complex and structurally deformed single autochthonous terrane formed along a convergent margin, or a combination of both these. Even though the AGB has been subdivided into 9 distinct lithotectonic assemblages, only four of these are generally accepted to contain komatiitic rocks and therefore considered prospective for ultramafic-hosted Ni-Cu-(PGE) sulphide deposits. These four assemblages have distinct and well defined ages as well as spatial distribution (Figure 6-1): the Pacaud assemblage (2750-2735 Ma), the Stoughton-Roquemaure assemblage (2723-2720 Ma), the Kidd-Munro assemblage (2719-2711 Ma), and the Tisdale assemblage (2710-2703 Ma). These four assemblages differ considerably in the physical volcanology and geochemistry of the komatiitic flows. It is important to note that the latter two of these assemblages contain larger volumes of high magnesium, Al-undepleted komatiites (>5 percent), while the Tisdale assemblage contains more andesitic rocks and sulphide facies iron formations (Sproule et al., 2003)
Figure 6-1 Simplified regional geological setting of the Abitibi Greenstone Belt.

The Shaw Dome is a major anticline centred approximately 20 km southeast of Timmins, Ontario (Muir, 1979; Green and Naldrett, 1981; Figure 6-2). The anticlinal structure may be a result of regional folding that affected rocks north of the Shaw Dome or, more probably, due to the diapiric action of a large granitic body which partially outcrops in the central south-east portion of the dome.

Volcanic rocks associated with the Shaw Dome have been associated with the Deloro assemblage (2730 to 2725 Ma: Ayer et al., 1999) and younger Tisdale assemblage. Pyke (1982) further sub-divided these assemblages into three volcanic formations: lower, middle, and upper volcanic formations. The lower formation of the Deloro assemblage is not exposed in the Shaw Dome, while the middle formation occupies the central part of the Dome north of the Redstone mine and the exposed granitic intrusive rocks depicted in Figure 6-2.
Figure 6-2 Location of the Mc Watters Mine shown on an extract from Map P2455 produced by the Ontario Geological Survey.

The upper volcanic formation of the Deloro was described by Pyke (1982) to contain a relative abundance of sulphide facies iron formations and a predominance of intermediate to felsic volcanic rocks of dacitic to andesitic composition. Pyke (1982) does not mention the presence of extrusive komatiitic rocks in this assemblage having mapped all of the ultramafic rocks contained within this supracrustal package as intrusive in nature (Pyke, 1970, 1975). Pyke (1982) does, however, add that “there is some intercalation of the komatiites (of the Tisdale assemblage) with the Deloro Group volcanic rocks”. Since, both intrusive and extrusive ultramafic rocks have been identified within the Deloro volcanic package (Hall & Houle, 2003; Houle et al., 2004; Houle & Guillmette, 2005) outlined by Pyke (1982). Therefore, either the assumption that the Deloro assemblage is devoid of komatiitic flows needs to be revised, or the disconformity that delineates the contact between Deloro and Tisdale rocks modified.

Stone & Stone (2000) divided the komatiitic rocks into two horizons making no reference to stratigraphy: the lower komatiitic horizon (LKH) and the upper komatiitic horizon (UKH). The UKH consists of extrusive komatiitic rocks
intercalated with calc-alkalic volcanic rocks and sulphide facies iron formations, while the LKH consists of komatiitic rocks that intrude the underlying felsic to intermediate volcanic flows and interbedded iron formations. The rocks that form the LKH are mostly dunites, whelrlites, pyroxenites, and gabbros that intruded sometime between 2725 Ma and 2707 Ma (Stone & Stone, 2000 and references therein).

The UKH rocks are cumulate, spinifex textured and aphyric komatiites that extruded sometime before 2703 Ma (Corfu et al., 1989). The UKH komatiitic intrusions are interpreted to represent part of the feeder system that resulted in the eruption of channelized komatiitic flows that are, at least initially, cogenetic and form what is now a large dyke-sill-lava complex. Observations and interpretations by Stone & Stone (2000) are supported by later mapping of Adams, Shaw, Langmuir, and Carman Twps by Houle et al. (2004) and Houle & Guillmette (2005).

To date five Ni-Cu-(PGE) deposits have been discovered in the Shaw Dome (Redstone, Hart, Mc Watters, Langmuir #1, Langmuir #2), and numerous showings have been identified (Galata, etc). These five deposits occur in komatiitic rocks found within the Deloro assemblage near the base of the Tisdale assemblage.

Proterozoic dykes of the Matachewan swarm and the Abitibi swarm intrude all of the rocks described so far. The Matachewan dykes generally trend north to north-west while the younger Abitibi swarm trends north-east.

6.2 Property Geology

There are no outcrops in the immediate area of the Mc Watters deposit. Four main rock types have been identified through diamond drill core: footwall intermediate volcanics, mineralized ultramafic flows, felsic dykes, and mafic dykes. Based on whole rock data (Appendix I), the intermediate volcanic rocks range in composition from basaltic andesite to andesite, classified using a total alkalis versus silica (TAS) diagram. The ultramafic rocks are of komatiitic composition plotting near the 100 percent Mg apex on the Jensen cation plot (Jensen, 1976), however the extrusive nature of the body is uncertain as associated textures (spinifiex, flow breccia) have not been identified to date. Its spatial association and similar silicate and sulphide mineralogy to other extrusive bodies is the basis of the classification. The dykes are syeno-diorites and gabbros respectively (also using a TAS diagram).

The komatiitic rocks, which host the mineralization are serpentinized and locally altered to talc, chlorite and carbonate. Massive and cumulate textures are locally preserved and are best developed near the center of the body where pyroxene occurs as an intercumulus phase. The contained sulphide minerals observed in decreasing abundance were pyrite, heazlewoodite and minor chalcopyrite, occurring predominantly as disseminations but also as pods, veins, and massive to semi-massive veins. Rather than being situated along the basal contact of a trough-shaped flow, the sulphides in the Mc Watters deposit occupy irregular volumes suspended within a large mass of ultramafic
cumulates that apparently lack any kind of komatiitic flanking sheet flows or any other indication of a volcanic origin. The massive sulphide bodies are, however, often associated with andesitic wedges that appear to be fault bound.

The Mc Watters deposit differs markedly from the rest of the known deposits in the Shaw Dome. The ultramafic body hosting the Mc Watters deposit is discordant, evidently cutting up through the iron formation that sits immediately on its north flank, as indicated by recent, more detailed magnetic surveys conducted by Liberty. The ultramafic body displays a characteristically high magnetic response that can be traced for several kilometers to the west, and appears to cross-cut the predominant stratigraphy. Several drillholes along the strike length confirm the presence of ultramafic rocks along most of this magnetic anomaly, making it possible to conclude that it represents a continuous ultramafic body. The discordant nature of this ultramafic unit suggests that it is intrusive, and therefore has a markedly different genesis relative to its extrusive counterparts in the Shaw Dome.

Along some sections the mineralization is present in more than one distinct volume, and it is possible that these each represent different intrusions or pulses within a single intrusion along the same path at different times. The outlines of the ultramafic body are only moderately understood, and it is entirely possible that multiple mineralized bodies exist within the same ultramafic massif, both at depth and on strike. Although this deposit offers a more challenging target for drill-based exploration due to its complexity, it also offers a much greater potential for the discovery of a very large deposit because of its greater size. Kambalda-type flow-hosted deposits are limited in size by the constraints imposed by the geometry of the lava flows, whereas an intrusion has the potential to be much larger. A probable analog to the Mc Watters deposit is the giant Mt Keith deposit in Australia (299 Mt at 0.57 percent Ni, of which 0.28 percent is hosted by silicate minerals; Butt and Brand, 2003 (http://www.crcleme.org.au/), which is also hosted by a subvolcanic dunitic intrusion. In the terminology of Lesher and Keays (2002) these correspond to Type II deposits. It should be noted that Lesher and Keays (2002), like most of the recent literature about dunite-hosted disseminated sulfide deposits of this type, referred to them as being hosted by channelized lava flows, but recent work at Mt Keith has shown it to be intrusive in origin.

Even though rock exposure is extremely limited in the area surrounding the Mc Watters deposit, the scope of work on the property has enabled a detailed geological map to be produced by Liberty staff.

Figure 6-3 is a plan map of the property geology, including the deposit outline and basic layout of the surface infrastructure.
Figure 6-3 Simplified surface geological map of the Mc Watters deposit.
7 Deposit Types

The distribution of magmatic Ni-Cu-PGE sulphide deposits in Canada, with a resource size greater than 100,000 tonnes is shown in Figure 7-1. Considerable research by various writers over the years indicates that komatiite hosted nickel deposits in the Timmins area are similar to the Archean age nickel deposits of the Kambalda and Windarra areas in Western Australia.

In the AGB four of the assemblages contain komatiites. Komatiite-associated Ni-Cu-(PGE) deposits have only been identified within the Kidd- Munro and Tisdale (including Mc Watters) assemblages. This is consistent with the interpretation that komatiite associated Ni-Cu-(PGE) deposits form within lava channels of channelized sheet flows or intrusives, but not within sheet flows or lava lobes.

Tisdale assemblage ultramafic volcanic rocks with high MgO contents (up to 32%) are defined as aluminium undepleted komatiites (“AUK”). Individual flows are usually less than 100 metres thick and typically occur at or near the base of ultramafic sequences. The flow units can be recognised by the presence of chilled contacts, the distribution of spinifex textures, marked compositional or mineralogical changes at unit boundaries and the presence of ultramafic breccia or sulphidic sediments at contacts. Intrusive counterparts have also been recognized in the Tisdale assemblage.

The following three paragraphs are largely based on Lesher & Keays (2002), parts of which are paraphrased.

Komatiite-hosted Ni-Cu-PGE deposits are one of several lithological associations within the broader group of magmatic Ni-Cu-PGE deposits. Mineralization occurs in both extrusive and intrusive settings and experimental studies indicate that komatiitic magmas/lavas were emplaced at very high temperatures. Deposits of this association are mined primarily for their Ni contents, but they contain economically-significant amounts of Cu, Co, and PGE.

Komatiite-associated nickel sulphide deposits are part of a continuum of lithotectonic associations in the family of magmatic Ni-Cu-PGE deposits, which contains a variety of mineralization types (Table 7-1 from Lesher & Keays, 2002).
Figure 7-1  Map showing the distribution of magmatic Ni-Cu-PGE sulphide deposits in Canada, with resources greater than 100,000 tonnes (after Wheeler et al, 1996)
Table 7-1 Classification of mineralization types in komatiite-associated magmatic Ni-Cu-PGE deposits

<table>
<thead>
<tr>
<th>Origin</th>
<th>Type</th>
<th>Magnatic</th>
<th>Hydrothermal-Metamorphic</th>
<th>Tectonic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
</tr>
<tr>
<td>Subtype</td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>basal/footwall</td>
<td>strata-bound internal</td>
<td>reef</td>
<td>offset</td>
</tr>
<tr>
<td>Subtype</td>
<td>I</td>
<td>IIa</td>
<td>IIb</td>
<td>IIc</td>
</tr>
<tr>
<td>Subtype</td>
<td>I</td>
<td>II</td>
<td>IIb</td>
<td>IIc</td>
</tr>
<tr>
<td>Subtype</td>
<td>I</td>
<td>II</td>
<td>IIb</td>
<td>IIc</td>
</tr>
<tr>
<td>Subtype</td>
<td>I</td>
<td>II</td>
<td>IIb</td>
<td>IIc</td>
</tr>
<tr>
<td>Subtype</td>
<td>I</td>
<td>II</td>
<td>IIb</td>
<td>IIc</td>
</tr>
<tr>
<td>Subtype</td>
<td>I</td>
<td>II</td>
<td>IIb</td>
<td>IIc</td>
</tr>
</tbody>
</table>

Most of the deposits in the Shaw Dome are **Type I** (stratiform basal), including Liberty’s Redstone and Hart deposits. **Type Ib** (migmatic footwall vein) mineralization is a minor mineralization type associated with Type I deposits, but is an important mineralization type in other associations (e.g., Cu-PGE-rich footwall veins at Sudbury). **Types IIa** (blebby disseminated) and **IIc** (cloudly disseminated) are common minor mineralization types associated with Types I and Ib. **Type III** (stratiform “reef”) mineralization is a more recently-recognized primary mineralization type in this association and is normally subeconomic, but is an important mineralization type in other associations (e.g., Bushveld, Stillwater). **Type IVa** (Ni-enriched metasediment) mineralization occurs in many deposits where Type I mineralization are intimately associated with sulphidic metasedimentary rocks, as is the case with the Hart deposit. **Type IVb** (hydrothermal vein) mineralization is a relatively minor, but genetically important secondary mineralization type. **Type V** (offset) mineralization is associated with almost all Type I deposits and is common both at Redstone and Hart deposits.
The Mc Watters deposit conforms to various mineralization types: **Type I** (basal massive sulphide layer), **Types IIa** and **IIc** (disseminated zone overlying the massives), and possibly **Type IVb** as there are clear indications of hydrothermal activity in the sulphide mineralogy.

The genesis of the Shaw Dome and the Australian deposits is attributed to the combined effect of lava channels (or channelized sheet flows) and intrusives, which provides the heat and metal sources, and sulphide bearing iron formations in the footwall that provide an external sulphur source. Thermal erosion of the underlying rocks by the komatiite flows is considered to be the dominant mechanism for adding sulphur to the magma and to the creating a depositional ‘trough’ for sulphide minerals. Type II mineralization characteristically contains disseminated sulphide mineralization within channelized flows resulting in large tonnage low grade deposits. Characteristics of this deposit type which should be used in exploration methodologies include:

- Geological mapping of komatiite flow units;
- Presence of sulphidic footwall rocks;
- Lithogeochemical surveys can detect AUK komatiites; and
- Airborne and ground electromagnetic surveys will detect the location of massive sulphide mineralization, whereas magnetic surveys should detect pyrrhotite rich sulphide mineralization.
8 Mineralization

The Mc Watters mineralized zone can be readily subdivided in two distinct zones: an upper zone of altered dunitic rocks containing disseminated sulphides, and a basal, lower zone consisting of massive sulphides. The upper zone directly overlies the lower zone, which is principally in contact with wedges of andesitic, footwall volcanic rocks. The two zones combined form a mineralized body approximately 150 metres in strike length by 30 metres to 40 metres in width extending down to a depth of approximately 160 metres. The body dips steeply to the south at an average dip of approximately 82 degrees.

Historically mineralization was thought to consist of pyrite, pentlandite, millerite, and minor chalcopyrite in order of decreasing abundance. However, petrographical work carried out by Liberty did not find evidence for this mineralogical assemblage, but instead a more unique and less common assemblage consisting primarily of pyrite and heazlewoodite (Figure 8-1). Heazlewoodite (Ni$_3$S$_2$) is one of the most nickel rich sulphide minerals, and is generally though to be of hydrothermal origin, most often found in dunites and lherzolites.

![Figure 8-1 Thin section microphotograph of mineralized core from the Mc Watters deposit showing the predominant sulphide assemblage: Heazlewoodite (ha) and Pyrite (py).](image-url)
Thin section studies of the upper zone revealed a mineralized core consisting of altered dunite/peridotite that is dominated by anhedral olivine (and possibly pyroxene) grains that were altered completely to antigorite-magnetite; antigorite was in turn altered slightly to strongly to talc. In other instances the dunite/peridotite is dominated by chlorite with lesser magnesite/ankerite. Sulphide mineralization in this upper zone consists primarily of pyrite and heazlewoodite (1 to10 percent modal abundance), with trace amounts of chalcopyrite and chromite. Heazlewoodite grains are generally between 0.05-0.2 mm in size (Figure 8-2).

The massive sulphide dominated lower zone is also comprised primarily of pyrite (40 percent-50 percent) and heazlewoodite (30 percent-40 percent) (Figure 8-3). Heazlewoodite grain sizes range up to 1.5 millimetres. Other common minerals include (in order of decreasing abundance): pyrrhotite, chlorite, tremolite, magnetite, and chalcopyrite.

The mineralogical observations appear to support the interpretation that ultramafic body hosting the mineralization is intrusive. The mineralization could be interpreted as hydrothermally modified magmatic sulphides.
Figure 8-2 Microphotograph of a thin section showing the mineral assemblage of the disseminated zone at Mc Watters. Magnetite (mt), Chlorite (cl), Heazlewoodite (ha), Magnesite (ms), Chalcopyrite (cp).

Figure 8-3 Microphotograph of a thin section showing mineralogy of the massive sulphide dominated basal layer at Mc Watters. Pyrite (py), Pyrrhotite (py), Chlorite (cl), Heazlewoodite (ha).
9 Exploration

9.1 Historical

A review of the historical exploration activities on the property can be found in Section 5.

9.2 Future

The ultramafic body that hosts the Mc Watters mineralized zone continues at depth and trends east-west over several kilometres. Future in-mine exploration will focus on drill testing the depth extension from drill bays on the 155 metre level of the mine.

During 2008, Liberty tested the airborne geophysical response of the Mc Watters mineralized body in order to determine which method detected a recognizable signature. The VTEM system successfully detected an electromagnetic response associated with the deep seated, flat lying massive sulphide layer. The entire strike length of the ultramafic body was subsequently flown using this very same system. Future exploration will target geophysical anomalies associated with ultramafic, discordant bodies that exhibit similar characteristics to those detected at Mc Watters.
10 Drilling

10.1 Introduction

During the period 1961 to 1995, a number of exploration companies undertook various phases of drilling activities in the vicinity of the Mc Watters Mine. Poor records exist of the diamond drilling during this period, and the results have not been used in the present study. The block model used in this study was based on drilling conducted by Liberty Mineral Exploration Inc. and Liberty. Total drilling amounted to 20,641 metres of diamond drill core. Details of this drilling are tabulated in Table 10-1.

Table 10-1  A tabulation of diamond drilling activities conducted at the Mc Watters Mine.

<table>
<thead>
<tr>
<th>Company</th>
<th>Period</th>
<th>Type</th>
<th>No. Holes</th>
<th>Total (metre)</th>
<th>Mean length (metre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberty Mineral Expl.</td>
<td>2001-04</td>
<td>Surface DD</td>
<td>49</td>
<td>7,965</td>
<td>163</td>
</tr>
<tr>
<td>Liberty Mines</td>
<td>2006-07</td>
<td>Surface DD</td>
<td>92</td>
<td>12,676</td>
<td>138</td>
</tr>
</tbody>
</table>

Diamond drilling conducted by Liberty Mineral Exploration Inc. consists of 49 vertical holes, for which very limited survey data was collected. Original drill logs and assay certificates from Swastika Laboratories, Kirkland Lake, ON (Canada), were found. Surface plan maps showing drill hole locations were also located, which aided in reconstructing drill hole locations. Approximately 75 percent of the casings were left in the ground enabling Liberty to survey a majority of the holes, adding confidence to the data. All the drill core belonging to this phase of drilling are stored on the Redstone Mine site, and have been either checked or relogged in entirety. All sampling matched the tags and assay certificates.

10.2 Drilling by Liberty (post 2004)

All drilling by Liberty was conducted from surface. A total of 92 holes with an average length of 138 metres were completed on the site. All the drilling done by Liberty was diamond drill core, with the core safely stored on surface at the Redstone Mine site for checking and review.

The core size for surface drilling was NQ, the size being deemed a natural balance between productivity and accuracy. The drilling contractor for over 90 percent of the program was Laframboise Drilling from Hilliardton, ON. Bradley Bros of Timmins performed a limited number of geotechnical holes. The boreholes are numbered by a clear alphanumeric code. The drill core was
not routinely photographed for a digital record, although representative core intersections were photographed.

Drill collars were surveyed by a land surveyor, with the original collar azimuth and plunge setup determined by compass and/or cut grid lines. Downhole surveying was routinely conducted at 25 metre intervals with a Maxibor instrument. Casing is used for one hole per set-up for all surface drill locations, with collar pickets installed with clear labels indicating location, hole names, azimuth, and dip. Core orientation is achieved with the EzyMark system. In terms of geotechnical data, RQD and recovery percentages have been routinely collected.

An example of the output of a typical Liberty drill log (MCW-07-65), highlighting all requisite drilling information in DH logger (Century Systems) output in shown in Figure 13.

10.3 Drilling Pattern and Density

Liberty Mineral Exploration drilled 49 surface holes to an average drill length of 163 metres. These holes were all vertical drill holes. The maximum depth below surface achieved was about 250 metres, although drilling typically targets depths less than 150 metres below surface. Drilling was done on a 15 metre by 15 metre pattern with one drill hole per set-up.

Liberty drilled 92 drill holes from surface average drill length of 138 metres. These holes were all drilled grid north, with dips angles ranging from -86 to -39.2 degrees. Set-ups typically consisted of 2-3 drill holes fanning with varying dip angles. Drilling was designed to achieve a drill spacing that fell somewhere in the 7.5 metre to10 metre range. The tight drill spacing was to ensure accuracy while modelling the sulphide concentrations in the disseminated zone, especially in the 0.5 percent to 0.8 percent range. The plan position of all drilling conducted at Mc Watters is illustrated in Figure 10-1, with a typical cross-section showing drill spacing illustrated in Figure 10-2.

It is the opinion of SRK that the drilling strategy and pattern have produced an adequate drill density to construct resource models of high enough confidence to enable accurate reserve estimates and subsequent financial predictions.
Figure 10-1 Plan section of diamond drill hole collars by Liberty shown on the Mc Watters grid.
Figure 10-2 Geological cross-section of the Mc Watters deposit showing geology, assay data, and drill hole traces.
11 Sampling Approach and Methodology

11.1 Introduction

Data reviewed in this study and applied for geological modeling and resource estimation was the product of historical and current exploration programs by two different companies. Historical exploration field procedures implemented by exploration staff have been summarized in the NI 43-101 compliant Technical Report on the Mc Watters Nickel Deposit, Timmins, ON, prepared by Roscoe Postle Associates Inc (RPA). This report is filed on SEDAR under Liberty Mines Inc., on the 9th of November, 2005. As stated in this report, it is the opinion of RPA that sampling procedures implemented by Liberty Mineral Exploration met the minimum requirements set out in Mineral Exploration Best Practices Guidelines.

SRK was able to review core handling, logging or sampling procedures implemented during the current Liberty drilling programs. All drill core is transported to the secure Redstone core yard, near the main office, where it is logged. Core is marked for sampling and mechanically split. Half of the split core is submitted for sample preparation and analyses (and sometimes for specific gravity), whereas the other half remains stored in the original core boxes. The results of drill core logging and sampling are recorded into DH logger (Century Systems) format, with adequate detail on lithology and mineralization recorded. Assay analyses results for Ni percent, Cu percent, Au gpt, Pt gpt and Pd gpt are recorded adjacent to lithology descriptions. Au, Pt and Pd have not been routinely sampled however. An extract from the drill log for diamond drill hole MCW-07-65, including the header information, is shown in Figure 11-1.
11.2 Sampling Protocols

Liberty sampling during the exploration program carried out on the McWatters site has followed industry best practices, as set out in *Mineral Exploration Best Practices Guidelines*. Liberty have sampled all mineralized core intercepts, which include a footwall sample below the massive sulphide basal contact as well as sample coverage of all mineralized intercepts in the disseminated zone to the massive sulphide. Figure 11-2 shows an extract from a typical drill log produced by Liberty, showing sampling procedures and logging details.
<table>
<thead>
<tr>
<th>Depth</th>
<th>Lithology</th>
<th>Mineralization Date</th>
<th>Assay Date</th>
<th>Sample Number</th>
<th>Scan To</th>
<th>Ni %</th>
<th>Cu %</th>
<th>Au (g/t)</th>
<th>Mo (g/t)</th>
<th>Other g/t</th>
</tr>
</thead>
<tbody>
<tr>
<td>142.00</td>
<td>SRK, Stronger Sulphide</td>
<td>140.00</td>
<td>140.00</td>
<td>3502</td>
<td>42</td>
<td>1.00</td>
<td>2.00</td>
<td>0.1200</td>
<td>0.5600</td>
<td>0.0000</td>
</tr>
<tr>
<td>144.20</td>
<td>SRK, Massive Sulphide</td>
<td>144.00</td>
<td>144.00</td>
<td>3505</td>
<td>40</td>
<td>1.00</td>
<td>2.00</td>
<td>0.1500</td>
<td>0.5000</td>
<td>0.0000</td>
</tr>
<tr>
<td>146.30</td>
<td>SRK, Kurokobite</td>
<td>146.00</td>
<td>146.00</td>
<td>3506</td>
<td>40</td>
<td>1.00</td>
<td>2.00</td>
<td>0.1400</td>
<td>0.5000</td>
<td>0.0000</td>
</tr>
<tr>
<td>148.50</td>
<td>SRK, Kurokobite</td>
<td>148.00</td>
<td>148.00</td>
<td>3507</td>
<td>40</td>
<td>1.00</td>
<td>2.00</td>
<td>0.1400</td>
<td>0.5000</td>
<td>0.0000</td>
</tr>
<tr>
<td>150.00</td>
<td>SRK, Kurokobite</td>
<td>150.00</td>
<td>150.00</td>
<td>3508</td>
<td>40</td>
<td>1.00</td>
<td>2.00</td>
<td>0.1400</td>
<td>0.5000</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

**Structure**

<table>
<thead>
<tr>
<th>Depth</th>
<th>Structure Type</th>
<th>Angle to Core Axis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.50</td>
<td>K</td>
<td>80</td>
<td>Sharp upper contact, broken/blocked.</td>
</tr>
<tr>
<td>44.10</td>
<td>K</td>
<td>45</td>
<td>Broken/broken felt, volcanic.</td>
</tr>
<tr>
<td>45.10</td>
<td>K</td>
<td>60</td>
<td>Broken gneiss.</td>
</tr>
<tr>
<td>51.35</td>
<td>K</td>
<td>55</td>
<td>Gneiss, folded, biotite.</td>
</tr>
<tr>
<td>51.50</td>
<td>K</td>
<td>61</td>
<td>Kurokobite, biotite, folded, altered.</td>
</tr>
<tr>
<td>75.50</td>
<td>ELT</td>
<td>15</td>
<td>Blocky/broken, semi-contract.</td>
</tr>
<tr>
<td>75.50</td>
<td>ELT</td>
<td>50</td>
<td>Blocky/broken, semi-contract.</td>
</tr>
<tr>
<td>129.00</td>
<td>ELT</td>
<td>80</td>
<td>Blocky/broken, semi-contract.</td>
</tr>
</tbody>
</table>

*Figure 11-2 Extract from Liberty drill log MCW-07-65 Sampling Procedures and Logging Details*
12 Sample Preparation, Analyses and Security

12.1 Sample Preparation and Analyses

Information regarding the historical Liberty Mineral Exploration sample preparation, analyses and procedures is available in the NI 43-101 compliant Technical Report on the Mc Watters Nickel Deposit, Timmins, ON, prepared by Roscoe Postle Associates Inc (RPA). Summarized information regarding the Liberty program is documented here.

The primary laboratory used by Liberty for drill core analyses is ALS Chemex, with sample preparation undertaken at the ALS Chemex Timmins sample preparation facility and subsequent analyses undertaken at the ALS Chemex Vancouver laboratories. Total turn-around time is reported to be about four weeks.

In terms of sample preparation, usually after drying core samples are fine crushed to 70 percent <2 millimetres (code CRU-31) and split with a riffle splitter. Split samples are pulverized and then split again to 85 percent <75 microns (code PUL-31).

Generally analyses are conducted for only nickel and copper, with analyses for Platinum, palladium and gold conducted on request. The assay method used is aqua regia digestion followed by fusion and AAS (analytical code AA46). Analyses for precious metals are reported from an aqua regia leach and using conventional ICP-AES analyses (analytical code ME-ICP41).

The ALS Chemex has ISO 9001 and ISO17025 registration in North America. SRK is unable to comment on the security measures in place during the sample handling processes during the various phases of data generation, as no information relating to this aspect is available.

Analytical results are returned by ALS Chemex to Liberty electronically with data directly updated to the Century Systems database. Certificates of Analyses are received for all assay data, which is checked against the original digital data. The original master pulps are stored for 90 days subsequent to the submission of the Certificates of Analyses, thereafter they are returned to site on request for storage.

12.2 Quality Assurance and Quality Control Programs

Quality control measures are typically set in place to ensure the reliability and trustworthiness of exploration data. This includes written field procedures and
independent verifications of aspects such as drilling, surveying, sampling and assaying, data management and database integrity. Appropriate documentation of quality control measures and analysis of quality control data are an integral component of a comprehensive quality assurance program and an important safeguard of project data.

The field procedures implemented by Liberty Mineral Exploration during their exploration program can be found in the NI 43-101 compliant Technical Report on the McWatters Nickel Deposit, Timmins, ON, prepared by Roscoe Postle Associates Inc (RPA). Aspects of the quality control measures implemented by Liberty have been reviewed by SRK. It is SRK’s opinion that recent quality control measures implemented and documented by Liberty, meet industry best practice guidelines.

Analytical control measures typically involve internal and external laboratory measures implemented to monitor the precision and accuracy of the sampling, preparation and assaying process. They are also important to prevent and monitor the voluntary or inadvertent contamination of samples. Assay certificates and Quality Assurance and Quality Control Reports from ALS Chemex were made available to SRK, who noted that internal and external laboratory control measures were in place.

In addition to the inferred quality assurance measures taken by ALS Chemex in Vancouver, a series of external analytical quality control measures to monitor the reliability of assaying results delivered by ALS Chemex Laboratories is implemented by Liberty. A series of blanks and standards were inserted at approximately every 10 to 20 samples (usually about 2 per batch).

Certified blank samples are used by Liberty. These blanks have recently also been verified by Liberty, by sending ten blank samples to the SGS Laboratory at Lakefield. The results of the assayed nickel and copper ‘blanks’ are shown in Figure 12-1. A high variance is noted in a limited number of deviant samples (4). The reason for this is unknown, but is most probably due to a sampling error where waste ultramafic was used instead of the standard blank material.

Two commercial certified standards (LBE-1 and LBE-2) and one ‘uncertified’ standard (Ni111) were applied by Liberty. The results of the Liberty standards for nickel and copper percentages are plotted in Figure 12-1. The recommended value for the copper and nickel reference materials are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Ni %</th>
<th>Cu %</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBE-1</td>
<td>1.090</td>
<td>0.071</td>
</tr>
<tr>
<td>LBE-2</td>
<td>6.440</td>
<td>0.200</td>
</tr>
<tr>
<td>Ni111</td>
<td>0.420</td>
<td>0.240</td>
</tr>
</tbody>
</table>
Figure 12-1 Plot for the control Nickel and Copper samples used by Liberty (top=blank, middle=copper and bottom=nickel).
12.3 Specific Gravity Data

Specific gravity measurements were collected during the Liberty core drilling program in 2006-7. All specific gravity data has been determined at the ALS Chemex laboratories in Vancouver from core pulp samples using the pycnometer method.

A total of specific gravity 235 determinations are available for the Mc Watters deposit. These were all assigned to a single weathering profile with three geo-domain differentiated. A summary of the weighted averages of this dataset is summarized in Table 12-1. This table differentiates between data from massive sulphides, disseminated mineralization and from other rock types. A histogram of the total specific gravity dataset is shown in Figure 12-2.

Specific gravity measurements were taken for mineralized samples from a whole spectrum of grades. A general positive relationship between specific gravity and Ni percent is apparent from the Mc Watters dataset. This positive relationship is highlighted in Figure 12-3 that shows the modeled linear relationship between specific gravity and Ni percent. The correlation coefficient between specific gravity and Ni percent is 0.6523.

For resource estimation, the modelled linear relationship between specific gravity and nickel grade was applied to estimate the grade for each block in the resource model.

The linear relationship is: specific gravity = 0.1584 x (Ni %) + 2.6782

<table>
<thead>
<tr>
<th>Rock Type</th>
<th>Samples</th>
<th>Ni%</th>
<th>Specific Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineralized Material</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disseminated Sulphides</td>
<td>200</td>
<td>0.74</td>
<td>2.77</td>
</tr>
<tr>
<td>Massive Sulphides</td>
<td>26</td>
<td>4.41</td>
<td>3.48</td>
</tr>
<tr>
<td>Non-mineralized Material</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Rock Types</td>
<td>9</td>
<td>1.58</td>
<td>3.12</td>
</tr>
<tr>
<td><strong>Total / Average</strong></td>
<td><strong>235</strong></td>
<td><strong>1.18</strong></td>
<td><strong>2.86</strong></td>
</tr>
</tbody>
</table>
Figure 12-2  Histogram of specific gravity data (g/cm³) for the total Mc Watters database.

Figure 12-3  Scatter plot showing the relationship between SG and Ni% from the Mc Watters dataset
13  Data Verification

13.1  Historical data verifications

It is good practice for exploration staff to implement field procedures designed to verify the collection of exploration data and to minimize the potential for inadvertent data entry errors.

SRK was unable to comment on the procedures adopted by Liberty during the 2002 to 2004 drilling campaign since no record is available of the data verification procedures adopted during this period. SRK was however able to review the procedures adopted by Liberty exploration staff for the recent 2006 to 2007 drilling campaign. A well structured data entry protocol is adopted by Liberty, with all verified data being captured in an industry standard Century Systems database.

13.2  Control Sampling Assay protocols

Control sampling procedures applied by Liberty at McWatters is similar to that adopted for its Redstone exploration drilling campaign. Techniques such as the following are applied:

- Validation of the assay results in the database compared with the original assay certificates;
- Taking replicate core samples from a second split of the pulverized sample at the laboratory;
- Duplicate analyses of selected samples;
- Sieve tests to verify the grinding on the pulp required for assaying;
- Insertion of routine blank samples to check for possible sample contamination during the preparation and assaying process;
- Application of appropriate grade certified control samples (standards);
- A check assaying program with an umpire laboratory.

Liberty has introduced the Century Systems database to all its exploration projects. This system as applied on Mc Watters is more than just a database, it is a management tool that combines borehole logging, mine mapping and assay data in a way that integrates seamlessly with Datamine, which is the modelling and design software applied. Century Systems also functions as a data verification tool, generating data input error and QAQC reports for management action.
13.3 SRK independent verifications

During the site visit to Mc Watters, SRK was able to verify many of the underground drillhole collars positions and review most of the exploration protocols and procedures applied by Liberty exploration staff. In addition SRK selected five drill holes from the recent Liberty drill program for high level logging which was compared to database information. Generally logging compared well, to that observed.

Assay results were compared to actual core intersections and a good correlation between sulphide mineralization and higher grades was observed.

SRK also took eight additional independent core samples for comparative analyses. These eight samples were taken from recently drilled remnant split Liberty core from previously sampled positions, taking care to sample core of varying sulphide mineralization (low as well as high grade samples taken).

The SRK samples were submitted to SGS Laboratories in Toronto for independent analyses. In contrast to Liberty, which analysed by aqua regia digestion (which yields a partial leach only) followed by AAS (ALS Chemex code AA46), SRK elected to have a ‘near total’ four acid digestion followed by ICP-AES (analytical code ICP90Q). The comparative results from this verification study are provided in Table 13-1 and graphically in Figure 13-1. SRK regard the variance in nickel and copper grades in Table 13-1 to be acceptable and typical for deposits of this nature.

<table>
<thead>
<tr>
<th>Sample #</th>
<th>ALS Chemex (Liberty)</th>
<th>SGS (SRK)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ICP90Q</td>
<td>AA46</td>
</tr>
<tr>
<td></td>
<td>Ni%  Cu%</td>
<td>Ni%  Cu%</td>
</tr>
<tr>
<td>1</td>
<td>E103670</td>
<td>0.56 0.03</td>
</tr>
<tr>
<td>2</td>
<td>E103671</td>
<td>0.37 0.03</td>
</tr>
<tr>
<td>3</td>
<td>E103672</td>
<td>2.17 0.05</td>
</tr>
<tr>
<td>4</td>
<td>E103676</td>
<td>2.36 0.15</td>
</tr>
<tr>
<td>5</td>
<td>E103682</td>
<td>10.35 1.32</td>
</tr>
<tr>
<td>6</td>
<td>E098946</td>
<td>2.60 0.07</td>
</tr>
<tr>
<td>7</td>
<td>E098947</td>
<td>0.99 0.01</td>
</tr>
<tr>
<td>8</td>
<td>E098948</td>
<td>2.47 0.08</td>
</tr>
<tr>
<td>average:</td>
<td></td>
<td>2.73 0.22</td>
</tr>
</tbody>
</table>
McWatters: Verification samples for Ni%

Figure 13-1 Graph showing comparative Ni% assays for SGS (ICP90Q) and ALS Chemex (AA46).

The verification study suggests that average nickel assays for SGS (ICP90Q) tend to be higher than that of ALS Chemex (AA46) for all grades.

Considering that average grades have been distorted by high grade sample E103682 and the small comparative database, these variations are however not seen as significant.

After review, SRK is satisfied that the exploration data available for the McWatters nickel project were generally acquired by Liberty using industry best practices guidelines. The quality and reliability of the sampling information is generally sufficient to support resource estimation.
14 Adjacent Properties

Liberty owns a large portion of the surrounding claims, including 3 of the 4 known deposits of the Shaw Dome. Mc Watters is located in the central portion of Langmuir Township (Figure 6-2). The Redstone nickel deposit is located to the west in neighbouring Eldorado Twp and is the westernmost deposit known to date. The Redstone Mine is currently in production and is equipped with concentrating facilities on site. Going eastward, located between Mc Watters and Redstone, is the Hart nickel deposit, which lies entirely within Liberty’s claim package. Langmuir #2, to the north, is shared with Inspiration Mining Corp, who owns part of the claims containing the mineralized zone. Langmuir #1 is the fourth deposit, and lies within a claim group whose mining rights belong to Inspiration Mining Corp.

The Redstone deposit has a recently calculated NI 43-101 compliant measured and indicated resource of 418,931 tonnes with an average grade of 2.32 percent Ni. This resource estimate only reflects mineralization contained in the upper 508m of the deposit, where current mining activities are taking place. The neighbouring Hart deposit has an historical inferred resource of 700,000 tonnes grading 0.9 percent Ni. An extensive drill program has been carried out during 2007 and early 2008 on the Hart project in order to provide a NI 43-101 compliant resource in the near future. In addition to the known deposits in the area there are many other prospects, including the Galata showing (up to 7.5 percent Ni) and the recently discovered mineralized intervals by Golden Chalice Resources.

Both Langmuir #1 and Langmuir #2 are past producing mines with total reported production of 111,502 tonnes with an average grade of 1.74 percent Ni, and 1,133,750 tonnes with an average grade of 1.50 percent Ni. Neither of these deposits have NI 43-101 compliant resource evaluations.

All nickel deposits of the Shaw Dome are hosted by ultramafic rocks, which have generally been interpreted as extrusive komatiitic flows, with the exception of Mc Watters. The latter deposit may be hosted by an ultramafic dyke that cross-cuts an iron formation.
15  Mineral Processing, Mineralogy and Metallurgical Testing

15.1  Introduction

On July 17, 2007, Liberty commissioned the Redstone Nickel concentrator, located on the Redstone Mine site. The plant is designed to process up to 2,000 tonnes per day of high MgO nickel, copper platinum group metals sulphide mineralization. The plant has been processing mineralized material from Liberty’s Redstone and Mc Watters Nickel Mines.

The Redstone concentrator processed 65,297 wet tonnes of mineralized material from the Redstone mine and 9,760 wet tonnes of mineralized material from the Mc Watters mine during the 2007 and 2008 campaigns. The concentrator demonstrated, during its operations, suitability to high MgO nickel sulphide mineralization achieving outstanding nickel recovery.

15.2  Processing

15.2.1  Mineralization Type

The Redstone Mill has been specifically built to process nickel sulphide mineralization with a high MgO content. The nickel sulphide deposits in the Shaw Dome are typically hosted by komatitic flows with an average MgO content ranging from eighteen percent to over thirty percent.

15.2.2  Predicted Metallurgical Recoveries

Predicted nickel recoveries for the McWatters Mine mineralized material are based primarily on previous plant performance, as well as metallurgical testing performed on drill core from the deposit and metallurgical studies. The predicted metallurgical performance for the McWatters’ life of mine is tabulated in Table 15-1.

<table>
<thead>
<tr>
<th>Ni head grade range</th>
<th>Predicted Ni recovery (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 - 0.6 percent</td>
<td>82</td>
</tr>
<tr>
<td>0.6 - 0.8 percent</td>
<td>85</td>
</tr>
<tr>
<td>0.8 - 1.5 percent</td>
<td>90</td>
</tr>
<tr>
<td>more than 1.5 percent</td>
<td>92</td>
</tr>
</tbody>
</table>
Concentrate grade is predicted to average more than 15 percent nickel.

15.2.3 Previous Plant Performance

The Redstone plant operated between July 14, 2007 to October 31, 2008, at which time the plant was placed on care and maintenance. During this period the plant processed high MgO komatiitic nickel mineralized material from the Redstone and Mc Watters mines. Processing results for the period are considered representative of future prospects.

Redstone mine throughput for the period averaged 215 tonnes of mineralization per day with an average head grade of 1.84 percent nickel, producing 1,763.7 tonnes of nickel concentrate. The concentrate grade averaged 16.4 percent nickel. Average nickel recoveries for the period were 87.05 percent.

The plant started processing Mc Watters development material on September 20, 2008 through to October 31, 2008. During this period 9,760 wet tonnes of mineralized material were processed. An average head grade of 0.57 percent nickel was measured at the mill, achieving average nickel recovery of 83 percent. Recovery fluctuated between 64 and 95 with head grades ranging from 0.33 to 1.15 percent nickel.

The metallurgical performance for both mines during operation is summarized in Table 15-2.

Table 15-2  Redstone plant metallurgical performance

<table>
<thead>
<tr>
<th></th>
<th>Tonnes</th>
<th>Head Grade (Ni%)</th>
<th>Con. Grade (Ni%)</th>
<th>Average Ni Recovery (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redstone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>42,006</td>
<td>2.08%</td>
<td>20.81%</td>
<td>88.70%</td>
</tr>
<tr>
<td>2008</td>
<td>58,445</td>
<td>1.84%</td>
<td>17.48%</td>
<td>87.74%</td>
</tr>
<tr>
<td>McWatters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>9,555</td>
<td>0.57%</td>
<td>13.73%</td>
<td>82.92%</td>
</tr>
</tbody>
</table>

15.2.4 Plant Flow Sheet Description

Crushing

All sulphide mineralization is trucked to the crusher house from the respective mine sites. Surface pads are specifically designed to maintain separate piles for each mine, but to blend the material from the same source in order to achieve a homogenous feed. The crusher coarse bin can store 100 million tonnes, which is drawn by a simplicity pan feeder on a variable frequency drive to control tonnage throughput. The pan feeder than feeds a 32 by 42 inches Birdshoro Jaw crusher. All minus 3-inch material is then conveyed to a Gator Double Deck screen. The top screen has an opening of 1” square and the bottom deck consists of a 3/8” x 3” opening. All material over 3/8” reports to a HP 400 cone crusher. This crushed material is then conveyed back to the screen deck for screening. The final crushed product is conveyed to two 800
live metric tonne bins for mill feed. The crusher house was operated at an average rate of 160 tonnes per hour.

**Grinding**
Feed product is drawn from two 800 live tonne fine mineralized material bins via a slot feeder. Material is conveyed to a 10 by 13 feet Dominion Ball Mill at a feed rate of 20-23 tonnes per hours. The mill is lined with rubber lifters and shell liners. The slurry density in the mill is maintained at seventy-four to seventy-eight percent at a specific gravity of 2.8. Slurry is pumped to a cyclone bank which consists of 4 Krebs D15 cyclone. Underflow is gravity fed to the mill for regrind and overflow of P80 65m reports to the conditioning tank.

Phase II grinding circuit is a mirror image of Phase I mill with independent feed belt, pump and cyclone. This is to separate mineralized contamination from a high Ni, lower MgO Redstone mineralization versus a moderate nickel, higher MgO content Mc Watters mineralization. This gives the circuit the flexibility to treat each mineralized body independently to maximize recovery.

Phase III consists of an addition of one 10’ .5” x 13’ Dominion Ball Mill which will be a regrind mill for the Mc Watters circuit to increase throughput from 500 to 1,000 tonnes per day. The three mills have the flexibility of operating in series to run one type of mineralization at high tonnage of up to 2,000 tonnes per day.

**Flotation**
The plant’s flotation circuit consists of two 500 cubic feet tank cells for Rougher with a slurry grade of 1.6 to 2.2 percent on average. Final concentrate collected at this stage has an average grade of eighteen percent nickel. The tails of the rougher cells is gravity fed to the first of six 500 cubic feet Scavenger tank cells. The last cell reports to the tailings discharge box, and all concentrated nickel collected is pumped to the cleaning stage which consists of three 500 cubic feet Scavenger Cleaner cells.

In the cleaner stage MgO’s are further depressed to clean the average nickel grade of five percent to a fourteen to sixteen percent nickel grade. Tails from the cleaner circuit are directed to the feed end of the scavenger to collect any remaining nickel. Phase II and III operate in a similar fashion with the addition of more cells for residence time, along with rougher cleaner cells to upgrade the rougher concentrate. All final concentrate reports to the 26’ conventional thickener. Slurry density is then thickened from thirty to sixty-five percent.

**Concentrate Dewatering**
The twenty-foot thickener pumps the sixty percent density slurry to a 500 cubic-feet holding tank which feeds two Larox filter presses. These state of the art dewatering presses operate fully on automation and can produce up to six tonnes per hour each. The average moisture of the concentrate cake is eight percent and is gravity fed to a seventy tonne storage bin.
The final product is conveyed from the storage bin where it is weighed before loading into haulage trucks. Samples are collected for assay and moisture content and are then transported to the buyer where the concentrate again is weighed and sampled in the buyer’s storage area.

**On Stream Analysis**
A new LIBS on stream analyzer has been installed. This analyzer measures nickel and MgO values on a two minute interval at feed and tails. This enables plant operation to react to MgO and head grade changes in a timely manner elevating recoveries while lowering chemical consumption and, therefore, reducing operating costs. The on stream analyzer is fully functional.

**Reagents**
The main reagents consumed are Depramin C which depresses MgO, copper sulphate which is the activator, Potassium Amyl Xanthate which is the collector, and DVX which acts as a frother.

15.3 Laboratory
The laboratory is located in the Redstone Mill and is under the supervision of the mill manager. The laboratory is equipped with a jaw crusher, ring, puck and riffler for sample preparation. The wet lab consists of a hot plate and digestion station. All sample assaying is done by atomic absorption. Concentrate samples are sent to a certified independent analytical laboratory as part of routine analytical quality control procedures.

The laboratory sample load consists of ten percent from the mill, eighty percent from geology, and ten percent from the environmental department.

15.4 Plant Personnel
The mill manager is responsible for the construction, operation and budgeting of the mill complex. The plant operates twenty-four hours a day, seven days a week with a staff of thirty-one employees. Working under the Mil Manager, a Mechanical Superintendent is responsible for three millwrights and any mechanical contractors on site. The Electrical Supervisor, with a crew of two electricians, is responsible for all of the plant automation and any electrical contractors on site. An Operations Superintendent assumes the responsibility for four mill shifters and all activities concerning mill processes. A Mill Metallurgical Supervisor is employed to ensure quality control in the assay laboratory and conduct test work to improve operating costs and nickel recovery.

Crews are divided into four operating crews headed by a Mill Shifter, who is responsible for two mill operators, along with a crusher and loader operator.
15.5 Plant Operating Costs

Plant operating costs summarized in Table 15-3 are based on historical production data at lower tonnages than those shown.

Table 15-3: Redstone plant operating costs

<table>
<thead>
<tr>
<th></th>
<th>500 tpd</th>
<th>1000 tpd</th>
<th>1200 tpd</th>
<th>1500 tpd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man Power</td>
<td>$9.39</td>
<td>$4.70</td>
<td>$3.91</td>
<td>$3.13</td>
</tr>
<tr>
<td>Chemical</td>
<td>$5.12</td>
<td>$5.12</td>
<td>$5.12</td>
<td>$5.12</td>
</tr>
<tr>
<td>Electrical</td>
<td>$0.55</td>
<td>$0.50</td>
<td>$0.47</td>
<td>$0.42</td>
</tr>
<tr>
<td>Mechanical</td>
<td>$1.02</td>
<td>$0.95</td>
<td>$0.90</td>
<td>$0.80</td>
</tr>
<tr>
<td>Analysis</td>
<td>$0.14</td>
<td>$0.14</td>
<td>$0.14</td>
<td>$0.14</td>
</tr>
<tr>
<td>Hydro</td>
<td>$4.67</td>
<td>$4.67</td>
<td>$4.67</td>
<td>$4.67</td>
</tr>
<tr>
<td>Total cost/tonne</td>
<td>$20.89</td>
<td>$16.08</td>
<td>$15.21</td>
<td>$14.28</td>
</tr>
</tbody>
</table>

15.6 Future Prospects and Upgrades

The plant is evaluating the possibility of introducing a gravity circuit to separate the platinum group metals from the nickel concentrate.
16 Mineral Resource and Mineral Reserve Estimates

16.1 Introduction

Unclassified historical resources have been reported for Mc Watters (ODM Geological Report 86). This historical estimate is unverified and as such is non-NI 43-101 by definition. A total of 477,768 tons grading 0.73 percent nickel in the Upper Zone and 165,790 tons grading 1.92 percent nickel in the Lower Zone for a total of 26,749,814 pounds of nickel was reported.

In 2005, Roscoe Postle Associates Inc. completed an updated NI 43-101 compliant resource estimate for the Mc Watters nickel deposit. Due diligence for this resource estimation included a review and compilation of all 2003 and 2004 sample assay data, survey data and surface topography. Aspects of the RPA (2005) resource estimate include:

- Data composited to one meter lengths;
- Block model dimensions of 2.5m x 2.5m x 2.5m;
- ID5 grade interpolation used within geologically defined solids;
- Indicated and Inferred resources classified according to data density and search radii criteria;
- Search radii of 100m for Inferred and 35m for Indicated resources;
- A density of 3.2t/m³ was assumed;
- Nickel grades were capped at 9 percent.

The Mineral Resource estimate at a cut off of 0.5 percent nickel is tabulated in Figure 16-1.

Figure 16-1 Mineral Resource Estimate for the Mc Watters Nickel Property (RPA, 2005)

<table>
<thead>
<tr>
<th>Cut off Nt %</th>
<th>Zone</th>
<th>Tonnes</th>
<th>Grade Ni %</th>
<th>Contained metal Ni (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicated Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.5 Upper</td>
<td>496,500</td>
<td>0.77</td>
<td>16,823,000</td>
<td></td>
</tr>
<tr>
<td>0.5 Lower</td>
<td>43,900</td>
<td>4.29</td>
<td>8,305,600</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>540,400</td>
<td>1.06</td>
<td>25,128,600</td>
<td></td>
</tr>
<tr>
<td>Inferred Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.5 Lower</td>
<td>4,300</td>
<td>4.29</td>
<td>817,900</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,300</td>
<td>4.29</td>
<td>817,900</td>
<td></td>
</tr>
</tbody>
</table>
SRK was commissioned by Liberty in October 2007 to compile an updated NI43-101 compliant resource estimate for the Mc Watters Nickel Deposit. This resource estimate supersedes the previous estimates.

This section summarizes the data, methodology and parameters used by SRK to estimate the mineral resources for the Mc Watters Nickel Deposit. The mineral resource model considers all available drilling data.

All resource estimation work was completed by Glen Cole, P.Geo from data received from William Randall, P.Geo from Liberty. The resource estimation and accompanying technical report was reviewed by Dr JF Couture of SRK.

The mineral resources presented herein are reported in accordance with the Canadian Securities Administrators’ National Instrument 43-101 and have been estimated in conformity with generally accepted CIM “Estimation of Mineral Resource and Mineral Reserves Best Practices” guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the mineral resource will be converted into mineral reserve.

Datamine Studio Version 2.1 was used to construct solids, build composites and the block model, to run grade interpolation and to estimate and tabulate mineral resources. Isatis Version 5.1.7 was used to undertake geostatistical analyses of the dataset and to generate variograms for nickel and copper.

### 16.2 Database validation

The data verifications adopted by SRK and Liberty are discussed in Section 13. Minimal data verification was possible for the data generated prior to 2006.

Database records reflect original drill data, except for the lithology codes which have been simplified and standardized by Liberty according to reasonable geological criteria. These lithology codes facilitated the geological modelling process.

The Excel and Datamine format database provided to SRK was checked for any missing data, overlapping intervals and for duplicated data inputs. The assay database comprises of a single data type viz. diamond drill data from various periods.

### 16.3 Resource Estimation

#### 16.3.1 Database

The database used for resource estimation includes exploration drilling data collected during various exploration programs conducted during the period 2002 to 2007. The Mc Watters drilling database that was received from Liberty
on 14 January 2008 comprises of 153 drill holes from the following diamond drill sources:

- Diamond drilling by Liberty during 2002 -2004 (L-series) = 49 holes;
- Diamond drilling by Liberty during 2006 -2007 (MCW-series) = 92 holes; and
- Other diamond drilling (RTH and TH-series) = 12 holes

The total resource assay database comprises of 6,667 records. The borehole database received from Liberty contains information about drill collar location, assay results for nickel and copper (and sometimes precious metals), lithology and surveying for all Liberty drill holes.

SRK is of the opinion however that the Mc Watters dataset is adequate for resource modelling and grade estimation for this style of sulphide mineralization.

16.3.2 Solid Body Modelling

Nickel (and copper) grades are spatially related to two kinds of sulphide mineralization at Mc Watters. The highest, most continuous grades are associated with the basal massive sulphide mineralization horizon which is locally highly variable in thickness. Overlaying the massive sulphide mineralization, disseminated type sulphides occur which are discontinuous in nature and associated with highly variable nickel grades. An additional complexity is the occurrence of barren intrusive dykes which complicate the continuity of known mineralization. The 3D orientation of such intrusive material has been modelled by Liberty.

With considerable interpretive input from Liberty exploration staff, the following geological entities were modelled:

The basal massive sulphide horizon was delineated from drill intersections; For the disseminated mineralized body, shells to estimate low grade mineralization (0.3 percent Ni) distributions as well as to estimate high grade mineralization (0.6 percent Ni) distributions were constructed for use as hard boundaries in the grade estimation process.

Mafic dykes cross cut the modelled mineralized domains and have been modelled accordingly from drillhole data. In addition felsic dykes have also been modelled (non-cross cutting). These intrusions have been coded and removed during resource determinations. Mineralized domains (massives, 0.3 percent Ni and 0.6 percent Ni domains) are reported excluding material (and sampling data) from barren intrusions.

The above methodology enables the creation of surfaces to simplistically define the extent of the two types of mineralization on Mc Watters (Figure 16-1). These surfaces will also become hard boundaries for the selection of data representing the two mineral types for geostatistical analyses and variography.
It is recognised that this geological model is a simplification of the reality on Mc Watters. No weathered surfaces have been modelled, as all drilled material is considered fresh by all available logging detail and by site inspection of the Liberty core by SRK.

**Figure 16-2** Simplistic oblique sectional view looking NNW of the result of the geological modeling process applied at Mc Watters.

### 16.3.3 Compositing

Composite files were created using uncapped values starting at the drillhole collar position and defined within each of the two ‘mineralized zones’ viz. the lower massive sulphide zone and the overlying disseminated type sulphide zone.

All assays were composited to 1.5 metre intervals and extracted to a workspace for statistical analyses and grade interpolation.

Certain intervals within the historical database (within the mineralized zones) were not sampled for reasons unknown. These intervals were assigned a value of zero in the compositing process. The original sample drill widths within both types of mineralized solids are illustrated in Figure 16-3.
Figure 16-3  Histogram of original sampled widths within modeled massive and disseminated sulphide mineralized zones.
16.3.4 Statistics

A tabulation of summary statistics (uncapped and capped) of composited drill data within the massive and disseminated sulphide domains is provided in Table 16-1. After excluding all data within modelled mafic dykes, composited datasets were generated for the 3 modelled mineralized domains with the following sizes (massive sulphides= 149, 0.3 Ni percent domain= 4330 (inclusive of 0.6 Ni percent domain) and the 0.6 Ni percent domain= 1499).

The statistical signature of each of these mineralized zones is substantially different, justifying the decision to separate these two data populations for geostatistical analyses which should result in higher confidence grade estimations.

Table 16-1  A tabulation of summary statistics of composited drill data with both modelled mineralized types

| Mineralized Domain | McWatters: Summary statistics on composited domainal drill data: | | | | |
|--------------------|-------------------------------------------------|---|---|---|---|---|
|                    | N      | Uncapped | capped | Uncapped | capped | Uncapped | capped | Uncapped | capped | Uncapped | capped | Variance |
| Massive Sulphides: | 149    | 149      | 15.80   | 15.00     | 0.00    | 0.00      | 3.88    | 3.87      | 15.84   | 15.59   |
| Disseminated Sulphides: | | | | | | | | | | | | |
| 0.3% Ni domain (*) | 4,330  | 4,330    | 4.59    | 2.50      | 0.00    | 0.00      | 0.45    | 0.45      | 0.11    | 0.11   |
| 0.6% Ni domain     | 1,499  | 1,499    | 4.59    | 2.50      | 0.00    | 0.00      | 0.72    | 0.72      | 0.13    | 0.12   |

(* inclusive of 0.6% Ni domain data)

Histograms for composited nickel grades within the two mineralized zones are provided in Figure 16-4. Nickel data is highly skewed with a dominance of low values, although within the massive sulphide zone a significant portion (about 10 percent of the total) of the data is in the higher grade tail (exceeding 10 percent Ni). The higher grade tail is insignificant in the stringer type sulphide zone.
Figure 16-4 Histogram for composited nickel within the two modeled mineralized zones.
16.3.5 Grade capping

Based on careful examination of the composited nickel datasets for all data within the modelled massive sulphide and disseminated mineralized zones and by consideration of the probability plots for nickel composite data within these zones (Figure 16-5) the following cappings were applied:

- Massive sulphide zone: 15 percent Ni
- Disseminated sulphide zone: 2.5 percent Ni

Figure 16-5  Probability Plots for composited nickel for data within the massive sulphide and disseminated sulphide zone.
16.3.6 Variography

Isatis software version 5.1.7 was used to generate all variograms. Traditional experimental variograms were modeled from the composited datasets from the two mineralization zones (basal massive sulphide and overlying disseminated type sulphides) for nickel and for all three principle directions.

The very low copper grades at Mc Watters motivated that copper was not analysed for. A single spherical structure variogram (including a nugget effect) was constructed and fitted for each direction for nickel (primary = N090, secondary = N180 and normal to the reference plane) and inputted into the Datamine Grade process. Nickel had slightly different search ellipses (ranges) in the disseminated sulphide domain to the massive sulphide domain reflecting different geological imprints.

Variograms for the disseminated sulphide domain was modelled with the reference plane inclined at -80 degrees to the south, whereas the massive sulphide domain was modelled with the reference plane at 0 degrees. An illustrative experimental variogram for nickel in the disseminated sulphide zone is shown in Figure XX (all 3 directions). Modelled ranges for all directions for both mineralized zones are tabulated in Table 16-2.

For nickel the major axis (Y) is orientated at N090 degrees, the regular minor axis (X) orientated at N180 degrees and the Z axis being orientated perpendicular to these. These directions coincide with local modelled geological orientations, yielding the ‘best’ variograms.

Table 16-2  Variography analyses ranges for nickel for all modelled directions and for both the two mineralization zones.

<table>
<thead>
<tr>
<th>Modelled direction</th>
<th>Range (metre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massive Sulphide Zone</td>
<td></td>
</tr>
<tr>
<td>X Axis</td>
<td>30</td>
</tr>
<tr>
<td>Y Axis</td>
<td>20</td>
</tr>
<tr>
<td>Z Axis</td>
<td>3</td>
</tr>
<tr>
<td>Disseminated Sulphide Zone</td>
<td></td>
</tr>
<tr>
<td>X Axis</td>
<td>45</td>
</tr>
<tr>
<td>Y Axis</td>
<td>30</td>
</tr>
<tr>
<td>Z Axis</td>
<td>18</td>
</tr>
</tbody>
</table>
16.3.7 Block Model and grade estimation

Criteria used in the selection of block size includes the borehole spacing, composite assay length, a consideration of potential mining unit sizes as well as the geometry of the modelled mineralized zones. The block size was set at 2.5 metres by 2.5 metres by 2.5 metres in the easting, northing and elevation directions respectively. The parameters of the Datamine block model constructed by SRK are presented in Table 16-3.

A two split Datamine sub block routine was applied during block model construction (with a minimum block size of 0.65 metres by 0.65 metres by 0.65 metres) to ensure that the modeled mineralized zones are adequately filled.
Table 16-3  Parameters of the Mc Watters Block Model constructed by SRK

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Block Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block origin:</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>9,900</td>
</tr>
<tr>
<td>Y</td>
<td>4,900</td>
</tr>
<tr>
<td>Z</td>
<td>1,125</td>
</tr>
<tr>
<td>Rows</td>
<td>84</td>
</tr>
<tr>
<td>Columns</td>
<td>60</td>
</tr>
<tr>
<td>Levels</td>
<td>70</td>
</tr>
<tr>
<td>Percent Model</td>
<td>No</td>
</tr>
<tr>
<td>Rotation</td>
<td>No</td>
</tr>
</tbody>
</table>

Block grades were estimated using ordinary kriging (OK) grade estimation methodologies.

Block grade estimation was completed in a single pass using the search ellipse ranges defined by variography as outlined in the previous section.

For the all classes of Mineral Resources defined in this study, applied search ellipse ranges are:

- **Massive sulphides:** X=30 metres, Y=20 metres and Z=3 metres for nickel;
- **Disseminated sulphide type sulphides:** X=45 metres, Y=30 metres and Z=18 metres for nickel

In addition, the minimum and maximum numbers of samples used for grade estimation were set at 4 and 20 respectively. Additional fields for mineralization type and classification were added to the block model.

Specific gravity values appropriate to the mineralization code were added to the model (values previously discussed).
16.4 Model validation

Global and local grade estimates were checked for appropriateness. Original nickel drilled grades were compared with block grades on a section-by-section basis. Grade estimation by ordinary kriging (OK) was found to appropriately reflect general grade trends and appropriately correspond to proximal borehole grades.

An example of the Mc Watters block grade estimation output generated by OK is shown in Figure 16-7, which is a west to east section (looking north) showing nickel block grade distribution relative to modelled mineralized zone outlines.

Figure 16-7: West to east section (looking north) showing nickel grade distribution in relation to zone outlines.
16.5 Mineral Resource Classification

Mineral resources have been estimated in conformity with generally accepted CIM “Estimation of Mineral Resource and Mineral Reserves Best Practices” Guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

SRK is not aware of any known environmental, permitting, and legal; title, taxation, socio-economic, marketing or other relevant issues that could potentially affect this estimate of mineral resources. Mineral reserves can only be estimated based on the results of an economic evaluation as part of a preliminary feasibility study or a feasibility study. As such no mineral reserves have been estimated by SRK as part of the present assignment. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

Mineral resources for the Mc Watters deposit have been classified according to the “CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines” (December, 2005) by Glen Cole, P.Geo an appropriate Qualified Person as defined by NI43-101. Mineral resources were classified as Indicated and Inferred Mineral Resources using the search distance to informing data criteria tabulated in Figure 16-8. For the well defined massive sulphide domain, Indicated resources are defined within the primary modelled variogram ranges, whereas Inferred resources are defined within four times the primary variogram ranges. For the less well defined disseminated sulphide domain, Indicated resources are defined within the primary modelled variogram ranges, whereas Inferred resources are defined within two times the primary variogram ranges.

**Figure 16-8 The classification scheme for Mc Watters highlighting search distances in each direction modelled for nickel in both modelled mineralized domains.**

<table>
<thead>
<tr>
<th>Details</th>
<th>Classification</th>
<th>Indicated</th>
<th>Inferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massive Sulphide domain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X dist</td>
<td>30</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Y dist</td>
<td>20</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Z dist</td>
<td>3</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Disseminated sulphide domain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X dist</td>
<td>45</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Y dist</td>
<td>30</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Z dist</td>
<td>18</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>
16.6 Mineral Resource Statement

The two categories of Mineral Resources for the Mc Watters deposit are reported at a single cut-off of 0.5 percent nickel, which is the cut-off Liberty management believe is achievable at future projected underground mining methods, volumes and associated costs.

A classified Mineral Resources statement for the Mc Watters resource is presented in Table 16-4. The numbers have been rounded to reflect the relative accuracy of the estimate.


<table>
<thead>
<tr>
<th>Zone</th>
<th>Tonnes</th>
<th>Ni (%)</th>
<th>Contained Ni (t)</th>
<th>Contained Ni (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicated: Disseminated Zone (Upper)</td>
<td>665,308</td>
<td>0.72</td>
<td>4,790</td>
<td>10,557,640</td>
</tr>
<tr>
<td>Massive Zone (Lower)</td>
<td>49,562</td>
<td>3.93</td>
<td>1,948</td>
<td>4,292,922</td>
</tr>
<tr>
<td>Sub total:</td>
<td>714,870</td>
<td>0.94</td>
<td>6,738</td>
<td>14,850,561</td>
</tr>
<tr>
<td>Inferred: Massive Zone (Lower)</td>
<td>13,829</td>
<td>3.39</td>
<td>469</td>
<td>1,033,242</td>
</tr>
<tr>
<td>Sub total:</td>
<td>13,829</td>
<td>3.39</td>
<td>469</td>
<td>1,033,242</td>
</tr>
</tbody>
</table>

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. Resources are reported at a cut off grade of 0.5% Ni.

A Mineral Resource grade sensitivity analysis tabulating the sensitivity of both classified mineralization types at Mc Watters to grade is shown in Table 16-5 (Massive Sulphide type) and Table 16-6. (Disseminated sulphide type)
# Table 16-5  Grade sensitivity tables for massive sulphide mineralization

**Indicated**

At cut-off Ni% grades:

<table>
<thead>
<tr>
<th>Above Volume (m³)</th>
<th>Tons (t)</th>
<th>Ni%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.20 15,195</td>
<td>49,604</td>
<td>3.93</td>
</tr>
<tr>
<td>0.40 15,192</td>
<td>49,597</td>
<td>3.93</td>
</tr>
<tr>
<td>0.50 15,179</td>
<td>49,562</td>
<td>3.93</td>
</tr>
<tr>
<td>0.60 15,132</td>
<td>49,430</td>
<td>3.94</td>
</tr>
<tr>
<td>0.70 15,044</td>
<td>49,186</td>
<td>3.95</td>
</tr>
<tr>
<td>0.80 14,965</td>
<td>48,965</td>
<td>3.97</td>
</tr>
<tr>
<td>1.00 14,653</td>
<td>48,083</td>
<td>4.02</td>
</tr>
<tr>
<td>1.20 14,119</td>
<td>46,560</td>
<td>4.12</td>
</tr>
<tr>
<td>1.40 13,574</td>
<td>44,991</td>
<td>4.22</td>
</tr>
<tr>
<td>1.60 13,115</td>
<td>43,652</td>
<td>4.30</td>
</tr>
<tr>
<td>1.80 12,603</td>
<td>42,143</td>
<td>4.39</td>
</tr>
<tr>
<td>2.00 11,812</td>
<td>39,785</td>
<td>4.54</td>
</tr>
</tbody>
</table>

**Inferred**

<table>
<thead>
<tr>
<th>Above Volume (m³)</th>
<th>Tons (t)</th>
<th>Ni%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.20 4,320</td>
<td>13,829</td>
<td>3.39</td>
</tr>
<tr>
<td>0.40 4,320</td>
<td>13,829</td>
<td>3.39</td>
</tr>
<tr>
<td>0.50 4,320</td>
<td>13,829</td>
<td>3.39</td>
</tr>
<tr>
<td>0.60 4,320</td>
<td>13,829</td>
<td>3.39</td>
</tr>
<tr>
<td>0.70 4,319</td>
<td>13,827</td>
<td>3.39</td>
</tr>
<tr>
<td>0.80 4,312</td>
<td>13,808</td>
<td>3.40</td>
</tr>
<tr>
<td>1.00 4,290</td>
<td>13,746</td>
<td>3.41</td>
</tr>
<tr>
<td>1.20 4,232</td>
<td>13,579</td>
<td>3.44</td>
</tr>
<tr>
<td>1.40 4,167</td>
<td>13,391</td>
<td>3.47</td>
</tr>
<tr>
<td>1.60 4,082</td>
<td>13,142</td>
<td>3.50</td>
</tr>
<tr>
<td>1.80 3,977</td>
<td>12,834</td>
<td>3.55</td>
</tr>
<tr>
<td>2.00 3,848</td>
<td>12,451</td>
<td>3.60</td>
</tr>
</tbody>
</table>

# Table 16-6  Grade sensitivity tables for disseminated sulphide mineralization

**Indicated**

At cut-off Ni% grades:

<table>
<thead>
<tr>
<th>Above Volume (m³)</th>
<th>Tons (t)</th>
<th>Ni%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.20 618,110</td>
<td>1,703,289</td>
<td>0.49</td>
</tr>
<tr>
<td>0.40 338,638</td>
<td>941,200</td>
<td>0.64</td>
</tr>
<tr>
<td>0.50 238,269</td>
<td>665,308</td>
<td>0.72</td>
</tr>
<tr>
<td>0.60 172,234</td>
<td>482,725</td>
<td>0.79</td>
</tr>
<tr>
<td>0.70 114,552</td>
<td>322,296</td>
<td>0.86</td>
</tr>
<tr>
<td>0.80 63,207</td>
<td>178,699</td>
<td>0.94</td>
</tr>
<tr>
<td>1.00 15,087</td>
<td>43,156</td>
<td>1.15</td>
</tr>
<tr>
<td>1.20 4,416</td>
<td>12,752</td>
<td>1.32</td>
</tr>
<tr>
<td>1.40 929</td>
<td>2,704</td>
<td>1.46</td>
</tr>
<tr>
<td>1.60 5</td>
<td>14</td>
<td>1.67</td>
</tr>
<tr>
<td>1.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17 Additional Requirements for Technical Reports on Development Properties and Production Properties

Engineering study results (SRK, May 16, 2008) have been excluded from Section 17 “Additional Requirements for Technical Reports on Development Properties and Production Properties” of this Interim technical report.

The excluded information relates to previously disclosed estimates of the mine production plan, operating and capital costs, financial analysis, and estimate of Mineral Reserves. This information was based on an engineering study, first principle estimates, assumed ground conditions, and estimated productivities.

The engineering study estimates have been superseded by the actual results being achieved on the site during development of the underground mine, and SRK considers them no longer reliable.

Liberty with the assistance of SRK, and other third parties as required, is undertaking economic analysis, geotechnical studies, and an environmental review of the property. As of December 16, 2008, work related to these studies has not advanced to a stage at which material changes about Mineral reserve estimates, mining and environmental considerations, financial analysis, and other components required by National Instrument 43-101 for development and production properties can be reported. The results will be released in a future technical report.
18 Conclusions and Recommendations

Significant nickel mineralization has been identified at the Mc Watters Mine. An indicated mineral resource estimate of 714,900 tonnes grading an average 0.93% Ni (calculated based on a 0.5% Ni cut-off grade) was indentified.

The confidence in estimating mineral resources at Mc Watters is high as the geological constraints are well understood and the drilling density is high. As a consequence the mineral resource estimate is of high enough confidence to consider the formulation of a mine plan, schedule, and financial analysis.

The Mc Watters mineralized body consists of a sub-vertical, large zone of disseminated nickel sulphides over-lying a sub-horizontal massive sulphide basal layer. The two zones present distinct sizes and geometry and are, therefore, conducive to two distinct underground mining techniques: longhole stope mining and conventional panel stope mining.

Stopes are to be accessed via an underground ramp from surface. This same ramp will also serve as a haulage route utilized to transport mineralized material to surface using underground haulage trucks. Material is then transported by a series of all weather gravel roads to the Redstone processing plant 9 kilometres away.

The results of the engineering study are highly dependent on the accuracy and quality of the data used to calculate key parameters. While the majority of the data was derived from reliable and accurate information, there are key areas that would benefit from increased investigations:

- Prior to reaching the target mining zone, conduct advanced rock quality tests on available and relevant drill core;
- Use the information gathered above to generate spatially sensitive models of rock quality characteristics that can aid in determining predicted ground conditions;
- Plan pillar dimensions and locations using the above data;
- Once underground conduct further geotechnical investigations prior to final stope layout and crown pillar determination;
- Conduct and complete an extensive underground sampling program following industry best practices. Use these results to compare and update the generated block model to reflect the increased data density and confidence. This should also occur prior to final stope layout. This could prove particularly important in the upper disseminated zone;
- Upon underground excavations reaching the relevant horizons, SRK recommends that sampling, mapping be conducted to support an update to the models of the massive sulphide zones. Many of these zones are located in the deepest part of the deposit where drill hole inaccuracies are greatest;
• Proposed mining methods for massive sulphide zones should be optimized based on the updated models;
• Assess structural controls on mineralization once underground exposures are available;
• Further assess the depth potential of the ultramafic body, as well investigate the strike potential based on geological observations and interpretations.

SRK understands that Liberty is advancing work on mine planning, a Mineral Reserve estimate, environmental considerations, financial analysis, and other relevant information required under National Instrument 43-101 for development and production properties. This work has not advanced sufficiently to be reported as of December 16, 2008. Results will be released in a future technical report.

SRK recommends that Liberty complete an updated National Instrument 43-101 Technical Report as soon as possible for the Mc Watters project.

The technical report should provide up to date information on all aspects of the Mc Watters project to meet the requirements of National Instrument 43-101 for development and production properties. This includes aspects such as:
• Environment;
• Mine geotechnical;
• Mine planning and production schedule;
• Financial analysis;
• Statement of estimated Mineral Reserves.

Table 18-1 presents a budget for SRK’s recommendations that include an updated Mc Watters Technical Report.

Table 18-1: Cost Estimate for updated Mc Watters Technical Report

<table>
<thead>
<tr>
<th>Task</th>
<th>Hours</th>
<th>Cost (CN$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Project Management</td>
<td>40</td>
<td>$7,800</td>
</tr>
<tr>
<td>2 Review Project Data</td>
<td>16</td>
<td>$3,200</td>
</tr>
<tr>
<td>3 Site Visit</td>
<td>12</td>
<td>$2,700</td>
</tr>
<tr>
<td>4 Resource Model Update</td>
<td>32</td>
<td>$5,760</td>
</tr>
<tr>
<td>5 Mine Design Review Update</td>
<td>80</td>
<td>$18,000</td>
</tr>
<tr>
<td>6 Update Mine Plan / Financial Model</td>
<td>16</td>
<td>$3,600</td>
</tr>
<tr>
<td>7 Technical Report</td>
<td>128</td>
<td>$24,320</td>
</tr>
<tr>
<td>8 Technical Report Review</td>
<td>16</td>
<td>$3,520</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>340</strong></td>
<td><strong>$68,900</strong></td>
</tr>
</tbody>
</table>
19 References


CERTIFICATE AND CONSENT

I, Glen Cole, residing at 15 Langmaid Court, Whitby, Ontario do hereby certify that:

1) I am a Principal Resource Geologist with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 1000, 25 Adelaide Street East, Toronto, Ontario, Canada;

2) I am a graduate of the University of Cape Town in South Africa with a B.Sc (Hons) in Geology in 1983; I obtained an M.Sc (Geology) from the University of Johannesburg in South Africa in 1995 and an M.Eng in Mineral Economics from the University of the Witwatersrand in South Africa in 1999. I have practiced my profession continuously since 1986. I am an expert in geostatistical techniques and geological and resource modelling. Since 2006, I have estimated and audited mineral resources for a variety of early and advanced base and precious metals projects in Africa, Canada, Chile and Mexico. Between 1989 and 2005 I have worked for Goldfields Ltd at several underground and open pit mining operations in Africa and held positions of Mineral Resources Manager, Chief Mine Geologist and Chief Evaluation Geologist, with the responsibility for estimation of mineral resources and mineral reserves for development projects and operating mines. Between 1986 and 1989 I worked as a staff geologist on various Anglo American mines;

3) I am a Professional Geoscientist registered with the Association of Professional Geoscientists of the province of Ontario (APGO#1416) and am also registered as a Professional Natural Scientist with the South African Council for Scientific Professions (Reg#400070/02);

4) I have personally inspected the Mc Watters Project and surrounding areas on January 14, 2008;

5) I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;

6) I, as a qualified person, am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;

7) I am the principal author of this technical report and accept professional responsibility for all sections of this technical report except for Sections 15 and 17;

8) SRK Consulting (Canada) Inc. was retained by Liberty Mines Inc. to prepare a technical report for the Mc Watters nickel project in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed using CIM “Best practices” and Canadian Securities Administrators National Instrument 43-101 guidelines;

9) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Redstone Project or securities of Liberty Mines Inc.;

10) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading; and

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

Toronto, Canada
December 16, 2008

Glen Cole, P.Geo
Principal Resource Geologist
CERTIFICATE AND CONSENT

I, Ken Reipas, residing at 43 Deverell Street, Whitby, Ontario do hereby certify that:

1) I am a Principal Mining Engineer with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 1000, 25 Adelaide Street East, Toronto, Ontario, Canada;

2) I am a graduate of Queen’s University in Kingston, ON with a B.Sc. in Mining Engineering, 1981. I have practiced my profession continuously since 1981. I am an expert in underground mine planning. From 1981 to 1997 I worked at Canadian open pit and underground mines holding positions in mine engineering and mine operations both at surface mines and underground mines, including positions of Chief Engineer and Mine Superintendent. Since 1998 I have worked as a consultant mining engineer, the last eight years being with SRK Consulting (Canada) Inc, based in Toronto. As a Principal Mining Engineer with SRK I have completed a variety of projects in many countries involving scoping studies, feasibility studies, due diligence reviews, operation reviews and independent reporting;

3) I am a Professional Engineer registered with the Association of Professional Engineers of the province of Ontario (#100015286);

4) I have not visited the project site;

5) I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;

6) I, as a qualified person, am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;

7) I am responsible for the preparation of Section 17 of this technical report;

8) SRK Consulting (Canada) Inc. was retained by Liberty Mines Inc. to prepare a technical report for the Mc Watters nickel project in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed using CIM “Best practices” and Canadian Securities Administrators National Instrument 43-101 guidelines;

9) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Mc Watters Project or securities of Liberty Mines Inc.:

10) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading; and

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

Toronto, Canada
December 16, 2008
Ken Reipas, P.Eng
Principal Mining Engineer
CERTIFICATE AND CONSENT

I, Carlo Cattarello, residing at 424 Amwell St, Haileybury, Ontario, Canada do hereby certify that:

1) I am a registered Professional Engineer in Ontario since 1967 with my present office at 424 Amwell St., Haileybury, Ontario, Canada;

2) I am a graduate of Michigan Technological University in Houghton, Michigan, with a BSc. in Metallurgical Engineering in 1961. From 1961 to 1983 I held senior Metallurgical positions (Mill Superintendent) with major Canadian mining companies. From 1983-2003, I was a Professor of milling and metallurgy at Haileybury School of Mines. From 2003 to the present, I have done consulting work for numerous mining companies and formed Cattarello Metallurgical Consultants Inc. in 2007 to formalize my consulting career and have continued to do work in Canada and Mexico;

3) I am a Metallurgical Engineer registered with the Professional Engineers of Ontario (#1922);

4) I have personally inspected the Redstone Mill on October 9, 2008;

5) I have read the definition of “qualified person” set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;

6) I, as a qualified person, am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;

7) I have reviewed Section 15: Mineral Processing, Mineralogy and Metallurgical Testing and accept professional responsibility for this section of the technical report;

8) I was retained by Liberty Mines Inc. to review the metallurgical data contained in a technical report for the Redstone mine in accordance with National Instrument 43-101 and Form 43-101F1 guidelines;

9) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Redstone Project or securities of Liberty Mines Inc.;

10) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading; and

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

Kelona, Canada
December 16, 2008

Carlo Cattarello, P.Eng
Consulting Metallurgist
Project number: 3CL008.000

Toronto, December 16, 2008

To:
Securities Regulatory Authorities
B. C. Securities Commission (BCSC)
Alberta Securities Commission (ASC)
Ontario Securities Commission (OSC)
L’Autorité des marchés financiers (AMF)
Toronto Stock Exchange (TSX)

CONSENT of AUTHOR


I further consent to the company filing the report on SEDAR and consent to press releases made by the company with my prior approval. In particular I have read and approved the press release of Liberty Mines Inc. dated December 15, 2008 (the “Disclosure”) in which the findings of the Technical Report are disclosed. I also confirm that I have read the Disclosure and that it fairly and accurately represents the information in the Technical Report that supports the Disclosure.

Dated this 16th day of December 2008.

Glen Cole, P.Geo
Principal Mining Engineer
Project number: 3CL008.000

Toronto, December 16, 2008

To:
Securities Regulatory Authorities
B. C. Securities Commission (BCSC)
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Dated this 16th day of December 2008.

Ken Reipas, P.Eng
Principal Mining Engineer
Toronto, December 16, 2008

To:
Securities Regulatory Authorities
B. C. Securities Commission (BCSC)
Alberta Securities Commission (ASC)
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Dated this 16th day of December 2008.

Carlo Cattarello, P.Eng
Consulting Metallurgist