# Mineral Resource Evaluation Technical Report for the Mirado Gold Project, Ontario

Report Prepared for Orefinders Resources Inc.





**Report Prepared by** 



SRK Consulting (Canada) Inc. 3CO013.000 December 13, 2013



## Mineral Resource Evaluation Technical Report, Mirado Gold Project, Ontario

## **Orefinders Resources Inc.**

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2067

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## **Executive Summary**

#### Introduction

The Mirado gold project is a resource delineation stage exploration project located in Ontario, Canada, approximately 35 kilometres southeast of the town of Kirkland Lake. Orefinders Resources Inc. (Orefinders) holds a 100 percent interest in the majority of the tenements.

In July 2013, Orefinders commissioned SRK Consulting (Canada) Inc. (SRK) to prepare a geological and mineral resource model for the Mirado project. The services were rendered between July and November, 2013 leading to the preparation of the Mineral Resource Statement reported herein that was disclosed publically by Orefinders in news releases on October 30, 2013 and December 9, 2013.

This technical report documents the first Mineral Resource Statement prepared for the Mirado project following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. The Mineral Resource Statement reported herein was prepared in conformity with the generally accepted CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines*.

#### **Property Description and Ownership**

The Mirado project comprises 12 contiguous patented mining claims and 23 contiguous staked mining claims and covers an aggregate area of 13.94 square kilometres (3439.52 acres). The patented mining claims are in good standing and are wholly owned by Orefinders. The claims are patented with Fee Simple Absolute title to mining and surface rights with minor surface right reservations, mostly for road allowances and power line easements. The staked mining claims are held by Orefinders, Ashley Gold Mines Limited (Ashley Gold), Mr. W. Metherall, and Mr. D. B. Zabudsky, and are in good standing. The staked claims were include mining rights only and have no surface rights.

#### **Geology and Mineralization**

The Mirado project is located in the central Abitibi Greenstone Belt that straddles the border between Ontario and Quebec. One of them, the Larder-Lake-Cadillac break passes the Mirado project immediately to the north.

The geology of the Mirado project consists of two principal rock assemblages: the Skead and the McElroy assemblages, both with a general age of 2,750 to 2,700 Ma. The assemblages are interpreted to be conformable to each other, and both are folded around the Round Lake batholith located on the west side of Catharine Township. The Skead assemblage consists of a variety of mafic to felsic pyroclastic flows and fragmental units with minor interflow sediments. The pyroclastic units consist of monolithic to heterolithic lapilli tuff and coarse fragmental units. Minor wacke and conglomerate occur throughout. The stratigraphy faces to the north. In the project area, the units strike at 290 degrees and dip from 70 to 85 degrees to the north. The hanging wall contact of the Skead assemblage is marked by an iron formation horizon. The overlying McElroy assemblage comprises mainly massive mafic metavolcanic rocks, subordinate felsic metavolcanic rocks, and very minor komatiite.

The majority of the gold mineralization found on the Mirado project occurs in the Main and North zones. In the Main zone gold commonly occurs in highly silicified fragmental rock with varying amounts of pyrite and subordinate chalcopyrite and sphalerite. In the North zone, gold mineralization is associated with a series of sulphide, quartz, and quartz carbonate veinlets parallel to the shear zone foliation.

#### Exploration

The exploration work conducted by Orefinders was professionally managed and used procedures consistent with generally accepted industry best practices. Orefinders has inherited historical core borehole data from two previous operators. SRK was unable to verify the historical data, and no quality control data exist.

Amax Minerals Exploration (Amax), Golden Shield Resources Ltd. (Golden Shield), and Orefinders drilled a combined total of 247 core boreholes (approximately 30,000 metres) at the Mirado gold project.

The property contains three historic stockpiles left from the previous operator. Orefinders surveyed and sampled this material to include in the current mineral resource model.

On completion of the validation procedure, SRK considers the Mirado exploration database sufficiently reliable to support mineral resource evaluation. The project database contains significant historical exploration data of uncertain quality. The confidence in the historical data is uncertain and casts risks that were taken into consideration in the classification of the mineral resources.

#### **Mineral Resource and Mineral Reserve Estimates**

The mineral resource model prepared by SRK considers 242 core boreholes (31,700 metres). This database represents drilling data acquired between 1980 and 2013 by Amax, Golden Shield, and Orefinders. The borehole data include collar location, down-hole survey data, lithology codes, and 19,091 sample intervals assayed for gold.

Mineral resources for the bedrock and the stockpiles gold mineralization were estimated using a geostatistical block modelling approach. SRK modelled the spatial continuity of capped core gold composites and used ordinary kriging to populate the bedrock block model. An inverse distance estimator was used to populate the stockpile block model as there is no spatial continuity between the stockpile samples.

Mineral resources were classified according to the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (November 2011) by Dr. Lars Weiershäuser, PGeo (APGO#1504) and Glen Cole, PGeo (APGO #1416), both of whom are full-time employees of SRK and appropriate independent Qualified Persons for the purpose of National Instrument 43-101. SRK is satisfied that the geological modelling honours the current geological information and knowledge. The mineral resource model is largely based on geological knowledge derived from variably spaced and oriented boreholes from three different operators. Approximately 63 percent of the borehole database comprises historical drilling data with no analytical quality control data. The lack of specific gravity data and uncertainties about the volume of the stockpiles also impacts negatively on the confidence of the estimates. As a result, SRK considers that it is appropriate to classify all modelled blocks in the Inferred category within the meaning of the CIM *Definition Standards for Mineral Resources and Mineral Reserves*. SRK considers that the confidence in the tonnage and grade estimates is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

SRK considers that parts of the gold mineralization found at the Mirado project are amenable to open pit mining. SRK used a pit optimizer to test the "reasonable prospects for economic extraction" of the block model and to assist with the selection of appropriate reporting assumptions. Optimization parameters were selected by benchmarking with similar projects. After review, SRK considers that open pit mineral resources can be reported at a cut-off grade of 0.45 gpt gold within a conceptual pit shell. The blocks located outside the conceptual pit shell can be reported as an underground mineral resource if their grade exceeds 2.0 gpt gold Orefinders elected to report the stockpile mineral resources at a cut-off grade of 2.0 gpt gold in the view of possible off-site toll milling prior to any mine development. SRK considers that a cut-off grade of 2.0 gpt gold is appropriate for reporting for the stockpile mineral resources.

Mineral resources are not mineral reserves and have not demonstrated economic viability. The Mineral Resource Statement was prepared by Dr. Lars Weiershäuser, PGeo (APGO#1504), an independent Qualified Persons as this term is defined in National Instrument 43-101. The effective date of the Mineral Resource Statement is October 30, 2013 (Table i).

Classification/Zone	Cut-Off Grade (gpt Gold)	Quantity (000 tonnes)	Grade Gold (gpt)	Contained Metal Gold (000 ounces)
Inferred				
Open pit**	0.45	9,927	1.18	376.6
Underground**	2.00	669	2.90	62.4
Northern pile***	2.00	12	4.71	1.8
Central pile***	2.00	4	5.38	0.7
Southern pile***	2.00	5	2.74	0.4
Total Inferred		10,618	1.29	442.0

Table i: Mineral Resource Statement*, Mirado Gold Project, Ontario,
SRK Consulting (Canada) Inc., October 30, 2013

\* Mineral resources are not mineral reserves and have not demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. Open pit mineral resources are reported at a cut-off grade of 0.45 gpt gold inside a conceptual pit; underground and stockpile mineral resources reported at a cut-off grade of 2.0 gpt gold. Cut-off grades assume a gold price of US\$1,400 per ounce; and metallurgical recovery of 95 percent.

\*\* Open pit and underground resources were disclosed by Orefinders in a news release dated December 9, 2013.

\*\*\* Mineral resources in historical stockpiles were disclosed by Orefinders in a news release dated October 30, 2013.

#### **Conclusion and Recommendations**

The geological setting and character of the gold mineralization delineated to date on the Mirado gold project are of sufficient merit to justify additional exploration expenditures. SRK recommends an exploration program that includes geophysical surveys and core drilling with the aim of improving the delineation of the known gold mineralization, tracing its lateral and depth extensions, and to increase the confidence in the continuity of the known gold mineralization. Geological studies are also recommended.

The boundaries of the gold mineralization in the North and Main zones remain poorly constrained and the gold mineralization remains open beyond the areas investigated by drilling. Geological studies and geophysical surveys should be completed to characterize the controls on the distribution of the gold mineralization and attempt to image the real extent of the sulphide mineralization. These studies should be conducted prior to initiating infill and stepout drilling to improve the delineation of the gold mineralization and test its lateral and depth extensions. The proposed exploration program includes:

- Field geological investigations aimed to study the controls on the distribution of the gold mineralization;
- Ground induced polarization survey in an attempt to image the extent of the sulphide mineralization;
- Verification drilling (1,500 metres) to validate historical drilling data; and
- Infill and step-out core drilling (6,000 metres) and trenching to improve the confidence in the continuity of the mineral resources and to test the lateral and depth extensions of the known gold mineralization.

The cost of the recommended work program is estimated at C\$2.1million.

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## **1** Introduction and Terms of Reference

The Mirado gold project is a resource delineation stage gold exploration project located in Ontario, Canada, approximately 35 kilometres southeast of the town of Kirkland Lake. Since the discovery of gold on the property in the early 1920s, the property has seen multiple phases of exploration, core drilling campaigns, as well as historical open pit and underground mining activities. In January 2012, Orefinders Resources Inc. (Orefinders) entered into an option agreement with Fechi Inc. (Fechi) to acquire 100 percent interest in the Mirado project. In August 2013, Orefinders completed the acquisition ahead of schedule.

In July 2013, Orefinders commissioned SRK Consulting (Canada) Inc. (SRK) to visit the Mirado project and to prepare a geological and mineral resource model. The services were rendered between July and November, 2013 leading to the preparation of the Mineral Resource Statement reported herein. The Mineral Resource Statement for the stockpiles was disclosed by Orefinders in a news release on October 30, 2013, while the bedrock Mineral Resource Statement was disclosed by Orefinders in a news release on December 9, 2013.

The full project Mineral Resource Statement was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with the generally accepted CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines*. This technical report summarizes the technical information available on the Mirado gold project.

In the opinion of SRK, the geological and mineral resource models discussed herein are a reasonable representation of the global distribution of the gold mineralization identified on the property at the current level of sampling.

#### 1.1 Scope of Work

The scope of work, as defined in a letter of engagement executed on July 8, 2013 between Orefinders and SRK, includes the construction of a mineral resource model for the gold mineralization delineated by drilling on the Mirado project and the preparation of an independent technical report in compliance with National Instrument 43-101 and Form 43-101F1 guidelines. This work typically involves the assessment of the following aspects of a project:

- Topography, landscape, access;
- Regional and local geology;
- Exploration history;
- Audit of exploration work carried out on the project;
- Geological modelling;
- Mineral resource estimation and validation;
- Preparation of a Mineral Resource Statement; and
- Recommendations for additional work.

### 1.2 Work Program

The Mineral Resource Statement reported herein is a collaborative effort between Orefinders and SRK personnel. The exploration database was compiled and maintained by Orefinders and it was audited by SRK. The geological model and outlines for the gold mineralization were constructed by SRK from a two-dimensional geological interpretation provided by Orefinders. In the opinion of SRK, the geological model is a reasonable representation of the distribution of the targeted gold mineralization at the current level of sampling. The geostatistical analysis, variography, and block models were completed by SRK during the month of September 2013.

A technical memorandum documenting the stockpile mineral resources was presented to Orefinders in a memorandum report on October 25, 2013 and disclosed in a news release dated October 30, 2013. A technical memorandum documenting the stockpile and bedrock Mineral Resource Statement was presented to Orefinders in a memorandum report on November 15, 2013. The Mineral Resource Statement was disclosed by Orefinders in a news release on December 9, 2013.

The technical report was assembled in Toronto during the months of October to December, 2013.

### **1.3 Basis of Technical Report**

This report is based on information collected by SRK during a site visit performed between July 15 and 17, 2013, and additional information provided by Orefinders throughout the course of SRK's investigations. SRK has no reason to doubt the reliability of the information provided by Orefinders. Other information was obtained from the public domain. This technical report is based on the following sources of information:

- Discussions with Orefinders personnel;
- Inspection of the Mirado project area, including outcrops and core;
- Review of exploration data collected by Orefinders; and
- Additional information from public domain sources.

#### 1.4 Qualifications of SRK and SRK Team

The SRK Group comprises more than 1,600 professionals, offering expertise in a wide range of resource engineering disciplines. The independence of the SRK Group is ensured by the fact that it holds no equity in any project it investigates and that its ownership rests solely with its staff. These facts permit SRK to provide its clients with conflict-free and objective recommendations. SRK has a proven 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. Through its work with a large number of major international mining companies, the SRK Group has established a reputation for providing valuable consultancy services to the global mining industry.

The resource evaluation work was completed by Dr. Lars Weiershäuser, PGeo (APGO#1504) and Ms. Dorota El-Rassi, PEng (APEO #100012348) under the supervision of Mr. Glen Cole, PGeo (APGO #1416). By virtue of their education, membership to a recognized professional association and relevant work experience, Dr. Weiershäuser, Ms. El-Rassi, and Mr. Cole are an independent Qualified Persons as this term is defined by National Instrument 43-101. Additional contributions were provided by Dr. James Siddorn, PGeo (APGO#1314) and Dr. Iris Lenauer for the

understanding of the distribution of the gold mineralization. Dr. Siddorn and Dr. Lenauer visited the property. Dr. Lenauer also assisted with the analysis of the analytical quality control data. This technical report benefited from the contribution of Sophia Karadov as technical editor.

Mr. Cole and Dr. Jean-François Couture, PGeo (APGO#0197), Corporate Consultant, reviewed drafts of this technical report prior to their delivery to Orefinders as per SRK internal quality management procedures. Neither Mr. Cole nor Dr. Couture visited the project.

### 1.5 Site Visit

In accordance with National Instrument 43-101 guidelines, Dr. Weiershäuser and Dr. Siddorn visited the Mirado gold project from July 15 to 17, 2013 accompanied by Mr. Kevin Piepgrass, Vice President Exploration of Orefinders. Dr. Lenauer visited the property from August 13 to 18, 2013 to study the controls on the spatial distribution of the gold mineralization.

The purpose of the site visit by Dr. Weiershäuser and Dr. Siddorn was to review the digitalization of the exploration database and validation procedures, review exploration procedures, define geological modelling procedures, examine core, interview project personnel, and collect all relevant information for the preparation of a geology and mineral resource model and the compilation of a technical report. During the visit, a particular attention was given to the structural setting of the gold mineralization.

The second site visit also aimed at investigating the geological and structural controls on the distribution of the gold mineralization in order to aid the construction of three-dimensional gold mineralization domains.

SRK was given full access to relevant data and conducted interviews with Orefinders personnel to obtain information on the past exploration work and to understand the procedures used to collect, record, store, and analyze historical and current exploration data.

#### 1.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by Orefinders personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of the assignment.

#### 1.7 Declaration

SRK's opinion contained herein and effective <u>October 30, 2013</u> is based on information collected by SRK throughout the course of SRK's investigations. The information in turn reflects various technical and economic conditions at the time of writing this report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

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

SRK is not an insider, associate, or an affiliate of Orefinders, and neither SRK nor any affiliate has acted as advisor to Orefinders, its subsidiaries, 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 was informed by Orefinders that there are no known litigations potentially affecting the Mirado project.

## 2 Reliance on Other Experts

SRK has not performed an independent verification of land title and tenure information as summarized in Section 3 of this report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, but has relied on Norton Rose Canada LLP (Norton Rose) as expressed in a legal opinion provided to Macquarie Capitals Markets Canada Ltd. (Macquarie Capitals), Borden Ladner Gervais LLP (Borden Ladner), and Strategic Metals Ltd. (Strategic Metals) on December 17, 2012. A copy of the title opinions is provided in Appendix A. The reliance applies solely to the legal status of the rights disclosed in Sections 3.1 and 3.2 below.

## **3 Property Description and Location**

The Mirado project is located approximately 35 kilometres by road southeast of the town of Kirkland Lake, Ontario (Figure 1), which is approximately 585 kilometres by road north of Toronto, Ontario. The project straddles the townships of Catherine and McElroy near the border of Quebec. In previous reports (for example, Reddick and Lavigne, 2012) a distinction has been made between the Mirado property and the MZ property. Since the MZ property is contiguous with the Mirado property, Orefinders and SRK agreed to refer to the entire tenement package as the Mirado project.

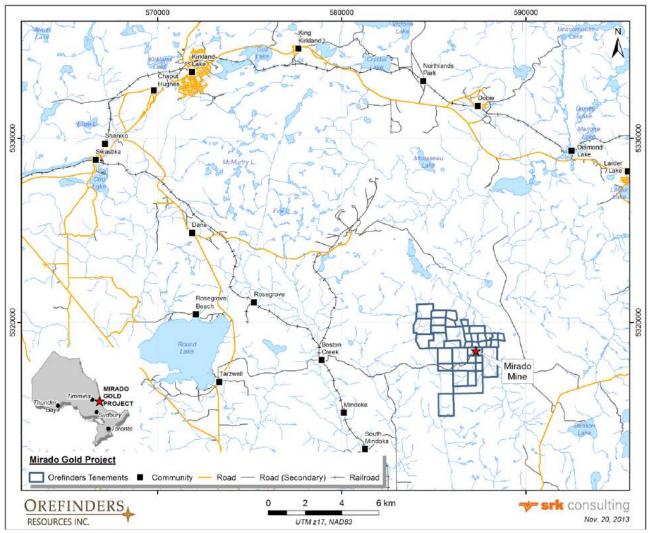


Figure 1: General Location of the Mirado Project

### 3.1 Mineral Tenure

The Mirado project comprises 12 contiguous patented mining claims with an aggregated area of 1.77 square kilometres (432.52 acres), formerly known as the Mirado property (Table 1), and 23 contiguous staked mining claims with an area of approximately 12.17 square kilometres (3,007 acres). Ten of these claims constitute an area formerly known as the MZ property (Figure 2). The remaining thirteen claims have been staked directly by Orefinders or have been purchased by Orefinders in recent transactions. With Orefinders' acquisition of the claim tenement packages, the entire area is considered the Mirado project.

The patented mining claims are in good standing and are wholly owned by Orefinders. The claims are patented with Fee Simple Absolute title to mining and surface rights with minor surface right reservations, mostly for road allowances and power line easements. Timber rights are reserved for the Crown.

The staked mining claims held by Orefinders, Ashley Gold Mines Limited (Ashley Gold), Mr. W. Metherall and Mr. D. B. Zabudsky are in good standing. The claims were staked for mining rights only and have no surface rights. Timber rights are held by the Crown.

The mineral resources stated in this technical report are located within tenements identified in Table 1 and Table 2.

Claim Number	Concession Name	Ownership	Township	Parcel	Area (km <sup>2</sup> )	Contains Resource
L31377	Mirado	Orefinders	McElroy	5264 SEC SST	0.15	
L31257	Mirado	Orefinders	McElroy	5265 SEC SST	0.16	
L26273	Mirado	Orefinders	McElroy	7432 SEC SST	0.19	
L27303	Mirado	Orefinders	McElroy	6339 SEC SST	0.12	
L31238	Mirado	Orefinders	McElroy	12449 SEC SST	0.09	
L26272	Mirado	Orefinders	McElroy	12448 SEC SST	0.14	Yes
L31749	Mirado	Orefinders	McElroy	12445 SEC SST	0.11	Yes
L31378	Mirado	Orefinders	McElroy	6417 SEC SST	0.13	
L24691	Mirado	Orefinders	Catherine	12447 SEC SST	0.19	Yes
L24690	Mirado	Orefinders	Catherine	12446 SEC SST	0.16	Yes
L34750	Mirado	Orefinders	Catherine	12465 SEC SST	0.15	Yes
L34751	Mirado	Orefinders	Catherine	12466 SEC SST	0.18	Yes
Total					1.77	

#### Table 1: List of Patented Claims

Claim Number	Concession Name	Ownership	Township	Date Staked	Expiry/Due Date Status	Area (km²)	Contains Resource
4268714	Mirado	Orefinders	McElroy	11/05/2011	12/05/2013 Active	0.58	
4268715	Mirado	Orefinders	McElroy	11/05/2011	12/05/2013 Active	0.28	
4272920	Mirado	Orefinders	Catherine	06/01/2013	06/06/2015 Active	0.31	
4272911	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.14	
4272912	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.12	
4272916	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.33	
4272915	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.32	
4272917	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.32	
4272919	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.74	
4272918	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.67	
4272913	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.23	
4272914	Mirado	Orefinders	McElroy	06/01/2013	06/06/2015 Active	0.65	
4259499	Ashley	Ashley Gold	McElroy	10/07/2011	10/17/2018 Active	0.34	
L4258214	MZ	Metherall	McElroy	06/30/2010	08/07/2016 Active	0.84	
L1241353	MZ	Zabudsky	Catherine	04/05/2003	04/10/2017 Active	0.96	
L3004539	MZ	Zabudsky	Catherine	09/17/2002	09/18/2017 Active	0.36	
L1192176	MZ	Zabudsky	Catherine	09/12/2002	09/18/2017 Active	0.67	
L1199884	MZ	Zabudsky	McElroy	07/26/2002	07/27/2017 Active	0.16	
L1199883	MZ	Zabudsky	Catherine	07/25/2002	07/26/2017 Active	0.69	
L3002902	MZ	Zabudsky	Catherine	07/07/2002	07/17/2017 Active	0.95	
L1241351	MZ	Metherall	McElroy	06/13/2002	06/18/2017 Active	1.32	Yes
L1196951	MZ	Zabudsky	Catherine	08/03/2000	08/04/2017 Active	0.50	
L1146327	MZ	Metherall	Catherine	04/09/2000	04/10/2017 Active	0.69	Yes
Total						12.17	

Table 2: List of Staked Claims



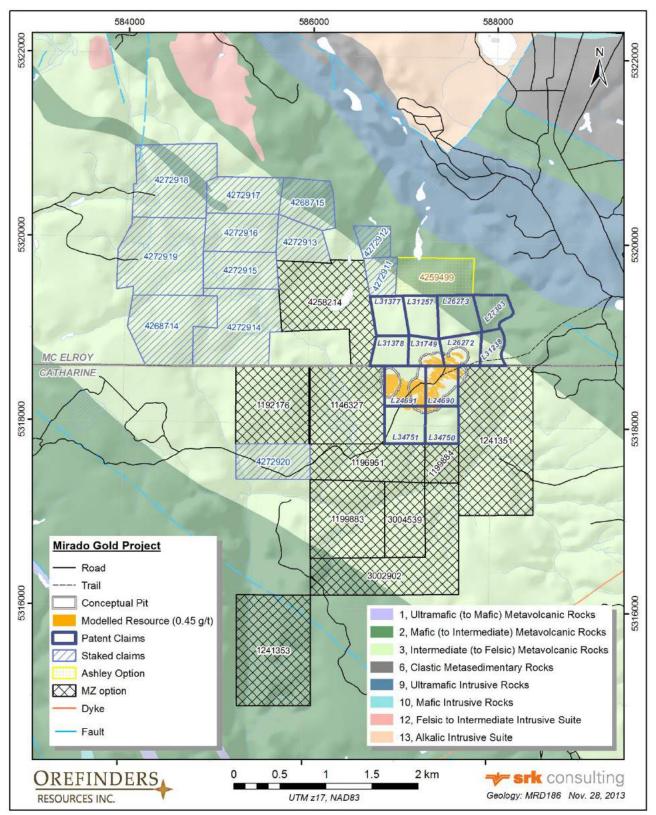


Figure 2: Tenement Map of the Mirado Project

### 3.2 Underlying Agreements

#### 3.2.1 Agreement Pertaining Patented Claims

On January 25, 2012, Orefinders entered into an option agreement with Fechi Inc. (Fechi) (the Mirado Agreement) related to the patented claims previously known as the Mirado property, which comprises the patented claims of the greater Mirado property defined in Section 3.0. Previously on January 19, 2012, Fechi, a private company, executed option agreement with Micon Gold Inc. (Micon) (the Fetchi-Micon Agreement). Orefinders assumed Fetchi's obligations that are specified in the Fechi-Micon agreement in return for obtaining the right to acquire the Mirado property from Fechi. On December 31, 2012 Micon amalgamated with Jubilee Gold Exploration Ltd. (Jubilee). The terms of the agreement between Orefinders and Fechi are as follows:

- Initial cash payment in the amount of C\$25,000 (paid);
- Subsequent series of cash payments in the aggregate amount of C\$125,000 that will flow from Fechi to Micon. The first payments of C\$50,000 and was made on January 19, 2013. The second payments of C\$75,000 was made on August 28, 2013;
- Issue to Micon 30 percent of the initial issued shares and warrants of Orefinders upon Orefinders successfully obtaining financing in the amount of five million Canadian dollars (C\$5,000,000). This transactions was completed on December 20, 2012; and
- Incur a total of C\$2,000,000 in exploration and development expenditures on the Mirado project over a period of three years from the date of the Fechi-Micon agreement with a minimum of C\$300,000 to be expended on or before the first anniversary date, a minimum of C\$500,000 to be expended on or before the second anniversary date, and a minimum of C\$1,200,000 to be expended on or before the third anniversary date.

On August 28, 2013 Orefinders fulfilled the terms of the agreement (cash payments, exploration expenditures, and issuance of shares) and has earned a 100 percent interest in the property with Jubilee retaining a 3 percent net smelter royalty (NSR) on production from the Mirado property. Orefinders was the operator during the earn-in period. Orefinders has the right to buy back 1 percent of the NSR for C\$1,000,000, and a further 1 percent of the NSR for C\$2,000,000, and the last 1 percent of the NSR for C\$3,000,000 at any time before commencement of commercial production from the Mirado property.

#### 3.2.2 Agreement Pertaining to the MZ Staked Claims

On February 9, 2012 Orefinders entered into an option agreement (the MZ Agreement) related to the MZ property with Fechi. The MZ property pertains to staked claims listed in Table 2 of the greater Mirado property as defined in Section 3.0. This agreement was amended on March 27, 2012 to add one additional claim in McElroy Township that was not included in the initial agreement. Fechi in turn made an option agreement with Mr. W. Metherall and Mr. D. Zabudsky on February 8, 2012; this agreement was amended March 26, 2012. Orefinders assumed the obligations for option payments and work commitments that were specified in the agreement made between Fechi and Messrs. Metherall and Zabudsky in return for obtaining the right to acquire the MZ property from Fechi. The terms of the agreement between Orefinders and Fechi are as follows:

- Initial cash payment in the amount of C\$20,000 and the issue to the Messrs. Metherall and Zabudsky 75,000 shares of Orefinders stock within 60 days of the date of signing the option agreement (paid and shares issued);
- Subsequent series of cash payments in the aggregate amount of C\$120,000 that will flow from Orefinders to the Messrs. Metherall and Zabudsky. The first of these payments was for C\$25,000 and was made on February 8, 2012. The second of these payments is for C\$25,000 and is to be made on or before the second anniversary date of the agreement (February 8, 2014). The third of these payments is for C\$30,000 and is to be made on or before the third anniversary (February 8, 2015). The fourth of these payments is for C\$40,000 and is to be made on or before the fourth anniversary (February 8, 2016);
- Issuance to Messrs. Metherall and Zabudsky of Orefinders shares in the aggregate amount of 175,000 shares. The first of these payments is for 25,000 shares and was made on February 8, 2012. The second of these payments is for 50,000 shares and is to be made on or before the second anniversary date of Agreement (February 8, 2014). The third of these payments is for 50,000 shares and is to be made on or before the third anniversary date (February 8, 2015). The fourth of these payments is for 50,000 shares and is to be made on or before the fourth anniversary (February 8, 2016); and
- Incur a total of C\$425,000 in exploration and development expenditures on the MZ property over a period of four years from the date of the MZ agreement with a minimum of C\$50,000 to be expended on or before the first anniversary date, a minimum of a further C\$75,000 to be expended on or before the second anniversary date, a minimum of a further C\$100,000 to be expended on or before the third anniversary date and a minimum of a further C\$200,000 to be expended on or before the third anniversary date.

Upon payments and satisfying all the terms of the agreement, Orefinders will have earned a 100 percent interest in the MZ property with Messrs. Metherall and Zabudsky retaining a 2 percent NSR on the production from the MZ Property. Orefinders has the right to buy back the first 1 percent of the NSR for C\$1,000,000 and also to buy back the last 1 percent of the NSR for C\$2,000,000 at any time before the commencement of commercial production from the Property.MZ property Orefinders is the operator during the earn-in period. The series of cash and share payments to satisfy the terms of the MZ agreement are summarized in the Table 3. The series of required expenditures to satisfy the terms of the MZ Agreement are summarized in the Table 4.

Date	Required Payment
On signing	C\$20,000 cash (paid)
Within 6 of Orefinders being Listed	75,000 shares (issued)
On or before February 8, 2013	C\$25,000 cash and 25,000 shares (paid and issued)
On or before February 8, 2014	C\$25,000 cash and 50,000 shares
On or before February 8, 2015	C\$30,000 cash and 50,000 shares
On or before February 8, 2016	C\$40,000 cash and 50,000 shares
Total	C\$140,000 cash and 250,000 shares

#### Table 3: Cash and Shares Payment Schedule for the MZ Agreement

#### Table 4: Work Expenditure Requirements for the MZ Agreement

Scheduled Date	Required Work Expenditure
On or before February 8, 2013	C\$50,000
On or before February 8, 2014	C\$75,000
On or before February 8, 2015	C\$100,000
On or before February 8, 2016	C\$200,000
Total	C\$425,000

#### 3.2.3 Staked Claims

The claims not subject to the Mirado or MZ agreements were staked by Orefinders in June 2013. In addition to staking claims directly, Orefinders purchased three claims.

On January 24, 2013 Orefinders purchased the Ashley claim for a one-time cash payment of C\$3,000 from Ashley Gold Mines Ltd. (Ashley). Under the agreement Ashley is entitled to a 2 percent NSR. Orefinders at any time can buy 1 percent of the NSR for C\$500,000 leaving Ashley with 1 percent NSR. At any time Orefinders can purchase the remaining one percent NSR from Ashley for an additional payment of C\$750,000.

On October 4, 2013 Orefinders purchased claims 4268714 and 4268715 from Mr. Pierre C. Robert for a one-time cash payment of C\$10,000. No other obligations are attached to the sale of these two claims.

### 3.3 Permits and Authorization

No special permits are currently required for early exploration stage work on patented mining claims in Ontario. However, the Ministry of Northern Development and Mines (MNDM) of the Ontario Government has recently implemented changes to regulations that require application for and approval of exploration permits for low impact field work such as line-cutting, geophysical surveys, power washing and diamond drilling on staked claims or patented claims if the owner of the surface rights is not the patented mining claim owner. The proposed regulations took effect on April 1, 2013. As Orefinders owns both the surface and mining rights to the Mirado claims, these new rules will not apply to this part of the property. However, these new regulations will apply to all staked claims.

#### 3.4 Environmental Considerations

There are no known environmental liabilities related to the Mirado project. There is a man-made pond that is thought to be a former mine water decant pond near the old open pit as well as the flooded open pit itself. The former Mirado Mine shaft is capped with a concrete cap. Concrete foundations are all that remains from former buildings on the property. Although there was limited production from the mine, no tailings were found. The Mirado open pit mine and underground mine were closed before the introduction of Part VII of the Mining Act in 1991, which instituted the requirement for closure plans. However, Orezone is of the opinion that there are no potentially hazardous conditions relating to public health and safety or to the environment on the site.

Mineral exploration work on the Mirado project is subject to Ontario mining regulations. Surface disturbance caused by exploration activity including drill pads and drill roads on patented claims are not normally subject to reclamation. See Section 3.3 regarding recent changes for exploration work on staked claims. Water crossings for heavy equipment such as drill rigs do require permits. Existing roads provide access to all areas of the properties such that new water crossings should not be necessary. Access to the parts of the project on the east side of the Misema River would have to be made from logging roads that turn off Highway 624.

## 3.5 Mining Rights in Ontario

The Mirado project is located in Ontario, a province that has a well understood permitting process in place and one that is coordinated with the federal regulatory agencies. As is the case for similar mine developments in Canada, the project may be subject to federal and provincial environmental

assessment processes based on certain project triggers. Due to the complexity and size of such projects, various federal and provincial agencies have jurisdiction to either provide authorizations or permits that enable project construction to proceed.

Federal agencies that have significant regulatory involvement at the pre-production phase include the Canadian Environmental Assessment Agency, Environment Canada, Natural Resources Canada as well as Fisheries and Oceans Canada. On the provincial agency side, the Ontario Ministry of Northern Development and Mines, Ministry of Environment, Ministry of Transportation as well as the Ministry of Natural Resources each have key project development permit responsibilities.

## 4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

Information in this section has been modified from Reddick and Lavigne (2012).

### 4.1 Accessibility

The Mirado property is located approximately 35 kilometres by road southeast of the town of Kirkland Lake, Ontario, which is approximately 585 kilometres by road north of Toronto, Ontario. The property is accessible from Kirkland Lake via Highway 66 to Highway 112, then travelling south along Highway 112 to Highway 564, east through Boston Creek and then eastward along a gravel road to the Mirado mines. Highways 66 and 112 are paved roads; Highway 564 and the other access roads to the property are well-maintained gravel roads. A 4-wheel drive truck, snowmobile or an all-terrain vehicle is needed to get to the Mirado property at certain times of the year as the road past Boston Creek is not regularly maintained year round. Old drill and logging roads cross the properties are in a variety of conditions. The Ontario Northland Railway passes through Boston Creek and the town of Swastika near Kirkland Lake. Kirkland Lake has a small airport; however, it is not serviced by commercial passenger flights.

### 4.2 Local Resources and Infrastructure

The Abitibi region, which includes the larger cities of Timmins and Kirkland Lake, has a long exploration and mining history dating back to the early 1900s, and offers a well-trained exploration and mining workforce. There are analytical laboratories and abundant mining service and supply businesses in the area. There are many active exploration projects in the area. Mining is the primary industry and employer in the area. Other industries include forestry and tourism.

The condition of the shaft and underground workings of the Mirado mine are unknown. Although the property hosts a network of old access roads, no mining-related surface infrastructure remains on the property. The Mirado project area contains several small lakes, streams, and ponds that supply sufficient water for drilling, trenching, and exploration work in general. The Misema River flows through the project area.

### 4.3 Climate

Climate conditions are typical of northern Ontario. Average winter temperatures are in the range of -12 to -17 degrees Celsius, and average summer temperatures are in the range of 15 to 18 degrees Celsius. Annual precipitation averages 884 millimetres of which 590 mm occurs as rainfall and the balance is snow (average of 294 centimetres of snowfall) (<u>www.climate.weatheroffice.gc.ca</u>). Exploration and mining in the area take place year round and there are very few lost days due to extreme weather conditions.

### 4.4 Physiography

The topography in the project area is flat to mildly rugged with a maximum relief of approximately 50 metres. The average elevation is approximately 290 metres above sea level but ranges from about 260 to 310 metres above sea level. The vegetation ranges from mature spruce, pine, birch, and poplar

to scattered, locally thick underbrush. Vegetation in the resource area has mostly been cleared. Historical production open pits and three areas hosting the stockpiled material dominate the project area (Figure 3).



Figure 3: Characteristic Landscape of the Mirado Project Area

- (A) Former Mirado open pit.
- (B) Historic trench on stripped outcrop near former Mirado open pit.
- (C) North stockpile.
- (D) Central stockpile.
- (E) South stockpile.

## 5 History

#### Information in this section has been modified from Reddick and Lavigne (2012).

Exploration for gold in the vicinity of the Mirado project commenced during the early 1920s. At that time the property was known as the Cathroy Larder property. The first gold discovery was made on Lot 7, concessions V and VI, Catharine Township, where the Gold Bank and Gold Ridge Syndicates obtained gold values ranging up to 0.12 ounces gold per ton (Bell, 1929). Almost all of the historical work on the Mirado property is concentrated in the immediate vicinity of the underground mine, which is further described in Chapter 9.

Yama Gold Mines Limited (Yama) held the property from 1937 to 1943. After an initial surface drilling program, Yama sank a three-compartment vertical shaft to a depth of 550 feet (168 metres) and established four levels approximately 125 feet (38 metres) apart, including levels at the 125, 250, 375 and 500 feet horizons (38, 76, 114, and 128 metres). For a 15-month period between late 1941 and 1943, the company operated a small 50 to 75 tons per day mill with mill feed coming from narrow shrinkage stopes near the shaft on or above the 250 foot (76 metres) level in an area now known as the North zone.

Yama recovered 3,227 ounces of gold and 946 ounces of silver from 22,250 tons of mineralized rock. The average grade of the material was 0.145 ounces per ton gold. The Second World War severely curtailed production with the rationing of steel and explosives.

Cathroy Larder Mines Ltd. (Cathroy Larder) took over Yama in 1943 and concentrated their exploration efforts on an area southwest of the shaft, where a second gold bearing zone was outlined by diamond drilling in 1945 in an area now known as the South zone.

A total of 15,000 feet (4,572 metres) of surface drilling and 17,000 feet (5,182 metres) of underground drilling were completed. Underground development on the South zone by means of exploration drifts developed south of the shaft was confined to the 250 and 500 foot levels. In total, 4,000 feet (1,220 metres) of crosscutting, 8,000 feet (2,438 metres) of drifting, 720 feet (219 metres) of raising, and 1,723 feet (525 metres) of lineal stoping and stope preparation were completed. No gold production was reported by Cathroy Larder between 1943 and 1948.

All work was suspended by Cathroy Larder in August 1948 when the full effects of the Bretton Woods Agreement, which fixed gold at US\$35 per ounce, and rising production costs made gold mining uneconomic. The property remained in the hands of Cathroy Larder until 1960.

A year earlier, K. Carmichael of Kirkland Lake staked ground in the immediate vicinity of the Cathroy Larder tenements and optioned the property to Kordol Exploration Limited in 1960. Kordol completed trenching and surface sampling and reported gold values of up to 1.01 ounces per ton gold from Claim 3004539. Following these results a total of 10 AX-sized core boreholes (304 metres) were completed at two targets. Following this drill program the option was allowed to lapse.

On December 12, 1960, Mirado Nickel Mines (Mirado) optioned the property from Cathroy Larder and proceeded to rehabilitate the underground workings. The underground workings were dewatered and re-mapped. A considerable amount of surface and underground drilling was completed, with 23,065 feet (7,030 metres) of surface drilling completed on the South zone, along with 5,760 feet (1,756 metres) of underground drilling on the North zone, and 9,083 feet (2,768 metres) of drilling on the South zone.

No additional drifting or crosscutting was carried out by Mirado. Segsworth (1964) completed an inhouse historic reserve estimate of 435,000 tons grading 0.23 ounces of gold per tonne. SRK cautions that this estimate is historical and cannot be verified and as such should not be relied upon.

During a brief period of time in 1963, Broulan Reef Mines optioned the property from Mirado Nickel Mines and carried out approximately 5,125 feet (1,562 metres) of surface diamond drilling in the area of the South zone and then subsequently returned the property after receiving negative results from this work.

The property then remained idle until 1980, when Amax Minerals Exploration (Amax) compiled an extensive amount of data from the previous drill programs into a single set of level plans and sections. Amax also cut a detailed grid over the Mirado deposit on 200 foot (61 metres) centres, and then completed 13.5 miles (21.6 kilometres) of very low frequency (VLF) survey, 16.7 miles (26.8 kilometres) of ground magnetometer survey, 11.0 miles (17.6 kilometres) of IP, 2.7 miles (4.3 kilometres) of pulse electromagnetic (PEM) survey and 2.2 miles (3.5 kilometres) of ground horizontal loop electro-magnetic (HEM) survey. VLF, PEM and HEM are all electro-magnetic method of geophysical surveying that measure the electro-magnetic properties of rocks. Detailed mapping and prospecting was performed during the summer of 1980, and three phases of diamond drilling were completed on the property.

The Phase 1 Amax core drilling program consisted of 9 BQ core boreholes for a total of 5,387 feet (1,642 metres). The Phase 2 drill program was conducted during the fall of 1980 and consisted of 15 BQ core boreholes for a total of 8,094 feet (2,467 metres). A Phase 3 program was completed during the winter in early 1981 and consisted of 31 BQ core boreholes totalling 16,760 feet (5,108 metres). During the summer of 1981, stripping and rock saw channel sampling was conducted in the vicinity of the South zone; this work was completed by the end of September. Amax returned the property to Mirado in 1983.

Golden Shield Resources Ltd. (Golden Shield) entered into an option agreement with Mirado and Royado Mines Ltd. in which Golden Shield could acquire a 100 percent interest in Mirado's Cathroy Larder gold property in August 1985. Fifteen core boreholes totalling 4,999 feet (1,524 metres) were drilled in the fourth quarter of 1985.

Golden Shield commenced their next surface diamond drilling in January 1986. A total of 86 BQ core boreholes were completed in two phases for a total of 13,753 feet (4,191 metres) between January and December of 1986.

In January 1986, Golden Shield contracted Dynatec Mining Ltd. from North Bay, Ontario to rehabilitate and expand infrastructure in and around the Mirado mine. Initially, Dynatec set up generators, compressors plus office and dry facilities, and then commenced with dewatering of the Mirado underground workings. Site water supply and sewage disposal systems were also installed. The underground dewatering program was completed on March 10, 1986 with the use of a 140 horsepower pump. Compressed air, water lines, underground communication lines and 18-inch gauge rail track were laid in all development drifts.

The shaft was rehabilitated and a temporary 35 foot (approximately 10 metre) high headframe plus a single drum Canadian Ingersoll Rand SE-2 hoist was installed. The underground workings were inspected and found to be in good condition. An underground drill program commenced in April 1986, during which 51 BQ core boreholes were completed for a total of 9,877 feet (3,011 metres).

The underground drilling program was undertaken from the 250 and 500 foot levels and targeted Zones D, E, F, and G, which are subzones of the South zone. Between June and December of 1986, a total of 1,551 feet (473 metres) of drifting, 420 feet (128 metres) of raising, 180 feet (55 metres) of sublevelling and 24 feet (7 metres) of crosscuts were developed underground. During this same period, detailed underground mapping and sampling programs were completed on all four levels.

In early 1986, metallurgical testwork was undertaken under the supervision of A. S. Hayden of EH Associates. Settling and filtration tests were conducted and test slurries were prepared by Lakefield Research. An economic study of three alternative metallurgical processes was undertaken, including selective flotation with cyanidation of concentrate, direct cyanidation of mineralized material with Merrill- Crowe recovery, and direct cyanidation of mineralized material, with carbon in pulp gold recovery. Gold recoveries up to 93 percent were realized. In addition to amalgamation and flotation testwork metallurgical recovery studies, reflected light microscopy and mineralogical studies were completed, and the Bond Work Index was determined (Hayden, 1986).

Environmental base line studies were completed for the surrounding fish and wildlife habitat and watersheds. The studies included land use, land ownership, forestry and mining activities, environmental and surficial geology, and tailings disposal. A base line water sampling program was also completed. All of this work was conducted by Environmental Applications Group Limited in 1986.

A technical and financial evaluation report for the Mirado Gold Mine project was prepared by representatives of Golden Shield and several outside consulting firms including Dynatec Mining Limited, Bryan Wilson and Associates, E. H. Associates, Environmental Applications Group Limited, and Markham Data Inc. The report included detailed plans for a proposed open pit to be developed during the winter of 1987. The pit was designed to provide access to the underground workings on the 125 foot level.

In early 1987, Dynatec stripped the South zone in an area where the D Zone was drilled near surface. Preliminary calculations indicated that an overall stripping ratio of 3:1 was economic, and that pit faces could be safely excavated to a 70 degree angle. Approximately 82,000 cubic yards of overburden was removed as part of the exploration sampling program (Golden Shield, 1987). A custom milling agreement was reached in 1986 with the owner of the McBean Mill (Queenston/Inco) for milling mineralized material at a rate of 600 tons per day. No records from the 1987 mine production or milling are available.

Later that year, Golden Shield became a victim to the stock market crash of 1987. The property was subsequently returned to Mirado. In 2010, Mirado merged with two other junior mining companies to become Micon Gold Inc. (Micon). In January 2012, Micon signed the agreement with Fechi (see Chapter 3).

The former MZ property experienced further exploration work between 1990 and 2012. During the summer field season of 1990, Goldfields Canadian Mining Ltd. (Goldfields) explored the southwestern limit of the former MZ property on what is currently known as Claim 1241353. A trench exposed a strongly iron-carbonate altered package of mafic and intermediate volcanic rocks that averaged approximately 1 gram of gold per tonne (gpt) across a true width of approximately 50 metres.

The gold mineralization was described as being hosted in gossanous quartz fracture filled mafic volcanic containing 1 to 3 percent pyrite and trace chalcopyrite. No further work has been completed on this showing since. The size of this mineralized gold showing is not known due to the extensive overburden coverage and it remains open in all directions.

In 1998, James Burns of Timmins, Ontario staked Claim 4258214 and conducted surface mapping and sampling as well as ground magnetic and EM-16 surveys. The extent of these surveys is unknown to SRK. Following this phase of exploration, a single BQ-sized core borehole (137 metres) was completed. No significant assay results were reported (Burns, 1998).

Between 2000 and 2002, Messrs. Metherall and Zabudsky conducted surface sampling, mechanized trenching, and drilling with a portable X-ray drill on Claims L-1146327 and L-1196951. This work was based on the discovery of previously undocumented historical trenches and pits in the area. Surface and trench sampling yielded unspecified "significant" gold assays. Drilling consisted of eight EX-sized core boreholes (114 metres).

In December 2002, the MZ claims were optioned to 1179785 Ontario Inc. This agreement was amended in January 2003. Subsequently, the agreement was transferred to Hawk Precious Metals Inc. (Hawk) in 2003. During April 2003, Hawk conducted two work programs including line-cutting and a ground geophysical magnetometer survey over Claims L-1146327, L-1199884, and L-1196951, followed by additional mechanized trenching in November 2003. Quantec Geophysics Inc. completed 5.7 kilometres of a pole-dipole induced polarization survey on Claim 1146327 in 2003.

In November 2003, four new trenches were excavated to investigate gold mineralization surrounding the discovery areas named the Main and North Showing areas. Channel sampling in Trench 03-2 at the Main Showing returned 3.28 gpt gold over a horizontal width of 5.33 metres. MZ property Hawk contracted MPH Consulting Ltd. (MPH) of Toronto, Ontario, to complete a technical report detailing Hawk's 2003 work program. SRK was not able to locate the report on SEDAR, which suggests that it may never have been filed.

MPH assessed the exploration potential for gold as favourable and recommended a two-phase exploration program, including a C\$225,000 Phase 1 program involving systematic geological mapping, prospecting, an induced polarization survey, and mechanized trenching, followed by a provisional C\$200,000 Phase 2 core drilling program on selected targets (Thein, 2005).

As part of the second phase exploration program, Hawk completed five NQ-sized core boreholes (767 metres) on Claim 1146327 to test targets identified from the induced polarization survey. Results from the drill program were discouraging and Hawk dropped the option and returned the property to the vendors.

White Pine Resources Inc. (White Pine) optioned the MZ property in 2009 and retained CXS Geophysics of Kirkland Lake, Ontario to complete 19 kilometres of pole-dipole induced polarization survey. The survey was completed in February 2010. A total of nine NQ-sized core boreholes (1,934 metres) were completed during the summer of 2010. These boreholes were completed to test targets identified through the geophysical survey and yielded results of 1 to 2 gpt gold range over several metres.

A summary of all known drilling on the Mirado property is presented in Table 5.

Company	Boreholes		Year	Feet	Metres
Yama Gold Mines Ltd.	8	Underground	1942	450	137.2
Cathroy Larder Lake	10	Surface	1945	5,596	1,705.7
Cathroy Larder Lake	15	Underground	1945	1,171	356.9
Cathroy Larder Lake	20	Surface	1946	9,404	3,018.7
Cathroy Larder Lake	173	Underground	1946	15,809	4,818.6
Mirado Nickel Mines	Unknown	Surface	1960	23,065	7,030.2
Mirado Nickel Mines	Unknown	Underground	1960	14,483	4,414.4
Kordol Exploration Ltd.	10	Surface	1960	997	303.9
Broulan Reef Mines	Unknown	Surface	1963	5,125	1,562.1
Amax Minerals Exploration	24	Surface	1980	13,461	4,102.9
Amax Minerals Exploration	31	Surface	1981	16,760	5,108.5
Golden Shield	15	Surface	1985	4,999	1,523.7
Golden Shield	86	Surface	1986	13,753	4,191.9
Golden Shield	51	Underground	1986	9,877	3,010.5
J. Burns	1	Surface	1998	449	136.9
Metherall and Zabudsky	8	Surface	2002	374	114.0
Hawk Precious Metals Inc.	5	Surface	2004	2,517	767.2
White Pine Resources Ltd.	9	Surface	2009	6,345	1,934.0
Total				144,635	44,237.2

Table 5: Historical Core Drilling on the Mirado Property

#### 5.1 Historical Resource Estimates

Three historical mineral resource estimates have been prepared for the Mirado project between 1964 and 1987. None of them appear to have been disclosed publicly at the time of reporting but were disclosed publicly in 2012 by Reddick and Lavigne (Reddick and Lavigne, 2012). SRK cautions that these estimates were prepared prior to the introduction of Canadian Securities Administrators' National Instrument 43-101. No qualified person has done sufficient work to review or classify these historical resources. The key assumptions, parameters, and methods used to prepare the historical estimates are unknown. No information exists about resource categories applied to the historical resources completed in 1964. The classification of the historical resource completed in 1987 is not comparable with current classification schemes. These estimates should not be relied upon and have been superseded by the mineral resource statement presented herein. Orefinders has not relied upon these historical mineral resource estimates are tabulated in Table 6 and are shown for historical interest only.

Estimate	Quantity (Tons)	Grade (ounces of gold per ton)	Category
Baker, 1964	400,000	0.230	
Segsworth, 1964	435,000	0.233	
Golden Shield Resources, May 30, 1987	441,000	0.340	Drill indicated

### 5.2 Past Production

Underground mining by Yama from 1937 to 1942 included the sinking of a three-compartment shaft to 540 feet, with levels at 125, 250, 375, and 500 feet. A 50-ton per day mill was established on site. Reported production figures vary. Bourne (1985) reports Yama production from 1938 to 1942 of 3,227 ounces of gold and 993 ounces of silver.

Production figures for Golden Shield are unavailable. Production figures from Meyer, et al. (2000) report total historical production from the Mirado property at 10,231 ounces of gold at an average grade of 0.114 ounce of gold per ton (opt gold) No records for mining or milling by Golden Shield are available, but the material is reported to have been milled at Queenston's McBean mill, although the Kerr Addison mine and mill were acquired by Golden Shield in 1987.

Period	Quantity (tons)	Metal (ounces)	Grade (opt gold)	Operator	Reference
1937 – 43	22,250	3,227	0.145	Yama Gold Mines Ltd.	Baker, 1962
1987 – 88	67,469	7,199	0.107	Golden Shield Resources*	
Total	89,719	10,231	0.114		Meyer et al., 2000

\* Historical production figures for Golden Shield Resources were derived by subtracting Yama Gold Mines Ltd. production figures from totals reported by Meyer et al (2000).

## 6 Geological Setting and Mineralization

### 6.1 Regional Geology

The Mirado project is located in the central Abitibi Greenstone Belt. The belt has an east-west dimension of approximately 700 kilometres and a north-south dimension of approximately 300 kilometres at its widest (e.g., Goodwin and Ridler, 1970; Mueller et al., 2002). To the north, the Abitibi Greenstone Belt is bordered by the Quetico Gneiss Belt, to the southeast it is truncated by the Grenville front, and to the west by the Kapuskasing structural zone.

The Abitibi Greenstone Belt is interpreted to have formed as accretionary arc complex, involving a north-directed subduction zone, arc rifting, and the generation of large amounts of komatiitic and tholeiitic to calc-alkaline magmas. The volcanic and sedimentary rocks were intruded by syntectonic tonalite-trondhjemite-granodiorite plutons (e.g., Bellefleur et al., 1998; Ayer et al., 2002; Wyman et al., 2002). Structural observations of major fault systems support the interpretation that the convergence of the building blocks of the greenstone belt was oblique (Daigneault and Archambault, 1990; Hocq, 1990).

Dimroth et al. (1982) subdivided the Abitibi Greenstone Belt into southern and northern zones, based on differences in sedimentary and volcanic lithologies and metamorphic grade. Shallow marine terrigenous sediments and plutonic pebbles in conglomerates are only known in the northern zone. Only the southern zone has a conglomerate apron along its southern contact, whereas the northern zone is characterized by intrusive contacts. Volcanologically, the main difference between the two zones is the near absence of ultramafic rock in the north compared with voluminous ultramafic flows at the bases of volcanic cycles in the southern zone (Jensen, 1978a; Allard et al., 1979; Dimroth et al., 1982). The Mirado project is located in the southern volcanic zone.

Large crustal scale east-west structural zones occur throughout the Abitibi Greenstone Belt that. One of them, the Larder-Lake-Cadillac Break is located immediately to the north of the Mirado project (Figure 4). Numerous gold deposits are located along this structure including the Kerr-Addison and the Kirkland Lake mines.

### 6.2 Local Geology

The geology of the Mirado project consist of two principal rock assemblages; the Skead and the McElroy assemblages (Figure 5), both with a general age of 2,750 to 2,700 Ma. The assemblages are interpreted to be conformable to each other, and both are folded around the Round Lake batholith located on the west side of Catharine Township.

The Skead assemblage consists of a variety of mafic to felsic pyroclastic flows and fragmental units with minor interflow sediments. The pyroclastic units consist of monolithic to heterolithic lapilli tuff and coarse fragmental units. Minor wacke and conglomerate occur throughout. The stratigraphy faces to the north. In the project area, the units strike at 290 degrees and dip from 70 to 85 degrees to the north. The hanging wall contact of the Skead assemblage is marked by an iron formation horizon.

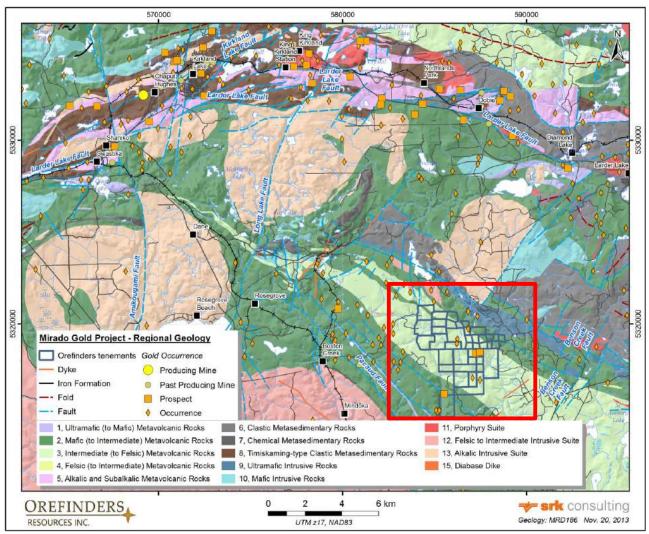


Figure 4: Regional Geology Setting of the Mirado Gold Project

The overlying McElroy assemblage comprises mainly massive mafic metavolcanic rock, subordinate felsic metavolcanic rock, and very minor komatiite.

A host of late dykes crosscut the Skead and McElroy assemblages and are described variably as syenite, syenite porphyry, feldspar porphyry, gabbro, diorite, and lamprophyre.

No significant regional structures have been documented in the McElroy or Catharine townships. However, Abraham (1951) notes that there are transverse faults in the south-eastern part of McElroy Township that strike 025 degrees with horizontal displacements of over 300 metres.

Outcrop on the Mirado property is scarce and is mostly restricted to the area around the historical open pit. Other areas of the property are mostly covered by thin glacial overburden. The geology is mostly known through government mapping, drilling, underground mining, trenching, and interpretation of geophysical data. Unpublished geological maps were produced in the 1960s by Baker (1962, 1964), Bourne (1985) and various other reports from the 1980s by Amax and Golden Shield. Orefinders has relied heavily on maps by Golden Shield.

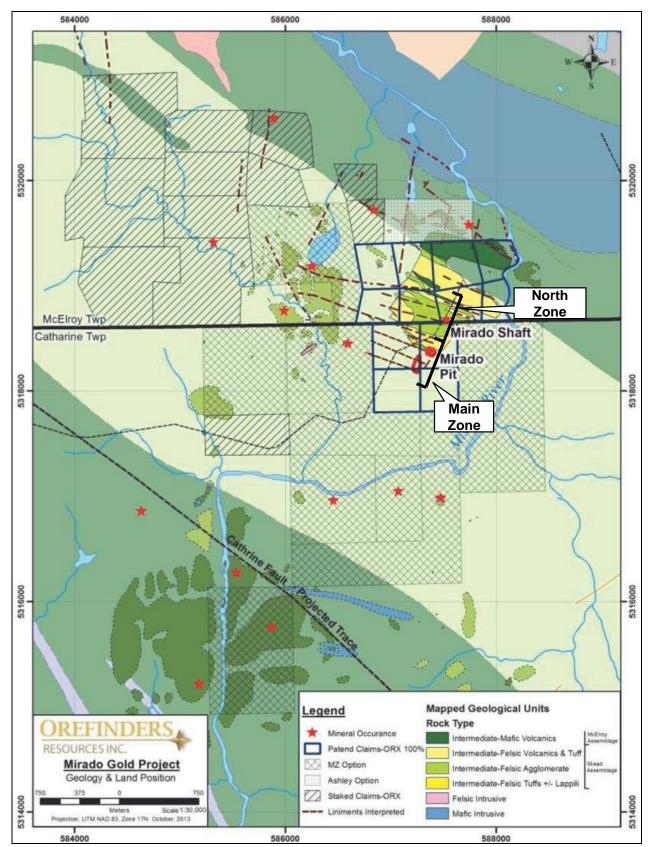


Figure 5: Geology of the Mirado Gold Project

The northeastern part of the property is underlain by the McElroy assemblage, which does not host known gold mineralization. The Skead assemblage underlies the majority of the property, while the southernmost part is underlain by the Catherine assemblage.

According to Bourne (1985), the Mirado property lies on the north limb of a major antiformal structure. Rock types in the mine area are largely fragmental volcanic rock and rhyolite cut by small syenite porphyry, diorite, and lamprophyre dykes.

During SRK's investigations an agglomerate tuff was identified northwest of the open pit. South of the open pit, a volcanic breccia with large mafic clasts and isolated sulphide stringers is exposed. Mafic dykes strike mainly northwest to north and are crosscut by an east-striking porphyry dyke. Sulphide stringers and veins are crosscut by barren mafic and feldspar porphyry dykes. Dykes exhibit no internal fabric and crosscut the cleavage and foliation fabrics in the surrounding tuff, indicating that they are younger than the regional foliation. Various geological features observed by SRK within the Mirado property are shown in Figure 6.

A striking feature of the Main zone in the surrounds of the open pit is a west-northwest striking shear zone that separates massive tuff in the south from tuff with a penetrative planar fabric in the north. North of this zone, specifically on the north shore of the open pit, agglomerate and lapilli tuff show foliation formed by elongated clasts. The shear zone itself is characterized by tightly spaced cleavage, locally with an oblique mineral lineation. From the Main zone open pit to the North Zone the felsic tuff generally exhibits west-northwest striking cleavage of varying intensity. The shear zone dips approximately 80 degrees to the north-northeast. In the Main zone, the gold mineralization is constrained to the north by this east-northeast striking shear zone.

A north-northeast-striking fault observed in core (Boreholes MD13-28, MD13-06, MD13-37) delimits the main auriferous zone to the east. This fault is characterized by slickensides with chlorite, and broken core and may correlate with a northeast-striking fault with subhorizontal lineation and sinistral sense-of-shear documented on the south side of the open pit.

The gold mineralization in the west, south, and at depth does not seem to be constrained by major structures. In the south and at depth, gold grades decrease at the contact to the rhyolite; however, the rhyolite is not barren. The geometry of the rhyolite contact is irregular.

Within the Main zone sulphide stringers occur at varying orientations. Northwest of the open pit sulphide stringers strike mainly west-northwest. Pyrite stringers in the massive rock south of the shear zone strike dominantly north to north-northwest and northeast at a high angle to the shear zone. Sulphide stringers in oriented core strike mainly west-northwest, north, and east. However, core orientation is erratic and these measurements should be treated with caution.

Quartz veins up to several centimetres thick occur throughout the Mirado project area. At surface, veins strike mainly northeast and dip southeast at varying angles. Quartz veins crosscut rock fabrics, brittle faults, and sulphide stringers. These veins likely represent the youngest structures observed in the Mirado project area. Orefinders has not tested these veins individually for gold, but timing relationships and the occurrence of gold associated with sulphide mineralization suggest that these late stage quartz veins are barren.

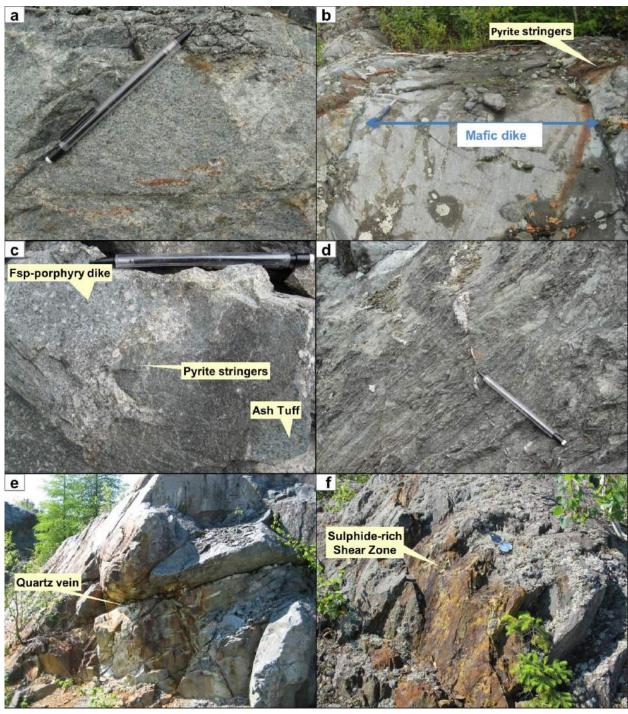


Figure 6: Main Geology Features Observed by SRK on the Mirado Gold Project (A) Undeformed intermediate to felsic tuff near the historic pit is the dominant rock type in the resource area.

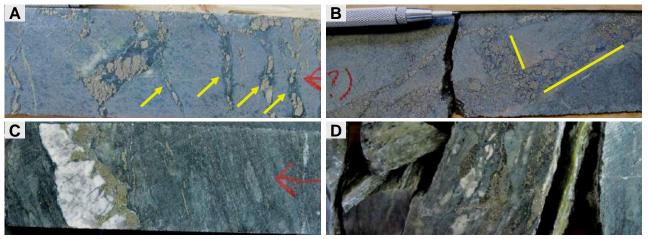
- (B) Mafic dyke crosscutting sulphide stringer mineralization.
- (C) Feldspar-porphyry dyke cross cutting undeformed ash tuff north west of historic pit.
- (D) Shear zone with tight cleavage, separating foliated and massive rock, on east side of historic pi.
- (E) Low angle quartz vein associated with sulphide mineralization north of historic pit.
- (F) Sulphide zone on northwest side of historic pit, looking easterly.

## 6.3 Mineralization

Gold mineralization at the Mirado project occurs in the Main zone (also referred to as the South zone is some historical reports) and the North zone. The shaft is located in the North zone, but almost all exploration work since the 1960s has been focused on the Main zone.

Gold mineralization in the Main zone commonly occurs in highly silicified fragmental rock with varying amounts of pyrite and subordinate chalcopyrite and sphalerite. Sulphide mineralization occurs as stringers, blebs and disseminations. The distribution of gold is highly variable and inconsistent. Past attempts to outline continuous gold subzones have been unsuccessful. Some gold occurs at and near the contact with a rhyolite which, based on information from core logging, forms an irregular body on the south side and below the Main zone.

In the North zone, gold mineralization is associated with a series of sulphide, quartz, and quartz carbonate veinlets parallel to the shear zone foliation. The strike continuity of the veins is good. Bourne (1985) reports that the North zone system was mined in five parallel stopes for about 500 feet along strike on the 250 foot level and the system can be traced for about 1,000 feet along strike. The North zone extends to the 500 foot level and is open at depth.



#### Figure 7: Typical Mineralization Features on the Mirado Property

- (A) Series of parallel pyrite-chlorite veinlets (borehole MD13-19 at 85 metres).
- (B) Orthogonal orientations of pyrite veins (borehole MD13-30 at 97.5 metres).
- (C) Pyrite parallel to foliation (borehole MD13-08 at 76 metres).
- (D) Pyrite parallel to foliation (borehole MD13-08 at 74 metres).

# 7 Deposit Types

Gold mineralization along regional fault and shear structures in the Abitibi Greenstone Belt are well documented examples of structurally controlled gold deposits, also known as orogenic gold deposits. In these deposits, the gold mineralization is typically associated with an organized network of quartz veins containing subordinate amounts of carbonate, tourmaline, sulphides, and native free-milling gold. Gold mineralization can also be associated with disseminated sulphides in strongly deformed alternation zones without significant veining.

This style of gold deposit typically exhibit strong relationships with regional arrays of major shear zones. Such deposits are formed by circulation of gold-bearing hydrothermal fluids in structurallyenhanced permeable zones developed in supracrustal rocks during regional metamorphism that typically accompanies orogenic processes. These deposits exhibit strong lithological and structural controls hosted in deformed and metamorphosed volcanic, sedimentary, and granitoid rocks occurring across a wide range of crustal depths. Gold deposition typically occurs as a result of changes in fluid solubility triggered by wallrock alteration and perturbations in the local stress field.

At the Mirado project the gold mineralization in the Main zone is primarily associated with stockwork and disseminated sulphides in variably altered rock. The characteristics of the gold mineralization in the Main zone are similar to intrusion-related gold mineralization (Robert et al. 2007). These atypical deposits display similar regional-scale controls as orogenic deposits. They differ in styles of mineralization, metal association, interpreted crustal levels of emplacement, and relative age. Those gold deposits show a close spatial association with high-level porphyry stocks (Figure 8).

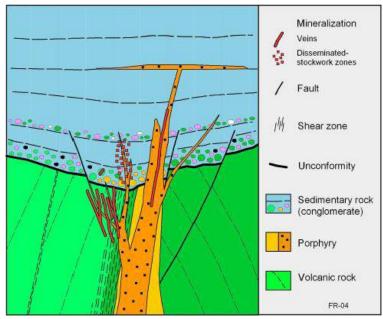


Figure 8: Conceptual Geological Model for Atypical Gold Deposits (Robert et al., 2007)

Note the close spatial associations between disseminated-stockwork and crustiform vein deposits in greenstone rock and high-level porphyry intrusions and unconformities at the base of conglomeratic sequences.

## 8 Exploration

Orefinders carried out limited exploration work prior to initiating drilling in 2013.

In 2012, Orefinders conducted basic survey and reconnaissance work including the identification of old mine survey control points and drill collars. Orefinders also completed a total of 67.8 kilometres of line cutting. Lines were cut at a bearing of 38 degrees, and replicating historical grids.

In the spring of 2012, Orefinders engaged Canadian Exploration Services Ltd. (CXS) of Larder Lake, Ontario to carry out an induced polarization survey of the Mirado property. The survey consisted of 14.5 kilometres of dipole-dipole survey and 6 kilometres of deep induced polarization survey. CanEx collected resistivity and chargeability data. Survey lines were spaced 100 metres apart with survey stations every 25 metres. The layout of the induced polarization survey is shown in Figure 9.

The dipole-dipole survey used a 10 channel Elrec Pro receiver and VIP 3000 (3kW) transmitter with a Honda 5000 generator as a power plant. The dipole-dipole array consisted of 11 mobile stainless steel read electrodes and one current electrode (C1). The distance between power electrodes and read electrodes as well as the distance between read electrodes was 25 metres. A two second transmit cycle time was used with a minimum number of receiver stacks of 12.

The configuration for the deep induced polarization survey comprised 21 mobile stainless steel read electrodes and two current electrodes (C1 and C2). The locations of C1 and C2 varied throughout the survey. A two second transmit cycle time was used with a minimum number of receiver stacks of 12.

In 2013, Orefinders focused on the consolidation and compilation of historical exploration and assay data and the completion of a 12,060 metre core drilling program.

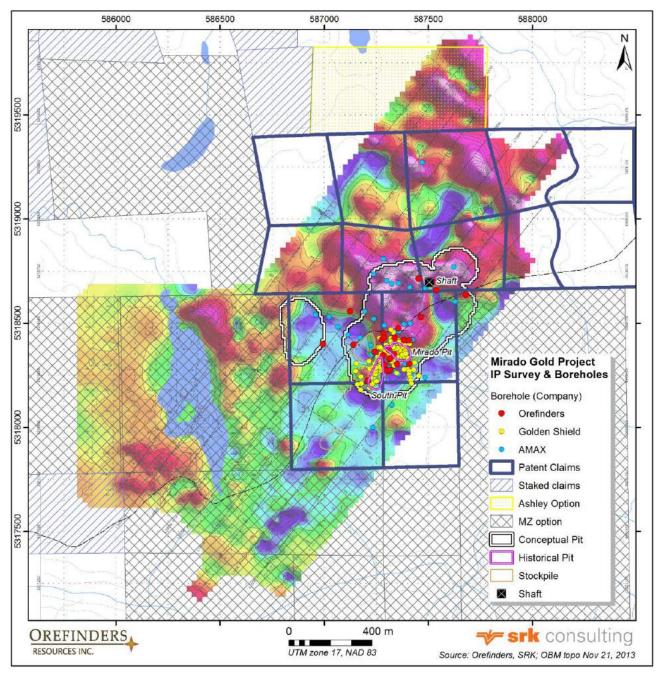


Figure 9: Location and Layout of the Induced Polarization Survey in Relation to Borehole Collars and the Conceptual Pit Outline Constraining the Mineral Resources Discussed Herein

# 9 Drilling

## 9.1 Introduction

Amax, Golden Shield, and Orefinders drilled a combined total of 247 core boreholes (approximately 30,000 metres) at the Mirado gold project. Included in this total are 51 underground core boreholes (approximately 3,000 metres) completed by Golden Shield in 1986.

The distribution of drilling is summarized in Table 8 and Figure 9. Orefinders drilling data contribute approximately 40 percent of the total drilling information (measured by drilled metres).

It is important to note that the information from the historical drilling (1980-1986) is available exclusively from paper logs. Sampling and assaying procedures were generally not documented by Golden Shield and Amax. Additionally, the core from the 1980-1986 drilling programs is not accessible.

Company	Period	Туре	Borehole Count	Total Length (metres)
Amax Minerals Exploration	1980	Surface	24	4,103
	1981	Surface	31	5,109
Golden Shield Resources	1985	Surface	15	1,524
Ltd.	1986	Surface	86	4,192
	1900	Underground	51	3,011
Orefinders Resources Inc.	2013	Surface	40	12,060
Total			247	29,997

#### **Table 8: Summary Characteristics of Drilling**

## 9.2 Drilling

### 9.2.1 Drilling by Amax

Amax completed three drilling programs between 1980 and 1981 on the Mirado project. All drilling was contracted to St. Lambert Drilling of Valleyfield, Quebec, and used BQ-sized equipment. The first two programs were aimed at testing the North and Main zones. The third program, completed in 1981 aimed at delineating the Main zone using boreholes spaced approximately 20 metres apart (Tremblay, 1982). Of the total 55 boreholes, 43 were placed in the Main zone, 9 in the North zone and 3 elsewhere (Figure 9). Collar locations were re-surveyed by Orefinders.

### 9.2.2 Drilling by Golden Shield

Golden Shield initiated drilling on the property in October 1985 and completed 15 NQ-sized core boreholes with the aim of testing the geometry of the sulphide zones delineated by Amax (Bryan Wilson & Associates, 1986).

In 1986, Golden Shield conducted an underground drilling program totalling 3,011 metres from the 250 and 500 levels (Golden Shield Resources, 1987). In the same year, 4192 metres of surface drilling were completed by Golden Shield. One phase of surface drilling was performed by Heath

and Sherwood Drilling of Kirkland Lake. All other surface and underground drilling was conducted by Morrisette Drilling of Haileybury, Ontario

### 9.2.3 Drilling by Orefinders

From January to September 2013 Orefinders drilled 40 boreholes (12,060 metres). The majority of the boreholes targeted the gold mineralization in the area of the historic open pit. Four boreholes targeted the mineralization in the North zone. One borehole was designed to test the continuity of mineralization between the North and Main zones. Two boreholes were drilled approximately 350 metres west of the former Mirado open pit to assess the along-strike continuity of the known gold mineralized zones. Orefinders used an ACT II tool to orient core from boreholes MD13-37 to MD13-40.

## 9.3 Drilling Pattern and Density

Boreholes completed by Orefinders were drilled with an azimuth of 045 degrees (16 boreholes) or 225 degrees (22 boreholes). Boreholes MD13-06 and MD13-07 had an azimuth of 090 degrees and 265 degrees, respectively. All boreholes were inclined at approximately 45 degrees. The majority of the boreholes were oriented perpendicular to the overall northwest-striking lithological contacts and the southeast-striking shear zone that appear to control the distribution of the gold mineralization. Boreholes by Golden Shield and Amax were drilled at a greater variability of azimuth and inclination; however, the majority of these boreholes were drilled perpendicular to the interpreted strike of the gold mineralization.

The overall borehole spacing is highly variable throughout the resource area. The highest drilling density is in the area of the historic Mirado open pit. All Golden Shield boreholes target the gold mineralization near the Mirado pit and the South pit. Orefinders and Amax also targeted mineralization in the North zone and tested the lateral continuity of the gold mineralization along the strike of the main shear zone. Borehole spacing increases rapidly with increasing distance from the historic open pit.

## 9.4 SRK Comments

SRK is of the opinion that the drilling procedures adopted by Orefinders conform to industry standard. SRK cannot comment on drilling procedures followed by Amax and Golden Shield. The drilling pattern resulting from the historical and current drilling is sufficiently dense to interpret the geometry and the boundaries of the gold mineralization with adequate confidence.

# **10** Sample Preparation, Analyses, and Security

## 10.1 Amax (1980 – 1983)

No information exists regarding sample preparation by Amax.

Limited information suggests that samples were assayed by Swastika Laboratories Ltd. (Swastika) in Swastika, Ontario. No information exists regarding the sample preparation, assay, and analytical procedures used by Swastika. The work conducted by Swastika Laboratories predates certification standards.

SRK is not aware of assays performed at a secondary laboratory.

## 10.2 Golden Shield (1985 – 1987)

No information exists regarding sample preparation, analyses, and security conducted by Golden Shield.

## 10.3 Orefinders (2013)

### 10.3.1 Sample Preparation and Analyses

Sample preparation was undertaken by ALS Minerals (ALS). Except for the first batch of samples received by the laboratory on January 15, 2013, which was prepared in Timmins, Ontario, all sample preparation was undertaken by ALS' preparation laboratory in Sudbury, Ontario. Samples were assayed by ALS in Vancouver.

The management system of ALS laboratories is accredited to ISO 9001:2008 by QMI-SAI Global (QMI; Certificate Number CERT-0051 527, Appendix B). ALS' Vancouver facility is also accredited to ISO 17025:2005 by the Standards Council of Canada (accredited laboratory number 579) for certain testing procedures including those used to prepare and assay samples submitted by Orefinders. See Appendix B for the Certificate of Accreditation and the scope of accreditation. ALS Chemex laboratories also participate in a number of international proficiency tests, such as those managed by CANMET and Geostats.

At ALS, samples were prepared using a standard rock preparation procedure consisting of drying, weighing, crushing, splitting, and pulverization (codes CRU-31, SPL-21, and PUL-31). Prepared samples were assayed for gold using fire assay with atomic absorption and gravimetric finish. The samples were assayed for a suite of 35 elements using an aqua regia digestion and inductively coupled plasma atomic emission spectroscopy (ICP-AES; code ME-ICP41).

### 10.3.2 Core Samples

Core was collected by Orefinders personnel at the drill site and brought to the core shack in Kirkland Lake, where the core was laid out, washed and set into racks. A geologist logged the core and determined sample intervals by marking the core with crayon at the beginning and end of intervals and by placing a sample tag at the end of each sample interval. The average sample length was 1 metre; the minimum sample length was 30 centimetres, and all sample intervals honour geological

contacts. For intervals considered barren a sample length of 1.5 metres was used. The geologist marked a cut line along the length of the core to prevent bias towards more or less mineralized halves while cutting the core. Core was cut using a diamonds saw.

One half of the core was placed in a plastic sample bag along with two sample tags containing a laboratory bar code. The outside of the sample bag was also labelled with a sample number using a permanent marker. A portion of the sample tag was torn off and stapled to the core box at the end of the sample interval. The sample bag was sealed using cable ties. Five to ten sample bags were placed in a rice bag and sealed with electrical tape. Each rice bag was labeled with the sample numbers included and the word "OREFINDERS". All samples were collected by an ALS representative and taken to the Sudbury sample preparation facility. The Timmins facility was used for samples in early January 2013.

### 10.3.3 Stockpile Samples

Three stockpiles occur on the Mirado property: the North, Central, and South stockpiles. The sampling procedure for the South stockpile differs slightly from the North and Central stockpile. The South Stockpile is higher than the North and Central stockpiles, therefore samples were taken on a three dimensional grid rather than on a two dimensional surface grid.

Sample location was determined using a square grid covering the entire extent of the stockpiles. In the South stockpile samples were spaced 10 metres apart. The North and Central stockpiles were sampled at 7.5-metre intervals. The sample location was established using a GPS receiver, compass, and measuring tape.

In the South stockpile, samples were taken at 1-metre depth intervals in boreholes up to 4 metre deep that were excavated by a power shovel. Depth was estimated by attaching a weighted, graduated tape to the power shovel bucket teeth. Individual samples were composited from the entire area of the sample borehole by taking a number of individual small pieces of rock. Additional fine muck samples were collected at a depth of 1 metre from each sample location. The weight of individual samples ranged from approximately 3 to 6 kilograms.

In the North and Central stockpiles, samples were collected throughout a 3.5 by 3.5 metres area centred on the marked sample location. Representative samples of fine muck from the stockpile surface were collected at each sample location. Individual pieces were not larger than fist-size. Pieces were placed in a plastic sample bag; final sample weights ranged from approximately 3 to 6 kilograms

At each location a sample collected from rock pieces, none larger than fist-size, from approximately the same proportion of oxidized and non-oxidized material. The geologist documented sample location, depth, sample tag number, general lithological characteristics, estimated sulphide content and oxidation intensity. After documentation, the sample bags were closed with cable ties and placed into rice bags for shipment to the assay laboratory.

## **10.4 Specific Gravity Data**

Neither Amax nor Orefinders collected specific gravity data. Golden Shield, as part of a metallurgical study, completed one specific gravity determination on a composite sample.

Quality control measures are set in place to ensure the reliability and trustworthiness of exploration data. These measures typically include 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 regular analysis of quality control data are important as a safeguard for project data and form the basis for the quality assurance program implemented during exploration.

Analytical control measures typically involve internal and external laboratory control measures implemented to monitor the precision and accuracy of the sampling, preparation, and assaying. They are also important to prevent sample mix-up and to monitor the voluntary or inadvertent contamination of samples.

Assaying protocols typically involve regularly duplicating and replicating assays and inserting quality control samples to monitor the reliability of the assaying results throughout the sampling and assaying process. Check assaying is normally performed as an additional test of the reliability of the assaying results; it generally involves re-assaying a set number of sample rejects and pulps at a secondary umpire laboratory.

### 10.5.1 Amax

SRK is not aware of a quality control program implemented by Amax.

### 10.5.2 Golden Shield

SRK is not aware of a quality control program implemented by Golden Shield. However, drill and assay logs suggest that 95 samples were re-assayed at an unknown laboratory.

### 10.5.3 Orefinders

Orefinders implemented external analytical quality control measures on all sampling. These measures involved using control samples (blanks, certified reference material, and field duplicate) at a rate of one of each every 20 samples. In addition, one reject duplicate, one sample preparation duplicate and one pulp duplicate were inserted for every 30 samples.

The blank sample consisted of approximately 200 grams of broken concrete or red brick. Orefinders used nine commercial certified reference material samples (Table 9) with low, medium, and high gold grade. The certified reference material was provided in pre-packaged bags containing 60 or 75 grams, depending on the material. The field duplicate samples were generated by splitting the half core in two quarters. Each of the quarters was bagged separately as a sample. Orefinders discontinued the use field duplicates after Borehole MD13-07 after review of analytical results suggest poor reproducibility.

Six certified reference materials were sourced from CDN Resources Laboratories Ltd. (CDN), Canada, and three certified standard reference materials were sourced from Rocklabs Ltd. (Rocklabs), New Zealand. They are listed in Table 9.

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Lab	CRM	Recommended Value (ppm Au)	Standard Deviation (ppm Au)	Sample Count
	CDN-GS-1K	0.87	0.10	132
CDN	CDN-GS-1P5F	1.40	0.12	127
	CDN-GS-5J	4.96	0.42	24
	SG56	1.03	0.01	31
	SG66	1.06	0.01	37
Rocklabs	Si64	1.78	0.01	134
ROCKIADS	SL61	5.93	0.06	32
	SN60	8.60	0.07	47
	OxH82	1.28	0.01	10
	Total			574

Table 9: Specifications of Certified Reference Material Used by	Orefinders in 2013
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### **10.6 SRK Comments**

Orefinders personnel used care in the collection and management of field and assaying exploration data. The analysis of the analytical quality control data is presented in the following section. In the opinion of SRK, the sampling preparation, security, and analytical procedures used by Orefinders are consistent with generally accepted industry best practices and are therefore adequate. SRK considers that the exploration data collected by Orefinders are of sufficient quality to support mineral resource evaluation.

The lack of quality control data and documented sampling and assaying protocols by Amax and Golden Shield cast uncertainty in the reliability of historical exploration data. However, the Amax and Golden Shield data are consistent with the Orefinders data suggesting that the historical data are generally reasonable. On this basis SRK considers that the historical data are sufficiently reliable to support geology and mineral resource modelling. The uncertainty related with the use of historical data was considered for mineral resource classification.

# 11 Data Verification

## **11.1 Verification by Amax**

Procedures undertaken by Amax to verify their exploration data are not documented.

### 11.2 Verification by Golden Shield

Procedures undertaken by Golden Shield to verify their exploration data are not documented. Historical core logs suggest that 95 samples were reassayed at an unknown laboratory.

### 11.3 Verifications by Orefinders

Orefinders implemented a quality management system which incorporates database verifications as well as external analytical quality control measures taken to monitor the reliability of analytical results delivered by ALS. Assaying protocols involve replicating assays (pulp duplicates), and inserting certified quality control samples. Orefinders did not submit samples to an umpire laboratory. Orefinders monitored the performance of quality control samples throughout the drilling program.

## 11.4 Verifications by SRK

### 11.4.1 Site Visit

In accordance with National Instrument 43-101 guidelines, SRK visited the Mirado project on two occasions. The first site visit was completed by Dr. Lars Weiershäuser, PGeo (APGO#1504) and Dr. James Siddorn, PGeo (APGO# 1314) between July 16 and 17, 2013.

The purpose of the first site visit was to inspect the property, witness the extent of the exploration work carried out by Orefinders and previous operators on the property, and assess logistical aspects relating to conducting exploration work in the area. SRK was given full access to project data. While on site, SRK interviewed project personnel regarding the exploration strategy and field procedures used by Orefinders.

During the visit, SRK examined the open pit and its adjacent stripped area. SRK also observed the logging and sampling of core. Several borehole collars were observed and their location checked with a handheld GPS receiver. The differences in coordinates measured by Orefinders and by SRK are listed in Table 10. The collar surveyed by SRK replicate the location recorded in the database within the precision of a handheld GPS unit.

Dr. Iris Lenauer from SRK Toronto returned to site between August 13 and 18, 2013 to study the geological and structural controls on the distribution of the gold mineralization to aid the construction of the three-dimensional gold mineralization domains. SRK investigated a stripped outcrop close to the open pit and examined core from 29 boreholes.

Borehole ID	Orefinders Survey (metres)						Absolute Difference (metres)		
	Easting	Northing	Elevation	Easting	Northing	Elevation	Easting	Northing	Elevation
MD13-15	587,277	5,318,424	302	587,277	5,318,422	294	0	2	8
MD13-25	587,286	5,318,432	304	587,288	5,318,432	295	2	0	9
MD13-33	587,278	5,318,385	297	587,279	5,318,382	289	1	3	8
MD13-01	587,311	5,318,377	293	587,311	5,318,375	288	0	2	5
MD13-06	587,313	5,318,331	293	587,318	5,318,330	288	5	1	5
MD13-02	587,319	5,318,334	294	587,314	5,318,329	289	5	5	5
MD13-09	587,523	5,318,702	310	587,521	5,318,700	303	2	2	7
MD13-08	587,453	5,318,715	310	587,453	5,318,714	303	0	2	7

Table 10: Comparison of Borehole Collar Surveys

### 11.4.2 Verifications of Analytical Quality Control Data

Orefinders provided to SRK the assay results for the quality control samples used during the 2013 sampling programs. All data were provided in Microsoft Excel spreadsheets.

SRK aggregated the assay results of the external analytical control samples for further analysis. Blanks and certified reference material analytical data were summarized on time series plots to highlight the performance of the control samples. Paired data (field duplicates) were analyzed using bias charts, quantile-quantile, and relative precision plots.

The external analytical quality control data produced for the core drilling in 2013 are summarized in Table 11 and presented in graphical format in Appendix C. The external quality control data produced on this project represents approximately 27 percent of the total number of samples assayed. This percentage is higher than that recommended by standard industry best practices.

In general, the performance of the control samples (pulp, blank, certified reference material) inserted with core samples submitted for assaying used by Orefinders is acceptable (Appendix C). Blank and certified reference material samples for the stockpile samples perform well. Field duplicates in the stockpile sample indicate low reproducibility (Appendix C).

Approximately 0.9 percent of blank samples inserted with the core samples returned assay values above ten times the detection limit of 0.005 gpt gold. One blank sample returned a gold value 60 times greater than the detection limit, indicating possible sample misidentification. SRK found no evidence of contamination.

Sampling Program	Core 2013	(%)	Stockpile 2013	(%)	Total 2013	(%)	Comment
Sample count	9,936		277		10,213		
Field blanks	530	5.3	13	4.6	543	5.3	
QC samples	574	5.8	15	5.4	1,365	13.4	
CDN-GS-1K	132		-		132		Reference material from
CDN-GS-1P5F	127		-		127		CDN Resource
CDN-GS-5J	24		-		24		Laboratories
SG56	31		-		31		
SG66	37		-		37		
Si64	134		10		134		Reference material from
SL61	32		-		32		Rocklabs
SN60	47		5		47		
OxH82	10		-		10		
Field duplicates	30	0.3	12	4.3	42	0.4	Terminated after 6 boreholes
Preparation duplicates	336	3.4	-		336	3.3	
Pulp duplicates	329	3.3	-		329	3.2	
Coarse Reject duplicates	334	3.4	-		334	3.3	
Total QC Samples	2,707	27.2	40	14.4	2,949	28.9	

 Table 11: Summary of Analytical Quality Control Data Produced By Orefinders on the Mirado

 Project

Assay results of the certified reference material samples CDN-GS-1K, CDN-GS-1P5F, and CDN-GS-5J from CDN submitted with core samples were mostly within two standard deviations of the certified value. One value well below two standard deviations for CDN-GS-1K likely represent a mislabelled blank, and one sample with an expected value similar to CDN-GS-5J, indicating mislabelling. The certified reference material samples from Rocklabs submitted with core samples show greater deviation from the expected value. For reference material Si64, half of the values are outside two standard deviations. This distribution suggests that ALS had difficulty in assaying this control sample.

Paired assay data for field duplicates (only 30 records) from core examined by SRK suggest that ALS in Sudbury had difficulty reproducing results for field duplicate pairs. Rank half absolute difference (HARD) plots show that only 53 percent of the field duplicate sample pairs have a HARD below 10 percent. As expected, the reproducibility deteriorates nearing the detection limits. Quantile-quantile (Q-Q) plots for field duplicates show a bias towards higher assay values in the original samples. Preparation, pulp, and reject duplicates show that above 60 percent of duplicate sample pairs have a HARD below 10 percent. Q-Q plots for preparation, pulp, and reject duplicates show that above 60 percent of duplicate show no apparent bias between the original and the duplicate assay values. The poor reproducibility of field duplicate samples is common in gold deposits.

Upon review, SRK considers that the analytical results delivered by ALS are sufficiently reliable for the purpose of mineral resource estimation. Other than indicated above, the data sets examined by SRK do not present obvious evidence of analytical bias.

# **12 Mineral Processing and Metallurgical Testing**

In early 1986, Golden Shield commissioned metallurgical test work. Settling and filtration tests were conducted by Bill Stone of EIMCO, based in Salt Lake City, Utah, and test slurries were prepared by Lakefield Research in Lakefield, Ontario. Tests were performed to assess the effects of flotation methods and variations on cyanidation procedures on gold extraction. Additionally, amalgamation and grindability testwork, mineralogical studies and Bond Work Index grindability tests were completed (Hayden, 1986).

Initial metallurgical studies were performed on one representative composite sample from the Mirado project. The sample consisted of 350 kilograms comprising 129 individual core intervals. SRK was not able to determine the origin of the samples within the Mirado deposit. In a second stage of testing, representative core samples from the North and Main zones were used.

The test work included amalgamation tests, flotation tests, cyanidation tests, settling and filtration tests, and grindability tests. The following conclusion is taken from Hayden, 1986, p. 21.

"The composite sample as received contains fine gold particles. The sulphide minerals identified don not interfere with the metallurgical processing. The optimum grind to liberate the gold particles from the matrix is 95 percent minus 200 mesh. The grinding power required is 13.8 kilowatt hour/tonne. 33.8 percent of the gold is free a this grind. Both flotation and cyanidation processes were conducted in this investigation. Selective flotation showed that a copper concentrate could recover 66.5 percent of the gold and 76.8 percent of the copper at a concentration grade of 1066 grams gold per tonne and 4.92 percent copper. The copper grade in the concentrate was unacceptable to copper smelters. Bulk flotation recovered 95 percent of the gold in a rougher concentrate at a grade of 50 grams of gold per tonne. The concentrate could be upgraded to 100 grams gold per tonne in two cleaning stages at a recover of 92 to 93 percent. The gold extraction from the flotation rougher concentrate was 93 percent, for an overall gold recover of 89 percent.

Direct cyanidation extracted more than 95 percent of the gold in 24 hours with 0.5 grams per litre NaCN at pH 11. The cyanide strength, pulp density and aeration did not affect the gold extraction efficiency. Reagent requirements depended upon the pH and aeration. More cyanide was consumed at the lower pH and without aeration. In general, 0.4 kilograms NaCN per tonne and 0.3 kilograms CaO per tonne was sufficient for 95 percent gold extractions.

For environments considerations, the cyanidation residue contained high sulphide, making it a potential acid producer. Cyanide destruction of the barren solution resulted in a decrease from 527 milligram NaCN per litre to 0.16 milligram NaCN per litre with the SO<sub>2</sub>-air process. Due to iron complex cyanide, the chlorination process could not decrease the cyanide to acceptable levels."

# **13 Mineral Resource Estimates**

## 13.1 Introduction

The Mineral Resource Statement presented herein represents the first mineral resource evaluation prepared for the Mirado gold project in accordance with the Canadian Securities Administrators' National Instrument 43-101.

The mineral resource model considers 242 core boreholes (31,700 metres), 40 (12,060 metres) of which were drilled by Orefinders. This database represents drilling data acquired between 1980 and 2013 by Amax, Golden Shield, and Orefinders. The borehole data include collar location, down-hole survey data, lithology codes, and 19,091 sample intervals assayed for gold. The mineral resource model also considers 422 samples from historical stockpiles.

The resource estimation work was completed by Dr. Lars Weiershäuser, PGeo. (APGO#1504) and Ms. Dorota El-Rassi, PEng (APEO #100012348) under the supervision of Mr. Glen Cole, PGeo (APGO #1416). Dr. Weiershäuser, Ms. El-Rassi. and Mr. Cole are full time employees of SRK and independent Qualified Persons as this term is defined in National Instrument 43-101. The effective date of the Mineral Resource Statement is October 30, 2013.

This section describes the resource estimation methodology and summarizes the key assumptions considered by SRK. In the opinion of SRK, the resource evaluation reported herein is a reasonable representation of the global gold mineral resources found in the Mirado project at the current level of sampling. The mineral resources have been estimated in conformity with the generally accepted CIM *Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines* and are reported in accordance with the Canadian Securities Administrators' National Instrument 43-101. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

SRK audited the Orefinders database informing the mineral resources, but has not been able to validate the quality of the historical data. Upon review of exploration data SRK considers that the drilling data acquired by Orefinders are consistent with the historical data. SRK is of the opinion that the overall drilling information is sufficiently reliable to interpret the boundaries of the gold mineralization with confidence and that the assay data are sufficiently reliable to support mineral resource estimation.

Leapfrog® Mining and Gemcom GEMS<sup>TM</sup> software was used to construct the geological solids, prepare assay data for geostatistical analysis, construct a block model, estimate metal grades, and tabulate mineral resources. The Geostatistical Software Library (GSLib) family of software was used for geostatistical analysis and variography.

## **13.2 Resource Estimation Procedures**

The Mirado gold project is a resource delineation exploration property. Historical and Orefinders drilling data have delineated gold mineralization of sufficient interest to warrant the preparation of an initial mineral resource evaluation. Orefinders' drilling efforts focused primarily on the Main zone; however, the North zone and down dip extensions to the known gold mineralization were also tested.

The mineral resources reported herein have been estimated using a geostatistical block modelling approach informed from core borehole data. The mineral resource model also includes 3 historical surface stockpiles and is informed from surface sampling data. All zones were estimated using a wireframe interpretation constructed from a three-dimensional interpretation of the drilling and muck sampling data using Leapfrog software.

The resource evaluation methodology involved the following procedures:

- Database compilation and verification;
- Modelling of the boundaries of the auriferous zones using Leapfrog and GEMS;
- Data processing (compositing and capping), statistical analysis, and variography;
- Selection of estimation strategy and estimation parameters;
- Block modelling and grade estimation;
- Validation, classification, and tabulation;
- Assessment of "reasonable prospects for economic extraction" and selection of reporting assumptions; and
- Preparation of the Mineral Resource Statement.

## 13.3 Resource Database

#### 13.3.1 General

Data used to evaluate the mineral resource were provided by Orefinders as a GEMS database, containing three-dimensional modelling and borehole data.

The database contains 247 core boreholes, 242 (31,700 metres) of which were considered for resource estimation. This database represents drilling data acquired between 1980 and 2013 by Amax, Golden Shield, and Orefinders. The borehole data include collar location, down-hole survey data, lithology codes, and 19,091 sample intervals assayed for gold.

The exploration database also includes 422 surface samples collected on 3 historical stockpiles.

SRK also received analytical quality control data produced by Orefinders in 2013, which include assay results for field blanks, field duplicates, and standard reference materials inserted within all sample batches submitted for assaying.

### 13.3.2 Data Validation

SRK performed the following validation steps on the borehole data:

- Checked minimum and maximum values for each quality value field and confirmed and edited those outside of expected ranges; and
- Checked for gaps, overlaps, and out of sequence intervals for both assays and lithology tables.

SRK did not find any problems with the recent Orefinders data, but has not been able to validate the quality of the historical data. No historical core or assay certificates are available. As a result SRK has relied on the data compilation completed by Orefinders. SRK built geological wireframes based on a structural geology investigations carried out by SRK. Due to the low confidence in the overall continuity of the gold grade data at the current sampling spacing, SRK did not construct additional

grade domains to constrain further the gold mineralization. The mineral resources were estimated within the geological wireframes.

Stockpile samples were validated in plan and section view to ensure their spatial distribution matched that of the reported sample pattern and that assay values matched values generally seen throughout the stockpiles.

On completion of the validation procedure, SRK considers the Mirado exploration database sufficiently reliable to support mineral resource evaluation and that the modelled geological wireframes are a reasonable interpretation of the boundaries of the gold mineralization at the current sampling spacing. However, the project database contains significant historical data of uncertain quality. The confidence in the historical data is uncertain and casts risks that were taken into consideration in the classification of mineral resources.

## 13.4 Solid Body Modelling

Gold mineralization of the Mirado property is associated with disseminated sulphide and sulphide veinlets, generally pyrite, hosted primarily in variably deformed and minimally altered fragmental volcanic rock. Gold abundance is generally related to an increase in pyrite content.

Pyrite abundance varies from trace to semi-massive. Gold mineralization discovered to date occurs along a northeast-trending deformation zone straddling the south contact of a porphyritic intrusion forming the footwall of the gold mineralization. Structural geology studies undertaken by SRK assisted with the definition of the main lithological domains, which are primarily fault-bounded.

In addition to the six gold bedrock mineralization domains, three stockpiles were also defined as shown in Figure 10.

A north-northeast striking fault truncates the Main zone to the east. The offset along this structure is unknown; as a result SRK did not model an offset.

A topography surface was created in Leapfrog using collar elevations of core boreholes. Each wireframe was assigned a numerical rock code to facilitate identification during resource evaluation (Table 12).

Domain/Zone	Block Model Code
Mineralized	
Main zone	100
Northern block	200
Northeastern block	250
East block	300
West block	400
Rhyolite	500
Northern stockpile	1300
Central stockpile	1400
Southern stockpile	1500
Waste	
Mafic dyke	600
Porphyry dyke	700
Overburden	800
Air	1000
Waste	77

#### Table 12: Rock Codes Used in the Mirado Gold Project

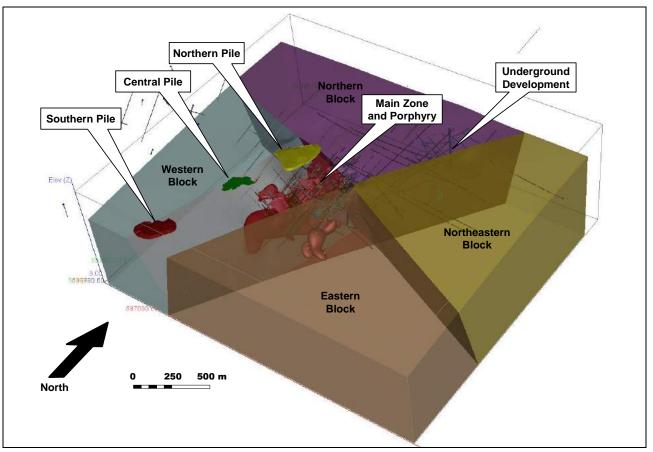


Figure 10: Oblique Section Showing Resource Domains and Stockpiles at the Mirado Gold Project, Overburden Removed

## 13.5 Compositing

The lithological wireframes were used to code a zone field into a block model (Table 12) and the drilling data.

Table 13 illustrates the basic sample gold and sample length statistics of the original borehole data. Unsampled drilling intervals intersecting wireframes were assigned a detection limit value of 0.003 gpt gold.

The distribution of core sample lengths shows a strong bimodal distribution with peaks at 1-metre and 1.5-metre intervals (Table 13) irrespective of geological contacts. After a review of the sample length histograms gold assays were composited to 1.5 metres for geostatistical analysis and variography.

Location	Variable	Count	Minimum	Maximum	Mean	Std. Dev.	Variance	COV
100		8,143	0.00	14,813.90	3.28	166.59	27,753.26	50.76
200		4,344	0.00	111.09	0.41	3.03	9.19	7.39
250	Gold grade	932	0.00	37.20	0.29	1.67	2.78	5.80
300	(gpt)	1,985	0.00	559.00	1.05	14.82	219.57	14.05
400		957	0.00	15.09	0.29	1.31	1.73	4.52
500		1,647	0.00	124.50	0.48	4.73	22.34	9.81
100		8,269	0.03	23.42	1.35	1.14	1.30	0.84
200		4,352	0.06	12.81	1.28	0.62	0.39	0.49
250	Length	932	0.10	9.67	1.30	0.48	0.23	0.37
300	(metres)	2,107	0.03	29.89	1.61	1.85	3.43	1.15
400		958	0.18	11.04	1.64	0.80	0.64	0.49
500		1,648	0.03	31.11	1.58	1.92	3.67	1.21

#### Table 13: Basic Statistics of Raw Core Samples for the Mirado Gold Project

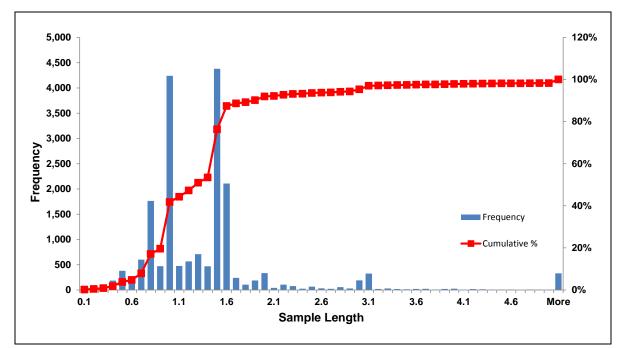


Figure 11: Sample Length Histograms for the Zones

## **13.6 Evaluation of Outliers**

For each zone, a capping value was selected from analysis of histograms and cumulative frequency plots of gold composites (Figure 12 for borehole data, Figure 13 for stockpile data). The impact of capping was analyzed and capping levels were adjusted for each resource domain separately. Capping was applied to the composites. Capping values were adjusted iteratively by reference to summary statistics to ensure robustness of statistics to chosen capping values (Table 14).

Basic statistics for uncapped and capped gold composites are shown in Table 15.

Zone	Cap Grade Au gpt	Composite Count	Composite Capped	Percentile Cap
100	30	8,035	24	0.997
200	13	4,449	6	0.999
250 and 300	15	3,823	8	0.998
400	3	1,329	17	0.987
500	7	1,925	10	0.995
1300	16	150	2	0.987
1400	20	60	3	0.950
1500	9	212	3	0.986

#### Table 14: Capping Values

#### Table 15: Statistics for Uncapped and Capped Gold Composites

Zone	Variable	Count	Minimum	Maximum	Mean	Std. Dev.	Variance	COV
100		8,035	0.00	1,185.50	0.85	14.01	196.21	16.57
200		4,449	0.00	34.10	0.24	1.01	1.03	4.24
250 and 300		3,823	0.00	372.94	0.01	6.42	41.28	642.47
400	Uncapped	1,329	0.00	26.59	0.03	1.13	1.27	37.58
500	(Au gpt)	1,925	0.00	59.59	2.05	2.05	4.18	1.00
1300		150	0.04	123.50	3.31	10.43	108.85	3.15
1400		60	0.05	53.50	4.48	8.74	76.45	1.95
1500		212	0.04	31.00	1.32	3.26	10.63	2.48
100		8,035	0.00	30.00	0.57	2.28	5.20	3.98
200		4,449	0.00	13.00	0.23	0.85	0.73	3.68
250 and 300		3,823	0.00	15.00	0.25	1.11	1.24	4.54
400	Capped	1,329	0.00	3.00	0.13	0.41	0.17	3.10
500	(Au gpt)	1,925	0.00	7.00	0.18	-0.69	0.47	-3.72
1300		150	0.04	13.00	2.59	3.53	12.45	1.36
1400		60	0.05	20.00	3.62	4.90	24.04	1.36
1500		212	0.04	9.00	1.10	1.84	3.40	1.67

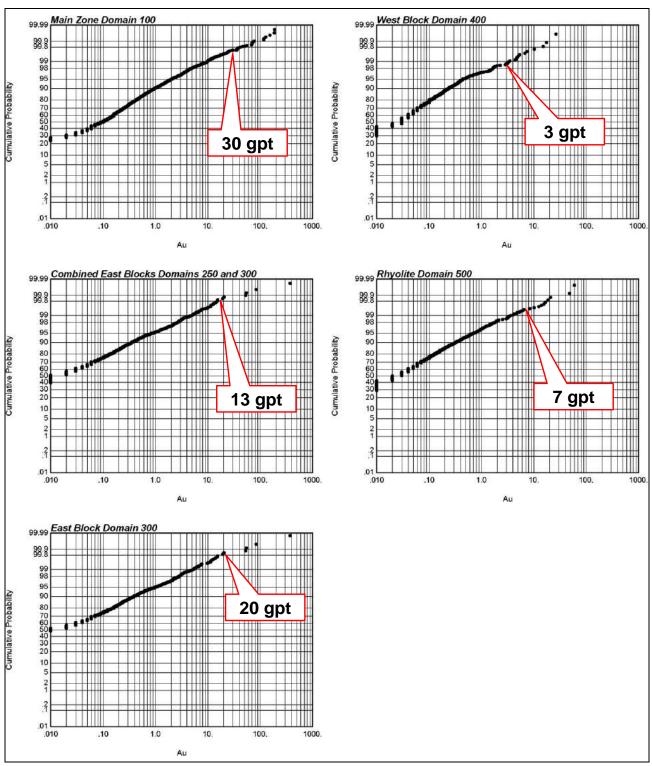


Figure 12: Cumulative Frequency Plots for Gold Composites (Selected Capping Value as Shown)

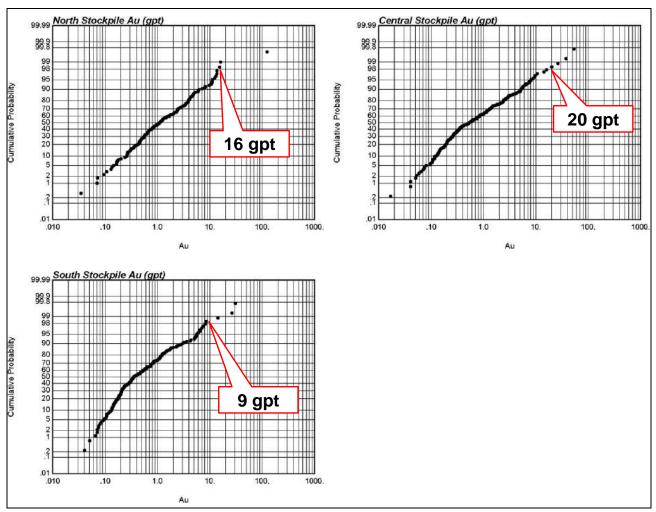


Figure 13: Cumulative Frequency Plots for Stockpile Gold Composites (Selected Capping Value as Shown)

## 13.7 Specific Gravity

Neither Orefinders nor Amax gathered specific gravity data. Golden Shield completed one specific gravity determination on a composite sample yielding a value of 2.92. In absence of recent and lithology-specific gravity data, SRK assigned a specific gravity of 2.75 to all mineralized rock types, 3.0 to barren mafic dykes, 2.75 to barren porphyry dykes, and 2.30 to the barren overburden. These specific gravity values are aligned with that applied on proximal projects. A swell factor of approximately 0.55 (AusIMM Field Geologists' Manual) was applied to the mineralized stockpiles for an applied specific gravity of broken rock of 1.55 (Table 16).

Domain	Specific Gravity	Domain	Specific Gravity
Overburden	2.30	Western block	2.75
Main zone	2.75	Rhyolite	2.75
Northern block	2.75	Porphyry dykes	2.75
Northeastern block	2.75	Mafic dykes	3.00
Eastern block	2.75	Stockpiles	1.55

## **13.8 Statistical Analysis and Variography**

SRK used GSLib software to model the spatial continuity of the core capped gold composites. Variography was not performed on the stockpile samples. Variograms were modelled for the following domains: Main zone and Eastern block (Domains 100 and 300), Northern and Northeastern blocks (Domains 200 and 250), the Western block (Domain 400), and the Rhyolite (Domain 500). For each zone, SRK assessed three different spatial metrics: (1) traditional semivariogram of original gold, (2) correlogram of original gold, and (3) traditional semivariogram of normal scores of gold. Final variograms were based on correlograms.

The three stockpiles were created from variable source material, including material from a small open pit and from underground development. The material is broadly separated by grade categories. Visual inspection of sampling data suggests random grade distribution. Accordingly, as there is no apparent spatial relationship between sample data, SRK used an inverse distance estimator (power of three) to assign more weight on the closest sample data point. Estimation ranges were chosen such that sufficient data were available for block estimation.

The variogram models for the bedrock samples are shown in Figure 14 and the selected variogram parameters are outlined in Table 17. SRK considers the final parameters, orientation, and fitted variogram models are appropriate and reasonable for their respective zones given the available data and geological interpretation.

Domain	<b>GEMS</b> Rotation (ADA)			Variogram Model							
Azimuth Dip Plun		Plunge	Nugget*	Structure	Туре	CC*	Y Range	X Range	Z Range		
100,	50	80	-10	0.2	1	Exponential	0.5	10	12	5	
300	50	00	-10	0.3	2	Spherical	0.2	40	30	5	
200,	105	0	1 5	0.3	1	Exponential	0.5	10	12	5	
250	105	0	15	0.5	2	Spherical	0.2	40	30	5	
400	135	-40	17	0.2	1	Exponential	0.4	40	40	12	
400	130	-40	17	0.3	2	Spherical	0.3	120	120	12	
500	40	40 0	0 50	0.0	1	Exponential	0.5	35	35	17	
500	40	0	-50	0.2	2	Spherical	0.3	35	35	17	

Table 17: Summary of Mirado Gold Project Variogram Model Parameters

\* Nugget effect and sills normalized to 1.0.

In all cases, variograms were first calculated using untransformed capped composited data. Data were then transformed to a Gaussian distribution and variograms were modelled on the normal score data (Figure 14).

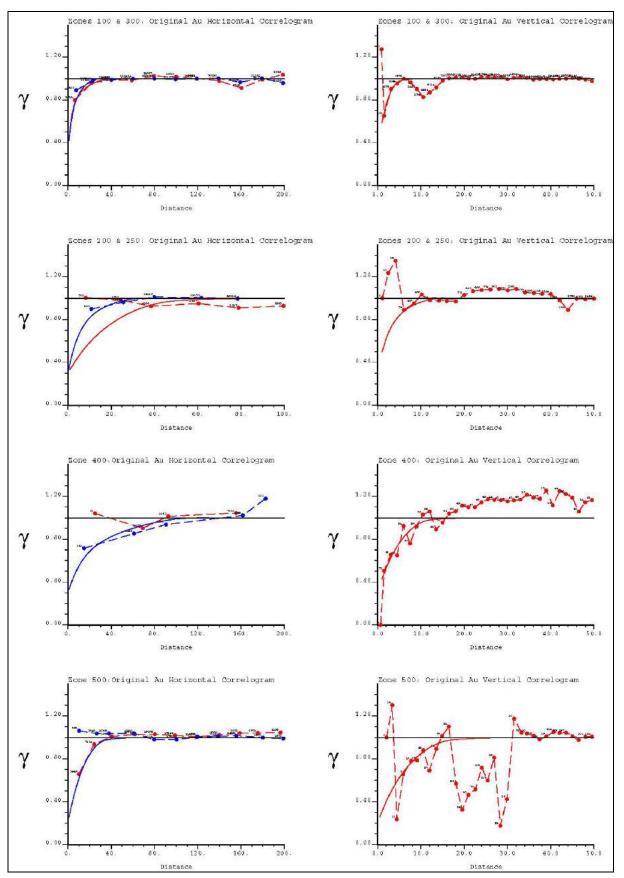


Figure 14: Modelled Gold Variograms for the Mirado Project Domains

## 13.9 Block Model and Grade Estimation

### 13.9.1 Block Model Definition

A block model was created to cover the entire area of the bedrock gold mineralization. The block model was set on a grid of 5 by 5 by 5 metres. The block model was not rotated. Separate block models were created for each of the three stockpiles. Block sizes were chosen to take into account the thickness of the stockpiles and sample spacing. The block model for the Northern stockpile is rotated by 35 degrees to take into account the sample grid. Block models for the Central and Southern stockpiles are not rotated. The model parameters are summarized in Table 18.

Direction	Origin*	Block Size (metre)	Number of Blocks	Direction	Origin*	Block Size (metre)	Number of Blocks
Main Bloo	ck Model - F	Pit and Under	ground		Northern	Stockpile <sup>2</sup>	
East-West	586,800	5.0	230	East-West	587,100	2.5	53
North-South	5,317,800	5.0	230	North-South	5,318,362	2.5	60
Vertical	320	5.0	85	Vertical	303	5.0	3
	Central S	Stockpile			Southern	Stockpile	
East-West	587,075	2.5	36	East-West	586,970	2.5	50
North-South	5,318,150	2.5	39	North-South	5,317,885	2.5	46
Vertical	294	1.5	3	Vertical	296	2.5	5

Table 18: Mirado Gold Project Block Model Parameters

\* UTM coordinates NAD83 datum Zone 17N

The extent of historical underground development can be deduced from historical plan maps; however, the volume of historical stopes and other material extracted cannot be determined with confidence. Meyer et al. (2000) estimate that approximately 80,000 tonnes were extracted from the underground workings. From historical plan maps, SRK modelled the underground development by digitizing development and stoping outlines and extruding the resulting polylines to a height of 2.5 metres. The resulting volume yielded approximately 100,000 tonnes that were removed from the resource model. SRK considers that the uncertainty related with the quantity of gold mineralization extracted from the historical underground workings is not material.

### 13.9.2 Grade Estimation

Gold grades in the rock block model were estimated by ordinary kriging whereas an inverse distance algorithm (power of three) was used to code the three stockpiles. The variogram models used for estimation are summarized in Table 17. For the stockpiles the dimensions of the search ellipse were adjusted to three to four times the data spacing to ensure sufficient data for block estimation and to ensure correspondence with underlying sampling data. Gold grades were estimated in each domain separately using capped composites from within that domain and the search parameters summarized in Table 19.

SRK evaluated the impact of varying estimation parameters in order to select the optimal estimation parameters for block grade interpolation. The results of this comparative study indicate that the grade estimation for these domains is not sensitive to slight variations of estimation parameters.

Three estimation runs were used to populate the rock block model and one estimation run for the three stockpiles block models. The first and second estimation passes considered full variogram ranges and the third estimation run considered twice the variogram ranges. For comparison, gold

grades were also estimated in the rock block model using an inverse distance algorithm (power of two) as a secondary estimator using the same estimation parameters.

Composites			Search Volume			Octant Search			Maximum GEMS Rotation		ation*		
Domain	Pass	Min.	Max.	SVx* (m)	SVy* (m)	SVz* (m)		Min. Octants	Max. Data	Comps / Borehole	Azimuth	Dip	Plunge
Rock													
100 and 300	1	4	10	40	30	5	Yes	3	5	3	50	80	-10
100 and 300	2	3	12	40	30	5	No	-	-	5	50	80	-10
100 and 300	3	2	15	80	60	10	No	-	-	-	50	80	-10
200 and 250	1	4	10	40	30	5	Yes	3	5	3	20	-80	-70
200 and 250	2	3	12	40	30	5	No	-	-	5	20	-80	-70
200 and 250	3	2	15	80	60	10	No	-	-	-	20	-80	-70
400	1	4	10	90	90	12	Yes	3	5	3	135	-40	17
400	2	3	12	90	90	12	No	-	-	5	135	-40	17
400	3	2	15	180	180	24	No	-	-	-	135	-40	17
500	1	4	10	35	35	17	Yes	3	5	3	40	0	-50
500	2	3	12	35	35	17	No	-	-	5	40	0	-50
500	3	2	15	70	70	34	No	-	-	-	40	0	-50
Stockpile													
Northern	1	5	12	30	30	15	No	-	-	-	0	0	0
Central	1	5	12	20	20	10	No	-	-	-	0	0	0
Southern	1	5	12	25	25	3	No	-	-	-	0	0	0

Table 19: Grade Estimation	Search and Rotation Parameters
----------------------------	--------------------------------

\* GEMS rotations

## 13.10 Model Validation and Sensitivity

The mineral resource model was validated by visually comparing block and borehole data on section by section and elevation by elevation basis (Figure 15). For the Main zone, ordinary kriging estimates were also compared with estimates derived using other estimators (inverse distance and nearest neighbour) and declustered capped composite data (Table 20). The comparison suggests that the ordinary kriging estimates are reasonable.

The block estimates for the three stockpiles were validated by comparison with the estimates from capped sample data. Due to the equidistant sample spacing no declustering was necessary. SRK found that the means compare well in all three cases (Table 20).

SRK constructed a quantile-quantile plot comparing global block estimates and declustered capped composite data. Declustering was accomplished using a nearest neighbour approach with a block size of 5 by 5 by 1.5 metres and a limit of one datum per block. This plot confirms that block estimates adequately reflect the informing data. The plot also shows the usual smoothing effect of ordinary kriging, particularly at higher grades (Figure 16, left). Less than 4 percent of the blocks have a grade higher than 1.0 gpt gold (Figure 16, right).

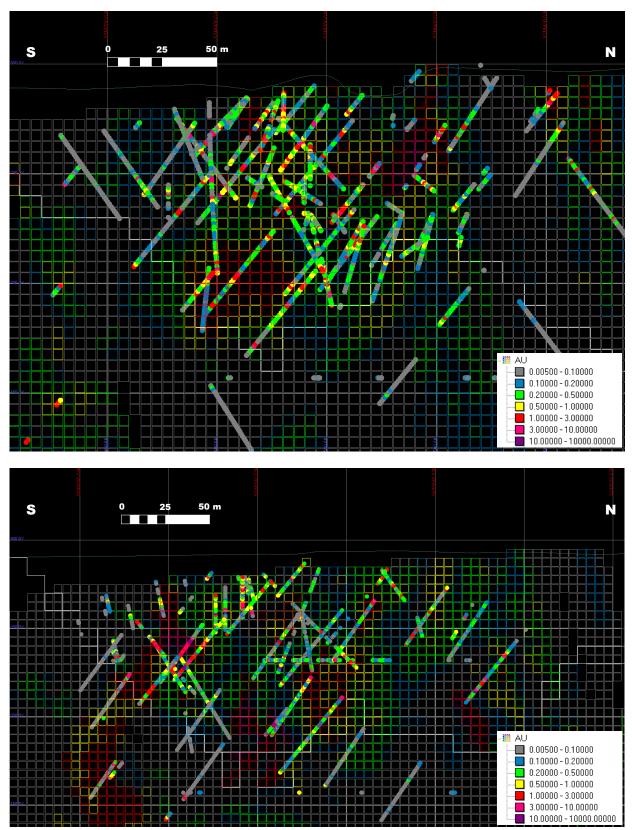


Figure 15: Vertical Cross-Section Through the Main Zone Comparing Block Estimates and Composite Data (Section 587,325, looking west [top]; Section 587,250, looking west [bottom])

Domain

Rock

100

200

250

300

400

500

Stockpile

Au ID3

Au ID3

Declustered

Declustered

Northern

Central

Southern

r Estimates						
Variable	Count	Mean	Minimum	Maximum	Std. Dev.	COV
Composites	8,035	0.57	0.00	30.00	2.28	3.98
Au OK	68,697	0.25	0.00	11.70	0.63	2.48
Au ID2	70,827	0.30	0.00	21.07	0.77	2.60
NN declustered	253,653	0.27	0.01	30.00	1.53	5.70
Composites	4,449	0.23	0.00	13.00	0.85	3.68
Au OK	272,684	0.14	0.00	4.74	0.25	1.86
Au ID2	283,691	0.18	0.00	8.02	0.37	2.04
NN declustered	1,214,045	0.15	0.01	14.52	0.61	3.98
Composites	903	0.18	0.00	14.52	0.85	4.67
Au OK	106,728	0.16	0.00	4.84	0.31	1.94
Au ID2	108,791	0.18	0.00	8.35	0.35	1.93
NN declustered	812,721	0.15	0.01	14.52	0.79	5.31
Composites	2,920	0.26	0.00	15.00	1.17	4.52
Au OK	60,768	0.18	0.00	12.11	0.41	2.25
Au ID2	60,768	0.19	0.00	16.23	0.45	2.23
NN declustered	265,873	0.16	0.01	30.00	0.92	5.69
Composites	1,329	0.13	0.00	3.00	0.41	3.10
Au OK	211,028	0.10	0.00	2.64	0.21	2.03
Au ID2	213,030	0.10	0.00	2.97	0.23	
NN declustered	531,663	0.16	0.01	4.72	0.45	2.90
Composites	1,925	0.18	0.00	7.00	-0.69	-3.72
Au OK	15,419	0.16	0.00	4.61	0.34	2.08
Au ID2	15,433	0.16	0.00	5.73	0.34	2.16
NN declustered	39,303	0.21	0.01	7.00	0.76	3.62
Au ID3	1,910	2.75	0.06	15.68	2.69	0.98
Declustered	150	2.59	0.04	16.00	3.53	1.36
1 100	=	0.05	0.47	10.00	0.05	4.00

0.17

0.05

0.07

0.04

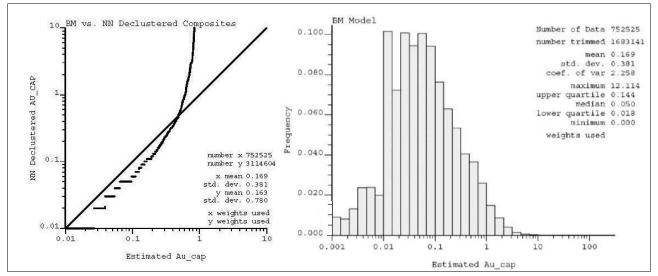
19.39

20.00

7.14

9.00

Table 20: Validation of Block Estimates: Summary Statistics of Ordinary Kriging Block Estimates, Underlying Composite Data, and Inverse Distance (Power of Two) and Nearest Neighbour Estimates



3.65

3.62

1.08

1.10

532

2,420

212

60

Figure 16: Quantile-Quantile Plot Comparing Global Block Estimate and Declustered Capped Composite Data (left) and Distribution of Block Estimates (right)

1.00

1.36

0.91

1.67

3.65

4.90

0.98

1.84

## 13.11 Mineral Resource Classification

Mineral resource classification is typically a subjective concept. Industry best practices suggest that resource classification should consider the confidence in the geological interpretation and the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the quality of the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas of similar resource classification.

Mineral resources for the Mirado gold project were classified according to the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (November 2011) by Dr. Lars Weiershäuser, PGeo (APGO#1504) and reviewed by Glen Cole, PGeo (APGO #1416) both of whom are full-time employees of SRK and appropriate independent Qualified Persons for the purpose of National Instrument 43-101.

SRK is satisfied that the geological modelling honours the current geological information and knowledge. SRK has not been able to validate the quality of the historical data, and as a consequence the confidence in the historical data present risks impacting negatively on classification. The mineral resource model is largely based on variably spaced and oriented boreholes drilled by three different operators.

Approximately 63 percent of the borehole database comprises historical drilling data with no analytical quality control data. The lack of specific gravity data and uncertainties about the volume of the stockpiles also impact resource classification. Other classification tools considered include the confidence in the geological interpretation, variography results, search ellipse volume, and kriging variance.

Due to the lack of specific gravity data and uncertainties about the use of historical data discussed above, SRK considers that it is appropriate to classify all modelled blocks to the Inferred category within the meaning of the *CIM Definition Standards for Mineral Resources and Mineral Reserves*.

SRK considers that the confidence in the tonnage and grade estimates is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

## 13.12 Mineral Resource Statement

CIM *Definition Standards for Mineral Resources and Mineral Reserves* (November 2011) defines a mineral resource as:

"[A] concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge."

The "reasonable prospects for economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. SRK considers that the gold mineralization of the Mirado gold project is primarily amenable for open pit extraction while other parts of the deposits could be extracted using an underground mining method.

In order to determine the quantities of material offering "reasonable prospects for economic extraction" by an open pit, a conceptual pit shell was developed using Whittle software and the Lerchs-Grossman optimising algorithm. The optimization parameters used by SRK are presented in Table 21. Goran Andric, PEng (APEO # 100103151) reviewed the mineral resource model and the grade distribution and advised that a reporting cut-off grade of 0.45 gpt gold is appropriate for reporting open pit mineral resources and the mineral resources in the stockpiles considering a gold price of US\$1,400 per ounce of gold and a gold recovery of 95 percent. SRK considers that a cut-off grade of 2.0 gpt gold is appropriate for the underground portion of this project.

Parameter	Assumption
Pit wall angle	50 degrees
Mining cost (ore and waste)	C\$2.00/t rock
Process cost including G & A costs	US\$15/t
Process recovery	95% gold
Assumed process rate	5,000 tpd from open pit and underground
Metal price	US\$1,400 /oz gold
Mining dilution and losses	5.0%

#### Table 21: Conceptual Assumptions Considered for Open Pit Resource Reporting

Orefinders elected to report the stockpile mineral resources at a cut-off grade of 2.0 gpt gold in the view of possible off-site toll milling prior to any mine development. SRK considers that a cut-off grade of 2.0 gpt gold is appropriate for reporting for the stockpile mineral resources.

SRK considers that the blocks above cut-off located within the conceptual pit shell can be reported as an open pit mineral resource and that those blocks located outside the conceptual pit shell above a cut-off grade of 2.0 gpt gold can be reported as underground mineral resources. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resources will be converted into mineral reserves. It is uncertain if further exploration will allow upgrading the classification of the Inferred mineral resources. The Mineral Resource Statement for the Mirado gold project is presented in Table 22. The effective date of the Mineral Resource Statement is October 30, 2013.

Classification/Zone	Cut-Off Grade (gpt Gold)	Quantity (000 tonnes)	Grade Gold (gpt)	Contained Metal Gold (000 ounces)
Inferred				
Open pit**	0.45	9,927	1.18	376.6
Underground**	2.00	669	2.90	62.4
Northern pile***	2.00	12	4.71	1.8
Central pile***	2.00	4	5.38	0.7
Southern pile***	2.00	5	2.74	0.4
Total Inferred		10,618	1.29	442.0

Table 22: Mineral Resource Statement\*, Mirado Gold Project, Ontario, SRK Consulting (Canada) Inc., October 30, 2013

\* Mineral resources are not mineral reserves and have not demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. Open pit mineral resources reported at a cut-off grade of 0.45 gpt gold inside a conceptual pit; underground and stockpile mineral resources reported at a cut-off grade of 2.0 gpt gold. Cut-off grades assume a gold price of US\$1,400 per ounce; and metallurgical recovery of 95 percent.

\*\* Open pit and Underground resources were disclosed by Orefinders in a news release dated December 9, 2013

\*\*\* Mineral resources in historical stockpiles were disclosed by Orefinders in a news release dated October 30, 2013.

## 13.13Grade Sensitivity Analysis

The mineral resources of the Mirado gold project are sensitive to the selection of reporting cut-off grade. To illustrate this sensitivity, within-pit block model quantities and grade estimates are presented in Table 23 at various cut-off grades and a grade tonnage curve for the same data is presented in Figure 17. The reader is cautioned that these figures should not be misconstrued as a Mineral Resource Statement. The reported quantities and grades are only presented as a sensitivity of the resource model to the selection of cut-off grade.

COG	Quantity	Gold Grade	Metal	COG	Quantity	Gold Grade	Metal
Gold (gpt)	(000't)	(gpt)	(000'oz)	Gold (gpt)	(000't)	(gpt)	(000'oz)
0.1	25,788	0.60	494	1.1	3,390	2.11	230
0.2	18,247	0.78	459	1.2	2,978	2.25	215
0.3	13,816	0.95	423	1.3	2,614	2.38	200
0.4	10,991	1.11	392	1.4	2,334	2.51	188
0.5	9,081	1.25	365	1.5	2,090	2.63	177
0.6	7,392	1.41	335	1.6	1,893	2.74	167
0.7	6,248	1.55	311	1.7	1,691	2.88	156
0.8	5,296	1.69	288	1.8	1,534	2.99	148
0.9	4,600	1.82	269	1.9	1,409	3.09	140
1.0	3,956	1.96	249	2.0	1,265	3.22	131

Table 23: Block Model Quantity and Grades Estimates\* at Various Gold Cut-Off Grades, Blocks Inside Conceptual Pit Shell, Mirado Gold Project

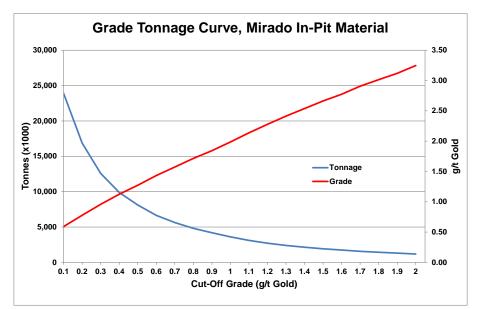


Figure 17: Mirado Gold Project Grade Tonnage Curves

# **14 Adjacent Properties**

There are no adjacent properties that are considered relevant to this technical report.

# **15 Other Relevant Data and Information**

There are no other relevant data available about the Mirado project.

# **16 Interpretation and Conclusions**

The exploration work conducted by Orefinders was professionally managed and used procedures consistent with generally accepted industry best practices. After review, SRK is of the opinion that the exploration data collected by Orefinders are sufficiently reliable to interpret with adequate confidence the boundaries of the gold mineralization for the Mirado gold project. Furthermore, the Orefinders exploration data are consistent with historical exploration data, suggesting that the exploration data acquired by Amax and Golden Shield are also generally sufficiently reliable to support geological modelling and mineral resource evaluation.

From historical and recent core drilling data, SRK defined six unique lithological domains encompassing all gold mineralization found on the Mirado gold project. These domains were considered separately for resource modelling. In addition, SRK considered muck samples collected by Orefinders on regular grids over three historical stockpiles.

SRK used an ordinary kriging estimator to assign a gold grade into a rock block model covering the bedrock gold mineralization, while an inverse distance estimator (power of three) was used to assign gold grades into three separate block models covering the historical stockpiles. In absence of density data, average specific gravity values were assigned to each lithological domain based on average specific gravity values for intermediate igneous rocks. An appropriate swell factor was used to account for the decrease in specific gravity of broken rock found in the three stockpiles.

The exploration data available for the Mirado gold project comprises a significant amount of historical data casting uncertainty in the reliability of the block model estimates. Furthermore, limited specific gravity data exist. On this basis, SRK considers that it is appropriate to classify all modelled blocks to the Inferred category within the meaning of the CIM *Definition Standards for Mineral Resources and Mineral Reserves*. SRK considers that the confidence in the tonnage and grade estimates is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

SRK considers that the gold mineralization found at the Mirado project is amenable to open pit mining. SRK used a pit optimizer to test the "reasonable prospects for economic extraction" of the block model and to assist with the selection of appropriate reporting assumptions. Optimization parameters were selected by benchmarking with similar projects. After review, SRK considers that open pit mineral resources can be reported at a cut-off grade of 0.45 gpt gold within a conceptual pit shell. The blocks located outside the conceptual pit shell can be reported as an underground mineral resource if their grade exceeds 2.0 gpt gold.

Orefinders elected to report the stockpile mineral resources at a cut-off grade of 2.0 gpt gold in the view of possible off-site toll milling prior to any mine development. SRK considers that cut-off grade to be appropriate for reporting for the stockpile mineral resources.

SRK draws the following conclusions from reviewing exploration data and the resource evaluation work completed for the Mirado gold deposit:

- While the Orefinders exploration data is generally consistent with the historical data, additional validation should be undertaken to corroborate the historical data, including twinning some historical boreholes, where appropriate;
- The classification of the mineral resources may be improve by better validation of the historical data, infill drilling to improve the delineation of the boundaries of the gold mineralization and collection of specific gravity data on all rock types and styles of gold mineralization;
- The main type of gold mineralization consists of stockwork and disseminated sulphides possibly associated with the intrusion of late porphyritic intrusions. The controls on the distribution of the gold mineralization remain, however, poorly constrained;
- The gold mineralization remains open beyond the areas investigated by drilling; and
- The mineral resources discussed herein occupy only a small footprint within the Mirado gold project.

# 17 Recommendations

The geological setting and character of the gold mineralization delineated to date on the Mirado gold project are of sufficient merit to justify additional exploration expenditures. SRK recommends an exploration program that includes geophysical surveys and core drilling with the aim of improving the delineation of the known gold mineralization, tracing its lateral and depth extensions, and to increase the confidence in the continuity of the known gold mineralization. Geological studies are also recommended.

After the analysis of existing exploration procedures, SRK recommends that Orefinders considers the following enhancements:

- Collect specific gravity data on all lithotypes and styles of gold mineralization;
- Twin five historical boreholes (1,500 metres) to validate historical drilling data; and
- Improve the reliability of the topographic information including the bathymetry of the historical pits.

The boundaries of the gold mineralization in the North and Main zones remain poorly constrained and the gold mineralization remains open beyond the areas investigated by drilling. Geological studies and geophysical surveys should be completed to characterize the controls on the distribution of the gold mineralization and attempt to image the real extent of the sulphide mineralization. These studies should be conducted prior to initiating infill and stepout drilling to improve the delineation of the gold mineralization and test its lateral and depth extensions. SRK recommends that Orefinders considers:

- Undertaking field geological investigations aimed at studying the controls on the distribution of the gold mineralization;
- Completing a ground induced polarization survey in an attempt to image the extent of the sulphide mineralization;
- Infill drilling to improve the confidence in the continuity of the mineral resources and possibly improve the classification of the mineral resources; and
- Step-out drilling and trenching to test the lateral and depth extensions of the known gold mineralization and possibly expand the mineral resources.

SRK considers that approximately 6,000 metres of core drilling is required to improve the confidence in the distribution of the gold mineralization in the North zone, target the mineralization located between the North and Main zones, test the extensions of known gold mineralization, and target areas to the south and east of the historical pit. The proposed program includes approximately 1,500 metres of core drilling to validate historical drilling data.

SRK is unaware of any other significant factors and risks that may affect access, title, or the right, or ability to perform the exploration work recommended for the Mirado project.

The cost of the proposed work program is estimated at C\$2.1 million (Table 47).

Description	Quantity	Unit Cost	Total (C\$)
Drilling			
Exploration drilling	6,000 metres	\$150	900,000
Verification drilling (twin boreholes)	1,500 metres	\$150	225,000
Subtotal			1,150,000
Geological Studies			
Study on mineralization controls			50,000
Induced polarization survey			75,000
Trenching			75,000
Geochemistry / re-sampling			50,000
Topography data			25,000
Subtotal			275,000
Field and Operating Costs			450,000
Subtotal			450,000
Contingency (10%)			190,000
Total			2,065,000

Table 24: Estimated Cost for the Exploration Program Proposed for the Mirado Project

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# **APPENDIX A**

### Legal Title Opinion by Norton Rose Canada LLP

				<b>NORTON ROSE</b>
				Barristers & Solicitors / Patent & Trade-mark Agents
				Norton Rose Canada LLP Royal Bank Plaza, South Tower, Suite 3800 200 Bay Street, P.O. Box 84 Toronto, Ontario M5J 2Z4 CANADA
File No	b: 01103	099-0233		F: +1 416.216.3930
Decem	ber 17, 2	2012		nortonrose.com
				On January 1, 2012, Macleod Dixon joined Norton Rose OR to create Norton Rose Canada.
Suite 2 550 Bu	400, Bei Irrard Str	ital Markets Canada Ltd. ntall 5 eet, Box 38 ish Columbia, V6C 2B5	Borden Ladner Gervais 1200 Waterfront Centre P.O. Box 48600 Vancouver, British Colu	e, 200 Burrard Street
Suite 1		s Ltd. ) West Hastings Street ish Columbia, V6B 1L8		
Dear S	irs/Mesd	ames:		
Re:		ders Resources Inc. (the "Company' ivate Placement of Flow-Through Sl		ng of Common Shares
We ha	ve acted	as counsel to the Company in connec	tion with the Offering an	id have, on its behalf:
1.	Develo	cted a search of the mining claim pment, Mines and Forestry (the " <b>Mini</b> s ember 14, 2012 (the " <b>Claims Search</b>	stry"), through its webs	ntario Ministry of Northern ite (the " <b>Ministry Website</b> "),
	(a)	the unpatented mining claims locate division, and set out in Schedule "A" a		
	(b)	the unpatented mining claims locate division, and set out in Schedule "B"	ed in the Province of a attached hereto (the "Za	Ontario, Larder Lake mining abudsky Claims"),
		(the Metherall Claims and the Zabi Claims"),	udsky collectively refer	rred to as the "Unpatented

and we have obtained on the Claims Search Date and examined a mining claim abstract with respect to each of the Unpatented Claims (the "Mining Claim Abstracts");

- On December 14, 2012 (the "Properties Search Date") conducted a title search of the public 2. records maintained by the Land Registry Office for the Province of Ontario, District of Haileybury (Timiskaming) (#54) and District of Kenora (Kenora) (#23), respectively (the "LRO"), using the Teraview software ("Teraview"), in respect of:
  - the fee simple properties set out in Schedule "C" attached hereto (the "Mirado Gold (a) Mine Property"); and
  - the fee simple properties set out in Schedule "D" attached hereto (the "Red Lake (b) Property"),

(the "Mirado Gold Mine Property and the Red Lake Property collectively referred to as, the "Fee Simple Properties"); and

TORONTO 25628445

	NORTON ROSE
3.	Considered such questions of law as we have deemed necessary for the purposes of rendering the opinions herein.
	on and relying upon the foregoing and, subject to the qualifications hereinafter expressed, we are opinion that:
1.	As at the Claims Search Date, Walter Metherall ("Metherall") is the recorded holder of a 100% interest in the Metherall Claims.
2.	As at the Claims Search Date, David Benjamin Zabudsky ( <b>"Zabudsky"</b> ) is the recorded holder of a 100% interest in the Zabudsky Claims.
3.	As at the Claims Search Date, the Unpatented Claims are active and in good standing under the Mining Act (Ontario) with respect to the filing of assessment work.
4.	As at the Properties Search Date, Micon Gold Inc. ("Micon") is the registered owner of a 100% fee simple interest in the Fee Simple Properties.
The fo	pregoing opinion is qualified as follows:
	<ul> <li>(a) we have assumed the accuracy and currency of the indices and records maintained at the Ministry Website and at any other public offices where searches or inquiries were conducted;</li> </ul>
	(b) we have assumed, with respect to all documents examined by us, the legal capacity of all individuals, the genuineness of all signatures, the authenticity of all documents and information reviewed by us as originals, and the conformity to any original and/or registered or recorded document of all documents reviewed by us as certified, confirmed, faxed, scanned, photocopied or electronic versions thereof;
	(c) Metherall's and Zabudsky's respective interests in the Unpatented Claims, as the case may be, are subject to those reservations set out in the Mining Claim Abstracts for each of the Unpatented Claims, along with those encumbrances set out in the Mining Claim Abstracts for each of the Unpatented Claims, as listed in Schedules "A" and "B" attached hereto;
	(d) we have assumed the completion, filing and approval of all assessment work recorded;
	(e) no investigation has been made of the original applications for filing, the location of the boundaries of the Unpatented Claims, or the existence of any interest in the Unpatented Claims, other than those that have been noted by the Ministry;
	<ul> <li>(f) we have assumed the validity of the staking, tagging, recording and surveying of the Unpatented Claims;</li> </ul>
	(g) we have further assumed that all necessary prospectors' licences have been duly held by predecessors in title to the recorded or recorded holders of any of the Unpatented Claims and all work recorded as having been performed with respect to any Unpatented Claims was duly performed and entitled to be credited as assessment work pursuant to the <i>Mining Act</i> (Ontario);
	<ul> <li>(h) we have assumed that the records examined are the only records pertaining to title to the Unpatented Claims and the Fee Simple Properties;</li> </ul>
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	Page 3
	NORTON RC
(i)	we have assumed that any print-outs examined are, in fact, true copies of documents in existence;
(j)	no searches or other correlations were made with respect to tax assessed by or paid to applicable government authorities;
(k)	no examination of the ground was made to determine if the Unpatented Claims have been staked or assessment work carried out in compliance with the provisions of applicable legislation;
(1)	we are not aware of any survey of any of the Unpatented Claims and we accordingly make no representation with respect to the manner in which such claim was staked;
(m)	we provide no opinion as to the existence of any liens, charges or encumbrances which are not recorded as against the Unpatented Claims on the Ministry Website;
(n)	we adopt and incorporate the qualifications set out by the Ministry in its "Terms of Use" policy governing the use of the Ministry Website;
(0)	we provide no opinion as to the marketability of title to the Fee Simple Properties;
(p)	title to the Fee Simple Properties is subject to those encumbrances disclosed by registered title as set out in Schedules "C" and "D" attached hereto and those unregistered encumbrances set out in Schedule "E" attached hereto;
(q)	we have not conducted any searches with regard to the Fee Simple Properties to confirm compliance with the <i>Planning Act</i> (Ontario) nor do we express any opinion in that regard; and
(r)	we express no opinion with respect to beneficial ownership, rights or interests in the Unpatented Claims and the Fee Simple Properties.
imited to the	fied to practice law in the Provinces of Ontario and the opinions hereinafter expressed are a laws of the Province of Ontario and the federal laws of Canada applicable therein. We pinion as to any other laws or any matters governed by any other laws.
specified abo Date and the solely for the	are given to you as of the Claims Search Date and the Properties Search Date, respectively, ove and we disclaim any obligation to advise you of any change after such Claims Search Properties Search Date in any matter set forth herein. The opinions in this letter are given benefit of the addressees hereof in connection with the Offering and may not, in whole or in d or relied upon by any other person or for any other purpose, without our prior written
Yours truly,	
NORTON RO	DSE CANADA LLP
Vorton P	life Canada LLP

#### SCHEDULE "A"

#### METHERALL CLAIMS

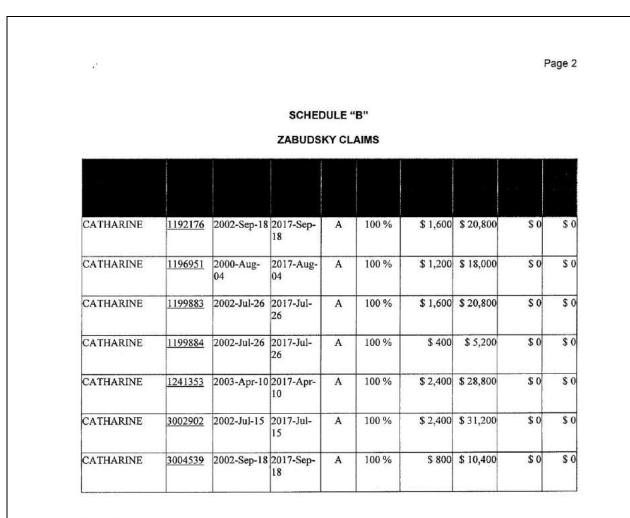
CATHARINE	<u>1146327</u>	2000-Apr-10	2017-Apr- 10	A	100 %	\$ 1,600	\$ 24,000	\$ 278,069	\$ (
CATHARINE	1241351	2002-Jun-18	2017-Jun- 18	A	100 %	\$ 3,200	\$ 41,600	\$ 0	\$ (
MCELROY	4258214	2010-Jul-08	2016-Jul- 08	A	100%	\$2,800	\$11,200	\$0	\$0

#### Encumbrances:

CLAIM NUMBER		PARTICULARS	
L1146327		N/A	
L1241351	STAKER 2002-Jun -18	ZABUDSKY, DAVID BENJAMIN (211097) RECORDS 100.00 % IN THE NAME OF METHERALL, WALTER (303329) AND JOINT TENANTS	R0280.02046
	MISC 2002-Jun -18	JOINT TENANCY IS HELD BY ZABUDSKI, DAVID BENJAMIN (211097) AND METHERALL, WALTER (303329).	M0280.00085
L4258214		N/A	

The Metherall Claims are subject to Mining Option Agreement made as of February 8, 2012, between Walter Metherall and David Zabudsky, as Optionors, and Fechi Inc., as Optionee.

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Encumbrances:

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CLAIM NUMBER		PARTICULARS	
L1192176	TRAN 2006-Jan -11	METHERALL, WALTER (303329) TRANSFERS 100.00 % TO ZABUDSKY, DAVID BENJAMIN (211097) AND JOINT TENANTS	T0680.00026
	MISC 2006-Jan	JOINT TENANCY IS HELD BY ZABUDSKY,	M0680.0000
	-11	DAVID BENJAMIN (211097) AND	1410080.0000
		METHERALL, WALTER (303329).	
L1196951	TRAN 2006-Jan	METHERALL, WALTER (303329) TRANSFERS	T0680.00026
	-11	100.00 % TO ZABUDSKY, DAVID BENJAMIN	
		(211097) AND JOINT TENANTS	
	MISC 2006-Jan	JOINT TENANCY IS HELD BY ZABUDSKY,	M0680.00007
	-11	DAVID BENJAMIN (211097) AND METHERALL, WALTER (303329).	
		METHERALL, WALTER (303329).	
L1199883	TRAN 2006-Jan	METHERALL, WALTER (303329) TRANSFERS	T0680.00026
	-11	100.00 % TO ZABUDSKY, DAVID BENJAMIN	
		(211097) AND JOINT TENANTS	
	MISC 2006-Jan	JOINT TENANCY IS HELD BY ZABUDSKY,	M0680.00007
	-11	DAVID BENJAMIN (211097) AND	
		METHERALL, WALTER (303329).	
L1199884	TRAN 2006-Jan	METHERALL, WALTER (303329) TRANSFERS	T0680.00026
	-11	100.00 % TO ZABUDSKY, DAVID BENJAMIN	
	n 	(211097) AND JOINT TENANTS	
	MISC 2006-Jan	JOINT TENANCY IS HELD BY ZABUDSKY,	M0680.00007
	-11	DAVID BENJAMIN (211097) AND	
		METHERALL, WALTER (303329).	
L1241353	MISC 2003-Apr	JOINT TENANCY IS HELD BY ZABUDSKY,	M0380.00060
	-10	DAVID BENJAMIN (211097) AND	
		METHERALL, WALTER (303329)	
	STAKER 2003-Apr	METHERALL, WALTER (303329) RECORDS	R0380.01592
	-10	100.00 % IN THE NAME OF ZABUDSKY,	
		DAVID BENJAMIN (211097) AND JOINT	
		TENANTS	
L3002902	TRAN 2006-Jan	METHERALL, WALTER (303329) TRANSFERS	T0580.00026
	-11	100.00 % TO ZABUDSKY, DAVID BENJAMIN	
		(211097) AND JOINT TENANTS	
	MISC 2006-Jan	JOINT TENANCY IS HELD BY ZABUDSKY,	M0580.00007
	-11	DAVID BENJAMIN (211097) AND	
		METHERALL, WALTER (303329).	

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CLAIM NUMBER			PARTICULARS	2
L3004539	TRAN	2006-Jan	METHERALL, WALTER (303329) TRANSFERS	T0680.00026
		-11	100.00 % TO ZABUDSKY, DAVID BENJAMIN	
			(211097) AND JOINT TENANTS	
	MISC	2006-Jan	JOINT TENANCY IS HELD BY ZABUDSKY,	M0680.00007
		-11	DAVID BENJAMIN (211097) AND	
	1		METHERALL, WALTER (303329).	

The Zabudsky Claims are subject to Mining Option Agreement made as of February 8, 2012, between Walter Metherall and David Zabudsky, as Optionors, and Fechi Inc., as Optionee.

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	Page
	SCHEDULE "C"
	MIRADO GOLD MINE PROPERTY
1.	PIN 61250-0095 (LT); LRO# 54
	Parcel 5264 Section SST; Part broken Lot 7 con 6 Catharine being mining claim L24690 as in TP10097; Subject to Lot74769; District of Timiskaming
	ESTATE QUALIFIER: Fee Simple, Absolute
	Encumbrances:
	Easement registered as Instrument No.LT74769 on March 12, 1941 in favour of The Hydr Electric Power Commission of Ontario
2.	PIN 61250-0096 (LT); LRO# 54
	Parcel 5264 Section SST; Part Broken Lot 7 Concession 6 Catharine being mining claim L2469 as in TP10098; District of Timiskaming
	ESTATE QUALIFIER: Fee Simple, Absolute
	Encumbrances:
	None
3.	PIN 61250-0107 (LT); LRO# 54
	Parcel 7432 Section SST; Part Lot 7 Concession 6 Catharine being mining claim L34750 as i TP10898; District of Timiskaming
	ESTATE QUALIFIER: Fee Simple, Absolute
	Encumbrances:
	Notice registered as Instrument No.LT110089 on January 17, 1955 by The Department of Mine of the Province of Ontario describing the lands herein as being taxable under The Mining Tax Act R.S.O. 1950, Chapter 237, and Amendments. That arrears of tax for two years or more marresult in the forfeiture to the Crown of the mining land, mining locations, mining claims, mining rights and other lands described in said document.
4.	PIN 61250-0098 (LT); LRO# 54
	Parcel 6339 Section SST; Part Lot 7 Concession 6 Catharine being mining claim L34751 as in TP10286; District of Timiskaming
	ESTATE QUALIFIER: Fee Simple, Absolute
	Encumbrances:
	Notice registered as Instrument No.LT110089 on January 17, 1955 by The Department of Mines of the Province of Ontario describing the lands herein as being taxable under The Mining Tax Act

Page 6 R.S.O. 1950, Chapter 237, and Amendments. That arrears of tax for two years or more may result in the forfeiture to the Crown of the mining land, mining locations, mining claims, mining rights and other lands described in said document. 5. PIN 61245-0044 (LT); LRO# 54 Parcel 12449 Section SST; mining claim L26272 McElroy saving and excepting thereout and therefrom the SRO on and over the right of way of the hydro-electric power commission power transmission line crossing the said land; District of Timiskaming ESTATE QUALIFIER: Fee Simple, Absolute Encumbrances: None 6. PIN 61245-0043 (LT); LRO# 54 Parcel 12448 Section SST, mining claim L26273 McElroy saving and excepting thereout and therefrom the SRO on and over the right of way of the hydro-electric power commission power transmission line crossing the said land; District of Timiskaming ESTATE QUALIFIER: Fee Simple, Absolute Encumbrances: None 7. PIN 61245-0046 (LT); LRO# 54 Parcel 12445 Section SST; mining claim L27303 mcelroy not covered by the waters of the blanche river & saving and excepting thereout and therefrom the SRO on and over the right of way of the hydro-electric power commission power transmission line crossing the said land; district of Timiskaming ESTATE QUALIFIER: Fee Simple, Absolute Encumbrances: None PIN 61245-0045 (LT); LRO# 54 8. Parcel 6417 Section SST; mining claim L31238 McElroy being land and land covered with the water of pt of the blanche river reserving the sro on and over a strip of land one chain in perpendicular width along the shore of the blanche river; District of Timiskaming ESTATE QUALIFIER: Fee Simple, Absolute Encumbrances: None

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		Page 7
9.	PIN 61245-0042 (LT); LRO# 54	
9.		
	Parcel 12447 Section SST; mining claim L31257 McElroy; District of Timiskaming ESTATE QUALIFIER: Fee Simple, Absolute	
	Encumbrances:	
	None	
10.	PIN 61245-0041 (LT); LRO# 54	
	Parcel 12446 Section SST; mining claim L31749 McElroy; District of Timiskaming	
	ESTATE QUALIFIER: Fee Simple, Absolute	
	Encumbrances:	
	None	
11.	PIN 61245-0040 (LT); LRO# 54	
	Parcel 12466 Section SST; mining claim L31378 McElroy; District of Timiskaming	
	ESTATE QUALIFIER: Fee Simple, Absolute	
	Encumbrances:	
	None	
12.	PIN 61245-0039 (LT); LRO# 54	
	Parcel 12465 Section SST; mining claim L31377 McElroy; District of Timiskaming	
	ESTATE QUALIFIER: Fee Simple, Absolute	
	Encumbrances:	
	None	
	): 256284v5	

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#### SCHEDULE "D"

#### RED LAKE PROPERTY

#### 1. PIN 42005-0074 (LT); LRO# 23

Parcel 1637 Section DPF; Mining Claim KRL3 Baird/Heyson (recorded as KRL12746); Mining Claim KRL286 Baird/Heyson (recorded as KRL12749); Mining Claim KRL6

Heyson (recorded as KRL12747); Mining Claim KRL288 Baird (recorded as KRL12748); Red Lake

ESTATE QUALIFIER: FEE SIMPLE, ABSOLUTE : Fee Simple, Absolute

Encumbrances:

None

#### 2. PIN 42010-0101 (LT); LRO# 23

Parcel 1637 Section DPF; Mining Claim K1464 Heyson (recorded as K.R.L. 12751); Mining Claim K1465 Heyson (recorded as K.R.L. 12750), being land and land covered with the water of a small unnamed lake within the limits of this claim, excepting thereout and therefrom the SRO on and over a strip of land one chain in perpendicular width along the shore of the said lake; Mining Claim KRL12752 Heyson; Part Mining Claim KRL12753 Heyson except SRO as in LT73822, SRO Part 17 & 18 23R4628, excepting thereout and therefrom the surface rights only on and over the hydro-electric transmission line crossing said claim; Part Mining Claim KRL12754 Heyson; SRO Part 17 & 18 23R4628, excepting thereout and therefrom the surface rights only on and over the hydro-electric transmission line crossing said claim; Part Mining Claim KRL12754 Heyson; SRO Part 17 & 18 23R4628, excepting the surface rights only on and over the hydro-electric transmission line crossing said claim; Part Mining Claim KRL12756 Heyson; SRO Part 17 & 18 23R4628, excepting thereout and therefrom the surface rights only on and over the hydro-electric transmission line crossing said claim; Nining Claim KRL12755 Heyson; Mining Claim KRL12756 Heyson; Mining Claim KRL12756 Heyson; Mining Claim KRL12756 Heyson excepting thereout and therefrom the SRO on and over the hydro-electric transmission line passing through said claim; Red Lake

ESTATE QUALIFIER: FEE SIMPLE, ABSOLUTE : Fee Simple, Absolute

Encumbrances:

None

TORONTO 256284+5

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#### SCHEDULE "E"

#### UNREGISTERED ENCUMBRANCES

- Mining Option Agreement made as of January 19, 2012 between Micon Gold Inc., as Optionor, and Fechi Inc., as Optionee;
- such defects or encroachments as might be revealed by up-to-date plans of survey of the Fee Simple Properties and any improvements situate thereon;
- 3. any liens for realty taxes, mining taxes, mining lease payments and/or utilities, or any undetermined or inchoate liens for realty taxes, mining taxes, mining lease payments and/or utilities which have accrued and are not yet due; any undetermined or inchoate liens incidental to current construction or operations which have not yet been registered against any of the Fee Simple Properties in accordance with applicable law, or of which written notice has not at this time been duly given in accordance with applicable law, or which relate to obligations not yet due or delinquent;
- the rights of expropriation, access or user or any similar right conferred or reserved by or in any statute of Canada or Ontario;
- any statutory liens, claims or levies which may obtain priority without registration in any office of public record;
- 5. the reservations, limitations, exceptions, provisos and conditions contained in the original grant from the Crown of each of the Fee Simple Properties; and
- any unregistered easements, rights-of-way or other unregistered interests, encumbrances or claims not disclosed by registered title.

TORONTO: 256284v5

# **APPENDIX B**

Laboratory Certifications

# CERTIFICATE **OF REGISTRATION**

This is to certify that

## ALS Group – Minerals Division

2103 Dollarton Highway, North Vancouver, British Columbia V7H 0A7 Canada

Refer to Attachment to Certificate of Registration dated November 1, 2012 for additional certified sites

operates a

### **Quality Management System**

which complies with the requirements of

### ISO 9001:2008

for the following scope of registration

The registration covers the Quality Management System for the provision of Assay and Geochemical Analytical Services.

Certificate No.: CERT-0051527 File No.: Issue Date:

1032903 November 1, 2012

Original Certification Date: February 14, 2005 Current Certification Date: February 12, 2011 Certificate Expiry Date: February 11, 2014

Chris Jouppi President, GMI-SAI Canada Limited



flom his

Guillaume Gignac, ing.f Vice President, Corporate Operations, Accreditation & Quality QMI-SAI Canada Limited

Registered by: SAI Global Confination Services Pty Ltd, 286 Suscess Street, Sydney NSW 2000 Austrolia with **OM-SAI Canada Limited**, 20 Carlson Court, Suite 200, Tearris, Chrono MSW 7H8 Canada (SAI GLOBAL). This registration is subject to the SAI Global Teams and Cardia to a the Certification White of due can and all was exercised in constring of this assessment, SAI Global accepts responsibility only for proven negligence. This schildrate remains the property of SAI Global and und as entering of the assessment. SAI Global occepts responsibility only for proven negligence. This schildrate remains the property of SAI Global and und as entering of them upon request. To verify that this certificate is current, please refer to the SAI Global On-Line Certification Register. <u>www.emis.ediad.doc.mic.com.edia.</u>



CER	TIFICATE OF REGISTRATION	
These site:	s are registered under Certificate No: CERT-0051527 issued on November 1,	2012
1602466	ALS Minerals Hermosillo Magnolia #16, Esq. Laureles, Col. Libertad, Hermosillo, Sonora 83130 México	February 12, 2011
1614900	ALS Minerals Yellowknife #3 Coronation Drive, PO Box 1919, Yellowknife, Northwest Territory Nunavut X1A 2P4 Canada	February 12, 2011
1616660	ALS Minerals Whitehorse #78 Mt. Sima Road, Whitehorse, Yukon Y1A 0A8 Canada	February 12, 2011
1624670	ALS Minerals Zacatecas Transito Pesado S/n, Bodega 100, 200, 300 y 400, Frente aCentral Camionera Col Lomas dela Isabelica, Zacatecas, Zacatecas 98099 México	January 18, 2012
1627754	ALS Minerals Anchorage 7011 Old Seward Highway, Anchorage, Alaska 99518 USA	October 2, 2012
1628077	ALS Group – Minerals Division 2953 Shuswap Road, Kamloops, British Columbia V2H 1S9 Canada	October 30, 2012
1628245	ALS Minerals Sudbury 1351 B, Unit 1, Kelly Lake Road, Sudbury, Ontario P3E 5P5 Canada	July 27, 2012

These registrations are dependent on ALS Group – Minerals Division (File No. 1032903) maintaining their scope of registration to ISO 9001:2008  $\,$ 



CER	TIFICATE OF REGISTRATION	
These site:	s are registered under Certificate No: CERT-0051527 issued on November 1,	2012
1 <b>602</b> 466	ALS Minerals Hermosillo Magnolia #16, Esq. Laureles, Col. Libertad, Hermosillo, Sonora 83130 México	February 12, 2011
1614900	ALS Minerals Yellowknife #3 Coronation Drive, PO Box 1919, Yellowknife, Northwest Territory Nunavut X1A 2P4 Canada	February 12, 2011
1616660	ALS Minerals Whitehorse #78 Mt. Sima Road, Whitehorse, Yukon Y1A 0A8 Canada	February 12, 2011
1624670	ALS Minerals Zacatecas Transito Pesado S/n, Bodega 100, 200, 300 y 400, Frente aCentral Camionera Col Lomas dela Isabelica, Zacatecas, Zacatecas 98099 México	January 18, 2012
1627754	ALS Minerals Anchorage 7011 Old Seward Highway, Anchorage, Alaska 99518 USA	October 2, 2012
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These registrations are dependent on ALS Group – Minerals Division (File No. 1032903) maintaining their scope of registration to ISO 9001:2008  $\,$ 







Tel.: +1 613 238 3222 200-270, rue Albert St. **Standards Council of Canada** Fax: +1 613 569 7808 Ottawa, ON (Canada) K1P 6N7 Conseil canadien des normes E-mail/Courriel : info@scc.ca Canada Internet: http://www.scc.ca SCOPE OF ACCREDITATION ALS Limited ALS MINERALS 2103 Dollarton Hwy North Vancouver, BC V7H 0A7 Accredited Laboratory No. 579 (Conforms with requirements of CAN-P-1579, CAN-P-4E (ISO/IEC 17025:2005)) CONTACT: Ms. Erin Miller (604) 984-0221 TEL: FAX: (604) 984-0218 EMAIL: erin.miller@alsglobal.com URL: www.alsglobal.com CLIENTS SERVED: Mining, Exploration and other interested parties FIELDS OF TESTING: Chemical/Physical PROGRAM SPECIALTY Mineral Analysis AREA: ISSUED ON: 2013-05-02 VALID TO: 2017-05-18 METALLIC ORES AND PRODUCTS Mineral Analysis Testing Mineral Assaying AA45 Ag, Cu, Pb and Zn - Determination of Base Metals Using AAS Following an Aqua Regia Digestion AA46 Ag, Cu, Pb, Zn and Mo - Determination of Ores and High Grade Materials Using AAS Following an Aqua **Regia** Digestion AA61 The approved and most recent version of this document can be viewed on the SCC website at http://palcan.scc.ca/SpecsSearch/GLSearch Form.do Page 1 of 3

	Ag, Co, Cu, Ni, Pb and Zn - Determination of Base Metals Using AAS Following a Four Acid Digestion
AA62	Ag, Co, Cu, Mo, Ni, Pb and Zn - Determination of Ores and High Grade Materials Using AAS Following a Four Acid Digestion
Au/Ag-GRA	Determination of Au and Ag by Lead Collection Fire Assay and Gravimetric Finish
Au-AA	Determination of Au by Lead Collection Fire Assay and Atomic Absorption Spectrometry
ICP81	Al, Co, Cu, Fe, Mg, Mn, Ni, Pb, S, and Zn by Sodium Peroxide Fusion and ICP-AES
ME-ICP41	Multi-Element (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, U, V, W, Zn) Determination by Aqua Regia Digestion and ICP-AES.
ME-ICP61	Multi-Element (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, S, Sb, Sc, Se, Si, Sn, Sr, Ta, Te, Ti, Tl, U, V, W, Y, Zn, Zr) Determination by 4-Acid Digestion and ICP-AES
ME-MS41	Multi-Element (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr) Determination by Aqua Regia Digestion and ICP-AES and ICP-MS.
ME-MS61	Multi-Element (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Si, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr) Determination by 4 Acid Digestion and ICP-AES and ICP-MS.
OG46	Ag, Cu, Mo, Pb and Zn - Determination of Ores and High Grade Material Using ICP-AES Following an Aqua Regia Digestion
OG62	Ag, Cu, Co, Mo, Ni, Pb and Zn-Determination of Ores and High Grade Material Using ICP-AES Following a Four-Acid Digestion
PGM-ICP	Determination of Au, Pt and Pd by Lead Collection Fire Assay and ICP-AES
Notes:	
CAN-P-1579: Require	nents for the Accreditation of Mineral Analysis Testing Laboratories
CAN-P-4E (ISO/IEC	17025): General Requirements for the Competence of Testing and Calibr

The approved and most recent version of this document can be viewed on the SOG website at http://palcan.soc.ca/SpecsSearch/GLSearchForm.do

Page 2 of 3

Standards Council of Canada Accredited Laboratory No. 579

Chantal Guay, ing., P. Eng. Vice President, Accreditation Services

Date: 2013-05-02

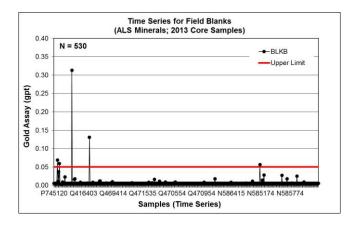
Number of Scope Listings: 14 SCC 1003-15/722 Partner File #0 Partner: SCC

The approved and most recent version of this document can be viewed on the SCC website at http://palcan.scc.ca/SpecsSearch/GLSearchForm.do

# **APPENDIX C**

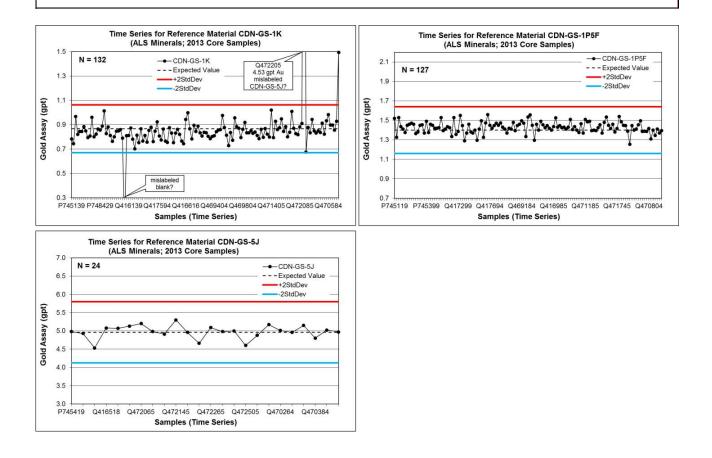
Analytical Quality Control Data and Relative Precision Charts Time series plots for Blank Samples Assayed by ALS Minerals in Vancouver January 2013 and September 2013.

→>= srk	consulting	Statistics	BLKB	
Project	SRK Orefinders Mirado	Sample Count	530	
Data Series	2013 Blanks	Expected Value	0.005	
Data Type	Core Samples	Standard Deviation	-	
Commodity	Au in gpt	Data Mean	0.007	
Laboratory	ALS Minerals	Upper Limit (10xDL)	1%	
Analytical Method	Fire assay - AA finish			
<b>Detection Limit</b>	0.005 gpt Au			



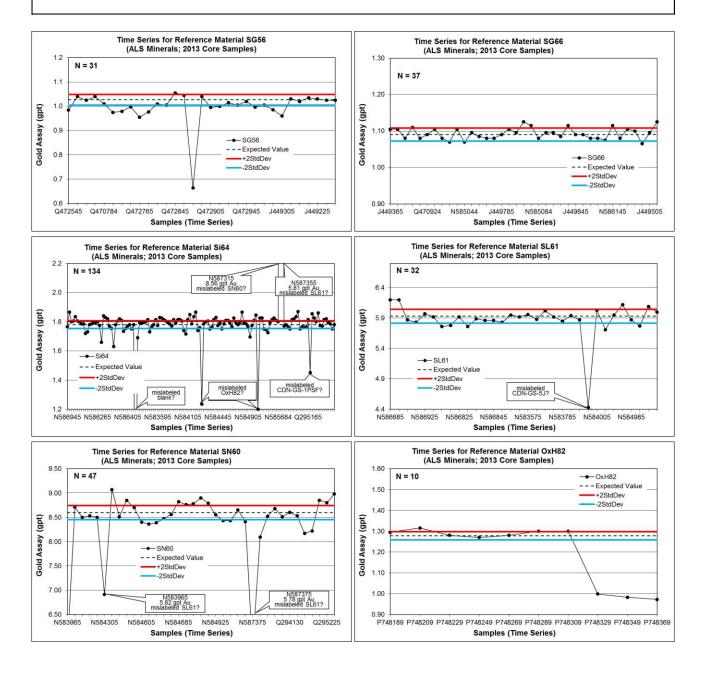
Time series plots for Certified Reference Materials (Standards) Samples Assayed by ALS Minerals Vancouver between January 2013 and April 2013.

-v∕= srl	<pre>consulting</pre>	Statistics	CDN-GS-1K	CDN-GS-1P5F	CDN-GS-5J
Project	SRK Orefinders Mirado	Sample Count	132	127	24
Data Series	2013 Standards	Expected Value	0.87	1.40	4.96
Data Type	Core Samples	Standard Deviation	0.10	0.12	0.42
Commodity	Au in gpt	Data Mean	0.87	1.43	4.97
Laboratory	ALS Minerals	Outside 2StdDev	2%	0%	0%
Analytical Method	Fire assay - AA finish	Below 2StdDev	1	0	0
Detection Limit	0.005 ppm (Au)	Above 2StdDev	2	0	0



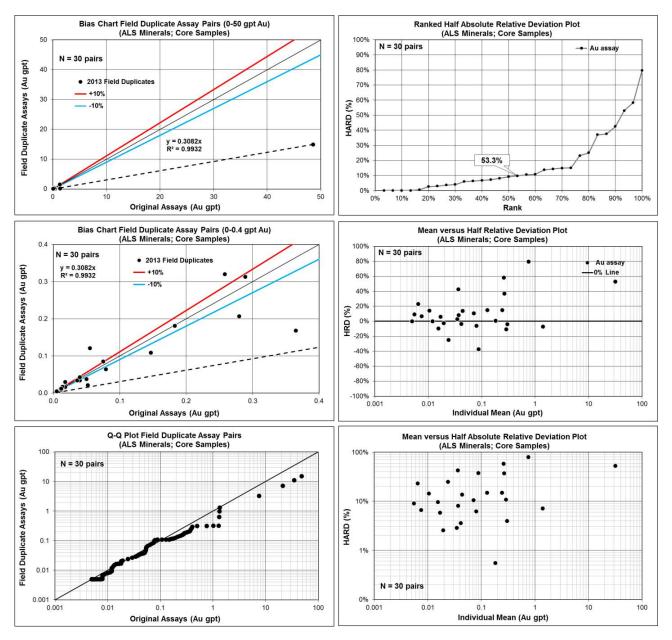
Time Series Plots for Certified Reference Materials (Standards) Samples Assayed by ALS Minerals Vancouver between April 2013 and May 2013.

-√= srk	<pre>consulting</pre>	Statistics	SG56	SG66	Si64	SL61	SN60 (	DxH82
Project	SRK Orefinders Mirado	Sample Count	31	37	134	32	47	10
Data Series	2013 Standards	Expected Value	1.03	1.09	1.78	5.93	8.60	1.28
Data Type	Core Samples	Standard Deviation	0.01	0.01	0.01	0.06	0.07	0.01
Commodity	Au in gpt	Data Mean	1.00	1.09	1.85	5.87	8.43	1.20
Laboratory	ALS Minerals	Outside 2StdDev	42%	24%	51%	31%	51%	60%
Analytical Method	Fire assay - AA finish	Below 2StdDev	12	3	24	6	13	3
Detection Limit	0.005 ppm (Au)	Above 2StdDev	1	6	44	4	11	3



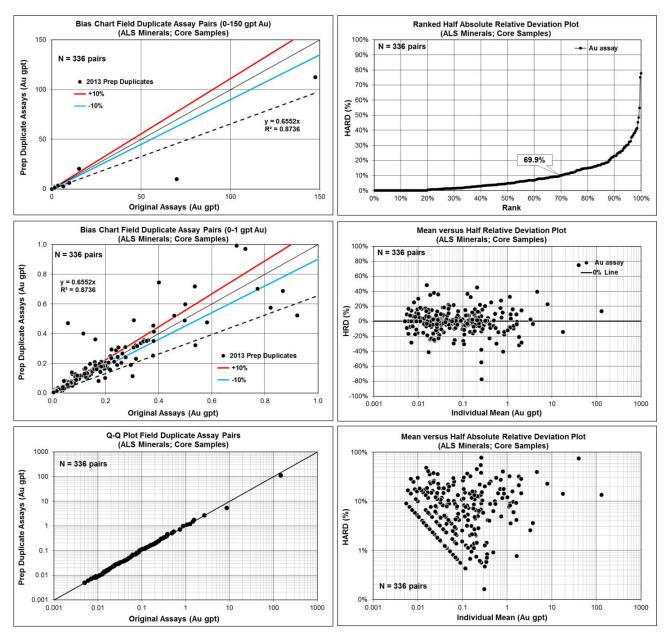
Bias Charts and Precision Plots for Field Duplicate Samples Assayed by ALS Minerals Vancouver in 2013.

-le orle	aanaultina	Statistics	Original	Field Duplicate
-V- SFR	consulting	Sample Count	30	30
Project	SRK Orefinders Mirado	Minimum Value	0.005	0.005
Data Series	2013 Field Duplicates	Maximum Value	48.60	14.95
Data Type	Core Samples	Mean	1.792	0.620
Commodity	Au in gpt	Median	0.045	0.036
Analytical Method	Fire Assay	Standard Error	1.615	0.497
<b>Detection Limit</b>	0.005 gpt Au	Standard Deviation	8.847	2.720
<b>Original Dataset</b>	Original Assays	Correlation Coefficient	0.9969	
Paired Dataset	Field Duplicate Assays	Pairs ≤ 10% HARD	53.3%	



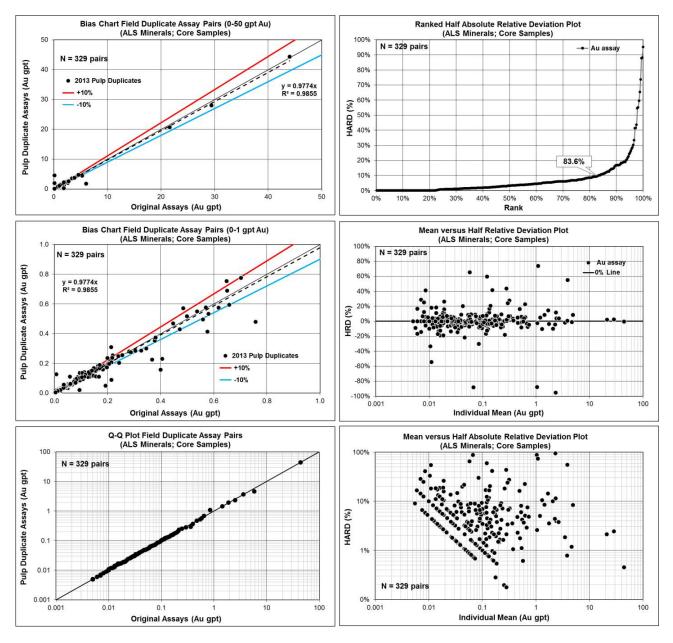
Bias Charts and Precision Plots for Prep Duplicate Samples Assayed by ALS Minerals Vancouver in 2013.

-le orle	oonculting	Statistics	Original	Prep Duplicate
-V- SFR	consulting	Sample Count	336	336
Project	SRK Orefinders Mirado	Minimum Value	0.005	0.005
Data Series	2013 Prep Duplicates	Maximum Value	147.50	112.50
Data Type	Core Samples	Mean	0.921	0.642
Commodity	Au in gpt	Median	0.044	0.042
Analytical Method	Fire Assay	Standard Error	0.488	0.342
<b>Detection Limit</b>	0.005 gpt Au	Standard Deviation	8.946	6.266
<b>Original Dataset</b>	Original Assays	Correlation Coefficient	0.9347	
Paired Dataset	Prep Duplicate Assays	Pairs ≤ 10% HARD	69.9%	



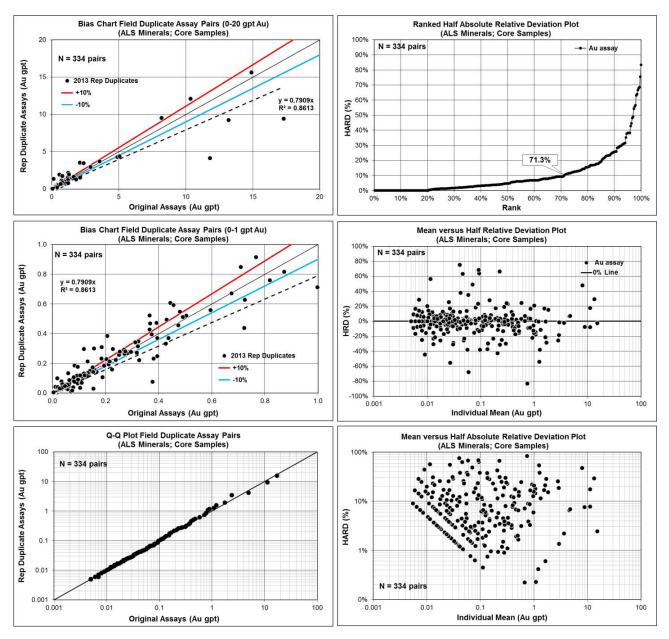
Bias Charts and Precision Plots for Pulp Duplicate Samples Assayed by ALS Minerals Vancouver in 2013.

-le orle	oonculting	Statistics	Original	Pulp Duplicate
-V- SFR	consulting	Sample Count	329	329
Project	SRK Orefinders Mirado	Minimum Value	0.005	0.005
Data Series	2013 Pulp Duplicates	Maximum Value	44.00	44.40
Data Type	Core Samples	Mean	0.514	0.502
Commodity	Au in gpt	Median	0.043	0.044
Analytical Method	Fire Assay	Standard Error	0.176	0.173
<b>Detection Limit</b>	0.005 gpt Au	Standard Deviation	3.194	3.145
<b>Original Dataset</b>	Original Assays	Correlation Coefficient	0.9927	
Paired Dataset	Pulp Duplicate Assays	Pairs ≤ 10% HARD	83.6%	



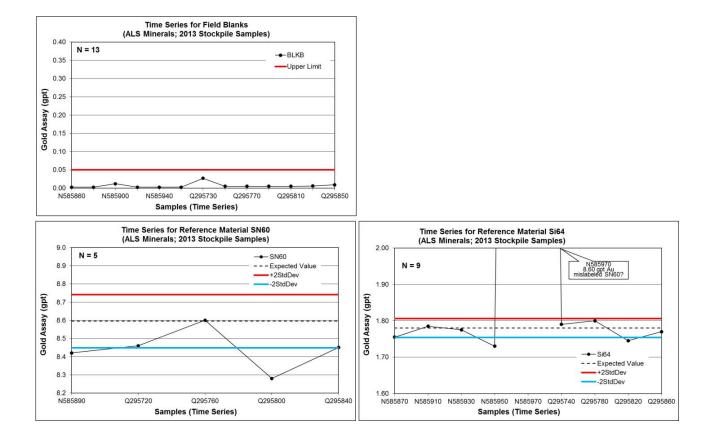
Bias Charts and Precision Plots for Rep Duplicate Samples Assayed by ALS Minerals Sudbury in 2013.

		Statistics	Original	Rep Duplicate
-V- SFR	consulting	Sample Count	334	334
Project	SRK Orefinders Mirado	Minimum Value	0.005	0.005
Data Series	2013 Rep Duplicates	Maximum Value	17.30	15.65
Data Type	Core Samples	Mean	0.439	0.415
Commodity	Au in gpt	Median	0.041	0.040
Analytical Method	Fire Assay	Standard Error	0.098	0.082
<b>Detection Limit</b>	0.005 gpt Au	Standard Deviation	1.785	1.501
<b>Original Dataset</b>	Original Assays	Correlation Coefficient	0.9292	
Paired Dataset	Rep Duplicate Assays	Pairs ≤ 10% HARD	71.3%	



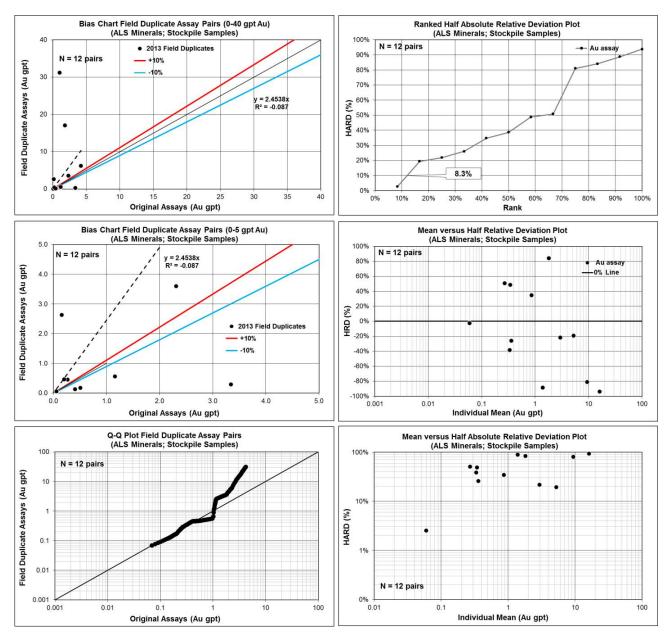
Time Series Plots for Blanks and Certified Reference Materials (Standards) Samples for Stockpile Samples Assayed by ALS Minerals Sudbury between July 2013 and September 2013.

- conculting				Stand	lards	
-V- SIN	consulting	Statistics	Blank	SN60	Si64	
Project	SRK Orefinders Mirado	Sample Count	13	5	9	
Data Series	2013 Blanks and Standards	Expected Value	0.005	8.600	1.780	
Data Type	Stockpile Samples	Standard Deviation	-	.0.07	0.01	
Commodity	Au in gpt	Data Mean	0.007	8.440	2.530	
Laboratory	ALS Minerals	Upper Limit (10xDL)	) 0%	-	-	
Analytical Method	Fire assay - AA finish	Outside 2StdDev	-	40%	33%	
Detection Limit	0.005 gpt Au	Below 2StdDev	-	2	2	
		Above 2StdDev	-	0	1	



Bias Charts and Precision Plots for Rep Duplicate Samples Assayed by ALS Minerals Sudbury in July to September 2013.

-le orle	aanaultina	Statistics	Original	Field Duplicate
-V- SFK	consulting	Sample Count	12	12
Project	SRK Orefinders Mirado	Minimum Value	0.058	0.061
Data Series	2013 Field Duplicates	Maximum Value	4.21	31.20
Data Type	Stockpile Samples	Mean	1.286	5.242
Commodity	Au in gpt	Median	0.757	0.513
Analytical Method	Fire Assay	Standard Error	0.395	2.747
<b>Detection Limit</b>	0.005 gpt Au	Standard Deviation	1.367	9.514
<b>Original Dataset</b>	Original Assays	Correlation Coefficient	0.1274	
Paired Dataset	Field Duplicate Assays	Pairs ≤ 10% HARD	8.3%	



#### **CERTIFICATE OF QUALIFIED PERSON**

# To accompany the report entitled: Mineral Resource Evaluation Technical Report for the Mirado Gold Project, Ontario, December 13, 2013

I, Lars Weiershäuser, PGeo, residing at 44 Juliana Court, Toronto, Ontario do hereby certify that:

- 1) I am a Senior Consultant (Geology) with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 1300, 151 Yonge Street, Toronto, Ontario, Canada;
- I graduated from the South Dakota School of Mines and Technology in Rapid City, South Dakota, USA with a MSc in Geology in 2000. I obtained a PhD in Geology from the University of Toronto in 2005. I have practiced my profession continuously since 2000;
- 3) I am a Professional Geoscientist registered with the Association of Professional Geoscientists of the province of Ontario (APGO #1504);
- 4) I personally inspected the subject project between July 15 and 17, 2013;
- 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 1.5 of National Instrument 43-101;
- 7) I am the author of this report and responsible for all sections of the report and accept professional responsibility this technical report;
- 8) I have had no prior involvement with the subject property;
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Orefinders Resources Inc. to prepare a technical audit of the Mirado project. In conducting our audit, a gap analysis of project technical data was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on a site visit, a review of project files, and discussions with Orefinders Resources Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Mirado project or securities of Orefinders Resources Inc.; and
- 12) 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.

Toronto December 13, 2013]

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Lars Weiershäuser, PhD, PGeo Senior Consultant (Resource Geology)

#### **CERTIFICATE of QUALIFIED PERSON**

# To accompany the report entitled: Mineral Resource Evaluation Technical Report for the Mirado Gold Project, Ontario, December 13, 2013

I, Dorota El-Rassi, residing at 70 Portsdown Road, Scarborough, Ontario do hereby certify that:

- 1) I am a Senior Consultant (Resource Geology) with the firm of SRK Consulting (Canada) Inc. with an office at Suite 1300, 151 Yonge Street Toronto, Ontario, Canada;
- 2) I am a graduate of the University of Toronto with a BSc (Hons) in 1997 and a MSc in Geology in 2000. I have practiced my profession continuously since 1997. I have more than 10 years of experience in mineral exploration, resource estimation, and consulting. Prior to joining SRK, I worked for Watts, Griffis and McQuat as a Resource Geologist. As a Resource Engineer, I have estimated and audited projects in North America, South America, Asia, and Africa. My professional experience includes gold, silver, copper, nickel, zinc, PGE, and industrial mineral deposits. My areas of expertise are resource estimation, geological modelling, and exploration project management;
- 3) I am a Professional Engineer registered with the Association of Professional Engineers of the province of Ontario (Licence: 100012348) and a fellow with the Geological Association of Canada;
- 4) I have not personally visited the project area but relied on site visits completed by Dr. Lars Weiershäuser, PGeo (APGO#1504);
- 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;
- 6) I, as a Qualified Person, am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and have contributed toward Section 13, and accept professional responsibility for this section of this technical report;
- 8) I have had no prior involvement with the subject property;
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Orefinders Resources Inc. to prepare a technical audit of the Mirado project. In conducting our audit, a gap analysis of project technical data was completed using CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on a site visit, a review of project files, and discussions with Orefinders Resources Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Mirado project or securities of Orefinders Resources Inc.; and
- 12) 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.

Toronto, Ontario December 13, 2013

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Dorota El-Rassi, PEng (# 100012348) Senior Consultant (Resource Geology)