

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 20-F**

- [ ] REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
or  
[ x ] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2012  
or  
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
or  
[ ] SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 1-33965

**Quaterra Resources Inc.**

(Exact name of Registrant as specified in its charter)

**British Columbia, Canada**

(Jurisdiction of incorporation or organization)

**1100 – 1199 West Hastings Street, Vancouver, British Columbia, Canada V6E 3T5**

(Address of principal executive offices)

**Scott B. Hean, Chief Financial Officer**

**1100 – 1199 West Hastings Street, Vancouver, British Columbia, Canada V6E 3T5**

**Phone (604) 681-9059 and Fax (604) 688-4670**

(Name, telephone, e-mail and/or facsimile number and address of company contact person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class  
**Common Shares, no par value**

Name of each exchange on which registered  
**NYSE MKT**

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report. **162,990,836 common shares**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
☐ Yes ☒ No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.  
☐ Yes ☒ No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  
☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  
☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer. See definition of “accelerated filer and large accelerated filer” in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐

Indicate by check mark which basis of accounting the registration has used to prepare the financial statements included in this filing:

U.S. GAAP ☐  
International Financial Reporting Standards as issued by the International Accounting Standards board ☒  
Other ☐

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 ☐  
Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  
☐ Yes ☒ No

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## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This annual report contains forward-looking statements about our operations and planned future activities within the meaning of the safe harbor for such statements under the Private Securities Litigation Reform Act of 1995. Statements that are not historical fact and relate to predictions, expectations, belief, plans, projections, objectives, assumptions, future events, or future performance may be “forward-looking statements.” Forward-looking statements may be identified by such terms as “believes”, “anticipates”, “expects”, “estimates”, “may”, “could”, “would”, “will”, “plan” or similar words. You are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements are subject to a variety of risks and uncertainties which could cause actual events or results to differ from those reflected in the forward-looking statements, including, without limitation:

- our ability to finance the continued exploration of our mineral properties;
- our history of losses and expectation of future losses;
- our ability to obtain adequate financing for our planned development activities;
- uncertainty of production at our mineral exploration properties;
- the lack of Proven Mineral Reserves or Probable Mineral Reserves;
- the impact governmental regulations, including environmental regulations; and
- commodity price fluctuations.

These forward-looking statements are based on the beliefs of our management as well as on assumptions made by and information currently available to us at the time such statements were made. We undertake no obligation to update forward-looking statements should circumstances or estimates or opinions change.

## DIFFERENCES IN UNITED STATES AND CANADIAN REPORTING PRACTICES

### Financial Information

All financial information in this annual report is prepared in accordance with International Financial Reporting Standards, (“IFRS”) as issued by International Accounting Standards Board (“IASB”). IFRS differs in some respects from United States generally accepted accounting principles, (“U.S. GAAP”), and thus our financial statements may not be comparable to financial statements of United States companies. The term Canadian generally accepted accounting principles (“Canadian GAAP”) refers to the accounting principles and standards before the adoption of IFRS.

### Resource and Reserve Estimates

None of the Company’s properties have Mineral Reserves. Disclosure about the Company’s exploration properties in this Annual Report on Form 20-F uses the term “Mineral Resources”, “Measured Mineral Resources”, “Indicated Mineral Resources” and “Inferred Mineral Resources”, which are Canadian geological and mining terms as defined in accordance with National Instrument 43-101 (“NI 43-101”), standards of disclosure for mineral projects of the Canadian Securities Administrators, set out in the Canadian Institute of Mining (CIM) Standards. These terms are not defined in the U.S. Securities and Exchange Commission (SEC) Industry Guide 7, *Description of Property by Issuers Engaged or to be engaged in Significant Mining Operations*, and are normally not permitted to be used in reports and registration statements filed with the SEC. Accordingly, information contained in this Annual Report on Form 20-F contain descriptions of our mineral deposits that may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.

*Cautionary Note to U.S. Readers concerning estimates of Measured Mineral Resources and Indicated Mineral Resources:* This Annual Report on Form 20-F may use the terms “Mineral Resources,” “Measured Mineral Resource” and “Indicated Mineral Resource.” The Company advises U.S. investors that while such terms are recognized and permitted under Canadian regulations, the SEC does not recognize them. U.S. investors are cautioned not to assume that any part or all of the Mineral Resources in these categories will ever be converted into Mineral Reserves.

*Cautionary Note to U.S. Readers concerning estimates of Inferred Mineral Resources:* This Annual Report on Form 20-F may use the term “Inferred Mineral Resource.” The Company advises U.S. investors that while such a term is recognized and permitted under Canadian regulations, the SEC does not recognize it. “Inferred Mineral Resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies. U.S. investors are cautioned not to assume that any part of all of the Inferred Mineral Resources exist, or is economically or legally mineable.

## GLOSSARY OF GEOLOGIC AND MINING TERMS

<b>Anomaly:</b>	A geological feature distinguished by geological, geochemical or geophysical means, which is detectably different than the general surroundings and is sometimes of potential economic value.
<b>Breccia:</b>	Rock consisting of more or less angular fragments in a matrix of finer-grained material or cementing material.
<b>Diamond drill:</b>	A type of drill in which the cutting is done by abrasion using diamonds embedded in a matrix rather than by percussion. The drill cuts a core of rock which is recovered in long cylindrical sections.
<b>Dilution:</b>	Process whereby unwanted gangue or waste rock is mixed with ore during mining.
<b>Epithermal:</b>	A class of ore deposits that form generally less than 1 km from surface. These deposits, which can host economic quantities of gold, silver, copper, lead and zinc are formed as a result of the precipitation of ore minerals from up-welling hydrothermal fluids. There are several classes of epithermal deposits that are defined on the basis of fluid chemistry and resulting alteration and ore mineralogy. Fluid chemistry is largely controlled by the proximity to igneous intrusive rocks and as a result igneous fluid content.
<b>Extrusive Rock:</b>	Igneous rock that has solidified on the earth’s surface from volcanic action.
<b>Fluid inclusion:</b>	A cavity, with or without negative crystal faces, containing one or two fluid phases, and possibly one or more minute crystals, in a host crystal. If two fluid phases are present, the vapor phase (bubble) may show Brownian motion.
<b>Folds:</b>	Flexures in bedded or layered rock formed when forces are applied gradually to rocks over a long period of time.
<b>Fracture:</b>	Breaks in a rock, usually due to intensive folding or faulting.
<b>Gambusino:</b>	An individual miner working without machinery.
<b>Gangue:</b>	Term used to describe worthless minerals or rock waste mixed in with the valuable minerals.
<b>Gouge:</b>	The finely ground rock that result from the abrasion along a fault surface.
<b>Grade:</b>	The concentration of each ore metal in a rock sample, usually given as weight percent. Where extremely low concentrations are involved, the concentration may be given in grams per tonne (g/t) or ounces per ton (oz/t). The grade of an ore deposit is calculated, often using sophisticated statistical procedures, as an average of the grades of a very large number of samples collected from throughout the deposit.
<b>Hectare:</b>	A square of 100 metres on each side.

<b>Indicated Mineral Resource:</b>	An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as out-crops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
<b>Inferred Mineral Resource:</b>	An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
<b>Lithology:</b>	The physical characteristics of a rock or a rock formation.
<b>Mafic:</b>	A term used to describe ferromagnesian minerals. Rocks composed mainly of ferromagnesian minerals are correctly termed melanocratic.
<b>Massive:</b>	A term used to describe sulfide ores containing more than 50% volume of sulphide.
<b>Measured Mineral Resource:</b>	A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
<b>Mineral Deposit or Mineralized Material:</b>	A mineralized body which has been intersected by sufficient closely spaced drill holes and or underground sampling to support sufficient tonnage and average grade of metal(s) to warrant further exploration-development work. This deposit does not qualify as a commercially mineable ore body (Reserves), as prescribed under SEC standards, until a final and comprehensive economic, technical, and legal feasibility study based upon the test results is concluded.
<b>Mineral Resource:</b>	A Mineral Resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material 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.
<b>Mineral Reserve:</b>	A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.
<b>Mineralization:</b>	Usually implies minerals of value occurring in rocks.

**Ore:**

A natural aggregate of one or more minerals which may be mined and sold at a profit, or from which some part may be profitably separated.

**Probable Mineral Reserve:**

A Probable Mineral Reserve is the economically mineable part of an Indicated, and in some circumstances a Measured, Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

<b>Properties as prospects:</b>	A property is a claim owned by a company and a prospect is a claim in which a company holds an interest.
<b>Proven Mineral Reserve:</b>	A Proven Mineral Reserve is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.
<b>Reserve(s):</b>	A natural aggregate of one or more minerals which, at a specified time and place, may be mined and sold at a profit, or from which some part may be profitably separated.
<b>Reverse circulation drill:</b>	A rotary percussion drill in which the drilling mud and cuttings return to the surface through the drill pipe.
<b>Tailings:</b>	Material rejected from a mill after recoverable valuable minerals have been extracted.

## GLOSSARY OF ABBREVIATIONS

<b>Ag:</b>	Silver
<b>Ag gm/t:</b>	Silver grade measured in grams per metric tonne
<b>AMR:</b>	Advance minimum royalty payments
<b>Au:</b>	Gold
<b>Au gm/t:</b>	Gold grade measured in grams per metric tonne
<b>Ba:</b>	Barium
<b>Co:</b>	Cobalt
<b>CSAMT:</b>	Controlled source audio-frequency magneto telluric geophysical survey
<b>Cu:</b>	Copper
<b>EIS:</b>	Environmental Impact Statement
<b>Fe:</b>	Iron
<b>43-101:</b>	Canadian National Instrument 43-101
<b>gpm:</b>	gallons per minute
<b>gpt:</b>	grams per tonne
<b>g/t:</b>	grams per tonne
<b>IP:</b>	Induced Polarization geophysical survey
<b>m.y:</b>	Million years
<b>Ni:</b>	Nickel
<b>NSR:</b>	Net smelter return royalty
<b>Oz:</b>	Troy ounce
<b>oz/t or opt:</b>	Ounces per ton.
<b>Pb:</b>	Lead
<b>Pd:</b>	Palladium
<b>PGE:</b>	Platinum Group Element
<b>PGM:</b>	Platinum group minerals
<b>PPB:</b>	Parts per billion
<b>PPM:</b>	Parts per million
<b>Pt:</b>	Platinum
<b>S:</b>	Sulphur
<b>TD:</b>	Total depth of a drill hole.
<b>tpd:</b>	Tonnes per day
<b>U3O8:</b>	Uranium oxide known as “yellow cake”.
<b>VLF:</b>	Very low frequency electromagnetic geophysical survey
<b>VMS:</b>	Volcanogenic massive sulphide



# CONVERSION TABLES

Conversion Table			
Imperial			Metric
1 Acre	=	0.404686	Hectares
1 Foot	=	0.304800	Metres
1 Mile	=	1.609344	Kilometres
1 Ton	=	0.907185	Tonnes
1 Ounce (troy)/ton	=	34.285700	Grams/Tonne

Precious metal units and conversion factors							
ppb	- Part per billion	1	ppb	=	0.0010	ppm	= 0.000030 oz/t
ppm	- Part per million	100	ppb	=	0.1000	ppm	= 0.002920 oz/t
oz	- Ounce (troy)	10,000	ppb	=	10.0000	ppm	= 0.291670 oz/t
oz/t	- Ounce per ton (avdp.)	1	ppm	=	1.0000	ug/g	= 1.000000 g/tonne
g	- Gram						
g/tonne	- gram per metric ton	1	oz/t	=	34.2857	ppm	
mg	- milligram	1	Carat	=	41.6660	mg/g	
kg	- kilogram	1	ton (avdp.)	=	907.1848	kg	
ug	- microgram	1	oz (troy)	=	31.1035	g	

## PART I

### ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

### ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

### ITEM 3. KEY INFORMATION

#### A. Selected Financial Data

The following table sets forth our selected consolidated financial data for the five years ended December 31, 2012 prepared in accordance with IFRS as issued by IASB for the years ended December 31, 2012, 2011 and 2010 and Canadian GAAP for the years ended December 31, 2009 and 2008. This information should be read in conjunction with our consolidated financial statements included in Item 17 of this annual report.

IFRS	Fiscal year ended December 31,		
	2012	2011	2010
Sales or operating revenues	Nil	Nil	Nil
Net (loss) for the year	(4,853,976)	(11,264,539)	(2,769,248)
(Loss) per common share - basic and diluted	(0.03)	(0.08)	(0.02)
Total assets	73,312,971	73,610,822	65,460,923
Net assets	71,855,193	71,733,234	64,564,355
Capital stock	115,816,740	111,923,521	95,800,950
Number of common shares outstanding	162,990,836	152,353,283	136,464,161
Long-term debt	774,673	-	-
Cash dividends per common share	Nil	Nil	Nil

Canadian GAAP <sup>(1)</sup>	Fiscal year ended December 31,	
	2009	2008
Sales or operating revenues	Nil	Nil
Net (loss) for the year	(6,988,414)	(6,834,181)
(Loss) per common share - basic and diluted	(0.08)	(0.08)
Total assets	41,872,497	34,397,289
Net assets	40,993,110	29,953,008
Capital stock	63,168,843	48,318,994
Number of common shares outstanding	111,459,371	87,463,483
Long-term debt	-	2,953,370
Cash dividends per common share	Nil	Nil

(1) The adoption of IFRS by the Company did not require restatement of fiscal years prior to 2010.

#### Exchange Rate Data

Unless otherwise indicated, all monetary references herein are denominated in Canadian Dollars. References to “\$” or “Dollars” are to Canadian Dollars and references to “US\$” or “U.S. Dollars” are to United States Dollars.

For the past five fiscal years ended December 31, 2012, the average rates calculated by using the average of the exchange rates on the last day of each month during the period) and for each of the previous six months, the high and low exchange rates for Canadian dollars expressed in terms of U.S. dollars (i.e., U.S. dollars required to purchase one Canadian dollar). The information was provided by the Bank of Canada:

Financial Year	Average Exchange Rate
2012	0.998917
2011	0.988667
2010	1.0295
2009	1.14075
2008	1.066667

Financial Month	Exchange Rate	
	High	Low
February 2013	1.0285	0.9960
January 2013	1.0078	0.9839
December 2012	0.9952	0.9841
November 2012	1.0028	0.9927
October 2012	1.0004	0.9763
September 2012	0.9902	0.9710

On March 28 2013, the ending exchange rate for the conversion of one U.S. dollar into one Canadian dollar was 1.0156.

**B. Capitalization and Indebtedness**

Not applicable.

**C. Reasons for the Offer and Use of Proceeds**

Not applicable.

**D. Risk Factors**

**RISK FACTORS**

*Investing in common stock of Quaterra Resources Inc. (the “Company” or Quaterra”) involves a high degree of risk. Before deciding to purchase, hold or sell the Company’s common stock, you should carefully consider the risks described below in addition to the cautionary statements and risks described elsewhere and the other information contained in this 20-F and in the Company’s other filings with securities regulatory authorities. The risks and uncertainties described below are not the Company’s only ones. Additional risks and uncertainties not presently known to the Quaterra or that Quaterra currently deems immaterial may also impair the Company’s business operations. If any of these known or unknown risks or uncertainties actually occurs with material adverse effects on Quaterra, the Company’s business, financial condition, results of operations and/or liquidity could be seriously harmed, which could cause the Company’s actual results to vary materially from recent results or from the Company’s anticipated future results. In addition, the trading price of the Company’s common stock could decline due to any of these known or unknown risks or uncertainties, and you could lose all or part of your investment.*

**The Company may not have sufficient funds to complete further exploration programs.**

The Company does not generate operating revenue and must finance exploration activity by other means, such as raising funds through the sale of equity, debt, or property interests. The Company cannot provide any assurance that additional funding will be available for further exploration of the Company’s projects or to fulfill anticipated obligations under existing property agreements. As of December 31, 2012, the Company had working capital of \$2,056,809, and, as of March 27, 2013, the Company has cash on hand of approximately \$200,000.

Although management is confident that it will be able to raise sufficient funds there is no assurance at the date these consolidated financial statements were approved that these financing initiatives will be successful. The lack of sufficient committed funding for the next 12 months indicates a material uncertainty, which casts substantial doubt over the Company’s ability to continue as a going concern. These consolidated financial statements do not include the adjustments that would result if the Company is unable to continue as a going concern.

Management has planned levels of exploration spending on the Company's properties with an expectation that future capital raises would provide the necessary funding, which includes equity financing, joint venture partners' contributions, and/or realizing the carrying amount through the sale of mineral property interests.

**Future equity transactions could cause dilution of present and prospective shareholders.**

Historically, the Company has financed operations through private placements. In order to finance future operations and development efforts, the Company may raise funds through the issuance of common shares or the securities convertible into common shares through private placements or public offerings. The common shares in these financings often are sold at a discount to market prices, and the exercise price of the warrants sometimes is at or may be lower than market prices. The Company cannot predict the size of future issues of common shares or the issue of securities convertible into common shares or the effect, if any, that issues and sales of the Company's common shares will have on the market price of its common shares. Any transaction involving the issue of common shares, or securities or convertible into common shares, could result in dilution, possibly substantial, to present and prospective holders of common shares, either at the time of the financing or subsequently when restrictions if any expire and the common shares are resold into the public markets.

**The Company has a history of losses and expects to incur losses for the foreseeable future.**

The Company has incurred losses during each of the prior five years in the amounts of \$32,710,358. As of December 31, 2012, the Company had an accumulated deficit of \$62,981,604. Quaterra expects to continue to incur losses unless and until such time as one or more of the properties enter into commercial production and generate sufficient revenues to fund the Company's continuing operations.

**The Company's exploration programs may not result in a commercial mining operation.**

Mineral exploration involves significant risk because few properties that are explored contain bodies of ore that would be commercially economic to develop into producing mines. Quaterra's mineral properties are without a known body of commercial ore and the proposed programs are an exploratory search for ore. The Company cannot provide any assurance that current exploration programs will result in any commercial mining operation. If the exploration programs do not result in the discovery of commercial ore, the Company will be required to acquire additional properties and write-off all investments in existing properties.

**The Company does not have Proven Mineral Reserves or Probable Mineral Reserves.**

The Company has not established the presence of any Proven Mineral Reserves or Probable Mineral Reserves (as such terms are defined in NI 43-101 of the Canadian Securities Administrators); please refer to "Disclosure of Mineral Resources" in the Preliminary Notes to this annual report) at any of Quaterra's mineral properties. The Company cannot provide any assurance that future feasibility studies will establish Proven Mineral Reserves or Probable Mineral Reserves at Quaterra's properties. The failure to establish Proven Mineral Reserves or Probable Mineral Reserves could restrict the Company's ability to successfully implement its strategies for long-term growth.

**Mineral resource estimates are subject to updates which may differ from prior estimates and adversely affect the value of the Company's properties.**

The estimating of mineralization is a subjective process and the accuracy of estimates is a function of the quantity and quality of available data, the accuracy of statistical computations, and the assumptions used and judgments made in interpreting engineering and geological information. There is significant uncertainty in any mineralization estimate, and the actual deposits encountered and the economic viability of mining a deposit may differ significantly from our estimates. From time to time, Quaterra obtains updated resource estimates and technical reports related to the Company's mineral properties.

**The Company's future business and financial condition are dependent upon resource prices.**

Resource prices have fluctuated widely, particularly in recent years, and are affected by numerous factors beyond the Company's control. These include international economic and political trends, inflation, currency exchange fluctuations, interest rates, global or regional consumption patterns, speculative activities and increased production due to new and improved extraction and production methods. These factors may negatively affect the marketability of any ore or minerals discovered at, and extracted from, Quaterra's properties. If, because of a sustained decline in prices, financing were not available to meet cash operating costs, the feasibility of continuing operations would be evaluated and if warranted, would be discontinued.

**The Company's common share price has been and may continue to be subject to volatility.**

U.S. and Canadian securities markets in recent years have experienced high levels of price and volume volatility, and the market price of securities of many companies have experience wide fluctuation in price which have not necessarily been related to the operating performance underlying assets values or prospects of such companies. Factors unrelated to Quaterra's financial performance or prospects include macroeconomic developments in North America and globally, and market perceptions of the attractiveness of particular industries. The Company's share price, financial condition, and results of operations are all also likely to be significantly affected by short-term changes in uranium, gold, silver and copper prices. Continual fluctuations in metal prices may occur. As a result of any of these factors, the market price of the Company's shares at any given point in time may be subject to wide swings unrelated to any direct action by Quaterra's operations.

**Some of the Company's directors and officers may have conflicts of interest due to their involvement with other natural resource companies.**

Some the Company's directors and officers are directors or officers of other natural resource or mining-related companies and these associations may give rise to conflicts of interest from time to time. As a result of these conflicts of interest, Quaterra may miss the opportunity to participate in certain transactions, which may have a material, adverse effect on the Company's financial position.

**The Company may experience difficulty attracting and retaining qualified management to grow Quaterra's business.**

The Company is dependent on the services of key executives including the Chief Executive Officer and other highly skilled and experienced executives and personnel focused on advancing corporate objectives as well as the identification of new opportunities for growth and funding. Due to the Company's relatively small size, the loss of these persons or the Quaterra's inability to attract and retain additional highly skilled employees required for activities may have a material adverse effect on the Company's business and financial condition.

**The Company may be limited in its ability to manage growth.**

Should the Company be successful in its efforts to develop mineral properties or to raise capital for such development or for the development of other mining ventures, it may experience significant growth in operations. Any expansion of the Company's business would place demands on management, operational capacity, and financial resources. The Company anticipates that it will need to recruit qualified personnel in all areas of operations. There can be no assurance that Quaterra will be effective in retaining current personnel or attracting and retaining additional qualified personnel, expanding operational capacity or otherwise managing growth. The failure to manage growth effectively could have a material adverse effect on the Company's business, financial condition and results of operations.

**Environmental and other regulatory requirements may limit the Company's operations and increase expenses.**

The Company's operations are subject to environmental regulations promulgated by various Canadian, U.S., and Mexican government agencies. Claims and current and future operations will be governed by laws and regulations governing mineral concession acquisition, prospecting, development, mining, production, exports, taxes, labor standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. Companies such as ours that engage in exploration activities often experience increased costs and delays in production and other schedules as a result of the need to comply with applicable laws, regulations and permits. Issuance of permits for Quaterra's exploration activities is subject to the discretion of government authorities, and the Company may be unable to obtain or maintain such permits. Permits required for future exploration or development may not be obtainable on reasonable terms or on a timely basis. Existing and possible future laws, regulations and permits governing operations and activities of exploration companies, or more stringent implementation thereof, could have a material adverse impact and cause increases in capital expenditures or require abandonment or delays in exploration.

**The Company's Arizona uranium claims are subject to a U.S. government order withdrawing new mining claims.**

On January 9, 2012, the U.S. Department of the Interior announced a Public Land Order to withdraw approximately one million acres of federal land for a twenty year period. The stated effect of the withdrawal order is to withdraw the acreage from new mining claims and sites under the 1872 Mining Law, subject to "valid existing rights" and does not prohibit previously approved uranium mining, or development of new projects that could be approved on claims and sites with "valid existing rights." The withdrawal order affects all of the Company's unpatented Arizona uranium claims on federal lands but does not affect future exploration or development on the Company's 5.9 square miles of state leases in Arizona. Some of the Company's mineral claims on federal lands may be excluded from the withdrawal order depending on how the U.S. Bureau of Land Management interprets and applies "valid existing rights." The Company believes that its exploration and development efforts have enhanced several of claims to the point where they could be developed based upon existing rights. The Company has filed lawsuits against the U.S. Department of Interior and Bureau of Land Management challenging the withdrawal order. The withdrawal order also is subject to various litigation by third parties. Unless it is revoked or overturned, the withdrawal may inhibit the Company's ability to implement its strategy for and adversely affect the value of the Arizona uranium claims.

**Operating hazards associated with mining may expose the Company to liability.**

Mining operations generally involve a high degree of risk, including hazards such as unusual or unexpected geological formations. Operations in which the Company has an interest are subject to all the hazards and risks normally incidental to exploration, development and production of minerals, any of which could result in work stoppages, damage to or destruction of mines and other producing facilities, damage to or loss of life and property, environmental damage and possible legal liability for any or all damage or loss. The Company currently does not maintain standard insurance policies on Quaterra's properties. The Company may become subject to liability for cave-ins and other hazards for which cannot be fully insured or against which the Company may elect not to insure where premium costs are disproportionate to the Company's perception of the relevant risks. For example, the Company is not currently covered by any form of political risk insurance or any form of environmental liability insurance. The payment of such insurance premiums and the incurring of such liabilities would reduce the funds available for exploration activities.

**The Company's properties may be subject to uncertain title.**

The acquisition of title to resource properties or interest therein is a very detailed and time consuming process. Title to and the area of resource concessions may be disputed. The Company has investigated title to all of its mineral properties and, to the best of the Company's knowledge, title to all of Quaterra's properties are in good standing. The properties may be subject to prior, and in some cases, not fully ascertainable unregistered agreements or transfers, and title may be affected by undetected defects. Title may be based upon interpretation of a country's laws, which laws may be ambiguous, inconsistently applied and subject to reinterpretation or change.

**Enforcement of judgments or bringing actions outside the United States against the Company and its directors and officers may be difficult.**

Quaterra is organized under the law of and headquartered in British Columbia, Canada, and the majority of the Company's directors and officers are not citizens or residents of the U.S. In addition, a substantial part of the Company's assets are located outside the U.S. and Canada. As a result, it may be difficult or impossible for you to (a) enforce in courts outside the U.S. judgments against the Company and a majority of Quaterra's directors and officers, obtained in U.S. courts based upon the civil liability provisions of U.S. federal securities laws or (b) bring in courts outside the U.S. an original action against the Company and its directors and officers to enforce liabilities based upon such U.S. securities laws.

**ITEM 4. INFORMATION ON THE COMPANY**

**A. History and Development of the Company**

Quaterra was incorporated under the Company Act (British Columbia) on May 11, 1993 originally under the name Acquaterre Mineral Development Ltd. On November 30, 1993, the Company changed its name to Aquaterre Mineral Development Ltd. and ultimately became Quaterra Resources Inc. on October 23, 1997. Quaterra's domicile is British Columbia, Canada and the Company operates under the British Columbia Business Corporations Act SBC 2002 Chapter 57.

On March 4, 1997, the Company increased its authorized capital from 20,000,000 common shares without par value to 100,000,000 common shares without par value.

On October 23, 1997, the Company consolidated its issued and un-issued share capital on the basis of five pre-consolidation shares for one post-consolidation share, and increased its authorized capital to 100,000,000 common shares without par value.

On August 3, 1998, the Company cancelled its previous form of Articles and adopted a new form of Articles.

On April 25, 2005, the Company completed the transition procedures in accordance with the Business Corporations Act (British Columbia), (the “New Act”).

On June 17, 2005, the Company increased the number of common shares which were authorized to issue to an unlimited number of common shares and, on June 13, 2005, cancelled its former Articles and adopted new Articles to take advantage of provisions of the New Act. The New Act was adopted in British Columbia on March 29, 2004 replacing the Company Act (the “Former Act”). The New Act requires the provisions formerly required in the Memorandum to be in the Company’s Articles. The New Act eliminates the requirement for a Memorandum.

The Company’s registered office is located at 1710 – 1177 West Hastings Street, Vancouver, B.C. V6E 2L3. Telephone (604) 641-2764. The Company’s head office is located at 1100 – 1199 West Hastings Street, Vancouver, British Columbia, Canada V6E 3T5. Telephone: (604) 684-9384, Facsimile: (604) 641-2740. Our agent for service of process in the United States is CT Corporation System, 818 West Seventh Street, Los Angeles, California, 90017, (213) 627-8252. We confirm the annual fees have been paid. The Company’s website is [www.quaterraresources.com](http://www.quaterraresources.com). *We are not including the information contained on our website as part of, or incorporating it by reference into, this Annual Report on Form 20-F.*

Since our incorporation, substantially all our capital has been deployed to development of our exploration stage business. We have not undertaken any material mergers or acquisitions other than in the ordinary course of business. There have been no public takeover offers by third parties with respect to our shares and we have made no public takeover offers with respect to another company’s shares.

## **B. Business Overview**

Quaterra is an exploration stage company focused on exploration and development of mineral properties in North America. The Company is currently exploring for gold, silver, copper, uranium, molybdenum, and precious metals in the United States and Mexico. Quaterra’s exploration efforts are directed at properties that the Company believes has potential to host large base metal, precious metal, and uranium deposits. When identifying prospects, the Company’s consideration include the following criteria: infrastructure; environment and location that is favorable for building a mine; large tonnage and/or high grade potential; and opportunity to acquire a 100% interest under reasonable terms.

On January 6, 2010, Quaterra signed an option agreement with La Cuesta International Inc. for an option to acquire a 100% interest in four mineral concessions located in Durango, Mexico known as the Santo Domingo Prospect. Total consideration consists of US\$7.5million in cash payments, 100,000 shares of the Company and \$50,000 in work expenditure.

On January 29, 2010, Quaterra entered into an Investment Framework Agreement (IFA) with Goldcorp Inc. (“Goldcorp”) of Vancouver, B.C. Under the IFA, Goldcorp received an option to acquire up to 65% in any the Company’s properties in the central Mexico Interest, with the exception of Nieves, by spending \$2 million over a two-year period on advanced exploration and by completing a bankable feasibility. In return, to fund generative exploration by Quaterra, Goldcorp agreed to invest US\$10 million in the Company over two years.

On February 4, 2010, Quaterra completed a private placement of 3,001,418 units for gross proceeds of US\$4.0 million (\$4,231,999) received from Goldcorp pursuant to the IFA. Each unit consisted of one common share and one-half of one share warrant with an exercise price of \$1.76 per full warrant expiring February 4, 2012.

On June 17, 2010, Quaterra signed an option agreement with Grande Portage Resources for the Herbert Glacier property. In accordance with the terms of the agreement, Grand Portage earned a 51% interest by spending US\$750,000 on or before June 15, 2011 and exercised an option to earn an additional 14% interest by spending US\$500,000 on or before June 15, 2012.

In August 2010, Quaterra entered into a lease with an option to purchase certain mining claims, known as the Klondike and Reveille in Eureka and Nye County, Nevada. The total consideration is US\$2,000,000 over 10 years. In 2011 Klondike was deemed to be impaired due to lack of exploration merits.

On October 27, 2010, Quaterra completed a brokered private placement of 11,724,200 units for gross proceeds of \$17,000,090. Each unit consisted of one common share and one-half of one common share purchase warrant with an exercise price of \$1.90 per full warrant expiring on October 27, 2012. The Company also issued 703,452 non-transferable compensation options to the agent at an exercise price of \$1.45 per unit with the same terms.

On January 1, 2011, the Company entered into an option agreement with North Exploration LLC to acquire 41 mining claims in White Pine County, Nevada, known as Butte Valley property. The Company can earn a 100% interest in the claims by making staged payments totaling US\$1 million. The Company has an option at any time to purchase the property for the difference between US\$1 million and the sum of amounts previously paid or if the full amounts have been paid under the above the sum of US\$1. The property is subject to 2.5% NSR upon commencement of commercial production of which 1% can be bought down for US\$1 million.

On February 7, 2011 Quaterra completed a private placement of 3,293,407 units for gross proceeds of US\$6.0M (C\$5,994,000) received from Goldcorp pursuant to the IFA. Each unit consisted of one common share and one-half of one share warrant with an exercise price of \$2.27 per full warrant expiring February 7, 2013.

On April 27, 2011, Quaterra completed the purchase of the Yerington property from Arimetco, Inc. Assets purchased include 4.2 square miles of patented claims and fee mineral properties centered on the former Anaconda open pit copper mine containing an historic resource estimate in excess of four billion pounds of copper, and 8,600 acre feet per year of water rights. This property, together with 9.3 and 13.2 square miles of unpatented claims at Yerington and nearby MacArthur respectively, provides the Company with a significant land position in the center of a copper camp. Quaterra has paid the remaining cash acquisition cost and has released 250,000 common shares of the Company stock previously issued and under escrow.

On May 12, 2011, pursuant to its January 1, 2011 option, Quaterra announced its acquisition of the Butte Valley porphyry copper prospect, located in White Pine County, Nevada. The property consists of approximately 45 square miles of mineral rights obtained by optioning and staking a total of 1,483 unpatented U.S. lode claims.

On May 26, 2011, the Company entered into a mining lease with an option to purchase agreement with Majuba Mining Ltd. to earn an interest in certain unpatented mining claims in Lyon County, Nevada, for US\$1.61 million. The company is required to incur a total of US\$300,000 exploration work on or before the third anniversary and any difference between the actual expenditures and US\$300,000 is required to be paid in the event that less than US\$300,000 is so expended. The project is subject to 3% NSR upon commencing commercial production of which 1% can be bought at US\$1,500,000.

On June 15, 2011, the Company entered into an option agreement with Nevada Alaska Mining Co., Inc. to acquire a 100% interest in certain mining claims in Esmeralda County, Nevada for US\$1 million over ten years. A 2% NSR is required upon commercial production.

On July 4, 2011, Quaterra announced that it has finalized an option agreement with La Cuesta International, Inc. (LCI) to acquire a 100% interest in the Microondas prospect located in Zacatecas State, Mexico, about 17 kilometers south-southeast of Rio Grande. Quaterra has the right to earn a 100% interest in the property by making semi-annual lease/pre-production payments and paying a 1% Net Smelter Return royalty ("NSR") payment that is capped at US\$5 million. A portion of the property carries an uncapped 2% NSR royalty. Quaterra, at its option, may issue to LCI 20,000 common shares or its cash equivalent on or before June 12, 2012.

On August 1, 2011, the Company entered into an option agreement with a private owner to acquire a 100% interest in certain mining claims situated in Lyon County, Nevada for US\$500,000. The Company has an option at any time to purchase the property for the difference between US\$500,000 and the sum of the amount previously paid.

On October 20, 2011, Quaterra added two properties to the Goldcorp IFA: El Calvo gold, located in the central Mexican state of San Luis Potosi, and Microondas gold-silver, located in Zacatecas State, Mexico.

On October 26, 2011, as contemplated by their June 17, 2010 agreement, Quaterra entered into a joint venture agreement with Grande Portage Resources Ltd. for the Herbert Glacier gold project located near Juneau, Alaska. Grande Portage has acquired a 65% interest and the Company retains a 35% interest in this project. Each party has agreed to bear its proportionate share of costs for the further exploration and development of the project.

On March 21, 2012, Quaterra entered into an Amended and Restated Investment Framework Agreement ("ARIFA") with Goldcorp Inc. ("Goldcorp") of Vancouver, B.C. This agreement extends the IFA entered into with Goldcorp on January 29, 2010 through the first quarter of 2013.

On April 12, 2012 received \$2.48 million from Goldcorp to fund additional exploration on certain properties in Mexico by issuing 4 million shares at the price of \$0.62 per share.



On October 2, 2012, the Company sold its Butte Valley copper project to Freeport-McMoRan Exploration Corporation of Phoenix, Arizona for gross proceeds of US\$2 million.

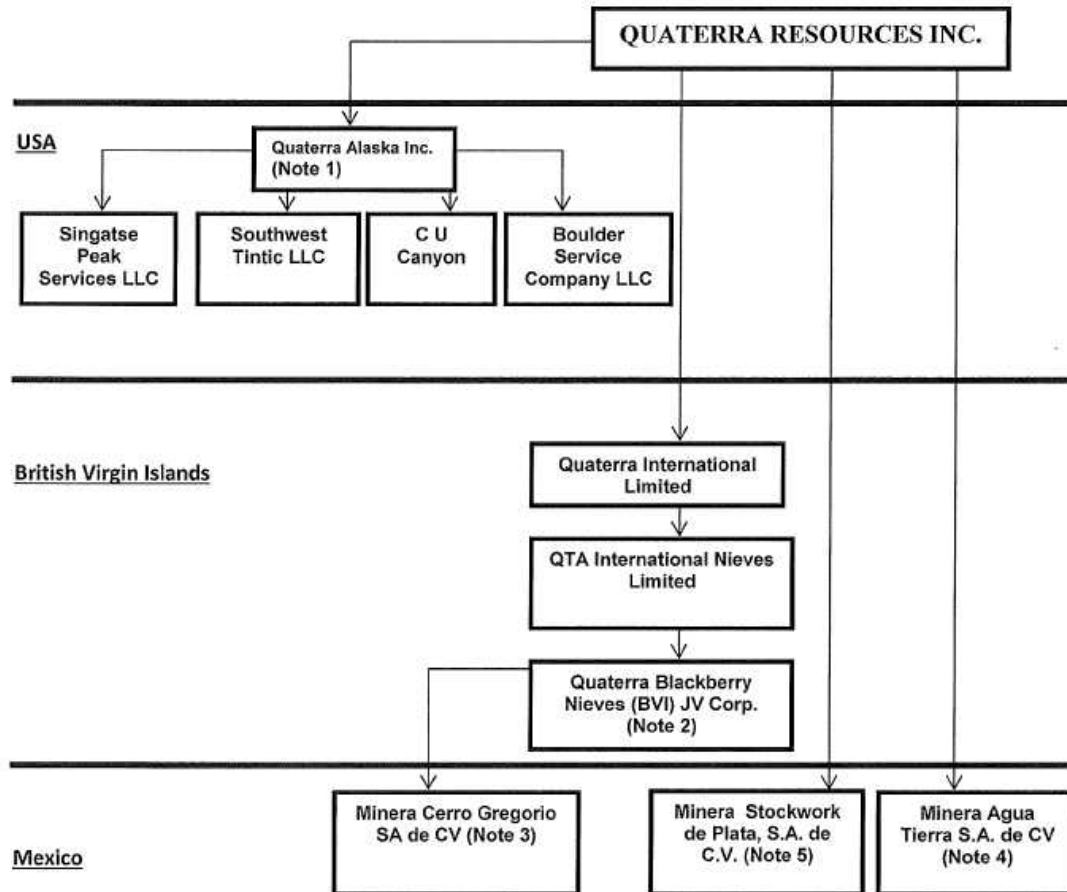
On December 28, 2012, Quaterra completed a private placement of 6,541,571 units at the price of US\$0.35 per unit for gross proceeds of US\$2,289,550. Each unit consisted of one common share and one share warrant with an exercise price of US\$0.53 per warrant expiring December 28, 2014.

For more information about our business, please refer to Item 4.D “Property, Plants and Equipment” below.

## C. Organizational Structure

### Inter-corporate Relationships

The flow chart below presents the Company's legal corporate structure and the jurisdictions of the incorporation.



Note 1: Quaterra Alaska, Inc. is 100% owned by Quaterra Resources Inc. and holds Arizona, Wyoming and Utah Uranium properties, MacArthur, Yerington, SW Tintic, Copper Canyon, Missouri Flat, Herbert Gold, Reveille, Goldfield, Cave Peak, and Wassuk Copper.

Note 2: Quaterra Blackberry Nieves (BVI) JV Corp., 50% owned by Quaterra Resources Inc., holds 100% of the Nieves Property.

Note 3: Minera Cerro Gregorio SA de CV holds 100% of the Nieves mineral claims and is indirectly owned as to 50% by Quaterra Resources Inc.

Note 4: Minera Agua Tierra S.A. de C.V. is 100% owned by Quaterra Resources Inc.

Note 5: Minera Stockwork de Plata, S.A. de C.V. is 100% owned by Quaterra Resources Inc., and holds the following claims: Reduccion Crestones, Las Americas, Americas, Mirasol, Cerro Blanco, Jaboncillo, Tian, Lupita, Carolina, Falcon, Los Azafranes, Sara, Onix, Marijo, Coyote 4, Tajo, Calvo, Crestones, Inde, San Domingo, Sierra Sabino, El Calvo, Microondas.

D. Property, Plants and Equipment

**GENERAL DEVELOPMENT OF THE BUSINESS**

**Nieves Silver Project, Mexico**

Property Description and Acquisition

The Nieves Project is located in the Francisco R. Murguía Municipality of the Zacatecas Mining District near the southeastern boundary of the Sierra Madre Occidental Physiographic Province in central Mexico. The Property is located approximately 150 km northwest of the state capital of Zacatecas and 90 km north of the mining community of Fresnillo. The property consists of 18 concessions covering approximately 12,064.1 ha. The concessions are registered in the name Minera Cerro Gregorio, as of August 5, 2011, a Mexican company wholly owned by Quaterra. The Nieves Property is jointly owned by Quaterra (50%) and Blackberry Ventures 1, LLC. ("Blackberry") (50%).

Kennecott Exploration Company ("Kennecott") acquired the Nieves property on January 16th, 1995, through an option agreement with Mexican concessionaires by making specified option payments over five years, and advance minimum royalty payments. On March 13th, 1998, Kennecott transferred its rights under the Nieves option to Western Copper Holdings Ltd. ("Western") in consideration for an uncapped 2% NSR on certain core concessions and a 1% NSR on others. Western assigned its rights to the Nieves Project to Quaterra on March 26th 1999. The Nieves concessions are subject to a maximum 3% NSR to the original concession holders, which the Company may purchase at any time for US\$2 million. Kennecott's royalties on the property were later sold to Royal Gold Inc. on January 24th, 2007.

On April 10th, 2003, Quaterra completed a limited partnership financing with Blackberry JV, whereby Blackberry JV could earn a 50% interest in the Property by funding two exploration programs of US\$750,000 each. The initial payment of US\$750,000 received in the 2003 Fiscal Year was expended on a 5,300-meter drill program on the Nieves Property. During the 2004 Fiscal Year, Blackberry JV elected to continue by advancing a further US\$750,000 towards a follow-up drill program completed in May 2005, thereby earning a 50% interest in the Property. The partners signed a joint venture agreement in 2006 and have jointly contributed to all exploration costs subsequently incurred.

There are no known significant environmental liabilities related to the current exploration of the Nieves Property. The areas of primary mineral exploration are generally flat-lying, sparsely populated with a few cultivated areas and the remaining land area used for the periodic grazing of livestock. Minimal rehabilitation measures such as stabilizing slopes and planting local flora in areas of disturbance is usually sufficient to satisfy the ecological authorities, the Instituto de Investigaciones Forestales, Agrícolas y Pecuarias ("INIFAP"), a government office based in Calera, Zacatecas.

There is little to no surface water for exploration or mining activities but an abundance of ground water exists and the ownership of mineral rights generally allows access to ground water as needed. There are no significant factors or risks that may affect access, title, or the right or ability to perform work on the property. Exploration drilling has been conducted under a permit issued by the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT). The permit expired on October 15, 2012, but may be extended by request received prior to September 14, 2013.

Since inception to December 31, 2012, the Company had incurred \$1,623,310 (2011 - \$1,535,959) for acquisition costs and \$4,692,483 (2011 - \$3,920,039) for exploration expenditures giving a total of \$6,315,793 (2011 - \$5,455,998) for its interest in Nieves. The Company's joint venture partner, Blackberry JV had spent, including the company's administration fee, US\$6,702,252 for its 50% interest in Nieves.

Location, Access and Infrastructure

Quaterra/Blackberry JV exploration activities are coordinated from the small town of Nieves (now re-named Francisco R. Murguía) where they maintain an office and a house. The town of Nieves is accessed via a 17 km paved road from Highway 49. The nearest major population and service centre to Nieves is the mining town of Fresnillo located 90 km to the south. Fresnillo has a population of approximately 75,000 and services the Fresnillo Mine operated by Peñoles. Fresnillo offers a professional work force experienced in mining and related activities in addition to most other supplies and services. International airports are located within approximately a three hour drive of the property in the city of Zacatecas to the south, and in Torreón (Coahuila State) to the north. Road access is excellent with the main paved highway to Nieves running along the northern portion of the property. A network of dirt roads and trails provide access to the historical mining operations and extend southward to all areas of the property. Drill and access roads can be built easily as most of the Nieves Property is flat-lying with only a few dry creek beds.

The Nieves property lies within the Mexican Altiplano or Mesa Central region. This region is flanked to the west by the Sierra Madre Occidental and to the east by the Sierra Madre Oriental mountain ranges. The Altiplano is dominated by broad alluvium filled plains between rolling to rugged mountain ranges and hills reaching up to 3,000m above mean sea level and average elevations in valleys of approximately 1,700m. Elevations on the Nieves property range from 1,900m. to 2,000m. The terrain is generally flat-lying with a prominent north-south trending ridge along the eastern portion of the property with moderate to vertical slopes. There is very little human habitation on the property, with only a few widely scattered farm houses, although the town of Nieves directly borders the property to the northeast.

The La Quinta field office, as well as core logging, cutting and storage facilities are located on the Nieves Property. Other infrastructure in the area includes: (1) a power line adequate to support a small mill (eg. 100 tonnes per day), (2) a spur of the main Zacatecas rail line that connects the city of Rio Grande, located 18 km to the south, and (3) operating smelters in San Luis Potosi (copper and zinc, approximately 350 km to the south) and in Torreón, Coahuila state (Peñoles lead-zinc smelter, approximately 200 km north).

## History

The first discovery on the area covered by the Nieves Property was the Santa Rita Vein in 1560 by Spanish explorers. Soon after in 1574 the Concordia vein was discovered. The Santa Rita and Concordia-San Gregorio-Dolores veins were the focus of mining by the Spanish and Mexican miners until 1880 when an English company, the Mexican Rosario Mining Company, and two Californian companies, the Almaden Mining Company and the Concordia M. and M. Company, worked in the area. These companies worked primarily on the Concordia vein while a small independent miner Gonzáles Piñera worked concurrently on the San Gregorio vein. Prior to the 1910 revolution, which halted all production in the Nieves District, total ore production in the District was estimated at 50,000 tonnes. The only production reported is from the Concordia Mine where 5,414 tonnes at a grade of 4,065 g/t silver were produced.

Between 1910 and 1978 several companies attempted to de-water, sample, and re-open the historical workings in the Concordia and Santa Rita mines, and were largely unsuccessful. The Santa Rita vein and refurbished mill and flotation plant were purchased by Fomento Minero in 1978; they operated the mine until 1987. Fomento Minero also sank three shafts and deepened a historic shaft along the Concordia-San Gregorio vein system during the 1970's. The flotation mill was capable of running 100 tonnes/day during this time and was fed 50% tailings and 50% ore with an average head grade of 130 g/t silver, 2% lead, 2.4% zinc and 2.5% antimony, according to Consejo Recursos Minerales. Today, all that remains on the site are the building foundations, abandoned shafts and power lines.

In the early 1990's, a group of Mexican concessionaires assembled a land position that Kennecott optioned on January 16th, 1995. Exploration work completed by Kennecott included geologic mapping, surface sampling, geophysical surveying and reverse circulation (RC) drilling of the Gregorio North, California and Orion West veins. The drilling intersected several zones of significant silver mineralization hosted by two distinct styles of mineralization. Drill hole NV08 in the California area intercepted two separate 2m intervals of high grade silver vein mineralization that returned assay values of 367 g/t and 795 g/t silver at depths of 108m and 116m, respectively. In contrast, drill hole NV03 intersected a large low grade zone of silver mineralization at a depth of 180m depth that averaged 82 g/t silver over 28m. Drill hole NV03 also encountered a high grade silver vein at 148m depth that returned 254 g/t silver over 2m. Drill hole NV06 also encountered a large zone of low-grade silver mineralization that returned 67 g/t silver over 68m.

After acquiring the Nieves option from Kennecott in 1998, Western drilled 5 RC holes testing the California vein system. The holes were drilled in the area around hole NV08. Western also twinned hole NV08 and reproduced similar assay values for the intercepts reported by Kennecott including 890 g/t silver over 1.0m in drill hole WCNV01. Holes drilled to intercept mineralization below drill hole NV08 returned assay values of 841 g/t silver over 0.45m, 109 g/t silver over 0.8m, and 1,081 g/t silver over 0.35m in drill hole WCNV04.

Systematic drilling of the property began after Quaterra received the Nieves property rights from Western in 1999. Since Kennecott initiated exploration drilling in 1995, a total of 61,608 meters have been drilled in 205 holes on the Nieves property. All but ten of the holes were completed during the Quaterra/Blackberry earn-in and JV.

## Geology

The Nieves Property lies on the western flank of the Central Altiplano in Mexico, just east of the Sierra Madre Occidental ranges. Basement rocks underlying the western Altiplano are a Mesozoic assemblage of marine sedimentary and submarine volcanic rocks belonging to the Guerrero Terrane that sit unconformably on Precambrian continental rocks.

The late Cretaceous to early Tertiary Laramide Orogeny folded and thrust faulted the basement rocks throughout area and preceded the emplacement of mid-Tertiary plutons and related dykes and stocks. Unconformably overlying the Mesozoic basement rocks in the western Altiplano are units from the late Cretaceous to Tertiary, Sierra Madre Occidental magmatic arc. These rocks consist of a "lower volcanic complex" comprising an assemblage of late Cretaceous to Tertiary volcanic, volcanoclastic, conglomerate, and limestone rocks unconformably overlain by a Tertiary "upper volcanic supergroup" of caldera related, rhyolite ash-flow tuffs and flows. Eocene to Oligocene intrusions occur throughout the Altiplano and are related to the later felsic volcanic event. A final stage of NE-SW extensional tectonics accompanied by major strike-slip fault movement during the Miocene developed much of the basin and range topography currently exhibited in the area. Subsequent erosion of the ranges has covered most of the valleys.

The Mesozoic section on the Nieves property is represented by a thick sequence of fine laminar grey to dark green argillite beds up to 1m thick belonging to the late Cretaceous Caracol Formation. The Caracol Formation is host to silver mineralization on the property. The argillite beds are more abundant to the south in the Santa Rita area and to the west in the Concordia area. The Mesozoic section is isoclinally folded with an axial plane cleavage. Fold axes strike east-northeast to east and beds strike east-west and dip steeply south to near vertical.

Tertiary clastic rocks unconformably overlie the Caracol Formation on the east side of the Nieves Property. The shallow dipping Tertiary clastic section includes a 1 to 10m thick conglomerate composed of rounded to sub-rounded limestone boulders in a sandstone groundmass. Above the limestone conglomerate there is up to 130m of conglomeratic sandstone with thin bands of calcareous conglomerate. Overlying the conglomerate is 40m to 50m of Tertiary volcanic rocks composed of rhyodacitic to andesitic welded tuff. A thin 1.5 to 2m unit of grey to dark grey basalt occurs above the tuff and is in turn overlain by at least 56m of porphyritic rhyolite flows striking north-northwest and dipping northeast. These flows underlie a prominent north trending ridge on the east side of the Nieves property and are the host rock for manganese-calcite veins and breccia mineralization previously exploited by local miners.

The oldest structures on the Nieves Property are the folds which affect the Mesozoic argillite beds. These structures are likely related to compression during the Laramide Orogeny in the Cretaceous. Thrust faults are also common features of structures attributed to the Laramide Orogeny and several have been suspected to occur on the Nieves Property. Post-Laramide structures affected both the Mesozoic Caracol Formation sedimentary rocks and the Tertiary volcanic and sedimentary rocks. These structures include: (1) faults that strike 330o to 000o and dip moderately northeast to east with east plunging slicken-sides, (2) faults that strike 170o to 180o and dip steeply to the west, and (3) major vein structures that strike 240o to 270o and dip 60o to 90o to the south.

## Mineralization

Silver mineralization on the Nieves Property is classified as low-sulphidation epithermal mineralization and is the primary exploration target. Epithermal silver veins are the dominant type of deposit within the Altiplano Region of Mexico that includes world-class examples such as Pachuca, Zacatecas, Fresnillo, and Guanajuato. The closest example is the Fresnillo deposit, located 90 km to the south of the Nieves Property. The Fresnillo deposit includes mantos and chimneys, stockworks, disseminated mineralization, and veins that show vertical mineralogical zonation. Typically in these veins, the high-grade silver (gold) zone is constrained in elevation within the vein structure to up to 500m vertically, or between 180 to 750m depths below which the veins becomes dominated by base-metal sulfides and progressively lower in precious metal content.

The most economically significant mineralization at Nieves occurs in anastomosing carbonate-quartz-sulphide vein systems and stockworks that have been defined over a total strike length of 3.8 kilometers by 54,814 meters of drilling in 187 holes. The system develops to a maximum true width of in excess of 200 meters and has a proven down dip extent of approximately 525 meters.

The carbonate-quartz-sulphide veins contain the best grades of silver, gold, lead and zinc. They consist of calcite that is partially to totally replaced by grey to white, chalcedonic, fine-grained quartz veins and veinlets. Individual veins are from centimetres to 1.5 m wide with up to 50% sulphide minerals. Sulphides include pyrite, stibnite, sphalerite, galena, chalcopryite and the silver sulphosalt, freibergite as well as minor proustite, pyrrargyrite, and jamesonite.

The central and most important of the three vein systems is the Concordia-San Gregorio-Dolores system which includes both the La Quinta and Gregorio North zones. Mineralization along the Concordia-San Gregorio-Dolores vein has a known total strike length of 1300 meters and a true width up to 100 meters. The mineralized zone in the Gregorio North area is approximately 1200 meters long and up to 200 meters wide. The La Quinta and Gregorio North zones are the subject of the August 9, 2012 Caracle Creek 43-101 compliant resource estimate but only the La Quinta zone has a designed open pit as shown in the October 31, 2012 preliminary economic assessment.

The attitude and size of the mineralized zones along the Santa Rita zone to the south and California vein system to the north are not well understood at this stage of exploration. Drilling along the Santa Rita system suggests that the mineralized zone is at least 750 meters long and may be up to 340 meters wide. The mineralized zone along the California vein system is at least 550 meters long and may be up to 130 meters wide.

Recent drilling has expanded the size of mineralized zones along all vein systems and additional drilling may significantly enhance the resources and economics of the project. Many of the vein systems are open along strike and all remain open to depth. Because some zones could be terminated along strike by late vertical fault structures, the discovery of strike extensions to the Nieves vein systems will only require continued drilling guided by the promising results of surface geophysical surveys.

#### Exploration and Drilling Results

Exploration between 2003 and 2010 by Quaterra and Blackberry included air photograph interpretation, surface sampling, field work, two geophysical surveys, six drill programs and three 43-101 independent technical reports, two of which include 43-101 compliant resource estimations, all prepared for the Nieves project by Caracle Creek International Consulting Inc. of Toronto, Ontario ("Caracle Creek").

In April 2011, Quaterra contracted Mira Geoscience to invert ground magnetic data from the Nieves Property. The results indicated that the geophysics model was poorly constrained due to insufficient data particularly along the western edge of the magnetic low anomaly. In December, 2011, Zonge International (Zonge) was contracted to conduct additional ground magnetometer surveying along 14 N-S lines with a spacing of 200m between lines. The survey extended the magnetic low an additional 1200 meters west for a total E-W length of 2200m.

In June and July 2011, Zonge conducted IPR surveys along 9 lines that indicated that several of the vein systems including the Santa Rita, Dolores, Nino and Orion veins extended to the western edge of the existing survey coverage. The coverage was extended in the first quarter of 2012, with a survey consisting of six lines totalling 28.4 line-kilometers, of vector CSAMT and CSIP and nine follow-up lines of pole-dipole IPR totalling 16.5 line-kilometers. The six lines of vector CSAMT/CSIP were spaced 400 meters apart and covered 1,000 hectares west of the main veins in the area of the enigmatic magnetic low.

The geophysical anomalies were followed up by surface mapping and sampling. The most interesting area identified to date is West Santa Rita, where the mapping identified two groups of narrow, sub-parallel 2 to 30 centimeters wide calcite-quartz veinlets, some of which contain strong gold and silver mineralization. Gold values are up to 8.11 g/t over 0.2 m and silver values are up to 253 g/t over 0.4 m. Outcrop in the area is sparse but at least one sample from a fault zone coinciding with the anomalous IP zone defining the Nino vein is anomalous in gold and silver.

Quaterra and Blackberry completed two more phases of drilling (VII and VIII) between March 2010 and October 2011, consisting of 73 drill holes and totalling 18,547 m. Most of the drilling concentrated on the Concordia-Dolores-San Gregorio vein system, but significant amount of drilling is located in the California and Santa Rita vein systems as well.

The drill program was very successful at increasing the size of known mineralized zones along all the major vein systems. Mineralization along the Concordia vein system was extended an additional 400 m, to a total of approximately 1,300 m. The length of known mineralization along the California vein system was increased to a total of approximately 550 m and it remains open to the east. Phase VII and VIII drill programs were successful in doubling the strike length of the Gregorio North mineralized zone located north of the San Gregorio vein, extending the strike length of the mineralized zone to approximately 1200 m. A total of 15 drill holes systematically tested the Santa Rita vein system over 500 m along strike, and the total length of mineralization was extended to approximately 750 m and remains open to the west.

The best intersections include 149 g/t Ag and 0.11 g/t Au over 31.25 m, which includes 6320 g/t Ag and 1.82 g/t Au over 0.25 m in drill hole QTA123 along the Concordia West vein, 104 g/t Ag over 19 m, including 6410 g/t Ag over 0.1 m and 5960 g/t over 0.1 m in drill hole QTA137 along the California vein, and 152.2 g/t Ag and 0.12 g/t Au over 57 m in drill hole QTA144 in the Concordia West area.

The results of the program were the subject of a fourth technical report and the third NI 43-101 compliant independent resource estimate prepared for the Nieves project by Caracle Creek. The most recent estimate, dated August 9, 2012, was incorporated into the October 31, 2012 preliminary economic assessment ("PEA") for the Nieves project by M3 Engineering & Technology Corp. ("M3") of Tucson, Arizona.

During preparation of the PEA, Quaterra tested the strike extension of mineralization at Nieves with 8 core holes totaling 3,060 meters. Hole QTA 190 was collared to test an induced polarization (IP) anomaly on the Orion vein a 2 kilometer westward extension of the Gregorio vein. The hole intersected 0.8 meters of 1,865 grams per tonne (g/t) silver (54.5 oz/ton) which is part of a larger vein interval starting at 243.6 meters averaging 341 g/t silver (10.0 oz/ton). Holes QTA 191 and QTA 192, drilled 200 meters west and east of QTA 190, intersected 0.85 meters of 289 g/t silver and 1.1 meters of 284 g/t silver respectively. The new zone is open laterally and at depth.

Three holes (QTA 185-187) tested coincident IP and geochemical gold anomalies on the western extension of the Santa Rita vein. Holes QTA 186 and QTA 187 intersected 5.1 meter intervals averaging 0.7 g/t gold and 0.55 g/t gold respectively. The gold anomalies may represent the upper levels of deeper and as yet undiscovered silver mineralization.

Wildcat holes QTA 188 and QTA 189, drilled 2 kilometers further west from holes QTA 185-187 to test anomalous vein occurrences, did not intersect significant mineralization. Additional drilling is being planned to investigate gold-silver anomalies on the West Santa Rita vein and several other high-priority geophysical anomalies detected by geophysical surveys during the first quarter of 2012.

#### Sampling, Analysis and Security of Samples

Quaterra and Quaterra jointly with Blackberry have drilled 192 holes on the Nieves property. All but 10 holes completed by Quaterra in 1999-2000 were core holes. Major Drilling of Mexico S.A. de C.V. was the drill contractor for drill programs completed during 1999 to 2006 and B.D.W. International Drilling of Mexico S.A. de C.V. has been the drilling contractor since 2006.

Drill hole orientations are generally perpendicular to the strike of the overall structural trend of the vein(s) targeted. HQ (63.5 mm) was the standard drill core diameter. NQ (47.6 mm) was used locally as an extension (a tail) where drill conditions were difficult. Drill hole locations are surveyed using a RTK Trimble (model R8), double frequency GPS with precision to 1 cm. Down-hole survey readings were recorded on average approximately every 50 or 100m depending on the length of the hole using an Eastman Single Shot instrument. Survey results have been corrected for magnetic declination (+9°).

All drilling is conducted under the supervision of Quaterra personnel. The compound containing the core logging and core storage facility is contained within a chain link fence with locked gate. The individual storage rooms are locked and prevent access to the core logging and core cutting areas. The onsite geology office is a separate building within the compound and is also kept locked. The main working office is located in the town of Nieves within a locked house compound and also serves as a field house for the geologists. Paper and digital maps, cross-sections and long sections are stored in the Nieves field house office.

Core boxes were collected from the drill site and brought to the core storage facility on the Nieves Property for logging and sampling by the project or assistant geologists on a daily basis. The drill core was washed and core recovery estimated. Rock types, alteration minerals, textural and structural features, veining, and mineralized zones documented. Sample intervals were measured, marked with permanent marker, and given a sample number and sample tag by the geologists. From this point, technicians were given the core to split, using a core saw, into halves where one half of each interval was placed with the sample tag into a sample bag and marked with the sample number. The other half was placed back into the core box in its original position and the core boxes were then stacked on racks and stored in order and by hole number in their core storage facility. Where the veins were coherent they were sawed in half perpendicular to the "grain" to get a representative split. Samples were placed into individual plastic bags marked with a unique sample identification number and with a sample tag placed into the bag. Sample ID numbers and meterages were also written on the core trays.

Samples were then packaged into sealed sacks and taken by Quaterra employees to ALS Chemex Laboratories in Guadalajara for preparation. No employees, officers, directors or associates of Quaterra or Blackberry JV are involved in the preparation of the samples. After preparation, the samples were then packaged into sealed sacks and taken by Quaterra employees to ALS Chemex Laboratories in Guadalajara for analysis.

Standard and blank samples were also included with the primary core samples for analysis. Standards were inserted directly into the sample sequence with a frequency of ~ 1 in 50. Blanks were inserted directly into the sample sequence with a frequency of ~ 1 in 25. The final prepared samples were shipped to the ALS laboratory in Vancouver, Canada for analysis. All samples were analyzed using a 41 element ICP method (ME-ICP41), in addition to analyzing gold and silver by standard fire assay (ME-GRA21). Lead and zinc values over 10,000 ppm and silver values over 100 ppm were re-assayed by atomic-absorption methods (ME-OG62). The Company is unaware of any known drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results. The Company believes the sampling procedure is appropriate for the type of mineralization being assayed such that samples are representative and there is no sampling bias.

ALS Chemex is an ISO 9001:2008, ISO 17025:2005 and Standard Council of Canada accredited laboratory with preparation and analytical laboratories operating in over 16 countries. Samples are sent to ALS Chemex in Guadalajara for preparation using their PREP-32 procedure. Upon receipt samples are dried, weighed and crushed. Two hundred and fifty grams of material is split and pulverized to at least 85% passing 75 microns. Reject material is retained at ALS Chemex in Guadalajara.

Samples were analyzed using fire assay – gravimetric finish method in addition to ICP. Silver was analyzed with two methods including aqua regia digest and a combination of ICP-AES (Inductively Coupled Plasma – Atomic Emission Spectroscopy) finish and fire assay and gravimetric finish. Gold was analyzed with fire assay and gravimetric finish. The rest of the elements were analyzed with aqua regia digestion and ICP-AES finish. In the aqua regia digest and ICP-AES finish, the samples are digested in aqua regia in a graphite heating block. After cooling, the solution is diluted to 12.5 ml with deionized water, mixed and analyzed by ICP-AES. The results are corrected for inter-element spectral interferences. In the fire assay and gravimetric finish, the samples are decomposed with fire assay fusion, during which the sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents to produce a lead button, which is cupelled to remove the lead. The remaining gold and silver bead is separated in dilute nitric acid, annealed and weighed as gold. Silver is determined by the difference in weights.

Internal quality assurance and quality control (QA/QC) procedures such as the insertion of blanks and standards into the sample sequences were not utilized by Quaterra and Blackberry JV during initial phases of exploration. Routine analysis of standard reference material (standards) began in 2007 with the insertion of a commercially prepared standard. Duplicate sampling began in 2008, and continued through the 2011 drill program. Duplicate samples were packaged and shipped using the same security protocols as the primary drill core samples and submitted to Skyline Assayers & Laboratories (“Skyline”) in Tucson, Arizona. Skyline is ISO 17025 accredited including analyses for Au and Ag by fire assay (including gravimetric methods), which is the method of analyses used for the submitted samples.

A review of the Nieves data in the October 16, 2012 M3 technical report concluded that the data quality is adequate at this stage of the project and can be used in 3D modelling for the purpose of resource estimation. The quality control review indicates that there were no major problems in the core shack such as sample mix ups or contamination. The slightly high failure rate of core duplicates is probably an indication of the nature of the ore that is characterized by narrow veinlets.

The failure rates of external standard (KM2653) are high for silver, but this is due to the different analytical method and not the poor quality of the data, which is suggested by the performance of the laboratory standards. Also, silver analyzed with the ME-ICP41 method is slightly biased high and silver analyzed with the ME-GRA21 method is slightly biased low, but these biases are not always consistent with the laboratory standard, suggesting that the problem is with the external standard. In the previous phases silver was analyzed with the same methods and a commercially available certified standard (CDN-SE-1) was used and performed well for silver. Recommendations for future programs include the use of an external standard with a similar certified value as the silver grades at Nieves that is certified for the same analytical method and has similar matrix.

The average gold value in phases at Nieves is 0.058 g/t including all data and 0.22 g/t including only data above the detection limit. The quality of the Au assay data is considered adequate to include Au in the resource calculation at this stage of the project, especially because the grade of Au is fairly low and it is not the main commodity at Nieves. Also, Au analyzed with ICP-OES and gravimetric method is comparable. Recommendations for future programs include using fire assay and instrument finish (AAS or ICP) for Au assays and that a certified standard with a low grade value, same analytical method and similar matrix is inserted and that the frequency of the quality control samples be increased to include one standard, one blank and one core duplicate with every twenty samples.



## Metallurgical Testing

Preliminary metallurgical testwork on the composite sample from the Nieves property was completed in June 2010 by G & T Metallurgical Services Ltd. Approximately 100 kg of coarse crush material was composited from reject core material from selected intervals in 12 holes drilled through the La Quinta mineralization in 2009-2010. The sample was determined to contain ~ 79 g/t Ag (theoretical grade of 83 g/t Ag). Freibergite was the major silver phase present in the sample. Ore hardness tests indicated that the sample was moderately soft with a Bond work index of 10.8 kWh/tonne. Open circuit floatation tests showed that ~ 86% of the Ag can be recovered into a final concentrate with a grade of ~ 2.3 kg/tonnes Ag. Rougher tests suggested that Ag recovery was relatively independent of primary grind size between 67 and 104µm K80. Additional testwork was recommended to investigate coarser primary grind sizes. Rougher tests also indicated that silver recovery could also be increased by using a collector such as EROPHINE 3418A which would increase the selectivity of Ag over pyrite. Open circuit cleaner tests suggest that regrounding the rougher concentrate to 20µm K80 had no significant benefit on silver metallurgy. However, increasing the pH of the cleaner circuit to 10 significantly improved the Ag grade in the final concentrate. For the purposes of the preliminary economic assessment, design parameters of 86% silver recovery with a final concentrate grade of 2,300 g/t were used.

## Mineral Resource Estimate

Caracle Creek completed an updated NI43-101 independent mineral resource estimate for the Nieves project in June 2012. A summary of the resource estimate within the Concordia and San Gregorio vein systems using a reporting cut-off grade of 15 g/t Ag is shown below:

Vein	Zone	Resource Class	Quantity Tonnes (t) 1	Grade3 Ag (g/t)	Grade4 Au (g/t)	Ag (oz) 5	Au (oz)5
Concordia	La Quinta	Indicated	33,040,000	50.1	0.04	53,220,000	42,500
Concordia	La Quinta	Inferred	39,260,000	32.0	0.02	40,390,000	25,200
San Gregorio	North	Inferred	18,770,000	27.0	0.08	16,293,900	48,300

1 Reported at a cut-off grade of 15 g/t Ag. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

2 Tonnes have been rounded to the nearest 10,000.

3 Ag grade has been rounded to one (1) significant digit.

4 Au grade has been rounded to two (2) significant digits.

5 Ounces have been rounded to nearest 100. One (1) troy ounce = 31.103 grams.

The mineral resource is based on drilling information as of June 22nd, 2012. The database includes collars, assays, survey and lithology information from 8 drill holes from programs of previous operators between 1995 and 1996, 10 drill holes drilled by Quaterra between 1999 and 2000, as well as 174 drill holes drilled by Quaterra and Blackberry between 2004 and 2012. The estimation used geostatistical block modeling methods constrained by a mineralised wireframe. GEMCOM's GEMS resource modeling software V.6.3 was used to generate the block model and perform the grade estimation. Grades for Ag & Au were estimated using the inverse distance method of interpolation. The mineral resources were classified according to the CIM Standard Definition for Mineral Resources and Mineral Reserves (December 2005) guidelines and reported in accordance with the Canadian Securities Administrators National Instrument 43-101.

The mineralized domains were constructed primarily from the Ag grade assay data. The La Quinta mineralized domain was defined using 99 drill holes and 5072 samples. The Gregorio North mineralized domain was defined using 25 drill holes and 1729 samples. The drill holes were drilled in a sectional pattern with a drill hole spacing ranging from 20 - 100 meters, in the La Quinta area, and 20 - 175 meters in the Gregorio North area. The mineralized domain was projected 100 meters beyond the last drill hole. Due to the potential for bulk open pit mining, a grade cut-off was not used when constructing the mineralized domain. However, if the last assay in the interval was less than 0.1 g/t Au, then it was not included in the mineralized domain unless it had a significant Ag grade component of 10 g/t Ag. The estimation parameters set for the mineral resources were not allowed to interpolate through un-sampled intervals. An Ag value of 0.1 g/t (Half Detection Limit) was assigned to the missing intervals.

The Qualified Person responsible for the updated Nieves project resource estimate is Jason Baker, P. Eng., of Caracle Creek. Zsuzsanna Magyarosi Ph.D., also of Caracle Creek, is the Qualified Person responsible for the QA/QC evaluation. Doris M. Fox M.Sc., P. Geo., also of Caracle Creek, is the Qualified Person responsible for the site visit and sampling procedures.

## Preliminary Economic Assessment

M3 Engineering & Technology Corp. ("M3") of Tucson, Arizona used the Caracle Creek mineral resource estimate to complete a preliminary economic assessment ("PEA") for the Nieves project October 31, 2012. The study concluded that the project has potential for development as an open pit silver mine that would produce 55.5 million ounces of silver over 10-year mine life.

The PEA set out the following key project parameters:

- An open pit mine centered on the Concordia vein that contains a total of 35.4 million tonnes of mineable ore. The pit includes 28.3 million tonnes of higher grade material averaging 65 g/t silver and 0.045 g/t gold (at a cutoff of 30.5 g/t silver); and 7.1 million tonnes of lower grade material averaging 24 g/t (at a cutoff of 21.3 g/t silver). The open pit mine plan was developed based on an indicated resource of 33.0 million tonnes at 50.1g/t silver and an inferred resource of 39.3 million tonnes at 32.0 g/t silver, using a cutoff of 15 g/t..
- Recovery of 55.5 million ounces of silver and 41,000 ounces of gold over the 10-year mine life at an average mining rate of 3.5 million tonnes per year. Silver recoveries of 86% were based on testwork completed to date.
- Initial capital expenditure of US\$231.6 million with a sustaining capital cost of \$64.1 million. Capital costs are considered accurate to +/- 35%.

Average life-of-mine operating costs of \$14.98 per ounce of payable silver.

- An after tax net present value (NPV) of \$77.1 million at an 8% discount rate and a base case silver price of \$27 per ounce and a before tax NPV of \$142.32 million. At a silver price of \$32.40 the after tax NPV is \$204 million. The project breaks even at a silver price of about \$21.37 per ounce (about \$15.25 after payback).
- An after tax internal rate of return (IRR) of 15.7% with a 4.4 -year pay back and a before tax IRR of 21.9% with a 3.4 -year pay back.

The mine plan for the Nieves project is an open pit that straddles the Concordia vein and includes three pit phases. A 35.4 -million tonne mineralized zone would be mined at a rate of 10,000 tonnes per day resulting in a ten year mine life and at a 5.4:1 (waste to ore) strip ratio. The pit includes 28.3 million tonnes of higher grade material averaging 65 g/t silver and 0.045 g/t gold (at a cutoff of 30.5 g/t silver); and 7.1 million tonnes of lower grade material averaging 24 g/t silver (at a cutoff of 21.3 g/t silver). The San Gregorio zone was not included in the mine plan but may become viable with additional drilling.

The financial analysis is based on a silver price of \$27 per ounce and a gold price of \$1,300 per ounce, rounded numbers which are both less than the SEC-recommended three-year historical price through the end of August. The analysis includes deductions for all royalty payments and a contingency of 20%. No credits are assumed for lead or zinc. Sensitivities were run for the price of silver, operating cost and initial capital cost.

The Qualified Person for the preliminary economic assessment is Joshua Snider P.E. with M3 Engineering & Technology Corp., Tucson, Arizona. The Qualified Person for the mining portion of the PEA is Jeffery Choquette P.E. of Butte, Montana, and for metallurgy Thomas L. Drielick P.E. M3 Engineering & Technology Corp., Tucson, Arizona.

The PEA emphasizes that additional exploration and drilling could both expand the current pit and upgrade the San Gregorio inferred resource which was not included in this study. The San Gregorio inferred resource includes 16.3 million ounces of silver and 48,300 ounces of gold using a cutoff of 15 grams. Vein systems to the north and south of the pit also have potential for additional resources.

## Future Work Plans

Quaterra plans to continue exploration at Nieves to investigate gold-silver anomalies on the West Santa Rita vein and several other high-priority geophysical anomalies detected by geophysical surveys during the first quarter of 2012. Most of the anomalies appear to be westward extensions of mineralized veins previously drilled, including the Dolores, Santa Rita, and Niño veins. The strike and depth extension of the high grade Orion vein presents a particularly attractive target for additional drilling on the property.

## MacArthur, Nevada, USA

### Acquisition and Staking of Mineral Claims

The MacArthur property consists of 895 unpatented lode claims totaling approximately 18,492 acres on lands administered by the US Bureau of Land Management (“BLM”). A significant number of the claims are held by means of a mineral lease with option to purchase, executed on August 27, 2005 and subsequently amended. The agreement gives Quaterra the right to purchase the claims from North Exploration LLC (“North”) by making 3 annual payments of \$524,000 (option balance) plus interest at the rate of 6% per annum by January 15, 2013. The second of these three annual payments was paid January 11, 2012. The third payment was renegotiated on December 14, 2012 to defray the final option balance by making a \$100,000 payment plus \$31,440 in interest prior to January 15, 2013 to extend the lease and option to January 15, 2014. Quaterra’s purchase is subject to a two percent Net Smelter Return (NSR) royalty with a royalty buy down option of \$1,000,000 to purchase one percent of the NSR, leaving a perpetual one percent NSR. The agreement with North is in good standing.

### Expenditures to Date

Acquisition costs incurred by the Company to December 31, 2012 were \$3,077,838 (2011 - \$2,358,534) and exploration expenditures were \$18,783,675 (2011 - \$17,144,368) for a total of \$21,861,513 (2011 - \$19,502,902).

### Location, Access and Infrastructure

The MacArthur Copper Project is located near the geographic center of Lyon County, Nevada, USA along the northeastern flank of the Singatse Range approximately seven miles northwest of the town of Yerington, Nevada. The project is accessible from Yerington by approximately five miles of paved roads and two miles of maintained gravel road. A 100-foot wide gravel haul road that accessed the MacArthur open pit copper mine during the 1990s leads 5 miles south to the Yerington Mine. Beyond the MacArthur pit area are several existing historic two-track dirt roads that provide access throughout the property. Topographic coverage is on US Geological Survey “Mason Butte” and “Lincoln Flat” 7.5’ topographic quadrangles. The nearest major city is Reno, Nevada approximately 75 miles to the northwest.

### History

The MacArthur project has been the subject of exploration and drilling by several operators who have contributed to the current database of more than 740 holes totaling approximately 282,000 feet. During the late 1940s, Consolidated Copper Mines attracted the interest of the US Bureau of Mines to conduct 7,680 feet of trenching in 1948 and followed up with the completion eight core holes for 3,414 feet in 1950. The Anaconda Company (“Anaconda”) began investigations at MacArthur including 33 shallow drill holes during 1955, 1956, and 1957. In 1963, Bear Creek Mining Company (“Bear Creek”) optioned claims and drilled at least fourteen air rotary holes, the deepest to 663 feet. At least four holes for 1,237 feet were drilled to satisfy claim staking location work. During 1967 to 1968, The Superior Oil Company optioned the claims formerly held by Bear Creek and drilled eleven holes as rotary pre-collar, core finish, for 13,116 feet testing the concept that a deep primary sulfide-bearing porphyry copper ore shell might underlie the MacArthur oxide mineralization heretofore tested no deeper than 663 feet. During the early 1970s, Anaconda conducted an extensive trenching and rotary drilling program consisting of more than 280 rotary holes totaling approximately 56,000 feet over and adjacent to the present day MacArthur pit.

Metech Pty. Ltd., of Perth, Australia was commissioned to prepare an ore reserve and mining planning study of the MacArthur deposit in 1989. The Metech study initiated the purchase of the Anaconda Yerington district properties by Arimetco International (“Arimetco”). Arimetco mined a total of six million tons at an estimated grade of 0.36 % total copper using open pit methods from the MacArthur deposit in the period of 1995 to 1998. Due to financial difficulties resulting primarily from the low price of copper, Arimetco sought protection under Chapter 11 of the U. S. bankruptcy Code in January 1997 and suspended all operations in 2000. After Arimetco’s departure, the mining claims over the deposit were allowed to expire. No consistent, large-scale mining has occurred on the site.

Quaterra acquired the MacArthur property in August, 2005. The acquisition was motivated by Quaterra’s belief in the potential of the property to host a copper deposit capable of sustaining a large run-of-mine heap leach operation using a solution extraction/electrowinning (SXEW) process for low cost production. The Company initiated exploration drilling in April 2007 and by November 2011, completed a total of 203,775 feet of drilling in 402 holes on the property. The drilling program has defined a widespread blanket of acid soluble copper oxide and chalcocite mineralization above primary copper mineralization that is believed to be the fringes of a major copper porphyry system.

The MacArthur copper deposit forms part of the Yerington mining district which includes at least three, large, porphyry copper deposits (Yerington, Ann Mason, Bear), as well as two large IOCG deposits (Pumpkin Hollow, and Minnesota). Mineralization ranges from disseminated porphyry copper occurrences to skarn, limestone replacement, and vein type deposits.

The Yerington area is underlain by early Mesozoic volcanic and sedimentary rocks now exposed along uplands in the Singatse Range in the west and the Wassuk Range to the east. These Mesozoic rocks were intruded by two Middle Jurassic batholiths, an older granodiorite (Yerington Batholith) and younger quartz monzonite (Bear Quartz Monzonite) that comprise the majority of outcropping rocks in the district. The batholiths were themselves intruded by another Middle Jurassic quartz monzonite event moderately to steeply north dipping quartz-biotite-hornblende porphyry dike swarms, associated with copper mineralization, striking north-northwesterly across the entire mining district. The Mesozoic section is overlain by Early to Middle Tertiary volcanics deposited ash flow tuffs prior to the advent of normal, faulting associated with Late Tertiary basin-and-range extension that displaced and tilted all of the above-mentioned rocks. These faults dip east and are curved, concave upward, so that the dip of the fault flattens eastward. Net displacements are in an east-west direction. The geologic section is completed by post-faulting conglomerates and alluvium.

At MacArthur, the older granodiorite underlies most of the northern and western parts of the Company's claim block. Along the east part of the claim block quartz monzonite is dominant and underlies the MacArthur pit. In bench walls at the MacArthur Pit, the quartz monzonite hosts conspicuous light brown limonite alteration banding (averaging 4 to 6 per foot) sub-parallel to the steeply north dipping, west-northwest trending quartz porphyry dikes. Along the eastern portions of the property, including the eastern third of the MacArthur pit, quartz monzonite assumes a light gray color due to widespread sodic-calcic alteration. A "border-phase quartz monzonite" commonly lies at the contact between the granodiorite and the quartz monzonite. The border-phase quartz monzonite is finer-grained than the quartz monzonite and has more abundant potassium feldspar.

Quartz porphyry dikes that host a large portion of the primary copper mineralization at Anaconda's Yerington mine are associated with all copper occurrences in the district. The porphyry dikes at MacArthur are classified by dominant mafic minerals into quartz biotite porphyry and quartz hornblende porphyry, each subdivided further based on composition and alteration. Dikes contain feldspar crystals and either hornblende or biotite crystals set in an aphanitic matrix. The structures are typically ridge-formers with widths to 50 feet, dip steeply to the north, and follow a penetrative north-northwest (S60°E to S80°E) structural fabric. Narrow (<10 feet) fine grained, post porphyry andesite dikes follow the same NNW structural fabric.

Both Jurassic and Tertiary age andesite dikes in the walls of the MacArthur Pit can be traced from bench to bench and projected across the pit floors. The Jurassic dikes are commonly very fine grained, dactylitic plagioclase-bearing porphyries that pinch and swell as they fill fractures and intrude the hornblende and biotite quartz porphyry dikes. Tertiary hornblende andesite dikes are similar, but coarser grained than the Jurassic andesite dikes, containing abundant, acicular, black hornblende phenocrysts and occasionally plagioclase phenocrysts. Mid-Tertiary ash flow tuff units unconformably overlay the Mesozoic intrusive rocks in the southeast and western margins of the property.

### Mineralization

The MacArthur deposit is part of a large, partially defined porphyry copper system that has been complicated by complex faulting and possible post-mineral tilting. Events leading to the current geometry and distribution of known mineralization include 1) emplacement of primary porphyry copper mineralization; 2) supergene enrichment resulting in the formation of a widespread, tabular zone of secondary chalcocite mineralization below outcrops of totally oxidized rocks called a leached cap; 3) oxidation of outcropping and near-surface parts of this chalcocite blanket, as well as oxidation of the primary porphyry sulfide system coupled with partial remobilization of copper to form the upper zone of oxide copper now exposed in the MacArthur pit and throughout the MacArthur property. Oxide, chalcocite, and primary copper mineralization on the MacArthur property is hosted in both granodiorite and quartz monzonite, and in lesser amounts within quartz biotite-hornblende (monzonite) porphyry dikes, all of middle Jurassic age. Oxide copper is also hosted in northwest striking andesite dikes less than one to ten feet wide with contacts forming favorable loci for mineralization. Andesite dikes make up less than approximately one to two percent of the host rocks on the property. Fracturing and ground preparation supplied the passage ways for the copper to migrate.

Copper oxide minerals are exposed throughout Quaterra's MacArthur property, particularly in MacArthur pit walls as primarily green and greenish-blue chrysocolla  $\text{CuSiO}_3 \cdot 2\text{H}_2\text{O}$  along with black neotocite, aka copper wad ( $\text{Cu, Fe, Mn SiO}_2$ ), azurite  $\text{Cu}_3(\text{OH})_2(\text{CO}_3)$  and malachite  $\text{Cu}_2(\text{OH})_2\text{CO}_3$ , while tenorite ( $\text{CuO}$ ) was identified with the electron microprobe (Schmidt, 1996). Copper-enriched limonite was identified by Anaconda as the mineral delafossite ( $\text{CuFeO}_2$ ). Chalcocite has been identified in drill holes below the MacArthur pit and in drilling throughout the property. The sulfides digenite ( $\text{Cu}_9\text{S}_5$ ) and covellite ( $\text{CuS}$ ) have been identified petrographically in drill cuttings from the western part of the property. The oxide copper mineralization is strongly fracture controlled, coating joint and fracture surfaces and within shears and faults. Both green and black copper oxides are frequently found on 1-5 millimeter fractures, as coatings and selvages and may be mixed with limonite. The fractures trend overall N60°W to N80°W (bearing 300° to 280° azimuth) and generally dip to the north. Limited turquoise is found on the property, mainly in one- to five-millimeter veinlets. On a minor scale, oxide copper mineralization replaces feldspar phenocrysts in the igneous host units, favoring andesite.

A significant amount of chalcocite has been intersected in drillholes. Chalcocite is seen on drill chips or drill core coating pyrite and chalcopyrite as weak to strong coatings and is strongest when occurring around the MacArthur fault. Chalcopyrite is present as disseminations and veinlets, with or without chalcocite. As much of the historic drilling was stopped at shallow (<400 foot) depths, the scope and extent of chalcopyrite mineralization have not been fully defined.

Both copper oxide and chalcocite mineralization occur over approximately 9,000 feet east-west by 4,500 feet north-south. Copper oxides are structurally controlled coating fractures, joint surfaces, and developed as green or black “streaks” within shears and faults over several feet. Chalcocite may similarly be seen as grayish “streaks” within shears. Oxide mineralization exhibits a generally flat-lying geometry extending with good continuity 150 feet below surface and less continuously up to 600 feet below surface. Chalcocite mineralization generally occurs as flat-lying zones 50 feet or more in thickness, mixed with or below oxide mineralization.

Primary chalcopyrite mineralization occurs irregularly with chalcocite and as porphyry style disseminations or as veinlets in quartz monzonite associated with potassic alteration below both the oxide and chalcocite mineralization. Quaterra’s drilling program in the Gallagher area has delineated a zone of chalcopyrite mineralization that extends over a north-south distance of 2,500 feet. The primary sulfide zone has a defined width of 500 feet and extends to a depth of approximately 650 feet.

Porphyry copper style sulfide mineralization below the low-angle MacArthur fault zone at the North Porphyry Target has been defined over a distance of 2,500 feet between holes QM-68 and QM-164. Veinlet and disseminated primary chalcopyrite mineralization intercepted at a depth of 485 feet in QM-68 assayed 1.19% copper over a thickness of 110 feet. The same zone in QM-70 averaged 0.82% copper over a thickness of 60 feet at a depth of 420 feet and correlates to a thickness of 15 feet averaging 1.20% at a depth of 770 feet in hole QM-72. QM-100 intersected the sulfide mineralization with 0.58% copper over 65 feet. Approximately 1,000 feet to the north, hole QM-164 intercepted 64 feet of disseminated chalcopyrite mineralization in sodic altered granodiorite averaging 1.31% copper at a depth of 1,673 feet. The intercept includes a high grade zone of 29 feet averaging 2.21%. Mineralized zones within potassic halos in holes QM-165 to the west and in QM-163 to the east are consistent with those that could fringe a porphyry copper center.

#### Exploration and Drilling Results

Quaterra acquired the digitized Anaconda exploration and drilling data package in August 2006 and commenced a review of the deposit geology and mineralization model using Datamine software. The data was used to assess the required drilling and sampling to complete a technical report on the MacArthur Project with the objective of preparing a NI 43-101 compliant resource estimate.

The lateral zonation of supergene copper minerals visible at the surface, a possible chalcocite blanket to the north of the pit, and a large, pervasive phyllic alteration zone to the north and west of the mine workings, all suggested to Quaterra that the MacArthur deposit could have a potential for growth; both in the form of copper oxides and as primary sulfides in a related porphyry system.

In April 2007, the Company commenced a drilling program to twin approximately 10% of the shallow holes that defined the previously explored copper oxide mineralization at MacArthur and to identify extensions of copper oxide and chalcocite mineralization in the vicinity of the open pit. The 20-month drilling program totaled 80,100 feet in 173 holes including 23,900 feet of core in 49 holes and 56,200 feet of reverse circulation drilling in 124 holes. The drilling successfully targeted a deeper chalcocite zone in step-out holes from the pit, expanded the known oxide mineralization, and encountered a large, underlying tabular blanket of mixed oxide-chalcocite mineralization that overlies primary chalcopyrite mineralization verified by deeper drillholes in the western and northern margins of the drilled area.

Drilling on the MacArthur project was suspended through most of 2009 pending receipt of a Plan of Operations (POO) drilling permit. On October 28th the Company received the approval of the MacArthur POO and the BLM Record of Decision with a Finding of No Significant Impact (FONSI). The POO environmental assessment anticipates a total surface disturbance of 200 acres as a result of drilling activities throughout much of the project area.

Quaterra initiated a second phase of reverse circulation and deep core drilling in early December 2009. Completed in August 2010, the program tested the northern extension to higher grade acid soluble copper mineralization on 500 foot centers northwest of the pit in-filled on 500 ft centers an undrilled area west of the pit. In the southern Gallagher area, the program confirmed a band of continuous near surface oxide mineralization ranging in thickness from 15 to 60 feet over a distance of 1,900 feet between holes QM-155 and 156.

Three deep holes tested IPR anomalies to the north and northwest of the MacArthur pit where earlier drill holes intersected ore grade porphyry copper style sulfide mineralization below the low-angle MacArthur fault zone over a strike length of 1,000 feet. Hole QM-100, located 1,400 feet north of QM-68, intercepted porphyry-style chalcopyrite/biotite-chlorite veining at a depth 1,203 feet that assayed 0.58% copper over a thickness of 65 feet below the shallow-dipping MacArthur fault zone. QM-109, spotted on an IPR anomaly, failed to reach projected depth due to fractured, caving ground while QM-99 intersected massive pyrite impregnated breccia and scattered zones of secondary biotite and chlorite alteration; common elements of a porphyry system.

A total of 81,560 feet were drilled in 153 holes including 69,890 feet in 147 RC holes and 11,760 feet in 6 core holes during the 2011 drilling program. The program had the twin goals of enlarging and upgrading the status of the inferred resources through step-out and infill drilling and exploring for primary sulfide mineralization related to a copper porphyry system at depth.

The infill program encountered high grades of continuous chalcocite and copper oxide mineralization in zones averaging 40 feet or more in thickness along the western and northern margins of the deposit in the area referred to as the "Ridge Zone". To test the high-angle mineralized structures that form an important component of the acid-soluble copper deposit, the program was completed on 250-foot centers in areas with higher grade potential and encountered some of the highest grades and best intercepts of acid soluble copper mineralization ever drilled on the property. Hole QM-187, drilled 2,000 feet north of the MacArthur pit, intersected 90 feet of predominantly chalcocite mineralization averaging 1.66% total copper (TCu) starting at a depth of 310 feet. This intercept includes 40 feet assaying 3.49% TCu. Hole QM-180 along the northwestern margin of the zone intercepted 40 feet averaging 1.37% TCu at a depth of 360 feet.

Exploration for a deep porphyry system at MacArthur intercepted one of the best primary copper intercepts yet identified on the project with 64 feet of disseminated chalcopyrite mineralization in sodic altered granodiorite averaging 1.31% TCu at a depth of 1,673 feet. The intercept includes a high grade zone of 29 feet averaging 2.21% TCu. QM-164 also intercepted a shallower zone of both vein and disseminated chalcopyrite at a depth of 685 feet that averages 0.34% TCu over a thickness of 96.5 feet. QM-164 extended the mineralized zone identified in QM-100 a distance of 1,000 feet to the north where it remains open for extension.

#### Geophysics

Quaterra Resources contracted three surveys at the MacArthur project in 2011 and 2012. A borehole geophysical survey and a surface IP/resistivity (IPR) survey were carried out by Zonge International in 2011. A detailed helicopter magnetic survey was flown by Geosolutions Pty. Ltd. in 2012. These surveys supplement previous geophysical work on the property that includes: a 2009 IPR survey carried out by Zonge; a 2007 helicopter magnetic survey carried out by EDCON-PRJ; a series of historic aeromagnetic surveys (1966 to 1975) available in analog form from the Anaconda Archives; and a series of historic IPR surveys (1963 – 1964) carried out by Kennecott Exploration Services/Bear Creek Mining Company and Superior Oil.

The mineralized system at MacArthur has an anomalous IP and resistivity response first detected in the Kennecott and Superior Oil IPR surveys in the 1960's. The Quaterra 2009 and 2011 IPR surveys confirmed the reliability of the earlier surveys and further defined the depth extent of the IP anomalies. The 2009 and 2011 Quaterra surveys confirmed that the 1963-64 Kennecott data is of good quality and is useful for mapping anomalous IP zones within the upper 1,000-1,200 feet from the surface. Below this depth, the older data cannot effectively resolve the bottom of the IP anomalies nor determine if any of the anomalies extend to great depths.

The 2009 and 2011 data sets show this increased depth of exploration is important. Portions of the IP response are flat lying with limited depth extent. However both the 2009 and 2011 surveys have identified anomalous IP responses with depth extent in excess of 2000 feet and possibly feeder zones of the near surface zones. In 2011 two borehole IP surveys were run that demonstrate Quaterra's ability to explore for deep sulfide responses below the depth of exploration of surface techniques.

The modern data maps subtle low resistivity features which are interpreted to be porphyry alteration systems and have identified anomalous IP responses that extend under post-mineral volcanic cover to the north and west of the main MacArthur system. These buried anomalies are high priority drill targets.

Two high resolution helicopter magnetic surveys were flown over the MacArthur project in 2007 (EDCON-PRJ) and 2012 (Geosolutions). The modern, high resolution data has a broad frequency bandwidth and will be used for 3D modeling and exploring beneath the magnetic volcanic cover.

#### Sampling, Analysis and Security of Samples

Quaterra has explored the MacArthur property with both reverse circulation (RC) and diamond core drilling methods. Reverse circulation holes were drilled by Diversified Drilling LLC, Missoula, Montana, USA, DeLong Construction Inc., Winnemucca, Nevada, USA and by Leach Drilling Inc., Silver Springs, Nevada, USA. During 2007-2008 the core drilling was contracted to Kirkness Diamond Drilling of Dayton, Nevada, USA and Kirkness Brothers Diamond Drilling (aka KB Drilling Co, Inc) of Carson City, Nevada, USA. Major Drilling America, Inc., Salt Lake City, Utah, conducted core drilling during 2009-2010. Core drilling during 2011 was contracted to Ruen Drilling Inc, Clark Fork, Idaho, USA. The RC crews ran one 10-12 hour shift per day; the core drill crews operated 24 hours per day.

The MacArthur drilling program is supervised in the field by the project geologist for monitoring recovery, proper sample handling and accuracy in labeling. Drill core (HQ diameter) and reverse circulation samples are delivered from the drilling rigs to the core and sample storage facility in Yerington by the drillers at the end of each 12 hour shift for logging and sampling by the project geologists.

At the core storage/logging facility, core is photographed, measured, core recovery calculated, and the rock types, alteration minerals, textural features, structures, veining, and mineralized zones documented. Sample intervals on the first three holes were fixed at 5 feet. In subsequent drill holes the sample intervals are taken at each of the core runs marked by the driller's blocks. Exceptions are where full recovery occurs in numerous, short core runs in intervals less than about 6 feet, or where the geologists visually selected sample intervals based on rock type or structure. Sample intervals are measured and marked with permanent marker, orange ribbon and aluminum tag that is stapled to the core tray showing the sample number. Where the core sample is coherent a line is drawn with permanent marker along the stick so that it is sawn in half perpendicular to the "grain" in order to get a representative split. The core is stored on pallets to be picked up by the analytical laboratory.

When core from the project arrives at the laboratory, it is split, using a core saw, into halves and one half of each interval is placed into a sample bag that is marked with the sample number. The sample is then dried, crushed to -10 mesh, rotary split to 1,000 grams, pulverized to -150 mesh, and split to 350 gram pulps. The pulps are assayed for total copper using a 2 gram-3 acid volumetric ore grade atomic-absorption (AA) spectroscopy analysis. The solution from the total Cu analysis is assayed by inductively coupled plasma (ICP) spectrometry for 34 elements. The acid soluble copper oxide (asCu) content of the sample is then analyzed by using a weak, sulfuric acid solution leach of a 1 gram pulp. The acid leachable copper sulfide content is analyzed by using ambient temperature concentrated sulfuric acid and hydrated ferric sulphate to determine Ferric Sulfate Soluble Copper (FSCu) content. Internal quality assurance and quality control procedures include the insertion of standards and duplicates into the sample sequences. Rejects from the previously analyzed samples are also sent to another accredited laboratory for check analyses. The remaining half core is placed back into the core box in its original position and the core boxes are returned to the Yerington core storage/logging facility by the laboratory truck, where it is then stacked and stored in order and by hole number. Reject and pulps are also returned with the core to the Yerington facility for archiving.

American Assay Laboratories (AAL) located in Sparks, Nevada prepared and assayed samples from the MacArthur drilling program in 2007. AAL is ISO/IEC 17025 certified and participates in CANMET, PTP MAL certification analyses twice a year and in GEOSTATS, SMA, and IOAG testing twice a year. Core samples from subsequent programs have been prepared and analyzed by ISO17025 compliant ALS Chemex Laboratories in Sparks, Nevada and Skyline Assayers and Laboratories (Skyline) in Tucson, Arizona.

The MacArthur reverse circulation drilling program is supervised in the field by the project geologist for sample accuracy, proper handling and accuracy in labeling. Methods and procedures for splitting and packaging of samples are conducted such that the quality of the sample splitting meets or exceeds standards required under NI 43-101 and a chain of custody starts with the drillers collecting, splitting and bagging of RC drill cuttings.

For logging of drilled lithologies, a continuous chip sample is collected in a plastic chip tray over five foot intervals and stored for logging by the project geologists. A 5/16 continuous split of five foot sample intervals is collected for assaying from 5.2 inch diameter drill holes through a wet splitter mounted on the rig. The samples are placed in sample bags and transported from the drilling rig to the Company's storage facility in Yerington at the end of each 12 hour shift. The samples are then inventoried by Company personnel, dried, placed on pallets, wrapped in plastic and shipped via United Parcel Service to the Skyline laboratory in Tucson, Arizona for sample preparation and assaying. Rejects and pulps are returned to the Yerington facility for archiving.

Skyline Assayers & Laboratories is accredited by the American Association for Laboratory Accreditation (A2LA - certificate no. 2953.01) in the Chemical field of Testing. Skyline is a recognized industry leader for all types of base metal, ferrous and non-ferrous analysis including high quality ore-grade assays, sequential copper analyses of ores, and umpire assays of metallurgical products. The Tucson laboratory has provided analytical service to the copper mining industry for over 70 years.

At Skyline, the RC samples are crushed to plus 75% passing a -10 mesh, split and pulverized at the Skyline laboratories for assay using analytical techniques as described for the core drilling program. Internal quality assurance and quality control procedures include the insertion of standards into the sample sequences. Rejects from the previously analyzed samples are sent to ALS Chemex Laboratories in Sparks, Nevada for check assays.

#### Mineral Resources

Tetra Tech, Inc. ("Tetra Tech") of Golden, Colorado completed an updated NI 43-101 compliant independent resource estimate for the May 23, 2012 MacArthur Copper Project Preliminary Economic Analysis (PEA). The Tetra Tech estimate concludes that the MacArthur project contains a measured and indicated oxide/chalcocite resource of 159.1 million tons averaging 0.212% total copper (TCu) that contains 675.5 million pounds of copper using a cut-off 0.12% TCu; an inferred oxide/chalcocite resource of 243.4 million tons averaging 0.201% TCu that contains 979.5 million pounds of copper at a cutoff of 0.12% TCu; and an inferred primary sulfide resource of 134.9 million tons averaging 0.283% TCu that contains 764.0 million pounds of copper at a cut-off of 0.15% TCu.

A summary of Tetra Tech's updated resource estimate is shown below:

#### MacArthur Copper Project Oxide and Chalcocite Material

Cutoff Grade (%TCu)	Tons (x1000)	Average Grade (%TCu)	Contained Copper (lbs x 1000)
Measured and Indicated Copper Resources			
0.12	159,094	0.212	675,513
0.20	65,421	0.286	374,601
0.25	29,859	0.364	217,075
Inferred Copper Resources			
0.12	243,417	0.201	979,510
0.20	82,610	0.293	483,929
0.25	43,695	0.356	311,108

#### MacArthur Copper Project Primary Material

Cutoff Grade (%TCu)	Tons (x1000)	Average Grade (%TCu)	Contained Copper (lbs x 1000)
Measured and Indicated Copper Resources			
0.15	1,098	0.292	6,408
0.20	670	0.369	4,938
0.25	507	0.416	4,216
Inferred Copper Resources			
0.15	134,900	0.283	764,074
0.20	89,350	0.341	609,188
0.25	53,060	0.423	449,312



Tetra Tech used 0.12% Cu (or TCu) as the base case cutoff grade for the leachable resource while applying a base case a 0.15% Cu cutoff grade for the primary sulfide resources. Both of these values are believed representative of actual operating cutoff grades in use as of the date of this report. It is the conclusion of Tetra Tech that the MacArthur Mineral Resources meet current CIM definitions for classified resources.

The updated mineral resource estimate was generated using drill hole sample assays results and the interpretation of a geologic model which relates to the spatial distribution of copper in the MacArthur deposit. Interpolation characteristics have been defined based on geology, drill hole spacing and geostatistical analysis of the data. A block size of 25 feet by 25 feet by 20 feet and an assay composite length of 10 feet were defined to best reflect both the drill hole spacing and current geologic model.

The database provided by Quaterra contained the pertinent drill hole and assay information for the MacArthur Copper deposit. The database contained 737 drill holes of which 676 drill holes from Quaterra and Anaconda (sometimes referred to as the Metech holes) were used. The 61 holes removed included holes with limited or no information on the assays (Pangea Gold 1991, Superior, USBM 1952, Anaconda 1955-57), and six Quaterra holes outside the model limits. Of the 676 holes used, there are 280 Anaconda (Metech) RC holes and 396 Quaterra holes (58 core and 338 RC holes). These drill holes traversed 257,895 feet, producing 51,258 total copper sample assay values at a nominal five feet in length. The variables available in the database are for total copper from Quaterra and Anaconda intervals, and acid-soluble copper, a limited number of ferric sulfate soluble (QLT) copper assays and a very limited number of cyanide leach copper assays from Quaterra holes.

A total of twenty-two (21 directional and a omni-directional) variograms were calculated using MicroModel® for each MinZone within each area. The program searches along each direction for data pairs within a 12.5 -degree window angle and 5-feet tolerance band. All experimental variograms are inspected so that spatial continuity along a primary, secondary and tertiary direction can be modeled. Each variogram model was then validated using the “jackknifing” method. This method sequentially removes values and then uses the remaining composites to kriging the missing value using the proposed variogram.

To classify the total copper resources Tetra Tech used an approach that takes into account the spatial distribution of the drilling, the distance to the nearest data points used to estimate a block, and finally the relative kriging error generated by the estimate. Tetra Tech has found this approach to be very robust and provide highly reproducible results.

The Qualified Person for the updated MacArthur resource estimate is Dr. Rex Clair Bryan with Tetra Tech.

#### Metallurgy

The MacArthur Project has a long history of metallurgical testing from 1976 through 2011 including bottle roll and column leach testing and full scale heap leach operations. Anaconda performed the first test work in 1976 and multiple subsequent owners continued test work through 2011. The most comprehensive test work was performed by Quaterra during 2010 and 2011. Quaterra contracted METCON Research of Tucson, Arizona to run a substantial number of bottle roll leach tests along with 32 column leach tests, on samples from 27 large diameter (PQ) size core drill holes. These drill holes provided reasonable representivity of the MacArthur Project mineral resources. The testwork, both historic and that most recently performed, shows the mineralized material is amenable to standard heap leaching with good copper extraction.

Considering both recent and historical test work, along with information from previous mining operations at the MacArthur site, the design basis for the M3 MacArthur Copper Project May 23, 2012 Preliminary Economic Assessment (PEA) considers a ROM heap leach operation with processing of the pregnant leach solution (PLS) through traditional solvent extraction / electrowinning (SX/EW). Copper extraction is predicted to range between 60 and 70 percent depending on material type. Acid consumption projections range between 30 and 35 pounds of acid per ton of material. The historic MacArthur Pit contains 133 million tons of oxide material which is predicted to yield 70% copper extraction with acid consumption of 30 pounds of acid per ton of material leached. Material from the MacArthur pit is predominately mined and processed over the first 7 years of operation.

The leach pad will be constructed using an HDPE liner system meeting Nevada requirements (NR 455). Conventional solvent extraction will be used. Electrowinning will include permanent mother blank stainless steel technology and harvesting of Grade A copper cathode on a 7 day pull schedule. All process facilities will incorporate proven industry standard designs and equipment.

The Qualified Person for the metallurgical portion of the MacArthur Copper Project PEA is Dr. Richard Jolk of Tetra Tech.

#### Preliminary Economic Assessment

M3 Engineering & Technology Corp. ("M3") of Tucson, Arizona completed a preliminary economic assessment ("PEA") for the MacArthur project on May 23, 2012. The study concluded that the project has potential for development as a large-scale copper oxide heap leach operation that would provide long-term cash flows for a relatively modest capital outlay. The PEA set out the following key project parameters:

- An open pit mine based on an acid soluble measured and indicated copper resource model of 159 million tons at 0.212% copper and an inferred resource of 243 million tons at 0.201% copper.
- Recovery of 747 million pounds of copper over the 18-year mine life at an average mining rate of 15 million tons per year with a waste to ore stripping ratio averaging 0.90.
- Initial capital expenditure of US\$232.7 million.
- Average life-of-mine operating costs of US\$1.89 per pound.
- An after tax net present value ("NPV") of US\$201.6 million at an 8% discount rate and a base case copper price of US\$3.48 per pound. (The project breaks even at a copper price of \$2.56 per pound until the capital is paid off in 3.1 years. Thereafter, the breakeven is US\$2.23 per pound.)
- An after tax internal rate of return ("IRR") of 24.2% with a 3.1-year pay back.

Mine operating costs were provided by Independent Mining Consultants Inc. ("IMC") of Tucson, Arizona, based on an average 41,000 ton per day mine plan.

The project financials were enhanced by including in the above cash flows a sulfuric acid plant at the site compared to purchasing and transporting acid to the site. An on-site acid plant provides more long term certainty for the highest operating cost item (sulfuric acid), reduces the requirement for purchased electric power, and would leverage future consolidation and development of other oxide deposits in the District.

The SX/EW capital cost estimate was prepared based on recent M3 in-house information of similar SX/EW facilities. It includes the heap leach pads, SX/EW facility and tank farm based on a design flow rate of 10,400 gal/min. Additional upfront capital costs were included for mining equipment and infrastructure improvements (power, water, roads) needed at the site. Capital costs are considered accurate to -20% to +25%.

The Qualified Person for the preliminary economic assessment is Mr. Rex Henderson with M3. The Qualified Person for the mining portion of the report is Herb Welhener of IMC. The NI43-101 MacArthur Copper Project may 23, 2013 PEA is available at [www.sedar.com](http://www.sedar.com).

#### Future Plans

The results of the PEA are being used to determine what additional drilling will be required to bring the project to a prefeasibility status and to evaluate the potential to integrate the MacArthur resource into a larger operation that includes the Yerington Copper resource. This stage of a project generally includes additional infill and condemnation drilling, metallurgical testing and geotechnical work as well as environmental studies, permitting and engineering.

Some of the options being considered to add additional value to the project include:

- Processing the Yerington site oxide residuals as part of a District-wide oxide project.
- Additional drilling particularly at the north end of the MacArthur site to investigate integrating both deeper acid- soluble and primary sulfide copper into an expanded MacArthur mine plan.
- Pit studies to raise grades, lower the strip ratio and optimize production rates.
- Inclusion of other smaller oxide deposits on the Company's land position in the Yerington Copper District.

## **Yerington Copper Project – Nevada, USA**

### **Acquisition and Staking of Claims**

The Yerington Copper project property totals approximately 11 square miles. The project mineral rights consist of 2,768 acres of fee mineral properties and patented mining claims as well as 201 unpatented lode claims totaling 4,153 acres on lands administered by the US Department of Interior, Bureau of Land Management (BLM).

On May 1, 2007, Quaterra's wholly owned subsidiary, Singatse Peak Services LLC (SPS) received the bankruptcy court approval for the acquisition all assets of Arimetco, Inc. (Arimetco) in the Yerington Mining District, subject to completion of due diligence. The purchase price comprised US\$500,000 cash, 250,000 of the Company's common shares and a 2% net smelter return royalty capped at US\$7.5 million dollars on production from any claims owned by the Company in the Yerington and MacArthur mine areas.

Private land, patented claims, and 23 unpatented mining claims related to the Yerington Copper project were acquired by SPS from the Arimetco bankruptcy court in April, 2011. The acquisition followed three years of due-diligence studies and negotiations with state and federal agencies and the receipt of Bona Fide Prospective Purchaser (BFPP) letters from the US Environmental Agency (EPA), the Nevada Division of Environmental Protection (NDEP) and the BLM to protect SPS from liability emanating from activities of the former mine owners and operations.

Private properties related to the Arimetco acquisition are located in Township 13 North, Range 25 East in Sections 4, 5, 8, 9, 16, 17, and 21, and patented claims are located within Township 13 North, Range 25 East in Sections 16, 17, 19, 21, 31, and 32 and in Township 13 North, Range 24 East in Sections 22-25 and 36. An additional 434 unpatented claims in Sections 1, 2, 11-13, 22- 27, 35, and 36 Township 13 North, Range 24 East and in Sections 4- 9, 16- 21, and 30-32 Township 13 North, Range 25 East, Mount Diablo Base & Meridian were staked prior to or subsequent to the acquisition by SPS.

### **Expenditures to Date**

Acquisition costs incurred by the Company to December 31, 2012 were \$3,193,862 (2011 - \$2,803,906) and exploration expenditures were \$6,521,961 (2011 - \$3,623,164) for a total of \$9,715,823 (2011 - \$6,427,070).

### **Location, Access and Infrastructure**

The Yerington Copper Property is located near the geographic center of Lyon County, Nevada, US, along the eastern flank of the Singatse Range. The property centers on the historical Yerington open pit mine, flanked on the west by Weed Heights, Nevada (a small private community; the original company town of The Anaconda Company) and on the east by the town of Yerington, Nevada. The property is easily accessed from Yerington by a network of paved roads that were used as principal transportation and access routes during the former operating period of the Yerington Mine. SPS controls approximately 8,600 acre feet of groundwater rights and the Yerington pit contains an estimated 37,000 acre feet of water. Power is available on site at the Yerington Mine area. Nevada Energy operates a 30 million kW propane-fired, electrical generating power plant within ten miles of the site. The power infrastructure at the Yerington Mine site is expected to be readily available for a future mining operation due to the historical mine operations at the site. Topographic coverage is on US Geological Survey "Yerington" and "Mason Butte" 7.5' topographic quadrangles. The nearest major city is Reno, Nevada, approximately 80 miles to the northwest.

### **History**

Recorded production in the Yerington mining district dates back to 1883 (Moore, 1969) as prospectors were attracted to and investigated colorful oxidized copper staining throughout the Singatse Range. Knopf (1914) reported that oxidized copper cropped out at the historic Nevada-Empire mine located above the south center of the present-day Yerington open pit. Knopf does not show or reference other mines or prospects that are underlain by the Yerington open pit footprint, as gravel and alluvial cover obscure bedrock over an approximate 0.75 mile radius around the Nevada-Empire Mine.

Information is sparse for the period from Knopf's reporting in 1914 until World War II, although it is likely that lessees worked the Nevada-Empire during spikes in the copper price. Private reports (Hart, 1915 and Sales, 1915) describe ore shipments and planned underground exploration from a northwest striking, southwest dipping structure at the historic Montana-Yerington Mine area located approximately one mile west of the present-day Yerington pit.

During the 1940s, The Anaconda Company (Anaconda), at that time one of world's major copper producers, outlined a 60-million-ton resource over the Yerington pit. During the early 1950s, the US government, citing the need for domestic copper production, offered "start-up" subsidies to Anaconda to open a copper mine in the Yerington district. Anaconda sank two approximately 400-foot-deep shafts in the present-day open pit and drove cross cuts to obtain bulk samples of oxidized rock for metallurgical study. Anaconda began operating the Yerington Mine in 1952 and mined continuously through 1979, producing approximately 1.744 billion pounds of copper from an ore body that contained 162 million tons averaging 0.54% Cu. Approximately 104 million tons of this total were oxidized copper ore that was "vat-leached" with sulfuric acid in 13,000-ton cement vats on a seven day leach cycle. Sulfide ores were concentrated on site in a facility that was dismantled and sold following termination of mining in 1979.

In 1976, all assets of The Anaconda Company, including the Yerington Mine, were purchased by the Atlantic Richfield Company (ARCO) who in 1979 shut down dewatering pumps in the pit and closed the Yerington Mine due to low copper prices. In 1982, ARCO sold the entire Yerington Mine complex and Weed Heights town site to Mr. Don Tibbals of Yerington, Nevada, who scrapped the plant and equipment. At closure, before dewatering pumps were shut off, the Yerington mine plan hosted a pre-stripped, non NI 43-101 compliant historic "reserve" of 98 million tons averaging 0.36% Cu containing approximately 696 million pounds of copper (K. L. Howard, Jr., Anaconda Internal Memo, 1979) within the ultimate pit design. The (Howard, 1979) historic estimate was prepared from a geologic section calculation using a 0.2 %TCu cut-off grade. Although the 1979 estimate contained no classification for measured, indicated, or inferred resources as defined by NI 43-101, the total estimate compares favorably to Tetra Tech NI43-101 compliant independent resource estimate completed in February 2012. An additional 22.8 million tons of material containing 136.8 million pounds copper was identified adjacent to the pit in this historic estimate. The (Howard, 1975) memo addressing this material is considered a reliable historic estimate because it cites mine reconciliation calculations and geologic projections from drill holes using a 0.2% Cu grade cut-off in an internal Anaconda memo by T. Leigh to W.C. Norem (1979).

In 1989, Arimetco Inc. (Arimetco) purchased the mine property from Tibbals, commissioned a 50,000-pound-per-day solvent extraction/electrowinning plant, and began heap leaching "sub-grade" dump rock stripped from the Yerington pit by Anaconda. Arimetco also added an unknown tonnage of "vat leach tailings" (minus 3/8 inch oxidized tailings leached during Anaconda's operation) to some heap leach pads (HLP's) as well as trucking oxidized ore from the MacArthur property located approximately five miles north of the Yerington mine site. Arimetco produced some 95 million pounds of copper from 1989 to 1999 before declaring bankruptcy due to low copper prices and abandoning the property.

Soil and groundwater contamination, alleged to stem from the former mining operations at Yerington, have been identified on the property. As a result, a portion of the property acquired by SPS in 2011 is now under the jurisdiction of the EPA. Liability for the contamination on site is the responsibility of a third party which is actively engaged in remedial investigation and remediation activities under the supervision of the EPA.

In order to establish SPS's position and rights, the acquisition by SPS of the Arimetco properties required a series of rigorous environmental, legal, and technical due diligence studies. The Chambers Group Inc. and Golder Associates Inc. completed a Phase 1 Environmental Site Assessment Report to allow SPS to establish liability protection as a bona fide prospective purchaser (BFPP). Prior to closing on the property, SPS received letters from the Nevada Department of Environmental Protection (NDEP), US Bureau of Land Management (BLM) and the USEPA indicating the post-closing requirements then applicable to the Site for SPS to maintain its defense to liability as a BFPP regarding the activities of the former mine owners and operators.

#### Geology and Mineralization

The Yerington property includes both the Yerington Deposit (Yerington Mine) and a portion of the Bear Deposit which represent two of three known porphyry copper deposits in the Yerington copper district. The porphyry systems are hosted in middle Jurassic intrusive rocks of the Yerington Batholith. Unless noted otherwise, the following discussions refer to the Yerington Deposit

Mineralized porphyry dikes associated with three phases of intrusive activity related to the Yerington Batholith form an elongate body of mineralization that extends 6,600 feet along a strike of N118°E. The mineralization has an average width of 2,000 feet and has been defined by drilling to an average depth of 250 feet below the Yerington Mine pit bottom at the 3,800-ft elevation. Because of the economic constraints of low copper prices at the time, many of the 558 historic Anaconda drill holes used in the SPS study were stopped in mineralization and very few were drilled below the 3,400-ft level where the porphyry system remains nearly unexplored.

Only four historic holes have actually explored the deep vertical projection of copper mineralization in the pit. Three of the holes were drilled along a single N-S oriented section through the center of the pit. According to M. T. Einaudi in an internal 1970 Anaconda report, the deep drilling program defined a series of nested, concave upward, grade shells that are elongated down the N 70° dip of the dikes with the 0.2% Cu zone extending to approximately the 2,600-ft level; an overall dip distance of 2,200 feet. Although the program encountered an increasing ratio of pyrite to chalcopyrite, there was no indication of a “barren core”, the porphyry dikes showed a “remarkable continuity” down dip and molybdenum mineralization became more abundant with increasing depth.

The orientation of the Yerington Deposit is due to mid-Tertiary extensional faulting that rotated the near vertically-emplaced batholith 60° to 90° westerly. The west to east dilation-displacement positioned the porphyry copper deposit on its side, resulting in a cross section of the of the porphyry system visible in the pit with its top toward the west end. Mining has revealed an alteration geometry displaying the original pyrite-rich cap (present-day leached sericite-limonite on the west end of the Yerington pit, grading downward easterly to quartz-sericite-pyrite alteration and potassic alteration in the central portion of the pit, continuing to a soda-flooded root zone at the eastern end).

Secondary oxide copper formed much of the upper Yerington Deposit. Chrysocolla was the dominant copper oxide mineral, occurring as fracture coatings and fillings to a depth of approximately 400 feet below the surface. Below the 4,100-ft level, chalcopyrite is the dominant copper sulfide mineral with minor bornite primarily hosted in A-type quartz veins in the older porphyry dikes. The un-mined mineralized material below the current pit bottom is primarily of chalcopyrite mineralization.

The Bear Deposit, located partially in the northeast corner of the Yerington Mine property, was discovered in 1961 by Anaconda during condemnation drilling in the sulfide tailings disposal area. The program identified chalcopyrite mineralization hosted in a porphyry system below 500 to 1,000 feet of valley fill and unmineralized bedrock. The mineralization is related to micaceous veining rather than A-type quartz veining common in the Yerington Mine porphyry system. Historic (not NI 43-101-compliant) resources estimated for the Bear Deposit are more than 500 million tons of material averaging 0.4% copper (Dilles and Proffett, 1995). The reference for this estimate does not include information regarding cut-off grade or methods used for the calculation and does not delineate categories for the resource. The estimate is considered reliable as it was calculated by the author who was the principal geologist with Anaconda (one of the world’s premier copper companies of the time) responsible for the Bear drilling program in 1967. The Bear deposit is known to extend beyond the boundaries of SPS properties and the percentage of the estimated resource controlled by SPS is unknown.

#### Exploration and Drilling Results

Exploration work on the Yerington Copper project commenced with a technical review of all available historical information relating to mineralization in and around the Yerington pit. A huge inventory of Anaconda data was available at the Anaconda Collection – American Heritage Center, University of Wyoming at Laramie. Approximately 10,000 pages of drill hole records from the library were scanned. The records included drill hole lithology, assays, and/or survey coordinates for almost 800 drill holes. Although some holes contained only lithologic or assay summary information, 558 holes contained adequate detailed assay, hole location and orientation information to be used in a resource estimation. Core from historical drilling left on site by Anaconda was photographed, described and selected intervals from 45 Anaconda core holes were shipped to Skyline Labs for re-assay.

Information obtained from the review of historical information was used to guide a two-pronged program of drilling during the last half of 2011. A total of 21,856 feet were drilled in 42 holes. The core holes and four RC holes were drilled to twin Anaconda core holes, while the remaining RC holes were targeted for expansion of mineralization laterally and below historic drill intercepts along the perimeter of the Yerington pit to support a NI 43-101 compliant resource estimate and technical report.

The data review and drilling results of the 2011 program clearly indicated that mineralization at Yerington is open to depth and along strike. Many of the historic holes in the pit were stopped in mineralization. Drill hole intercepts along the western edge of the pit are some of the best in the SPS database. Twin hole SP-04, drilled by SPS at the northwest end of the pit, intercepted 524.5 feet averaging 0.35%TCu starting at a depth of 228 feet including 88 feet of 0.69%TCu at a depth of 265 feet. Exploration hole SP-36, located along south central margin of the pit intercepted 95 feet averaging 0.28% TCu at a depth of 230 feet. Details of the 2011 drilling program are in the NI 43-101 compliant technical report for the Yerington Copper Project completed by Tetra Tech, Inc. of Golden, Colorado in February 2012.

A drilling program to sample residuals (historic dumps and tailings) at the Yerington site was completed in September 2012. A total of 9,585 feet of sonic drilling in 95 holes have provided material for the characterization of the vat leach tails, heap leach pads, and the W-3 sub-grade waste dump. The samples have been sent to Metcon Labs in Tucson, Arizona for metallurgical testing. These residual resources, historically estimated to total 124 million tons of mineralized material, reflect a notable potential to enhance the MacArthur project once they become NI 43-101 compliant.

In September 2012, SPS reached a voluntary agreement with the U.S. Environmental Protection Agency (EPA) to participate in upgrading the system which manages fluids from the historic mining operation at the Yerington mine site. In exchange for SPS's participation in this work, the Company obtained a site-wide 'Covenant Not to Sue' for the contamination left at the site by former owners and operators of the historic mine operations. The agreement provides for improvements to the site and allows SPS to continue exploration at the site while working cooperatively with the EPA, Nevada Department of Environmental Protection and the community. The Agreement's 'Covenant Not to Sue' strengthens SPS's 'Bona Fide Prospective Purchaser Defense' against liability resulting from the contamination at the site prior to SPS's purchase. It is understood that by privately funding the project EPA can continue to manage the site in an appropriate manner without the immediate necessity to list the site on the National Priorities List (often referred to as the Superfund). SPS sees this as a positive step toward our goal of developing the Yerington mine site as well as our other assets in the Yerington Copper District.

The first phase of the fluid management project was completed in Q4. SPS co-funded the repairs to the on-site fluid management system by the EPA as well as the relining of one of the system ponds. Phase 2 requires SPS to complete a study of the entire fluid management system to determine what additional repairs or other modifications are necessary to ensure that the system is capable of handling the fluids from the former mine operations for a period of five years. In Phase 3, SPS will work with the EPA to determine which, if any, of the conclusions of the study should be implemented. SPS may elect to fund half of those repairs. All phases of the work are co-funded by the Atlantic Richfield Company, the predecessor owner and operator of the Yerington mine site and which company the EPA has identified as a potentially responsible party for a portion of the site.

#### Sampling, Analysis and Security of Samples

Tetra Tech's review of sample preparation, handling, analyses, and security procedures for the Yerington drilling and sampling program has determined that the Company's current practices meet NI 43-101 and CIM defined requirements.

Samples taken during the period from 1952 to 1979, when Anaconda operated the Yerington Mine, including samples used for the determination of mine head grades, lithology, densities, and metallurgical performance were determined by Tetra Tech to be representative of the deposit. While no details are available regarding Anaconda's exact assaying protocol and quality control during the period the Yerington copper mine was operating, public records of profit and cost confirmed that the techniques and procedures implemented conformed to industry standards for that era.

SPS explored the Yerington Mine Copper property with both RC and diamond core drilling methods. The drilling program was supervised in the field by the project geologist for monitoring recovery, proper sample handling and accuracy in labeling. Approximately 4,300 samples were collected during the 2011 program and shipped for sample analyses. The samples were analyzed for total copper (TCu), gold, and a 47 element trace element package. Samples representing oxide mineralization and acid soluble sulfide copper were also analyzed for acid soluble copper and for ferric sulfate soluble copper. Rock quality designations (RQD) and magnetic susceptibility measurements were taken on all core which was photographed following geologic logging.

The RC samples are collected in a conventional manner via a cyclone and standard wet splitter, placed in cloth bags that are pre-marked by SPS personnel at five-foot intervals and include a numbered tag inserted into a plastic bag bearing the hole number and footage interval. Collected samples, weighing approximately 15 to 20 pounds each, are wire tied and then loaded onto a ten-foot trailer with wood bed allowing initial draining and drying. Each day SPS personnel or the drillers at the end of their shift, haul the samples to SPS's secure sample preparation warehouse in Yerington, Nevada where the samples are dried, loaded on plastic lined pallets, weighed, and trucked by Skyline Assayers & Laboratories (Skyline) personnel to Skyline's sample preparation facility in Battle Mountain, Nevada. A chain of custody form accompanies all shipments from Yerington to Battle Mountain. Once Skyline preps each sample in its Battle Mountain facility, approximately 50 gram sample pulps are air-freighted to Skyline's analytical laboratory in Tucson, Arizona for analyses and assay.

Samples from the core drilling program are handled in a similar manner. Core samples with a diameter of approximately 2.75 -inches (HQ) are placed in wax-impregnated, ten-foot capacity cardboard boxes and delivered to SPS's secure sample warehouse in Yerington, Nevada by the drill crew following each 12-hour shift. The core is logged by a SPS geologist who marks appropriate sample intervals (one to nominal five feet) with colored flagging tape. Lines are marked along the length of core with red wax crayons to indicate where the core piece should be sawed. Each core box, bearing a label tag showing drill hole number, box number, and box footage interval, is then photographed. Rock quality designations (RQD), magnetic susceptibility, and recovery measurements are taken. Core is then loaded on a pallet, shrink wrapped, and secured with wire bands for trucking by Skyline personnel to Skyline's sample preparation facility in Battle Mountain, Nevada. The core is sawed in half by Skyline personnel, one half designated for sample preparation/assay, the second half placed in its core box for return to SPS. Chain of custody procedures for core shipments picked up by Skyline at the SPS core shed follow the format for RC samples.

Drilling samples from the Yerington Copper Project were analyzed by Skyline in Tucson, Arizona, which is accredited by the American Association for Laboratory Accreditation (A2LA - certificate no. 2953.01) and by ISO17025-compliant ALS Minerals Laboratories in Sparks, Nevada. SPS implements a quality assurance and quality control assay protocol whereby either one blank or one standard is inserted with every ten samples into the assay stream. Rejects from the previously analyzed samples are sent to ALS Minerals in Reno, Nevada for check assays.

#### Mineral Resources

Tetra Tech, Inc. of Golden, Colorado completed a NI43-101 compliant independent resource estimate and technical report for mineralization in and around the historic Yerington Mine in February 2012. Using a cutoff of 0.2% TCu, the Yerington Mine's measured and indicated primary copper resource totals 71.8 million tons averaging 0.30% TCu and contains 430 million pounds of copper. An inferred primary copper resource of 63.9 million tons averaging 0.25% TCu contains 323 million pounds of copper. Acid-soluble oxide/chalcocite mineralization includes a measured and indicated resource of 9.4 million tons averaging 0.30% TCu (57 million pounds of copper) and an inferred resource of 8.6 million tons averaging 0.28% TCu (47 million pounds of copper).

A summary of the February 2012 resource estimate is shown below:

#### Yerington Copper Project Oxide and Chalcocite Material

Cutoff Grade (%TCu)	Tons (x1000)	Average Grade (%TCu)	Contained Copper (lbs x 1000)
Measured and Indicated Copper Resources			
0.12	18,391	0.23	85,886
0.20	9,445	0.3	57,237
0.25	5,563	0.36	39,953
Inferred Copper Resources			
0.12	24,703	0.2	97,873
0.20	8,596	0.28	47,347
0.25	4,215	0.33	28,021

#### Yerington Copper Project Primary Material

Cutoff Grade (%TCu)	Tons (x1000)	Average Grade (%TCu)	Contained Copper (lbs x 1000)
Measured and Indicated Copper Resources			
0.15	93,893	0.27	507,961
0.20	71,781	0.3	429,968
0.25	46,991	0.34	318,599
Inferred Copper Resources			
0.15	123,366	0.21	529,734
0.20	63,918	0.25	322,530
0.25	26,700	0.29	157,103

Based on benchmarking of the Yerington Deposit to similar deposits, Tetra Tech has determined that reasonable base case cutoff grades for the leachable (oxide/chalcocite) SX/EW recoverable copper and for flotation recoverable primary sulfide resources are 0.12% and 0.15% TCu, respectively.

The data show that the possibility exists to expand the resource as mineralization extends beyond the limit of current drilling, particularly below the pit and on its western end.

The results of the NI 43-101-compliant resource estimate compare favorably to the noncompliant estimates of copper remaining in and around the Yerington pit after the mine shut down (K. L. Howard, Jr., Anaconda Internal Memo, 1979). The 1979 estimate contained no classification for measured, indicated, or inferred, so direct comparison can only be made when considering all classes of the current estimate.

Using the same 0.2% TCu cutoff, the Tetra Tech estimate is 127% of the total tonnage, 81% of the average grade, and 104% of the total pounds of contained copper in the 1979 Anaconda estimate of 121 million tons with an average grade of 0.34% Cu containing approximately 831 million pounds of copper. The lower grade and higher tonnage of the Tetra Tech estimate are attributed to the effects of the kriging estimation method used for modern resource estimates. A nearest neighbor model run by Tetra Tech to test the results raised the average grade of the deposit to 0.32% TCu.

The 1979 estimate cited approximately 84% of the total contained copper (696 million pounds of copper in 97.8 million tons with an average grade of 0.356% Cu) as being within the original Anaconda pit design, suggesting that a significant portion of the Yerington resource may be mined without a pushback or major changes to the upper walls of the Anaconda pit.

The current Tetra Tech resource estimate is based upon SPS's 2011 drilling as well as historic drill holes taken from scanned pages of assay and/or geologic data which were reviewed and digitally recorded by SPS personnel. The digital data entry was validated by Tetra Tech against historic sections and was considered to be compliant, based upon results of 18 twin holes and 5,446 feet of core from Anaconda holes which were assayed by SPS. The twinned drill intercepts statistically confirmed that the new compliant data support use of the historical data, as did the new core assays which were well within the expected norms for corroborating the old with new data.

The Tetra Tech resource estimate is included with a description of the project history, geology, mineralization, sampling procedures, and laboratory Quality Assurance/Quality Control procedures. The NI 43-101 Technical Report is available at [www.sedar.com](http://www.sedar.com). The Qualified Person for the Yerington Copper Project resource estimate and the technical report is Rex Clair Bryan, Ph.D., Sr. Geostatistician for Tetra Tech, Golden Colorado.

#### Future Work Plans

Quaterra believes the Yerington Copper Project has potential for significant additional copper resources. Historic and current drilling data indicate that limits to the mineralization at the Yerington Mine have not yet been found, both horizontally and vertically. The Company is planning additional exploration and in-fill drilling to both expand and upgrade the current NI 43-101 compliant copper resources of the project. Future drilling will target the pit area below the 3,000 feet level where only four deep historic holes (D158, D152, D174, and V2-28-33) have actually explored the deep vertical projection of mineralization. Three of five holes drilled along a N-S oriented section through the pit during the period of 1969 -1970 defined a series of nested, concave upward, grade shells that are elongated down the N 70° dip of the dikes with the 0.2% Cu zone extending to approximately the 2,600 level; an overall dip distance of 2,200 feet. Although the program encountered an increasing ratio of pyrite to chalcopyrite, there was no indication of a "barren core", and the porphyry dikes showed a "remarkable continuity" down dip. The drilling data also established a 250 to 500 foot thick zone of fracture hosted and disseminated molybdenum mineralization that wraps around the sulfide zone near the chalcopyrite/ chalcopyrite-pyrite transition.

Additional metallurgical testing is planned for both the residuals and core from sulfide mineralized zones below the pit and oxide copper mineralization in the vicinity of the mine. The test results will be used in an economic assessment of the property and an assessment of the merits of a possible integration of the MacArthur and Yerington operations.

The Bear porphyry deposit also remains unconstrained by drilling beneath the Yerington Mine site. Although it does not contain NI 43-101 compliant resources at this time, historical drilling has indicated a large area of copper mineralization that will require systematic drilling and evaluation. Exploration of the Bear Deposit is planned in 2013 to validate and potentially expand the historic resource into a 43-101 compliant resource.



## **Herbert Gold Project, Alaska**

### **Property Description and Acquisition**

The Herbert Gold project is an early stage, partially drill-tested, high-grade, gold mineralized mesothermal quartz vein system in the historic Juneau Gold Belt of southeast Alaska. The project consists of 91 unpatented lode claims located 32 km north of Juneau along the eastern shore of the Lynn Canal on Federal lands administered by the U.S. Forest Service. The area has a land use designation on current land use plans as semi-remote recreation with a minerals overlay. Forest lands within this designation are open to mineral exploration and development, and guidelines allow reasonable access in accordance with the provisions of an approved Plan of Operations. Exploration at the project has proceeded under approved Plan of Operations from the U.S. Forest Service. A City/Borough of Juneau exploration permit has been granted effective through February 2013.

The Herbert Gold claim block consists of three claim groups. A core group of 17 claims was acquired by Juneau Exploration and Development Inc. (JEDI) from Echo Bay Exploration Inc. in 1997. Quaterra and JEDI signed a mining lease agreement in April 2007, with an effective date of November 1, 2007, at which time 67 additional claims were staked and an area of interest around the core claims agreed upon. A final set of 7 claims was added by Quaterra in February 2008 bringing the current total to 91 active claims. There is no distinction between the claims within the agreements and all claims lie within the proscribed area of interest. The lease includes a sliding scale NSR on production, up to five percent (5%) where the price of gold exceeds \$601 per troy ounce, and a minimum annual advance production royalty of up to a maximum of \$30,000 after the tenth anniversary of the effective date payable to JEDI.

On June 16, 2010 Quaterra optioned the Herbert Gold property to Grande Portage Resources (GPR). The option agreement granted the right to earn 65% in the Herbert Gold project if: a) GPR spent at least \$750,000 before June 15, 2011 to earn 51% b) GPR spent an additional \$500,000 before June 15, 2012 to earn the full 65%. GPR has fulfilled both of these obligations and is fully vested at 65%. On October 24, 2011 GPR and Quaterra signed a Joint Venture Agreement outlining the collective responsibilities between the JV participants. Funding is on a pro-rata basis, with standard dilution applying in the event either party declines to participate.

### **Expenditures to Date**

Acquisition costs incurred to December 31, 2012 were \$136,492 and exploration expenditures were \$1,512,046 for a total of \$1,648,538. Acquisition costs incurred to December 31, 2011 were \$120,357 and exploration expenditures were \$554,119 for a total of \$674,476.

### **Location, Access and Infrastructure**

The Herbert project area lies on the western flanks of the Coast Range Mountains. Terrain is generally rugged within the project area, with elevations extending from 40 m to 1200 m above sea level. Topographic relief ranges from moderate to rugged. Vegetation ranges from dense alder brush to bare rock. Herbert Glacier terminates at the eastern edge of the claim block and the glacier's rapid retreat in the past 30 years is responsible for recent exposure of uncommonly large areas of bare rock at low elevations.

Exploration field work is currently limited to summer and fall months, but no seasonal restrictions are anticipated for future operations. Access to the project area is currently by helicopter from Juneau but the main public paved highway (Route 7) from Juneau passes 5.5 km west of the project area where it crosses the Herbert River. Topographically there is no obvious impediment for road access from the highway to the project area along a route parallel to the Herbert River.

Juneau is a regional mining center supporting active mining operations at Greens Creek and Kensington. As such it is well supplied with qualified support personnel for any future mining operation at the project site. Other nearby communities including Haines and Skagway add to the potential employment base. The Alaska Marine Highway and commercial aviation are the primary forms of transportation between the three communities.

Electric power lines along Route 7 terminate just north of Dotson's Landing approximately 3 km south of the highway/ Herbert River junction. Tidewater access is likely at Dotson's Landing approximately 10 km from the project, of which the first 4.5 km would be on public paved roads.

## History

The Juneau area hosts multiple high-grade gold deposits that were active from 1883 through to 1943 and so it is likely the Herbert Gold area was originally prospected during this time. Houston Oil and Minerals found gold mineralization in outcrops recently exposed by retreating ice and drilled the prospect in 1986. The program consisted of 9 BQ diameter core holes totalling 502 meters. Echo Bay Mines drilled an additional 1,100 m in 10 holes in 1988. Historic data is a little vague as to whether there was some additional shallow "winkie" drilling also completed in 1988, with possibly as much as 230 m completed in 12 holes. Although encouraging results were returned, for unknown reasons Echo Bay abandoned the project.

In 1997 as part of Echo Bay's divestiture of its Alaskan properties, a group of three local prospectors (JEDI) successfully purchased the core claims of the Herbert Gold project. The property was brought to the attention of Quaterra in 2006 who signed a Mining Lease with JEDI effective November 1, 2007. A field program in the summer of 2007, managed by the Hawley Resource Group (HRG) resulted in the collection of 299 rock chip, soil, and stream silt samples and the initiation of a property wide geology map. In 2010 the property was optioned to GPR.

After acquiring an option in 2010, Grand Portage initiated work with detailed geologic mapping and analysis of aerial photographs over the southern two-thirds of the most intensely mineralized part of the Herbert Gold property. The work investigated three high angle east-west trending vein-faults identified as the Floyd, Deep Trench, and Main structures. The Deep Trench and Main structures were mapped over strike-lengths of about 2,100 meters and vertical distances of several hundred meters. The work also identified attractive targets in subsidiary structures such as the Ridge vein and more master vein-faults, tentatively named Goat Creek and North.

The 2010 field work was followed up with an exploration drilling program that totaled 15 holes as an initial test of the Main, Ridge, and Deep Trench Veins from 5 platforms. Hole 10C-1 intercepted 1.14 meters that averaged 17.1 g/t Au in the Main Vein and 6.17 g/t Au over a thickness of 0.86 meters in a newly discovered vein. Drill hole 10D-2 intercepted a quartz-sulfide vein of about 4 meters true thickness with an intercept of 6.55 g/t Au over 1.15 m. Other significant intercepts were reported in the Ridge Vein (.85 m averaging 6.85 g/t Au in hole 10A-4) and in the Deep Trench Vein (.52 meters averaging 9.4 g/t Au in hole 10B-1). The drilling program tracked Herbert's Main Vein for about 750 meters and tested the vein at three general locations.

GPR drilled a total of 5,181 meters at the Herbert Glacier project in 30 holes during the 2011 field season. The program intersected high grade gold mineralization in 5 separate zones, four of which are new discoveries. The Deep Trench Vein was tested by 16 holes from the E, F, and G platforms. Hole 11E-2, drilled at an angle of minus 62 degrees, intersected the vein with a true width of 8.76 meters averaging 33.8 g/t gold at a downhole depth of 137.1 meters. The western most platform on Deep Trench vein, the F platform, also showed impressive values in drill hole 11F-3. At a depth of 40.0 meters, 11F-3 intercepted a brecciated quartz vein that assayed 11.53 g/t Au of gold over 3.52 meters. Significant values were seen in all of the holes testing the vein from the G platform. Trench samples taken from the vein near the E platform encountered gold values with screened assays up to 40.1 g/t Au. The drilling results together with surface exposures give the known mineralization in the Deep Trench Vein a vertical extent of at least 400 meters, a known strike length of almost 1000 meters and the mineralization remains open at depth.

Thirteen holes drilled in 2011 tested the Main and Ridge Vein systems. Hole 11I-4, drilled at an angle of -64 degrees to a total depth of 171.3 meters intersected the Main Vein with a true thickness of 0.95 meters averaging 73.9 g/t gold and 93.1 g/t silver at a downhole depth of 141.2 meters. This intercept occurs near the western limit of exploration on the Main Vein immediately beneath the major contact between the normal host and low-grade meta-sediments and volcanics. The mineralization appears to represent a new target type defined by bonanza grade mineralization produced by the sudden changes in geochemistry, and possibly pressure and temperature at the quartz diorite intrusive contact. Grande Portage completed its 2011 fieldwork by identifying several deep targets to be drilled in the 2012 season.

The first NI 43-101 Technical Report ever prepared for the Herbert Gold project was completed May 28, 2012 by Nicholas Van Wyck and William Burnett of Yukuskokon Professional Services, LLC. The report uses all exploration and drilling data compiled through the 2011 field season to describe the geology and mineralization of the project and outlines the sampling, assaying and analysis used for the preparation of the database.

## Geology and Mineralization

Through 1989, the Juneau gold belt has produced approximately 6.7 million ounces of gold. The production totalled nearly 75% of Alaska's lode gold until this percentage was reduced by production from the Fort Knox and Pogo mines in the Alaska interior. Historic production from the Juneau mining district was mainly from mesothermal quartz veins and stringer lodes localized in greenschist to amphibolite-facies metasedimentary and intrusive rocks. As are typical of these types of deposits worldwide, mineralized veins in the Juneau district are known to extend significant distances along strike and down-dip.

Mineralization at the Herbert Glacier project consists of mesothermal quartz-carbonate-gold-base metal veining and similar to that seen throughout the district. Gold-quartz veins are hosted in weakly foliated, NW trending quartz diorite caught between two NW-trending faults separating the quartz diorite from gneiss and tonalite to NE and phyllites and metagraywackes to the SW. The four principal veins from south to north are the Floyd, Deep Trench, Main, and Goat veins. Minor veins include the North, Ridge and Lake. The principal veins strike N80E and dip steeply to the north, with a minor subsidiary NE orientation. On the surface, veins and their hydrothermally altered walls erode easily to form prominent linear zones with strike lengths of over 900 meters. The cumulative strike length of all mapped veins at present is over 3,700 m. Current drilling and exposures in creek bottoms indicate that the structural zones hosting the veins are as much as 20 meters wide, while the veins themselves have drill intercepts with corrected true thicknesses of at least 8 meters in places, although most are on the order of 1-2 meters thick. Some of the veins contain visible gold and exhibit local high grade gold values.

#### Exploration and Drilling Results

A total of 127 diamond drill holes and four trenches have investigated the Herbert Gold Property since drilling began on the project in August 2010. The 2012 drilling campaign was designed to upgrade the previously identified inferred resources to indicated resources and to test extensions of mineralization in the Main and Deep Trench veins as well as new targets in the Goat and Ridge veins.

Grande Portage initiated the 2012 drilling campaign with a two rig program in June. Spring Valley Drilling Inc. and Core One Enterprises LLC. completed 8,900 meters of core drilling in 62 holes. The program in-filled the drill hole spacing of the Main and Deep Trench Veins to a nominal 25 meters and tested the open strike extents of both structures while completing a successful test of the Goat Creek Vein.

Seven holes were drilled from pad J on the Goat Creek structure in 2012. Hole 12J-3 intersected visible gold in a sheared quartz vein with a 2.05 meter intercept of 79.4 g/t gold which includes 0.8 meters of 192.5 g/t gold. Hole 12J-4 encountered an average of 12.66 g/t gold over 1.10 meters in the structure. The Goat Creek vein was discovered in 2011 by a single wildcat hole collared on a linear feature which paralleled the other well-mineralized east-west veins. The feature can be traced on surface for nearly 1,000 meters.

The results from the 2012 infill drilling campaign were used for the updated NI43-101-compliant resource estimate by D.R. Webb of DRW Geological Consultants Ltd. (see "Mineral Resource Estimate" section). When compared to the April 2012 resource estimate, the recent campaign resulted in the conversion of 52.3% of the tonnes and 74.4% of the ounces from the inferred to indicated resource category. At the same time the grade increased by 42.2% compared to last April's resource estimate. At a 3.0 g/t cut off, 56.0% of the tonnes and 81.7% of the ounces were converted to the indicated resource category, with an increase in grade of 46.2%. The program also delineated a higher grade shoot within the Deep Trench vein which contains the highest grade resource discovered to date of 407,100 tonnes averaging 8.12 g/t Au (at a 2 g/t Au cut-off), and 232,300 tonnes averaging 12.42 g/t Au (at a 3 g/t Au cut-off). This high-grade mineralization is open to the east and at depth.

#### Sampling, Analysis and Security of Samples

All core samples from the Herbert Gold drilling program are removed via helicopter from the drill pad to a secure hanger area and from there by truck to the project core logging and sample prep facility in Juneau. This facility consists of two lockable 40-foot shipping containers situated behind a residence in a graded parking area. The surrounding area is residential with multifamily housing units and business in the immediate area. The area is not fenced and is easily accessible to the public. The containers are owned by one of the underlying claim owners and so steps have been taken to maintain a clear custody of core samples by the operator including storage of the core in a locked container.

Core is first logged and selected intervals marked for sampling. A rock saw outside the core facility is used to saw the core in half. One half is bagged and stored prior to shipping to the assay lab, while the remainder of the core is archived on the core storage site. Samples are locked before being shipped to the assay lab in Fairbanks by air shipment. The samples are shipped to the lab quickly and are not stockpiled on site for any length of time. Future program will include security seals on sample bags and a designated storage area for split samples prior to shipping.

Core samples from 2010 and 2011 were air shipped to the ALS facilities in Fairbanks, AK for sample preparation. Incompetent, friable, clay-rich or crumbly samples were bagged in plastic bags and then placed in the standard canvas bags so there would be no possible loss of free gold in the cloth. Core samples were weighed, coarse crushed, split and pulverized. Pulps were then shipped to ALS in Reno, NV for analyses. For both 2010 and 2011, base metals and trace elements were analysed by ICP - AES (ALS prep code: ME-ICP61). This method uses a four acid dissolution method and is primarily designed as an exploration geochemistry analytical package. Initially, 2010 gold assays were by conventional fire assay techniques (ALS prep code: Au-ICP21), consisting of fire assay of a 30 g sample of the pulp with the pellet then dissolved in acid and "finished" by AES. This analytical method is typically used for exploration projects. Later in the 2010 season, 34 samples with anomalous gold values were check assayed using the metallic screen method (ALS prep code: Au-SCR21). In 2011 metallic screen assays were used for all submitted samples in addition to conventional fire assays.

There is no relationship between the assay lab (ALS) and either GPR or Quaterra. ALS Minerals laboratories are registered or are pending registration to ISO 9001:2008, and a number of their analytical facilities have received ISO 17025 accreditations for specific laboratory procedures.

After the completion of two seasons of exploration on the project, deficiencies were identified in the May 28, 2012 technical report concerning methods used for quality control and quality assurance. There were no external standards being used nor was there a program of duplicate analyses. Although analytical blanks were submitted into the sample stream, the source of the blank material was problematical. The authors of the technical report do consider however, that the data from the 2010-2011 field season is still valid based largely on the good agreement between the original data and the later check assays. Recommendations for correcting deficiencies in the adequacy of sample preparation, security, and analytical procedures were implemented prior to commencement of the 2012 drilling program.

#### Metallurgical Testing

Metallurgical testing on mineralized material from the Herbert Gold project confirms that the gold in this system returns recoveries up to 91 % Au and 78% Ag using a combination of gravity concentration and cyanide leach of the gravity tailings. The ores also contain variable percentages of sulfides such as arsenopyrite, galena and sphalerite, and sodium cyanide consumption was high.

The U.S. Bureau of Mines collected a 240-pound metallurgical sample of gold mineralized vein material from the project for analysis and beneficiation tests in 1988. A gravity separation test recovered 88.8 % of the gold and 80.7 % of the silver. In 2010 a sample prepared from cannibalized drill core was tested for "Bond Ball Grindability" and gold recoveries. The results cite a calculated value of 15.7 kw-hr/tonne for work index (WI) and combined gold and silver recoveries of 91 and 78 % respectively using gravity concentration followed by cyanidization of the concentrates and tails (G&T Metallurgical Services, Ltd., 2011). The report recommends further metallurgical testing to understand the large consumption of sodium cyanide in the process. Though the metallurgical study consisted of representative material from core, the material collected was uniformly from relatively low-grade material recovered during the 2010 drilling campaign and did not include the high-grade with visible gold drilled during the 2011 season. As testing of the project continues, increased knowledge will allow a better consideration of the range and size of the sampling program required for additional metallurgical sampling. A bulk sample between 10 and 100 tonnes will permit a far more comprehensive mill design and a gravity only recovery test by Falcon (or equivalent) would provide better parameters for designing of the mill.

The regional characteristics of ores from past mining operations in the Juneau district are quite consistent, containing a very high percentage of free milling gold with the remainder of the gold reporting with the base metal sulphides. It is reasonable to expect, based on these regional characteristics and the character of the core samples obtained to date, that potential ore from the Herbert Gold project will behave similarly.

#### Mineral Resource Estimate

GPR and Quaterra released an updated NI 43-101 complaint resource estimate for the Herbert Gold Project on February 28, 2013. The updated estimate by D.R. Webb P. Geol. of DRW Geological Consultants Ltd. used the digital database derived from a total of 127 diamond drill holes and four trenches that includes the results from the 2012 infill drilling campaign. At a base case cut-off of 2 g/t Au, the February 28, 2013 estimate contains an indicated resource of 821,100 tonnes grading 6.91 grams per tonne gold (g/t) containing 182,400 ounces of gold in the Deep Trench and Main veins. At the same 2 g/t Au cutoff, the Deep Trench and five veins that have had limited drill testing contain an inferred resource of 51,600 tonnes grading 7.73 g/t gold for a total of 12,800 ounces of gold. The mineralization is open at depth and along strike.

A summary of the February 28, 2012 resource estimate is shown below:

Herbert Gold Project  
Mineral Resource Estimate (February 2013)

Cutoff Grade (g/t Au)	Tonnes	Av. Grade (g/t Au)	Au (Ounces)
<b>Total Indicated Gold Resources</b>			
0.5	2,867,500	2.69	248,100
1.0	1,645,500	4.14	219,000
1.5	1,081,300	5.66	196,900
2.0	821,100	6.91	182,400
2.5	637,900	8.25	169,200
3.0	532,400	9.34	159,800
<b>Total Inferred Gold Resources</b>			
0.5	1,509,800	1.18	57,300
1.0	585,400	1.85	34,900
1.5	112,600	4.46	16,100
2.0	51,600	7.73	12,800
2.5	42,100	8.99	12,200
3.0	38,600	9.55	11,900

The resources are classified according to their proximity to the sample locations and are reported, as required by NI 43-101, according to the CIM Definition Standards for Mineral Resources and Mineral Reserves. Indicated resources comprise blocks that are situated within 60 meters of assays derived from drill holes or trenches. Resource blocks located between 60 and 200 meters of assays are considered inferred. Metallic or screened assays were used in all instances where they were available (921 samples). All other assays are standard one assay ton results reported using ICP finish or where over limit (>10 g/t) are reported using gravimetric finish.

MapInfo's 3D solid generation routine was used to construct three dimensional models from a series of cross sections for each of eight different zones where correlations in apparent gold assays, alteration zones, and multi-element data appear down-dip on section and between sections. Some areas of the Main vein provided multiple options for correlations that were permissive by geology and sample geochemistry. The Deep Trench vein was remarkable in the simplicity and consistency of a very planar orientation of the correlations.

An Inverse Distance Squared (ID2) method using a block model approximately 8m x 1.5m x 6m was applied to the Main and Deep Trench veins. Smaller solids (such as the Deep Trench Vein Hanging Wall) were modeled using smaller block sizes down to 2m x 2m x 2m. Blocks required a minimum of three and a maximum of 12 composites within a 180m x 180m x 180m search ellipsoid, oriented parallel to the vein. The raw and composited assay data for the veins display a mixture of three populations on the lognormal probability plots. These can be modeled smoothly without any obvious outliers that can over-influence the estimation and to account for the nugget effect. Statistical studies showed that capping or averaging was not indicated. The resource remains open in multiple directions along these defined veins.

D.R. Webb P. Geol. is the Qualified Person responsible for the reserve and resource calculations while D.G. Dupre P. Geo. is the Qualified Person responsible for all other aspects of the Technical Report which is being prepared and will be filed within 45 days of the February 28, 2013 release. Quality-control data, generated during the various drill programs conducted at the Herbert Property, are being independently verified by Mr. Dupre and Dr. Webb as part of the project review.

#### Future Work Plans

GPR and Quatterra are planning an aggressive program of diamond drilling for 2013 to extend the known mineralization down dip and along strike at the Herbert Gold project. Preliminary resource estimates are strongly influenced by high-grade shoots along the veins and there is no geological evidence that the grades of the shoots could not have continuity to great depths. The resource remains open in multiple directions along these defined veins in addition to there being several highly prospective structures spread over the property. With 4 (or possibly five) high grade mineral shoots now identified in 3 of 6 vein systems on the property and only 10% of the known property yet investigated by drilling, the Herbert Gold project retains an attractive untested potential for significant resource growth.

## Arizona Uranium Claims, USA

### Acquisition and Staking of Uranium Claims

Quaterra commenced uranium exploration in Arizona in June 2005 with the acquisition of 99 unpatented lode mining claims from North Exploration LLC (“North”) that cover several uranium breccia pipe targets in the Arizona Strip district. Under the terms of the North agreement, the Company acquired a 100% interest in all of the North claims by making staged payments over a five-year period totaling US\$500,000 and issuing 600,000 common shares. The North Properties are subject to a 2% production royalty on each Property, 1% of which may be purchased by Quaterra for US\$1 million. The North acquisition also included other properties in Utah and Wyoming that are prospective for both uranium and vanadium.

In mid-2006, Quaterra signed a letter agreement with Nu Star Exploration LLC (Nustar) to lease 18 Claims covering 4 additional breccia pipe targets in the district. The terms of the Nustar lease are an upfront payment of US\$20,000, a first anniversary payment of US\$30,000, a second anniversary payment of US\$40,000 and a final anniversary payment of US\$100,000. The final payment date has been amended so that the payment is deferred until such time when the withdrawal by the Department of the Interior be lifted and exploration and mining activities be allowed to continue. The Nustar Claims are subject to a 4% Yellowcake royalty, 75% of which the Company can buy back for US\$500,000 per Claim group (thereby reducing the royalty from 4% to 1%).

Quaterra staked an additional 550 mining Claims on the Arizona Strip in 2006 and another 1,450 claims were perfected in early 2007 to cover more than 200 high and moderate priority anomalies identified by an airborne VTEM geophysical survey.

A subsequent review of all the Company’s assets was conducted in response to a July 20, 2009 decision by the US Department of the Interior (“DOI”) to segregate 1 million acres of federal lands in the Arizona Strip for two years pending a review for a possible 20 year withdrawal of the district from mineral entry. Unpatented claims held in the area of segregation were prioritized and selectively reduced to establish a land position consisting of 1,000 claims and one state lease. The optimized land position controlled 195 VTEM anomalies that include Quaterra’s best breccia pipe targets with a maintenance cost that could be supported while the withdrawal is contested in Federal District Court.

In early 2010, Arizona state Mineral Exploration Permits (MEPs) totaling approximately 3,200 acres were acquired through an option agreement with Eagle Hill Exploration, Eagle Hill Arizona Uranium LLC, and Snowden Resources Corp. Additional MEPs were acquired by the Company in 2011 and some were abandoned in 2012 making a current total of 1,880 acres of Arizona state land now under lease by Quaterra. When combined with 32.3 square miles covered by 1000 unpatented federal claims, the Company’s land position covers approximately 35.2 square miles in the heart of the Arizona Strip uranium district. The properties consist of many individual and scattered claim blocks that have been selectively staked over targets with some surface expression of a possible collapse structure, with favorable VTEM geophysical signatures and within areas of known mineralized occurrences.

On January 9, 2012, the DOI announced a Public Land Order to withdraw approximately one million acres of Federal land for a twenty year period. The stated effect of the withdrawal order is to withdraw the acreage from new mining claims and sites under the 1872 Mining Law, subject to valid existing rights and does not prohibit previously approved uranium mining, or development of new projects that could be approved on claims and sites with valid existing rights. The withdrawal order affects all 1,000 of Quaterra’s unpatented claims on federal lands but does not affect future exploration or development on the Company’s 1,880 acres of State leases in Arizona.

### Expenditures to Date

Acquisition costs incurred to December 31, 2012 were \$4,962,589 (2011 - \$4,761,909) and exploration expenditures were \$7,867,075 (2011 - \$7,728,123) for a total of \$12,829,664 (2011 - \$12,490,032).

### Location, Access and Infrastructure

Quaterra’s Arizona Uranium property is located in the northern Arizona Strip uranium district in Coconino and Mohave Counties. The property occupies the southwest corner of the Colorado Plateau physiographic province in northwestern Arizona just south of the Utah state line. It is bounded to the west by the Grand Wash Cliffs and to the east by the Echo Cliffs. The area is characterized by a broad and featureless expanse of range land that becomes deeply incised by canyons of four major drainages.

Access to the property is provided by maintained county roads, mine access roads and a network of BLM recognized dirt roads and jeep trails used by ranchers and prospectors as well as State and Federal authorities for land management. Nearly all of the surface and mineral rights with the exception of the Arizona state lands are Federal and managed by the Bureau of Land Management with a field office in St. George, Utah.

## History

Uranium mineralization was first discovered on the Arizona strip in a mineralized breccia pipe in 1947. The uranium occurred in association with copper mineralization at the Orphan mine two miles west of the visitor's center on the south rim of the Grand Canyon. The first uranium ore was shipped by the Golden Crown Mining Company in 1956 to a buying station in Tuba City. Before closing in 1969, the Orphan operation produced a reported total of 4.4 million lbs of uranium in material averaging 0.42% U<sub>3</sub>O<sub>8</sub> and 6.7 million lbs of copper. (Baillieul, T.A. and Zollinger, R.C. (1980) NURE Grand Canyon Quadrangle, Arizona PGJ-020, 41p.).

The relationship of uranium to copper mineralization initiated an investigation of several small copper deposits in the region. Uranium was identified in the Hack Canyon copper mine on the northern Arizona strip in the 1950s but it was not until 1974 when Western Nuclear discovered uranium ore bodies in the Hack 1 and Hack 2 breccia pipes that industry began to focus attention on the emerging district. Energy Fuels Nuclear Inc. (Energy Fuels) acquired the Hack Canyon ore bodies in 1980 and initiated an intense campaign of land acquisition and exploration that over the next ten years discovered seven ore bodies. With the entrance of Pathfinder Mines and Union Pacific Resources, at least three additional mineralized breccia pipes were added to the district. Several more were in earlier stages of discovery when in the early 1990s the price of uranium dropped below the cost of production.

Energy Fuels breccia pipe uranium mines were some of last hard rock uranium producers in the US prior to the price decline of the 1990s. Since 1980, the Arizona Strip has produced in excess of 19 million pounds of uranium, averaging 0.65% U<sub>3</sub>O<sub>8</sub> from seven breccia pipes. Of these, Hack Canyon I, II, and III, Pigeon and Hermit are mined out and have been reclaimed, Arizona 1 (owned by Dennison Mines) resumed production in January 2010, Pinenut (Dennison Mines) is in the final phases of development and pending permitting to commence production and Kanab North has been placed on a standby with reserves remaining.

## Geology and Mineralization

The canyon walls of northern Arizona expose numerous breccia pipes that are characteristic of the collapse structures that host uranium mineralization in the Arizona strip. The collapse of cavern roofs in the Mississippian Redwall Limestone forms a pipe of breccia through the subsequent collapse of overlying sediments through mechanical and chemical processes to form a vertical column of breccia. Breccia pipes in the region average 200 to 400 feet in width and can extend upward over 3,000 feet from the Redwall Limestone to the upper Triassic sequence.

Many northern Arizona Breccia pipes exhibit several common morphological features that are used to identify the structures at the surface and to position drill holes at depth. The cylindrical area of vertically displaced breccia in the center of the pipe is generally referred to as the "pipe throat." The amount of vertical displacement in the throat ranges from 50 to several hundred feet and often decreases up section. The internal geometry of the throat can be complicated by the later formation of "pipe in pipe" structures. These internal features are the result of late stage (often post-mineral) collapse due to continued dissolution of carbonates in the lower reaches of the pipe throat. They may result in the dispersal and elimination of economic accumulations of uranium mineralization in the pipe.

The throat of a breccia pipe is seldom visible at the surface when not exposed in canyon walls. Where covered by the Triassic Moenkopi siltstone or recent alluvium, the only evidence of a pipe structure may be a large circular structure of gently inward dipping beds or even more subtle circular anomalies formed by ring fractures and vegetation. These features are caused by the dissolution of evaporites in the Permian Toroweap and Kaibab Formations (PKfm) along the margins of the throat during the formation of the pipe. As the evaporites are removed, a pronounced structural depression or "collapse cone" develops in the overlying strata above the Coconino sandstone. Many of the collapse cones are characterized by a thick section of Moenkopi siltstone that fills the cone near the upper Kaibab horizon. Although breccia pipes often have some structural symmetry at different levels, the throat of a pipe is not always in the center of a collapse cone and circular depressions are not always related to pipes.

Uranium mineralization in breccia pipes of the northern district occurs predominantly within the pipe throat and below the upper Hermit contact. Mineralization is also present in ring fractures along the margins of the throat, and in the underlying Supai Group, but significant accumulations at this level is less common on the north rim than in the southern district. Economic concentrations of mineralization often occur over a vertical distance of more than 600 feet in the pipe throat. Scattered mineralization can extend well below the upper contact of the Esplanade Sandstone.

Uranium occurs primarily as pitchblende in voids between sand grains and replacing rock fragments of a reduced sandstone dominant breccia derived from the Coconino Sandstone. Calcite and gypsum are common cementing minerals. Associated trace elements include copper, arsenic, nickel, lead, zinc and silver. The mineralized breccia often contains abundant bitumen that is considered an important reducing agent for the geochemical system. Uranium is generally thought to have been transported to the pipe by oxidizing ground waters in the Coconino Sandstone and deposited in a "trap" of porous sandstone breccia within the non porous pipe walls of Hermit siltstone and above a relatively tight base of siltstone dominant breccia. Finely disseminated pyrite is common in the mineralized zone and may contribute to the reducing environment necessary for the deposition of uranium. Immediately above the mineralization, pyrite becomes massive and forms a "cap" of pyrite after marcasite that can exceed 50 feet in thickness.

The USGS Open File Report (OFR-89-550) shows the mapped locations of 1,296 pipes in northern Arizona. More than 90% of mapped pipes are shown within the deeper canyons of the region where they are exposed by erosion of the younger strata. Because of their scenic value, these canyons have been withdrawn from exploration and mining. However, the same density of pipes is probable at depth in the surrounding district where the number of known pipes decreases dramatically below the cover of successive layers of younger sediments until fewer than 2 pipes are evident over a surface area of 500 square miles in the upper Triassic sequence. The upper level of stoping by collapse varies and many pipes may occur at depth within the district and remain hidden with no surface evidence of a pipe throat. If these structures penetrate the Coconino Sandstone, an ore body may exist with no pipe feature at the surface.

Hidden or "blind" pipes may be the most numerous types of mineralized structures. Until the discovery of A-1, the Hack 2 mine was the only blind pipe ever discovered in the district. Hack 2 was also the largest deposit ever mined in the district with approximately 7 million pounds of U<sub>3</sub>O<sub>8</sub> produced. The number of pipes identified to date may represent only a small fraction of the number of mineralized hidden pipes that lie waiting to be discovered at depth.

#### Recent Exploration and Drilling Results

The discovery of new deposits in a mature district requires a determined and innovative approach combined with the latest exploration technology. Quaterra initiated uranium exploration on the Arizona Strip in 2006 with methods based upon past experience of Energy Fuels. Geologic mapping, aerial photography and satellite imagery have been and continue to be used extensively to identify breccia pipe targets. When a target was located, surface time-domain electromagnetic geophysical surveys had significant success in defining areas of thickened (conductive) siltstone within the surface structure. Shallow drill holes are used define a collapse cone and to target deep holes to test for mineralization in the pipe throat. Most of the obvious targets identified by these methods have been located and drill tested by companies exploring the northern district in the 1980s. However, extensive areas remained unexplored because of the time and expense required by the surface geophysical surveys.

Since commencing on the Arizona Strip, Quaterra has drilled 98,403 feet in 105 shallow and 41 deep holes that investigated 25 targets. The program had limited success until Quaterra contracted Geotech Ltd. to conduct the first extensive test of an airborne time-domain electromagnetic system (VTEM) in the district in early 2007. The VTEM system identified most of the known breccia pipes and more than 200 moderate to high priority targets on the Company's property with similar geophysical signatures but with little or no outcropping evidence of a collapse feature. The similarities to known structures and the sheer number of targets suggested that many of the anomalies could be blind pipes.

The first VTEM target tested resulted in the discovery of the first new mineralized breccia pipe found on the Arizona Strip in 18 years. Discovery Hole A-01-31 intercepted a thickness of 57 feet averaging 0.33% U<sub>3</sub>O<sub>8</sub> at a depth of 1,034 feet. The intercept includes a higher grade interval of 28 feet averaging 0.58% U<sub>3</sub>O<sub>8</sub>. The drill-hole data indicate that the A-1 structure is a hidden breccia pipe. Upward collapse of the A-1 pipe stopped more than 400 feet below the surface.

Quaterra followed up on the discovery of the A-1 mineralized pipe with a drilling program in 2008 dedicated to testing several more of the many airborne geophysical anomalies on Quaterra's properties. The first hole to test the second geophysical anomaly identified a new breccia pipe with high-grade uranium mineralization at A-20. Discovery Hole A-20-01 intercepted a thickness of 34.5 feet averaging 0.37% U<sub>3</sub>O<sub>8</sub> at a depth of 1,442 feet, including a high-grade zone of 6.5 feet averaging 0.63% U<sub>3</sub>O<sub>8</sub> at a depth of 1,443 feet. The hole also intercepted a deeper zone of 13.0 feet averaging 0.46% at a depth of 1,567 feet that includes a higher grade interval of 10.0 feet averaging 0.58%.



The relative size of the A-20 pipe cannot yet be determined, but it may be comparable to the larger breccia pipes in the district. Only three holes have been completed in the structure, one exited the pipe above the favorable mineralized horizon and two have penetrated pipe breccia.

Since commencing the drilling program to target VTEM anomalies Quatterra has achieved a 70% success ratio in its exploration results. Near surface structures were identified in all but three of seven additional VTEM targets tested during the year.

The A-18 target, located midway between and about half a mile from the Company's mineralized Ollie and A20 pipes, is in a suitable position for a single development to access all three targets. To date, five deep and two shallow holes have been completed that define a 40-foot-deep structural depression at the upper Fossil Mountain horizon. The deep holes have encountered up to eight feet of altered Hermit shale and a strongly altered section of Coconino sandstone that are indicative of close proximity to a pipe throat.

Drilling at the A51 target, located 1.5 miles west of the A1 discovery provided similar encouragement. Three shallow holes and four deep holes defined a 60-foot-deep structure at the upper Fossil Mountain horizon and more than 20 feet of alteration in the Hermit shale. A gamma log of one deep hole showed a radiometric anomaly over a thickness of 15 feet in the Toroweap Formation. The holes are believed to have encountered the outer margins of a breccia pipe structure.

While waiting to complete a down-hole survey, one rig was moved to the Ollie prospect to re-enter and probe an old hole drilled by Energy Fuels Nuclear in 1990. The probe identified an intercept in hole JH2618-04 of 52.5 feet averaging 0.24% eU3O8 at a depth of 1,342.5 feet, including 27.0 feet averaging 0.36% eU3O8 at a depth of 1,359.5 feet. A down-hole TEM survey (using technology that was nonexistent during the EFN program) identified a significant anomaly to the south of the drilled area which suggests that a large section of the Ollie pipe may remain untested. The down-hole TEM proved valuable in locating the pyrite cap and providing information to target additional drill holes.

The A-21 VTEM target may also be a pipe, but deep drilling has failed to encounter the throat below the upper Coconino horizon. Three shallow and two deep holes have defined approximately 30 feet of structural closure in the Kaibab Formation and up to five feet of altered Hermit Shale below the lower Coconino contact indicating the proximity of a pipe structure. Additional shallow drilling will be required to target the pipe throat at depth.

## Sampling, Analysis and Security of Samples

The Company uses the industry standard gamma logging method for grade determinations of uranium mineralization in drill holes. The process requires systematic calibration of the logging tools for precision and accuracy. Grades are reported as equivalent “U3O8” based on an assumed direct correlation between gamma-ray intensity, as measured by the gamma logging tools, and uranium content. The techniques for gamma log interpretation has been found to represent in-situ grades for uranium mineralization in the district as established by Energy Fuels Nuclear Inc. during their exploration and mining operations conducted on the Arizona Strip.

Down hole logging for the drill holes is contracted to Strata Data, Casper, Wyoming and Century Geophysical Corp. with verification by Geophysical Logging Service of Prescott, Arizona. The down-hole gamma logging tools are routinely calibrated by probing standardized test pits in Grand Junction, Colorado. Mr. Ken Sweet, Geophysical Consultant, of Denver Colorado provides QA/QC and final interpretation of the process.

Geophysical Logging Service uses a borehole NaI detector manufactured by Mt. Sopris in Golden, Colorado for initial grade calculations. It is of the type 2PGA1000 which is a standard for uranium logging. It uses a large crystal, 22.22 mm in diameter and 76.2 mm long. As a back up an HLP-2375 tool is used, also manufactured by Mt. Sopris. The HLP tool is a smaller diameter and can be used small drill holes.

The tools are calibrated in Grand Junction Colorado, nominally every 3-6 months. When ore grade mineralization is encountered the tool will be calibrated more often. In general, variation with this tool is insignificant within a year and requiring less than a 1% calibration change. There are 4 calibration pits in Grand Junction; 0.231%, 0.452%, 1.22%, and 2.63% U3O8. The calibration pits are constructed of natural uranium ore. Corrections are made for hole diameter, the type of drilling pipe, and fluid in the hole. Because the grades and thicknesses of the mineralized section are determined by down hole logging tools, the Company uses rotary drilling for exploration on the project. Drill cuttings from the program are often limited to the upper 400 feet of the hole. Circulation of the samples to the surface is often lost in the deeper evaporite dominant sections. Samples of the cuttings are collected in plastic boxes and archived in locked storage facilities.

When mineralization is intersected, spot core is collected when possible to compare to the interpreted gamma response. In some cases corrections need to be made for disequilibrium as established by closed-can analysis or direct neutron activation that compares the chemical values of core vs. the interpreted gamma grades. The gamma response has the advantage of sampling a large volume, on the order of 60 cm. Data is sampled at 0.5 foot or closer spacing. All core from the program is placed in boxes marked for depths, logged by the Company geologist and kept in the Company’s storage facilities in Kanab, Utah.

For hole deviation a Mt. Sopris 2DVA-1000 borehole deviation probe is used. It consists of a 3 axis flux gate magnetometer and a 3 axis accelerometer. The tool is calibrated on the surface using a “Jig” to hold it in a known orientation. The data is recorded continually along the hole.

Induction logs are used in conjunction with the gamma probe to provide additional lithologic information. Correlation of the interpreted lithologies between drill holes in a target area can reveal structural deformation related to a possible breccia pipe.

## Mineral Resources

There are no resources or reserves on the Company’s Arizona Strip properties that comply with the CIM Standards on Mineral Resources and Reserves Definitions and Guidelines as adopted by CIM Council on August 20, 2000.

## Future Work Plans

On January 9, 2012, the U.S. Department of the Interior (“DOI”) announced a Public Land Order to withdraw approximately one million acres of Federal land for a twenty year period. The stated effect of the order is to withdraw the acreage from new mining claims and sites under the 1872 Mining Law, subject to valid existing rights and does not prohibit previously approved uranium mining, or development of new projects that could be approved on claims and sites with valid existing rights. The withdrawal order affects all 1,000 of Quaterra’s unpatented claims on Federal lands but does not affect future exploration or development on the Company’s 1,880 acres of State leases within the district.

On April 18, 2012, Quatterra, together with co-Plaintiff the Board of Supervisors, Mohave County, Arizona, (Arizona Coalition) filed a lawsuit in the United States District Court for the State of Arizona naming as Defendants the United States Department of the Interior and the Bureau of Land Management.

The basis of the lawsuit is that the United States Government, through the Secretary of the Interior and the Bureau of Land Management, did not adhere to mandated statutory procedures when it issued a decision to close more than one million acres of Federal land to all mining in Northern Arizona. Specifically, the suit alleges that the facts and science demonstrated that mining would not harm the Grand Canyon watershed and that the withdrawal of Federal lands regardless of this evidence was arbitrary and capricious; the decision arbitrarily withdraws over one million acres to address subjective sensibilities which enjoy no legal protection; the Secretary did not comply with the procedural requirements of the National Environmental Policy Act; and, the Secretary did not address scientific controversies and failed to coordinate with Local Governments in making his decision.

The remedy sought is a judicial declaration that the withdrawal Order is unlawful and setting it aside together with issuance of a permanent injunction enjoining the Defendants from implementing any aspects of the Withdrawal. A decision finding that the Secretary failed to follow the criteria and procedures for a withdrawal and setting the withdrawal aside would allow Quatterra to proceed to develop the mineral deposits that it has lawfully claimed and worked.

Pursuant to an order of the United States District Court for the State of Arizona dated July 19, 2012, the case filed by Quatterra Alaska against Secretary Salazar was assigned to be heard by Judge Campbell of this Court. The DOI filed a motion to dismiss the Plaintiff's claim in September and the motion was heard in October. On January 8, 2013, the court denied the government's effort to dismiss Quatterra, except for the NEPA claims and also denied the government's motion to dismiss the Arizona Coalition on the NEPA claims. The district court held that the Coalition had standing to pursue its NEPA claims against BLM.

Since the commencement of the withdrawal process, the Company has not expended significant amounts on the Arizona uranium claims pending the court decision and has suspended plans to continue to develop uranium claims on Federal land while the issues are resolved politically or judicially.

The uranium in this district represents significant potential domestic supply of energy and many jobs at a time when both are critical to the needs of the U.S.

#### Other Properties

The Company's other properties, listed by commodity, include:

Copper +/- gold: Yerington District (Wassuk, Missouri Flats, Copper Canyon), Reville and Goldfield East in Nevada; SW Tintic in Utah.

Gold +/- silver: Central Mexico (Americas/Mirasol, Sierra Sabino, Santo Domingo, Marijo, Onix, Azafran, Tian, Lupita, Microondas, El Calvo);

Molybdenum: Cave Peak, Texas;

Uranium: Tidwell, Sinbad, and Shootaring, Utah and Basin, Wyoming;

Data from prior activities is limited or in the process of being acquired and studied. The Company's total expenditures to date with respect to these other properties have been minimal.

#### **ITEM 4A. UNRESOLVED STAFF COMMENTS**

None.

#### **ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

*The information in this section is presented in accordance with International Financial Reporting Standards, ("IFRS") as issued by International Accounting Standards Board. The following discussion of our financial condition and results of operations for the fiscal years ended December 31 and should be read in conjunction with our consolidated financial statements included in Item 17 of this annual report.*

### Critical Accounting Estimates

The accounting estimates believed to require the most difficult, subjective or complex judgments, and which are the most critical to our reporting of results of operations and financial position, are as follows:

#### *Mineral Properties*

We capitalize all costs related to the acquisition and exploration of mineral properties on a property by property basis, net of recoveries until such time as these mineral properties are placed into commercial production, sold or abandoned. If commercial production is achieved from a mineral property, the related deferred costs will be amortized prospectively on a unit-of-production basis over the estimated life of the ore reserves. If a mineral property is abandoned, the related deferred costs are written down and expensed. From time to time, we may acquire or dispose of all or part of the mineral property interests under the terms of property option agreements. As such options are exercisable entirely at the discretion of the optionee, option payments are recorded as property costs or recoveries when paid or received.

Long-lived assets, such as equipment and deferred exploration, are reviewed for impairment at each reporting period or more frequently as economic events indicate that the carrying amount of an asset may not be recoverable.

On an ongoing basis, we evaluate each mineral property for potential impairment based on results obtained to date to determine the nature of exploration, other assessment and development work, if any, that is warranted in the future and the potential for recovery of the deferred costs. If there is little prospect of future work on a property being carried out within a three-year period from completion of previous activities, the deferred costs related to that property are written down to the estimated amount recoverable unless there is persuasive evidence that an impairment allowance is not required.

#### *Stock-based Compensation Expense*

From time to time, we may grant share purchase options to directors, officers, employees and consultants. We use the Black-Scholes option pricing model to estimate the fair value for these options. This model, and other models which are used to value options, require inputs such as expected volatility, expected life to exercise and interest rates. Changes to any of these inputs could cause a significant change in the stock-based compensation expense charged in a period.

#### *Fair value of derivative liabilities*

The fair value of derivative liabilities that are not traded in an active market is determined by using a valuation technique. Management makes estimates and utilizes assumptions in determining the fair value for share-based payments, warrants, and the (gain) loss on the revaluation of the derivative liability;

#### *Income Taxes*

Income tax comprises current and deferred tax. Income tax is recognized in net income (loss), except to the extent related to items recognized directly in equity or in other comprehensive loss.

Deferred tax is recognized in respect of temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax is determined on a non-discounted basis using tax rates and laws that have been enacted or substantively enacted by the reporting date and are expected to apply when the deferred tax asset or liability is settled. Deferred tax assets are recognized to the extent that it is probable that the assets can be recovered.

### **A. Operating Results**

For the year ended December 31, 2012, we reported a net loss of \$4,853,976 compared to a net loss of \$11,264,539 for the previous year. The decreased loss in 2012 was mainly attributable to \$4,183,224 impairments and \$2,846,707 stock-based compensation recorded in 2011. Other general fluctuations are discussed below:

#### Exploration Costs

Exploration costs represent expenditures to undertake and support exploration activities on our properties. If they do not have characteristics of property, plant and equipment, they are expensed as incurred. Exploration costs charged to operations during 2012 were \$182,852 compared to \$506,297 for the prior year resulting from an increase in the consideration of potential properties in Mexico.

## General Administrative Expenses

General administrative expenses include overheads associated with administering and financing our exploration activities.

General administrative expenses were \$3,371,294 (excluding stock-based compensation and amortization), an increase of \$329,884 compared to \$3,701,178 in 2011. The higher costs in 2011 resulted from the increased support required for advancing the MacArthur and Uranium mineral properties including the retention of additional personnel, the rising regulatory costs associated with increased regulatory requirements in Canada and the United States, and general and administration expenditures to support our expanded operations.

- Administration and general increased by \$24,443 from \$701,670 in 2011 to \$726,113 in 2012 reflecting the new rates in the Manex service agreement renewed in February 2012.
- Consulting decreased by \$278,393 from \$644,757 in 2011 to \$366,364 in 2012 due to a onetime consulting agreement accrual made in 2011 and the termination of the financial advisory service agreement on April 15, 2012.
- Investor relations and communications decreased by \$84,701 from \$309,110 in 2011 to \$224,409 in 2012 due to the new website design of the Company in 2011.
- Personnel costs decreased by \$16,806 from \$1,152,792 in 2011 to \$1,135,986 in 2012 reflecting the gradual slow-down of the exploration activities of the Company.
- Professional fees increased by \$165,864 from \$429,889 in 2011 to \$595,753 in 2012 reflecting the increased legal fees for the Arizona Uranium law suit starting January 2012.
- Share-based payments: share-based payments decreased by \$1,800,190 from \$2,846,707 in 2011 to \$1,046,517 in 2012.
- Travel and promotion reduced by \$149,949 from \$203,086 in 2011 to \$53,137 in 2012 reflecting a reversal of travel expenses provision accrued in the prior years and no longer required.

## Other and Non-Cash Items

- Exploration partner administration income: The Company charges a 10% administration fee on its Nieves joint venture partner's shared exploration costs and 5% fee on expenditures on its central Mexico properties under the Goldcorp IFA agreement.
- Foreign exchange: The Company recognized a foreign exchange loss of \$189,877 in 2011 compared to \$166,914 in 2012 due to the fluctuation of the Canadian dollar against the US dollar. Volatility in the foreign exchange rate could continue to result in significant foreign exchange gains or losses. The Company does not hedge its exposure to changes in the value of the Canadian dollar.
- The Company sold its Butte Valley copper project to Freeport for gross proceeds of US\$2 million, of which net \$1,737,692 was received on October 2, 2012. As of December 31, 2012, the Company recorded \$820,712 gain after its accumulated acquisition and exploration costs of \$1,159,669 incurred.
- General exploration costs: These costs represent expenditures to undertake and support exploration activities on the Company's properties, including costs incurred prior to the Company obtaining the rights to the mineral properties. In addition, if the expenditures are deemed not to be specifically related to individual properties or not recoverable, they are expensed as incurred.
- During the year ended in 2012, 3,695,000 stock options were granted at a weighted average exercise price of \$0.47 versus 3,690,000 granted in 2011 at a weighted average exercise price of \$1.26. The values of share-based payments were determined by the Black-Scholes option pricing model recognized over the vesting period of options. See Note 8(a) in the audited consolidated financial statements for Black Scholes assumptions used and the resulting estimate of fair value.
- Impairments: in 2011 the carrying value of five properties in the United States totaling \$4,183,224 was written down due to lack of exploration merit. The Company conducted impairment test and concluded no impairment write-down was required as of December 31, 2012.
- Interest income: interest earned varies based on the timing, type and amount of equity placements and resultant fluctuations in cash.
- (Recovery) write-off of equipment: \$39,954 insurance proceeds were received for the losses of two vehicles in Mexico in 2011. \$38,525 was written off in 2011 due to one of the losses

For the year ended December 31, 2011 ("2011"), the Company reported a net loss of \$11,264,539 compared to a net loss of \$2,769,248 in the previous year ("2010").

General administrative expenses increased by \$765,748, or 26%, (excluding non-cash items), reflecting the Company's increased activities in 2011.

An analysis of the changes is outlined below:

- Administration and general office general expenses increased by \$122,638 from \$579,032 in 2010 to \$701,670 in 2011 reflecting the expanded office operations in Yerington, Nevada.
- Consulting increased by \$274,978 from \$369,779 in 2010 to \$644,757 in 2011 reflecting the Company's engagement with a local community service provider in Yerington, Nevada regarding the exploration of mining opportunities at its Yerington property.
- The increases in investor relations and travel & promotion reflect the Company's communications with investors through web/telephone conferences, implementing a new website and advertising in industry newspapers and magazines.
- Personnel costs increased by \$319,420 from \$833,372 in 2010 to \$1,152,792 in 2011 resulting from the expanded operations noted above.
- Professional fees reduced by \$43,643 from \$473,532 in 2010 to \$429,889 in 2011 reflecting the reduced legal fees in the current year.
- Share-based payments increased by \$595,449 from \$2,251,258 in 2010 to \$2,846,707 in 2011. The values of share-based payments were determined by the Black-Scholes option pricing model recognized over the vesting period of options. See Note 8 in the consolidated financial statements for Black Scholes assumptions.
- Transfer agent and regulatory fees decreased by \$7,625 from \$157,205 in 2010 to \$149,580 in 2011 due to the timing difference in expensing annual regulatory listing fees.

#### Other and Non-Cash Items

- Exploration partner administration income: The Company charges a 10% administration fee on its Nieves joint venture partner's shared exploration costs and 5% fee on expenditures on its central Mexico properties under the Goldcorp IFA agreement.
- Foreign exchange: The Company recognized a foreign exchange loss of \$189,877 in 2011 compared to \$324,828 in 2010 due to the fluctuation of the Canadian dollar against the US dollar. Volatility in the foreign exchange rate could continue to result in significant foreign exchange gains or losses. The Company does not actively hedge its exposure to changes in the value of the Canadian dollar.
- General exploration costs: These costs represent expenditures to undertake and support exploration activities on the Company's properties. If the expenditures are deemed not to be specifically related to individual properties or not recoverable, they are expensed as incurred.
- Impairment: during the year ended December 31, 2011, the Company wrote down the carrying value of the following properties totaling \$4,183,224:
  - i. \$2,441,592 related to Duke Island property
  - ii. \$257,533 related to Peg Leg property
  - iii. \$49,809 related to the Klondike property
  - iv. \$1,109,446 related to Willow Creek property
  - v. \$324,844 related to GrayHills property.
- Interest earned varies based on the timing, type and amount of equity placements and resultant fluctuations in cash.
- Fair value gain on derivative liability is related to the U.S. dollar denominated warrants issued on November 27, 2008, December 19, 2008 and January 15, 2009 with respect to the convertible debt financings.

#### **B. Liquidity and Capital Reserves**

As at March 27, 2013, the Company has cash on hand of approximately \$200,000. The Company will need to rely on the raising of equity in the capital markets or on the sale and/or the optioning of its mineral property interests via joint venture agreements with third parties to provide working capital and to finance its mineral property acquisition and exploration activities. Since the Company does not generate any revenue from operations, its long-term profitability will be directly related to the success of its mineral property acquisition, divestment and exploration activities.

On December 28, 2012, the Company closed a non-brokered private placement with the issuance of 6,541,571 units for gross proceeds of US\$2.289 million. Each unit is comprised of one common share and one non-transferable common share purchase at an exercise price of US\$0.53 expiring December 28, 2014. The proceeds were used to pay the outstanding bills, and the Company's ongoing exploration operations in Nevada, US and Mexico. The Company is currently exploring various avenues to monetize its interest in the Nieves project in order to fund its 100% owned copper assets in Nevada, US.

On October 2, 2012, the Company received the net proceeds of \$1,737,692 for the sale of its Butte Valley property, representing one of the first transactions that to monetize the Company's non-core assets.

On April 12, 2012, the Company received \$2.48 million from Goldcorp to fund additional exploration on certain properties in Mexico by issuing 4 million shares at a price of \$0.62 per share.

During the year ended December 31, 2012, the Company used cash in operating activities of \$3,517,730 (2011 - \$4,377,036) and had \$13,397,677 (2011 - \$17,345,625) in mineral property acquisition and exploration costs. As of March 27, 2013, the Company received US\$189,994 as a reimbursement of shared exploration costs incurred in 2012 from BlackBerry. The ability of the Company to continue its exploration program is dependent on the continuing success of its programs and on generating sufficient additional funding from Investors.

#### C. Research and Development, Patents and Licenses, etc.

We do not have a research and development policy, nor do we hold any patents, licenses, or other intellectual property.

#### D. Trend Information

Mineral property expenditures can vary from quarter to quarter depending when option payments are due and the stage of the exploration program. For example, drilling may slow down for a period of time when results are analyzed, resulting in lower costs during that period.

We have had no revenue from mining operations since our inception. Income was generated through management fees on certain properties and interest earned on banker's acceptance investments.

#### E. Off- Balance Sheet Arrangements

None.

#### F. Tabular Disclosure of Contractual Obligations

The following table outlines our contractual and optional obligations at December 31, 2012:

	Total	1 Year	2-3 Years	4-5 Years	> 5 Years
Mineral properties <sup>(a)</sup>	\$ 8,459,017	\$ 908,781	\$ 2,122,559	\$ 2,083,321	\$ 3,344,356
Office lease <sup>(b)</sup>	1,144,857	277,561	482,296	385,000	-
	\$ 9,603,874	\$ 1,186,342	\$ 2,604,855	\$ 2,468,321	\$ 3,344,356

(a) We are required to make option payments and other expenditure commitments to maintain the properties and earn interest.

(b) During 2012, we renewed the service agreement with Manex Resource Group ("Manex") for its Vancouver office space, administration, and corporate development. The agreement can be cancelled upon two- year notice. The current expiry date is August 31, 2017. The office lease Yerington, Nevada United States expires on July 15, 2014.

#### G. Safe Harbour

The safe harbor provided in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, shall apply to forward-looking information provided pursuant to Item 5.F. Please see "Cautionary Statement Regarding Forward-Looking Information" at the outset of this annual report.

## ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

### A. Directors and senior management

The following tables and biographies set forth information about our directors and executive officers:

Name	Age	Positions Held	Period as Director or Officer	Jurisdiction of Residence
Tracy Stevenson	62	Director & Chairman of the Board	Since 2007	Utah, U.S.
Thomas C. Patton	69	Director, President & Chief Executive Officer	Since 1998	Washington, U.S.
Anthony Walsh	61	Director	Since 2012	British Columbia, Canada
John Kerr	72	Director	Since 1993	British Columbia, Canada
Lawrence Page, Q.C.	73	Director & Secretary	Since 1995	British Columbia, Canada
Eugene Spiering	59	Vice President of Exploration	Since 2006	British Columbia, Canada
LeRoy Wilkes	70	Director	Since 2006	Colorado, U.S.
Scott Hean	65	Chief Financial Officer	Since 2006	British Columbia, Canada
Charles Hawley	83	Vice President, Exploration, Alaska	Since 2001	Alaska, U.S.
Todd Hilditch	45	Director	Since 2012	British Columbia, Canada
Steve Dischler	54	Vice-President- Yerington District	Since 2012	Yerington, Nevada

#### Tracy Stevenson

Mr. Stevenson received a B.S. Accounting Magna Cum Laude from the University of Utah. He has international experience in finance, mergers and acquisitions, strategic planning, corporate governance, auditing, administration and information systems and technology. He worked for Rio Tinto plc, the world's second largest mining company, and related companies for 26 years, where he held a number of senior leadership positions. Mr. Stevenson was the global head of information systems and shared services for Rio Tinto. He also served for four years as Executive Vice President, Chief Financial Officer and a director of Comalco Ltd., an Australia-based international aluminum company partially owned by Rio Tinto, and a further four years as Chief Financial Officer and a director of Kennecott Corporation, a diversified North American mining company owned by Rio Tinto. He also has public accounting experience with Coopers & Lybrand (now Price Waterhouse Coopers). Mr. Stevenson also serves as a director of Vista Gold Corp. Mr. Stevenson is also a founding member of Bedrock Resources, LLC, a private resources financial advisory firm and SOS Investors, a private resources investment firm.

#### Dr. Thomas Patton

Dr. Patton graduated from the University of Washington in 1971 (Ph.D.) and has worked with both junior and senior mining companies. He served as the President and Chief Operating Officer for Western Silver Corporation from January 1998 to May 2006. Among his accomplishments at Western Silver were the discovery and delineation of the class Peñasquito silver-gold-lead zinc deposit in Zacatecas, Mexico and the subsequent sale of the company to Glamis Gold Ltd. Prior to joining Western Silver, Dr. Patton held senior positions with Rio Tinto PLC and Kennecott Corporation, where he served as Senior Vice President, Exploration and Business Development. Dr. Patton is a member of the Society of Economic Geologists and the American Institute of Mining & Metallurgical Engineers.



#### John R Kerr

John R. Kerr graduated from the University of British Columbia in 1964 with a Bachelor of Applied Science (B. ASce) degree in Geological Engineering. He has participated in the mining industry continuously since graduation as an exploration geologist. Mr. Kerr has gained experience in recognition and identification of mineral potential in a diversified field of geological environments. Mr. Kerr also serves as director of Bravada Gold Corporation. He currently operates a geological consulting practice out of Vancouver, B.C., with projects located in all areas of North America.

#### Lawrence Page, Q.C.

Lawrence Page, Q.C. obtained his law degree from the University of British Columbia in 1964 and was called to the Bar of British Columbia in 1965. He has been admitted to the Bar of Ontario for the purpose of acting as counsel in specified litigation. Mr. Page was awarded the distinction of Queen's Counsel in 1988. Mr. Page practices on his own in Vancouver in the areas of commercial litigation, native law, natural resource law and securities law. He is the principal of the Manex Resource Group, which provides administrative, financial, corporate and geological services to a number of public companies in the mineral resource sector, including Quaterra. Mr. Page also serves as a director of five public companies: Duncastle Gold Corp.; Valterra Resource Corporation; Southern Silver Exploration Corp.; Bravada Gold Corp. and Homestake Resource Corporation.

#### Eugene Spiering

Mr. Spiering has a Bachelor of Science-Geology degree from the University of Utah. He has over 30 years of experience in the mining exploration industry. Mr. Spiering previously held the position of Vice President, Exploration at Rio Narcea Mines Ltd., where he managed a team that discovered the El Valle and Corcoesto gold deposits and completed the final definition of the Carles and Salave gold deposits and the Aguablanca nickel deposit in Spain. Prior to his tenure at Rio Narcea, Mr. Spiering held the position of senior geologist with Energy Fuels Nuclear, Inc. where he participated in the discovery of the Arizona 1 and Hermit uranium deposits. His responsibilities with Energy Fuels included drilling supervision, geologic mapping, and ore reserve calculations related to uranium exploration in northern Arizona and gold exploration in the western US and Venezuela. Mr. Spiering is a member of the Society of Economic Geologists, the Society for Mining, Metallurgy & Exploration, the American Association of Petroleum Geologists, and is a Fellow member of the Australasian Institute of Mining and Metallurgy.

#### LeRoy Wilkes

Mr. Wilkes was President of Washington Group International's mining business unit where he was responsible for the operating and financial performance of the unit's international operations in the coal, metals and industrial minerals markets. He has 37 years of mining experience in the precious metals, coal industrial metals, and base metals mining and processing. Prior to joining the Washington Group, Mr. Wilkes served as executive vice-president and chief operating officer of Santa Fe Pacific Gold Corporation of Albuquerque, New Mexico from 1988 to 1995. Mr. Wilkes also previously served as executive vice-president of Washington Corporation of Missoula, Montana, responsible for merger and acquisition activities. He earlier served as vice-president and general manager of Kennecott Ridgeway Mining Company of Ridgeway, South Carolina, and director of business development of Anaconda Minerals Co. of Denver, Colorado. He has held management and supervisory positions at surface and underground mines producing molybdenum, copper, limestone, lead silver and zinc. Mr. Wilkes has a degree in mining engineering from the Montana School of Mines. Mr. Wilkes also serves as a director and chairman of the Board of Sabina Silver Corporation.

#### Scott B. Hean

Mr. Hean graduated from Simon Fraser University in 1973 and from the Ivey School of Business, London, Ontario, in 1975. He completed the Institute of Corporate Directors Director Education program in May 2006. Currently, Mr. Hean is director and past chair of the audit committee for Sabina Gold Corp. and a director of Southern Silver Exploration Corp. He has been CFO of the Company since 2006. Previously he held senior management and executive positions with Bank of Montreal as Senior Vice President and Managing Director responsible for financing in the natural resources sectors in North America and with J.P. Morgan of New York, where he was involved in financing oil and gas companies. In the non-profit sector, he serves as a director and chair of the Bill Reid Trust, a not for profit organization concerning the work of the internationally renowned Haida artist, Bill Reid. He has served on numerous not-for-profit Boards, including Outward Bound Canada and B.C. Children's Hospital.

#### Dr. Charles Hawley

Dr. Hawley graduated with a Bachelor of Arts degree from Hanover College, Indiana in 1951 and earned a Ph.D in geology from the University of Colorado in 1963. He worked for the U.S. Geological Survey from 1952-1968. Dr. Hawley has been working within the exploration and mine development field in Alaska's private sector since 1969.

#### Anthony Walsh

Mr. Walsh graduated from Queen's University (Canada) in 1973 and became a member of The Canadian Institute of Chartered Accountants in 1976. Mr. Walsh has over 20 years' experience in the field of exploration, mining and development. From 2008 to 2011, Mr. Walsh was President and CEO and a Director of Sabina Gold & Silver Corp. From 1995 to 2007, Mr. Walsh was President and Chief Executive Officer of Miramar, from 1993 to 1995 was the Senior Vice-President and Chief Financial Officer of a computer leasing company and from 1989 to 1992 was Chief Financial Officer and Senior Vice-President, Finance of International Corona Resources Ltd., a gold producer. Mr. Walsh is currently Chairman of Stornoway Diamonds Ltd. and serves as a director of several other public companies, namely: Sabina Gold and Silver Ltd., Dundee Precious Metals Ltd., Avala Resources Ltd., Nova Gold Ltd., and TMX Group Ltd.

#### Todd Hilditch

Mr. Hilditch is President, Chief Executive Officer and a Director of Terraco Gold Corp., a TSXV-listed gold exploration company focussed in the western United States. He is a Director of Sama Resources Inc., a TSXV-listed base metals company focussed in West Africa, and was its President and Chief Executive Officer until 2010. Until 2010, Mr. Hilditch was President, Chief Executive Officer and a Director of Salares Lithium Inc., which was acquired by Australia-based Talison Lithium Limited, the world's largest lithium producer and a TSE-listed company. He is also a Director of Bryant Resources Inc. Mr. Hilditch is the President and owner of Rock Management Consulting Ltd., a private mining management services and consulting company.

#### Steven Dischler

Mr. Dischler graduated from the University of Wisconsin in 1981 (BS) and from the University of Arizona in 1984 (MS). Both of his degrees are in Mining Engineering. From 2007 through 2011, Mr. Dischler was a Project General Manager and Strategy Manager for a global oil company, BP. In his roles at BP he was responsible for managing major capital projects up to \$250MM (US) and for managing a portfolio of legacy mining sites across the western US for the company. In prior roles Mr. Dischler was a consultant for 25 years which included permitting and development of major mining sites at numerous locations in the US. Mr. Dischler is a registered Professional Engineer in 8 states and has been a member of the Society of Mining Engineers since 1978.

### **B. Compensation**

#### Executive Officers

The following table sets forth the compensation paid to executive officers for the fiscal year ended December 31, 2012.

Name	Salary (\$)	Bonus (\$)	Securities Under Options Granted (#)	Share-Based Payment Under Options (\$)	All other Compensation	Total (\$)
Thomas C. Patton President & CEO	137,500	nil	160,000	44,800	nil	182,300
Eugene Spiering VP of Exploration	200,000	nil	160,000	44,800	nil	244,800
Scott Hean <sup>(1)</sup> CFO	nil	nil	160,000	44,800	157,880	202,680
Gerald Prosalendis <sup>(2)</sup> former VP, Corporate Development	106,250	nil	80,000	22,400	29,750	158,400
Steve Dischler VP - General Manager Yerington District	249,850	nil	160,000	44,800	nil	294,650

- (1) Consulting fees paid to Atherton Enterprises, a company owned by Mr. Scott Hean in consideration of Mr. Hean's services as Chief Financial Officer.
- (2) Consulting fees paid to Swordfern Strategic Counsel Inc., a company owned by Mr. Gerald Prosalendis in consideration of his services in investor relations subsequent to his resignation as VP, Corporate Development effective August 31, 2012.

We granted stock options on June 28, 2012 under our Incentive Stock Option Plan at an exercise price of \$0.45 per share for a five year term to the executive officers named above in the following amounts: Dr. Thomas Patton received 160,000 options; Mr. Spiering received 160,000 options; Mr. Hean received 160,000 options, Mr. Dischler received 160,000 options and Mr. Prosalendis received 80,000 options

#### Board of Directors

In the fiscal year ended December 31, 2012, each of our non-executive directors, other than the Chairman of the Board of Directors, received an annual fee of \$12,000 for their service as well as a \$500 fee per Board of Directors or committee meeting attended and \$500 per day for each day of travel. On June 28, 2012, John Kerr, Anthony Walsh, Lawrence Page, and Roy Wilkes each received 80,000 options, at an exercise price of \$0.45 per share. Mr. Hilditch received 100,000 options on June 28, 2012 at the price of \$0.45 per share. The Chairman of the Board, Mr. Stevenson received an annual fee of \$24,000 and \$3,500 meeting fees and \$4,000 for days traveled. Mr. Stevenson also received 100,000 options on June 28, 2012 at an exercise price of \$0.45 per share.

In addition, Robert Gayton, Chairman of the Audit Committee, who resigned from the Board and the Audit Committee on September 30, 2012, received an annual fee of \$11,250 and \$5,500 meeting fees. Mr. Gayton also received 80,000 options on June 28, 2012. Mr. Anthony Walsh who was appointed the Chairman of the Audit Committee on October 1, 2012 received an annual fee of \$9,750 and \$5,500 meeting fees. The Chairman of the Corporate Governance Nomination and Compensation Committee, LeRoy Wilkes, received an annual fee of \$13,500 as well as \$6,000 meeting fees and \$5,000 travel allowance. The Chairman of the Safety, Health, Security and Environment Committee, John Kerr, received an annual fee of \$13,500 and \$8,000 meeting fees.

All stock options issued expire after five years and were issued under our Incentive Stock Option Plan.

#### **C. Board Practices**

##### Term of Office

Our directors are elected annually at our annual general meeting and each officer holds such office for one year, until the next annual general meeting of shareholders, or until replaced by his or her predecessor.

## Service Contracts

During the most recently completed financial year, two of our executive directors had service contracts in place which provide for benefits upon termination of employment.

*Thomas Patton* – In January 2010, Dr. Thomas Patton entered into an employment agreement with the Company and its subsidiary, Quaterra Alaska, Inc. for a period of five years which replaced a prior employment agreement dated January 1, 2009. Under the employment agreement, Dr. Patton is entitled to receive an annual base salary of \$150,000. Upon the expiration of one year following the date of the employment agreement and each year thereafter, the Company will review Dr. Patton's salary with a view to its increase, giving consideration to the Company's financial position and the scope of its activities. Dr. Patton may be eligible to participate in future stock option grants. The Company may terminate the employment of Dr. Patton only for breach of the employment agreement or for cause. Dr. Patton is entitled to two months' notice of such discharge. If Dr. Patton becomes disabled and unable to perform his regular duties, he shall be entitled to receive his full salary for two months. Upon a change of control, as defined in the employment agreement, Dr. Patton has the right to terminate the employment agreement and receive an amount of money equal to his annual salary for two (2) years, that amount being \$300,000.

*Lawrence Page*: On July 15, 2011, Lawrence Page, Q.C. entered into a Service Agreement with the Company for a period of five years, whereby Mr. Page provides Corporate Secretarial services to the Company and is entitled to receive an annual fee of \$50,000. Mr. Page may be eligible to participate in future stock option grants.. Upon a change of control, as defined in the agreement, Mr. Page has the right to terminate the agreement and receive an amount of money equal to his annual salary for two (2) years, that amount being \$100,000.

## Committees

Our Board of Directors has established an Audit Committee and Corporate, Governance, Nomination and Compensation Committee.

*Audit Committee* –The Company's Board of Directors has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended. The members of the Audit Committee are Anthony Walsh, Todd Hilditch and John Kerr. The Company's Board of Directors has determined that each of Messrs. Walsh, Hilditch, and Kerr are independent (as provided for under Rule 10A-3 of the Exchange Act and Section 803 of the NYSE MKT LLC Company Guide) and are financially literate. The Audit Committee is responsible for assisting directors to meet their responsibilities providing better communication between directors and external auditors; enhancing the independence of the external auditor, increasing the credibility and objectivity of financial reports, and strengthening the role of the directors, facilitating in-depth discussions among directors, management, and the external auditor. The Audit Committee meets at least four times during a year. A copy of the Audit Committee Charter is available through our website at [www.quaterraresources.com](http://www.quaterraresources.com).

*Corporate Governance, Nomination and Compensation Committee* – The members of the Corporate Governance Nomination Compensation Committee (the "CGNCC") are LeRoy Wilkes, Anthony Walsh, and Todd Hilditch all of whom are independent under NYSE MKT rules. The Board of Directors has determined that the composition of the CGNCC ensures an objective process for determining compensation of executive officers. The CGNCC meets regularly and considers matters of governance and compensation. The CGNCC may seek the advice of third party independent consultants as may be required in particular circumstances and submits reports to the full Board of Directors on a regular basis.

## **D. EMPLOYEES**

During the fiscal years ended December 31, 2012, 2011 and 2010, we had direct employees as outlined below. Prior to 2010, the majority of our workforce were independent contractors rendering services to the different subsidiaries.

<b>Company</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Quaterra Resources Inc.	2	3	4
Quaterra Alaska Inc.	11	12	4
Minera Agua Tierr S.A. de C.V.	Nil	Nil	Nil
Quaterra International Limited	Nil	Nil	Nil
<b>Total</b>	<b>13</b>	<b>15</b>	<b>8</b>

We renewed the service agreement with related party Manex Resource Corp. ("Manex") in February, 2012 whereby Manex provides administrative, accounting, and secretarial services to us. The basic fee for office space and office infrastructure is \$19,250 per month and other services rendered are based on hourly rates specified in the agreement. We also reimburse Manex for office supplies including paper, courier, postage, parking, filing fees and other out-of-pocket expenses. During the three years ended December 31, 2012, we paid Manex the following:

	Fiscal year ended December 31		
	2012	2011	2010
Office space and administration\$	267,124	\$ 241,552	\$ 216,950
Accounting	164,088	163,799	179,102
Corporate Secretary	100,454	103,387	99,173
15% charges on recovery	3,683	5,839	6,125
	\$ 535,349	\$ 514,577	\$ 501,350

Manex is located at the same address as our company at suite 1100, 1199 West Hastings Street, Vancouver, British Columbia. Manex is a private company controlled by Lawrence Page, one of our directors.

#### E. SHARE OWNERSHIP

All persons listed in subsection 6.B above beneficially own an aggregate of 4,587,934 Common shares or 2.81% of our common shares outstanding. Dr. Thomas Patton beneficially owns 3,348,162 or 2.05% of our common shares and he has the right to exercise or redeem various stock options that if fully exercised will beneficially own 4,608,162 common shares of the Company or 2.82% of our outstanding shares. No other director or officer beneficially owns greater than 1% of our common shares.

We grant stock options to directors, officers, employees and consultants who provide services to us, including our subsidiaries, pursuant to our Incentive Stock Option Plan. The purpose of the Incentive Stock Option Plan is to provide increased incentive to contribute to our future success and prosperity, thus enhancing the value of our shares for the benefit of all the shareholders and increasing our ability to attract and retain skilled and motivated individuals in the service of us. Our Incentive Stock Option Plan is a "rolling" plan through which the maximum number of issuable shares underlying options is equal to 10% of our outstanding shares. As of December 31, 2012, there were 14,010,000 options outstanding and 13,635,000 exercisable under the Incentive Stock Option Plan.

### ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

#### A. Major Shareholders

We are not aware of any beneficial shareholder holding greater than 5% of our common shares as of the date of this annual report or during the prior three years, other than:

Goldcorp Inc.	10,294,825 common shares	6.31%.
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As of December 31, 2012, approximately 61% of our common shares were held in Canada and approximately 35% of our common shares were held in the U.S., with the balance held in various other countries.

There are no arrangements known to us that may at a subsequent date result in a change in control.

#### B. Related Party Transactions

During fiscal 2012, we paid consulting fees of \$157,880 paid to Atherton Enterprises, a company owned by Scott Hean and, and we also paid legal fees of \$4,115 to a law firm of which Lawrence Page is the principal.

The Company renewed the service agreement with related party Manex Resource Corp. ("Manex") on February 2, 2012 which replaces a prior service agreement dated June, 2008, whereby Manex provides administrative, accounting, and secretarial services to the Company. Manex is a private company controlled by Lawrence Page, a director and officer of the Company. The basic fee for office space and office infrastructure is \$19,250 per month and other services rendered are based on hourly rates specified in the agreement. The Company also reimburses Manex for office supplies including paper, courier, postage, parking, filing fees and other out-of-pocket expenses. During the year ended December 31, 2012 the Company paid \$535,349 to Manex. Manex is located at the same address as the Company at suite 1100, 1199 West Hastings Street, Vancouver, British Columbia, V6E 3T5. We believe the terms of the Manex agreement are similar to that which would be obtainable from an unrelated party.

### C. Interests of Experts and Counsel

Not applicable.

## ITEM 8. FINANCIAL INFORMATION

### Financial Statements

The consolidated statements of financial position of Quaterra Resources Inc. as of December 31, 2012 and 2011 and the consolidated statements of comprehensive loss, changes in equity and cash flows of Quaterra Resources Inc. for the years ended December 31, 2012, 2011 and 2010, as well as the auditors' report thereon, are presented at Item 17 of this annual report.

### Legal Proceedings

As described in "Future Work Plans" as part of the Arizona Uranium Claims, USA discussion under Item 4D above, the Company is has initiated a lawsuit against the U.S. Department of the Interior and Bureau of Land Management.

From time to time, we may be a party to pending or threatened legal proceedings and arbitrations that are routine and incidental to our business. Based upon information presently available, and in light of legal and other defenses available to us, our management does not consider the liability from any threatened or pending litigation to be material.

### Dividends

We have never declared or paid any cash dividends on our common stock and we do not anticipate paying any cash dividends in the foreseeable future.

### Significant Changes

Except as otherwise disclosed in this annual report, including under Item 5. "Operating and Financial Review and Prospects", there has been no significant change in our financial position since December 31, 2012.

## ITEM 9. THE OFFER AND LISTING

### A. Offer and listing details

Our common shares have traded on the TSX Venture Exchange since November 14, 1997 under the symbol QTA. Our common shares also have traded on the NYSE MKT (previously known as the NYSE AMEX) since March 4, 2008 under the symbol QMM.

The following table set forth the price history of our common shares for the periods indicated.

	TSX Venture Exchange (C\$)		NYSE MKT (US\$)	
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
Fiscal Year Ended December 31, 2012	0.74	0.32	0.71	0.32
Fiscal Year Ended December 31, 2011	2.08	0.54	2.21	0.50
Fiscal Year Ended December 31, 2010	2.50	1.05	2.42	1.01
Fiscal Year Ended December 31, 2009	2.05	0.41	2.28	0.30
Fiscal Year Ended December 31, 2008	4.18	0.47	3.97	0.36
Fiscal Year Ended December 31, 2012				
First Quarter	0.74	0.46	0.71	0.45

Second Quarter	0.60	0.34	0.55	0.35
Third Quarter	0.40	0.32	0.46	0.32
Fourth Quarter	0.54	0.32	0.60	0.33
Fiscal Year Ended December 31, 2011				
First Quarter	2.08	1.52	2.21	1.50
Second Quarter	1.75	1.10	1.84	1.10
Third Quarter	1.61	0.84	1.70	0.80
Fourth Quarter	1.25	0.54	0.95	0.50
February 2013	0.32	0.23	0.36	0.20
January 2013	0.38	0.30	0.38	0.30
December 2012	0.40	0.32	0.42	0.33
November 2012	0.45	0.35	0.46	0.34
October 2012	0.54	0.35	0.60	0.34
September 2012	0.40	0.32	0.41	0.32

**B. Plan of Distribution**

Not applicable.

**C. Markets**

See subsection 9.A. "Offer and Listing Details" above.

**D. Selling Shareholders**

Not applicable.

**E. Dilution**

Not applicable.

**F. Expenses of the Issue**

Not applicable.

**ITEM 10. ADDITIONAL INFORMATION**

**A. Share Capital**

Not applicable.

**B. Memorandum and Articles of Association**

Incorporation

We are governed by Articles dated June 13, 2005 and amended December 11, 2007. Our Articles are on file with the Office of the British Columbia Registrar of Companies under Certificate of Incorporation No. BC0446713. Under the provisions of the *Business Corporations Act* (BC), we have the capacity and the rights, powers, and privileges of an individual of full capacity. There are no restrictions in our Articles on the business that we can carry on or the powers we can exercise.

Powers and Functions of the Directors

Under Article 17, a director is obligated to disclose a potential interest in a contract or transaction being considered by us, and may not vote on a contract or transaction with a disclosable interest, but the director shall be counted in the quorum at the meeting of the Board of Directors at which the contract or transaction is approved.

Under Article 13, the Board of Directors may, in the absence of an independent quorum, vote compensation to themselves.

Under Article 8, there are no limitations on borrowing powers exercisable by our Board of Directors.

There are no provisions in our Articles for the retirement or non-retirement of a director under an age limit.

There is no requirement in our Articles for a director to hold any of our common shares.

#### Rights and Restrictions Attached to the Common Shares

Our common shares rank equally as to dividend rights, voting rights, profits, and liquidation rights. The common shares are not subject to redemption or sinking fund provisions, liability to further capital calls, nor any provisions discriminating against any existing or prospective holder of such shares as a result of such shareholder owning a substantial number of shares.

#### Alteration of Share Rights

In accordance with the *Business Corporations Act* (BC) and our Articles, a special resolution is required to change the rights of common shares, and must be (a) passed at a general meeting by a majority of not less than 2/3 of the voting common shareholders; or (b) consented to in writing by all common shareholders.

#### Annual General Meetings

Articles 10 and 11 of our Articles, together with applicable corporate and securities laws, contain the conditions governing the manner in which annual and extraordinary general meetings of shareholders are called, including notice, proxy solicitation, and quorum requirements. Annual general meetings are called and scheduled upon decision by the Board of Directors. The Board of Directors may convene an extraordinary general meeting of the shareholders. Holders of common shares may not requisition an extraordinary meeting of the shareholders. All meetings may be attended by registered shareholders or persons who hold powers of attorney or proxies given to them by registered shareholders.

#### Foreign Ownership Limitation

Our Articles do not contain limitations on the rights of non-residents, foreigners, or other groups to own common shares.

#### Change of Control

There are no provisions in our Articles that would have the effect of delaying, deferring or preventing a change in control, or that operate only with respect to a merger, acquisition or corporate restructuring involving us or any of our subsidiaries.

#### Share Ownership Reporting Obligation

Our Articles do not contain provisions governing the threshold above which shareholder ownership must be disclosed.

#### Differences between Canadian and U.S. Law

The securities laws of the Province of British Columbia require disclosure of shareholdings by (i) persons who are our directors or senior officers; and (ii) a person who has direct or indirect beneficial ownership of, control or direction over, or a combination of direct or indirect beneficial ownership of and control or direction over our securities carrying more than 10% of the voting rights attached to all of our outstanding voting securities.

The threshold of share ownership percentage requiring disclosure of ownership is higher in the home jurisdiction of British Columbia than the U.S. where U.S. securities law prescribes a 5% threshold for ownership disclosure.

#### Capital Changes



There are no conditions imposed by our Articles governing changes in our share capital that are more stringent than is required by law.

#### C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in Item 4. “Information on the Company” or elsewhere in this annual report.

#### D. Exchange Controls

There currently are no laws, decrees, regulations, or other legislation in Canada that restrict the export or import of capital, or impose foreign exchange controls or affect the remittance of interest, dividends, or other payments to non-resident holders of our common shares, other than the withholding tax requirements described under subsection E. “Taxation” below. Canada has no system of exchange controls

There are no limitations imposed by Canadian law or our Articles on the right of non-resident to hold our common shares, other than as provided by the *Investment Canada Act*, as amended (the “Act”), as amended by the *North American Free Trade Agreement Implementation Act* (Canada), and the *World Trade Organization (WTO) Agreement Implementation Act*. The Act requires notification and, in certain cases, advance review and approval by the Government of Canada of the acquisition by a “non-Canadian” of “control of a Canadian business”, all as defined in the Act. Generally, the threshold for review will be higher in monetary terms for a member of the WTO or NAFTA.

#### E. Taxation

We encourage you to consult with your own tax advisors about the Canadian and U.S. federal, state, provincial, local, and foreign tax consequences of purchasing, owning, and disposing of our common shares.

#### *Certain Canadian Federal Income Tax Consequences*

The discussion under this heading summarizes the principal Canadian federal income tax consequences of acquiring, holding and disposing of shares of common shares for a shareholder who is not a resident of Canada but is a resident of the United States and who will acquire and hold a corporation’s common shares as capital property for the purposes of the Income Tax Act (Canada) (the “Canadian Tax Act”). This summary does not apply to a shareholder who carries on business in Canada through a “permanent establishment” situated in Canada or performs independent personal services in Canada through a fixed base in Canada if the shareholder’s holding is effectively connected with such permanent establishment or fixed base. This summary is based on the provisions of the Canadian Tax Act and the regulations thereunder and on an understanding of the administrative practices of Canada Customs & Revenue Agency, and takes into account all specific proposals to amend the Canadian Tax Act or regulations made by the Minister of Finance of Canada as of the date hereof.

**This discussion is general only and is not, nor is it intended to provide a detailed analysis of the income tax implications of any particular shareholder’s interest. Investors are advised to obtain independent advice from a shareholder’s own Canadian and U.S. tax advisors with respect to income tax implications pertinent to their particular circumstances.** The provisions of the Canadian Tax Act are subject to income tax treaties to which Canada is a party, including the Canada-United States Income Tax Convention (1980), as amended (the “Convention”).

#### Dividends on Common Shares and Other Income

Under the Canadian Tax Act, a non-resident of Canada is generally subject to Canadian withholding tax at the rate of 25 percent on dividends paid or deemed to have been paid to him or her by a corporation resident in Canada. The corporation is responsible for the withholding of tax at the source. The Convention limits the rate to 15 percent if the shareholder is a resident of the United States and the dividends are beneficially owned by and paid to such shareholder and to 5 percent if the shareholder is also a corporation that beneficially owns at least 10 percent of the voting stock of the payor corporation.

The amount of a stock dividend (for tax purposes) would generally be equal to the amount by which the paid up or stated capital of the corporation had increased by reason of the payment of such dividend. The corporation will furnish additional tax information to shareholders in the event of such a dividend. Interest paid or deemed to be paid on the corporation’s debt securities held by non-Canadian residents may also be subject to Canadian withholding tax, depending upon the terms and provisions of such securities and any applicable tax treaty.

The Convention generally exempts from Canadian income tax dividends paid to a religious, scientific, literary, educational or charitable organization or to an organization constituted and operated exclusively to administer a pension, retirement or employee benefit fund or plan, if the organization is a resident of the United States and is exempt from income tax under the laws of the United States.

#### Dispositions of Common Shares

Under the Canadian Tax Act, a taxpayer's capital gain or capital loss from a disposition of a common share is the amount, if any, by which his or her proceeds of disposition exceed (or are exceeded by, respectively) the aggregate of his or her adjusted cost base of the share and reasonable expenses of disposition. The capital gain or loss must be computed in Canadian currency using a weighted average adjusted cost base for identical properties. The capital gains net of losses included in income since October 17, 2000 is 50%. The amount by which a shareholder's capital loss exceeds the capital gain in a year may be deducted from a capital gain realized by the shareholder in the three previous years or any subsequent year, subject to certain restrictions in the case of a corporate shareholder.

Under the Canadian Tax Act, a non-resident of Canada is subject to Canadian tax on taxable capital gains, and may deduct allowable capital losses realized on a disposition of "taxable Canadian property." Common shares of a corporation will constitute the taxable Canadian property of a shareholder at a particular time if the shareholder used the shares in carrying on business in Canada, or if at any time in the five years immediately preceding the disposition, 25% or more of the issued shares of any class or series in the capital stock of the corporation belonged to one or more persons in a group comprising the shareholder and persons with whom the shareholder and persons with whom the shareholder did not deal at arm's length and in certain other circumstances.

The Convention relieves United States residents from liability for Canadian tax on capital gains derived on a disposition of shares, unless: (i) the value of the shares is derived principally from "real property" in Canada, including the right to explore for or exploit natural resources and rights to amounts computed by reference to production; (ii) the shareholder was resident in Canada for 120 months during any period of 20 consecutive years preceding, and at any time during the 10 years immediately preceding, the disposition and the shares were owned by him when he ceased to be resident in Canada; or (iii) the shares formed part of the business property of a "permanent establishment" that the holder has or had in Canada within the 12 months preceding the disposition.

#### ***Certain United States Federal Income Tax Consequences***

The following is a discussion of material United States federal income tax consequences generally applicable to a U.S. Holder (as defined below) of our common shares. This discussion does not cover any state, local or foreign tax consequences. This discussion is based upon the sections of the Internal Revenue Code of 1986, as amended ("the Code"), Treasury Regulations, published Internal Revenue Service ("IRS") rulings, published administrative positions of the IRS and court decisions that are currently applicable, any or all of which could be materially and adversely changed, possibly on a retroactive basis, at any time. In addition, the discussion does not consider the potential effects, both adverse and beneficial, or recently proposed legislation which, if enacted, could be applied, possibly on a retroactive basis, at any time.

#### U.S. Holders

As used herein, a U.S. Holder includes a holder of common shares who is a citizen or resident of the United States, a corporation (or an entity which has elected to be treated as a corporation under Treasury Regulations created or organized in or under the laws of the United States or of any political subdivision thereof, any estate other than a foreign estate (as defined in the Code) or, a trust subject to the primary supervision of a court within the United States and control of a United States fiduciary as described in the Code. This summary does not address the tax consequences to, and U.S. Holder does not include, persons subject to special provisions of federal income tax law, such as tax-exempt organizations, qualified retirement plans, financial institutions, insurance companies, real estate investment trusts, regulated investment companies, broker-dealers, non-resident alien individuals, persons or entities that have a "functional currency" other than the U.S. dollar, shareholders who hold common shares as part of a straddle, hedging or conversion transaction, and shareholders who acquired their common shares through the exercise of employee stock options or otherwise as compensation for services. This summary is limited to U.S. Holders who own common shares as capital assets. This summary does not address the consequences to a person or entity holding an interest in a shareholder or the consequences to a person of the ownership, exercise or disposition of any options, warrants or other rights to acquire common shares.

#### Distribution on Common Shares

U.S. Holders receiving dividend distributions (including constructive dividends) with respect to common shares are required to include in gross income for United States federal income tax purposes the gross amount of such distributions equal to the U.S. dollar value of such distributions on the date of receipt (based on the exchange rate on such date), to the extent that the corporation has current or accumulated earnings and profits, without reduction for any Canadian income tax withheld from such distributions. Such Canadian tax withheld may be credited, subject to certain limitations, against the U.S. Holder's United States federal income tax liability or, alternatively, may be deducted in computing the U.S. Holder's United States federal taxable income (see more detailed discussion at "Foreign Tax Credit" below). To the extent that distributions exceed current or accumulated earnings and profits of the corporation, they will be treated first as a return of capital up to the U.S. Holder's adjusted basis in the common shares and thereafter as gain from the sale or exchange of the common shares. Dividend income will be taxed at marginal tax rates applicable to ordinary income while preferential tax rates for long-term capital gains are applicable to a U.S. Holder which is an individual, estate or trust. There are currently no preferential tax rates for long-term capital gains for a U.S. Holder which is a corporation.

In the case of foreign currency received as a dividend that is not converted by the recipient into U.S. dollars on the date of receipt, a U.S. Holder will have a tax basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Gain or loss may be recognized upon a subsequent sale or other disposition of the foreign currency, including the exchange for U.S. dollars.

Dividends paid on the common shares of a corporation will not generally be eligible for the dividends received deduction provided to corporations receiving dividends from certain United States corporations. A U.S. Holder which is a corporation may, under certain circumstances, be entitled to a 70% deduction of the United States source portion of dividends received from a corporation (unless the corporation qualifies as a "foreign personal holding company" or a "passive foreign investment company", as defined below) if such U.S. Holder owns shares representing at least 10% of the voting power and value of the corporation. The availability of this deduction is subject to several complex limitations which are beyond the scope of this discussion.

#### Foreign Tax Credit

A U.S. Holder who pays (or has withheld from distributions) Canadian income tax with respect to the ownership of common shares may be entitled, at the option of the U.S. Holder, to either a deduction or a tax credit for such foreign tax paid or withheld. Generally, it will be more advantageous to claim a credit because a credit reduces United States Federal income taxes on a dollar-for-dollar basis, while a deduction merely reduces the taxpayer's income subject to tax. This election is made on a year-by-year basis and applies to all foreign income taxes (or taxes in lieu of income tax) paid by (or withheld from) the U.S. Holder during the year. There are significant and complex limitations which apply to the credit, among which is the general limitation that the credit cannot exceed the proportionate share of the U.S. Holder's United States income tax liability that the U.S. Holder's foreign source income bears to his/her or its worldwide taxable income. The various items of income and deduction must be classified into foreign and domestic sources. Complex rules govern this classification process. In addition, this limitation is calculated separately with respect to specific classes of income such as "passive income", "high withholding tax interest", "financial services income", "shipping income", and certain other classifications of income. Dividends distributed will generally constitute "passive income" or, in the case of certain U.S. Holders, "financial services income" for these purposes. The availability of the foreign tax credit and the application of the limitations on the credit are fact specific and holders and prospective holders of common shares should consult their own tax advisors regarding their individual circumstances.

For individuals whose entire income from sources outside the United States consists of qualified passive income whose total amount of creditable foreign taxes paid or accrued during the taxable year does not exceed US\$300 (US\$600 in the case of a joint return) and for whom an election is made under section 904(j), the limitation on credit does not apply.

#### Disposition of Common Shares

A U.S. Holder will recognize gain or loss upon the sale of common shares equal to the difference, if any, between (i) the amount of cash plus the fair market value of any property received, and (ii) the tax basis in the common shares. Preferential tax rates apply to long-term capital gains of U.S. Holders which are individuals, estates, or trusts. This gain or loss will be capital gain or loss if the common shares are capital assets in the hands of the U.S. Holder, which will be a short-term or long-term capital gain or loss depending upon the holding period of the U.S. Holder. Gains and losses are netted and combined according to special rules in arriving at the overall capital gain or loss for a particular tax year. Deductions for net capital losses are subject to significant limitations. For U.S. Holders which are not corporations, any unused portion of such net capital loss may be carried over to be used in later tax years until such net capital loss is thereby exhausted, but individuals may not carry back capital losses. For U.S. Holders which are corporations (other than corporations subject to Subchapter S of the Code), an unused net capital loss may be carried back three years from the loss year and carried forward five years from the loss year to be offset against capital gains until such net capital loss is thereby exhausted.

#### Foreign Personal Holding Company

If at any time during a taxable year more than 50% of the total combined voting power or the total value of the our outstanding shares is owned, actually or constructively, by five or fewer individuals who are citizens or residents of the United States and 60% (50% after the first tax year) or more of our gross income for such year was derived from certain passive sources, then we would be treated as a “foreign personal holding company.” In that event, U.S. Holders that hold common shares would be required to include in gross income for such year their allocable portions of such passive income to the extent we do not actually distribute such income.

We do not believe we currently have the status of a “foreign personal holding company”. However, there can be no assurance that we will not be considered a foreign personal holding company for any future taxable year.

#### Passive Foreign Investment Company

As a foreign corporation with U.S. Holders, we potentially could be treated as a passive foreign investment company (“PFIC”), as defined in Section 1297 of the Code, depending upon the percentage of our income which is passive, or the percentage of our assets which are held for the purpose of producing passive income. We do not believe we currently are a PFIC.

The rule governing PFICs can have significant tax effects on U.S. Holders of foreign corporations. These rules do not apply to non-U.S. Holders. Section 1297 of the Code defines a PFIC as a corporation that is not formed in the United States and, for any taxable year, either (i) 75% or more of its gross income is “passive income”, which includes interest, dividends and certain rents and royalties or (ii) the average percentage, by fair market value (or, if the corporation is a controlled foreign corporation or makes an election, by adjusted tax basis), of its assets that produce or are held for the production of “passive income” is 50% or more. The taxation of a US Holder who owns stock in a PFIC is extremely complex and is therefore beyond the scope of this discussion. U.S. Holders should consult with their own tax advisors with regards to the impact of these rules.

#### Controlled Foreign Corporation

If more than 50% of the voting power of all classes of our common shares entitled to vote is owned, actually or constructively, by citizens or residents of the United States, United States partnerships, corporations, or estates or trusts other than foreign estates or trusts, each of whom own actually or constructively own 10% or more of the total combined voting power of all classes of our capital stock (“United States Shareholders”), then we would be a “controlled foreign corporation” (CFC). We do not believe we currently are a CFC.

The CFC classification would affect many complex results, one of which is that certain income of a CFC would be subject to current U.S. tax. The United States generally taxes United States Shareholders of a CFC currently on their pro rata shares of the Subpart F income of the CFC. Such United States Shareholders are generally treated as having received a current distribution out of the CFC’s Subpart F income and are also subject to current U.S. tax on their pro rata shares of the CFC’s earnings invested in U.S. property. The foreign tax credit described above may reduce the U.S. tax on these amounts. In addition, under Section 1248 of the Code, gain from the sale or exchange of shares by a U.S. Holder of common shares of a corporation which is or was a United States Shareholder at any time during the five-year period ending with the sale or exchange is treated as ordinary income to the extent of earnings and profits of the corporation (accumulated only while the shares were held by the United States Shareholder and while the corporation was a CFC attributable to the shares sold or exchanged). If a foreign corporation is both a PFIC and a CFC, the foreign corporation generally will not be treated as a PFIC with respect to the United States Shareholders of the CFC. This rule generally will be effective for taxable years of United States Shareholders beginning after 1997 and for taxable years of foreign corporations ending with or within such taxable years of United States Shareholders. The PFIC provisions continue to apply in the case of a PFIC that is also a CFC with respect to the U.S. Holders that are less than 10% shareholders.

#### **F. Dividends and Paying Agents**

Not applicable.

## G. Statement by Experts

Not applicable.

## H. Documents on Display

Any document referred to in this annual report may be inspected at our principal executive offices at Suite 1100, 1199 West Hastings Street, Vancouver, British Columbia Canada V6E 3T5 during regular business hours.

Various documents referenced in this annual report also are included as exhibits to this annual report in accordance with Item 19 of this Form 20-F. We are required to file periodic reports and other information with the SEC. You may read and copy any materials we file with the SEC at its Public Reference Room at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. The SEC further maintains an internet website at [www.sec.gov](http://www.sec.gov) that contains reports and other information about issuers like us who file electronically with the SEC.

In addition, we file various documents on the Canadian Securities Administrator's System for Electronic Document Analysis and Retrieval (SEDAR) at [www.sedar.com](http://www.sedar.com) as required by applicable Canadian law and stock exchanges.

## I. Subsidiary Information

Not applicable.

## ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ON MARKET RISK

The significant market risks to which the Company is exposed are currency, interest rate and other price risk.

### Currency risk

The Company operates internationally and is exposed to foreign currency risk from fluctuations in exchange rates between the Canadian dollar and various currencies, primarily US dollars and Mexican pesos. The Company has not hedged its exposure to foreign currency fluctuations.

The Company is exposed to currency risk as follows:

	December 31, 2012		December 21, 2011	
	US	Pesos	US	Pesos
Cash	\$ 1,715,415	183,410	\$ 1,155,138	1,114,735
Other receivables and restricted cash	69,000	-	69,000	12,614,401
Due from exploration partners	616,899	-	236,206	-
Reclamation bond	171,160	-	510,415	-
Accounts payable and accrued liabilities	(343,686)	(760,178)	(1,498,898)	(53,726)
Derivative liabilities - warrants	(784,988)	-	-	-
Net foreign exposure	\$ 1,443,800	(576,768)	\$ 471,861	13,675,410

Based on the above net foreign currency exposures as at December 31, 2012, and assuming all other variables remain constant, a 5% weakening or strengthening of the Canadian dollar against a) the US dollar would result in a change of \$73,930 (2011 - \$24,402) in the Company's loss; and b) the Mexican peso would have no material impact in the Company's loss for the year.

#### Interest rate risk

The Company's cash and cash equivalents are held in bank accounts that earn interest at variable interest rates. Due to the short-term nature of these financial instruments, fluctuations in market rates do not have a significant impact on the estimated fair value as of December 31, 2012. The Company manages interest rate risk by maintaining an investment policy that focuses primarily on preservation of capital and liquidity.

#### Other price risk

Other price risk is the risk that the future cash flows of a financial instrument will fluctuate due to changes in market prices, other than those arising from currency risk or interest rate risk. The Company's marketable securities are carried at market value and are therefore directly affected by fluctuations in the market value of the underlying securities. The Company's sensitivity analysis suggests that a 10% change in market prices would have no material impact on the value of the Company's marketable securities.

#### **ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

Not applicable.

## PART II

### ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

### ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Effective June 18, 2008, in accordance with the vote of shareholders at the 2008 Annual General Meeting on June 18, 2008, we adopted a rights plan applicable to our common shares (the "Rights Plan"). Under the Rights Plan, we issued one right for no consideration in respect of each outstanding common share. All common shares we subsequently issue during the term of the Rights Plan will have one right represented for each common share. The term of the Rights Plan is through the first annual meeting of shareholders held after June 18, 2013. The rights issued under the Rights Plan become exercisable only if a party acquires 20% or more of our common shares without complying with the Rights Plan or without a waiver from our Board of Directors.

Each right entitles the registered holder to purchase from us on the occurrence of certain events, one common share at the price of CDN\$100 per share, subject to adjustment (the "Exercise Price"). If a "Flip-in Event" as defined in the Rights Plan occurs, each right would then entitle the registered holder to receive, upon payment of the Exercise Price, that number of common shares that have a market value at the date of that occurrence equal to twice the Exercise Price. The rights are not exercisable until the "Separation Time" as defined in the Rights Plan.

The purpose of the Rights Plan is to ensure, to the extent possible, that all shareholders are treated equally and fairly in connection with any take-over bid or similar proposal to acquire our common shares. Take-over bids may be structured in such a way as to be coercive or discriminatory in effect, or may be initiated at a time when it will be difficult for our Board of Directors to prepare an adequate response. Such offers may result in shareholders receiving unequal or unfair treatment, or not realizing the full or maximum value of their investment in us. The Rights Plan discourages the making of any such offers by creating the potential of significant dilution to any offeror who does so.

An offeror can avoid that potential by making an offer that either: (i) qualifies as a "Permitted Bid" under the Rights Plan, and therefore meets certain specified conditions (including a minimum deposit period of 90 days) which aim to ensure that all shareholders are treated fairly and equally; or (ii) does not qualify as a "Permitted Bid" but is negotiated with and has been exempted by our Board of Directors from the application of the Rights Plan in light of the opportunity to bargain for agreed terms and conditions to the offer that are believed to be in the best interests of shareholders.

Under current Canadian securities laws, any party wishing to make a formal take-over bid for our common shares is required to leave the offer open for acceptance for at least 35 days. To qualify as a "Permitted Bid" under the Rights Plan, however, a take-over bid must remain open for acceptance for not less than 90 days. The Board of Directors believes that the statutory minimum period of 35 days may be insufficient for the directors to: (i) evaluate a take-over bid (particularly if the consideration consists, wholly or in part, of shares of another issuer); (ii) explore, develop and pursue alternative transactions that could better maximize shareholder value; and (iii) make reasoned recommendations to the shareholders. The additional time afforded under a "Permitted Bid" is intended to address these concerns by providing the Board of Directors with a greater opportunity to assess the merits of the offer and identify other possible suitors or alternative transactions, any by providing other bidders or proponents of alternative transactions with time to come forward with competing, and potentially superior, proposals.

### ITEM 15. CONTROLS AND PROCEDURES

#### Disclosure Controls and Procedures

Our management carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Securities and Exchange Act of 1934, as amended) as of the end of the fiscal year covered by this report. Based on the evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2012, our disclosure controls and procedures were effective.

## Management's Annual Report on Internal Control Over Financial Reporting

Our management's report on internal control over financial reporting is set forth on page [2 of 40] under Item 17 of this annual report.

The attestation report of Smythe Ratcliffe LLP, our independent registered public accounting firm, on management's assessment of our internal control over financial reporting is set forth on page [4 of 40] under Item 17 of this annual report.

## Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the fiscal year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

### **Item 16A. Audit Committee financial expert**

Our Board of Directors has determined that Anthony Walsh is an "audit committee financial expert" serving on the Audit Committee of the Company within the criteria prescribed under SEC and NYSE MKT rules. Our Board of Directors has determined that Anthony Walsh is an "independent" director as that term is defined under NYSE MKT rules.

### **Item 16B. Code of Ethics**

We have adopted a Code of Business Conduct and Ethics for all our directors, officers, and employees. It includes a Code of Ethical Conduct for Financial Managers that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. The Code of Business Conduct and Ethics is available in the Governance section of our website at [www.quaterraresources.com](http://www.quaterraresources.com). All applicable amendments to and waivers of the Code of Business Conduct Ethics governing our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions will be posted on our website and furnished to the SEC on Form 6-K.

### **Item 16C. Principal Accountant Fees and Services**

The following table shows the aggregate fees billed to us by our principal accountant Smythe Ratcliffe LLP, Chartered Accountants, in each of the last two fiscal years.

	Year ended December 31,	
	2012	2011
Audit Fees	\$101,000	\$113,500
Audit-Related Fees	\$900	NIL
Tax Fees	\$3,000	\$2,800
All Other Fees	-	-

*Audit fees* are the aggregate fees billed by the Company's independent auditor for the audit of the Company's annual consolidated financial statements, reviews of interim consolidated financial statements and attestation services that are provided in connection with statutory and regulatory filings or engagements.

*Audit-related fees* are fees charged by the Company's independent auditor for assurance and related services that are reasonably related to the performance of the audit or review of financial statements and are not reported under "Audit Fees".

*Tax fees* are fees for professional services rendered by the Company's independent auditors for tax compliance and tax advice on actual or contemplated transactions.

The Audit Committee recommends to the Board of the Directors the external auditor to perform audit, review, and attestation services. The Audit Committee pre-approves all non-audit services provided by our external auditors, and pre-approved the tax fees and the all other fees listed in the table above.



**Item 16D. Exemptions from the listing standards for Audit Committees**

Not applicable.

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None.

**Item 16F. Change in Registrant's Certifying Accountant**

Not applicable.

**Item 16G. Corporate Governance**

Our common shares are listed on the NYSE MKT Section 110 of the NYSE MKT Company Guide permits the exchange to consider the laws, customs and practices of foreign issuers in relaxing listing criteria and to grant exemptions from listing criteria based on these considerations.

A significant way in which our governance practices differ from those followed by U.S. domestic companies pursuant to NYSE MKT listing standards relates to the shareholder meeting quorum requirement: The NYSE MKT minimum quorum requirement for a shareholder meeting is one-third of the outstanding shares of common stock. In addition, a company listed on the NYSE MKT is required to state its quorum requirement in its bylaws. Our quorum requirement is set forth in our Articles. A quorum for a meeting of our shareholders is one person present in person, being a shareholder entitled to vote thereat or a duly appointed proxy holder for an absent shareholder so entitled.

An additional significant way in which our governance practices differ from those followed by U.S. domestic companies pursuant to NYSE MKT listing standards relates to shareholder approval of additional share issuances. Section 713 of the NYSE MKT Company Guide generally requires shareholder approval as a prerequisite to approval of applications to list additional shares when the additional shares will be issued in connection with a transaction involving the sale or issuance by a company of common stock (or securities convertible into or exercisable for common stock) equal to 20% or more of presently outstanding stock for less than the greater of book or market value of the stock. However, the issuance of common stock in an amount in excess of 20% of the presently outstanding stock for less than book or market value, without shareholder approval, is not prohibited under the rules of the TSX Venture Exchange ("TSX-V") and does not constitute a default under the TSX-V rules or any applicable laws in Canada. Section 110 of the NYSE MKT Company Guide permits the NYSE MKT to consider the laws, customs and practices of foreign issuers in relaxing certain listing criteria, and to grant exemptions from listing criteria based on these considerations. In connection with prior issuances of common shares, the NYSE MKT has granted the Company an exemption from the shareholder approval requirements of Section 713 of the NYSE MKT Company Guide. The Company may seek similar exemption from the requirements of Section 713 of the NYSE MKT Company Guide in the future.

**Item 16H. Mine Safety Disclosure**

Pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (The "Dodd-Frank Act"), issuers that are operators, or that have a subsidiary that is an operator, of a coal or other mine in the United States are required to disclose in their periodic reports filed with the SEC information regarding specified health and safety violations, orders and citations, related assessments and legal actions, and mining-related fatalities. During the fiscal year ended December 31, 2012, the Company had no such specified health and safety violations, orders or citations, related assessments or legal actions, mining-related fatalities, or similar events in relation to the Company's United States operations requiring disclosure pursuant to Section 1503(a) of the Dodd-Frank Act.

**PART III**

**ITEM 17. FINANCIAL STATEMENTS**

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**ITEM 18. FINANCIAL STATEMENTS**

Not applicable.

**ITEM 19. EXHIBITS**

The following documents are filed as exhibits to this annual report on Form 20-F:

Exhibit Number	Description of Exhibit
1	Articles of Quaterra Resources Inc., dated December 13, 2007 (incorporated by reference to Exhibit 1 to the Company's Annual Report on Form 20-F for the year ended December 31, 2008)
2	Shareholder Rights Plan, dated June 18, 2008 (incorporated by reference to Exhibit 2 to the Company's Annual Report on Form 20-F for the year ended December 31, 2008)
4	<a href="#">Service Agreement between Manex Resource Group and Quaterra Resources Inc.</a>
8	<a href="#">List of Subsidiaries</a>
12.1	<a href="#">Certification of the principal executive officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
12.2	<a href="#">Certification of the principal financial officer filed pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
13.1	<a href="#">Certification of the principal executive officer furnished pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
13.2	<a href="#">Certification of the principal financial officer furnished pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>

## **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

### **QUATERRA RESOURCES INC.**

Dated: March 28, 2013

By: /s/ Scott Hean  
Scott B. Hean  
Chief Financial Officer



(An Exploration Stage Company)

**Audited Consolidated Financial Statements**

**December 31, 2012**

**(Expressed in Canadian Dollars)**

## Management's Responsibility for Financial Reporting

The management of Quaterra Resources Inc. is responsible for the integrity and fair presentation of the financial information contained in this annual report. Where appropriate, the financial information, including consolidated financial statements, reflects amounts based on management's best estimates and judgments. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board. Financial information presented elsewhere in the annual report is consistent with that disclosed in the consolidated financial statements.

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Management has established and maintains a system of internal accounting control designed to provide reasonable assurance that assets are safeguarded from loss or unauthorized use, financial information is reliable and accurate and transactions are properly recorded and executed in accordance with management's authorization. This system includes established policies and procedures, the selection and training of qualified personnel and an organization providing for appropriate delegation of authority and segregation of responsibilities. Any system of internal control over financial reporting, no matter how well designed, has inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management has a process in place to evaluate internal control over financial reporting based on the criteria established by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control – Integrated Framework. Based on this assessment, management has concluded that as at December 31, 2012, the Company's internal control over financial reporting was effective.

The Board of Directors oversees management's responsibility for financial reporting and internal control systems through an Audit Committee, which is composed entirely of independent directors. The Audit Committee meets periodically with management and the independent auditors to review the scope and results of the annual audit and to review the consolidated financial statements and related financial reporting and internal control matters before the consolidated financial statements are approved by the Board of Directors and submitted to the Company's shareholders.

Smythe Ratcliffe LLP, an independent registered public accounting firm, appointed by the shareholders, has audited the Company's consolidated financial statements in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States) and has expressed its opinion in the independent auditors' report. The effectiveness of the Company's internal control over financial reporting as at December 31, 2012 has also been audited by Smythe Ratcliffe LLP, and their opinion is included in their report.

*"Thomas C. Patton" (signed)*

Thomas C. Patton  
President and Chief Executive Officer

March 27, 2013  
Vancouver, British Columbia, Canada

*"Scott Hean" (signed)*

Scott Hean  
Chief Financial Officer

## INDEPENDENT AUDITORS' REPORT

### To the Shareholders of Quaterra Resources Inc.

We have audited the accompanying consolidated financial statements of Quaterra Resources Inc., which comprise the consolidated statements of financial position as at December 31, 2012 and 2011, and the consolidated statements of comprehensive loss, changes in equity and cash flows for the years ended December 31, 2012, 2011 and 2010, and a summary of significant accounting policies and other explanatory information.

#### *Management's Responsibility for the Consolidated Financial Statements*

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### *Auditors' Responsibility*

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

#### *Opinion*

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Quaterra Resources Inc. as at December 31, 2012 and 2011, and its financial performance and its cash flows for the years ended December 31, 2012, 2011 and 2010 in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

#### *Emphasis of Matter*

Without qualifying our opinion, we draw attention to note 1 in the consolidated financial statements, which describes matters and conditions that indicate the existence of material uncertainties that cast substantial doubt about the Company's ability to continue as a going concern.

#### *Other Matter*

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal controls over financial reporting as at December 31, 2012, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations for the Treadway Commission (COSO) and our report dated March 27, 2013 expresses an unqualified opinion on Quaterra Resources Inc.'s internal control over financial reporting.

*"Smythe Ratcliffe LLP" (signed)*

Chartered Accountants

Vancouver, Canada  
March 27, 2013

## INDEPENDENT AUDITORS' REPORT

**To the Shareholders of Quaterra Resources Inc.**  
(An Exploration Stage Company)

We have audited Quaterra Resources Inc.'s (the "Company") internal control over financial reporting as at December 31, 2012 based on the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risks. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as at December 31, 2012, based on the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We have also audited, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States), the consolidated statements of financial position of the Company as at December 31, 2012 and 2011, and the related consolidated statements of comprehensive loss, changes in equity and cash flows for the years ended December 31, 2012, 2011 and 2010, and our report dated March 27, 2013 expressed an unqualified opinion.

*"Smythe Ratcliffe LLP" (signed)*

Chartered Accountants

Vancouver, Canada  
March 27, 2013

**Quaterra Resources Inc.**  
**Consolidated Statements of Financial Position**  
(Expressed in Canadian dollars)

	Note	December 31, 2012	December 31, 2011
<b>Assets</b>			
Current assets:			
Cash and cash equivalents		\$ 1,795,555	\$ 12,147,321
Restricted cash		80,148	94,638
Amounts due from exploration partners		613,753	240,222
Taxes receivable		30,294	15,498
Prepays and deposits		220,164	257,488
		2,739,914	12,755,167
Non-current assets:			
Marketable securities	4	12,333	27,667
Taxes receivable		-	919,315
Equipment	5	224,876	348,795
Mineral properties	6	70,165,561	59,040,786
Reclamation bonds		170,287	519,092
<b>Total assets</b>		<b>\$ 73,312,971</b>	<b>\$ 73,610,822</b>
<b>Liabilities</b>			
Current liabilities:			
Accounts payable and accrued liabilities		\$ 656,115	\$ 1,829,704
Due to related parties	10	26,990	47,884
		683,105	1,877,588
Non-current liability			
Derivative liability - warrants	7(b)	774,673	-
<b>Total liabilities</b>		<b>1,457,778</b>	<b>1,877,588</b>
<b>Shareholders' Equity</b>			
Share capital	7	115,816,740	111,923,521
Share-based payment reserve		19,020,057	17,988,540
Accumulated other comprehensive loss		-	(51,199)
Deficit		(62,981,604)	(58,127,628)
		71,855,193	71,733,234
<b>Total liabilities and shareholders' equity</b>		<b>\$ 73,312,971</b>	<b>\$ 73,610,822</b>

Approved on behalf of the Board of Directors:

"Thomas Patton" (signed)  
Thomas Patton

"Anthony Walsh" (signed)  
Anthony Walsh

(See the accompanying notes to consolidated financial statements)



**Quaterra Resources Inc.**  
**Consolidated Statements of Comprehensive Loss**  
(Expressed in Canadian dollars)

	Note	Years ended December 31,		
		2012	2011	2010
<b>General and administrative expenses</b>				
Administration and general office		\$ 726,113	\$ 701,670	\$ 579,032
Consulting		366,364	644,757	369,779
Depreciation		133,595	149,810	95,184
Directors' fees		126,971	110,294	113,240
Investor relations and communications		224,409	309,110	274,827
Personnel costs		1,135,986	1,152,792	833,372
Professional fees		595,753	429,889	473,532
Share-based payments	8 (a)	1,046,517	2,846,707	2,251,258
Transfer agent and regulatory fees		142,561	149,580	157,205
Travel and promotion		53,137	203,086	134,443
		(4,551,406)	(6,697,695)	(5,281,872)
<b>Exploration partner administration income</b>		90,847	181,417	155,639
<b>Foreign exchange loss</b>		(166,914)	(189,877)	(324,828)
<b>Fair value gain on derivative liability</b>	8 (e)	-	-	4,037,184
<b>Gain on sale of mineral property</b>	6 (c)	820,712	-	50,000
<b>General exploration costs</b>		(182,852)	(506,297)	(794,571)
<b>Impairments</b>		-	(4,183,224)	(622,121)
<b>Interest income</b>		57,985	169,662	11,321
<b>Recovery (write-off) of equipment</b>		39,954	(38,525)	-
<b>Impairment of marketable securities</b>	4	(66,533)	-	-
<b>Write-off of taxes receivable</b>	15	(895,769)	-	-
<b>Net loss for the year</b>		(4,853,976)	(11,264,539)	(2,769,248)
Unrealized loss on marketable securities		(15,334)	(34,000)	(4,333)
Transfer on impairment of marketable securities		66,533	-	-
<b>Comprehensive loss for the year</b>		\$ (4,802,777)	\$ (11,298,539)	\$ (2,773,581)
<b>Loss per share - basic and diluted</b>		\$ (0.03)	\$ (0.08)	\$ (0.02)
<b>Weighted average number of common shares outstanding</b>		155,378,395	144,227,216	122,095,093

(See the accompanying notes to consolidated financial statements)

**Quaterra Resources Inc.**  
**Consolidated Statements of Cash Flows**  
(Expressed in Canadian dollars)

	Years ended December 31,		
	2012	2011	2010
<b>Operating activities</b>			
Net loss for the year	\$ (4,853,976)	\$ (11,264,539)	\$ (2,769,248)
Items not involving cash:			
Depreciation	133,595	149,810	95,184
Share-based payments	1,046,517	2,846,707	2,251,258
Gain on sale of mineral property	(820,712)	-	(50,000)
Unrealized loss (gain) on foreign exchange	43,266	22,210	(23,689)
Shares issued for services	30,000	90,000	90,000
Impairments	-	4,183,224	622,121
Impairment of marketable securities	66,533	-	-
Write-off of equipment	-	38,525	-
Write-off of taxes receivable	895,769	-	-
Fair value gain on derivative liability	-	-	(4,037,184)
	(3,459,008)	(3,934,063)	(3,821,558)
Changes in non-cash working capital			
Taxes and other receivables	(14,796)	(626,826)	(247,664)
Prepays and deposits	37,324	(4,452)	(75,433)
Accounts payable and accrued liabilities	(60,356)	181,646	15,551
Due to related parties	(20,894)	6,659	(209,412)
<b>Cash used in operating activities</b>	<b>(3,517,730)</b>	<b>(4,377,036)</b>	<b>(4,338,516)</b>
<b>Financing activities</b>			
Shares issued for cash, net of issue costs	3,848,219	15,530,711	27,685,252
Warrants issued for cash	774,673	-	-
<b>Cash provided by financing activities</b>	<b>4,622,892</b>	<b>15,530,711</b>	<b>27,685,252</b>
<b>Investing activities</b>			
Expenditures on mineral properties	(13,397,677)	(17,345,625)	(9,049,566)
Due from exploration partners	(373,531)	638,548	(626,866)
Purchase of equipment	(9,676)	(318,787)	(150,433)
Reclamation bonds	348,805	(143,425)	(90,813)
Proceeds from sale of mineral property	1,980,381	-	10,000
Restricted cash	11,500	(48,886)	(45,752)
<b>Cash used in investing activities</b>	<b>(11,440,198)</b>	<b>(17,218,175)</b>	<b>(9,953,430)</b>
<b>Effect of foreign exchange on cash</b>	<b>(16,730)</b>	<b>(394)</b>	<b>23,689</b>
<b>Decrease in cash and cash equivalents during the year</b>	<b>(10,351,766)</b>	<b>(6,064,894)</b>	<b>13,416,995</b>
<b>Cash and cash equivalents, beginning of year</b>	<b>12,147,321</b>	<b>18,212,215</b>	<b>4,795,220</b>
<b>Cash and cash equivalents, end of year</b>	<b>\$ 1,795,555</b>	<b>\$ 12,147,321</b>	<b>\$ 18,212,215</b>
<b>Supplemental cash flow information (Note 11)</b>			

(See the accompanying notes to consolidated financial statements)

**Quaterra Resources Inc.**  
**Consolidated Statements of Changes in Equity**  
**(Expressed in Canadian dollars)**

	Common Shares		Share-based payment	Accumulated Other		
	Shares	Amount	reserve	Comprehensive Loss	Deficit	Total
Balance at December 31, 2009	111,459,371	\$ 63,168,843	\$ 13,453,030	\$ (12,866)	\$ (44,093,841)	\$ 32,515,166
Shares issued for cash, net of issue costs	14,725,618	19,955,427				19,955,427
Exercise of options and warrants	9,954,486	7,729,825				7,729,825
Common shares issued for services	74,686	90,000				90,000
Common shares issued for mineral property	250,000	355,500				355,500
Fair value of compensation options		(533,480)	533,480			-
Fair value of options and warrants exercised		594,075	(594,075)			-
Fair value of derivative liability - warrants exercised		4,440,760				4,440,760
Share-based payments			2,251,258			2,251,258
Unrealized loss on available-for-sale marketable securities				(4,333)		(4,333)
Net loss for the year					(2,769,248)	(2,769,248)
<b>Balance, December 31, 2010</b>	<b>136,464,161</b>	<b>95,800,950</b>	<b>15,643,693</b>	<b>(17,199)</b>	<b>(46,863,089)</b>	<b>64,564,355</b>
Shares issued for cash, net of issue costs	3,293,407	5,918,882				5,918,882
Exercise of options and warrants	12,505,732	9,611,829				9,611,829
Common shares issued for services	89,983	90,000				90,000
Fair value of options and warrants exercised		501,860	(501,860)			-
Share-based payments			2,846,707			2,846,707
Unrealized loss on available-for-sale marketable securities				(34,000)		(34,000)
Net loss for the year					(11,264,539)	(11,264,539)
<b>Balance, December 31, 2011</b>	<b>152,353,283</b>	<b>111,923,521</b>	<b>17,988,540</b>	<b>(51,199)</b>	<b>(58,127,628)</b>	<b>71,733,234</b>
Shares issued for cash, net of issue costs	10,541,571	3,848,219				3,848,219
Cancelled shares	(2,501)					-
Common shares issued for services	98,483	45,000	(15,000)			30,000
Share-based payments			1,046,517			1,046,517
Unrealized loss on available-for-sale marketable securities				(15,334)		(15,334)
Impairment of available-for-sale marketable securities				66,533		66,533
Net loss for the year					(4,853,976)	(4,853,976)
<b>Balance, December 31, 2012</b>	<b>162,990,836</b>	<b>\$ 115,816,740</b>	<b>\$ 19,020,057</b>	<b>\$ -</b>	<b>\$ (62,981,604)</b>	<b>\$ 71,855,193</b>

(See the accompanying notes to consolidated financial statements)

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

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**1. Nature of operations and going concern**

Quaterra Resources Inc. ("Quaterra" or "the Company") is engaged in the acquisition and exploration of precious and base metal mineral properties in the United States and Mexico. Quaterra is a publicly listed company incorporated in Canada under the *Business Corporations Act* (British Columbia). The Company's shares are listed on the TSX Venture Exchange ("QTA") and the New York Stock Exchange MKT ("QMM"). The head office, principal address and records office of the Company are located at 1100 - 1199 West Hastings Street, Vancouver, British Columbia, Canada, V6E 3T5. The Company's registered office is 1710 - 1177 West Hastings Street, Vancouver, British Columbia, Canada, V6E 2L3.

The Company is in the process of exploring its mineral properties and has not yet determined whether its mineral properties contain economically recoverable mineral reserves. The underlying value and the recoverability of the amounts recorded as mineral properties is entirely dependent upon the existence of economically recoverable mineral reserves, the ability of the Company to obtain the necessary financing to complete its acquisition, exploration and development of its mineral properties or receive proceeds from joint venture partners' contributions. The carrying value of the Company's mineral properties does not reflect current or future values.

The Company incurred a net loss of \$4,853,976 for the year ended December 31, 2012 (2011 - \$11,264,539; 2010 - \$2,769,248). As at December 31, 2012, the Company had an accumulated deficit \$62,981,604 with a working capital of \$2,056,809.

The consolidated financial statements have been prepared on a going concern basis, which assumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business. The ability of the Company to continue as a going concern and meet its commitments as they become due, including completion of the acquisition, exploration and development of its mineral properties, is dependent on the Company's ability to obtain the necessary financing. Management is planning to raise additional capital to finance operations and expected growth, if necessary, or alternatively to dispose of its interests in certain properties. The outcome of these matters cannot be predicted at this time. Although management is confident that it will be able to raise sufficient funds there is no assurance at the date these consolidated financial statements were approved that these financing initiatives will be successful. The lack of sufficient committed funding for the next 12 months indicates a material uncertainty, which casts substantial doubt over the Company's ability to continue as a going concern. These consolidated financial statements do not include the adjustments that would result if the Company is unable to continue as a going concern.

Management has planned levels of exploration spending on the Company's properties with an expectation that future capital raises would provide the necessary funding, which includes equity financing, joint venture partners' contributions, and/or realizing the carrying amount through the sale of mineral property interests.

The business of mining exploration involves a high degree of risk and there is no assurance that current exploration projects will result in future profitable mining operations. The Company has no source of revenue, and has significant cash requirements to meet its administrative overhead, pay its liabilities, and maintain its mineral interests.

These consolidated financial statements were approved by the board of directors for issue on March 27, 2013.

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

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**2. Summary of significant accounting policies**

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB") effective as of December 31, 2012. The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

a) Basis of presentation and consolidation

These consolidated financial statements have been prepared on a historical cost basis, except for financial instruments classified as available-for-sale and derivative financial liability, which are stated at their fair values. These consolidated financial statements are presented in Canadian dollars, the Company and subsidiaries' functional currency.

These consolidated financial statements incorporate the financial statements of the Company and the entities controlled (directly or indirectly) by the Company (its subsidiaries) including *Quaterra Alaska Inc.* and *Singatse Peak Services LLC* – incorporated in the United States, *Minera Agua Tierra S.A. de C.V.* – incorporated in Mexico, and *Quaterra International Limited* – incorporated in the British Virgin Islands. All significant intercompany transactions and balances have been eliminated.

b) Accounting estimates and judgments

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company's accounting policies. Management believes the estimates are reasonable; however, actual results could differ from those estimates and could impact future results of operations. The areas where assumptions, estimates and judgments are significant to the consolidated financial statements relate to, but are not limited to, the following:

- (i) The recoverability of non-current taxes receivable related to Mexico value added taxes. Management uses all relevant facts available, such as the development of policies in Mexico, historical collectability, and the general economic environment of Mexico, to determine if the non-current taxes receivable is impaired;
- (ii) The recoverability of the carrying value of the mineral properties: the estimation of the impairment indicators involves the application of a number of significant judgments and estimates to certain variables including metal price trends, plans for properties, and the results of exploration and evaluation to date;
- (iii) Fair value of derivative liabilities and share-based payments: the fair value of derivative liabilities that are not traded in an active market is determined by using a valuation technique. Management makes estimates and utilizes assumptions in determining the fair value for share-based payments, warrants, and the (gain) loss on the revaluation of the derivative liability;
- (iv) The Company applies judgment in assessing the functional currency of each entity consolidated in these financial statements; and

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

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**2. Significant accounting policies, continued**

b) Accounting estimates and judgments, continued

- (v) Deferred tax assets: the assessment of availability of future taxable profits involves judgment. A deferred tax asset is recognized to the extent that it is probable that taxable profits will be available against which deductible temporary differences and the carry-forward of unused tax credits and unused tax losses can be utilized.

c) Foreign currency translation

Items included in the financial statements of each consolidated entity are measured using the currency of the primary economic environment in which the entity operates (the “functional currency”).

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of transactions. Monetary assets and liabilities are translated at exchange rates prevailing at each reporting date. Non-monetary assets and liabilities are translated using the historical rate on the date of the transaction. Non-monetary assets and liabilities that are stated at fair value are translated using the historical rate on the date that the fair value was determined.

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the translation at period-end exchange rates of monetary assets and liabilities denominated in currencies other than the Company’s functional currency are recognized in net income (loss).

d) Cash and cash equivalents

Cash and cash equivalents includes deposits in banks and highly-liquid investments that are readily convertible to known amounts of cash and have maturities of three months or less from the date acquired. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.

e) Marketable securities

Marketable securities in entities over which the Company has no significant influence are classified as available-for-sale and are carried at quoted market value. Resulting unrealized gains or losses are reflected in other comprehensive income (loss), while realized gains or losses are reflected in net income (loss).

f) Reclamation bonds

Certain cash is held in long-term reclamation bonds to support future reclamation work in the United States. No interest is earned on these bonds.

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

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**2. Significant accounting policies, continued**

g) Equipment

Equipment is measured at cost less accumulated depreciation and impairment losses. Cost comprises expenditures that are directly attributable to the acquisition of the asset. Gains and losses on disposal of an item of equipment are determined by comparing the proceeds from disposal with the carrying amount of the equipment, and are recognized in net income (loss).

Depreciation is calculated over the estimated useful life of the assets using the declining-balance method at an annual rate of 30% for vehicles and field equipment, and up to 75% for computer equipment.

h) Mineral properties

The cost of acquiring mineral properties and related exploration and development costs are deferred on an individual area of interest basis until the properties are placed into production, sold or determined to be impaired. Once a license to explore an area has been secured, directly attributable expenditures on exploration and evaluation activities are capitalized to mineral properties. Costs incurred to acquire an interest in a mineral property are capitalized as a mineral property acquisition cost. Costs incurred prior to obtaining the right to explore are expensed as incurred. Proceeds from the sale of properties or cash proceeds received from farm-out agreements are recorded as a reduction of the related mineral interest, with any excess proceeds accounted for in net income (loss).

Management reviews the carrying value of capitalized acquisition and exploration costs at least annually to consider whether there are any conditions that may indicate impairment.

i) Unit offering

The Company uses the residual value method with respect to the measurement of common shares and share purchase warrants issued as units. The proceeds from the issue of units is allocated between common shares and share purchase warrants on a residual value basis, wherein the fair value of the common shares is based on the market value on the date of announcement of the placement and the balance, if any, is allocated to the attached warrants. Share issuance costs are netted against share proceeds.

j) Share-based payments

The Company has a stock option plan that is described in note 8. Share-based payments to employees are measured at the fair value of the equity instruments issued and are amortized over the vesting periods. Share-based payments to non-employees are measured at the fair value of the goods or services received or at the fair value of the equity instruments issued (if it is determined the fair value of the goods or services cannot be reliably measured), and are recorded at the date the goods or services are received. The offset to the recorded cost is to share-based payment reserve. If and when the stock options or warrants are ultimately exercised, the applicable amounts of reserve is transferred to share capital.

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

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**2. Significant accounting policies, continued**

k) Income tax

Income tax comprises current and deferred tax. Income tax is recognized in net income (loss), except to the extent related to items recognized directly in equity or in other comprehensive loss.

Deferred tax is recognized in respect of temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax is determined on a non-discounted basis using tax rates and laws that have been enacted or substantively enacted by the reporting date and are expected to apply when the deferred tax asset or liability is settled. Deferred tax assets are recognized to the extent that it is probable that the assets can be recovered.

l) Income (loss) per share

Basic income (loss) per share is calculated using the weighted average number of common shares outstanding during the year. The Company uses the treasury stock method to compute the dilutive effect of options, warrants and similar instruments. Under this method the dilutive effect on income per share is calculated presuming the exercise of outstanding options, warrants and similar instruments. It assumes that the proceeds of such exercise would be used to repurchase common shares at the average market price during the year. However, the calculation of diluted loss per share excludes the effects of various conversions and exercise of options and warrants that would be anti-dilutive.

m) Financial instruments

Financial assets and liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument. It initially measures financial assets and financial liabilities at their fair value, adding or deducting directly attributable transaction costs (except for transaction costs directly attributable to acquiring financial assets or financial liabilities at fair value through profit or loss ("FVTPL"), which is recognized immediately in profit or loss). Financial assets are derecognized when the rights to receive cash flows from the assets have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership. On derecognition of a financial asset, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. Financial liabilities are derecognized when the obligation specified in the relevant contract is discharged, cancelled or expires. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

Financial assets and liabilities are offset and the net amount is reported in the statement of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.



**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

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**2. Significant accounting policies, continued**

m) Financial instruments, continued

At initial recognition, the Company classifies its financial instruments in the following categories depending on the purpose for which the instruments were acquired:

- (i) FVTPL: A financial asset or liability is classified in this category if acquired principally for the purpose of selling or repurchasing in the short-term.  
  
Financial instruments in this category are recognized initially and subsequently at fair value. Gains and losses arising from changes in fair value are recorded in net income (loss) in the period in which they arise. Financial assets and liabilities at FVTPL are classified as current, except if they are expected to be realized beyond twelve months of the statement of financial position date, where they are classified as non-current.
- (ii) Available-for-sale investments: Available-for-sale marketable securities are non-derivative financial assets that are either designated in this category or not classified in any of the other categories. The Company's available-for-sale assets are marketable securities.  
  
Available-for-sale investments are initially recognized at fair value and are subsequently carried at fair value. Gains or losses arising from changes in fair value are recognized in other comprehensive loss. Available-for-sale investments are classified as non-current, unless management expects to dispose of them within twelve months. An impairment loss is established when there is a significant or prolonged decline in fair value of the investment below its cost. The amount of the impairment loss is measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognized in net income (loss). Any amounts related to that asset are removed from other comprehensive income (loss) and are included in net income (loss). Reversals in respect of available-for-sale financial assets are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized directly in other comprehensive income (loss) until the assets are disposed of.
- (iii) Loans and receivables: loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest rate method, less any impairment losses.
- (iv) Financial liabilities at amortized cost: financial liabilities at amortized cost include accounts payable and accrued liabilities and due to related parties. They are initially recognized on the trade date at fair value when the Company becomes a party to the contractual provisions of the instrument and derecognized when its contractual obligations are discharged or cancelled, or they expire.

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
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**(Expressed in Canadian dollars)**

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**2. Significant accounting policies, continued**

m) Financial instruments, continued

- (v) Derivative financial instruments: the Company's warrants that have an exercise price denominated in US dollars, which is different to the Company's functional currency, are treated as derivative liabilities at fair value determined using the Black-Scholes option pricing model. Changes in fair values have been recorded as gains or losses in net income (loss).

**3. Future accounting changes**

The Company has reviewed new and revised accounting pronouncements that have been issued by the IASB but are not yet effective and determined that the following may have an impact on the Company:

- a) IFRS 9, *Financial Instruments*, addresses the classification, measurement and recognition of financial assets and financial liabilities. IFRS 9 was issued in November 2009 and October 2010. It replaces the parts of International Accounting Standard ("IAS") 39, *Financial Instruments: Recognition and Measurement*, that relate to the classification and measurement of financial instruments. IFRS 9 requires financial assets to be classified into two measurement categories: those measured at fair value and those measured at amortized cost. The determination is made at initial recognition. The classification depends on the entity's business model for managing its financial instruments and the contractual cash flow characteristics of the instrument.

For financial liabilities, the standard retains most of the IAS 39 requirements, except that fair value changes due to credit risk for liabilities designated as FVTPL would generally be recorded in other comprehensive income.

IFRS 9 is required to be applied for accounting periods beginning on or after January 1, 2015, with earlier adoption permitted.

- b) IFRS 10, *Consolidated Financial Statements*, replaces the guidance on control and consolidation in IAS 27, *Consolidated and Separate Financial Statements*, and SIC-12, *Consolidation – Special Purpose Entities*. IFRS 10 changes the definition of control under IFRS so that the same criteria are applied to all entities to determine control.

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
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**(Expressed in Canadian dollars)**

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**3. Future accounting changes, continued**

- c) IFRS 11, *Joint Arrangements*, replaces IAS 31, *Interests in Joint Ventures*. IFRS 11 reduces the types of joint arrangements to two: joint ventures and joint operations. IFRS 11 requires the use of equity accounting for interests in joint ventures, eliminating the existing policy choice of proportionate consolidation for jointly controlled entities under IAS 31. Entities that participate in joint operations will follow accounting much like that for jointly controlled assets and jointly controlled operations under IAS 31.
- d) IFRS 12, *Disclosure of Interests in Other Entities*, sets out the disclosure requirements for all forms of interests in other entities including joint arrangements and associates.
- e) IFRS 13, *Fair Value Measurement*, establishes a single framework for measuring fair value where it is required by other standards. It aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across IFRS.
- f) There have been amendments to existing standards, including IAS 27, *Separate Financial Statements*, and IAS 28, *Investments in Associates and Joint Ventures*. IAS 27 addresses accounting for subsidiaries jointly controlled entities and associates in non-consolidated financial statements. IAS 28 has been amended to include joint ventures in its scope and to address the changes in IFRS 10 to 13.

The above standards are required to be applied for accounting periods beginning on or after January 1, 2013, with earlier adoption permitted.

- g) IAS 1, *Presentation of Financial Statements*, has been amended to require entities to separate items presented in other comprehensive income on the basis of whether they are potentially classifiable to profit or loss subsequently. The amendment is effective for annual reporting periods beginning on or after July 1, 2012. The Company anticipates that the adoption of this standard will have no material impact.

IAS 1 is required to be applied for accounting periods beginning on or after July 1, 2012, with earlier adoption permitted.

The Company is currently evaluating the impact of these new pronouncements on its consolidated financial statements. The adoption of these standards is not expected to have a significant impact on the Company's financial position or financial performance.

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

**4. Marketable securities**

The following table presents the fair value of the Company's shares of Redtail Metals Corp. ("Redtail") and Auramex Resource Corp. ("Auramex"):

	Number of shares	December 31, 2012			December 31, 2011		
		Cost	Accumulated unrealized losses	Carrying value	Cost	Accumulated unrealized losses	Carrying value
Redtail	66,667	\$ 38,866	\$ (32,533)	\$ 6,333	\$ 38,866	\$ (26,199)	\$ 12,667
Auramex	100,000	40,000	(34,000)	6,000	40,000	(25,000)	15,000
		\$ 78,866	\$ (66,533)	\$ 12,333	\$ 78,866	\$ (51,199)	\$ 27,667

During the year ended December 31, 2012, the Company's shareholding in Auramex was reduced from 1,000,000 to 100,000 common shares due to a share consolidation of 1-for-10 by Auramex.

The fair value of these marketable securities has been determined by reference to their closing quoted share price at the reporting date.

During the year ended December 31, 2012, management made the assessment that the marketable securities have experienced a prolonged decline in their fair values. Accordingly, an impairment of \$66,533 has been transferred from accumulated other comprehensive loss and recognized in net loss.

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

**5. Equipment**

	Computer equipment	Field Equipment	Vehicles	Total
<b>Cost</b>				
Balance, December 31, 2010	\$ 97,348	\$ 93,651	\$ 354,228	\$ 545,227
Additions during the year	50,683	81,219	186,885	318,787
Disposals	-	-	(59,498)	(59,498)
Balance, December 31, 2011	148,031	174,870	481,615	804,516
Additions during the year	-	-	9,676	9,676
Balance, December 31, 2012	\$ 148,031	\$ 174,870	\$ 491,291	\$ 814,192
<b>Accumulated depreciation</b>				
Balance December 31, 2010	\$ 93,708	\$ 63,679	\$ 169,497	\$ 326,884
Depreciation for the year	19,006	32,174	98,630	149,810
Disposals	-	-	(20,973)	(20,973)
Balance, December 31, 2011	112,714	95,853	247,154	455,721
Depreciation for the year	27,398	23,705	82,492	133,595
Balance, December 31, 2012	\$ 140,112	\$ 119,558	\$ 329,646	\$ 589,316
<b>Carrying value</b>				
At December 31, 2011	\$ 35,317	\$ 79,017	\$ 234,461	\$ 348,795
At December 31, 2012	\$ 7,919	\$ 55,312	\$ 161,645	\$ 224,876

**Quaterra Resources Inc.**  
**Notes to Consolidated Financial Statements**  
**For the years ended December 31, 2012, 2011 and 2010**  
**(Expressed in Canadian dollars)**

**6. Mineral properties**

The total deferred acquisition and exploration costs for mineral properties for the year ended December 31, 2012 and 2011 were as follows:

Mineral Properties	United States					Mexico		Total
	MacArthur Property	Yerington Property	Alaska	Uranium Properties	Other Properties	Nieves	Other Properties	
<b>Acquisition</b>								
Balance, December 31, 2011	\$ 2,358,534	\$ 2,803,906	\$ 120,357	\$ 4,761,909	\$ 2,384,460	\$ 1,535,959	\$ 1,737,922	\$ 15,703,047
Additions during the year	719,304	389,956	16,135	200,680	619,285	87,351	740,915	2,773,626
Disposal of mineral property	-	-	-	-	(949,052)	-	-	(949,052)
Recovery - Goldcorp	-	-	-	-	-	-	(5,950)	(5,950)
Balance, December 31, 2012	3,077,838	3,193,862	136,492	4,962,589	2,054,693	1,623,310	2,472,887	17,521,671
<b>Exploration</b>								
Balance, December 31, 2011	17,144,368	3,623,164	554,119	7,728,123	763,148	3,920,039	9,604,778	43,337,739
Geological	832,756	940,564	193,948	108,831	68,838	189,143	1,282,023	3,616,103
Geophysical	50,798	31,251	4,468	-	88,588	140,709	17,288	333,102
Geochemical	79,293	416,847	38,266	-	7,867	82,048	491,926	1,116,247
Drilling	6,390	624,681	529,490	-	-	219,016	877,730	2,257,307
Technical studies	475,364	640,819	1,055	14,132	-	130,778	140,919	1,403,067
Other	194,706	244,635	190,700	15,989	-	10,750	169,780	826,560
Additions during the year	1,639,307	2,898,797	957,927	138,952	165,293	772,444	2,979,666	9,552,386
Disposal of mineral property	-	-	-	-	(210,617)	-	-	(210,617)
Recovery - Goldcorp	-	-	-	-	-	-	(35,618)	(35,618)
Balance, December 31, 2012	18,783,675	6,521,961	1,512,046	7,867,075	717,824	4,692,483	12,548,826	52,643,890
<b>Total acquisition and exploration</b>								
<b>Balance, December 31, 2012</b>	<b>\$ 21,861,513</b>	<b>\$ 9,715,823</b>	<b>\$ 1,648,538</b>	<b>\$ 12,829,664</b>	<b>\$ 2,772,517</b>	<b>\$ 6,315,793</b>	<b>\$ 15,021,713</b>	<b>\$ 70,165,561</b>

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**6. Mineral properties, continued**

Mineral Properties	United States					Mexico		Total
	MacArthur Property	Yerington Property	Alaska	Uranium Properties	Other Properties	Nieves	Other Properties	
<b>Acquisition</b>								
Balance, December 31, 2010	\$ 1,731,500	\$ 2,100,233	\$ 276,933	\$ 4,458,996	\$ 2,165,930	\$ 1,472,896	\$ 1,267,888	\$ 13,474,376
Additions during the year	627,034	703,673	6,644	302,913	1,075,462	63,063	489,238	3,268,027
Impairments	-	-	(163,220)	-	(856,932)	-	-	(1,020,152)
Recovery - Goldcorp	-	-	-	-	-	-	(19,204)	(19,204)
Balance, December 31, 2011	2,358,534	2,803,906	120,357	4,761,909	2,384,460	1,535,959	1,737,922	15,703,047
<b>Exploration</b>								
Balance, December 31, 2010	10,820,796	839,354	2,415,742	7,611,207	1,005,545	2,780,131	6,138,519	31,611,294
Geological	911,405	636,992	134,021	99,946	208,468	180,940	1,484,410	3,656,182
Geophysical	172,171	75,661	108,182	-	282,868	12,556	583,421	1,234,859
Geochemical	1,045,297	323,472	10,032	27	17,268	143,686	390,895	1,930,677
Drilling	3,703,192	1,128,462	162,549	-	128,770	718,257	1,914,623	7,755,853
Technical studies	61,995	232,696	1,965	12,075	-	59,112	41,006	408,849
Other	429,512	386,527	-	4,868	4,929	25,357	263,851	1,115,044
Additions during the year	6,323,572	2,783,810	416,749	116,916	642,303	1,139,908	4,678,206	16,101,464
Impairments	-	-	(2,278,372)	-	(884,700)	-	-	(3,163,072)
Recovery - Goldcorp	-	-	-	-	-	-	(1,211,947)	(1,211,947)
Balance, December 31, 2011	17,144,368	3,623,164	554,119	7,728,123	763,148	3,920,039	9,604,778	43,337,739
<b>Total acquisition and exploration December 31, 2011</b>	<b>\$ 19,502,902</b>	<b>\$ 6,427,070</b>	<b>\$ 674,476</b>	<b>\$ 12,490,032</b>	<b>\$ 3,147,608</b>	<b>\$ 5,455,998</b>	<b>\$ 11,342,700</b>	<b>\$ 59,040,786</b>

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**6. Mineral properties, continued**

a) MacArthur Property, Nevada

Pursuant to an agreement dated September 13, 2005, and subsequently amended, with North Exploration LLC ("North Exploration"), the Company acquired the right to earn an interest in certain unpatented mining claims covering the former MacArthur copper-oxide mine, in the Yerington Mining District of Lyon County, Nevada. The Company may elect to acquire the property by making the following staged payments totaling US\$2.207 million of which \$1.783 million has been paid to March 27, 2013:

- (i) US\$635,000 and 150,000 shares by January 15, 2010 (paid and issued)
- (ii) US\$524,000 on or before January 15, 2011 (paid)
- (iii) US\$524,000 plus interest at the rate of 6% per annum by January 15, 2012 (paid)
- (iv) US\$100,000 plus \$31,440 interest by January 15, 2013 (paid)
- (v) US\$424,000 plus interest at the rate of 6% per annum by January 15, 2014 or US\$212,000 plus interest by January 15, 2014 and 2015, respectively.

The property is subject to a 2% net smelter return ("NSR"), which may be reduced to 1% for US\$1 million.

b) Yerington Property, Nevada

On April 27, 2011, the Company completed the acquisition of the Yerington property after more than three years of legal and environmental due diligence. The purchase price was US\$500,000 cash, 250,000 of the Company's common shares and a 2% NSR capped at US\$7.5 million on commencement of commercial production.

The Yerington property is a historic mining site formerly owned and operated by the Anaconda Company, Atlantic Richfield Company ("ARC") and Arimetco. The property has a history of environmental releases, which are outlined in an environmental site assessment undertaken for the Company by the Chambers Group and subsequently updated by SRK Consulting. The Yerington Mine Site is a *Comprehensive Environmental Response Compensation and Liability Act* ("CERLA") site, but has not been listed on the National Priorities List.

Prior to closing on the property, the Company obtained Bona Fide Prospective Purchaser ("BFPP") Reasonable Steps letters from the US Environmental Protection Agency ("EPA"), the State of Nevada Department of Environmental Protection and the Bureau of Land Management ("BLM"). These letters define reasonable steps that the Company could take to retain its status as a BFPP.

During the year ended December 31, 2012, the Company entered into a voluntary Settlement Agreement (the "Agreement") with the EPA to assist in upgrading the fluid management system (the "System"), which manages fluids from the former Arimetco operations at the property. Under the terms of the Agreement, the Company agreed to complete a study of the System in order to determine additional repairs or modifications that may be required and to work with the EPA to determine which, if any, of the conclusions of the study should be implemented. The Company may elect to fund 50% of these repairs at an expected cost of approximately US\$300,000 and be completed by 2014.



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**6. Mineral properties, continued**

b) Yerington Property, Nevada, continued

As part of the Agreement, the Company will obtain a site-wide covenant not to sue from the EPA for existing environmental contamination related to historic mining operations at the site. ARC is the primary responsible party for the existing environmental liabilities at the site due to its ownership of Anaconda and past operations at the site.

c) Butte Valley Copper Prospect, Nevada

On January 1, 2011, the Company entered into an option agreement with North Exploration to acquire 41 mining claims in White Pine County, Nevada, known as the Butte Valley property. The Company can earn a 100% interest in the claims by making staged payments totaling US\$1 million

On August 2, 2012, the Company entered into a purchase and sale agreement with Freeport-McMoRan Mineral Properties ("FMMP") for Butte Valley at gross proceeds of US\$2 million. A gain of \$820,712 from the sale was recorded in the year ended December 31, 2012.

On October 2, 2012, the Company received net proceeds of \$1,737,692 from FMMP, after mineral claim payments and settlement fees. The Company retains the right, if and when FMMP completes a positive feasibility study, to elect to have either a 30% working interest in the project or a 2% NSR.

d) Copper Canyon Project, Nevada

Pursuant to an agreement in November 2007, as amended October 9, 2009 and October 19, 2010, the Company acquired the right to earn an interest in certain mining claims, known as the Copper Canyon Project in Mineral County, Nevada. To earn a 100% interest, the Company is required to make payments totaling US\$625,000 as follows:

- (i) Initial payment of US\$15,000 (paid) and US\$70,000 on or before November 6, 2009 (paid)
- (ii) Commencing November 6, 2010, US\$35,000 (paid) annually through November 6, 2024 (2011 and 2012 paid)
- (iii) US\$15,000 on or before November 6, 2025.

The property is subject to a 2.5% NSR on commencement of commercial production, which can be reduced to 2% for US\$500,000. Should the Company decide to commence commercial production, a payment of US\$750,000 is due within five business days from the date the decision is made.

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**6. Mineral properties, continued**

e) Goldfield East Claims, Nevada

On June 15, 2011, the Company entered into an option agreement with Nevada Alaska Mining Co., Inc. to acquire a 100% interest in certain mining claims in Esmeralda County, Nevada, for US\$1 million over ten years:

- (i) US\$20,000 upon execution (paid)
- (ii) US\$20,000 each on or before June 15, 2012 (paid) and 2013
- (iii) US\$40,000 on or before June 15, 2014
- (iv) US\$50,000 each on or before June 15, 2015 and 2016
- (v) US\$100,000 each on or before June 15, 2017, 2018 and 2019
- (vi) US\$250,000 each on or before June 15, 2020 and 2021.

The property is subject to a 2% NSR on commencement of commercial production.

f) Poker Brown Project, Nevada

On August 24, 2012, the Company entered into an option agreement with Nevada Alaska Mining Co., Inc. to acquire a 100% interest in certain mining claims in Pershing County, Nevada, for US\$1 million payable over 10 years as follows:

- (i) US\$20,000 upon execution (paid)
- (ii) US\$20,000 each on or before August 24, 2013 and 2014
- (iii) US\$40,000 on or before August 24, 2015
- (iv) US\$50,000 each on or before August 24, 2016 and 2017
- (v) US\$100,000 each on or before August 24, 2018, 2019 and 2020
- (vi) US\$250,000 each on or before August 24, 2021 and 2022.

A 2.5% NSR is required upon commercial production of which 0.5% can be purchased at US\$500,000.

g) Wassuk Copper Project, Nevada

On May 26, 2011, the Company entered into a mining lease with an option to purchase agreement with Majuba Mining Ltd. to earn an interest in certain unpatented mining claims in Lyon County, Nevada, for US\$1.61 million:

- (i) US\$140,000 on or before May 26, 2011 (paid)
- (ii) US\$130,000 on or before May 26, 2012 (paid)
- (iii) US\$120,000 on or before May 26, 2013
- (iv) US\$110,000 each on or before May 26, 2014 and 2015
- (v) US\$200,000 each on or before anniversary date until May 26, 2020.

The Company is required to incur a total of US\$300,000 exploration work on or before May 26, 2014, and any difference between the actual expenditures and US\$300,000 is required to be paid in the event that less than US\$300,000 is so incurred.

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**6. Mineral properties, continued**

g) Wassuk Copper Project, Nevada, continued

The project is subject to a 3% NSR upon commencing commercial production of which 1% can be bought for US\$1.5 million.

h) Missouri Flat Prospect, Nevada

On August 1, 2011, the Company entered into an option agreement with a private owner to acquire a 100% interest in certain mining claims situated in Lyon County, Nevada, for US\$500,000 as below:

- (i) US\$5,500 upon execution (paid)
- (ii) US\$5,000 on or before January 1, 2012 (paid)
- (iii) US\$10,000 each on or before January 1, 2013 (paid in 2012) and July 15, 2013
- (iv) US\$10,000 each on or before January 1, 2014 and July 15, 2014
- (v) US\$10,000 each on or before January 1, 2015 and July 15, 2015
- (vi) The remaining US\$369,500 on or before January 1, 2018 unless subsequently amended
- (vii) US\$15,000 each on or before January 1, 2016 and July 15, 2016
- (viii) US\$15,000 each on or before January 1, 2017 and July 15, 2017.

The Company has an option at any time to purchase the property for the difference between US\$500,000 and the sum of the amount previously paid.

i) South West Tintic, Utah

Pursuant to an agreement made in March 2007, the Company acquired the right to earn an interest in certain unpatented mining claims, which forms part of the South West Tintic Claims in Juab County, Utah. To earn a 100% interest, the Company was required to make US\$1 million option payments (US\$60,000 paid) over 10 years.

Effective May 29, 2009, as amended August 28, 2012, the Company signed an earn-in agreement with Freeport-McMoRan Exploration Corporation ("FMEC") of Phoenix, Arizona, for the property. Under the terms of the agreement, FMEC has the exclusive right and option to acquire a 70% ownership interest in this property by making a US\$275,000 property payment (paid) and by spending US\$4.725 million on exploration over five years.

The property is subject to a 2% NSR on commencement of commercial production, which may be reduced to 1% for US\$1 million.

j) Peg Leg, Arizona

On August 27, 2009, the Company signed an earn-in agreement with FMEC for the Company's Peg Leg copper project in Arizona. FMEC has the exclusive right and option to acquire a 70% interest in the Peg Leg project by spending US\$3 million on exploration by December 31, 2012. In the first quarter of 2011, the property was returned and total exploration expenditures of \$257,533 were written off.

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**6. Mineral properties, continued**

k) Herbert Gold Project, Alaska

Pursuant to an agreement made in November 2007, the Company acquired the right to earn an interest in certain mining claims, known as the Herbert Gold Project. To earn a 100% interest, the Company, and subsequent to June 2010 the joint venture between Quaterra and Grande Portage Resources Ltd. ("Grande Portage"), is required to make annual payments of US\$12,000 from November 2007 to 2011 (paid), US\$20,000 from November 2012 (paid) to 2017, and US\$30,000 from November 2018 and every consecutive anniversary thereafter.

In June 2010, Grande Portage entered into an agreement with Quaterra to earn up to a 65% interest in the Herbert Gold Project by spending US\$1.25 million by June 15, 2012. As of December 31, 2012, Grande Portage had earned its 65% interest and the Company retained a 35% interest. The two parties formed a joint venture for the further exploration and development of the property, with each party bearing their proportionate share of the costs. If any party does not contribute their proportionate share of such costs, then the joint venture agreement includes a dilution formula whereby if any party's interest is reduced to 10% or less, its interest will be automatically converted into a 1% NSR, which may be acquired by the other party at any time for US\$1 million.

The property is subject to a NSR on commencement of commercial production as follows:

- (i) 3.0% on gold prices less than US\$400/ounce
- (ii) 3.5% on gold prices between US\$401/ounce and US\$500/ounce
- (iii) 4.0% on gold prices between US\$501/ounce and US\$600/ounce
- (iv) 5.0% on gold prices above US\$601/ounce.

l) Uranium Properties (Arizona, Utah and Wyoming)

Pursuant to a June 2005 agreement with North Exploration, the Company acquired an option to purchase mining claims situated in Arizona, Utah and Wyoming. The Company is required to make payments of US\$500,000 (paid) and issue 600,000 common shares (issued) before September 6, 2010.

The property is subject to a 2% NSR upon commencement of commercial production, which can be reduced to 1% for US\$1 million.

Pursuant to an August 2006 agreement, as amended subsequently, with Nustar Exploration LLC ("NuStar"), the Company leased 18 claims in the Arizona Strip District. The Company is required to pay the following:

- (i) US\$90,000 on or before August 10, 2008 (paid)
- (ii) US\$100,000 on or before August 10, 2013.

Each group of claims within this agreement is subject to a 4% royalty upon commencement of commercial production of which 3% royalty can be bought back for US\$500,000 per claim group.

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**6. Mineral properties, continued**

l) Uranium Properties (Arizona, Utah and Wyoming), continued

On March 23, 2007, the Company entered into a Purchase and Royalty Agreement with NuStar to acquire certain unpatented lode mining claims in Mohave County, Arizona, for US\$125,000 cash payment. The claims are subject to a 4% royalty of which 75% can be purchased for US\$1 million (reduced from 4% to 1%) as it applies to each breccia pipe discovered on the claims.

On January 9, 2012, the Interior Department announced a Public Land Order to withdraw approximately one million acres of federal land in northern Arizona from mineral exploration on new claims for a twenty-year period. Approximately 85% of Quaterra's claims lie within these federal jurisdiction lands and 15% lie within Arizona State lands, which are unaffected by the withdrawal

In April 2012, the Company, together with various co-plaintiffs filed a lawsuit in the United States District Court for the State of Arizona naming as defendants the United States Department of the Interior and the BLM. The results of this legal action are unknown at this time, and, if not successful, could lead to an impairment write-down of approximately \$10 million.

m) Cave Peak Molybdenum Prospect, Texas

Pursuant to an option agreement made in March 2007, the Company may acquire a 100% interest in certain prospect permits. The option payments are as follows: US\$230,000 on or before March 27, 2010 (paid); US\$150,000 on or before March 27, 2011 (paid by FMEC); and US\$220,000 on or before March 27, 2012 (paid by FMEC).

On July 24, 2009, the Company acquired a mining lease with the state of Texas for 19 years for a total of US\$120,462 (US\$30,462 paid); US\$35,000 is due upon the submittal of an initial plan of operations to conduct exploration; and US\$55,000 on submittal of a supplemental plan of operations to conduct mining. If production has not commenced before one year of the date of the lease, the lease will be terminated unless delay payments are made on anniversary dates during the lease term as follows:

- (i) US\$26,190 on July 24, 2010 (paid)
- (ii) US\$26,190 on each anniversary date 2011 (paid by FMEC), 2012 (paid by FMEC) and 2013
- (iii) US\$39,280 on each anniversary date between 2014 and 2018
- (iv) US\$78,560 on each anniversary date between 2019 and 2023
- (v) US\$104,750 on each anniversary date between 2024 and 2027.

Effective November 1, 2010, as amended February 3, 2012, the Company entered into an option agreement with FMEC, which allows FMEC to earn 70% of this property by paying future land and lease holding costs and by spending US\$5 million in exploration expenditures by December 31, 2016. Except for the 2011 land holding costs, which are a firm commitment, all other exploration expenditures are optional.

This property is subject to a production royalty of 6.25% on commencement of commercial production with an annual advanced minimum royalty ("AMR") of US\$500,000.

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**6. Mineral properties, continued**

n) Reveille Property, Nevada

Pursuant to an agreement made in August 2010, the Company entered into a lease with an option to purchase certain mining claims known as the Reveille claims in Nye County, Nevada. The total consideration is US\$1 million over 10 years as follows:

- (i) US\$20,000 upon execution (paid) and US\$20,000 each on or before July 31, 2011 and 2012 (paid)
- (ii) US\$40,000 on or before July 31, 2013
- (iii) US\$50,000 each on or before July 31, 2014 and 2015
- (iv) US\$100,000 each on or before July 31, 2016 and 2017
- (v) US\$100,000 on or before July 31, 2018
- (vi) US\$250,000 each on or before July 31, 2019 and 2020.

The property is subject to a 2% NSR on commencement of commercial production of which 1% can be bought down for US\$1 million.

o) Willow Creek Molybdenum Project, Montana

On March 24, 2011, the Company renegotiated the option agreement with Willow Creek Discovery Group, LLC for the Willow Creek property in Montana. All second anniversary option payments (year 2010) were waived and cancelled providing that all claim rental payments are made and additional drilling to a minimum of 500 feet is undertaken. The Company terminated the option agreement and recorded an impairment of \$1,109,446 in the second quarter of 2011.

p) Nieves Silver Concessions, Mexico

The Company originally owned a 100% interest in the Nieves silver property located in northern Zacatecas, Mexico. In 2003 the Company entered into an agreement with U.S.-based Blackberry Ventures 1, LLC ("Blackberry"). Pursuant to the terms of the agreement, Blackberry advanced US\$1.5 million to the Company and earned a 50% interest in the property. Accordingly, the Company owns the remaining 50% interest. All work plans are made in consultation with the joint venture partner, Blackberry, which contributes its share of ongoing exploration costs plus a 10% administration fee. As at December 31, 2012, Blackberry owed \$613,753 (2011 - \$158,370) for their share of exploration expenditures incurred in the second half of the year. Subsequent to the year-end December 31, 2012, US\$189,994 was received.

The Nieves concessions are subject to a maximum 3% NSR to the original concession holders, which the Company may purchase at any time for US\$2 million. In addition, Kennecott Exploration Company, the optionor in the initial Underlying Agreement, retained a 2% NSR on certain core claims and 1% on certain peripheral claims. On January 24, 2007, this NSR was purchased by Royal Gold Inc. Commencing January 26, 2004, an AMR payment of US\$75,000 is due to the concession holders until the commencement of commercial production.

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**6. Mineral properties, continued**

q) Goldcorp Inc. ("Goldcorp") – Investment Framework Agreement ("IFA")

On January 29, 2010, the Company entered into an IFA with Goldcorp to fund the Company's mining properties in central Mexico totalling US\$10 million. In February 2010 and 2011, US\$4 million and US\$6 million, respectively, were received from Goldcorp (note 7). In April 2012, the IFA was extended to January 29, 2013 and Goldcorp was required to acquire additional common shares (note 7(c)).

In February 2010, Goldcorp selected Sierra Sabino for advanced exploration. For the year ended December 31, 2012, the Company incurred marginal exploration expenditures and had no plan for further exploration work.

r) Microondas Precious Metal Prospect (part of IFA), Mexico

On April 8, 2011, the Company entered into a letter of intent agreement with La Cuesta International Inc. ("LCI") to acquire a 100% interest in six mineral concessions in Zacatecas, Mexico, in consideration of certain cash payments and the issuance of up to 20,000 common shares of the Company as follows:

- (i) US\$10,000 on or before December 1, 2011 (paid)
- (ii) US\$10,000 on or before June 1, 2012 (paid) and elected a one-time cash payment equal to the value of 20,000 common shares based on the share price at the close of trading on May 15, 2012 (US\$8,000 - paid)
- (iii) US\$15,000 on or before December 1, 2012 (paid)
- (iv) US\$20,000 on or before June 1, 2013
- (v) US\$25,000 on or before December 1, 2013
- (vi) US\$25,000 each six months thereafter.

The property is subject to a 1% NSR that is capped at US\$5 million and a 2% NSR for a portion of the property.

s) Santo Domingo, Mexico (part of IFA)

On January 6, 2010, the Company entered into an option agreement with LCI, pursuant to which the Company has an option to acquire a 100% interest in four mineral concessions located in Durango, Mexico, known as the Santo Domingo prospect. Total consideration consists of US\$7.5 million in cash payments, including NSR royalties, 100,000 common shares of the Company and \$50,000 (incurred) in work expenditures as follows:

- (i) US\$10,000 and 100,000 common shares on January 6, 2010 (paid and issued) and US\$10,000 on July 1, 2010 (paid)
- (ii) US\$15,000 on or before January 1, 2011 (paid) and US\$15,000 on or before July 31, 2011 (paid)
- (iii) US\$20,000 each on or before January 1, 2012 (paid in 2011) and July 31, 2012 (paid)
- (iv) Commencing January 1, 2013 (paid for January 2013), US\$25,000 every six months.

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**6. Mineral properties, continued**

s) Santo Domingo, Mexico (part of IFA), continued

The property is subject to 1% NSR on materials removed from the property, and 0.5% on any properties acquired within a specified area. The Company shall pay a minimum of US\$25,000 per calendar quarter or the NSR, whichever is greater, upon commencing mining operations.

t) El Calvo, Mexico (part of IFA)

On June 14, 2012, the Company entered into an option agreement allowing the Company to earn a 100% interest in the El Calvo property located in San Luis Potosi State, Mexico. The Company is required to pay US\$1.7 million over four years as below:

- (i) US\$50,000 on June 14, 2012 (paid)
- (ii) US\$100,000 on June 14, 2013
- (iii) US\$150,000 on December 14, 2013
- (iv) US\$250,000 on June 14, 2014
- (v) US\$400,000 on June 14, 2015
- (vi) US\$750,000 on June 14, 2016.

u) Tecolote, Mexico (part of IFA)

On September 30, 2008, the Company and EXMIN Resources Inc. ("EXMIN") entered into an agreement allowing the Company to earn a 75% interest in EXMIN's Tecolote Property, Mexico. Under the terms of the agreement, the Company can earn a 75% interest in the property by spending US\$500,000 (US\$678,015 incurred) in exploration costs by September 30, 2012 plus making cash payments of US\$100,000 on or before September 30, 2011 (paid).

v) Impairments

In 2011 five mineral properties were deemed to be impaired due to lack of exploration merits: Duke Island - \$2,441,592, Peg Leg - \$257,533, Klondike - \$49,809, Gray Hill - \$324,844 and Willow Creek - \$1,109,446, totaling \$4,183,224. There were no mineral properties written down during the year ended December 31, 2012.

w) Realization of assets

The Company's investment in and expenditures on mineral property interests comprise a significant portion of the Company's assets. Realization of the Company's investment in the assets is dependent on establishing legal ownership of the property interest, and on the attainment of successful commercial production or from the proceeds of disposal. The attainment of commercial production is in turn dependent upon the existence of economically recoverable reserves, the ability of the Company to obtain necessary financing to complete the development of the property interest, and upon future profitable production.



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**6. Mineral properties, continued**

x) Title to mineral properties

Title to mineral properties involves certain inherent risks due to the difficulties of determining the validity of certain claims as well as the potential for problems arising from the frequently ambiguous conveyance history of many mineral properties. Although the Company has taken steps to ensure title to the mineral property in which it has an interest, in accordance with industry standards for the current stage of exploration of such properties, these procedures may not guarantee the Company's title. Property title may be subject to unregistered prior agreements or transfers and title may be affected by undetected defects.

y) Environmental matters

The Company is subject to the laws and regulations relating to environmental matters in all jurisdictions in which it operates, including provisions relating to property reclamation, discharge of hazardous material and other matters. With the exception of the Yerington property, the Company may also be held liable should environmental problems be discovered that were caused by former owners and operators. The Company conducts its mineral exploration activities in compliance with applicable environmental protection legislation.

**7. Share capital**

a) The Company has authorized an unlimited number of common shares without par value.

b) On December 28, 2012, the Company completed a US\$0.35 non-brokered private placement and issued 6,541,571 units for gross proceeds of US\$2,289,550 (\$2,259,462). Each unit is comprised of one common share and one share purchase warrant. Each share purchase warrant entitles the holder to acquire one common share of the Company at US\$0.53 for a period two years, expiring December 28, 2014, subject to the following acceleration provision: if, at any time after four months from the date of closing of the Offering, the five-day weighted average trading price of the Company's common stock on the NYSE MKT exceeds US\$1.00 (the last day of such five-day period being the ("Trigger Date")), the Company will, within seven days of the Trigger Date (the "Notice Date") accelerate the expiry date of the warrants by giving notice to the holders of the warrants that the expiry date of the warrants has been accelerated to 30 days after the Notice Date. The Company has determined that such warrants with an exercise price denominated in a currency that is different from the Company's functional currency are classified as a derivative liability and carried at their fair value. Any changes in the fair value from period to period are recorded as a gain or loss in net income (loss).

The gross proceeds of \$2,259,462 were allocated to common shares in the amount of \$1,484,789 and to warrants in the amount of \$774,673. Share issue costs totaled \$55,452 and were allocated against the common share proceeds.

The fair value of the warrants was estimated at \$0.12 on the date issued using the Black-Scholes option pricing model assuming an expected volatility of 85%, a risk-free interest rate of 1.1%, a dividend yield of 0%, and an expected term of two years. As at December 31, 2012, 6,541,571 warrants entitling the holder to purchase 6,541,571 common shares of the Company were outstanding.

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**7. Share capital, continued**

- c) On April 12, 2012, the Company closed a private placement and issued 4 million common shares for gross proceed of \$2.48 million under the terms of the Amended and Restated IFA with Goldcorp. The proceeds were used to fund additional exploration on certain properties in central Mexico. Share issue costs of \$61,118 were incurred.

The original IFA entered into January 29, 2010 provided Goldcorp with an option to acquire a certain interest in the Company's central Mexico projects for US\$10 million over two years. Pursuant to which, in February 2011, the Company issued 3,293,407 common shares and 1,646,703 share purchase warrants for gross proceeds of US\$6 million (\$5,994,000) and, in February 2010, the Company issued 3,001,418 common shares and 1,500,709 share purchase warrants for gross proceeds of US\$4 million (\$4,231,999).

**8. Share-based payments**

- a) Stock options

The Company has a stock option plan (the "Plan"), which is approved by the shareholders annually. The Plan is designed to attract and retain individuals and to reward them for current and expected future performance. Options generally are granted for a maximum term of five years and expire 90 days following the termination of the optionee's agreement. The exercise price for the options is set at the closing market price of the common shares on the grant date. The vesting periods of options vary with terms determined by the board of directors. Under the Plan, the Company is authorized to grant stock options of up to 10% of the number of common shares issued and outstanding of the Company at any given time.

The following table presents changes in stock options for the years ended December 31, 2012 and 2011:

	December 31, 2012		December 31, 2011	
	Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
Outstanding, beginning of year	11,460,000	\$ 1.53	10,624,000	\$ 1.60
Granted	3,695,000	\$ 0.47	3,690,000	\$ 1.26
Expired	(1,145,000)	\$ 2.61	(2,199,500)	\$ 1.54
Exercised	-	\$ -	(654,500)	\$ 1.11
Outstanding, end of year	14,010,000	\$ 1.16	11,460,000	\$ 1.53
Exercisable, end of year	13,635,000	\$ 1.17	11,158,333	\$ 1.53

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**8. Share-based payments, continued**

a) Stock options, continued

The following table summarizes information about the stock options outstanding by expiry dates:

Exercise price	Fair Value	Expiry Date	Options Outstanding	
			December 31, 2012	December 31, 2011
\$ 3.33	\$ 1.98	July 20, 2012	-	775,000
\$ 3.45	\$ 2.05	March 31, 2013	150,000	150,000
\$ 3.30	\$ 1.87	June 19, 2013	905,000	905,000
\$ 0.98	\$ 0.52	November 9, 2014	1,745,000	1,750,000
\$ 1.02	\$ 0.51	November 9, 2014	2,095,000	2,100,000
\$ 2.00	\$ 1.22	January 14, 2015	40,000	40,000
\$ 1.80	\$ 0.85	April 1, 2015	100,000	100,000
\$ 1.76	\$ 0.97	April 22, 2015	200,000	200,000
\$ 1.29	\$ 0.75	August 9, 2015	1,605,000	1,685,000
\$ 1.55	\$ 0.90	October 6, 2015	65,000	65,000
\$ 1.51	\$ 0.90	November 3, 2015	100,000	100,000
\$ 0.60	\$ 0.12	December 31, 2015	400,000	-
\$ 1.60	\$ 0.96	March 24, 2016	305,000	355,000
\$ 1.25	\$ 0.74	August 9, 2016	2,800,000	2,935,000
\$ 0.90	\$ 0.51	October 24, 2016	300,000	300,000
\$ 0.50	\$ 0.32	March 27, 2017	100,000	-
\$ 0.45	\$ 0.28	June 28, 2017	3,100,000	-
Total stock options outstanding			14,010,000	11,460,000

The weighted average remaining contractual life for options outstanding and exercisable on December 31, 2012 was 2.91 (2011 – 3.25) years and 2.90 (2011 – 3.22) years, respectively.

On January 1, 2013, 25,000 stock options at an exercise price of \$0.45 and an expiry date of June 28, 2017 expired unexercised due to forfeiture.

The Company uses the following weighted average assumptions to fair value the options granted through the Black-Scholes option pricing model:

	December 31, 2012	December 31, 2011	December 31, 2010
Weighted average share price	\$ 0.44	\$ 1.26	1.39
Risk-free interest rate	1.11%	1.13%	4.45%
Expected share price volatility	82%	89%	92%
Expected option life in years	3.9	4.0	3.0
Forfeiture rate	0%	0%	0%
Expected dividend yield	0%	0%	0%

Volatility was determined based on the historical volatility over the estimated lives of the options.

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**8. Share-based payments, continued**

a) Stock options, continued

The share-based payments expense is incurred as follows:

	Years ended December 31,		
	2012	2011	2010
Consultants	\$ 368,835	\$ 1,078,605	\$ 1,175,872
Directors and officers	460,455	1,018,476	787,668
Employees	217,227	749,626	287,718
	\$ 1,046,517	\$ 2,846,707	\$ 2,251,258

b) Share purchase warrants

The following table presents changes in warrants for the years ended December 31, 2012 and 2011:

	December 31, 2012		December 31, 2011	
	Number of Warrants	Weighted Average Exercise Price	Number of Warrants	Weighted Average Exercise Price
Outstanding, beginning of year	9,009,512	\$ 1.94	20,186,023	\$ 1.16
Issued	6,541,571	\$ 0.53	1,646,703	\$ 2.27
Expired	(7,362,809)	\$ 1.87	(971,982)	\$ 0.75
Exercised	-	\$ -	(11,851,232)	\$ 0.75
Outstanding, end of year	8,188,274	\$ 0.88	9,009,512	\$ 1.94

The following summarizes information about the share purchase warrants as of December 31, 2012 and 2011:

Expiry date	Exercise price	December 31, 2012	December 31, 2011
February 4, 2012	\$ 1.76	-	1,500,709
October 27, 2012	\$ 1.90	-	5,862,100
February 7, 2013	\$ 2.27	1,646,703	1,646,703
December 28, 2014	USD 0.53	6,541,571	-
		8,188,274	9,009,512

On February 7, 2013, 1,646,703 warrants at an exercise price of \$2.27 expired unexercised.

c) Pursuant to a financial and advisory service agreement dated April 15, 2011, the Company issued 98,483 (2011 – 89,983) common shares during the year ended December 31, 2012 for such services with a fair value of \$45,000 (2011 - \$90,000). The agreement expired April 15, 2012.

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**8. Share-based payments, continued**

d) Agent compensation options

During the year ended December 31, 2011, the Company issued 703,452 agent compensation options at an exercise price of \$1.45 expiring October 27, 2012 in relation to the brokered private placement on October 27, 2010. Each option entitles the agent to acquire one common share of the Company and one-half of one share purchase warrant exercisable at \$1.90 by October 27, 2012 on which date the entire agent compensation options expired unexercised.

e) Warrants issued on November 27, 2008, December 19, 2008 and January 15, 2009 with respect to the convertible debt financing had an exercise price denominated in US dollars. As a result, these warrants are required to be measured and recognized at fair value with changes subsequent to the initial recognition charged to the net income (loss) until they are fully exercised. The Company has determined the fair value using the Black-Scholes option pricing model.

For the year ended December 31, 2010, the Company recorded a warrant revaluation gain of \$4,037,184 resulting from the fair value change of this derivative liability that expired unexercised. On exercise of the warrants, the associated derivative liability of \$4,440,760 was transferred to share capital.

**9. Compensation of key management**

Key management comprises directors and executive officers. Certain executive officers are entitled to termination benefits equal to up to two years' gross salary amounting to \$1,625,000 in the event of a change of control. The Company has no post-employment benefits and other long-term employee benefits.

Compensation awarded to key management was as follows:

		Years ended December 31,		
		2012	2011	2010
Salaries and employee benefits	\$	918,297	\$ 805,770	\$ 637,500
Directors' fees		126,971	110,294	113,240
Share-based payments		460,455	1,018,476	787,668
	\$	1,505,723	\$ 1,934,540	\$ 1,538,408

**10. Related party transactions**

The Company's related parties consist of companies owned by executive officers or directors. The following fees and expenses were incurred in the normal course of operations:

		Years ended December 31,		
		2012	2011	2010
Manex Resource Group <sup>(a)</sup>	\$	535,349	\$ 514,577	\$ 501,350
Lawrence Page, Q.C. Law Corp. <sup>(b)</sup>		4,115	6,410	7,820
Atherton Enterprises Ltd. <sup>(c)</sup>		157,880	175,000	175,000
	\$	697,344	\$ 695,987	\$ 684,170

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**10. Related party transactions, continued**

- a) Manex Resource Group ("Manex") is a private company owned by a director that provides general office and administrative services. As of December 31, 2012, \$26,374 (2011 - \$47,884) was still owing in due to related parties.
- b) Lawrence Page, Q.C. Law Corp. is a company owned by a director that provides legal services. As of December 31, 2012, \$616 (2011 - \$nil) was still owing in due to related parties.
- c) Atherton Enterprises Ltd. is a private company owned by an officer that provides CFO services to the Company.

**11. Supplemental cash flow information**

For the years ended	December 31, 2012	December 31, 2011	December 31, 2010
<b>Non-cash items</b>			
Mineral property expenditures included in accounts payable	\$ 302,366	\$ 1,415,599	\$ 622,884
Non-cash share issue costs	\$ -	\$ -	\$ 533,480
Shares received for mineral properties	\$ -	\$ -	\$ 40,000
Shares issued for mineral properties	\$ -	\$ -	\$ 355,500
<b>As at</b>			
	December 31, 2012	December 31, 2011	
<b>Cash and cash equivalents comprises</b>			
Cash	\$ 1,795,555	\$ 2,147,321	
Term deposits and bankers acceptance	-	10,000,000	

**12. Deferred income taxes**

- a) A reconciliation of income tax provision computed at Canadian statutory rates to the reported income tax provision is provided as follows:

	2012	2011	2010
Loss for the year	\$ 4,853,976	\$ 11,264,539	\$ 2,769,248
Canadian statutory tax rate	25.0%	26.5%	28.5%
Income tax benefit computed at statutory rates	1,213,494	2,985,103	789,236
Foreign tax rates different from statutory rates	224,933	266,896	22,335
Temporary differences	887,107	311,553	2,228,377
Change in timing differences	427,291	(1,316,464)	(960,676)
Rate difference between current and deferred taxes	(66,920)	45,108	38,709
Foreign exchange gains or losses	(531,660)	345,176	(831,885)
Permanent differences	(284,224)	(820,811)	(659,490)
Unused tax losses and tax offsets not recognized in tax asset	(1,870,021)	(1,816,561)	(626,606)
	\$ -	\$ -	\$ -

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**12. Deferred income taxes, continued**

Effective January 1, 2012, the Canadian federal corporate tax rate decreased from 16.5% to 15.0% and the British Columbia provincial tax rate remained the same at 10.0%. The overall reduction in tax rates has resulted in a decrease in the Company's statutory tax rate from 26.5% to 25.0%.

In 2009, the Mexican government approved tax reform that includes a 2% increase in the income tax rate in Mexico from 28% to 30% for a three-year period starting in 2010.

- b) The tax effected items that give rise to significant portions of the deferred income tax assets and deferred income liabilities at December 31, 2012 and 2011 are presented below:

	<b>2012</b>	<b>2011</b>
Deferred tax assets		
Tax losses carried forward	\$ 5,915,207	\$ 4,781,079
Tax value over book value of equipment	59,294	46,722
Tax value over book value of investments	-	4,585
Deferred tax assets	5,974,501	4,832,386
Deferred tax liability		
Book value over tax value of mineral properties	(5,974,501)	(4,832,386)
Net deferred tax assets	\$ -	\$ -

- c) The Company recognizes tax benefits on losses or other deductible amounts generated in countries where it is probable the deferred tax assets will be recovered. The Company's unrecognized deductible temporary differences and unused tax losses for which no deferred tax asset is recognized consist of the following amounts:

	<b>December 31, 2012</b>	<b>December 31, 2011</b>
Non-capital losses	\$ 22,770,000	\$ 19,689,000
Share issue costs	709,000	1,057,000
Tax value over book value of mineral properties	5,915,000	3,837,000
Tax value over book value of equipment	134,000	57,000
Tax value over book value of investments	33,000	16,000
Unrecognized deductible temporary differences	\$ 29,561,000	\$ 24,656,000

The Company's unrecognized unused non-capital losses expire as follows:

	<b>Canada</b>	<b>United States</b>	<b>Mexico</b>
2014 - 2018	\$ 643,000	\$ -	\$ 6,652,000
2019 - 2023	-	916,000	15,753,000
2024 - 2032	16,299,000	4,910,000	-
Total	\$ 16,942,000	\$ 5,826,000	\$ 22,405,000

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**13. Commitments**

- a) On February 9, 2012, the Company renewed its service agreement with Manex for its Vancouver head office administration and corporate services at a monthly rate of \$19,250 for a five-year term expiring August 31, 2017. The Company may terminate the agreement by paying Manex the lesser of \$462,000 or a total of fee owing for the remainder of the term.
- b) On March 1, 2011, the Company's US subsidiary entered into a lease agreement for its premises located in the city of Yerington, Nevada. The initial term of the lease is three years with an option to extend for an additional three years.
- c) As of December 31, 2012, the Company had the following commitments related to its office premises:

December 31, 2013	\$	277,561
December 31, 2014		251,296
December 31, 2015		231,000
December 31, 2016		231,000
December 31, 2017		154,000
	\$	1,144,857

**14. Segmented information**

The Company has one business segment, the exploration of mineral properties. The Company's significant non-current assets are distributed by geographic locations as follows:

December 31, 2012				December 31, 2011			
	Equipment	Mineral property	Taxes receivable	Equipment	Mineral property		
<b>Mexico</b>	116,722	21,337,506	919,315	194,290	16,798,700		
<b>U.S.A</b>	108,154	48,828,055	-	154,505	42,242,086		
<b>Total</b>	\$ 224,876	\$ 70,165,561	\$ 919,315	\$ 348,795	\$ 59,040,786		

**15. Capital management and financial instruments**

The Company considers its capital under management to consist of shareholders' equity. The Company manages the capital structure and makes adjustments in light of changes in economic conditions and the risk characteristics of the Company's assets.

The Company's objectives of capital management are intended to ensure the entity's ability to support the Company's normal operating requirements on an ongoing basis, continue the development and exploration of its mineral properties, and support any expansionary plans.

To effectively manage the entity's capital requirements, the Company has in place a planning and budgeting process to help determine the funds required to ensure the Company has the appropriate liquidity to meet its operating and growth objectives.



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**15. Capital management and financial instruments, continued**

There were no changes in the Company's approach to capital management during the year ended December 31, 2012.

The Company's activities expose it to a variety of risks arising from financial instruments. These risks and management's objectives, policies and procedures for managing these risks are disclosed as follows.

The following is a summary classification of financial instruments as of December 31, 2012 and 2011:

	December 31, 2012	Loans and receivables	Available- for-sale	Held-for- trading	Other financial liabilities	Total carrying value
<b>Financial assets</b>						
Cash and cash equivalents	\$	-	\$	-	\$	1,795,555
Restricted cash		80,148				80,148
Amounts due from joint venture partners		613,753				613,753
Marketable securities			12,333			12,333
Reclamation bonds		170,287				170,287
<b>Financial liabilities</b>						
Accounts payable and accrued liabilities					(656,115)	(656,115)
Due to related parties					(26,990)	(26,990)
Derivative liabilities - warrants			(774,673)			(774,673)
	\$	864,188	\$	(762,340)	\$	1,214,298
	December 31, 2011	Loans and receivables	Available- for-sale	Held-for- trading	Other financial liabilities	Total carrying value
<b>Financial assets</b>						
Cash and cash equivalents	\$	-	\$	-	\$	12,147,321
Restricted cash		94,638				94,638
Amounts due from exploration partners		240,222				240,222
Marketable securities			27,667			27,667
Reclamation bonds		519,092				519,092
<b>Financial liabilities</b>						
Accounts payable and accrued liabilities					(1,829,704)	(1,829,704)
Due to related parties					(47,884)	(47,884)
	\$	853,952	\$	27,667	\$	11,151,352

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**15. Capital management and financial instruments, continued**

**Fair value**

The Company's marketable securities measured at fair value were categorized in Level 1 at \$12,333 (2011 - \$27,667). The fair value of the Company's marketable securities is based on active market prices at the reporting date.

The derivative liability is measured at fair value and categorized in Level 2 at \$774,673 (2011 - \$nil). The fair value of the derivative liability is based on the Black-Scholes option pricing model inputs disclosed in note 7(b) as determined at the reporting date.

The recorded amount for cash equivalents, restricted cash, amount due from exploration partners, amounts due from and to related parties, and accounts payable and accrued liabilities approximate their fair values due to their short-term nature. The carrying values of the reclamation bonds approximate their fair values, as these balances are redeemable on demand.

**Market risk**

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk comprises three types of risks: currency risk, interest rate risk and other price risk.

Currency risk

The Company operates internationally and is exposed to foreign currency risk from fluctuations in exchange rates between the Canadian dollar and various currencies, primarily US dollars and Mexican pesos. The Company has not hedged its exposure to foreign currency fluctuations.

The Company is exposed to currency risk as follows:

	December 31, 2012		December 21, 2011	
	US	Pesos	US	Pesos
Cash	\$ 1,715,415	183,410	\$ 1,155,138	1,114,735
Other receivables and restricted cash	69,000	-	69,000	12,614,401
Due from exploration partners	616,899	-	236,206	-
Reclamation bond	171,160	-	510,415	-
Accounts payable and accrued liabilities	(343,686)	(760,178)	(1,498,898)	(53,726)
Derivative liabilities - warrants	(784,988)	-	-	-
Net foreign exposure	\$ 1,443,800	(576,768)	\$ 471,861	13,675,410

Based on the above net foreign currency exposures as at December 31, 2012, and assuming all other variables remain constant, a 5% weakening or strengthening of the Canadian dollar against a) the US dollar would result in a change of \$73,930 (2011 - \$24,402) in the Company's loss; and b) the Mexican peso would have no material impact in the Company's loss for the year.

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**15. Capital management and financial instruments, continued**

**Market value, continued**

Interest rate risk

The Company's cash and cash equivalents are held in bank accounts that earn interest at variable interest rates. Due to the short-term nature of these financial instruments, fluctuations in market rates do not have a significant impact on the estimated fair value as of December 31, 2012. The Company manages interest rate risk by maintaining an investment policy that focuses primarily on preservation of capital and liquidity.

Other price risk

Other price risk is the risk that the future cash flows of a financial instrument will fluctuate due to changes in market prices, other than those arising from currency risk or interest rate risk. The Company's marketable securities are carried at market value and are therefore directly affected by fluctuations in the market value of the underlying securities. The Company's sensitivity analysis suggests that a 10% change in market prices would have no material impact on the value of the Company's marketable securities.

Credit risk

Credit risk is the risk of a financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations.

The Company's financial instruments that are exposed to credit risk and for which the balances represent the maximum exposure to credit risk are cash and cash equivalents, restricted cash, amounts due from exploration partners, and taxes and other receivables. The Company manages its credit risk on cash and cash equivalents and restricted cash by maintaining these balances at Canadian chartered banks and financial institutions that have high credit ratings assigned by international credit ratings agencies. The Company's credit risk associated with amounts due from exploration partners is minimized as a result of a strong and continuing working relationship with the partners. Taxes receivables include balances due from the Canadian federal government.

At December 31, 2012, management assessed the probability of recovering the non-current taxes receivable and determined that the probability of recovery was remote and, accordingly, recognized an impairment loss of \$895,769 (2011 - \$Nil).

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company manages liquidity risk by forecasting cash flows from operations and anticipated investing and financing activities and through the management of its capital structure. Accounts payable and accrued liabilities of \$656,115 are due in the first quarter of fiscal 2013 and due to related parties of \$26,990 are due on demand.

**SERVICE AGREEMENT**

THIS SERVICE AGREEMENT is dated as of the 9th day of February, 2012 (the "Agreement").

BETWEEN:

**MANEX RESOURCE GROUP INC.**  
1100 – 1199 West Hastings Street  
Vancouver, BC V6E 3T5

("Manex")

AND:

**QUATERRA RESOURCES INC.**  
1100 – 1199 West Hastings Street  
Vancouver, BC V6E 3T5

(the "Company")

WHEREAS:

- A. The Company wishes to retain Manex to provide office space, facilities and equipment, and to provide services with respect to the administrative and corporate affairs of the Company;
- B. Manex has the facilities, resources and expertise available to provide office space, and administrative and corporate services to the Company; and
- C. Manex has agreed to provide office space and administrative, corporate and other services to the Company on the terms and subject to the conditions hereinafter set forth.

NOW THEREFORE in consideration of the premises and the mutual covenants and agreements herein contained, the parties hereto covenant and agree with the other as follows:

**1. APPOINTMENT**

- 1.1 The Company hereby appoints Manex and Manex hereby accepts such appointment to provide office space, and administrative, corporate and other services to the Company effective from June 30, 2012 until August 31, 2017 (the "Term").

**2. CONTRACT WITH OTHERS**

- 2.1 The Parties acknowledge and agree that separate contracts may be executed between the Company and the Company's senior officers (including, but not limited to, the President, Vice President, Chief Financial Officer, and Corporate Secretary). Payment for these contracts will be negotiated separately between the Company and each senior officer and is therefore not included in the Basic Rent (as herein defined).

**3. SERVICES**

- 3.1 Manex agrees to provide to the Company the following services (collectively, the "Services"):
  - (a) provision of an address, telephone number, receptionist, meeting and board

rooms, appropriate furniture, computer equipment and software, telephone, copiers, fax, and other reasonable office related equipment;

- (b) provision of a dedicated office (if required) with appropriate furniture, computer and other related equipment; and
- (c) Manex will provide, as requested, corporate strategic and contract advice, corporate finance and financing advice, geological, corporate development, accounting and administrative services.

- 3.2 As required by Manex, the Company agrees to subscribe to WhistleBlower Security, Inc., a whistleblower service, and Aprio Inc., a corporate governance software service (or such other comparable services as recommended by Manex).

#### **4. LEGAL SERVICES**

- 4.1 Manex does not provide legal services to the Company and the Company agrees to obtain its own legal advice and counsel.

#### **5. REMUNERATION**

- 5.1 The Company hereby agrees to pay Manex:

- (a) \$10,500 per month in advance for the provision of offices, meeting and boardrooms, receptionist, telephones, address and access to all professional services offered by Manex (the "**Basic Rent**");
- (b) \$1,750 per month per dedicated office in use by the Company from time to time (the "**Specific Rent**"); and
- (c) fees for the Services rendered and other charges incurred at the rates outlined at Schedule "A".

- 5.2 The Company further agrees to reimburse Manex for the actual out-of-pocket expenses and/or disbursements incurred on behalf of the Company plus 15% thereof by Manex, its consultants, advisors, sub-agents and employees, in connection with the provision of any of the services hereunder including, but not limited to, paper, postage, couriers, parking, coffee, bottled water, pens, binding materials and filing fees, as well as any tax imposed (other than income tax) on any of Manex's fees, out-of-pocket expenses or disbursements (collectively, the "Expenses"), PROVIDED ALWAYS THAT Manex will provide to the Company receipts or vouchers detailing such Expenses and, if the statute implementing any tax imposed obligates Manex to collect and remit that tax, Manex shall be at liberty to add that tax to its accounts as a separate item AND PROVIDED FURTHER that the Company shall advance from time to time and at any time, upon request by Manex, funds sufficient to cover anticipated Expenses to be incurred on behalf of the Company, it being acknowledged by the Company that, in the absence of such advance, Manex may but will not be obligated to cause such Expenses to be incurred on behalf of the Company.

- 5.3 The Company agrees to pay Manex for travel time of a maximum of eight (8) hours per person per day charged at the rates outlined in Schedule "A".

- 5.4 The Company agrees that it is responsible for all business-related taxes including HST/GST and any other applicable taxes and acknowledges that the fees listed in

Schedule "A" do not include business-related taxes.

**6. ACCOUNTS**

- 6.1 Manex will provide the Company with an invoice at the beginning of each month detailing the Basic Rent and Specific Rent for that month. Manex will also provide the Company with an invoice in the middle of each month for Services and other charges rendered in the preceding month according to the rates at Schedule "A", and an additional invoice for Expenses for the preceding month.
- 6.2 The Company agrees to pay Manex within seven (7) days of receipt of the invoices and agrees to pay interest to Manex on the unpaid balance thereof at the rate of prime plus 2% per annum calculated from the seventh (7<sup>th</sup>) day after receipt of the invoice to the date of payment. Manex may, at its option, immediately cease providing services to the Company in the event of any non-payment of an account or accrued interest thereon. Manex may, without notice in the event of any non-payment of an account or accrued interest thereon, pursue any collection remedy available to it at the cost of the Company including court costs, filing fees and legal costs on a solicitor and his own client basis.

**7. TERMINATION**

- 7.1 Manex may terminate the Agreement with thirty (30) days written notice to the Company.
- 7.2 The Company may terminate the Agreement by paying Manex an amount equal to the lesser of:
- (a) Basic Rent and Specific Rent calculated for a two (2) year period; and
  - (b) Basic Rent and Specific Rent calculated for the remainder of the Term.
- 7.3 In the event of default of either party, the non-defaulting party may give the defaulting party written notice of default which specifies the obligations which the defaulting party has failed to perform. If the defaulting party fails to remedy such default within thirty (30) days of receiving the notice of default, or such other period of time as may be determined by mutual agreement, the non-defaulting party may terminate the Agreement by written notice to the defaulting party.

**8. NON-DISCLOSURE**

- 8.1 Manex shall not, either during the Term or within five (5) years after the termination of this Agreement, disclose to any person, or make use of itself, any information or trade secrets relating to the Company, its business, policies, methods, scientific data, information or other private affairs which Manex shall have acquired in any manner.

**9. NON-EMPLOYMENT OF MANEX STAFF**

- 9.1 During the term of this Agreement and for a period of five (5) years thereafter, the Company shall not hire or otherwise engage any employee of Manex, or any person previously employed by Manex within one (1) year thereof, without the prior written consent of Manex.

**10. GENERAL**

- 10.1 The Company represents and warrants to Manex that the Company is duly incorporated,

validly existing and in good standing under the laws of the jurisdiction of its incorporation and has the power and capacity to enter into this Agreement and to carry out its terms, and the execution and delivery of this Agreement by the Company has been duly and validly authorized by all necessary corporate action.

- 10.2 Manex covenants and agrees to provide the Services hereunder in a faithful and diligent manner and to conduct the Services in an efficient, trustworthy and business-like manner to the advantage and benefit of the Company.
- 10.3 Neither the Agreement nor any rights or benefits arising hereunder are assignable without the prior written consent of the other party.
- 10.4 Any notices to be given by either party to the other shall be well and sufficiently given if telecopied or delivered personally or if sent by double registered mail, postage prepaid, to the parties hereto at the respective addresses set out above, or to such other address or addresses as the parties hereto may notify to the other from time to time in writing. Such notice shall be deemed to have been given at the time of delivery, if telecopied or delivered in person, or forty-eight (48) hours from the date of posting if mailed from Vancouver, British Columbia.
- 10.5 This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the Province of British Columbia and the laws of Canada applicable therein.
- 10.6 This Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.
- 10.7 This Agreement is subject to its acceptance for filing on behalf of the Company by the stock exchange upon which the Company's shares are listed, if the rules and/or policies of such stock exchange require such acceptance for filing.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the day and year first above written.

**MANEX RESOURCE GROUP INC.**

Per:   
Authorized Signatory

**QUATERRA RESOURCES INC.**

Per:   
Authorized Signatory

# SCHEDULE "A": FEES

**Basic Rent:** \$10,500 per month  
**Specific Rent:** \$1,750 per month

**Travel Time** Travel time will be charged to the Company according to the hourly rate of each personnel department in this Schedule "A" to a maximum of eight (8) hours per day, or as otherwise outlined for Field Geological Staff.

**HST/GST and Other Business Taxes:** The Company is responsible for all business related taxes including HST/GST. The fees noted above are before any business related taxes.  
Applicable taxes are not included in service fees.

<b>Rates:</b> The Company will be charged per hour worked or hour traveled as follows:	
<b>Position</b>	<b>Rate (per hour)</b>
Geological Staff (Manex Offices)	
Senior	\$100
Junior	\$70
Drafts/Data	\$60
Geological Staff (Field)	
Senior (10 hour day)	\$1,000
Senior drilling (12 hour day)	\$1,200
Junior (10 hour day)	\$700
Junior drilling (12 hour day)	\$840
Corporate Development	
Senior Manager	\$100
Manager	\$80
Marketing, communications, graphics, corporate development assistant	\$70
Corporate Secretarial	
Assistant Corporate Secretary	\$85
Junior	\$65
Accounting	
Senior	\$100
Junior	\$70
Book-keeper	\$50
Administration	\$45



**SUBSIDIARIES OF QUATERRA RESOURCES INC.**

<u>Name</u>	<u>Jurisdiction of Incorporation or Organization</u>
Quaterra Alaska, Inc.	Alaska, United States
Minera Agua Tierra S.A. de C.V.	Mexico
Quaterra International Limited	British Virgin Islands
QTA International Nieves Limited	British Virgin Islands
Quaterra Blackberry Nieves (BVI) JV Corp.	British Virgin Islands
Minera Stockwork de Plata, S.A. de C.V.	Mexico
Minera Cerro Gregorio S.A. de C.V.	Mexico

**CERTIFICATION OF THE PRINCIPAL EXECUTIVE OFFICER  
FILED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Thomas C. Patton, certify that:

1. I have reviewed this annual report on Form 20-F of Quaterra Resources Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 28, 2013

/s/ Thomas Patton

Thomas C. Patton  
Chief Executive Officer

**CERTIFICATION OF THE PRINCIPAL FINANCIAL OFFICER  
FILED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Scott B. Hean, certify that:

1. I have reviewed this annual report on Form 20-F of Quaterra Resources Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 28, 2013

/s/ Scott Hean  
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Scott B. Hean  
Chief Financial Officer

**CERTIFICATION OF THE PRINCIPAL EXECUTIVE OFFICER  
FURNISHED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of Quaterra Resources Inc. (the "Company") on Form 20-F for the period ended December 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report") to which this certification is attached, I, Thomas C. Patton, Chief Executive Officer of the Company, certify solely for the purposes of 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 28, 2013

/s/ Thomas Patton  
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Thomas C. Patton  
Chief Executive Officer

*This certification is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933 or the Securities Act of 1934 (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.*

**CERTIFICATION OF THE PRINCIPAL FINANCIAL OFFICER  
FURNISHED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of Quaterra Resources Inc. (the "Company") on Form 20-F for the period ended December 31, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report") to which this certification is attached, I, Scott B. Hean, Chief Financial Officer of the Company, certify solely for the purposes of 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 28, 2013

/s/ Scott Hean

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Scott B. Hean

Chief Financial Officer

*This certification is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933 or the Securities Act of 1934 (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.*