

Quarterly Activities Report

For the period ending 31 December 2017

Highlights

- ▲ Rapidly advancing 100%-owned Rhyolite Ridge Lithium-Boron Project (“Project”) in the USA towards development
- ▲ Updated Mineral Resource confirmed large tonnage of high-grade lithium-boron mineralisation from surface:
 - **High-grade lithium-boron portion doubled to 137 million tonnes** at 0.9% lithium carbonate and 7.2% boric acid with 75% in the Indicated category
 - **Total Indicated and Inferred Resource increased 17% to 460 million tonnes** at 0.9% lithium carbonate and 2.6% boric acid, containing 4.1 million tonnes of lithium carbonate and 11.9 million tonnes of boric acid
- ▲ Initial mining study confirmed potential for **open pit mining at low strip ratios** with development in two stages:
 - A 2Mtpa starter pit (constrained) based on 26Mt Resource that may be eligible for fast-track permitting due to its small footprint
 - A large, unconstrained pit based on 87Mt Resource and sufficient to support 4Mtpa operation
- ▲ **Excellent potential for heap leach processing** demonstrated by testwork achieving:
 - Lithium and boron recoveries of 88-92% to solution
 - Rapid leach times at ambient temperature with moderate acid consumption rates
- ▲ Mr. Matt Weaver appointed Senior Vice President of Engineering and Operations to manage all engineering and operational aspects of the Project
- ▲ **Amec Foster Wheeler appointed as the engineering and design firm** to complete the Rhyolite Ridge Pre-Feasibility Study (“PFS”)

Overview

Global Geoscience is focussed on developing its 100%-owned Rhyolite Ridge Lithium-Boron Project in Nevada, which is at the PFS stage.

Global’s Managing Director, Bernard Rowe commented on the quarter:

“All of our activities during the quarter continued to reinforce our view that we have an economic pathway to make the Rhyolite Ridge resource into a significant, low-cost, near-term producer of lithium carbonate and boric acid in America.

“Our updated Mineral Resource estimate doubled the high-grade portion of the Resource with 75% upgraded to the Indicated category. The Resource remains open in several directions.

“The initial mining study has shown that the current high-grade lithium-boron Resource can readily support a long-life 2Mtpa to 4Mtpa mining operation.

“Recent metallurgical testwork has demonstrated that heap leaching is likely to be a simple, low-cost processing route for this unique lithium-boron mineralisation.

“We have the funding in place to complete the Rhyolite Ridge Pre-Feasibility Study, build a pilot plant and undertake a definitive feasibility study.

“We are close to commencing the key permitting process which we expect to be considered for fast-track permitting under US Federal Government regulations. Rhyolite Ridge may also benefit from an Executive Order signed by President Trump in December that aims to ensure reliable domestic supplies of critical minerals such as lithium.”

Rhyolite Ridge is a large, shallow lithium-boron deposit located close to existing infrastructure in southern Nevada, USA. The Project lies 25km west of Albermarle’s Silver Peak lithium mine and 340km from the Tesla Gigafactory near Reno. Rhyolite Ridge is one of the largest lithium and boron deposits in the world and has the potential to become a strategic, long-life and low-cost source of lithium and boron.

The deposit is amenable to low-cost open pit mining methods. The high-grade lithium-boron mineralisation is the focus of the Rhyolite Ridge PFS as it represents potentially the highest value material combined with a low-cost, simple processing route. This is due to the low-clay, low-carbonate and high-searlesite (boron) content of the rock, which make the mineralisation amenable to low-cost acid leaching at ambient temperature and pressure. The proposed flowsheet will allow for the production of lithium carbonate and boric acid at the mine site.

Rhyolite Ridge is very well positioned to become a major US domestic producer capable of supplying a significant portion of future American lithium demand. This strategic location was reinforced on 20 December 2017 when President Trump signed an Executive Order titled a “Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals”. Lithium is one of the 23 critical mineral resources previously identified by the United States Geological Survey.

The Rhyolite Ridge Advantage

Rhyolite Ridge’s unique mineralogy is what sets it apart from other lithium and lithium-boron deposits. Unlike other sedimentary and pegmatite (spodumene, mica) lithium deposits, the lithium (and boron) at Rhyolite Ridge are contained within minerals that are highly soluble in sulphuric acid. Compared to other sedimentary lithium deposits, the lithium-boron mineralisation at Rhyolite Ridge has very low clay content.

These unique characteristics mean that Rhyolite Ridge mineralisation is amenable to simple, low-cost acid leaching – including heap, vat and agitation (tank) leach. Unlike other sedimentary and pegmatite lithium deposits, Rhyolite Ridge does not require roasting or high-temperature conversion prior to acid leaching, meaning significantly lower operating and capital costs.

Key advantages include:

- ▲ Nevada location: one of the world’s most favourable and stable mining jurisdictions and home to the USA’s burgeoning electric vehicle industry. Nevada has well-developed infrastructure and skilled mining workforce

- ▲ Unique mineralogy which distinguish it from other sedimentary lithium deposits and allow for a simple, low-cost acid leach extraction process. Unlike sedimentary clay deposits, no roasting or calcining is required
- ▲ Unlike pegmatite (spodumene, mica) deposits, no high-temperature conversion is required to produce lithium carbonate.
- ▲ Dual revenue streams from lithium and boron
- ▲ Simple ownership – 100% Global Geoscience with no private royalties
- ▲ Large Mineral Resource containing 137 million tonnes of high-grade lithium boron mineralisation within a total Resource (Indicated & Inferred) of 460 million tonnes
- ▲ PFS stage - mining studies in progress, engineering studies about to commence
- ▲ Management and technical team with proven track record in the development and delivery of lithium and boron projects
- ▲ Ideally positioned to supply the lithium and boron markets in the USA and Asia
- ▲ Potential long-term US domestic supplier of lithium – a designated critical mineral

Project Development Activities

Appointment of Amec Foster Wheeler for PFS

On 17 January 2018, the Company announced the appointment of Amec Foster Wheeler (“Amec”, part of Wood plc) as the engineering and design firm to complete the Rhyolite Ridge PFS.

A key aspect of Amec’s selection was its strong technical team and recent, highly relevant experience in lithium projects, including a sedimentary lithium-boron deposit like Rhyolite Ridge. The Amec team members for the Rhyolite Ridge PFS are based in Vancouver, Reno and Santiago.

Updated Mineral Resource

Global Geoscience released an updated Mineral Resource estimate on 31 October 2017.

The high-grade portion of the Indicated and Inferred Resource has doubled to 137 million tonnes at 0.9% lithium carbonate and 7.2% boric acid (at a 1050ppm Li and 0.5% boron cut-off), with 75% in the Indicated category.

The total Indicated and Inferred Resource for the South Basin at Rhyolite Ridge has increased by 17% and is now estimated to be (at a 1,050ppm lithium cut-off):

- ▲ 460 million tonnes at 0.9% lithium carbonate and 2.6% boric acid
- ▲ Containing 4.1 million tonnes of lithium carbonate and 11.9 million tonnes of boric acid

The Resource remains open to the north, south and east and has significant potential to expand with further drilling of the South Basin. Not included in the Mineral Resource estimate is known lithium-boron mineralisation in the North Basin at Rhyolite Ridge.

Mining Studies

RPM Global completed an initial mining study in conjunction with the updated Mineral Resource estimate. The study is evaluating conceptual pit designs and development, scheduling and mine site design and layout. The study was based on only the high-grade (lithium-boron) component of the South Basin Resource.

The mining study considered two scenarios:

▲ A smaller constrained starter pit shell:

- 26 million tonnes at 1,400ppm lithium (equivalent to 0.74% lithium carbonate) and 1.24% boron (equivalent to 7.1% boric acid)
- Supporting a 2Mtpa operation for more than 10 years
- Low strip ratio of less than 4:1
- Small footprint that may be eligible for fast-track permitting

▲ A larger unconstrained pit shell:

- 87 million tonnes at 1,635ppm lithium (equivalent to 0.87% lithium carbonate) and 1.35% boron (equivalent to 7.7% boric acid)
- Supporting a 4Mtpa operation for more than 20 years

The mining study provides the basis for estimating the cost of feed to the processing plant and is an integral part of the PFS. Whilst no decision has been made at this stage, the Company is considering production rates in the range of 2 million to 4 million tonnes per annum. By way of illustration, one million tonnes of mineralisation contains approximately 8,700 tonnes of lithium carbonate and 77,200 tonnes of boric acid.

Metallurgical Testwork

Metallurgical testwork completed during the quarter demonstrated that simple, low-cost heap leach processes can be used to extract lithium and boron at high recovery rates into a Pregnant Leach Solution (“PLS”). Lithium and boron can then be removed from the PLS through crystallisation and purification steps to produce lithium carbonate and boric acid at the mine.

This metallurgical testwork was conducted by Kappes Cassiday & Associates (Reno) and Hazen Research (Denver) laboratories.

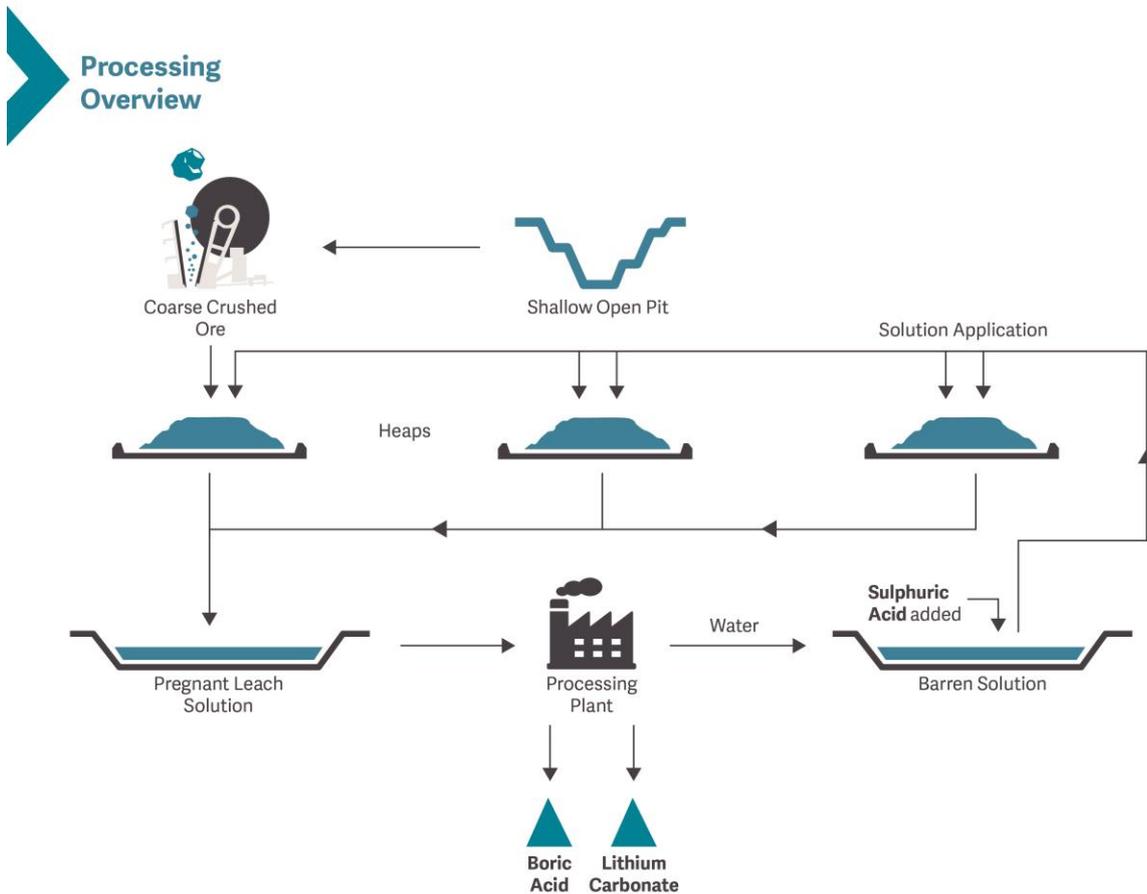
Heap leach extraction of lithium and boron at modest acid consumption rates means significantly lower capital and operating costs are likely when compared to other forms of acid leaching such as agitation (tank) leaching that require crushing, grinding, filtration and leach tanks. It also means substantially lower capital and operating costs when compared to hard-rock lithium deposits (spodumene, mica, clay) that require beneficiation and high temperature conversion or roasting to liberate the lithium prior to the lithium carbonate production process.

The Company believes Rhyolite Ridge is the first lithium project where heap leach has been demonstrated to be an effective processing route.

The key results from the heap leach testwork were:

- ▲ High recoveries to PLS: 89-92% for lithium and 88-89% for boron
- ▲ Large samples: 150kg to 495kg
- ▲ Coarse feed: crushed to minus 150mm
- ▲ Rapid leach times: 30 days to get to 80% and 41 days to circa 90%
- ▲ Moderate net acid consumption: 413kg per tonne of ore
- ▲ High permeability and high percolation rates maintained throughout tests
- ▲ Excellent column integrity: low mass loss (21%) and low slumping (<5%)
- ▲ PLS can be operated at close to boric acid saturation
- ▲ No agglomeration required

An overview of the heap leach flowsheet for Rhyolite Ridge is provided in the diagram below.



A heap leach operation at Rhyolite Ridge would likely involve the following:

- ▲ Run-of-mine ore is crushed to between 50mm and 150mm
- ▲ The crushed ore is placed on a lined pad
- ▲ The ore is irrigated with sulphuric acid/water solution via drip feeder pipes
- ▲ The metals are dissolved into solution, forming a pregnant leach solution (“PLS”)
- ▲ The PLS is collected in a pond or tank
- ▲ Boron and lithium are recovered from the PLS and converted into boric acid and lithium carbonate by a combination of crystallisation and purification process steps

Metallurgical testwork is currently focused on the crystallisation and purification process steps.

March Quarter Work Program

The March quarter work program will continue to focus on aspects of the Rhyolite Ridge PFS including:

- ▲ Formal commencement of environmental permitting process
- ▲ Optimisation of acid-leach process – in progress
- ▲ Crystallisation and purification testwork on PLS to produce lithium carbonate and boric acid – in progress
- ▲ PFS engineering study – underway
- ▲ Environmental, ground water and geotechnical studies – in progress

Corporate Activities

Senior Management Appointment

In November 2017, Mr. Matt Weaver was appointed Senior Vice President of Engineering and Operations for the Company.

Mr. Weaver will manage all engineering and operational aspects of the Rhyolite Ridge Lithium-Boron Project and will be responsible for delivering the project through the feasibility and developmental phases and into full commercial production. He is based in the USA and will work out of the Company's Reno, Nevada office.

During three decades' experience in the mining industry, Mr. Weaver has worked on both small and large-scale development projects at BHP, Rio Tinto and Newmont, as well as for several smaller mining companies.

Capital Raising

The \$30 million capital raising via an institutional placement ("Placement") announced on 28 September 2017 was settled early in the December Quarter. Citigroup Global Markets Australia Pty Limited (Citigroup) acted as sole lead manager, bookrunner and underwriter to the Placement.

The Company is now funded to progress Rhyolite Ridge into development by completing the PFS, building a pilot plant and undertaking a definitive feasibility study.

Expenditure

Expenditure during the December quarter totalled:

- ▲ \$1.0 million on exploration; and
- ▲ \$0.6 million on corporate/administration/salaries.

Cash on hand at 31 December 2017 was \$33 million.

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About Global Geoscience

Global Geoscience Limited (ASX:GSC) is an Australian-based lithium-boron mine developer focused on its 100%-owned Rhyolite Ridge Lithium-Boron Project in Nevada, USA. Rhyolite Ridge is a large, shallow lithium-boron deposit located close to existing infrastructure. It is a unique sedimentary deposit that has many advantages over the brine and pegmatite deposits that currently provide the world's lithium. The Rhyolite Ridge Pre-Feasibility Study is under way.

Global Geoscience is aiming to capitalise on the growing global demand for lithium and boron. Lithium has a wide variety of applications, including pharmaceuticals, lubricants and its main growth market, batteries. Boron is used in glass and ceramics, semiconductors and agriculture. Global Geoscience aims to develop the Rhyolite Ridge Lithium-Boron Project into a strategic, long-life, low-cost supplier of lithium carbonate and boric acid. To learn more please visit: www.globalgeo.com.au.

Recent Announcements

The table below lists the announcements made by the Company since 1 October 2017.

Date Released	Title
5 October 2017	Global Geoscience Further Confirms High-Grade Mineralisation at Rhyolite Ridge Lithium-Boron Project
31 October 2017	Global Geoscience Doubles High-Grade Lithium-Boron Mineral Resource
31 October 2017	Quarterly Activities Report for the period ending 30 September 2017
28 November 2017	Global Geoscience Appoints Senior Executive to Manage Rhyolite Ridge Lithium-Boron Project
12 December 2017	Global Geoscience Makes Groundbreaking Discovery Heap Leach Lithium-Boron Extraction at Rhyolite Ridge
19 December 2017	Initial Rhyolite Ridge Mining Study Confirms Potential for Long Mine Life from Currently Defined South Basin Resource
17 January 2018	Global Geoscience appoints Amec Foster Wheeler for Rhyolite Ridge PFS

Compliance Statement

The information in this report that relates to Exploration Results is based on information compiled by Bernard Rowe, a Competent Person who is a Member of the Australian Institute of Geoscientists. Bernard Rowe is a shareholder, employee and Managing Director of Global Geoscience Ltd. Mr Rowe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Bernard Rowe consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

In respect of Mineral Resources referred to in this presentation and previously reported by the Company in accordance with JORC Code 2012, the Company confirms that it is not aware of any new information or data that materially affects the information included in the public report titled "Global Geoscience Doubles High-Grade Lithium-Boron Mineral Resource" dated 31 October 2017 and released on ASX. Further information regarding the Mineral Resource estimate can be found in that report. All material assumptions and technical parameters underpinning the estimates in the report continue to apply and have not materially changed.

Forward Looking Statements

Various statements in this report constitute statements relating to intentions, future acts and events which are generally classified as "forward looking statements". These forward looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties and other important factors (many of which are beyond the Company's control) that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed in this presentation. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements.

Global cautions security holders and prospective security holders to not place undue reliance on these forward-looking statements, which reflect the view of Global only as of the date of this report. The forward-looking statements made in this report relate only to events as of the date on which the statements are made. Except as required by applicable regulations or by law, Global does not undertake any obligation to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance.

Appendix

Geology

Rhyolite Ridge project covers two separate lithium-boron deposits (North Basin and South Basin) located 4km apart. The mineralisation occurs in flat lying sedimentary rocks as a two or more stacked layers or lenses. The sedimentary rocks are up to 300m thick and the mineralized layers within are 20-70m thick. The mineralized layers contain lithium only (clay-rich) and lithium-boron (clay-poor) mineralisation.

The lithium-only mineralisation typically contains over 2000ppm lithium, less than 0.02% boron and occurs in clay-rich layers. The lithium-boron mineralisation typically contains 1500-2000ppm lithium and greater than 1% boron, is higher in silica, sodium and potassium and lower in calcium and magnesium and occurs in 20m to 70m thick layers containing abundant searlesite (20-40%) and low in clay. Searlesite is a sodium-boron-silicate mineral. There are at least two separate layers of lithium-boron mineralisation (upper zone and lower zone) separated by 30-50m of barren sediments. The upper zone outcrops and the lower zone is shallow (<40m) along the western margin of South Basin. Both types of mineralisation are very consistent laterally over at least several square kilometres.

The host rocks are dominated by the minerals searlesite (boron-bearing), sepiolite (lithium-bearing), K-feldspar, calcite and dolomite. Unlike most other sedimentary-type lithium deposits, the lithium-boron mineralization at Rhyolite Ridge has low clay content.

Both basins have not been structurally disturbed since deposition and the strata/mineralisation are very consistent laterally.

Resource Estimate

The Indicated and Inferred Resource estimate for the South Basin at Rhyolite Ridge totals 460 million tonnes at 0.9% lithium carbonate and 2.6% boric acid (at a 1,050ppm Li cut-off).

October 2017 Mineral Resource Estimate (1,050ppm Li Cut-off)

Group	Classification	Tonnage Mt	Li ppm	B ppm	Li ₂ CO ₃ %	H ₃ BO ₃ %	K ₂ SO ₄ %	Contained		
								Li ₂ CO ₃ kt	Boric Acid kt	Potassium kt
Upper Zone	Indicated	147.7	1,910	7,690	1.0	4.4	1.7	1,500	6,490	2,490
	Inferred	<u>68.9</u>	<u>2,140</u>	<u>5,300</u>	<u>1.1</u>	<u>3.0</u>	<u>1.8</u>	<u>780</u>	<u>2,090</u>	<u>1,240</u>
	Total	216.6	1,980	6,930	1.1	4.0	1.7	2,290	8,580	3,720
Lower Zone	Indicated	126.0	1,390	3,430	0.7	2.0	1.7	930	2,460	2,140
	Inferred	<u>116.8</u>	<u>1,500</u>	<u>1,490</u>	<u>0.7</u>	<u>0.7</u>	<u>1.5</u>	<u>840</u>	<u>870</u>	<u>1,790</u>
	Total	242.9	1,440	2,500	0.7	1.4	1.6	1770	3,330	3930
Upper & Lower Zone	Indicated	273.7	1,670	5,730	0.9	3.3	1.7	2,440	8,950	4,630
	Inferred	<u>185.8</u>	<u>1,730</u>	<u>2,900</u>	<u>0.9</u>	<u>1.6</u>	<u>1.6</u>	<u>1,620</u>	<u>2,960</u>	<u>3,020</u>
	Grand Total	459.5	1,700	4,590	0.9	2.6	1.7	4,060	11,910	7,650

The Indicated and Inferred Resource includes a high-grade lithium-boron zone totaling 137 million tonnes at 0.9% lithium carbonate and 7.2% boric acid (at a 1,050ppm Li and 0.5% B cut-off).

October 2017 Mineral Resource Estimate (1,050ppm Li and 0.5% B Cut-off)

Group	Classification	Tonnage Mt	Li ppm	B ppm	Li ₂ CO ₃ %	H ₃ BO ₃ %	K ₂ SO ₄ %	Contained		
								Li ₂ CO ₃ kt	Boric Acid kt	Potassium kt
Upper Zone	Indicated	73.6	1,800	14,600	1.0	8.3	2.0	700	6,150	1,490
	Inferred	<u>28.7</u>	<u>2,020</u>	<u>11,850</u>	<u>1.1</u>	<u>6.8</u>	<u>2.2</u>	<u>310</u>	<u>1,950</u>	<u>640</u>
	Total	102.4	1,860	13,830	1.0	7.9	2.1	1,010	8,090	2,130
Lower Zone	Indicated	29.5	1,410	9,490	0.7	5.4	1.6	220	1,600	480
	Inferred	<u>5.3</u>	<u>1,560</u>	<u>6,870</u>	<u>0.8</u>	<u>3.9</u>	<u>2.0</u>	<u>40</u>	<u>210</u>	<u>110</u>
	Total	34.8	1,430	9,090	0.8	5.2	1.7	260	1,800	580
Upper & Lower Zone	Indicated	103.1	1,680	13,140	0.9	7.5	1.9	920	7,740	1,970
	Inferred	<u>34.0</u>	<u>1,950</u>	<u>11,070</u>	<u>1.0</u>	<u>6.3</u>	<u>2.2</u>	<u>350</u>	<u>2,160</u>	<u>740</u>
	Grand Total	137.1	1,750	12,620	0.9	7.2	2.0	1,280	9,900	2,710

Note: Totals may differ due to rounding, Mineral Resources reported on a dry in-situ basis.

Schedule of Tenements

Country	Project	Tenement ID	Tenement Name	Area (km2)	Interest at beginning of quarter	Interest at end of quarter	Note
USA	Rhyolite Ridge	NMC1118666	NLB claims (160)	13	100%	100%	No change
USA	Rhyolite Ridge	NMC1117360	SLB claims (199)	16.5	100%	100%	70 new claims added
USA	Rhyolite Ridge	NMC 1129523	BH claims (81)	7	0%	0%, option to purchase 100%	No change
USA	New Morenci	AMC393550	MP claims (2)	0.12	100%	100%	No change
USA	Tokop	NMC883619	TK claims (73)	4.82	100%	100%	No change
USA	Tokop	NMC285234	Path Patents (11)	0.74	0%, option to purchase 100%	0%, option to purchase 100%	No change
USA	Tokop	NMC814692	Path Unpatented (5)	0.40	0%, option to purchase 100%	0%, option to purchase 100%	No change
USA	Bartlett	NMC938020	PEARL claims (8)	0.67	0%, option to purchase 100%	0%, option to purchase 100%	No change
USA	Lone Mt	NMC913404	NAMMCO claims (71)	5.43	0%, earning 100%	0%, earning 100%	No change
USA	Lone Mt	NMC1071591	LMG claims (37)	2.80	100%	100%	No change
USA	Lone Mt	NMC1094601	SW claims (24)	2.0	100%	100%	No change
USA	Towers Mt	AMC426407	CK claims (32)	2.54	100%	100%	No change