

Quarterly Activities Report for the period ended 31 December 2023

ASX Release: 15 January 2024

LOI signed for Hillside Joint Venture

Rex Minerals Limited

ASX: RXM | OTCQB: RXRLF ABN 12 124 960 523

Directors

Ian Smith, NED (Chairman) Richard Laufmann, CEO/MD Amber Rivamonte, CFO/ED Gregory Robinson, NED Andrew Seaton, NED

Shares on Issue	636,987,587
Options	55,663,340
HRCR ²	15,000,000

Share Price Activity

December	2023 Quarter
Low	15.0c
High	21.0c
Last	18.5c

Cash & cash equivalent \$5.5M at 31 December 2023

T 1300 822 161 (Australia) T +61 3 9068 3077 (Int'l) PO Box 3435, Rundle Mall South Australia 5000

E rex@rexminerals.com.au W www.rexminerals.com.au

Highlights

Hillside Copper-Gold Project, South Australia (100%)

- Rex executed a non-binding Letter of Intent with Nittetsu Mining Co.
 Ltd., to establish a Joint Venture for development of the Hillside Project
- Rex and Nittetsu have agreed to work together to identify additional JV partners and then to secure the complete funding package with debt and equity providers¹
- The Senior Debt funding process with domestic and international banking groups to accelerate in 2024
- Pre-construction activity on site is continuing.

Hog Ranch Gold Property, Nevada USA (100%)

- Strategic review process will continue in CY 2024 with a number of interested parties and site visits to be arranged around the US winter weather conditions
- Further research results on lithium mineralisation support our view that it is geologically and mineralogically analogous to Thacker Pass, which is also associated with clay, predominantly smectite and illite.

Corporate

• Cash & cash equivalent as at 31 December 2023 was \$5.5M.

¹ This is subject to final agreement and satisfactory due diligence by all the parties and investors completing Project funding up to and including FID

Hillside Copper-Gold Project, South Australia (100% equity)

Letter of Intent signed for Project Joint Venture with Nittetsu

On 20 December 2023, Rex announced that it had executed a non-binding Letter of Intent (LOI) with Nittetsu Mining Co. Ltd. (Nittetsu), a Japanese public company with global mining experience, to establish a Joint Venture in respect of the Company's wholly-owned Hillside Copper-Gold Project (Hillside or the Project).

The proposed Joint Venture would combine the complementary skills and resources of Rex and Nittetsu to finance, develop and operate the Hillside Project. Nittetsu is an ideal long-term partner with experience in Iron Oxide Copper Gold (IOCG) style exploration, development and operation.

Following comprehensive due diligence by Nittetsu, the parties have agreed to work together to identify additional JV partners and to secure the complete funding package with debt and equity providers³. Rex's funding commitment will include the proceeds from the sale to Nittetsu of its Participating Interest.

The LOI sets out the principal terms on which Nittetsu can initially acquire a 15% participating interest in the Hillside Project (Participating Interest), with optionality to increase its investment up to 45% in the future. A Participating Interest includes the obligation to contribute a share of all Joint Venture expenditure and the right to receive and dispose of a share of copper-gold concentrate production for its own account.

Capital expenditure for the development of Stage 1 of the Project is estimated to be A\$854 million. It is intended that approximately 50% of the development costs of the Project can be funded by jointly procured debt finance facilities secured over the Project. Domestic and international banks, with deep experience in supporting Australian mining and development projects, have demonstrated robust interest in providing this funding.

Nittetsu is a Japanese corporation established in 1939 and listed on the Tokyo Stock Exchange Prime. Nittetsu operates globally and has extensive mining and exploration expertise in IOCG deposits. Nittetsu owns and operates Japan's largest limestone mine (the Atacama Kozan Copper Mine) and is in the process of developing a second copper mine (Arqueros Copper Mine) in Chile. In addition to mining, Nittetsu business interests extend to developing and distributing industrial minerals, machinery, real-estate and environment-related products, and power generation using renewable energy.

At the time of the announcement, Rex's Chief Executive Officer, Richard Laufmann, said: "*Nittetsu holds corporate values and objectives that complement Rex's ambition to fund and develop Hillside*.

"In addition to its interest in IOCG deposits, Nittetsu has a long history in mining and operating the largest limestone mine in Japan. Nittetsu also has ongoing and long-term contracts with the Whyalla Steel Works, in South Australia, for limestone supply running for 54 years. We are excited to be working with a company that brings so much to the table."

As per the Nittetsu LOI process, the Company has noted that potential funding participants are becoming increasingly focused on the fact that the Hillside Project can extend beyond the Stage 1 development.

³ This is subject to final agreement and satisfactory due diligence by all the parties and investors completing Project funding up to and including FID

That is:

Stage 1 507kt of copper and 436koz of gold and

Stage 2 525kt of copper and 433koz of gold.

A further 50% of the Mineral Resource remains to be converted to Ore Reserve post Stage 2.

As previously announced, the Senior Debt Process continues.

Operational Activity

Pre-construction activity continued during the quarter, including:

- 2023 Hillside Rainwater Tank Testing Program was completed
- Hydrology Workshop was hosted at Hillside, as part of our pre-construction activities
- Installation of additional environmental monitoring equipment at Hillside in accordance with the approved PEPR (Program for Environment Protection and Rehabilitation)
- Operational Readiness plans progressed, including short listing of solar farm responses
- Rex hosted the Annual NExUS (Nationally Exploration Undercover School) site visit in December, training the next generation of Australian exploration geoscientists
- Rex participated in the AusIMM (Australasian Institute of Mining and Metallurgy) New Leaders Summit 2023
- Major partner contract discussions for mining and construction continue to advance.



Photo 1: Jason Schell on Stage–Interview with an Industry Legend Photo 2: NExUS–training the next generation of geoscientists

Community Developments

Rex continues to gradually expand on its community presence and involvement as we move toward full funding and development. In addition to meetings with the Hillside Mine Community Consultative Committee:

• We opened a Shared Community Centre in Ardrossan, for use by all Yorke Peninsula community members

- Rex's Community Fund sponsored or supported four community events
- In December, we commenced a Summer Vacation Student Program with three students (from the University of Adelaide and the Ardrossan Area School).



Photo 3: Vacation students Britney Russell and Claire Horsler from Adelaide University

Hillside is fully permitted for development

As previously announced, all Federal and key State Government approvals have been granted to proceed with the Hillside Development.

In 2014, with the granting of the Hillside Mineral Lease (ML), Rex also obtained Development Act approvals for road re-alignments and upgrades in the vicinity of the Hillside Project (Road Approvals). Subsequently, in 2020, following a period of extensive consultation, the Program for Environment Protection and Rehabilitation (PEPR) was approved, enabling site works, including road works for the development of the Project.

An individual (Applicant) has recently issued an application for judicial review of the validity of the Road Approvals against the Government of South Australia and named the Company as a Second Respondent (Application).

To avoid any doubt, the Application does not relate to or challenge the validity of either Rex's approved (2014) ML or its PEPR (2020) and hence Rex is continuing with the development of the Hillside Project.

The Application for judicial review challenges the planning approvals for the road realignment and upgrade works to be completed in stages. In the first instance, the Applicant is seeking an extension of time for the court to determine those challenges. In Rex's view, the Application and grounds upon which it is made lack merit.

Background on the Hillside Copper-Gold Project⁴

High level key points of the Hillside Project include:

- Project Value for Stage 1: Net Present Value (NPV) A\$1,252M (pre-tax), NPV of A\$847M (post-tax) Internal Rate of Return (IRR) of 19%, (nominal IRR 23%), C1 of US\$1.52/lb copper and a 4.3-year payback period
- Scale and Opportunity: Stage 1 (11 years) lays the foundation for a 20 plus year operation and extracts around half of the current Ore Reserve. Substantial potential exists for Resource and Ore Reserves growth, leading to mine life extension and higher processing rates beyond Stage 1
- *First Production*: Annual payable metal of circa 42kt copper (Cu) and 30koz gold (Au) to follow rampup. First concentrate delivery timing to align with the beginning of the forecast global copper market deficit
- *Pre-production capital cost*: Estimated at A\$854M (US\$598M) all-inclusive of full fleet, pre-strip and contingency
- *Team*: Board and Management have significant experience in delivering similar projects in Australia and internationally
- *Contribution*: Hillside to provide employment for over 500 people during construction and over 400 during operations (over \$600M in payroll), contributing over A\$200M in state royalties
- *Regulatory Approvals*: Key approvals are in place to allow commencement of development and operations.

Hog Ranch Gold Property, Nevada USA (100% equity)

Hog Ranch is an emerging gold property in Nevada, with a JORC compliant Mineral Resource of 2.2Moz gold⁵. In addition to a start-up production option, this "camp" scale trend offers clear upside to build upon the resource with ongoing exploration expenditure. Based on extensive work undertaken since acquisition in 2019, Rex has interpreted Hog Ranch to have the geological signature of a large-scale gold camp.

As with the Hillside partnering process, a formalised sequence of steps was put in place in May 2023. This process broadly encompasses evaluating potential partner approaches with a view to collating a short-list of preferred forward alternatives to create value for the business. The Company is continuing to explore various options for Hog Ranch as discussions with interested parties continue.

Progress with Gold and Lithium opportunity

Rex has completed further research which supports the interpretations and the proposed way forward for further exploration of its gold and lithium targets at Hog Ranch.

Highlights

• The Cottonwood Caldera, host to the Hog Ranch Property, represents the culmination of an extensive geological event that is likely to source some of the largest mineral deposits in northwest Nevada.

 ⁴ See RXM ASX Announcement: 2022 OFS Phase Engineering Study, Executive Summary, 14 December 2022
 ⁵ See RXM ASX Announcement: Hog Ranch Gold Resource now over 2.2Moz gold, 23 March 2021

- The geological context of the Cottonwood Caldera and preliminary research results highlighting the incredibly extensive alteration minerals at Hog Ranch suggest that a more aggressive exploration strategy at Hog Ranch for both gold and lithium is warranted.
- For lithium: new research into the clay minerals associated with anomalous lithium at Hog Ranch has provided further evidence that lithium is hosted in a similar geologic setting to lithium at the Thacker Pass Deposit in Nevada.
- **For gold:** the historical mining and current Mineral Resource are considered the "tip of the iceberg" and an aggressive exploration campaign to rapidly identify this potential has been proposed internally. The renewed vision for gold is to focus exploration toward delivering a new mining study with annual production of 200kozs per annum.

New Research Results on the Lithium Potential at Hog Ranch

Nevada is home to several substantial lithium deposits, which are driving a renewed push for US-based sustainability in a green energy future. One of the most significant new development projects that is leading the way for new US-based lithium production is Lithium Americas' Thacker Pass deposit, which is located in northern Nevada, 33km due south of the Oregon border (see Figure 1).



Figure 1: Location of significant lithium and gold deposits throughout northern Nevada relative to Hog Ranch. The lithium and gold deposits highlighted are all interpreted to be associated with a geological event linked to the Yellowstone hotspot.

Rex first announced the presence of significant lithium mineralisation at Hog Ranch on 12 September 2023^{6.} Selected samples with the highest lithium results from drill hole HR22-007 have subsequently been re-assayed using Sodium Peroxide Fusion for total digestion, which is more suited to identifying the total lithium content when there is potential for lithium to be enclosed within the clays.

XRD (X-ray diffraction) analysis has also been completed on samples from drill hole HR22-007 to test if the lithium is associated with similar clay minerals as have been identified at Thacker Pass. The XRD results have identified that lithium enrichment at Hog Ranch is closely associated with smectite clay minerals. The clay minerals which represent between 20% and 36% of the drill hole samples were then analysed separately, using the Na-Peroxide method, with results reaching up to 4,500 ppm lithium.

These findings are analogous to the research reported at Thacker Pass where the lithium is also found to be associated with clay minerals, predominantly smectite and illite.

In combination with the silicic host rock caldera setting, there are additional parallels between the lithium identified at Hog Ranch and the lithium that has been discovered at Thacker Pass, leading to the interpretation that Thacker Pass may be an appropriate analogue for the lithium at Hog Ranch. Table 1 (below) shows a summary of the comparisons between the geologic setting and host rock to the lithium at Hog Ranch and publicly available information reported about the lithium at Thacker Pass.

Category	Geological Similarities
Geological Age	~16Ma
Associated Geological Event	Yellowstone Hot Spot
Local Geological Setting	Silicic Caldera
Lithium Host Rock	Lacustrine sediments within a caldera lake basin that lie above intra-caldera tuff
Minerals Associated with Lithium	Smectite clays
Interpreted Formation	Clay formation in closed lake, rich in lithium due to leaching of nearby and underlying volcanic glass, late-stage magmatic activity and hydrothermal fluids passing through existing structures and into clays within the caldera basin

Table 1: Similarities between the geological setting of the Thacker Pass Lithium Deposit and the Caldera Lithium

 Prospect at Hog Ranch.

⁶ See ASX Announcement: Rex identifies lithium at Hog Ranch, 12 September 2023



Figure 2: McDermitt Caldera (left panel) (see Reference C) which is host to the Thacker Pass deposit and Cottonwood Caldera (right panel) which is host to Hog Ranch and the "Caldera Lithium Prospect". Both maps have been adjusted to the same scale for reference.

Rex has identified that geophysical surveys can potentially define the extent of the prospective clay host rocks which are interpreted to exist over a broad area throughout the Cottonwood Caldera basin.

To understand the possible extent of the lithium potential at Hog Ranch, Rex intends to conduct broad scale RC drilling which will test the lithium content over the Caldera Prospect Target Area (see Figure 2) within the prospective clay rich host rocks.

At this stage, the interpreted host rocks are considered to range from 10m to just over 150m beneath the surface.

Vision for expanded Gold potential at Hog Ranch

Rex completed an earlier scoping study at the Bells (see Figure 3) deposit which was announced on 9 June 2020⁷. This study provided insights for the cost structure of a potential new small scale open pit and heap leach gold operation at Hog Ranch. In addition to this start-up option, Rex considers a significantly improved and expanded Project could be developed with the inclusion of the Krista Project area.

⁷ Gold Heap Leach in Nevada – Bells Scoping Study points to growth at Hog Ranch, 9 June 2020



Figure 3: Hog Ranch Location Map

The Krista Project area produced over 80% of 300,000ozs of gold mined historically at Hog Ranch and represents over 60% of the current 2.3Moz gold Mineral Resource at Hog Ranch.

Beyond the existing Mineral Resource, the Krista area is distinguished by a 20km² alteration footprint. Research completed by earlier explorers and Rex indicates the scale of the Krista area extends well beyond the historical mining and current Mineral Resource. Multiple datasets support this area of largescale late-stage alteration of the host rocks at Krista, including airborne hyperspectral data, airborne magnetic data, radiometric data and earlier rock analysis by Western Mining Corporation (WMC) during the operating life of the gold operation at Hog Ranch (Bussey, 1996). The radiometric dataset highlights the extent of the alteration and associated prospective area at Krista via a strong relative depletion in the potassium thorium (K/Th) ratio compared to the surrounding host rocks (see Figure 4).



Figure 4: Plan view map of the Krista Project area with the radiometric dataset highlighting the relative potassium (K) over Thorium (Th) depletion extending well beyond the historical pits and the Krista Mineral Resource area as it has currently been defined.

The advanced level of exploration information at Krista suggests a much larger gold footprint, both within the existing Mineral Resource area at depth and surrounding the current Mineral Resource area. Therefore, Rex has proposed a strategy to significantly expand the existing Mineral Resource with a more substantial exploration program over the Krista area. The program is designed to double the existing Mineral Resource and convert the bulk of the existing Mineral Resource into the Measured and Indicated categories (up from the Inferred category).

This exploration program which remains to be approved, will serve as Phase One of Rex's overall objective for Hog Ranch which is to complete a mine plan at Hog Ranch for the shallow open-pit oxide gold mineralisation which could deliver ~200,000 ounces gold production per annum.

This potential is still considered by Rex to be only the small and shallow part of the greater potential at Hog Ranch.

References

- Bussey, S.D., 1996. Gold mineralisation and associated rhyolitic volcanism at the Hog Ranch District, northwest Nevada, in Coyner, A.R., and Fahey, P.L. eds., Geology and Ore Deposits of the American Cordillera: Geological Society of Nevada Symposium Proceedings, Reno/Sparks, Nevada, April 1995., p. 181-207.
- B. Benson, T. R., Coble, M. A., Rytuba, J. J. and Mahood, G. A. 2017. Lithium enrichment in intracontinental rhyolite magmas leads to Li deposits in caldera basins. Nature Communications 8:2770.

C. Roth, R. et. al., 2022. National Instrument 43-101 Technical Report for the Thacker Pass Project, Humboldt County, Nevada, USA.

CORPORATE

On 1 November 2023, Rex released an updated corporate presentation that was used for the IMARC 2023 Sydney Conference. Rex presented at the IMARC conference in Sydney where Rex also had a booth with members of the Company's technical team in attendance.

During the December Quarter, a total of 333,334 unquoted options were exercised under the Company's Option Incentive Plan (OIP). Additionally, 15,000,000 unquoted options were issued under the OIP. The issue included 5,000,000 options each to two Executive Directors as approved by Shareholders at the Company's 2023 Annual General Meeting (AGM) which was held on 28 November 2023. The Chairman's Address and other documents related to the AGM are available via the ASX or on Rex's website.

On 12 October 2023, Rex released an updated Securities Trading Policy following a review of its governance policies and procedures.

Financial Information

The Company's cash position as at 31 December 2023 was \$5.5M. The Appendix 5B – Statement of Consolidated Cash Flows is attached to this Quarterly Activities Report.

Information disclosed in the Cash Flow Report for the quarter ended 31 December 2023 includes:

- Exploration and Evaluation expenditure during the quarter of \$2.3M
- No costs were attributed directly to mine production or mine development activities during the quarter in line with our accounting policy, which will only attribute costs post-FID
- Payments to related parties of Rex and its associates during the quarter were \$0.3M. The Company advises that this relates to Executive Directors' salaries, Non-Executive Directors' fees and related superannuation.

Hog Ranch Consideration Rights

At the beginning of the quarter, the Company had on issue 15 million Hog Ranch Consideration Rights (HRCR), which will convert to Rex shares upon the single remaining milestone, namely announcement by Rex to the ASX, by no later than 31 October 2024, that the Board has approved a decision to mine the Hog Ranch Property.

Hillside, SA					
Tenement	Location	Lease Status	Area Type	Current Area	Expiry Date
EL5981	Moonta South	Granted	km²	68	22/06/2028
EL6136	Moonta South	Granted	km ²	91	19/03/2029
EL6143	Moonta South	Granted	km ²	51	15/04/2029
EL6189*	Moonta South	Granted	km ²	243	01/08/2022
EL6245	Moonta South	Granted	km ²	1,014	01/08/2028
EL6455	Moonta South	Granted	km ²	28	04/11/2024
EL6497	Moonta South	Granted	km ²	254	27/07/2025
EL6515	Moonta South	Granted	km ²	257	20/09/2025
EL6531	Moonta South	Granted	km ²	21	09/06/2025
ML6438	Hillside	Granted	На	2,998	15/09/2035
EML6439	Hillside	Granted	На	225	15/09/2026
MPL146	Hillside	Granted	На	94	15/09/2035

TENEMENT SCHEDULES AT 31 DECEMBER 2023

* Renewal documentation submitted to the SA Government and currently being processed

As at 31 December 2023, the Hog Ranch Property is made up of 1,737 unpatented mining claims located in Washoe County, Nevada, USA. Hog Ranch Minerals Inc directly owns 1,490 Mining Claims (see table below) and controls the remaining 247 Mining Claims through a mining lease with purchase option with Nevada Select Royalty Inc.

Nevada, USA						
Lode Mining Claims	Location	Lease Status	Area Type	Total Area ¹	Date Certified	
NHR 1 – 30	Washoe County	Claimed	Ft ²	27,000,000	10/08/2019	
NHR 31 – 100	Washoe County	Claimed	Ft ²	63,000,000	28/01/2020	
NHR 101 – 232	Washoe County	Claimed	Ft ²	118,800,000	10/07/2020	
NHR 233 – 417	Washoe County	Claimed	Ft ²	166,500,000	19/11/2020	
NHR 418 – 434	Washoe County	Claimed	Ft ²	15,300,000	30/04/2021	
GL 1 – 104	Washoe County	Claimed	Ft ²	93,600,000	10/07/2020	
GL 105 – 177	Washoe County	Claimed	Ft ²	65,700,000	19/11/2020	
GL 178 – 354	Washoe Country	Claimed	Ft ²	159,300,000	30/04/2021	
$CC 1 - 578^2$	Washoe County	Claimed	Ft ²	520,200,000	TBA ²	
CHR 1 – 124 ²	Washoe County	Claimed	Ft ²	111,600,000	TBA ²	

 $^1\,$ Total Area comprises the area of each Lode Mining Claim, ie. 1500' x 600'

² Renewal documentation submitted to the BLM, receipted and currently being processed

SUPPLEMENTARY INFORMATION

Forward-Looking Statements

This announcement contains "forward-looking statements". All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, copper, gold and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any forward-looking statement.

Competent Persons' Report – Hillside

The information in this report that relates to Ore Reserves is based on information compiled by Mr Charles McHugh who is a Fellow of the Australasian Institute of Mining and Metallurgy and is an employee of Rex Minerals Ltd. Mr McHugh has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr McHugh consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Mr Steven Olsen who is a Member of the Australasian Institute of Mining and Metallurgy and is an employee of Rex Minerals Ltd. Mr Olsen has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Olsen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to metallurgy is based on, and fairly reflects, information compiled by Mr John Burgess who is a Fellow of the Australasian Institute of Mining and Metallurgy and a consultant to Rex Minerals Ltd. Mr Burgess has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Burgess consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Person's Statement - Hog Ranch

The information in this report that relates to Exploration Results or Mineral Resources is based on, and fairly reflects, information compiled by Mr Steven Olsen who is a Member of the Australasian Institute of Mining and Metallurgy and an employee of Rex Minerals Ltd. Mr Olsen has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Olsen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

CORPORATE INFORMATION

ASX: RXM | OTCQB: RXRLF

Board of Directors

Ian Smith, Non-Executive Chairman Richard Laufmann, Chief Executive Officer & Managing Director Amber Rivamonte, Chief Financial Officer & Executive Director of Finance Greg Robinson, Non-Executive Director Andrew Seaton, Non-Executive Director

Share Registry

Computershare Investor Services Yarra Falls, 452 Johnston Street, Abbotsford, Victoria 3067

T: +61 3 9415 4000 (investors) 1300 850 505 (investors within Australia)

Registered Office

Mailing Address

68 St Vincent Highway Pine Point, South Australia 5571 PO Box 3435, Rundle Mall Adelaide, South Australia 5000

- T: 1300 822 161 (Australia) +61 3 9068 3077 (International)
- E: rex@rexminerals.com.au
- W: www.rexminerals.com.au

For media/investor relations, please contact:

Peter Bird

EGM Investor Relations & Business Development

- T: +61 438 871 995
- E: pbird@rexminerals.com.au

Gavan Collery Media

- T: +61 419 372 210
- E: gcollery@rexminerals.com.au

For further information, please contact:

Kay Donehue, Company Secretary

- T: 1300 822 161 (Australia) | +61 3 9068 3077 (International)
- E: rex@rexminerals.com.au



JORC Code, 2012 Edition – Table 1 Report

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	RC Drilling
	Sample intervals were taken over 5-foot intervals (1.52m) which were collected after separation of the sample using a rotary splitter situated at the base of the cyclone. The sample was split into three exit points for the following: primary sample, duplicate sample and remaining rejected material, from which a sample of rock chips were collected for geological logging. Water is injected at the head of the drill string at the hammer to supress dust.
	The individual drill rod length is 10 feet. After the addition of a new drill rod (after the collection of two 5-foot samples) the total return column is flushed to prevent spill over and contamination into subsequent samples down the drill hole. The rods would routinely be held static and flushed for a period of 4 to 5 minutes after the addition of each drill rod. The time taken to flush the return column is considered more than adequate to prevent contamination for subsequent samples given the relatively short total length of all the drilling completed in the reported RC drilling program.
	Regular gold standards, including pulp standards were routinely placed throughout the samples for each drill hole. Standards for multi-element data (including Lithium) were not inserted at the time of drilling as they were not target elements. Unrecognisable waste rock blanks were placed throughout the samples for each drillhole. A review of the results from all gold standards did not identify any evidence of any material analytical imprecision or bias. A review of the results from the wase rock blanks did not identify that there was contamination between samples as a result of the sampling techniques conducted at the drill rig. Sample weights collected as the primary sample typically exceeded 2.0kg which were subsequently pulverised to produce a 0.5g sample for a 5-acid digest with ICP-OES/MS finish at the laboratory.
Drilling techniques	Drilling was completed using Reverse Circulation (RC) drilling utilising double wall drill pipe, interchange hammer and 4¾ inch hammer bits to drill and sample the rock formation.
Drill sample recovery	Drill sample recovery was found to be good with minor low sample weights occurring, likely to be due to the effects of clay alteration, and occasionally alternating sections of harder siliceous material. With particular reference to the drill holes referenced in this announcement, approximately 4% of all samples were considered underweight (<1kg) with poor sample capture.
Logging	The major rock units and alteration characteristics at Hog Ranch were identified from substantial earlier work and technical studies completed largely by Western Mining Corporation (WMC). Based on what was observed from the original paper drilling logs prior to 1986 just prior to the commencement of mining, a standard rock code and alteration code system was established for rock chip and core logging at Hog Ranch.
	For the purpose of consistency with this earlier system, the 2021 and 2022 RC drilling program also adopted the same logging system for entry into the Hog Ranch database.



Criteria	Commentary						
	Table 2: Sample legend for drill hole logging information recorded from 1986 up to 1991 by Western Hog Ranch and WMC, which makes up 80% of the drill hole database.						
	Rock Code	Definition	Alteration Code	Definition	Oxidation Code	Definition	1
	1	Lithic tuff/clastic	1	Silicified	Blank	Oxidised	1
	2	Pumice rich tuff	2	Bleached silica	0	Unoxidised	
	3	Ash fall tuff	3	Argillic	1	Oxidised Breccia	
	4	Laminated tuff	4	Opaline	2	Unoxidised Breccia	
	5	Tuff/rdd qtz grains	5	Sponge	3	Oxidised qtz sul	
	6	Tuff w/quartz eyes	6	Silica rich w/clay	4	Unoxidised qtz sul	
	7	Basal bx	7	Clay rich /silica			
	8	Clay	8	Bleached argillic			
	9	Spheroidal tuff	9	Unaltered			
	Where logging between the r	g information is availabl major flow banded unit	e, this has been places and the lacustrine s	ed into the Rex datab ediments which host	base and used to defin the Lithium (Li) mine	ne the broad boundaries eralisation.	
Sub-sampling techniques and sample preparation	Drill cuttings were discharged from the cyclone into a rotating splitter. Cuttings exit the splitter into three exit points with both a primary and secondary field sample collected directly into a sample bag which was fitted onto a collection bucket. A small portion of the rock chips for each 5-foot interval was placed into chip trays for record keeping and geological logging. This process was repeated for each interval, with the sample bags replaced after each 1.52m (5 feet) interval.						
	After collection of the samples and drying at the laboratory (American Assay Laboratory (AAL) in Sparkes, Reno), the samples were initially crushed to 70% passing 2mm before separation of a 250gm sample using a riffle splitter.						
	The crushed 2 analysis.	50gm sample was pulve	erised to better than	85% passing 105 mic	rons and a 0.5g pulp	sub sample was used for	-
Quality of assay data and laboratory tests	The multi-element (including Li) assay information was completed by AAL. AAL is accredited by the Standards Council of Canada (SCC) for specific tests listed in their Scopes of Accreditation to ISO/IEC 17025:2017.						
	The analyses digestion with	used for the reported Li n ICP-MS finish.	thium assays are a 5-	acid digest with ICP-(DES/MS finish and So	dium Peroxide Flux for t	otal
	AAL routinely of its own QA standards did	includes its own CRM's /QC check samples with not identify any issues	, blanks and duplicate in each batch of sam with the Lithium ana	es within each batch ples for gold. A revie lysis.	of samples. In addition wo f the inserted bla	on, Rex inserted a large n nks and the Lab internal	umber

Criteria	Commentary
	Specific CRMs and Blanks were inserted by AAL for the Sodium Peroxide Lithium Analysis. Duplicates were also run for all analyses. A review of the inserted blanks, internal lab standards, and duplicates did not identify any issues with the Sodium Peroxide Lithium analysis.
Verification of sampling and assaying	The RC drilling program included a large number (over 10% of all samples) of QA/QC check samples that were placed throughout the samples for gold. The QA/QC data included a 0.81g/t pulp standard, a 0.38g/t pulp standard, a blank pulp standard and a barren rock (unrecognisable) all spread throughout each sample submission. All QA/QC samples for gold were returned within reasonable error limitations and there was no evidence to suggest that the assay results contained any contamination or systematic errors in either the sampling process or the assaying process at the laboratory. A review of the internal blanks did not highlight any issues associated with the Li assay results from the drill holes reported in this release. Specific internal lab QA/QC standards for lithium were inserted for the Na-Peroxide digest. Upon review, no issues were
Location of data points	Drill hole collar co-ordinates are recorded in UTM NAD83 (Zone 11N) within the Hog Ranch database. After completion of each drill hole, a labelled tag was left at the drill collar position for subsequent survey pick up of the actual collar location. All drill collars from the 2021 and 2022 drilling program were located using a Trimble ProXRT2 dual frequency L1/L2 GPS receiver capable of 10cm/4in accuracies. Data collected is post processed using GPS data files from the UNAVCO, Vya Nevada base station located approximately 18 miles from the project site. Accuracy based on the distance from the base station is estimated at 20cm.
Data spacing and distribution	Data spacing down hole is at 5 feet (1.52m). The Li mineralisation from the drill holes reported in this release are interpreted to exist on the margins of a large-scale clay hosted exploration target, the full extents and distribution of which is not yet understood at this early stage of exploration. The spacing and locations of the current drilling information are not sufficient at this stage to understand the size and extent of the Lithium mineralisation.
Orientation of data in relation to geological structure	The bulk of the Li mineralisation is interpreted to be horizontal. See Rex ASX release dated 12 September 2023 for more information pertaining to the interpretation of the lithium mineralisation relative to the angle of the drill hole information.
Sample security	The Hog Ranch Property is in a remote location with no other people present during the drilling program other than the supervising geologist, and the drilling crew. The drill samples were all collected and placed on the ground at each respective drill hole under the supervision of Rex's Geologist. At the end of the program, the samples were collected and placed directly into a sample collection truck under the custody of the independent laboratory, AAL in Sparkes, Nevada. Based on the known chain of custody of the samples and generally low-grade nature of the drilling results, there is no evidence to suggest that any of the samples were interfered with.
Audits or reviews	No audits or reviews were commissioned for the reported RC drilling program.



Section 2 Reporting of Exploration Results

Criteria	Commentary					
Mineral tenement and land tenure	The Project is made up of 1,737 unpatented mining claims located in Washoe County, Nevada, USA. Mining claims have increased by ~70% (previously 1,035) to secure the prospective caldera for Lithium.					
status	The underlying title is held by Nevada Select Royalty Inc ("Nevada Select") and Hog Ranch Minerals Inc (100% owned by Rex). The Nevada Select claims are subject to an underlying agreement between Nevada Select Royalty Inc and Hog Ranch Minerals Incorporated. The agreement provides full operational control of the Project to Hog Ranch Minerals Inc., with a series of minimur expenditure and activity commitments required to keep the agreement and the option to acquire 100% of Hog Ranch.				Inc (100% owned by Rex). The nd Hog Ranch Minerals s Inc., with a series of minimum .00% of Hog Ranch.	
	In August 2019, Rex purc has 100% ownership of t	hased a 100% inter he company Hog R	rest in Hog Ranch via anch Minerals Inc.	its purchase of th	e private compan	y Hog Ranch Group, which in turn
	The mining claims at Hog	Ranch are located	on open public land	managed by the E	Bureau of Land M	anagement (BLM).
Exploration done by other parties	 Gold mineralisation at Hog Ranch was first discovered in 1980 after the Project had been initially explored for Uranium. Ferret Exploration was the first company to actively pursue the gold potential at Hog Ranch, leading to some initial Mineral Resource estimates and mining proposals. A consortium made up of Western Goldfields, Geomax (parent Company of Ferret Exploration) and Royal Resources ultimately provided the funding to commence gold production at Hog Ranch in 1986 via open pit mining and heap leach methods under the name of Western Hog Ranch Inc. After approximately 18 months of production, the Project was subsequently sold to WMC, who purchased 100% of Hog Ranch in early 1988. WMC commenced a significant exploration effort, drilling over 1,600 RC holes, a series of additional deep diamond drill holes an further detailed studies during the life of the operation which continued until 1991. A summary of the gold production and geological information that was obtained during the mining operations was later summarised in a paper by Bussey (1996) – see table 3. Table 3: (after Bussey, 1996) Summary of the historical production (mined) from each open pit based on production blast hole information prior to placement onto the laceh pade. 					
	Deposit/Resources	Tons (Mt)	Tonnes (Mt)	Gold (oz/ton)	Gold (g/t)	Comments
	Bells	1.18	1.07	0.041	1.4	Found first, mined last
	East Deposit	1.00	0.91	0.038	1.3	
	Krista Deposit	4.64	4.21	0.036	1.23	Largest deposit
	Geib Deposit	1.28	1.16	0.033	1.13	
	139 Deposit	0.23	0.21	0.028	0.96	Local visible gold
	West Deposit	0.17	0.15	0.045	1.54	
	TOTAL	8.5	7.7	0.036	1.23	
	There has been no focuse	ed exploration effo	rt historically for Li m	nineralisation.		



Criteria	Commentary
Geology	The geological setting, alteration and characteristics of the host rock caldera setting at Hog Ranch provide evidence for the presence of clay hosted Li mineralisation which could be of economic significance. The style of Li mineralisation contemplated by Rex is analogous in style to a geological model postulated in a technical paper by Benson et.al., 2017. In the paper by Benson et. al., 2017 they postulated that rhyolitic magmas in continental settings have elevated Li concentrations such that eruptions voluminous enough to result in caldera collapse produce volcanic products with sufficient total Li to form economic deposits. Post-caldera magmatism contributes additional Li via lavas and outgassing of intrusions. This geological setting also generates hydrothermal systems (linked to the gold mineralisation) focused along caldera fractures. The Li is leached from ignimbrite and caldera- related lavas by meteoric and hydrothermal fluids and is structurally bound in clay minerals (eg: hectorite) which developed in ash rich sediments adjacent to the source rocks.
	$\begin{array}{c} \text{Hydrothermal} \\ \text{circulation} \\ \text{+} \\ + \\ + \\ + \\ + \\ + \\ + \\ + \\ + \\ + \\$
	Figure 5: (after from Benson, et al., 2017) Schematic representation of the geological environment for the formation of Li mineralisation at Hog Ranch.
Drill hole information	Table 4 below identifies the drill collar location (in UTM NAD83 (Zone 11) Datum), dip, azimuth and total length for the drill hole in the reported drilling program. Table 4: Drill Hole location information (UTM NAD83 (Zone 11N) Co-ordinate System)
	Drill Hole Easting Northing Elevation Dip Azimuth Total Length Number (m) (m) (m) (m) (m) (m) (m)
	HR22-007 290100.00 4561350.00 1646.0 -61 90 246.9m (810ft)



Criteria	Commentary
Data aggregation methods	See Rex ASX release dated 12 September 2023 which first reported the drilling results from drill hole HR22-007 as reported also in this release., A nominal cut-off grade of 500ppm Li was used. In order to show the extents of the Li anomalism in Figure 7, broad intervals above 100ppm Li are identified in drill holes HR22-007 and HR21-008.
Relationship between mineralisation widths and intercept lengths	The drilling information reported has a dip of 61 degrees. The general orientation of the gold mineralisation is interpreted to have a horizontal dispersion with true widths typically at 85% to 95% of the down hole intercept lengths. Figure 7 shows a representation of the Li mineralisation relative to the dip of the drill holes.
Diagrams	See Figures 6 and 7 below which are from Rex ASX release dated 12 September 2023 which first reported the drilling results from drill hole HR22-007 as reported also in this release.







Criteria	Commentary		
	West A HR22-007 HR21-008 Surface		
	97.5m @ 250ppm Li		
	Li mineralization open		
	Felsic Volcanics		
	Date Created: September 4, 2023 Author: Rex Minerals Coordinate System: NAD 83/UTM Zone 11N 25 75 SCALE		
	Figure 7: Cross section illustrating the relative location of drill hole HR22-007 in relation to the interpreted geology and possible extensions to the Lithium mineralisation intersected and reported in this release.		
Balanced reporting	All drilling results have been reported in full.		
Other substantive exploration data	Hog Ranch Property has been the subject of extensive exploration and historical drilling, predominantly over the period from 1981 through to 1997, in addition to a period of historical mining from 1989 to 1991. Rex has reported drilling information from work completed in 2019 and up to this announcement by the Company in earlier announcements, including a summary of the historical drilling information which was reported in the Mineral Resource announcement published on 2 September 2019.		
Further work	Rex is reviewing all Li and Li pathfinders elements in its soil sampling dataset which covers the bulk of the mining claims at Hog Ranch. This review is expected to guide a new broad RC drilling campaign to test the extents of the potential Li mineralisation.		

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
Rex Minerals Ltd	
ABN	Quarter ended ("current quarter")
12 124 960 523	December 2023

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(2,334)	(4,650)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(1,469)	(2,923)
	(e) administration and corporate costs	(634)	(1,252)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	68	143
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(4,369)	(8,682)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(148)	(161)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	59	59
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(89)	(102)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	8,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	294
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(562)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	7,732

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	9,974	6,568
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(4,369)	(8,682)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(89)	(102)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	7,732

Cons	olidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	5,516	5,516

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	5,516	9,974
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	5,516	9,974

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	301
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.		

Payments at Item 6.1 relate to remuneration payments for Directors for the quarter.

7.	Financing facilities Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	arter end	-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(4,369)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(4,369)
8.4	Cash and cash equivalents at quarter end (item 4.6)	5,516
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	5,516
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.26
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8 Otherwise, a figure for the estimated quarters of funding available must be included in i	3.3, answer item 8.7 as "N/A". item 8.7.
8.8	If item 8.7 is less than 2 quarters, please provide answers to the follow	wing questions:
	8.8.1 Does the entity expect that it will continue to have the current	level of net operating

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Yes, the Company's principal objective is to create value through the discovery and development of mineral resources and as such, it does not presently have a source of operating income, rather it is reliant on equity raisings or funds from other external sources to fund its activities.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: The Company reasonably expects that it will be able to raise funds as required and has a history of successfully raising cash through equity raisings.

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: The Company believes that it is able to continue its current operations and business objectives for the reasons outlined above in 8.8.1 and 8.8.2.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 15 January 2024

Authorised by: Kay Donehue, Company Secretary (Name of body or officer authorising release – see note 4)

Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.