

Quarterly Activities Report

For the Quarter ended 31 December 2021

31st January 2022

HIGHLIGHTS

- 2 RC drill holes totalling 312 metres tested for further extensions of gold mineralisation at the Transit prospect in December 2021 with a further 4 RC drill holes completed in January 2022.
- A 100 aircore hole program totalling 2,000 metres resumed at Transit gold prospect in January 2022 to obtain bedrock samples that can help define boundaries of broader system.
- At the Platina Lead 12 large diameter (0.9m) holes totalling 191 metres were drilled to test for near surface coarse platinum and gold mineralisation.
- Rimfire secured significant grant of \$185k from NSW government in a competitive tender process for future drilling at the Valley for a porphyry copper – gold orebody in the highly prospective Lachlan Fold Belt.
- Aircore drilling of up to 60 holes totalling 1,500 metres resumed in January 2022 at the Valley.
- Planning and approvals completed for an aircore drilling program of up to 80 holes at the Currajong cobalt project with drilling planned to commence this Quarter.

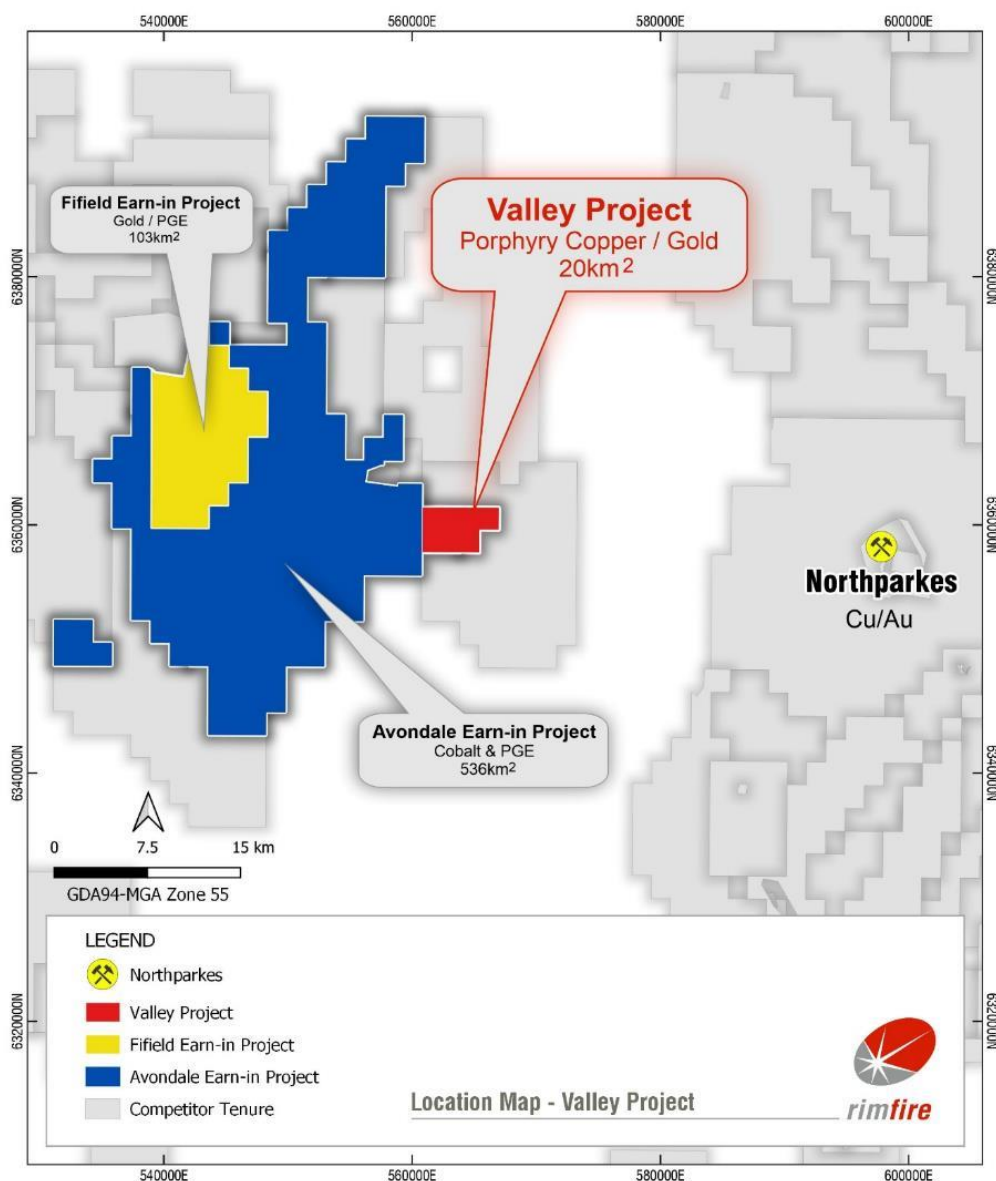
Operations

Valley Project: RIM 100%

At the Valley, Rimfire is targeting porphyry style copper - gold mineralisation within Ordovician age volcanic rocks similar to the nearby major Northparkes porphyry copper – gold mine (Figure 2). A deep diamond drill hole completed by Rimfire in 2021 intersected strongly epidote-chlorite altered volcanoclastic rock which are interpreted as being Ordovician ([ASX Announcement: Valley Results Nearby Porphyry System 27July2021](#)).

To support further RC and diamond drilling at the Valley the Company has been successful in securing a grant of \$185,675 through the competitive, peer reviewed Department of Regional NSW - New Frontiers Cooperative Drilling Grant program.

Figure 1: Location Plan of major Lachlan Fold Belt Projects



The Valley Prospect had been largely unexplored beyond surface mapping and sampling by Rimfire or past explorers until last year, so Rimfire’s favourable geological observations and funding support from NSW Government to undertake further deep drilling bode well for the next phase of the program to vector into the source of a mineralised system.

At the end of the Quarter, Rimfire also commenced a nominal 60 hole aircore drilling (1,500 metres) program with the aim of assessing if there is anomalous geochemistry that would warrant testing by RC drilling.

Fifield Project: GPR Earning up to 50.1%

Sorpresa Development Update

Metallurgical samples for the Sorpresa Development Project are undergoing testing to assist in confirming gold and silver recoveries for various ore types and process plant design configurations. Once this data is available, the company will be able to confirm proposed mine design layout and process plant configuration which will form part of the Environmental Impact Assessment (EIA) that is required to obtain the Development Consent from NSW Government Authorities for the Sorpresa Project.

Fifield Project Exploration

Transit

The Transit prospect (Figure 2) is located 4km to the east of Sorpresa where 2021 drill programs tested for deeper extensions of gold mineralisation to a downhole depth of 156.6m ([ASX Announcement: Fifield Project Intercept, 8 July 2021](#)). The hole (Fi2080) returned an intercept of 86m at average grade of 0.63g/t Au from 21m downhole depth including:

- 9m @ 1.72g/t Au from 21m
- 4m @ 1.48g/t Au from 98m

The focus of Company activities that are solely funded by the GPR Earn-in ([ASX Announcement: \\$4.5M Earn-in Agreement 4May2020](#)) during the December Quarter was a RC drilling program at Transit where previously Rimfire has obtained some significant drill results.

The RC drilling program tested for extensions of gold mineralisation along strike of previously intersected mineralisation along the interpreted structural trend. In December 2021 the Company completed 2 RC holes totalling 312 metres, with the remaining 4 holes drilled in January 2022, with results expected by March 2022.

An Aircore drilling program of up to 100 aircore holes totalling 2,000 metres commenced in January 2022 to test the geochemistry and geology in the area surrounding existing RC drilling. These results are expected by late March 2022 and will assist in planning for next round of RC drilling at Transit.

Platina Lead

The Platina Lead is a historic source of coarse grained (can be manually panned using gravity separation methods) platinum and gold that commenced production in the 1880's and continued into the early 1900's (Figure 2). The Platina Lead and other Leads in the area remain Australia's largest dedicated area for platinum production.

During the Quarter a large diameter auger (“bucket”) drill program was undertaken at the Platina Lead to determine whether any remnant platinum and gold mineralisation exists within areas of previous mining. It will also be possible to assess the tenor of remaining platinum and gold mineralisation where previous mining was by hand so focused on areas with the higher grade coarse platinum and gold.

A specialised drill rig completed a 12 hole program, totaling 191 metres to obtain samples from the bedrock zone in a shallow alluvial channel that is part of an ancient stranded paleochannel that is now in the middle of open grazing and cropping land (Figure 3). As the samples are coarse grained they will be processed using gravity separation techniques and then the gravity concentrate analysed to quantify content of platinum group elements (PGE’s) of Osmium (Os), Iridium (Ir), Ruthenium (Ru), Rhodium (Rh) and Palladium (Pd), gold and other materials. This work is expected to happen in Q2 CY2022.

Figure 2: Transit and Platina Lead Locality Map

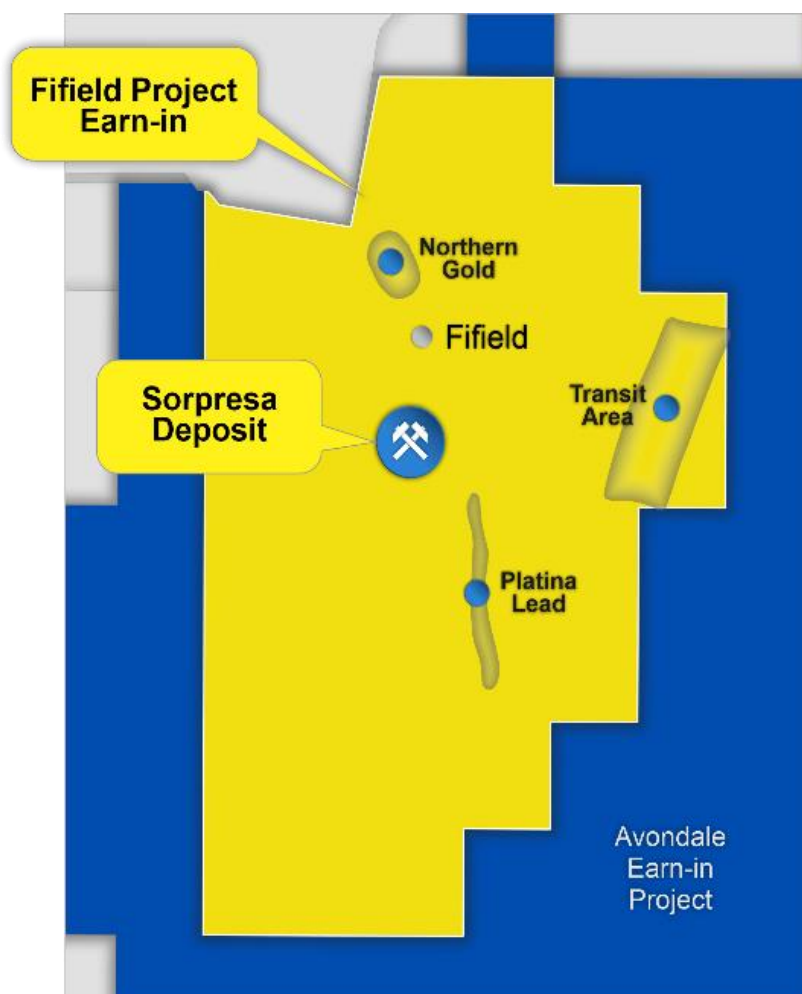


Figure 3: Platina Lead Drilling

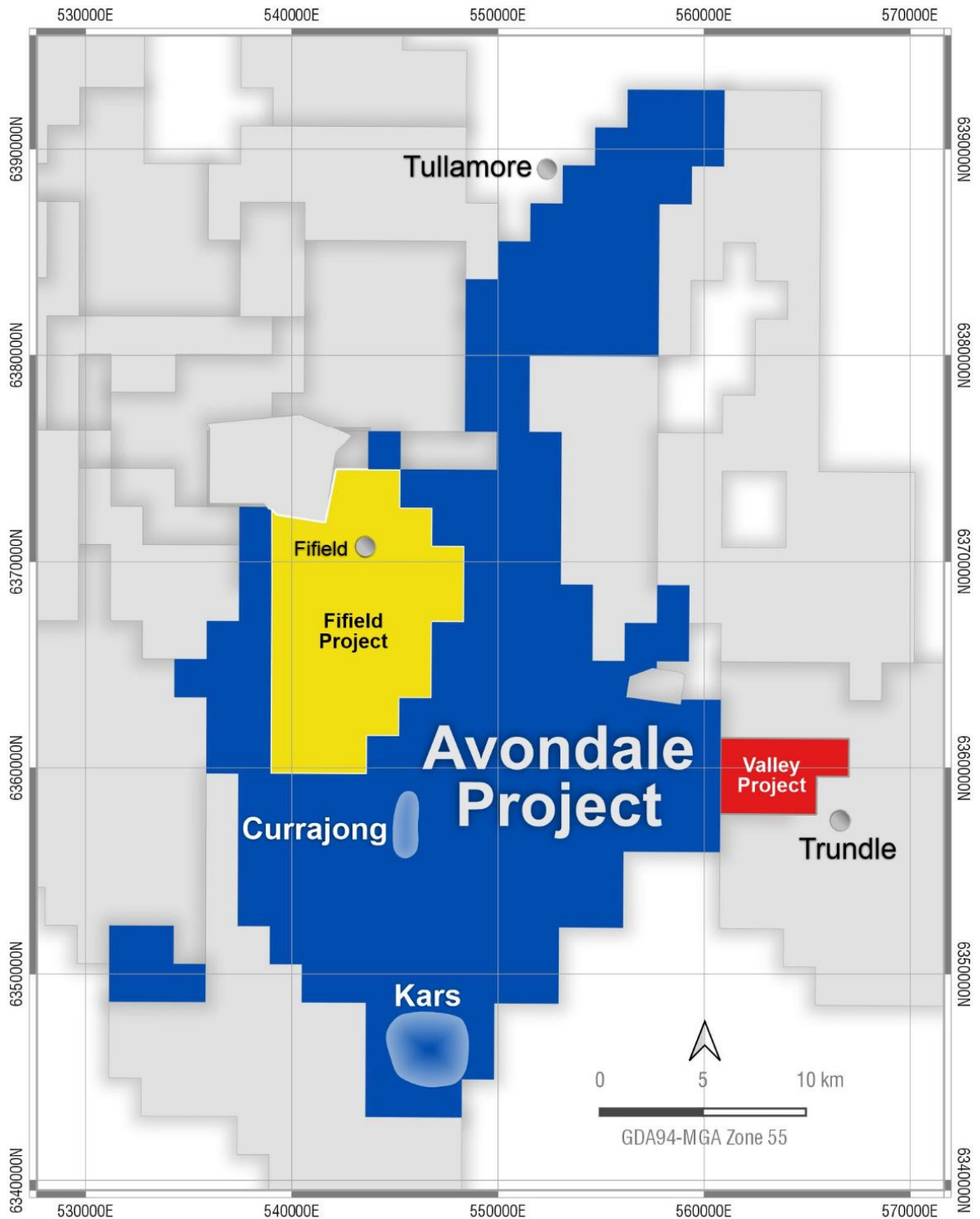


Avondale Project: GPR Earning up to 75%

At the Currajong cobalt prospect the company finalised all necessary work to enable it to start an aircore drilling program of up to 80 holes totalling 2,400 metres to assess extent and thickness of cobalt in laterite profile. It is anticipated the program will commence in the first Quarter of 2022.

During the Quarter all approvals and planning were completed for a soil sample program at the Kars Platinum Group project and this work will commence shortly.

Figure 4: Location Plan of Avondale Project



Green View Project: RIM 100%

Rimfire reached agreement with Perilya for the return of 25 out of 27 blocks from the Windy Ridge Joint Venture over Rimfire's EL 5958 at Broken Hill ([ASX Announcement: Green View Cobalt Project Secured - 9 Sept 2021](#)). The returned blocks are referred to as the Green View Cobalt Project.

Primary activity during the Quarter involved reconnaissance site visits including interactions with local landholders and service companies that would support work in the area. The company is continuing to develop work plans for this project including obtaining approvals from landholders and government authorities for field activities.

Cowal Project: RIM 100%

There was no field work undertaken during the Quarter on the Cowal gold project.

Tenement Position

There has been ongoing routine submittal of various compliance reports including Annual Technical Reports to Department of Regional NSW, Mining, Exploration and Geoscience group to meet government compliance requirements for Rimfire's Exploration Licences.

The Company continues to maintain its tenements in the Fifield area covering an area of 915km².

The Company also has 25 units of the 27 units that make up EL5958 with the remaining 2 units being held in a Joint Venture with Perilya who are the manager and operator of the 2 blocks remaining in the Joint Venture.

Health, Safety, Environment and Community

Health and Safety

There were no Health or Safety related incidents during the last Quarter. The Total Year to Date performance for Minor Injuries, Medical Treatment Injuries and Lost Time Injuries remains zero.

The company continues to monitor NSW Government COVID directives and modify site safety management plans as appropriate. Recent changes to Queensland and Victorian State Government COVID border movement control requirements for people travelling in and out of NSW has significantly improved ability of personnel and contractors to support field operations at site. The company appreciates the ongoing support of the local community, employees and contractors during this period of abnormal business conditions.

Environment

There has been further rainfall during the past Quarter that has kept all dams at the Fifield project site at capacity and fully saturated the surface soils. The ongoing rainfall has caused delays to field program activities as access tracks to many sites including drill hole locations are too wet to support vehicle movements. The Company continues to collaborate with farmers to ensure drilling operations have minimal impact on farming activities and rehabilitation is completed to a high standard.

Community

There have been no significant community events during the past Quarter.

CORPORATE ACTIVITY

Cash, Capital Structure, Funding, Facilities, and Investments

At 31 December 2021, the Company had access to \$1.32M in cash, made up of \$0.77M held by RIM and \$0.55M in Earn-in funds received from Earn-in partner less payments made during the Quarter on exploration work which is held separately for exploration work on the Earn-ins.

There was no change in the Company's capital structure during the Quarter. Related party transactions of \$82K (section 6.1 and 6.2 of the December 2021 Quarter Appendix 5B) are payments for salary (including statutory superannuation) to Craig Riley (MD and CEO) and Director fees for the December 2021 Quarter.

During the Quarter the Company's AGM was held with all resolutions being passed, including the change of company type and name from Rimfire Pacific Mining N.L. to Rimfire Pacific Mining Limited, which has subsequently been formally recognised by ASIC / ASX.

The continuing strength of commodity prices has generated increased focus on exploration companies that hold ground positions in highly prospective areas such as the Lachlan Fold Belt in central NSW, which is being now being reported by media commentators as a "hotspot". As previously advised to the market the Company will continue to evaluate opportunities that may support the growth and funding activity of the Company.

Appendix A - Rimfire Exploration Licenses

Below is a listing of the exploration licenses held by Rimfire Pacific Mining Limited as at 31 December 2021.

Project	Lic No.	Units	RIM Int.	Interest Aquired During Qtr (units)	Interest Reduced During Qtr (units)
The Valley	EL8542	5	100%	-	-
	EL8401	2	100%	-	-
Cawal	EL8804	42	100%	-	-
	EL8805	39	100%	-	-
Fifield**	EL8935	21	100%	-	-
	M(C)L305	1.9ha	100%	-	-
	EL6241	15	100%	-	-
Avondale***	EL5565	4	100%	-	-
	EL7058	35	100%	-	-
	EL7959	7	100%	-	-
	EL8401	98	100%	-	-
	EL8542	27	100%	-	-
	EL8543	1	100%	-	-
	EL8935	19	100%	-	-
Green View	EL5958	25	100%	-	-
Windy Ridge	EL 5958*	2	10%	-	-

*Perilya manage the Windy Ridge JV, RIM free carried for 10%

**Subject to Fifield Project Earn-in entered into during the June 2020 Quarter, however no interest in tenements to be ceded until earn-in conditions met in full

***Subject to Avondale Project Earn-in entered into during the June 2021 Quarter, however no interest in tenements to be ceded until earn-in conditions met in full

This announcement is authorised for release to the market by the Board of Directors of Rimfire Pacific Mining Limited.

For further information please contact:

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ABOUT RIMFIRE

Rimfire Pacific Mining (ASX:RIM) is an ASX listed exploration company focused on projects in the Lachlan Fold Belt in central NSW and Broken Hill NSW. The company has a track record of successful exploration and asset monetisation through partnership agreements.

Rimfire currently has four key project areas under management in the Lachlan Fold Belt:

1. The Valley – Porphyry Copper / Gold, RIM 100%
 - ✓ Located 5km west of Kincora Copper/RareX Mordialloc porphyry copper-gold target.
 - ✓ Recently completed a drilling program to test near surface IP targets and interpreted Ordovician basement that hosts regional major discoveries such as Northparkes, Cadia and Cowal.
2. Cowal Project - Copper / Gold, RIM 100%.
 - ✓ Located to the east of Evolution's Lake Cowal Copper / Gold mine
 - ✓ Little exploration has occurred on these tenements and prospective for Copper / Gold
3. Fifield Project - Gold / PGE's
 - ✓ GPR earning up to 50.1%, RIM free carried for development.
 - ✓ Maiden JORC 2012 resource of 125Koz gold + 7.9Moz silver.
 - ✓ Recent drilling at the Transit Prospect returned 55m @ 0.94g/t gold with the final 1m intersection increasing to 9.98g/t gold.
4. Avondale Project – Cobalt, PGEs and Gold
 - ✓ GPR earning up to 75%
 - ✓ Avondale and KARS prospects located in the southern area of the project area and prospective for Cobalt and PGE's respectively.

Rimfire also has a key project located at Broken Hill:

1. Green View – Cobalt, RIM 100%
 - ✓ Located 15km from Broken Hill
 - ✓ Adjacent to significant Cobalt Blue Holdings Railway Cobalt Resource



Competent Persons Declaration

The information in the report to which this statement is attached that relates to Exploration and Resource Results is based on information reviewed and/or compiled by Craig Riley who is deemed to be a Competent Person and is a Member of The Australasian Institute of Mining and Metallurgy.

Mr Riley has over 25 years' experience in the mineral and mining industry. Mr Riley is employed by Rimfire Pacific Mining (RIM) and is an employee of the Company. Craig Riley has sufficient experience that is relevant to the style of mineralisation and type of deposits 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'. Craig Riley consents to the inclusion of the matters based on the information in the form and context in which it appears.

Forward looking statements Disclaimer

This document contains "forward looking statements" as defined or implied in common law and within the meaning of the Corporations Law. Such forward looking statements may include, without limitation, (1) estimates of future capital expenditure; (2) estimates of future cash costs; (3) statements regarding future exploration results and goals. Where the Company or any of its officers or Directors or representatives expresses an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and the Company or its officers or Directors or representatives as the case may be, believe to have a reasonable basis for implying such an expectation or belief. 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, commodity price fluctuation, currency fluctuation, political and operational risks, governmental regulations and judicial outcomes, financial markets and availability of key personnel. The Company does not undertake any obligation to publicly release revisions to any "forward looking statement",