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23 October 2020

Quarterly Report – September 2020

Meteoric Resources NL (**ASX: MEI**) ("Meteoric" or "the Company") provides shareholders with its Quarterly Report for the three-month period ending 30 September 2020.

Palm Springs Gold Project, WA

Meteoric acquired the high-grade Palm Springs Gold Project in the Kimberley Region of Western Australia in June 2020. The project covers more than 12,000 hectares including 3 MLS, 4 ELs and 6 PLs and contains more than 60 known gold occurrences over a 20km strike. Previous production in the late 1990s at the Butchers Creek Open Pit Gold Mine saw 52,000oz @ 2.1g/t Au until the mine was shut down in 1997 due to low gold prices (refer ASX:MEI Announcement 15/6/2020).

In August, Meteoric mobilised a team to site to prepare for Stage 1 drilling (both RC and diamond) with the aim to confirm and extend the known high-grade gold mineralisation associated with a plunging anticline south of the existing Butchers Creek open pit. Meteoric planned for approximately 23 RC (5,000m) and 7 diamond drill holes (1,500m) for a total of 6,500m of drilling in Stage 1. Drilling at Palm Springs commenced with diamond drilling aimed at defining the geometry of the anticline and confirming the historical high-grade gold drilling intercepts under the Butchers Creek open pit.

On 10 September, Meteoric advised that the first two diamond drill holes had intersected broad zones of sulphide mineralisation within the host trachyte unit. Importantly, these first two holes visually confirmed the location and geometry of the historical high-grade gold intercepts underneath and along strike from the Butchers Creek open pit in the Kimberley.

The confirmation provided from these initial diamond drill holes intercepting broad zones of visual sulphide mineralisation consistent with the location of historical high-grade gold intercepts at Butchers Creek, provided the Company with a high degree of confidence to ramp up its drilling efforts. Meteoric commenced RC drilling in conjunction with the diamond drill rig, throughout September and into October to complete approximately 5,000m of RC and 1,500m of diamond drilling for a total 6,500m.

The first assay results from Butchers Creek Drilling are imminent and the Company expects to be in a position to announce these to the market in late October/early November.

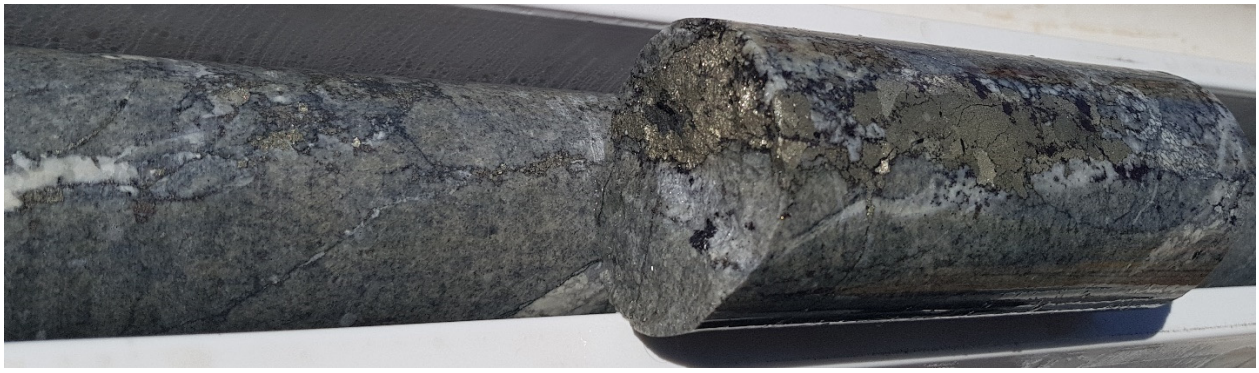


***Figure 1**. Strongly mineralised drill core from BCDD372, 150m down hole & 40m along strike from the open pit*

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Meteoric completed a digital compilation of data sourced from historic records for Butchers Creek by mid-September. This digital database allowed the Meteoric geological team to build a 3D interpretation of the Butchers Creek geology and gold mineralisation and use it to guide all exploration activities and ensure accurate tracking of gold mineralisation in the south-westerly plunging host trachyte unit.

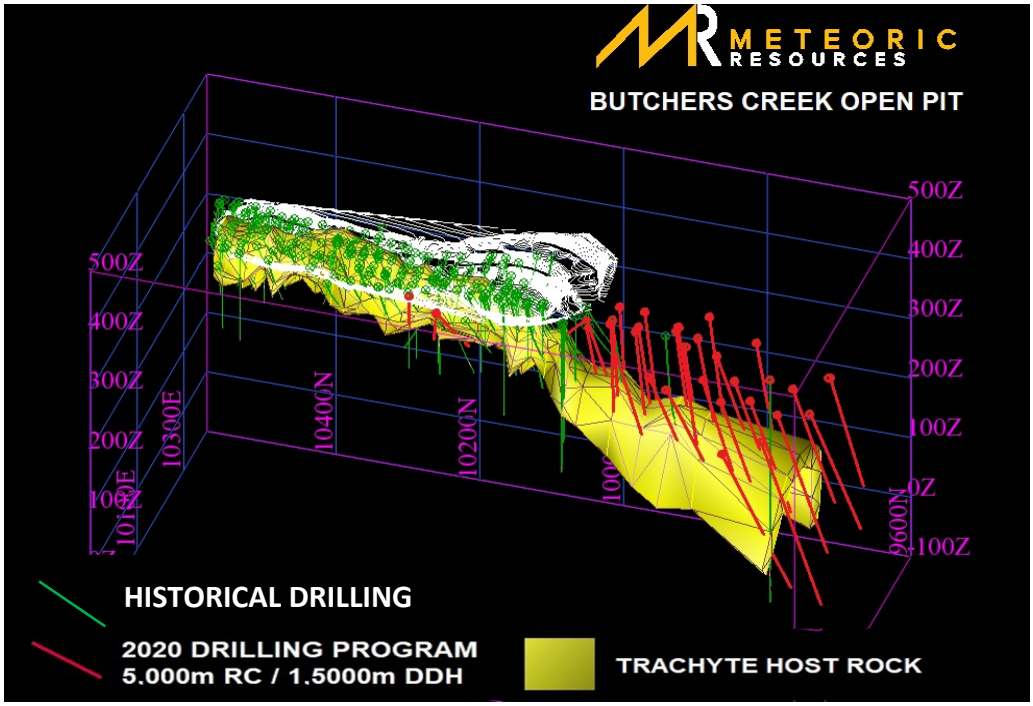


Figure 2. *Butchers Creek Open Pit -Oblique 3D view with interpretation, historical & planned drilling - Looking NE - Local Grid*

Juruena Gold Project, Brazil

In Brazil, Meteoric commenced drilling for the 2020 Exploration Program at the Juruena Gold Project on 9 June. Meteoric announced assays in August for the first four holes of its 2020 drilling program at Juruena, with results continuing to grow the areas of known mineralisation. The focus of the drilling was the high-grade Dona Maria Prospect and the Au-Cu Crentes Prospect.

Holes JUDD024 & 025, successfully tested the southern high-grade shoot at Dona Maria (Figure 3), both by extending the ore shoot down plunge and also confirming the presence and high-grade nature of the resource in an untested area. A shallow intersection in JUDD024 through a breccia body identified additional high-grade gold with high-grade copper associated with the WNW trending Juruena Fault, within the Crentes Prospect. Results included:

- JUDD024:
  - **9.0m @ 15.6 g/t Au & 1.5% Cu** from 100m (141 g/t.m) including **6.0m @ 21.6 g/t Au & 2.0% Cu** from 101m
  - **3.0m @ 6.2 g/t Au** from 243m (19 g/t.m)
- JUDD025:
  - **3.4m @ 10.1 g/t Au** from 392m (34 g/t.m) including **0.5m @ 71.9 g/t Au** from 394.5m

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Assay results from diamond drill holes JUDD028-032 at Dona Maria confirmed that high-grade gold mineralisation continues below the base of the current resource and also confirms the continuation of mineralised gold grades and widths in poorly drilled areas of the resource at Dona Maria.

Hole JUDD031 intersected both the top of a potential porphyry gold-copper system (Crentes) and the Bonanza gold grades of Dona Maria below the 2016 Resource with results of:

- **11m @ 2.34 g/t Au & 0.28% Cu from 42m** (26 g/t.m) - Crentes Au-Cu
- **1.1m @ 93.0 g/t Au from 235.9m** (102 g/t.m) – Dona Maria Au
- **14.3m @ 10.2g/t Au from 293m** (145 g/t.m)
  Including **1m @ 52.1 g/t Au** from 293m & **0.6m @ 109 g/t Au** from 297.4m

Hole JUDD031 was particularly encouraging as it intercepted a large downhole gold intersection below the current resource (**14.3m @ 10.15g/t Au**) where previous holes intersected narrower zones of mineralisation (JUDD022 – **4m @ 13.50g/t Au** & JUDD025 - **3.4m @ 10.10g/t Au**).

Further highlights included:

- JUDD028:
  - **2.4m @ 37.9 g/t Au from 216.5m** (91 g/t.m) including **0.9m @ 97.3 g/t Au** from 217.3m
- JUDD030:
  - **4.6m @ 5.8g/t Au from 195m** (27 g/t.m).

Following receipt of these results, Meteoric proposed additional holes below the resource to further assess widths and grades at depth.

***Table 1**: Highlights from current drilling.*

Hole ID	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Gram.Metres (g/t.m)	Cu Grade (%)
JUDD028	*31.40	34.1	2.7	0.83	2	0.34
	211.3	213.5	2.2	2.84	6	
	216.6	**219**	**2.4**	**37.97**	**91**	
including	***217.3***	***218.2***	***0.9***	***97.3***	***88***	
	226	229	3	2.74	8	
JUDD029	205	209	4	2.01	8	
	213	218.5	5.5	1.14	6	
JUDD030	**195.9**	**200.5**	**4.6**	**5.8**	**27**	
JUDD031	***42.00**	**53**	**11**	**2.34**	**26**	**0.28**
including	****48.00***	***50***	***2***	***10.05***	***20***	***0.23***
	235.9	**237**	**1.1**	**93**	**102**	
	293	**307.3**	**14.3**	**10.15**	**145**	
including	***293***	***294***	***1***	***52.1***	***52***	
and	***297.42***	***298***	***0.58***	***109***	***63***	

**Geologically distinct copper rich breccia zone. Not intersected in holes JUDD029-030 & 032.*

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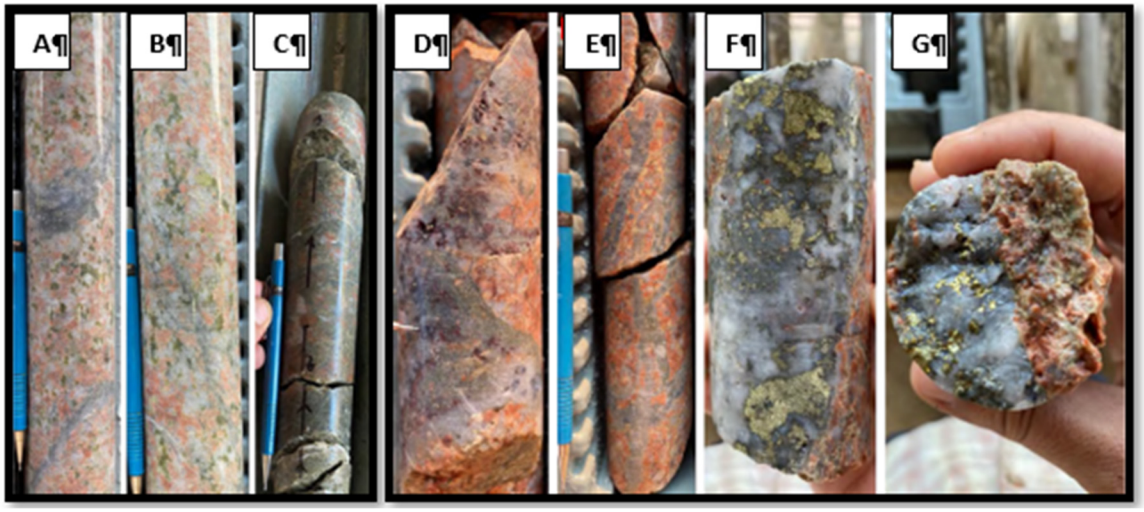


Photo 1 *(SCALE: NQ diameter core – 76mm) JUDD031. Phengite Zones (A-C) - (A) 299m and (B) 305m: moderate PH alteration with quartz veins, (C) 345.56m: pervasive PH alteration. Au-Cu rich Hydrothermal Breccias (D-G) - (D) Quartz + pyrite + galena vein. (E) Quartz + pyrite veins (F) and (G) Quartz + pyrite + chalcopyrite veins.*

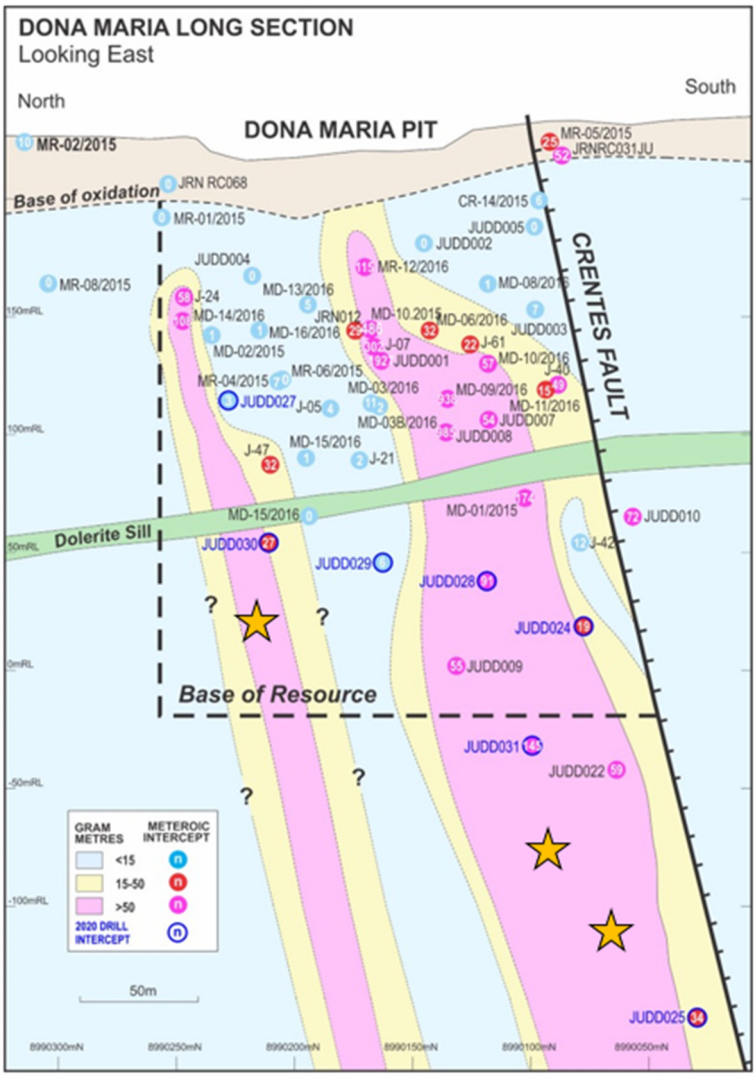


Figure 3: *Dona Maria Long Projection Gold stars indicate planned intersection points for additional drilling in the 2020 Program.*

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Crentes Fault/Breccia Copper & Gold

Mineralisation at Crentes is distinctly different to that observed at Dona Maria and Querosene. It occurs along the NNW striking steeply south dipping Juruena Fault. Crentes contains narrow, high-grade gold mineralisation similar to that seen at Dona Maria and Querosene (with a typically Au-Ag-Te-Mo elemental association), but it also has copper mineralisation associated with strong potassic alteration (P2) of the host coarse granite. This P2 hydrothermal alteration has red potassic feldspar and quartz in the matrix with quartz veins + pyrite-chalcopyrite-bornite. Where there is local brecciation, this breccia hosts significant copper and gold grades as seen in historical drill hole JRND01 (40.3m @ 1.08 g/t Au & 0.39% Cu) and more recently in JUDD010 (54.3m @ 1.33g/t Au & 0.23% Cu). This style of mineralisation continues to be a target for additional resources at Crentes.

The gold-copper rich intersection in JUDD024 (9m @ 15.6g/t Au & 1.5% Cu) occurs in a hydrothermal breccia (different to P2 alteration zone) and this represents a separate target at Crentes, not previously identified. In this newly identified breccia, the gold and copper mineralisation is associated with subangular clasts of granite, mafic rocks, or other breccia types in a chloritic matrix. It generally has a strong (10% - 20%) sulphide content (py > cpy) disseminated within the matrix and as stringers. Whilst the controls on this style of mineralisation, and where it occurs, along the Juruena Fault are not fully understood, it presents an exciting target and several holes will be drilled in the 2020 Exploration Program as follow up to JUDD024.

The results from the 2019 and 2020 Juruena diamond drill programs will feed into a new resource update which will include the additional 20 holes at Dona Maria, four holes at Querosene, and seven holes at Crentes. Meteoric will begin modelling of the mineralisation as soon as drilling is completed, and remaining core has been processed (mid October). Modelling will continue through October and November as final assay results are received, with a new Resource Estimate expected by the first quarter of 2021.

Midrim and LaForce projects, Canada

In August, Meteoric advised it had entered into a conditional tenement sale agreement ("Sale Agreement") to dispose of its Canadian nickel-copper projects, Midrim and LaForce, for consideration of 13,050,000 shares in ASX-listed Rafaella Resources Limited (ASX:RFR) ("Rafaella").

The Company considers the sale secures excellent value for Meteoric shareholders for non-core assets and provided Meteoric with upside exposure to not only Rafaella's exploration successes at both Midrim and LaForce, but across the entire Rafaella portfolio.

The key terms and conditions of the Sale Agreement are as follows:

- Rafaella will acquire 100% of the Midrim and LaForce Projects from Meteoric;
- Completion of the acquisition is conditional on the satisfaction of various conditions precedent, including:
  - Rafaella completing due diligence and obtaining shareholder approval and all regulatory approvals to complete the acquisition and the transfer the Midrim and LaForce projects from Meteoric to Rafaella;
  - The holders of certain royalties applicable to the Midrim and LaForce Projects agreeing to the assignment of such royalties;
- At completion, Rafaella will issue Meteoric 13,050,000 shares (60% of which will be escrowed for 6 months) and Meteoric will transfer the mining claims which comprise the Midrim and LaForce Projects to Rafaella (or its nominee). Rafaella will also issue 1,450,000 shares and 5,000,000 options with an

exercise price of $0.20 expiring two years from the date of grant to the shareholders of Canadian Nickel Corporation Pty Ltd in consideration of their services in introducing the transaction; and

- Meteoric has given representations and warranties to Rafaella that are customary for an agreement of this nature.

In September, it was announced that Meteoric and Rafaella had mutually agreed to extend the conditional agreement from 42 days from the date of signing to 73 days from the date of signing, to allow Rafaella to obtain shareholder approval an at upcoming General Meeting on 29 October 2020.

Other Australian Projects

Webb Diamond JV (Ownership 16.5% MEI / 83% Geocrystal Pty Ltd [MEI 10.5% of E80/4506])

The Webb Diamond JV is focused on the evaluation of a large kimberlite field comprising 280 nulls-eye targets and covers an area of 400km^2. About 23% of the targets have been drill tested with 51 kimberlite bodies identified. There was no activity reported during the quarter.

Warrego North IOCG Project (Ownership 49% MEI / 51% Chalice Gold Mines Limited)
Located in the Northern Territory, the Warrego North Project is approximately 20km north west of the historical high-grade Warrego Copper-Gold Mine, the largest deposit mined in the area producing 1.3 Moz Au and 90,000 tonnes of copper.

Chalice Gold Mines Limited (ASX:CHN) can earn up to 70% interest in the Project by sole funding $800,000. There was no activity reported during the quarter.

Corporate

Strong Cash Position

Meteoric maintains a healthy cash position with A$4,885,000 cash in hand as at 30 September 2020.

Annual General Meeting

Meteoric will convene its 2020 Annual General Meeting of shareholders on 10 November 2020 at 12pm (WST) in its Perth offices. A notice of meeting was lodged with the ASX on 5 October.

In accordance with temporary modifications to the Corporations Act under the Corporations (Coronavirus Economic Response) Determination (No. 1) 2020, the Company is not sending hard copies of the Notice of Meeting to shareholders. A copy of the Notice of Meeting ("Meeting") is available at the following link:

https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02289909-6A999596?access_token=83ff96335c2d45a094df02a206a39ff4

Shareholders may vote by attending the Meeting in person, by proxy or by appointing an authorised representative.

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ASX Additional Information

Meteoric provides the following information pursuant to ASX Listing Rule requirements:

1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure during the quarter was $1,539,000. Full details of exploration activity during the September quarter are set out in this report.
2. ASX Listing Rule 5.3.2: There was no substantive mining production and development activities during the quarter.
3. ASX Listing Rule 5.3.5: Payment to related parties of the Company and their associates during the quarter: $173,581 cash. The Company advises that this relates to remuneration of Directors only. Please see the Remuneration Report in the Annual Report for further details on Directors' Remuneration.

This release has been authorised by the Board of Meteoric Resources NL.

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The information in this announcement that relates to mineral resource estimates and exploration results is based on information reviewed, collated and fairly represented by Mr Peter Sheehan who is a Member of the Australasian Institute of Mining and Metallurgy and a consultant to Meteoric Resources NL. Mr Sheehan has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Sheehan consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

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APPENDIX 1

TENEMENT HOLDINGS AS AT 30 SEPTEMBER 2020

Tenement	Status	Project	Ownership (%)	Change in Quarter
E80/4407	Granted	ANGAS HILL (Webb JV)	16.5%	-
E80/4506	Granted	WEBB DIAMONDS (Webb JV)	-	(10.5%)
E80/4815	Granted	LAKE MACKAY (Webb JV)	16.5%	-
E80/5121	Granted	WEBB DIAMONDS (Webb JV)	16.5%	-
E80/5471	Application	WEBB DIAMONDS (Webb JV)	16.5%	-
E80/5496	Application	WEBB DIAMONDS (Webb JV)	16.5%	-
E80/5499	Application	WEBB DIAMONDS (Webb JV)	16.5%	-
EL23764	Granted	WARREGO NORTH	49%	-
M80/0106	Granted	PALM SPRINGS	97%	-
M80/0315	Granted	PALM SPRINGS	97%	-
M80/0418	Granted	PALM SPRINGS	100%	-
P80/1766	Granted	PALM SPRINGS	100%	-
P80/1768	Granted	PALM SPRINGS	100%	-
P80/1769	Granted	PALM SPRINGS	100%	-
P80/1839	Granted	PALM SPRINGS	100%	-
P80/1854	Granted	PALM SPRINGS	100%	-
P80/1855	Granted	PALM SPRINGS	100%	-
E80/4856	Granted	PALM SPRINGS	100%	-
E80/4874	Granted	PALM SPRINGS	100%	-
E80/4976	Granted	PALM SPRINGS	100%	-
E80/5059	Granted	PALM SPRINGS	100%	-

BRAZIL

Claim No.	Status	City	Ownership %	Change in Quarter
Juruena Project				
866.079/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.081/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%	-
866.082/2009	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%	-
866.084/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.778/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.531/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%	-
866.532/2015	Granted Exploration Permit	COTRIGUAÇU/MT	100%	-
866.533/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%	-

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866.534/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%	-
866.535/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%	-
866.537/2015	Granted Exploration Permit	COLNIZA/MT, COTRIGUAÇU/MT	100%	-
866.538/2015	Granted Exploration Permit	COTRIGUAÇU/MT	100%	-
866.085/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.080/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.086/2009	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.247/2011	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.578/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.105/2013	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.934/2012	Granted Exploration Permit	COTRIGUAÇU/MT	100%	-
866.632/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.633/2006	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.294/2013	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-
866.513/2013	Granted Exploration Permit	COTRIGUAÇU/MT, NOVA BANDEIRANTES/ MT	100%	-
Novo Astro Project				
867.246/2005	Granted Exploration Permit	NOVA BANDEIRANTES/ MT	100%	-%

CANADA

Claim No.	Province	Project	Ownership %	Change in Quarter
1131335 - 1131337	Quebec	MIDRIM/LAFORCE	100%	-
1131339- 1131341	Quebec	MIDRIM/LAFORCE	100%	
1131345	Quebec	MIDRIM/LAFORCE	100%	-
2499890 - 2499891	Quebec	MIDRIM/LAFORCE	100%	-
2499895 - 2499896	Quebec	MIDRIM/LAFORCE	100%	-
2499900 - 2499918	Quebec	MIDRIM/LAFORCE	100%	-
2499921 - 2499922	Quebec	MIDRIM/LAFORCE	100%	-
2499926 - 2499929	Quebec	MIDRIM/LAFORCE	100%	-
2499933	Quebec	MIDRIM/LAFORCE	100%	-
2412147 - 2412167	Quebec	MIDRIM/LAFORCE	100%	-
2412167 - 2412193	Quebec	MIDRIM/LAFORCE	100%	-
2412195 - 2412207	Quebec	MIDRIM/LAFORCE	100%	-
Various	Ontario	IRON MASK	100%	-
Various	Ontario	MULLIGAN	100%	-
Various	Ontario	MULLIGAN EAST	100%	-
517797 - 517963	Ontario	BEAUCHAMP	100%	-