

## SEPTEMBER 2017 QUARTERLY ACTIVITIES REPORT

- Finalised acquisition of highly prospective **primary cobalt and Cu-Ni-Co-PGE projects**
- Secured **additional 138 exploration claims** within Baby Formation surrounding Midrim
- **Multi-year technical advancement** of the Midrim Cu-Ni-Co-PGE project through acquisition of extensive historical database
- Identified **significantly expanded multi-commodity opportunity** within the Belleterre-Angliers Greenstone Belt
- Appointment of **key technical personnel**; Shastri Ramnath and Max Nind

Meteoric Resources NL (ASX: MEI, "Meteoric" or "the Company"), a Canadian focused Cu-Ni-Co-PGE explorer, is pleased to provide an operational update for the three-month period ending 30 September 2017.

### Finalisation of project acquisition and project highlights

Within the period the Company finalised the acquisition of Cobalt Canada Pty Ltd to gain 100% interest in two primary Cobalt projects, **Iron Mask & Mulligan** located within Ontario, Canada, and two Cu-Ni-Co-PGE magmatic sulphide projects, **Midrim & Laforce** within the Belleterre-Angliers Greenstone Belt (BAG), Quebec, Canada.

#### *Midrim & Laforce*

- 223 claims covering 118 km<sup>2</sup> of highly prospective ground within BAG
- 46,000m of historical drilling, only partially assayed
- Over AU\$4.5m in historical drilling value
- Significant platinum and palladium mineralisation associated with Cu-Ni mineralisation
- 36 aerial EM targets identified over the Baby segment of BAG, with 24 of these conductors located on MEI's ground
- Exceptional historical drilling results, targeting the Midrim deposit, forming one of the 24 EM conductors, include :

	From depth (m)	Length (m)	PGE/Au g/t	Cu %	Ni %
MR00-01	15.5	19.69	3.22	2.99	1.85
Including	21.4	11.94	3.36	3.64	2.27
MR01-29	17.6	17.85	2.53	2.16	1.55
MR01-30	10.9	1.1	5.15	5.41	1.7
MR00-11	23	1	4.41	4.74	2.66

### Iron Mask

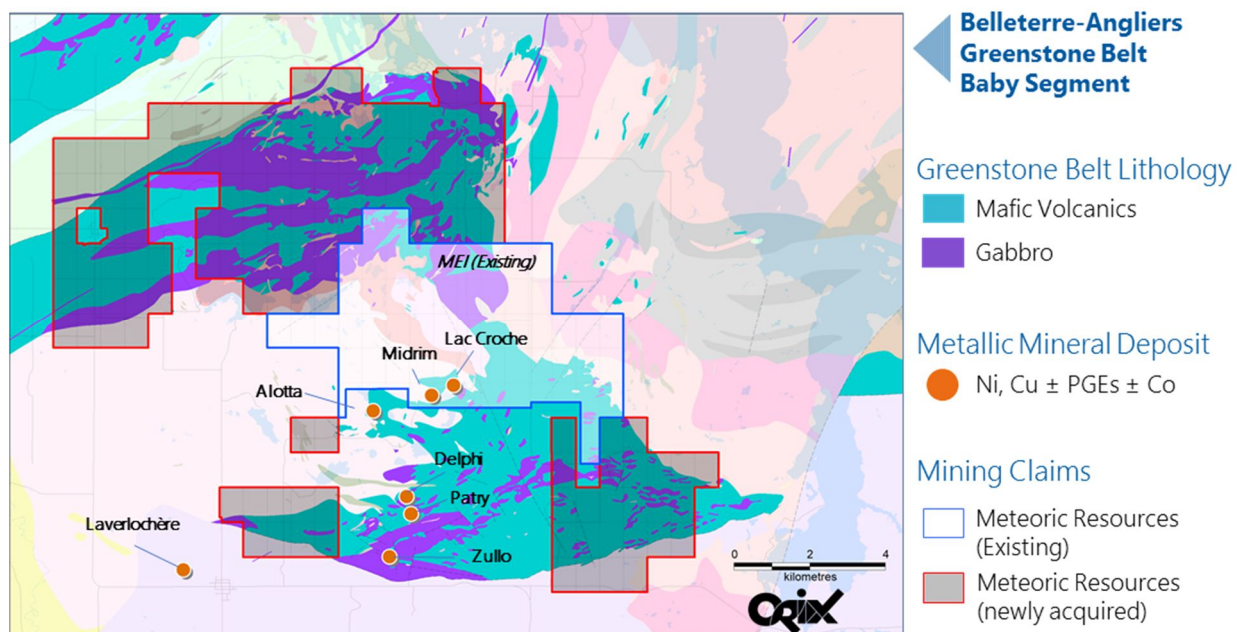
- 8 claims covering 14.2 km<sup>2</sup>
- Historical Iron Mask and Cobalt Shafts as well as the Cobra showing, 500m northwest of MEI claims, have been exploited showing significant cobalt potential:
  - Cobra Showing
    - Chip sampling grades 11.3% Co
    - Grab sampling 21.3% Co & 6.19% Ni
  - Cobalt Shaft
    - Bulk sample averaged 15% Co and 279 g/t Ag
    - Grab sampling grades of up to 16% Co, 4.8% Ni and 17% Bi
  - Iron Mask Shaft
    - Channel sample 3.2% Co and 6 g/t Au
- EM and magnetic surveys indicate extension of mineralized zones into MEI's claims

### Mulligan

- 50km North of prolific Ag-Co mining camp of Cobalt, Ontario
- Historic production averaging 10% Co
- Production run sampled grades of up to 19% Co and 56.7 g/t Au
- Canadian Department of Mines Sample (23720)
  - o 12.6% Co, 29.75 g/t Au, 39.7 g/t Ag and 1.03% Ni
- Sulphides visible in 200m x 200m Diabase outcrop from which historical production occurred
- The Project captures 8 parallel cobalt-rich polymetallic veins

### Securing additional ground surrounding the Midrim Project

An additional 138 claims within the Baby segment of the BAG were staked by the company during the period, representing 82.53km<sup>2</sup> of highly prospective ground covering the northern extents of the greenstone belt. The acquired ground covers an additional 13 of the 36 EM targets identified by Falconbridge, which now gives Meteoric access to a total of 24 historical targets.



**Figure 1 The expanded Meteoric Resources landholding covering the Baby segment of the BAG**

## Acquisition of historical database

To complement the expanding landholding, during the period, the Company negotiated to acquire a comprehensive database of raw technical information as well as geological interpretations covering the entire Belleterre-Angliers Greenstone Belt, with a value exceeding \$5 million. The acquisition cost was estimated to be approximately 8% of replacement value and including integral data such as regional Aerial EM and Magnetic surveys as well as a comprehensive database of drilling results.

The acquisition of the technical data enabled Meteoric to gain significant insight into the geological opportunities within the BAG and represents a multi-year advancement of the exploration program. Reprocessing and analysis of the technical data commenced during the period with results expected within Q4 2017.

Significant items included in the database:

- Airborne EM surveys – 4 channel
- Airborne magnetic survey
- Ground based EM surveys
- Ground inductive polarisation
- Soil/rock chip geochemistry
- Multi-element drill database

## Identification of significantly expanded Cu-Ni-Co-PGE opportunity

During the compilation process a number of technical reports produced by Falconbridge Limited (Falconbridge) (acquired by Xstrata/Glencore) were located. The reports identify a large scale, high grade resource opportunity within the greater BAG area (ASX release 21 August 2017). Compilation of findings are below:

- **4km x 1km Underlying Metal Sulphide Source** Within the BAG there are numerous Ni-Cu±PGE sulphide occurrences hosted within Gabbro Sills. It is interpreted that the Geoffrey Anomaly, which forms as a deep, flat lying electromagnetic conductor, measuring 4km x 1km, is the feeder to a swarm of mineralised Gabbroic Sills
- **Gabbro Sills** The Midrim property is one of several such drill proven Gabbro Sills within the Baby Formation segment of the BAG, which also includes the adjacent Alotta, Delphi, Patry, & Zullo projects
- **36 Geophysical Targets Identified** Each of the above Gabbro Sills forms as one of 36 airborne electromagnetic conductors Falconbridge identified from a 2001 MEGATEM survey over the Baby segment of the BAG. 11 of these targets are hosted within Meteoric's Midrim project
- **80% Hit Rate** Only 6 of the identified electromagnetic conductors have been drill tested by Aurora Platinum and Fieldex Exploration, with 5 (or >80% hit rate) containing significant high grade intersections of nickel, copper, cobalt and PGE enrichment
- **Falconbridge Targeted Numerous 3-5Mt Polymetallic Deposits** Falconbridge stated that the Baby Formation had the "Excellent prospect for several 3-5Mt high grade (1.5% Ni, >1% Cu and >2 g/t PGE) semi-massive sulphide Gabbro Sills close to surface within a small area"
- **Evidence of Production Scale** Production records for a single small scale Gabbro Sill (600kt - Lorraine mine) located within the BAG stated that 14.28 Million pounds of copper & 6.34 million pounds of nickel was recovered within a 3 year period. LME price per pound as at 18th of August 2017 for copper is US\$2.89 and nickel is US\$4.792

## Appointment of Key Technical Personnel

The Company appointed **Ms Shastri Ramnath** as technical director effective from 1 October. Ms Ramnath is currently the managing director of Orix Geoscience.

*Ms Ramnath has significant knowledge of the Midrim and La Force projects recently acquired by Meteoric through its acquisition of Cobalt Canada. Whilst employed by FNX Mining Ltd as a geologist for special projects, Ms Ramnath was directly involved with exploration of Midrim and La Force, undertaking various technical activities on the MEI assets including drill program supervision. This level of direct experience will prove invaluable in the progression of exploration across the Belleterre-Angliers Greenstone Belt.*

The company also appointed Max Nind as exploration manager to direct an aggressive work program over Meteorics Canadian cobalt and Cu-Ni-Co-PGE assets.

*Mr Nind is an experienced exploration geologist, having held several senior exploration positions within ASX-listed companies, as well as major private companies; including Geologist In-Charge and Senior Exploration Geologist (Western Mining Corporation), and Exploration Manager (Nevada Iron & Sinosteel Australia). He was also Head of Research at one of Perth's oldest stockbroking firms, specialising in analysis of resource companies.*

*Throughout his 30-year career, Mr. Nind has undertaken extensive surface and underground exploration for magmatic copper-nickel sulphides. This experience will provide a solid foundation for the Company, as it plans to ramp up exploration on the Belleterre-Angliers Greenstone Belt (BAG), including the Midrim and La Force projects. Since acquiring its Canadian assets, the Company has continued to expand its holding over the BAG, which contains numerous projects with high-grade copper-nickel-PGE mineralisation*

## Company Outlook and events subsequent to the end of September Quarter

Subsequent to the period the company updated the market regarding its upcoming work program at the Midrim Cu-Ni-Co-PGE project. Technical work currently underway includes:

- Preliminary metallurgical testing of Midrim mineralisation
- Re-assaying of 1,000m of Midrim drill core
- Bulk sample study commenced
- Drill program commencing in coming weeks
- Finalisation of 2001 MegaTEM survey reprocessing

### **Preliminary metallurgical testing and bulk sample mining study underway**

The previously announced preliminary metallurgical study (ASX release 25 August 2017) being conducted by "SGC Lakefield" on historical drill cores from the Midrim prospect is progressing well. Three holes were selected, ¼ and ½ core samples were cut and composited to make up a 50kg sample. The results aim to identify the appropriate process for extraction and the potential recovery of Cu-Ni-Co-PGE metals at the Midrim project. Results of the preliminary metallurgical study are expected in Q4 2017.

The metallurgical test work will develop a suitable processing flowsheet and design to support a substantially larger bulk sample mining study. This later study will identify the viability of extracting a suitably sized zone of

shallow mineralisation from within the existing historical drilling area for trial processing. Results of the bulk sample study are also expected in Q4 2017.

### **Geophysical reinterpretation**

A reprocessing and reinterpreting program of the 2001 MegaTEM survey data, which covered most of the Baby Segment of the Belleterre-Angliers Greenstone Belt including Midrim and other targets is progressing.

The reinterpretation of the data aims to refine conductive geological features in order to assist with the finalisation of the location of drill holes for the forthcoming drill program at Midrim and will provide a strong platform for target generation regionally. Full results of the EM reprocessing to be released once completed.

### **Validation of Midrim historical drill programs and re-assays**

The Company is progressing well with the validation of the historical results of the 2000-2001 drill programs conducted at the Midrim project.

As part of this validation process the re-assaying of a representative sample of 9 historical drill cores, including geological units that have previously not been assayed is being undertaken to validate historical assay results as well as identify potential new zones of mineralisation. The Company will update the market upon receiving the results of this validation program.

### **Midrim Drill Program**

Following the finalisation of the re-interpretation of the 2001 MegaTEM survey and review of historical data the Company will be well positioned to finalise a diamond drilling program at Midrim, which is anticipated to commence in Q4 2017.

### **Iron Mask and Mulligan Projects**

The company has announced the commencement of a Cobalt exploration program targeting the Iron Mask and Mulligan projects. The initial program at **Mulligan** will consist of:

- geological mapping; rock chip sampling and identification of possible channel sampling locations
- collection of 300 soil samples and 7.3 line kms of IP surveying at 25m intervals along 100m spaced lines
- ground magnetics continuously recorded along 100m spaced lines

The initial program targeting Iron Mask will include geological mapping and rock ship sampling as well as the identification of potential channel sampling locations.

## Warrego North IOCG Project, Northern Territory, Australia

The Warrego North Project is located approximately 20km north-west of the historical high-grade Warrego copper-gold mine in the western part of the Tennant Creek Mineral Field in the Northern Territory, Australia. Warrego was the largest deposit mined in the area with historical production of 1.3Moz of gold and 90,000 tonnes of copper from 5 million tonnes of ore at 8g/t gold and 2% copper in a classic iron oxide copper gold ("IOCG") geological setting. Chalice can earn up to a 70% interest in the project from Meteoric Resources NL by sole funding \$800,000.

### Geophysics and Surface Geochemistry

In July, a double offset pole-dipole IP survey for 12 line km was completed over the Parakeet prospect. A moderate intensity chargeability anomaly located 500m north-east of Parakeet was identified which could potentially represent concealed sulphide mineralisation (Figure 2). Follow-up surface mapping and systematic rock chip sampling (17 samples) over the chargeability feature identified a major east-west oriented ironstone unit striking over 500m.

Assay results of the sub-cropping ironstone unit returned multiple elevated copper and gold values which the company considers encouraging (Table 1). Additional to the surface sampling, a hematite fertility study has been undertaken on selected surface ironstone samples using laser ablation (LA-ICPMS) techniques carried out by the University of Tasmania. Ironstone samples were classified as being either fertile (deemed prospective) or infertile (deemed non-prospective) for iron oxide copper gold (IOCG) Tennant Creek-style mineralisation based on their hematite chemistry. Initial results are encouraging, with two of three samples returning fertile hematite signatures.

### Drilling

One RC and three diamond drill holes with RC pre-collars for 1,575m were drilled to follow-up a previous encouraging result from drill hole WND17-001 (8m @ 1.74% Cu and 0.42g/t Au) central to the Parakeet anomaly (refer to previous ASX announcement - 16/06/17). The Parakeet anomaly is a coincident magnetic and gravity anomaly which was targeted for IOCG Tennant Creek style gold-copper mineralisation (Figure 3).

Follow-up drilling completed this quarter was successful in identifying two additional ironstone units in diamond hole WND17-006, located approximately 150m east of WND17-001. Diamond hole WND17-004, drilled directly beneath the previous intersection in diamond hole WND17-001 intersected a zone of intense chlorite alteration with accompanying elevated copper and gold values, which is interpreted to have narrowly missed a prospective ironstone.

Diamond hole WND17-005 tested the western extent of the Parakeet anomaly and RC hole WND17-003 tested an historical chargeability target. Both failed to intersect any zones of mineralisation. All significant drill results are tabulated (Table 2).

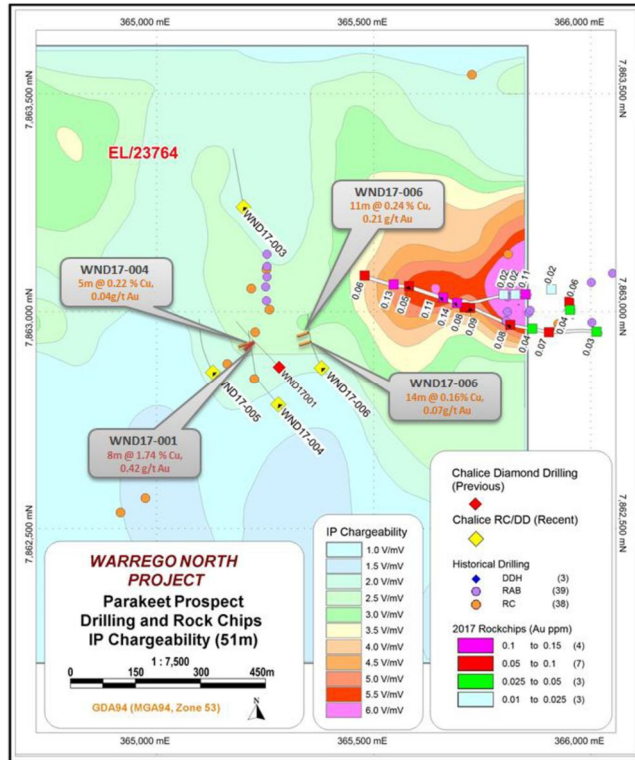


Figure 2 IP chargeability, surface rock chip results and drilling

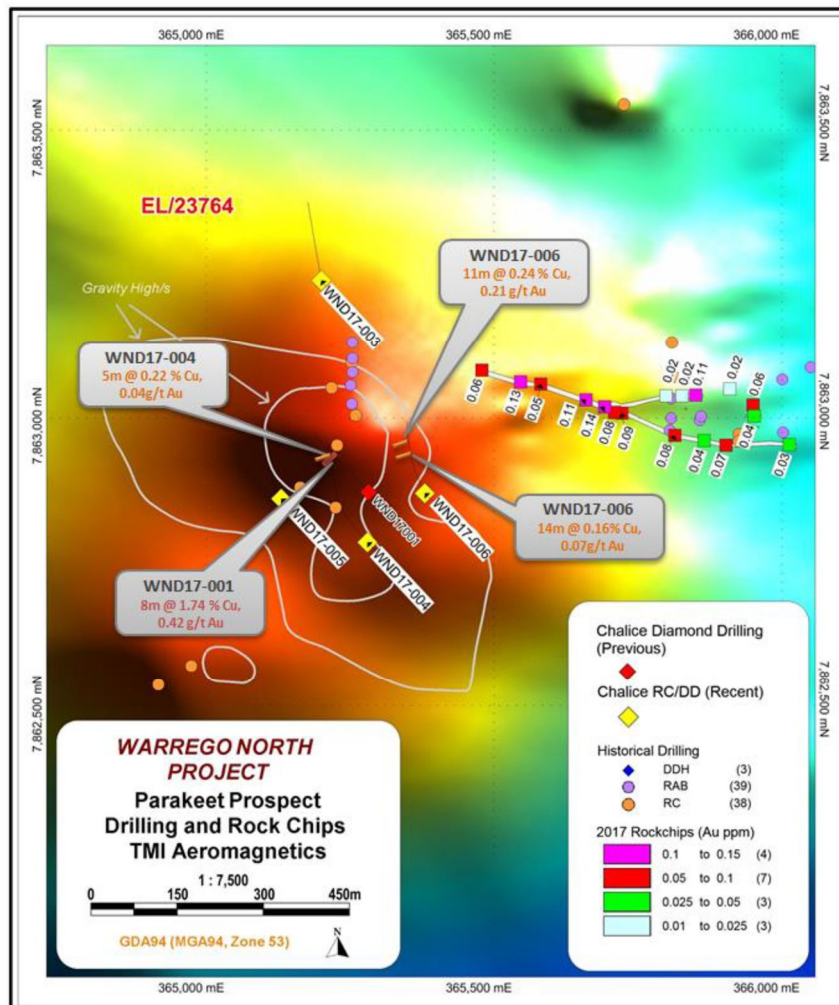


Figure 3 Drilling and surface rock chip results over aeromagnetics and gravity

Sample Id	MGA East	MGA North	Au (ppm)	Cu (ppm)	Fe(%)	Geology
CHRK001	365903	7862953	0.07	505	32.2	Ironstone
CHRK002	365865	7862961	0.04	245	38.4	Ironstone
CHRK003	365814	7862970	0.08	646	40.2	Ironstone
CHRK004	365722	7863009	0.09	685	40.2	Ironstone
CHRK005	365709	7863010	0.08	65.4	39.3	Ironstone
CHRK006	365692	7863020	0.14	251	40.2	Ironstone
CHRK007	365660	7863032	0.11	523	37.3	Ironstone
CHRK008	365581	7863059	0.05	204	30.5	Ironstone
CHRK009	365546	7863063	0.13	175.5	30	Ironstone
CHRK010	365479	7863083	0.06	46.8	35	Ironstone
CHRK011	365799	7863039	0.02	130.5	29	Ironstone
CHRK012	365826	7863039	0.02	346	31.8	Ironstone
CHRK013	365850	7863040	0.11	424	29.2	Ironstone
CHRK014	365909	7863051	0.02	247	26.3	Ironstone
CHRK015	365950	7863023	0.06	249	27.4	Ironstone
CHRK016	365952	7863004	0.04	85.4	27.5	Ironstone
CHRK017	366013	7862954	0.03	386	26.9	Ironstone

**Table 1 Surface rock-chip assay results**

Tenement	Hole Id	Sample No.	From (m)	To (m)	Interval (m)	Au (ppm)	Cu (ppm)	Bi (ppm)
EL23764	WND17-004	WD0342	196	205	9	0.03	1527	171
EL23764	WND17-004	WD0329	216	222	6	0.01	1714	58
EL23764	WND17-004	WD0340	249	252	3	0.01	1098	BD
EL23764	WND17-004	WD0742	442	445	3	0.09	1074	13
EL23764	WND17-004	WD0746	446	451	5	0.04	2170	92
EL23764	WND17-005	WD0440	252	255	3	0.05	1382	BD
EL23764	WND17-006	WD0604	162	166	4	0.05	1273	3
EL23764	WND17-006	WD0608	166	172	6	0.07	2290	0
EL23764	WND17-006	WD0617	183	189	6	0.07	1907	64
EL23764	WND17-006	WD0629	208	222	14	0.07	1589	118
EL23764	WND17-006	WD0847	265	276	11	0.21	2381	39

**Table 2 Drilling Results (maximum 5m waste, minimum 2 m intersection, greater than 0.1% Cu). WND17-003 returned no significant results.**

### **Competent Persons' Statements**

*The information in this report that relates to Exploration Results in relation to the Warrego North Project is based on information compiled by Dr Kevin Frost BSc (Hons), PhD, who is a Member of the Australian Institute of Geoscientists. Dr Frost is a full-time employee of Chalice Gold Mines Limited and has sufficient experience in the field of activity being reported to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Dr Frost consents to the release of information in the form and context in which it appears here.*

WEBB DIAMOND JV (Meteoric 19.0% and right to acquire 13.0% of E80/4506).

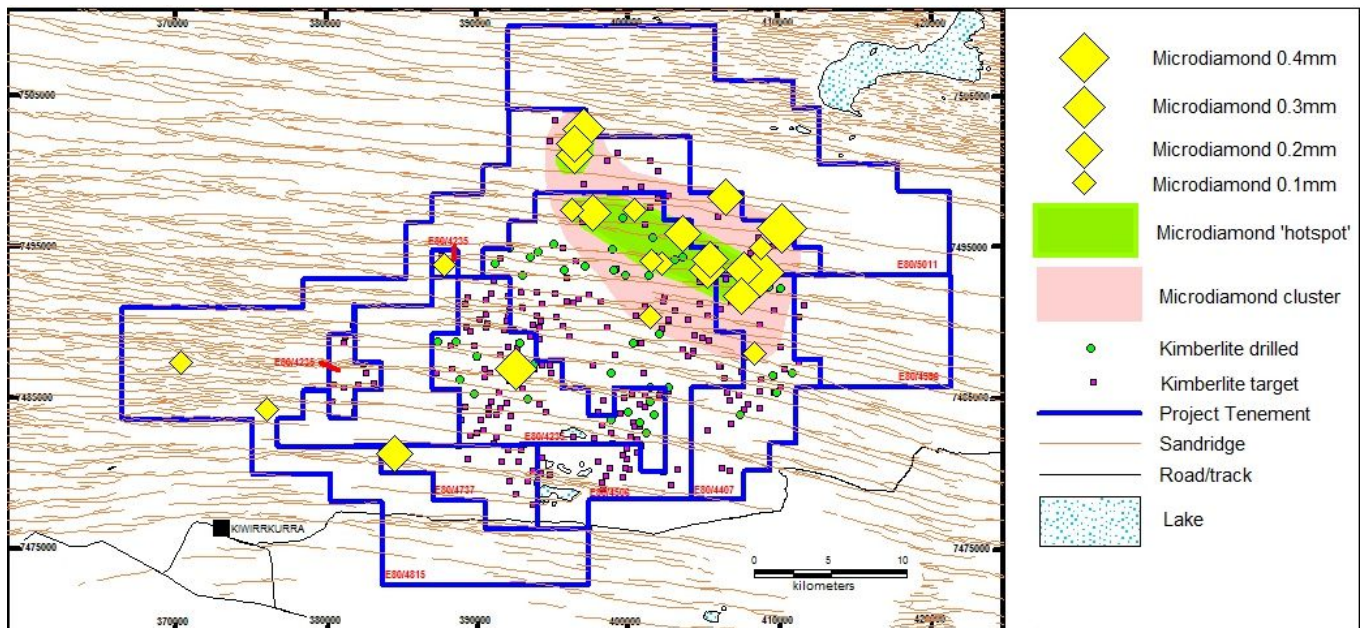
The Webb Diamond Joint Venture is focussed on the evaluation of a large kimberlite field comprising some 280 bulls-eye magnetic targets of which 23% have been drill tested and with 51 kimberlite bodies identified. Successive surface loam sampling programs has resulted in the recovery of 24 microdiamonds and the interpretation of a broad surface microdiamond dispersion anomaly in the northern portion of the kimberlite field.

While the significance of this broad microdiamond anomaly which encompasses an area of approximately 150km<sup>2</sup> is speculative, the company is highly encouraged by the persistence of the anomaly in repeated loam sampling programs and the presence of larger microdiamonds. There are 42 untested kimberlite targets within this broad microdiamond anomaly that are prioritized for future drill testing.

Some of these Kimberlite targets of interest located in the northern portion of the kimberlite field and which are within the broad surface microdiamond anomaly were selected for detailed ground geophysical surveying. This work commenced on the 24<sup>th</sup> September and was ongoing at the end of the quarter. These ground geophysical surveys are aimed at better defining the targets and prioritising them for drill testing.

The ground geophysical surveys will be completed during the forthcoming quarter and with the results reported at the end of the quarter. The previously planned 2017 drill program has been deferred and will now be rescheduled for 2018.

In addition, further reconnaissance loam sampling is underway aimed at better defining the areal extent of the surface microdiamond anomaly.



**Figure 4. Webb Diamond Joint Venture- Location map of Micro Diamonds Recovered**

**Competent Person Statement**

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Tom Reddicliffe BSc (Hons), MSc. Tom Reddicliffe, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Tom Reddicliffe is a self-employed consultant to the Meteoric Resources NL - GeoCrystal Limited joint venture and a director of GeoCrystal Limited. Tom Reddicliffe 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 of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Tom Reddicliffe consents to the inclusion in this report of his information in the form and context in which it appears.

**BARKLY JOINT VENTURE (MEI 30% subject to JV)**

During the quarter no exploration was undertaken.

**PERSEVERANCE (Meteoric 68.43%, Emmerson Resources 31.57%)**

During the quarter 70km of detailed Cesium vapour ground magnetics was completed with 50m line spacings. Data processing and geophysical interpretation is expected during the December quarter.

**R29 BABBLER (MEI 100%)**

During the quarter 16.5km of detailed Cesium vapour ground magnetics was completed with 50m line spacings. Data processing and geophysical interpretation is expected during the December quarter.

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APPENDIX 1

TENEMENT HOLDINGS AT 30 SEPTEMBER 2017

Tenement	Nature of Interest	Project	Equity (%)
E80/4235	Granted	ELIZABETH HILLS (Webb JV)	19.0%
E80/4407	Granted	ANGAS HILL (Webb JV)	19.0%
E80/4506	Granted	WEBB DIAMONDS (Webb JV)	Rights to 13.0%
E80/4737	Granted	WEBB DIAMONDS (Webb JV)	19.0%
EL30057	Application	WEBB DIAMONDS (Webb JV)	19.0%
E80/4815	Granted	LAKE MACKAY (Webb JV)	19.0%
E80/5071	Application	LAKE MACKAY (Webb JV)	19.0%
E80/5011	Application	WEBB DIAMONDS (Webb JV)	19.0%
EL23764	Granted	WARREGO NORTH (Chalice JV)	100%, Subject to Farmout
EL30701	Application	R29 BABBLER	100%
MLC217	Granted	PERSEVERANCE	68.43%
MLC218	Granted	PERSEVERANCE	68.43%
MLC219	Granted	PERSEVERANCE	68.43%
MLC220	Granted	PERSEVERANCE	68.43%
MLC221	Granted	PERSEVERANCE	68.43%
MLC222	Granted	PERSEVERANCE	68.43%
MLC223	Granted	PERSEVERANCE	68.43%
MLC224	Granted	PERSEVERANCE	68.43%
MLC57	Granted	PERSEVERANCE	68.43%
EL28620	Granted	BARKLY (Color Minerals JV)	30%
Canadian Tenement Claim Titles 1131335 to 1131345 inclusive	Claim	MIDRIM/LAFORCE	100%
Canadian Tenement Claim Titles 2402370 to 2402386 inclusive	Claim	MIDRIM/LAFORCE	100%
Canadian Tenement Claim Titles 2412147 to 2412207 inclusive	Claim	MIDRIM/LAFORCE	100%
Canadian Tenement Claim Titles 2499867 to 2501095 inclusive	Claim	MIDRIM/LAFORCE	100%
Canadian Tenement Claim Titles 4284365 to 4284371 inclusive	Claim	IRON MASK	100%
Canadian Tenement Claim Titles 4278666 and 4280538	Claim	MULLIGAN	100%