

# QUARTERLY REPORT

ASX: MOO

FOR THE QUARTER ENDED 31 DECEMBER 2011

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## Highlights

### Herberton Exploration

- Detailed mapping and rock chip traverses were completed at three of the Herberton Project prospects. XRF rock chip results include:

Sample ID	Prospect	Tin (%)
RX0054	Arbouin	1.91
RX0090*	Arbouin	2.15*
RX0131	Kitchener	1.27
RX0134	Kitchener	3.22
RX0153	Kitchener	1.67

\* - channel sample collected across identified shear zone

- Intensive field activities over the course of the quarter generated further advanced targets
- Comprehensive stream sediment sampling completed
- Drill programme preparation underway

### Baal Gammon Mine and Kagara Strategic Alliance

- Treatment of ore commenced late December– NSR payment expected early 2012
- Resource validation drilling at Baal Gammon has concluded. High grade intercepts include:
  - 2m @ 16.91% Cu, 468g/t Ag, 951g/t In and 0.88% Sn from 28.1m
  - 7m @ 7.77% Cu, 201g/t Ag, 462g/t In and 0.04% Sn from 22m
  - 8.1m @ 5.18% Cu, 101g/t Ag, 179g/t In and 0.17% Sn from 30m
  - 10.7m @ 2.91% Cu, 131g/t Ag, 136g/t In and 0.69% Sn from 52.5m
  - 1.7m @ 11.89% Cu, 185g/t Ag, 185g/t In and 0.11% Sn from 20m
- Revised Baal Gammon Resource of 2.8Mt @ 1% Cu, 40g/t Ag, 0.2% Sn & 39g/t In
- Larger than anticipated high grade zone identified within the Baal Gammon Resource – 829kt @ 2.5% Cu, 96g/t Ag, 0.4% Sn & 96g/t In
- Independent consultant jointly commissioned by Monto/Kagara to review Monto's exploration ground for potential JV opportunities has completed a series of reports which are currently being assessed
- Feasibility studies into a tin extraction circuit well advanced – potential to increase NSR

## Confederation Mining Lease Application (MLA)

- MLA contiguous with Baal Gammon lodged over a 220ha area incorporating former mines and advanced prospects
- High grade deposits with metallurgy similar to Baal Gammon
- First phase of ore body modelling complete

## *Summary of Activities*

Monto Minerals has been engaged in intensive field activities over the course of the December 2011 quarter, generating a number of advanced targets and refining drill programme design.

The resource validation drilling programme conducted by Kagara at Baal Gammon has concluded with all results received. The drilling produced a series of impressive copper and silver intercepts that have effectively identified a high grade zone within the overall Baal Gammon Global Resource. Mining at Baal Gammon and trucking of high grade ore to Kagara's Mt Garnet plant has commenced, with royalty payments expected in early 2012. Kagara and Monto Minerals are currently reviewing reports generated by the jointly commissioned independent consultant engaged to review Monto's exploration ground with the intent of identifying further JV opportunities.

## Herberton Exploration

### ***Detailed Mapping and Rock Chip Traverses***

During August/September, Monto completed a series of detailed surface rock chip sampling traverses to confirm indicative grades and widths at the Pompeii, Arbouin and Kitchener prospects within its 100% owned Herberton tin project. Sampling traverses were completed perpendicular to the strike of mineralised structures and zones of alteration identified at each of the prospects.

Representative rock chip samples were primarily collected from surface outcrop. Host rocks sampled comprised mainly granites and metasediments, with a total of 165 rock chip samples collected.

Rock chip samples were analysed using a broad suite of elements which included laboratory XRF analysis for tin. Significant rock chip results are included in Table 1 below.

**Significant Rock Chip Results**

Sample ID	Prospect	Tin (%)
RX0054	Arbouin	1.91
RX0090*	Arbouin	2.15*
RX0131	Kitchener	1.27
RX0134	Kitchener	3.22
RX0153	Kitchener	1.67

\* - channel sample collected across identified shear zone

The rock chip sampling programme also included the collection of 26 channel samples over particular zones of interest such as porphyry intrusions and zones of shearing and brecciation.

The results highlight the high-grade nature of tin mineralisation at surface within the company's Herberton tin project. Importantly, the results in combination with other exploration datasets have provided further resolution to assist in targeting a series of shallow, high-grade potential tin deposits. The company looks forward to finalising drill planning and progressing the Herberton tin project towards the commencement of a first-pass drilling programme.

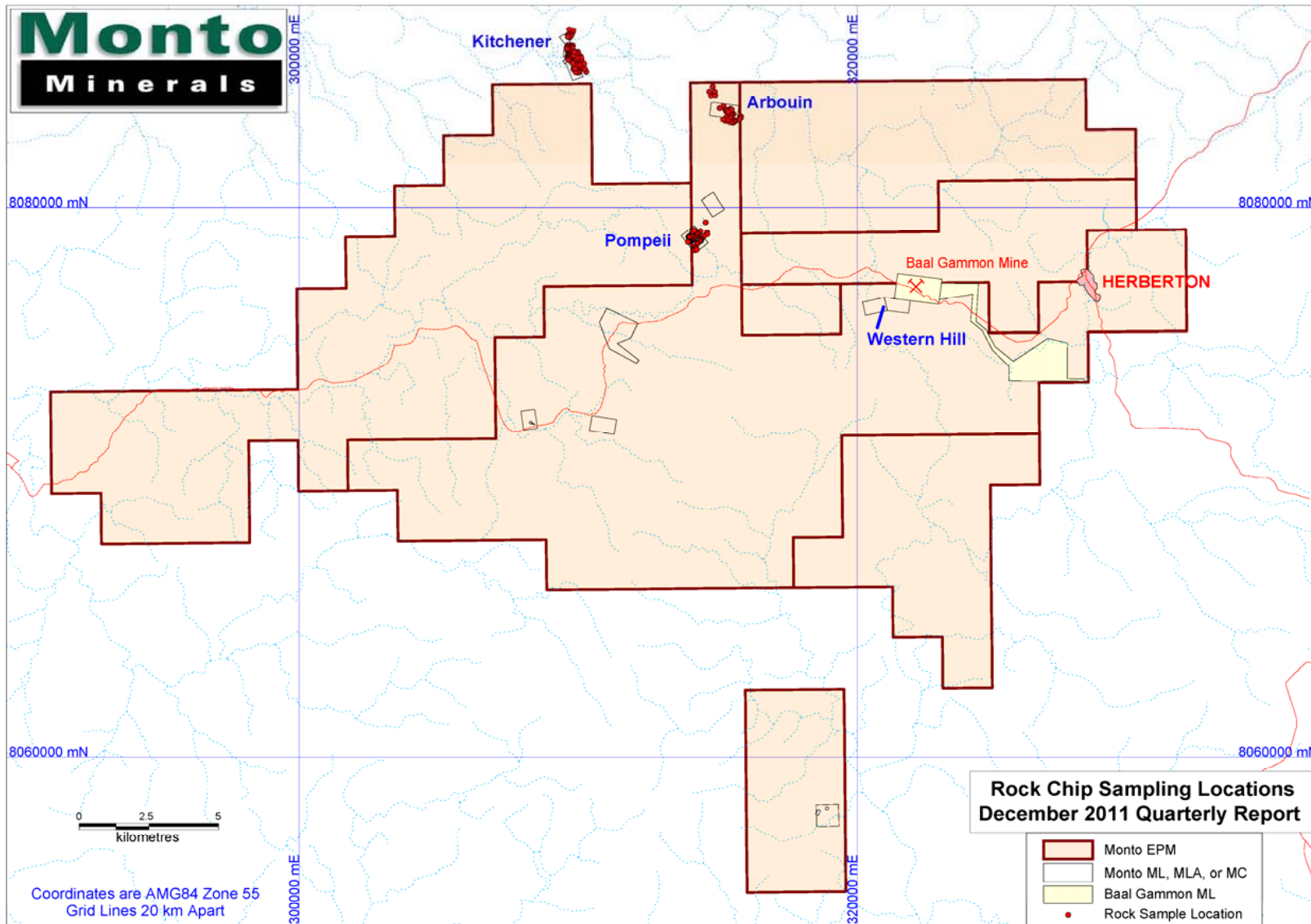
Data generated from the geological/structural mapping exercises and rock chip sampling traverses is complementing existing geophysical, geochemical and historical information. The forthcoming drilling programme has been designed and further refined using the important data captured during this phase of fieldwork.

***Stream Sediment and Geochemical Sampling***

The stream sediment and geochemical sampling programme continued through the December 2011 quarter. Initially the programme was designed to sterilise specific areas whilst also addressing the lack of regional stream sediment and geochemical data. Geochemical samples were submitted for assay and stream sediment samples were panned or processed by a Knelson concentrator. Surprisingly, anomalous tin was detected in a number of the stream sediment and geochemical samples indicating a potential tin source in granites previously thought of as unmineralised.

Stream sediment and geochemical sampling undertaken during the December 2011 quarter targeted drainage in the vicinity of suspected mineralised topographic features. Geochemical samples are awaiting assay whilst bulk stream sediment samples collected in the Silver Valley area have generated pan concentrates of coarse tin.

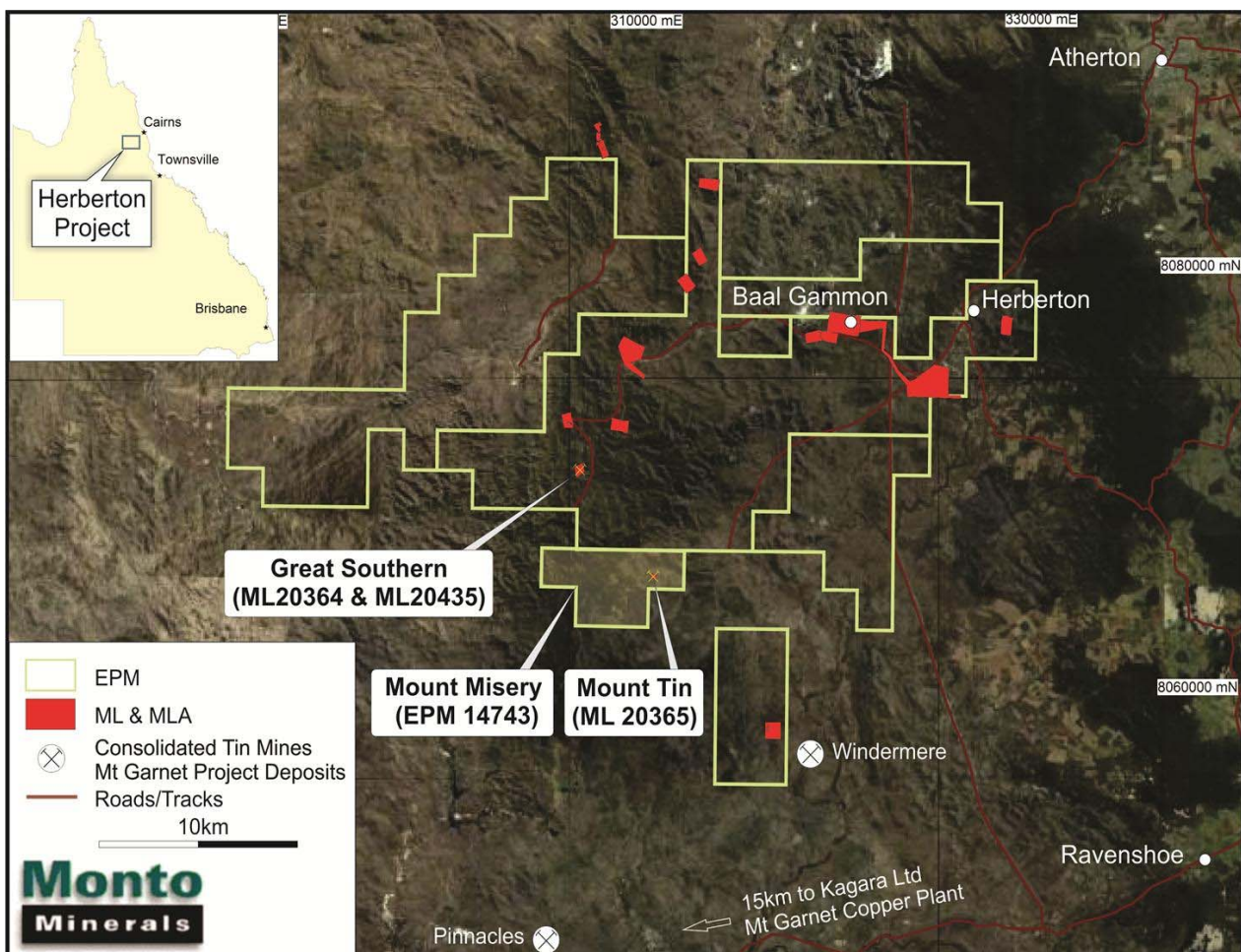
Monto is extremely encouraged by the presence of tin in areas previously not recognised as containing any form of tin mineralisation.



## Option to Acquire Advanced Tin Exploration Ground

Monto has signed two option agreements to purchase several advanced tin mining properties contiguous with Monto's existing tenements. The agreements provide exclusive options over the properties for a period of two years for a total up-front option fee payment of \$30,000.

The mining properties include three granted Mining Leases (MLs) and one Exploration Permit (Minerals) (EPM) which incorporates the historic Great Southern tin mine and the Mount Misery prospect. The Mount Misery property comprises both EPM 14743, which has an area of approximately 20km<sup>2</sup>, and ML 20365 which has an area of 4ha and is centred on the former Mount Tin mine. EPM 14743 is contiguous with Monto's existing EPM holdings.



Location of Mining Properties subject to Option Agreements

Extensive exploration work undertaken by WMC at Mount Misery included over 200 drill holes (totalling over 4,800m) as well as underground bulk sampling. Significant drill intercepts include:

- 12.9m @ 0.85% Sn from 30m (incl. 3.65m @ 1.78% Sn)
- 30.05m @ 0.77% Sn from 29m (incl. 10.65m @ 1.3% Sn)
- 13.4m @ 0.63% Sn from 76m (incl. 4m @ 1.75% Sn)

Through the bulk sampling operation, WMC identified target mineralisation<sup>1</sup> at Mount Tin of between 100,000t and 140,000t of mineable ore at a grade of 0.4% - 0.6% Sn to a depth of 100m. WMC used a cut-off grade of 0.2% Sn and, through extensive testing, demonstrated a recovery of approximately 80%.

Exploration reports indicate significant potential for the identification of additional mineralised zones similar to that outlined at Mount Tin. The Morning Cloud, Landmark, Murphy's Luck and Day Dawn prospects are located within 400m of Mount Tin and all represent significant targets.

Great Southern ML 20364 is wholly included within the larger 18.5ha ML 20435. Both Great Southern MLs are incorporated within Monto's existing EPM holdings.

The former Great Southern tin mine commenced mining in 1881 and is one of the most historic underground mines in the Herberton Tin Field producing some 1,800t of tin metal to a depth of around 120m. Since 1926 the mine was continually worked for 60 years by a family operation for which tin production figures have not been provided.

Tin mineralisation is in the form of cassiterite and has historically recorded high recoveries through simple gravity separation methods. The tin occurs in relatively high grade shear features hosted in metasediments and has been historically readily identifiable through its close association with chlorite.

Metals Exploration NL (now Metals X Limited) conducted a detailed exploration programme from 1965-1967 which included underground development of approximately 386m (including shaft sinking) and 2,861m of mostly underground diamond drilling. The exploration programme concentrated on one mineralised shoot and generated target mineralisation<sup>1</sup> of 25,000 – 30,000t at a grade of 1 – 1.3% Sn.

No recorded exploration has been conducted since the mid-1960s at Great Southern and a preliminary review of supplied information indicates the potential for additional resources to be identified between existing underground workings and the surface and also through the identification of further shear repetitions and crosscutting structures.

<sup>1</sup> The Company has target mineralisation but it does not comply with the JORC Code guidelines for the reporting of identified mineral resources and ore reserves. Therefore this mineralisation is considered to be an Exploration Target estimate. The Company plans to undertake further work to enable the estimates to become JORC Code compliant. On this basis, the potential quantity and grade is conceptual in nature. There has been insufficient exploration to define a Mineral Resource under the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource.

## Baal Gammon Mine and Kagara Strategic Alliance

### **Baal Gammon Mine**

Kagara commenced trucking ore from Baal Gammon in late November. Net Smelter Royalty payments to Monto under the Mineral Rights Agreement, which covers all metals, are expected to commence in early 2012.

Monto and Kagara have made significant progress with respect to the assessment of the technical feasibility and commerciality of a tin extraction circuit at the Mt Garnet processing facility. The establishment of a tin extraction circuit at Kagara's Mt Garnet Plant would be a significant development for Monto as it would provide considerable additional cashflow stemming from royalties on tin production from Baal Gammon and would provide a natural processing option for tin resources identified on the 554km<sup>2</sup> Herberton Tin Project.

### **Baal Gammon Resource Drilling and Resource Generation**

Resource diamond drilling conducted by Kagara at the Baal Gammon mine has concluded, results are shown below.

**Baal Gammon Drilling – Significant Intercepts**

Hole ID	From (m)	To (m)	Intersection (m)	Copper (%)	Silver g/t	Indium g/t	Tin %
BG509	7	14	7.00	3.29	73	155	0.13
BG509	22	29	7.00	7.77	201	462	0.04
BG512	22.15	22.8	0.65	2.85	66	71	0.26
BG514	16.3	20	3.70	1.31	28	54	0.03
BG514	32.7	37.5	4.80	1.93	125	79	0.15
BG514	39.5	43.3	3.80	1.81	61	68	0.04
BG515	20	21.7	1.70	11.89	185	185	0.11
BG515	34	42	8.00	2.01	94	109	0.08
BG517	32	36	4	2.01	99	51	0.08
BG517	43.8	48.2	4.4	2.71	143	89	0.09
BG518	29	31.9	2.9	1.7	152	42	0.14
BG519	52.5	63.2	10.7	2.91	131	136	0.69
BG520	30	38.1	8.1	5.18	101	179	0.17
BG525	55.9	62	6.1	1.7	31	140	0.20
BG527	28.1	30.1	2	16.91	468	951	0.88
BG530	29.2	32.6	3.4	3.32	78	128	0.11

**Note:**

All drill holes vertical with the exception of BG509 (-71°/68°), BG511 (-55°/100°), BG513 (-62°/65°), BG514 (-48°/53°), BG515 (-73°/98°), BG518 (-72°/324°) and BG521 (-79°/346°).

Subsequent to the end of the December 2011 quarter, Kagara released an updated Global Resource estimation for Baal Gammon using Ordinary Kriging and applying a hard boundary to the two domains, namely massive sulphide mineralisation along the UNA porphyry sill contact zone and disseminated mineralisation within the UNA porphyry sill.

**Baal Gammon Resource – 0.2% Cu cut-off**

Resource Category	Volume m <sup>3</sup>	Tonnes	Copper %	Silver g/t	Tin %	Indium g/t
Inferred	10,492	30,636	0.6	18	0.1	63
Indicated	918,324	2,769,385	1.0	40	0.2	38
<b>Total</b>	<b>928,816</b>	<b>2,800,021</b>	<b>1</b>	<b>40</b>	<b>0.2</b>	<b>39</b>

Note: Material mined to date and known underground workings have been subtracted from the figures above

Within the above Baal Gammon Resource there is a higher grade zone as outlined below.

**Baal Gammon Higher Grade Zone Resource**

Resource Category	Volume m <sup>3</sup>	Tonnes	Copper %	Silver g/t	Tin %	Indium g/t
Inferred	1,047	3,622	2.7	94	0.4	146
Indicated	238,621	825,629	2.5	96	0.4	96
<b>Total</b>	<b>239,668</b>	<b>829,251</b>	<b>2.5</b>	<b>96</b>	<b>0.4</b>	<b>96</b>

Note: Material mined to date and known underground workings have been subtracted from the figures above

The purpose of the Baal Gammon Resource calculation was to optimise the current pit design to ensure maximum recovery of the higher grade portions of the Resource.

The identification of the larger than expected high grade Resource zone within the broader Baal Gammon Global Resource has enhanced the economics of the Baal Gammon mine with this material having been prioritised for production from the commencement of mining in late September 2011. Copper in this zone averages 2.5% with significant silver credits of 96g/t. Investigations are continuing on the potential to recover tin.

***Monto/Kagara Herberton Mineral Field Review***

Monto and Kagara jointly commissioned the services of an independent consulting geologist with experience in the Herberton Mineral Field to conduct a review of all copper, zinc, lead, gold and silver (non-tin metals) prospects contained within Monto's exploration ground.

The review focussed on many of the non-tin metals prospects with a view to establishing specific terms for proposed joint venture(s) whereby Kagara will have the right to explore for metals (excluding tin) over specific prospects identified. The formal terms of the joint venture(s) are to be agreed.

A series of reports from the independent consulting geologist were received during the December 2011 quarter. These reports are currently being assessed by both Monto and Kagara.

### Confederation Mining Lease Application (MLA)

During the December 2012 quarter, Monto lodged a MLA over the Confederation group of former mines. The 220ha MLA is contiguous with the existing Baal Gammon Mining Leases with all known prospects located within 800m of the existing Kagara-operated Baal Gammon mine.

Historical drilling across the Confederation group includes 65 mostly diamond drill holes totalling over 8,300m. Previous owners North Queensland Metals Limited (NQM) drilled six percussion holes at the Confederation group in late 2008, three of which contained significant mineralisation:

Confederation RC Drilling Results - NQM

Hole ID	From (m)	To (m)	Total (m)	Cu (%)	In (g/t)	Ag (g/t)	Sn (%)
CSN02	93	94	1	2.0	140	57.5	0.025
CSN04	111	134	23	2.24	160	74.55	0.073
(includes)	118	124	6	3.90	270	132.5	0.143
CSN06	47	51	4	1.44	177	90.25	0.158

The Confederation group was originally exploited for coarse grained cassiterite tin, however when sulphides were encountered at depth within the old workings the primary payable metals became copper and silver with stanniferous tin.

The Confederation group of former mines and prospects represents an area of mineralisation that has historically supported a number of high grade underground operations and in more recent times has been subjected to a series of comprehensive drilling programmes. The close proximity to the currently operating Baal Gammon mine and the advanced state of the prospects provides the potential opportunity to exploit ore from the Confederation group following a positive outcome from ongoing modelling work and granting of the Mining Lease.

### Corporate

During the December 2011 quarter Monto made a cash payment of \$1.5M to Evolution Mining following a decision to mine Baal Gammon. There are no further payments required under the acquisition agreement.

#### **Contact Information:**

Managing Director

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[www.montominerals.com](http://www.montominerals.com)

## **Baal Gammon Project Summary**

Baal Gammon is a copper/tin/silver/indium deposit incorporated in the broader Herberton project area and comprises the following **JORC Code-compliant resources**:

### **Baal Gammon Resource – 0.2% Cu cut-off**

<b>Resource Category</b>	<b>Volume m<sup>3</sup></b>	<b>Tonnes</b>	<b>Copper %</b>	<b>Silver g/t</b>	<b>Tin %</b>	<b>Indium g/t</b>
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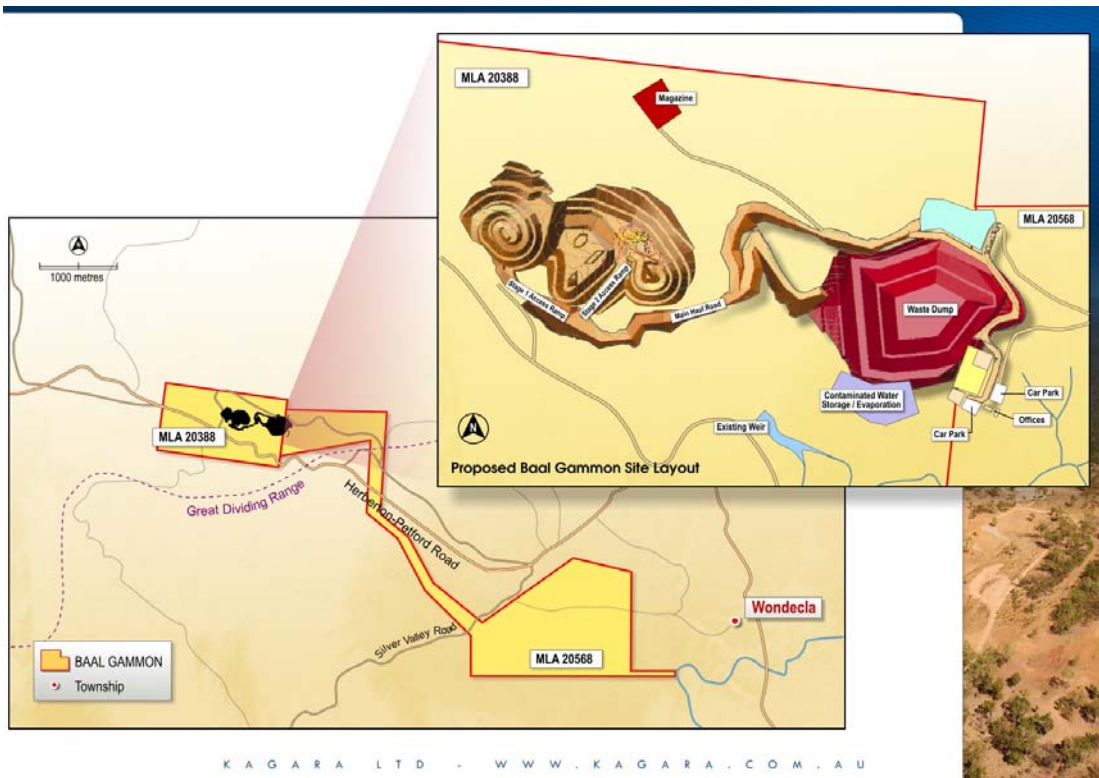
On 12 May 2011, Monto announced the signing of a Mineral Rights Agreement (MRA) for Kagara to mine Baal Gammon.

Transaction terms as follows:

- \$6,000,000 initial capital payment payable in Kagara shares (payment complete)
- 2.5% NSR (Net Smelter Royalty) payable on all metals for the first 550,000t of ore processed
- 2% NSR payable on all metals over 550,000t of ore processed

Kagara commenced open pit mining operations in September 2011 and are processing Baal Gammon ore at their nearby 500,000tpa Mt Garnet copper processing facility. Under the terms of the Baal Gammon MRA Kagara will pay the NSR to Monto within five business days of receipt of payment from the product (concentrate) buyer. Kagara at present generally sell concentrate from the Mt Garnet facility on a monthly basis.

Kagara is responsible for all costs with respect to Baal Gammon mine development and operations.



*Competent Persons Statement*

*The information in this report which relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr James Allchurch, a Director, who is a Member of the Australian Institute of Geoscientists. Mr Allchurch 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 2004 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr Allchurch consents to the inclusion in this announcement of the statements based on this information in the form and context in which it appears.*