



METEORIC RESOURCES

QUARTERLY REPORT for the Quarter Ended 31 December 2010

Meteoric Resources NL
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MEICA

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PO Box 963
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Issued Capital:
Shares - Quoted:
68,029,251 fully paid
shares
23,504,727 contributing
shares

Options - Unquoted:
2,400,000 options
exercisable at \$0.065 by
16.11.2011
2,580,000 options
exercisable at \$0.2249 by
23.12.2014

Cash: \$1.4 million

Directors:
Peter Thomas
Chairman
Roger Thomson
Managing Director
George Sakalidis
Executive Director

HIGHLIGHTS

COORARA

- Geological mapping identifies a structurally complex BIF sequence favourable for the formation of iron enrichments.
- Rock sampling provides further encouragement for hematite-goethite mineralisation with composite chip sample results up to 35m @ 58.9%Fe.
- A trial gravity survey over a limited part of the project area outlines 4.5 km of targets for drilling.
- Initial RC drilling programme commences.

TIBOOBURRA

- Several large gold and multi-element geochemical anomalies identified. Planning of follow up drilling in progress.

COORARA (Meteoric right to 100%)

Rock sampling has continued to highlight the potential for hematite-goethite mineralisation (MEI ASX release 17 November 2010). 46% of a total of 71 rock samples confirmed the presence of significant iron grades (>55% Fe) in altered or weathered quartz magnetite banded iron formation (BIF) with low impurities, as summarised in Table 1.

Table 1
Coorara Rock Sampling Results

Sample Number	Co-ordinates		Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %
	E	N					
BIF002	219687	6660869	64.69	1.75	1.03	0.044	4.36
BIF007	218763	6664344	56.73	5.91	5.08	0.037	7.50
BIF008	218740	6664408	61.77	3.45	2.79	0.04	5.23
BIF009	218668	6664288	65.24	1.36	1.25	0.117	3.88
BIF010	217278	6667231	65.84	0.96	1.64	0.065	1.77
BIF011	217219	6667273	60.01	3.30	3.30	0.022	5.85
BIF012	217107	6667300	61.37	3.25	2.40	0.043	6.10
BIF016	220917	6659212	58.78	7.39	3.57	0.021	4.64
ASRC002	216652	6666375	56.99	8.61	1.18	0.065	8.46
ASRC003	222137	6658039	63.03	3.73	1.48	0.016	4.46
ASRC009	222487	6658108	62.27	4.44	1.29	0.018	4.77
ASRC013	222277	6658030	57.91	4.56	1.94	0.028	10.38
ASRC016	222769	6657286	58.74	4.48	5.01	0.027	4.28
ASRC017	222371	6657626	58.71	6.83	0.71	0.187	7.68
ASRC021	217092	6667388	59.64	3.32	1.97	0.083	8.97
ASRC022	217103	6667370	61.27	2.95	2.47	0.075	6.51
ASRC024	217185	6667246	62.24	3.03	2.71	0.038	4.44
ASRC025	217114	6667312	59.99	2.18	3.65	0.032	8.03
ASRC027	216800	6667488	63.37	2.06	2.01	0.034	4.75
ASRC028	216801	6667804	58.53	3.36	1.53	0.015	10.83
ASRC032	219422	6663128	58.32	7.23	1.43	0.064	7.40
ASRC034	218953	6663882	56.01	3.80	3.06	0.056	11.88
ASRC035	218954	6663933	56.16	4.28	3.02	0.028	11.90
ASRC036	218897	6664000	55.66	3.73	3.52	0.058	11.83
ASRC037	218848	6664009	58.23	2.31	1.44	0.074	11.95
ASRC038	218725	6664398	62.79	2.44	2.28	0.046	4.99
ASRC040	218651	6664299	62.91	3.04	2.61	0.083	3.91
ASRC041	219672	6663165	69.20	0.45	0.14	0.027	0.25
ASRC045	219704	6660821	63.04	2.84	1.64	0.046	5.06
ASRC047	219443	6660986	62.52	1.90	0.56	0.092	7.61

Fe, SiO₂, Al₂O₃ and P analysed by fused disc XRF method

*sample ASRC041 is a magnetite-rich sample

The average grade of the 30 higher grade samples shown in Table 1 is 60.7% Fe, 3.6% SiO₂, 2.2% Al₂O₃, 0.05% P and 6.7% LOI (loss on ignition) indicating potential for direct shipping ore (DSO) grades. The samples were taken over a 12km strike length of multiple BIF horizons in the northern part of the project area and continue to reinforce the target areas identified from Meteoric's detailed aeromagnetic survey, see Figure 1.

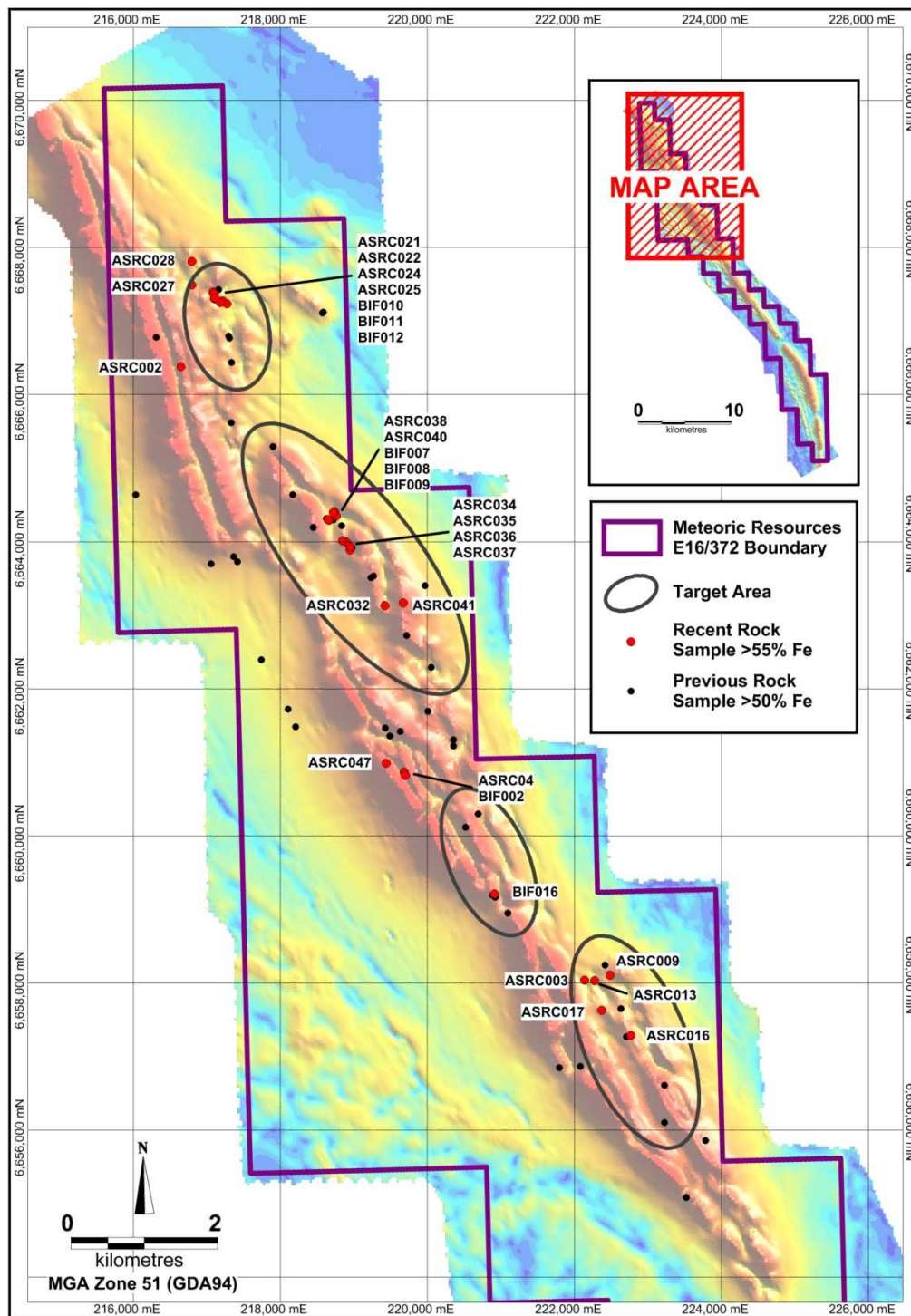


Figure 1
Coorara Rock Sample Locations (Aeromagnetic Image)

In addition, rock chip sampling traverses in five target areas has indicated significant widths of hematite-goethite. A total of 194 rock chip samples were collected across outcrop (and occasionally sub-crop) of which 83 returned grades of higher than 55%Fe. The samples comprised close spaced rock chips at 20cm intervals, generally over 5m lengths. Weighted average grades for composite samples have been calculated for contiguous high grade samples. This sampling is considered to provide indicative grades and widths for drill targeting purposes. Significant results are summarised in Table 2, including a best result of 35m @ 58.9%Fe, 5.9% SiO₂ and 0.07%P.

Using a 55%Fe cut-off, the weighted average grade of the composite samples is 58.3%Fe, 5.6% SiO₂, 0.05%SiO₂, 0.95%P and 7.1%LOI. The sample locations and highlighted results are shown in Figure 2.

Table 2
Coorara Composite Rock Chip Sampling Results

Sample No	Location		Azimuth	Width m	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %
	E	N							
T1L1	217082	6667373	298°	4	59.77	5.01	2.17	0.06	7.0 2
T1L3	217101	6667353	084°	15	58.38	5.97	2.96	0.03	7. 14
T1L4	217111	6667334	039°	10	59.15	5.25	2.04	0.05	7. 41
T1L5A	217113	6667316	092°	10	59.65	3.26	3.04	0.04	7.76
T1L5B	217104	6667316	091°	3	58.57	8.70	1.95	0.03	5. 59
T1L6	217124	6667279	041°	6	57.10	4.76	4.67	0.04	7.9 7
T1L8	220930	6659158	041°	8	58.77	5.56	3.66	0.04	6.5 6
T1L9	217278	6666254	100°	5	59.56	4.43	4.78	0.03	5.1 6
T1L11A	217277	6666205	046°	5	58.36	4.76	4.99	0.03	6. 19
T1L11B	217293	6666214	015°	7	62.43	2.83	2.75	0.06	4. 51
T1L11C	217303	6666224	107°	5	55.24	5.71	6.46	0.04	8. 25
T1L13	217274	6666154	082°	10	53.12	6.59	7.80	0.02	8. 32
T2L3A	218705	6664366	028°	5	59.34	6.84	2.44	0.04	4. 88
T2L3B	218721	6664381	092°	5	56.27	5.19	4.48	0.05	9. 02
T2L4	218620	6664350	062°	20	58.35	7.93	2.35	0.06	5. 98
T2L5	218639	6664297	068°	35	58.89	5.95	2.65	0.07	6. 83
T2L6	218667	6664254	069°	25	61.65	3.76	1.94	0.07	5. 93
T2L7	218691	6664205	060°	24	56.68	7.88	3.78	0.05	6. 79
T2L10	219216	6663354	097°	14	58.22	7.41	3.06	0.03	5. 86
T2L11	219218	6663314	095°	14	60.23	5.22	2.25	0.04	6. 04
T2L12	219257	6663307	069°	13	57.49	5.71	3.58	0.05	7. 82
T2L13	219263	6663253	088°	15	55.35	8.61	3.78	0.04	7. 61
T2L14	219313	6663265	074°	12	56.90	2.51	3.54	0.02	10.78
T2L15	219354	6663201	062°	19	58.51	3.93	3.75	0.04	8. 01
T2L16	219392	6663165	035°	10	59.22	4.79	2.68	0.07	7. 59
T2L17	219375	6663152	046°	9	56.70	5.35	4.50	0.04	8. 41
T2L18	219387	6663155	040°	10	55.69	6.48	4.80	0.05	8. 49
T2L19	219432	6663139	007°	13	59.86	4.68	2.33	0.06	7. 07
T4L3	220930	6659158	041°	10	58.77	5.56	3.66	0.04	6. 43
T5L1	226880	6650224	076°	10	55.99	6.73	5.12	0.06	7. 58
T5L2	226924	6650118	058°	10	58.29	4.57	4.72	0.03	6. 13

Fe, SiO₂, Al₂O₃ and P analysed by fused disc XRF method. Horizontal, rock chip samples, generally in 5m intervals.
Location coordinates at the western end of each composite sample. Sample direction orthogonal to BIF strike direction

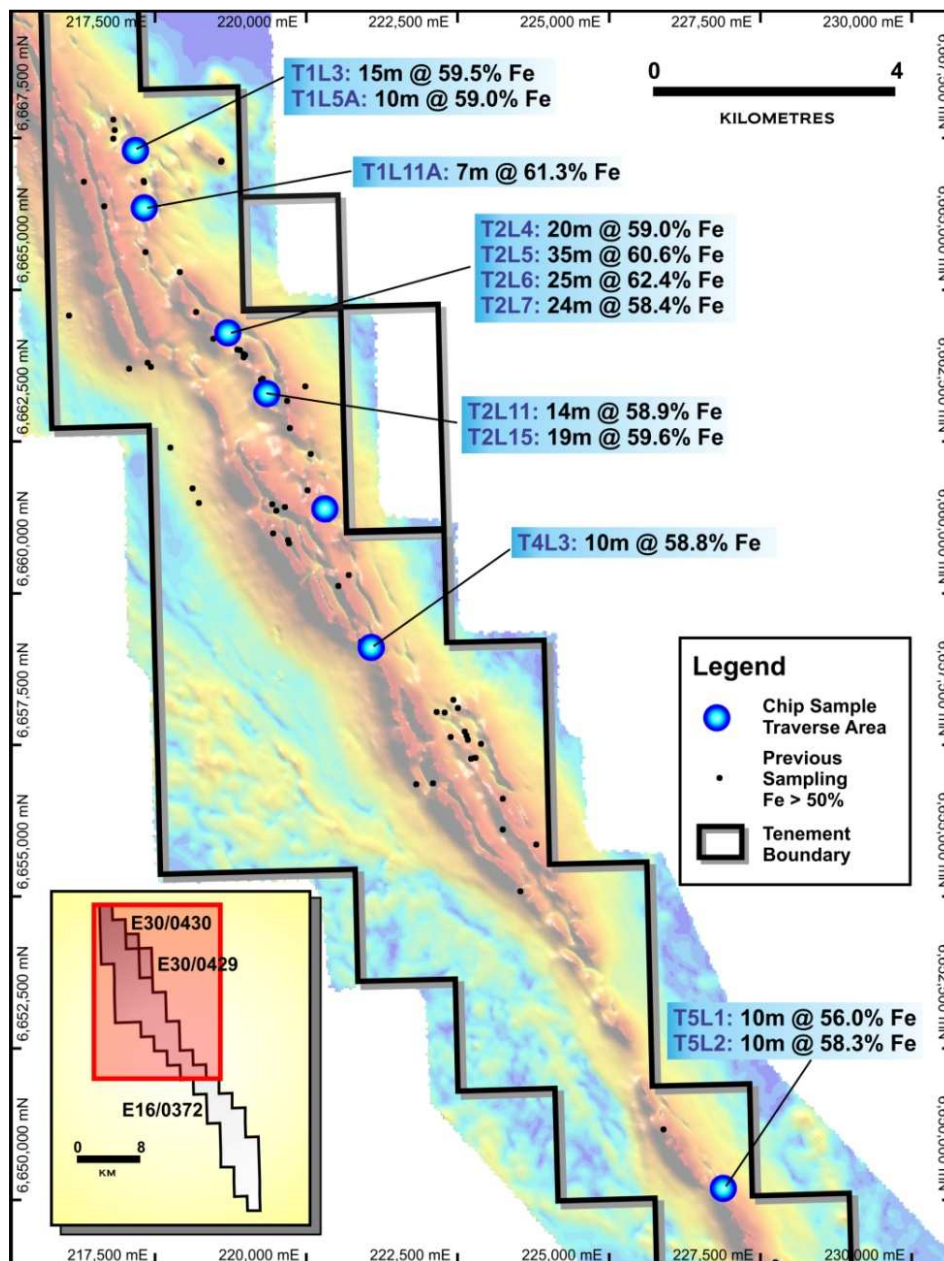


Figure 2
Coorara Chip Sample Traverse Locations (Aeromagnetic Image)

Detailed geological mapping has been carried out over the northern part of the project and focusing on the northern 15km of the interpreted 40km strike length of BIF, in an area where outcrop is more prevalent. The mapping identified two broad zones within the BIF sequence; a linear Western BIF comprising mainly magnetite BIF and a structurally complex Eastern BIF exhibiting strong folding and structural deformation.

The Eastern BIF comprises a package of BIF and intercalated ultramafic and mafic schists which can be traced discontinuously in outcrop for about 17km along strike. Within this zone the BIF has in places been altered to hematite-goethite, see Figure 3. Sampling has also identified +50%Fe grades to the south along strike where detailed mapping has yet to be completed. Structural complexity of the type exhibited in the Eastern BIF and the interpreted presence of large strike faults of shears can be a factor in causing the alteration of magnetite BIF to hematite-goethite mineralisation.

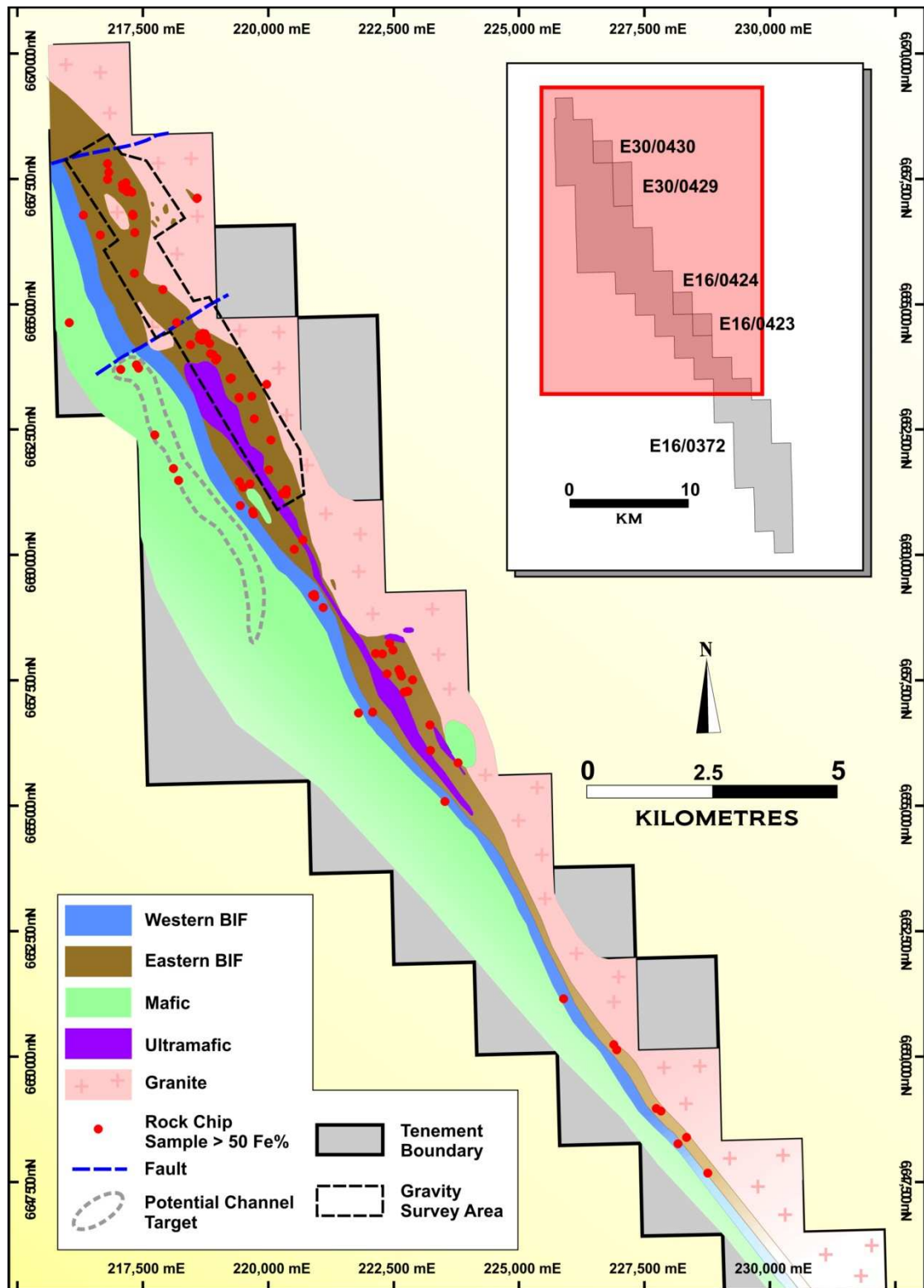


Figure 3
Coorara Generalised Geology

Another significant result of the mapping was the recognition of cemented detrital hematite-goethite outcrops and the presence of pisolitic ironstone gravels which indicate potential for channel iron deposits formed by the weathering and/or mobilisation of the altered BIF. A separate programme is being planned in order to assess the potential of these occurrences.

A trial gravity survey (960 stations, 200 m x 50 m spacing) has been carried out over an 8 km strike length of the Eastern BIF sequence. The survey covers less than 25% of the BIF sequences in the project area. Gravity surveying can identify the presence of dense rocks such as hematite-goethite

enrichment, particularly when the magnetic signature of BIF is reduced by alteration of the magnetite to less magnetic iron minerals. The residual gravity results identify a series of gravity anomalies, as shown in Figure 4.

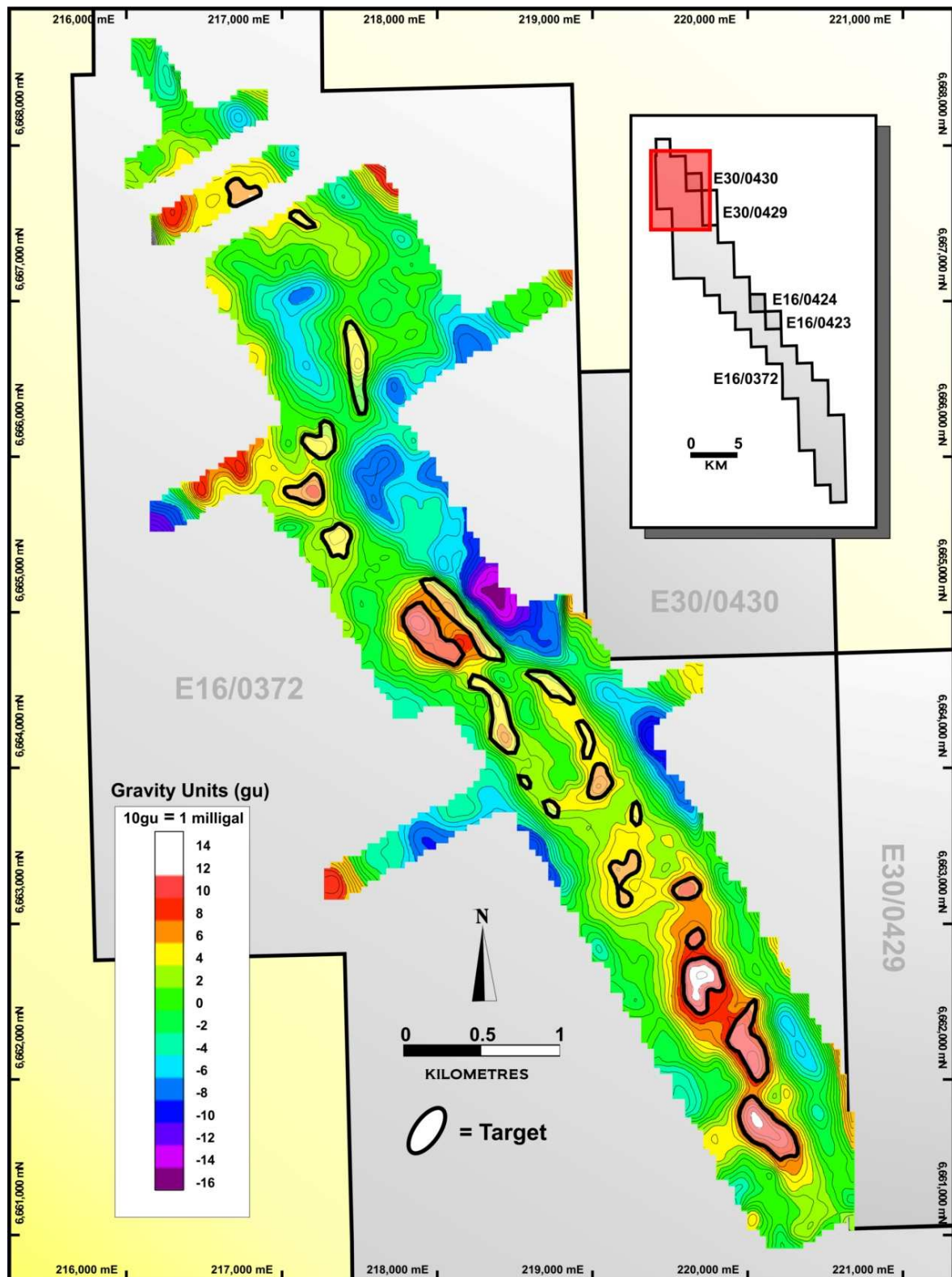


Figure 4
Coorara Gravity Survey and Targets

Many of these gravity anomalies coincide with areas of reduced magnetic response and/or known hematite-goethite enrichments. The cumulative strike length of the gravity targets totals at least 4.5 km, including a strong 2 km-long zone of anomalies at the southern end of the survey area.

Following the encouraging results of the geological mapping rock sampling and gravity survey, Meteoric has commenced an initial RC drilling programme to test priority targets for hematite-goethite mineralisation.

ROBINSON RANGE (Meteoric 100%)

Permitting for the initial drilling of hematite-goethite outcrops along the Robinson Range iron formation is in progress at this project in the emerging Mid West Iron Province of WA. As part of the permitting process, there is a requirement for flora and fauna survey to be carried out over part of the project area. The survey is required to be carried out after rainfall so the timing of the survey remains undetermined at this stage.

WEBB (Meteoric 100% or earning up to 70%)

A 3mgal gravity anomaly has been identified in close proximity to the T2 magnetic target (previously reported). Modelling of the gravity and magnetic data is in progress, to further assess the potential of the target for iron oxide-copper-gold (IOCG) mineralisation. Preparations remain in hand to carry out heritage surveys over IOCG targets T4 and T5 where strong, discrete magnetic anomalies have been identified. The heritage surveys are anticipated to be carried out during next quarter. Following these surveys it is proposed to carry out gravity surveys to further assess these targets for IOCG potential.

TIBOOBURRA (Meteoric right to earn up to 75%)

A geochemical survey has been completed over several targets areas prospective for gold at the old Tibooburra gold field, about 300km north of Broken Hill, NSW (MEI ASX release 15 November 2010). Follow up sampling to define anomalies brings the total to 2,026 soil samples and 733 stream sediment samples.

The Tibooburra goldfield comprises several inliers of Cambrian metasediments which host numerous quartz veins and stringers. The Cambrian inliers occur within an area extending from the town of Tibooburra for some 50km to the south west, as shown in Figure 5. Very little systematic gold exploration has been completed in the Tibooburra goldfield, with only two of the numerous vein systems drilled and no drilling below a depth of 60m. The area is considered to have potential for both high grade veins and bulk tonnage vein arrays.

The soil sampling (mostly on 500m x 50m spacing) identified several large, coherent areas of elevated gold-arsenic-antimony responses, summarised as follows:

- Evans Gully: 3.5km x 0.5km +3ppb Au envelope containing several gold peaks ranging from 10-40ppb Au (background <2ppb Au). An antimony anomaly of 0.3-0.6ppm Sb (background 0.1ppm Sb) remains open to the south.
- New Bendigo: 4km x 200m-800m +3ppb Au envelope containing five gold anomalous zones, three of them more than 1km in length, ranging from 10-120ppb Au and open to the north. Old gold diggings in this area show evidence of sericite-altered quartz stockworks.
- Mt Poole Diggings: 4.5km x 0.5km +3ppb Au envelope containing three gold anomalous zones, one of them more than 1.5km in length, ranging from 10-20ppb Au.
- Kink (between New Bendigo and The Peak): 5km x 100m-200m +3ppb Au envelope with a pronounced 2km-long, 200m-500m wide antimony anomaly ranging from 0.3-3ppm Sb.

This area is characterised by extensive deposits of both residual and transported quartz float and very little outcrop.

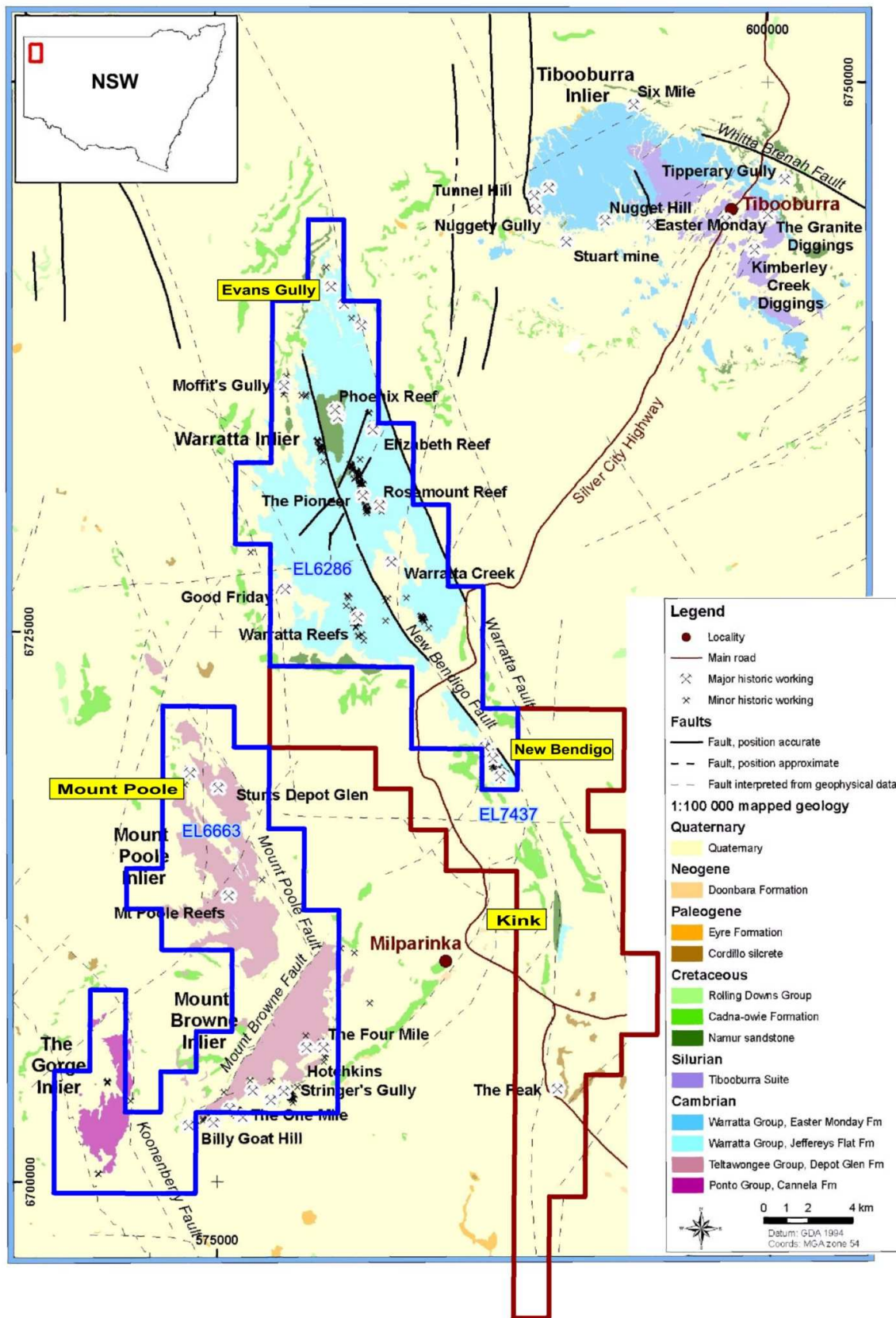


Figure 5
Tibooburra Goldfield, NSW

The cover in the anomalous areas ranges from thin soils on weathered Cambrian sediments to gravel-covered outwash plains derived from younger Cretaceous sediments. The multi-element character of the anomalies suggests a bedrock rather than an alluvial source of the gold.

Following these encouraging results Meteoric is planning a RAB drilling programme to test these previously untested targets. Subject to permitting, the drilling is anticipated to commence mid year.

UNALY HILL SOUTH (Meteoric 100%, diluting)

As previously reported, Black Ridge Mining (ASX:BRD) completed five RC drill holes over a 1.2 km strike of the Atley Igneous Complex. The drilling intersected vanadiferous magnetite in all holes, with an average intersection width of 21m and a weighted average grade of 0.48%V₂O₅. This grade compares favourably with the quoted resource grade of 0.47%V₂O₅ at the Windimurra vanadium project situated 30km to the west.

Black Ridge Mining has completed its minimum expenditure requirement and elected to continue to earn-in. Meteoric has agreed to an extension of the earn-in period from three to six years. Under the terms of the agreement Black Ridge Mining may earn a 60% interest (excluding gold and silver) by expenditure of \$1M within the earn-in period.

For more information on the company visit www.meteoric.com.au

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The information in this report that relates to exploration is based on information compiled or reviewed by Roger Thomson BSc, ARSM, MAusIMM, who is a Member of the Australian Institute of Geoscientists. Roger Thomson is a director of Meteoric Resources NL. Roger Thomson 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 of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Roger Thomson consents to the inclusion of this information in the form and context in which it appears in this report