



## MT THIRSTY PROJECT - EXPLORATION UPDATE

### Highlights

- **Drill Assay Results Indicate Further Southern Extensions to Mt Thirsty Cobalt–Nickel–Manganese Oxide Mineralisation**
- **EM Survey to Test Potential Nickel Sulphide Mineralisation**

New assay results released today have effectively extended the mineralisation southwards of the existing resource at the Mt Thirsty cobalt-nickel-manganese project, which has the potential to be in the top five cobalt producers worldwide.

Proponents of Mt Thirsty, a 50:50 Joint Venture between Perth-based Barra Resources Limited and Fission Energy Limited, say that assay results from the latest drilling have confirmed that the project's cobalt-nickel-manganese oxide mineralisation continues to grow. Revised resource calculations will commence shortly with results expected in the coming weeks.

Mt Thirsty, located 20km north-northwest of Norseman (Figure 1), has a current JORC Indicated Resource of 14.8 million tonnes at 0.14% Co, 0.59% Ni and 0.99% Mn and a JORC Inferred Resource of 14.23 million tonnes at 0.11% Co, 0.52% Ni and 0.77% Mn over an apparent strike of 1.3 kilometres and a width of around 800 metres. Tonnes of contained metal are listed in the table below:

	Indicated	Inferred	Total
Tonnes Cobalt	20,700	15,600	36,300
Tonnes Nickel	87,300	73,800	161,100
Tonnes Manganese	146,520	109,300	255,820

Previous metallurgical test-work achieved atmospheric leach extractions of 99% cobalt, 78% nickel and 98% manganese. The current market price for cobalt is around \$A40,000 per tonne and \$A16,500 per tonne for nickel.

### Mineral Resource Extended

Step out air core drilling at 80m intervals along 4 lines spaced 100m apart (30 holes for 1,089m, holes MTAC 322 to 351) to the south of the current resource outlines has recently been completed. Assay results have now been received from all holes and significant cobalt intervals (based on 0.06% cut off) with associated nickel and manganese values are displayed in Table 1. Holes were drilled vertically and sampled in 1m intervals; locations are shown in Figure 2.

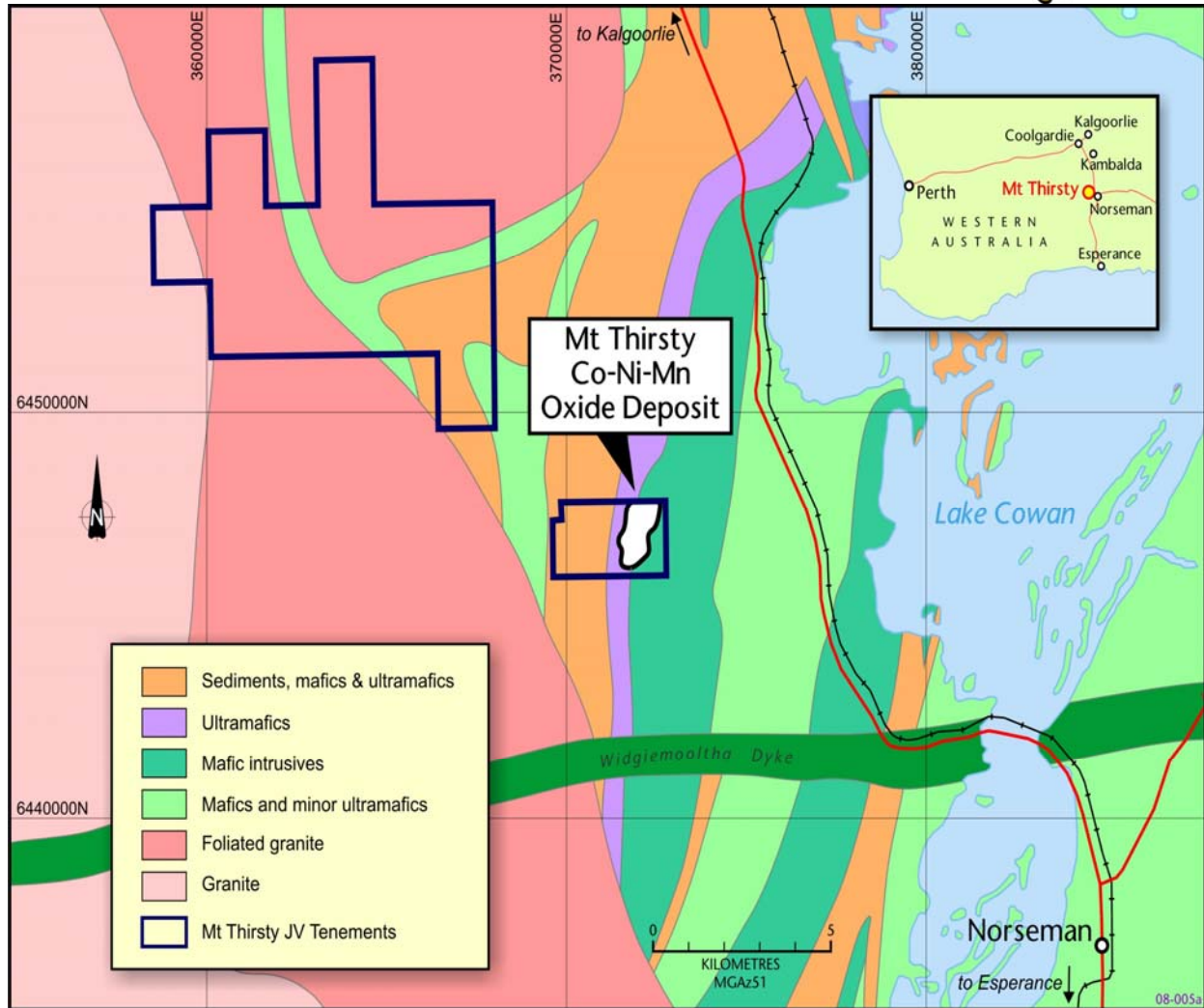
The extended mineralisation is lower grade and patchier as it approaches the tenement's southernmost boundary but appears sufficient, to allow estimation of an additional Inferred Resource within the 600m strike length to the southern tenement boundary.

A further 12 holes for 676m (holes MTAC 352 to 363) were mostly drilled in places within the existing resource outlines to better define selected areas of exceptional thickness and often higher grade which appear to be related to deeper weathering associated with cross - cutting structural features.

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**Figure 1: Mt Thirsty Project - Location and Regional Geology**

In most cases the drilling confirmed good lateral continuity to these areas of thicker mineralisation which had been tested previously by only a few holes. Best intersections were 43m at 0.14% Co, 0.69% Ni and 0.72% Mn in hole MTAC 352 and 31m at 0.18% Co, 0.75% Ni and 1.73% Mn in hole MTAC 363.

#### **Nickel Sulphide Exploration - Electromagnetic (EM) Survey**

Gossanous outcrops near the eastern margin of the Mt Thirsty deposit will be tested for nickel sulphides at depth using a deep penetrating SQUID fixed loop ground EM survey. This geophysical technique is designed to detect buried conductive minerals such as nickel sulphides. The survey is scheduled to commence later this month and will continue for about 10 days.

The gossanous outcrops were discovered in late 2008, and assays returned strongly anomalous nickel values up to 7500 ppm (refer announcement 29 October 2008). Geological mapping indicates the outcrops are located at the base of the Mt Thirsty Sill and hence there is potential for the discovery of ultramafic intrusive hosted Ni sulphide mineralisation similar to Mirabela Nickel's Santa Rita deposit.

An EM survey will also be carried out over the Woodcutters prospect 6km to the northwest of the Mt Thirsty deposit where potential nickel gossans have also been located within a komatiitic sequence (refer announcement 17 July 2008). This area therefore has potential for Kambalda-style nickel sulphides.



**Table 1**  
**Significant Drilling Results (based on 0.06% Co cut off)**

Hole No	East	North	Total Depth	From	To	Interval	Co %	Ni %	Mn%
AGD84 Zone 51			m	m	m	m			
<b>Southern Resource Drilling</b>									
MTAC323	371278	6445898	52	27	33	6	0.11	0.45	1.54
MTAC324	371358	6445897	35	20	22	2	0.18	0.41	0.51
MTAC326	371519	6445901	31	23	26	3	0.09	0.37	0.35
MTAC327	371201	6446190	43	29	30	1	0.08	0.32	0.39
MTAC328	371285	6446199	40	24	27	3	0.13	0.31	0.74
				31	32	1	0.06	0.16	2.23
MTAC329	371360	6446206	41	18	26	8	0.09	0.46	0.57
MTAC330	371449	6446202	42	18	25	7	0.09	0.36	0.56
MTAC330				28	31	3	0.09	0.72	0.40
MTAC331	371532	6446193	34	19	23	4	0.08	0.38	0.33
MTAC332	371601	6446211	29	1	3	2	0.13	0.45	0.52
MTAC333	371684	6446200	34	10	11	1	0.26	0.58	0.68
				33	34	1	0.08	0.10	0.19
MTAC334	371761	6446196	36	14	17	3	0.11	0.69	0.29
MTAC336	371760	6446102	27	3	4	1	0.13	0.35	0.93
MTAC338	371596	6446104	39	21	25	4	0.14	0.62	0.59
MTAC339	371521	6446104	42	29	33	4	0.14	0.61	0.57
MTAC340	371443	6446113	41	28	30	2	0.10	0.64	0.36
MTAC344	371508	6445998	45	32	34	2	0.12	0.43	0.53
MTAC345	371432	6446001	39	26	32	6	0.07	0.44	0.30
MTAC349	371602	6446001	42	8	14	6	0.10	0.34	0.30
<b>Infill Drilling</b>									
MTAC352	371459	6447002	65	14	57	43	0.15	0.69	0.72
MTAC353	371420	6446997	62	31	51	20	0.08	0.48	0.47
MTAC354	371423	6446939	58	22	33	11	0.10	0.69	0.56
MTAC355	371444	6446943	56	24	33	9	0.14	0.58	1.10
MTAC356	371443	6447048	55	29	43	14	0.09	0.37	0.63
MTAC357	371460	6447054	56	10	12	2	0.06	0.42	0.66
				23	56	33	0.11	0.49	0.79
MTAC358	371886	6447112	61	29	43	14	0.08	0.77	0.50
MTAC359	372224	6447454	38	16	29	13	0.14	0.62	0.80
MTAC360	372150	6447459	56	15	45	30	0.17	0.75	0.94
MTAC361	372188	6447449	50	16	35	19	0.14	0.59	1.02
MTAC362	372255	6446859	62	21	45	24	0.18	0.54	1.75
MTAC363	372294	6446841	57	26	57	31	0.18	0.75	1.73

Note: Only Ni and Mn average assays within intervals selected using a Co cut-off of 0.06% are reported.

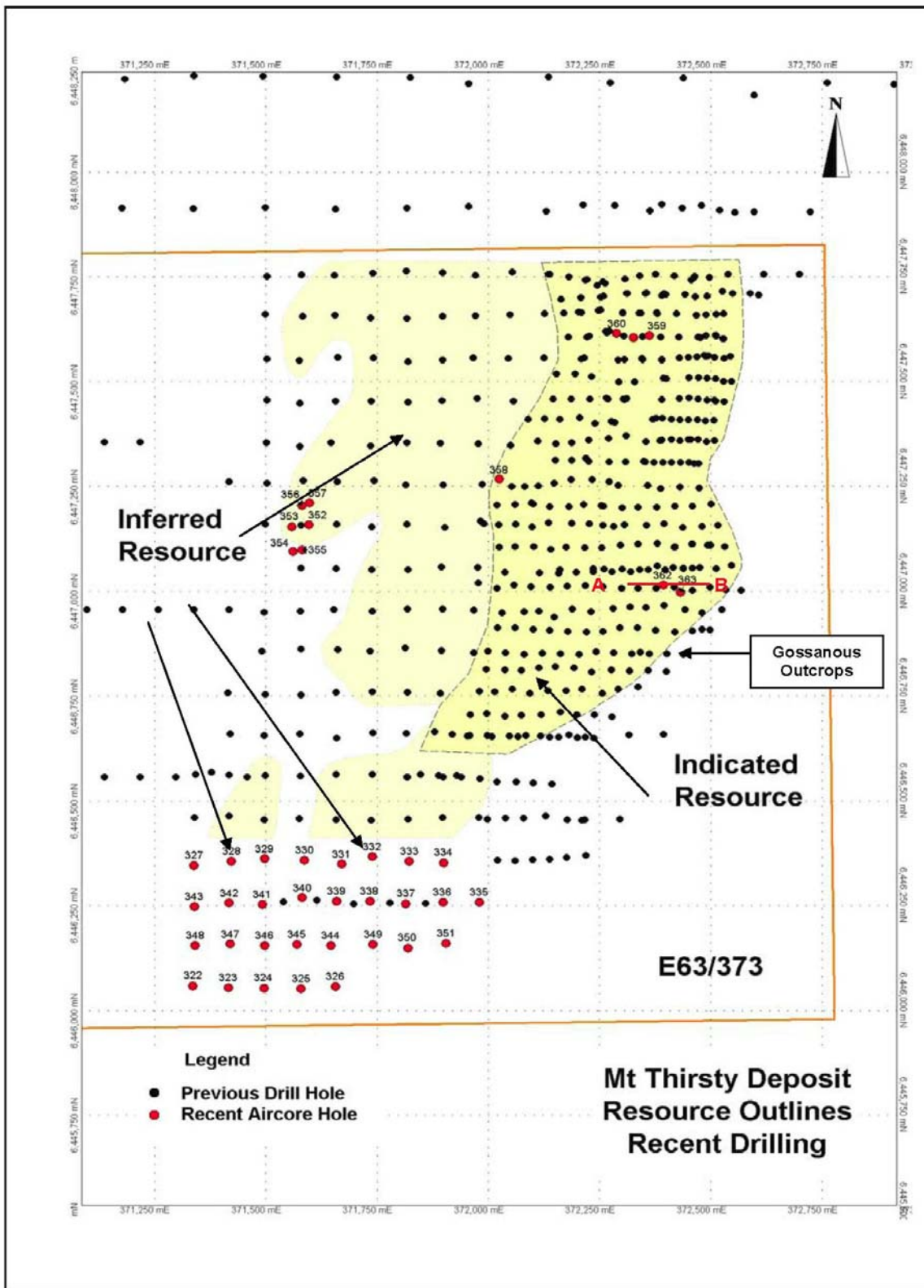


Figure 2: Drill Hole Locations (Recent (2009) holes shown in red)



A handwritten signature in black ink, appearing to read 'D. Goodwin', is written over a light-colored background.

**Dean Goodwin**  
Managing Director  
Barra Resources Limited

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dean Goodwin who is a Member of the Australian Institute of Geoscientists. Dean Goodwin is a full-time employee of the Company. Dean Goodwin 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". Dean Goodwin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.