

NEWS RELEASE
August 31, 2010

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For Immediate Dissemination

DSO GRADE MINERALISATION INTERSECTED - 24m at 62.4%Fe

VANCOUVER, BRITISH COLUMBIA – (Marketwire – August 31, 2010), Macarthur Minerals Limited (MMS – TSXV) (“the Company”) is pleased to advise that further RC drilling has returned further direct shipping ore (DSO) grade mineralisation at the Central North prospect with 24m at 62.5% Fe being recorded at its Lake Giles project, located in Western Australia. Key highlights:

- Hematite-goethite (DSO grade) iron mineralisation at Central projects. Better intersections include:
 - 24m @ 62.5%Fe from 6m depth**
 - 21m @ 57.4%Fe from 5m depth**
 - 14m @ 58.0%Fe from 5m depth**
 - 11m @ 58.2% Fe from 38m depth**
- 6 areas now confirmed to host hematite-goethite mineralisation.
- A total of 59 holes for 2,400 metres are pending assays.

The drilling was carried out over the outcropping hematite zones the Company has mapped and sampled earlier in the year at the Central North project. Hematite has been mapped and drilled over 4 individual zones with a combined strike length of 6,600 metres at the Central prospect. A full listing of results is detailed in Table 1 (down-hole lengths reported - true widths will be determined). These results compliment the results recently released (refer news release dated 19 August 2010) where better intersections reported include:

21m @ 57.4%Fe from 5m depth
9m @ 61.6%Fe from 16m depth
28m @ 57.9%Fe from 13m depth
16m @ 57.4%Fe from 36m depth
8m @ 61.1%Fe from 44m depth

Mr Alan Phillips stated “These results exceed the intersections that resulted in a NI43-101 compliant Inferred Mineral Resource estimate for its Banjo and Moonshine North projects of 4.4 million tonnes at 54.2 % Fe”. Since drilling commenced on February 18, a total of 165 holes have been drilled for a total advance of 11,800 metres. Hematite-goethite mineralisation is now confirmed at 6 areas, namely the Snark, Lost World, Banjo, Moonshine, Central North and Central projects.

Further details for the Central North project is provided below

Central

A total of 23 RC holes for an advance of 1,365 metres have been drilled on 200 metre section spacing's at Central and Central North and assays reported. Of the 23 holes drilled, 14 holes have intersected hematite-goethite mineralisation. A further 9 RC holes for an advance of 377 metres have been drilled with assays pending. Better intersections are summarised below and detailed in Table 1.

Table 1 – Central RC Intersections

Hole ID	From	To	Length (m)	Fe %	SiO2%	Al2O3%	P%	S%	LOI%
LGRC_355	5	26	21	57.4	6.2	3.9	0.06	0.17	7.1
LGRC_371	4	10	6	56.5	6.4	3.9	0.05	0.26	8.2
including	7	9	2	60.4	2.9	2.1	0.07	0.24	7.4
LGRC_374	6	30	24	62.4	2.5	1.5	0.07	0.15	6.5
and	33	38	5	55.5	7.2	4.2	0.07	0.13	8.8
LGRC_375	1	4	3	52.5	12.4	6.3	0.03	0.06	5.7
and	5	19	14	58	5.9	4.5	0.05	0.29	6.2
including	6	9	3	60.9	4.8	3.2	0.04	0.07	4.4
including	13	17	4	62	2.8	2.2	0.05	0.22	6
LGRC_376	18	21	3	53.3	9.9	6	0.1	0.11	7.2
LGRC_378	18	25	7	55	7.3	5.8	0.05	0.09	7.3
including	22	24	2	58.4	4.4	3.7	0.07	0.1	7.4
LGRC_384	12	18	6	58.2	4.7	4.2	0.05	0.1	7.4
and	20	22	2	53.3	8.4	5.4	0.05	0.15	9.3
LGRC_385	15	20	5	54.2	6.5	5.9	0.04	0.35	9
and	21	24	3	58.8	4.2	3	0.08	0.15	7.8
and	38	49	11	58.2	8.5	2.9	0.07	0.05	4.9
LGRC_386	61	66	5	55.8	9.3	2.4	0.08	0.01	8

Notes for Tables 1:

- All analysis by X-Ray Fluorescence Spectrometry (XRF) at SGS and Amdel Laboratory in Perth, Western Australian.
- RC Samples collected over 1 metre intervals using an industry standard 3 tier riffle splitter
- Intersections are reported >50% Fe Minimum intersection width 2 metres with internal waste of no more than 2 metres
- Downhole lengths reported as true width is unknown.
- Azimuths are referenced to local grid.
- Fe intersections grade rounded to 1 decimal figure.

Quality Assurance and Quality Control (QAQC) :

Intersections reported have been verified by the company's QAQC protocols. All samples from drill holes are prepared by SGS Laboratory and pulverised to 90% passing 75 microns then analysed for the iron suite using XRF.

QUALIFIED PERSON

Mr. Andrew Spinks B.App.Sc, Grad.Dip (Mining), a member of AusIMM, and a consultant geologist, is a Qualified Person as defined in National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101"), in charge of the exploration on the Lake Giles project.

Further information on Macarthur Minerals Limited and technical reports on the Lake Giles project can be found on the company's website www.macarthurminerals.com or www.sedar.com

On behalf of the Board of Directors,
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