

For Immediate Dissemination
August 31, 2006

TSXV: MMS
NR2006-16

LAKE GILES MAGNETITE PROJECT UPDATE

Vancouver, B.C. – Macarthur Minerals Limited (TSXV – MMS) (the "Company") is pleased to provide the following update on exploration activities at its 100%- owned Lake Giles iron-ore / nickel project in Western Australia.

Drilling Highlights:

<p>Stage 1 Drilling:</p> <ul style="list-style-type: none"> • Drill hole LGRC_001, 50 meters @ 29.3% Fe (Note 1) • Drill hole LGRC_002, 38 meters @ 30.4% Fe (See Note 1 & 2) • Drill hole LGRC_004, 18 meters @ 29.5% Fe
<p>Stage 2 Drilling: (See Note 3)</p> <ul style="list-style-type: none"> • Drill hole LGRC_010 intersects 150 of visible magnetite • Drill hole LGRC_011 intersects 104m of visible magnetite • Strike extension of mineralised BIF in excess of 2.2 km
<p>NOTES:</p> <ol style="list-style-type: none"> 1) Metallurgical recovery and concentrate grade test work is currently being undertaken on Phase 1 samples LGRC_001 and LGRC_002 magnetite ore at the Ambdel laboratories in Adelaide, Australia. 2) LGRC_002 was terminated in mineralization due to drilling problems. 3) Future metallurgical test work which would include bulk-sample grinding, concentrating and flotation will be needed to be undertaken to determine the ultimate concentrate, grade and quality.

MACARTHUR MINERALS LIMITED	
ACN 103 011 436	
1300 – 885 West Georgia Street Vancouver BC V6C 3E8 Canada Tel: (604) 628-5002 Fax: (604) 688-3452	13 – 340 Adelaide Street Brisbane QLD 4000 Australia Tel: (617) 3831 6104 Fax: (617) 3831 5694

Drill hole details are provided in Table 1 below.

Snark Magnetite Drilling:

Table 1

Hole ID	Northing	Easting	Dip & Azimuth	Depth (meters)	Assay Results
LGRC_001	6,698,856	781,822	-60 @ 090	156	Results received
LGRC_002	6,698,771	781,803	-60 @ 100	163	Results received
LGRC_004	6,696,901	784,178	-60 @ 210	210	Results received
LGRC_009	6,698,430	781,732	-60 @ 100	156	Assays pending
LGRC_010	6,699,058	781,866	-60 @ 060	288	Assays pending
LGRC_011	6,698,487	782,376	-60 @ 240	252	Assays pending
LGRC_012	6,698,177	782,525	-60 @ 220	160	Assays pending
LGRC_014	6,698,840	781,930	vertical	192	Assays pending
LGRC_015	6,699,259	781,636	-60 @ 220	168	Assays pending
LGRC_016	6,697,914	782,914	-60 @ 200	168	Assays pending

1,913 meters

Table 2

Hole ID	From	To	Intersection	Fe %	P %	SiO2%
LGRC_001	80	130	50	29.3	0.08	50.6
LGRC_002	125	163	38	30.4	0.09	50.3
LGRC_004	102	118	16	27.2	0.08	50.5
LGRC_004	178	196	18	29.5	0.09	50.1

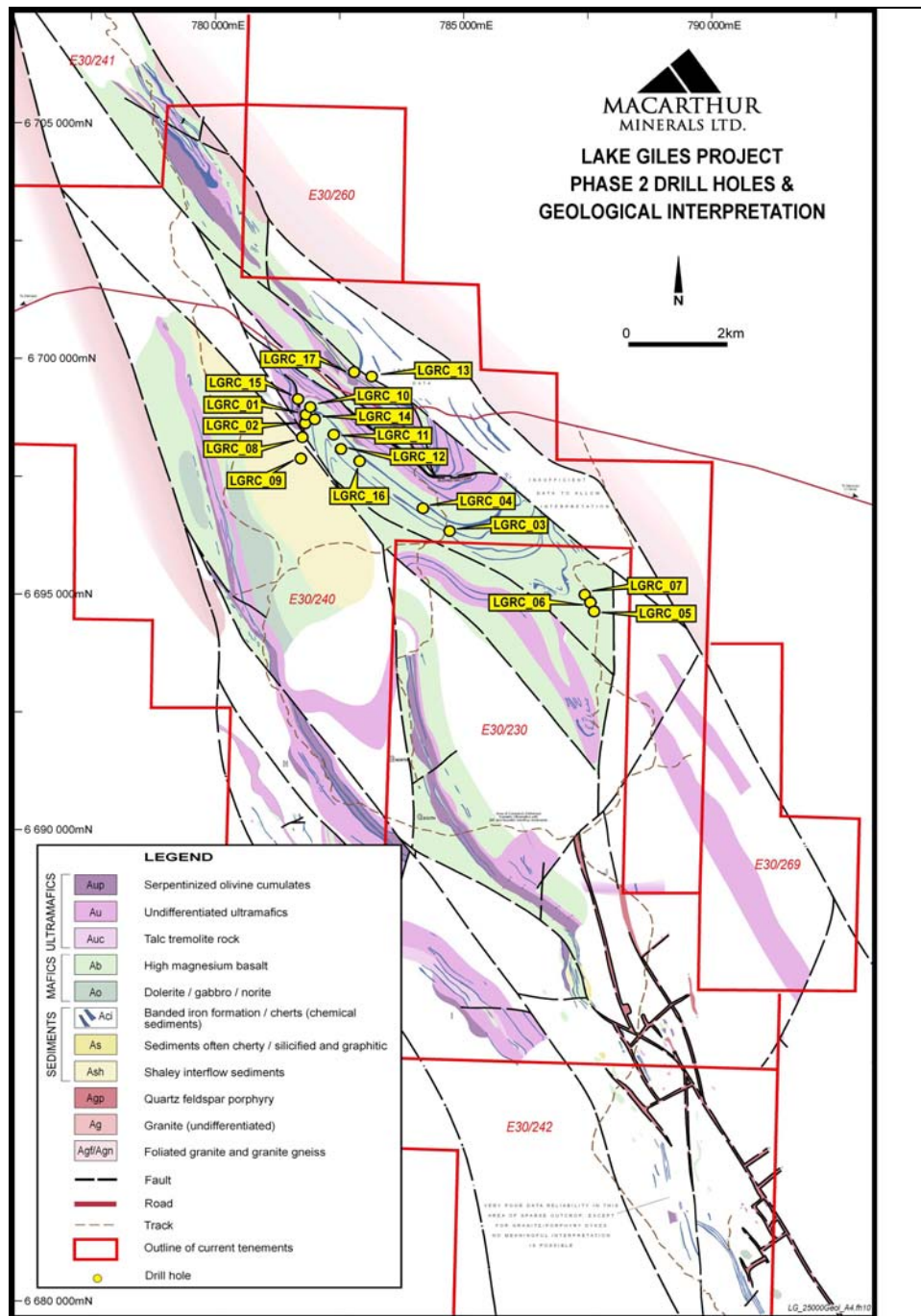


Figure 1 – Drill hole location plan.

Background

Drilling of the Lake Giles magnetite deposit commenced in June 2006. The project area (Snark) to date has 9 Reverse Circulation drill holes for 1,913 meters, which tested approximately 1.4 km of strike length of the prospect to a depth of 180 meters below surface.

The results of Phase 2 drilling reflects better than expected widths (up to 150 meters) of magnetite-rich BIF intersected in the drilling and the confirmation of exceptional uniformity and consistency of the mineralisation both along strike and at depth.

Geological logging, sampling and data compilation is currently underway to facilitate a Mineral Resource estimate process, which is planned to commence in October after the completion of Phase 3.

The results of Phase 2 drilling has significantly increased the Company's confidence in the potential of the prospect to continue for up to 2 km to the north and to extend at depth. In addition, the Company plans to drill test the outcropping eastern limb of the prospect as part of Phase 3 drilling program. Phase 3 will be designed to increase the magnetite resource and extend the strike length to a depth of approximately 250 meters below surface.

See Figure 1 drill hole location plan (map attachment)

Nickel (Ni) Exploration

There was no drilling for Nickel mineralisation during Phase 1 or Phase 2, however the fixed loop EM survey was completed on August 9, 2006. All data has now been presented to Southern Geosciences Consultants and the final report and target generation is expected to be available the first week of September.

QA-QC Statement

Mr. Nick Revell is responsible for the verification and quality assurance of the Company's exploration data and analytical results from the Lake Giles project.

Reverse Circulation Drilling hole collar surveys used a handheld GPS and down-hole surveys used an Eastman single shot camera instrument.

There is high assay confidence with systematic laboratory QA/QC procedures.

Samples from the drill holes described in this release were prepared and analysed by Genalysis Laboratory in Perth, Western Australia, with the following procedure sample prep and assaying:

1. Sort and dry all samples.
2. Generate 5m Composites using half the 1 meter samples (store excess 1 meter samples.)

3. Robotic Sample preparation NO QTZ WASH – Auto Crush to ~2mm & Split 1kg, bag and store excess crushed material, Grind 1kg to generate assay 200g assay pulp + 800g bulk pulp.
4. Package 800g Bulk pulp for Davis Tube Test.
5. XRF Package 4: Fusion for Fe Ore Suite + Single point LOI
6. Au Cu Pb Zn Ni & Co by Aqua Regia Digestion with AAS finish.

Qualified Person

Mr. Nick Revell BSc is a member of AusIMM, and a Company director, 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.

On behalf of the Board of Directors,

MACARTHUR MINERALS LIMITED

"David K. Barwick"

David K Barwick, President, Chairman & CEO

Investor and Media Inquiries:

Michael Rodger-Longview Strategies Inc.

Tel: (604) 681-5755

Email: mrodger@lvscapital.com

**THE TSX VENTURE EXCHANGE DOES NOT ACCEPT RESPONSIBILITY FOR THE
ADEQUACY OR ACCURACY OF THIS RELEASE**

This news release contains forward-looking statements regarding ongoing and upcoming exploration work and expected geology, geological formations and structures. Actual results may differ materially from those anticipated in these statements. The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this release.