

HEMATITE-GEOTHITE DSO GRADE MINERALISATION INTERSECTED - 28m at 61.3%Fe

VANCOUVER, BRITISH COLUMBIA – (Marketwire – September 22, 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 and Snark prospects with 28m at 61.3% Fe being recorded at its Lake Giles project, located in Western Australia. Key highlights:

- Hematite-goethite (DSO grade) iron mineralisation recorded includes:

**28m @ 61.3%Fe from 10m
9m @ 59.7%Fe from 57m
9m @ 57.4%Fe from 22m
22m @ 59.1%Fe from 9m
8m @ 58.6%Fe from 35m**

- Resource estimation commenced on the 6 identified areas.

The drilling was carried out over the outcropping hematite zones the Company has mapped and sampled earlier in the year. A full listing of results is detailed in Table 1 (down-hole lengths reported - true widths will be determined) and the results received complement the results released previously over the last 2 months where better intersections reported include:

**24m @ 62.5%Fe from 6m depth
14m @ 58.0%Fe from 5m depth
11m @ 58.2%Fe from 38m depth
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**

Since drilling commenced on February 18, a total of 184 holes have been drilled for a total advance of 13,053 metres for Hematite-goethite. Mineralisation is now confirmed at 6 areas, namely the Snark, Lost World, Banjo, Moonshine, Central North and Central projects. To date the combined total of holes the Company has reported with significant results is 88 holes. These holes will form the basis for mineral resource estimations which are planned to commence shortly and are expected to be completed later this year.

Table 1 – RC Intersections

Hole ID	Prospect	From	To	Length	Fe %	SiO2%	Al2O3%	P%	S%	LOI%
LGRC_308	Central	10	38	28	61.3	3.6	1.9	0.07	0.16	6.5
and	Central	45	55	10	55.4	12.7	2.0	0.07	0.02	5.6
<i>including</i>	Central	45	47	2	60.8	5.1	2.1	0.03	0.01	5.7
<i>including</i>	Central	52	54	2	58.1	11.9	0.8	0.07	0.04	3.9
LGRC_309	Snark	1	9	8	53.3	13.3	3.3	0.05	0.06	7.0
LGRC_314	Central	9	11	2	54.3	4.6	6.2	0.07	0.93	10.3
and	Central	42	49	7	57.2	8.7	2.9	0.06	0.02	6.2
<i>including</i>	Central	45	49	4	59.3	7.9	1.5	0.05	0.02	5.4
and	Central	53	56	3	53.5	13.4	2.7	0.06	0.04	6.8
LGRC_315	Central	25	27	2	54.8	12.0	1.9	0.06	0.14	7.1
and	Central	31	34	3	56.3	8.1	2.1	0.07	0.16	8.9
LGRC_388	Central	28	36	8	54.6	11.5	4.4	0.04	0.02	5.6
LGRC_389	Central	22	31	9	57.4	6.8	4.4	0.08	0.07	6.1
<i>including</i>	Central	25	30	5	60.0	4.8	3.3	0.07	0.06	5.5
LGRC_391	Banjo	7	12	5	54.6	8.1	3.5	0.02	0.06	9.8
and	Banjo	17	25	8	53.9	10.4	4.1	0.04	0.04	8.1
and	Banjo	45	52	7	56.8	9.7	3.8	0.05	0.01	5.1
<i>including</i>	Banjo	48	52	4	58.6	8.5	2.9	0.06	0.01	4.6
LGRC_392	Lost World	16	18	2	51.0	9.8	8.0	0.05	0.05	8.6
and	Lost World	30	33	3	52.9	15.3	3.1	0.03	0.03	5.6
LGRC_395	Banjo	11	13	2	53.2	9.2	5.9	0.05	0.10	8.1
and	Banjo	16	19	3	55.3	6.8	4.8	0.07	0.08	8.6
LGRC_397	Central	13	15	2	52.6	14.1	1.6	0.02	0.03	8.4
LGRC_400	Snark	13	21	8	54.7	7.6	5.9	0.05	0.18	7.6
LGRC_401	Snark	16	18	2	51.0	13.2	6.8	0.03	0.07	6.3
and	Snark	19	25	6	53.4	10.9	4.3	0.05	0.15	7.6
LGRC_402	Snark	2	4	2	54.4	5.8	5.1	0.11	0.52	10.3
and	Snark	17	31	14	55.2	5.6	4.7	0.09	0.26	10.0
<i>including</i>	Snark	24	26	2	60.0	2.5	2.2	0.09	0.19	8.8
<i>including</i>	Snark	29	31	2	60.4	3.2	1.2	0.15	0.04	8.5
LGRC_403	Snark	5	10	5	58.4	3.0	2.7	0.06	0.28	9.7
and	Snark	15	20	5	54.7	5.9	6.0	0.06	0.40	9.0
LGRC_404	Snark	2	4	2	53.6	8.6	5.9	0.03	0.52	7.9
and	Snark	6	14	8	58.1	3.4	3.4	0.05	0.30	9.4
and	Snark	57	66	9	59.7	4.0	2.9	0.05	0.05	7.0
LGRC_405	Snark	5	16	11	55.3	4.4	6.1	0.08	0.37	9.4
<i>including</i>	Snark	14	16	2	58.8	1.6	4.5	0.11	0.31	9.0
and	Snark	35	43	8	58.6	3.3	3.7	0.06	0.16	8.5
and	Snark	52	54	2	51.5	13.8	3.3	0.05	0.07	8.5
LGRC_406	Snark	9	31	22	59.1	6.8	2.3	0.07	0.05	5.8
and	Snark	34	36	2	52.7	19.8	0.8	0.11	0.01	3.6
and	Snark	46	48	2	56.6	8.7	2.9	0.11	0.02	6.4
LGRC_407	Snark	34	37	3	51.0	15.1	3.8	0.06	0.04	7.4
LGRC_408	Snark	8	11	3	50.9	14.6	4.3	0.05	0.15	7.6
and	Snark	37	43	6	53.7	17.6	0.8	0.07	0.01	4.1

Notes for Table 1:

- All analysis by X-Ray Fluorescence Spectrometry (XRF) at SGS and Amdel Laboratory in Perth, Western Australia.
- RC Samples collected over 1 metre intervals using a 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 Amdel and 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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