



ASX RELEASE

2nd October 2012

ASX: MGV

Musgrave Secures New Silver-Zinc-Lead Joint Venture

- **Heads of Agreement signed with Australian base metals producer for the Menninnie Dam Silver-Zinc-Lead Project in South Australia**
- **Potential high grades demonstrated by previous drill holes including:**
 - **MD042 5.1m @ 183g/t Ag, 11.3% Zn, 23.6% Pb**
 - **MD056 14.1m @ 89g/t Ag, 13.6% Zn, 14.7% Pb**
 - **MD066 2.65m @ 71g/t Ag, 20.1% Zn, 9.2% Pb**
 - **MD051 9.1m @ 45g/t Ag, 11.1% Zn, 9.2% Pb**
- **Well defined existing resource with potential to extend and upgrade through testing of Ag-Zn-Pb targets in close proximity**
- **Untested high quality drill targets outlined outside the existing resource area**
- **Significant untested silver potential – The Menninnie Dam Project is located approximately 20km from the recent Paris silver discovery**

Musgrave Minerals Ltd (ASX: MGV) is pleased to announce that it has entered into a Heads of Agreement with Menninnie Metals Pty Ltd, a wholly owned subsidiary of **Terramin Australia Limited (ASX:TZN)** to earn up to a 75% interest in the Menninnie Dam silver-lead-zinc project in South Australia.

The Menninnie Dam Project comprises a group of five Exploration Licences (“EL’s”) covering a contiguous area of 2,471km² in the highly sought after and prospective Gawler Craton region of South Australia (Figure 1). It is located approximately 100 km west of Port Augusta and is well positioned in regards to infrastructure and proximity to the coast.

The Menninnie Dam Project hosts the Menninnie Central and Viper zones with an inferred mineral resource of 7.7Mt @ 27g/t Ag, 3.1% Zn, 2.6% Pb (*estimated by Terramin Australia Limited in 2011 in accordance with the JORC code). These zones are not closed off. The project also encompasses a number of highly prospective geophysical and geochemical (Pb-Zn-Cu, and Ag-Au) anomalies that demonstrate potential for definition of additional resources.

19 Richardson Street, West Perth WA 6005

Telephone: (61 8) 9324 1061 Fax: (61 8) 9324 1014

Web: www.musgraveminerals.com.au Email: info@musgraveminerals.com.au

ABN: 12 143 890 671

Previous exploration on the project has primarily focused on the existing resource. Very little basement drilling has been undertaken on targets outside the defined resource area and there has been no exploration drilling completed on the project since the global financial crisis interrupted a vigorous program of geophysical surveys and drilling late in 2008 .

The district has the potential to host high grade silver, zinc and lead as demonstrated by the following historic intersections at Menninnie Dam:

- MD042 5.1m @ 183g/t Ag, 11.3% Zn, 23.6% Pb (from 321.7m down hole)
- MD056 14.1m @ 89g/t Ag, 13.6% Zn, 14.7% Pb (from 317m down hole)
- MD066 2.65m @ 71g/t Ag, 20.1% Zn, 9.2% Pb (from 213m down hole)
- MD051 9.1m @ 45g/t Ag, 11.1% Zn, 9.2% Pb (from 193m down hole)

The Menninnie Dam Project complements Musgrave Minerals' ongoing commitment to the Musgrave region of South Australia enhancing the Company's project portfolio with a more advanced opportunity and adding further drill ready targets in a new and prospective province that can be tested immediately.

"The high grade intercepts and estimated mineral resource demonstrate the potential for significant discoveries at Menninnie Dam and the opportunity is aligned with the Company's South Australia focus" Musgrave Minerals Managing Director, Rob Waugh said.

"The project is well located in regards to infrastructure and we look forward to drill testing the defined targets as soon as possible".

Target Summary

The following targets (Figure 2) are drill-ready and Musgrave intends to commence drilling on these in the December 2012 quarter.

Tank Hill

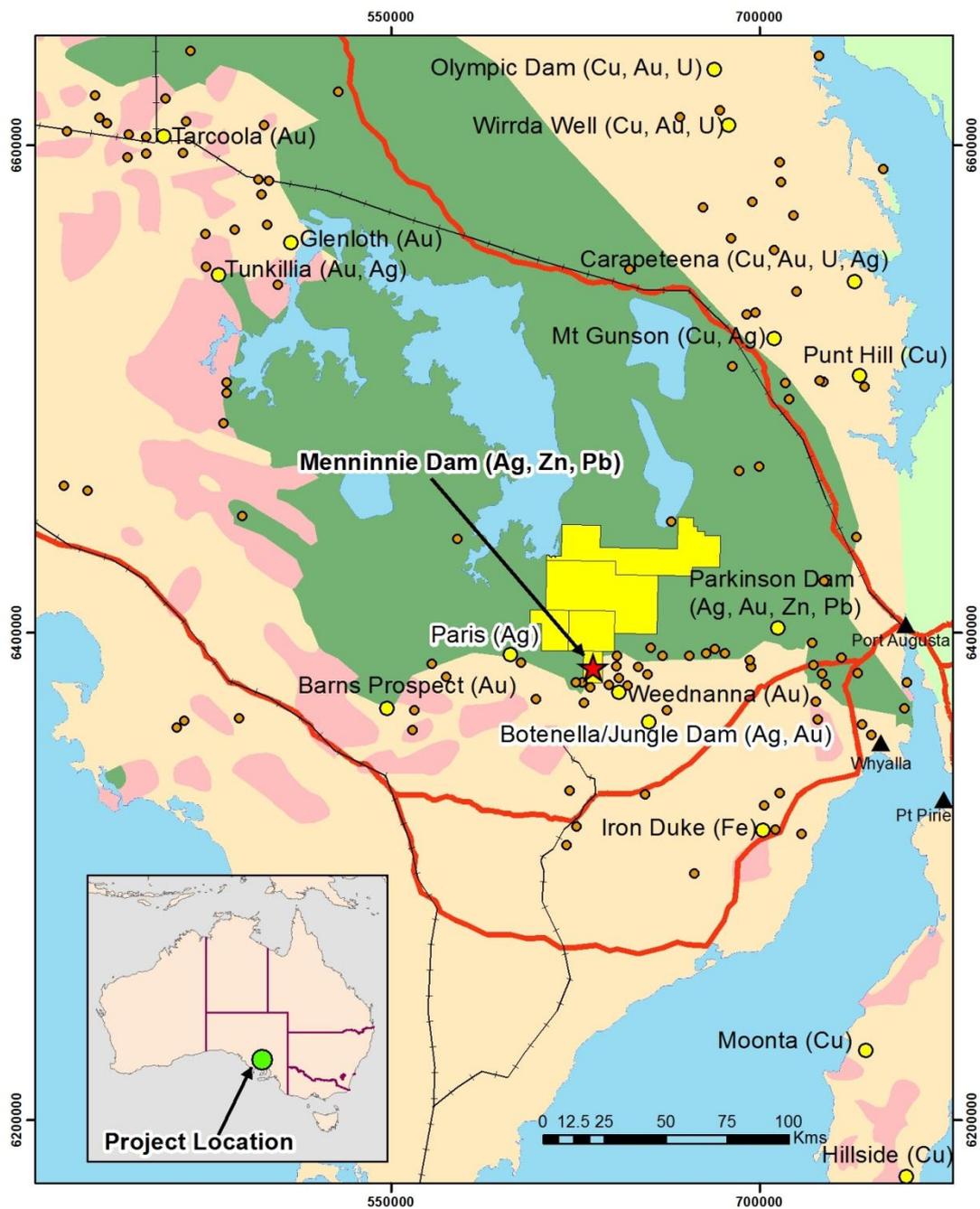
The Tank Hill target is a 2km long induced polarisation ("IP") anomaly with co-incident surface Zn, Pb, Cu and Au soil geochemistry. The target has not been adequately drill tested.

Mannequin

The Mannequin target is a 3km long IP anomaly. This IP response is more extensive and more intense than the responses over the known mineralisation at Menninnie Central. The modeled source of the IP response extends from near-surface to significant depth. The area is covered by transported overburden making geochemistry in-effective. The area has never been drill tested

Phone Hill

The Phone Hill target is a 1.5km long IP anomaly co-incident with a large surface soil Ag, Zn, Pb geochemical anomaly and regional alteration. The IP response is relatively shallow and has never been drill tested. The Phone Hill target is only 20km east of the Paris silver deposit discovered by Investigator Resources Limited (ASX: IVR) , and just 2km ENE of IVR's Victory East silver prospect.



Menninnie Silver-Zinc-Lead Project

- | | | | |
|---|------------------------------|---|---------------------------------|
|  | Younger Cover Sequences |  | Musgrave/Menninnie JV Tenements |
|  | Gawler Range Volcanics |  | Mine/Prospect |
|  | Hiltaba Suite Intrusives |  | Ag, Cu, Au, Pb or Zn Occurrence |
|  | Archean/Proterozoic Basement |  | Town/Smelter |
| | |  | Principal Road |
| | |  | Railway |



Figure 1: Location of the Menninnie Dam Project

Over the coming months the Company will focus on the following at Menninnie Dam:

1. The analysis of detailed geochemical samples covering new targets
2. Re-interpretation of existing data
3. RC and diamond drilling of new priority targets

“This is a very good opportunity for the Company to quickly drill test some really exciting targets in a very prospective new silver-zinc province. The project has significant potential to provide a new discovery.” Mr Waugh said.

“The Company looks forward to providing further updates to investors as exploration progresses and results become available.”

Enquiries:

Robert Waugh

Managing Director

Musgrave Minerals Ltd

0439 955 415

Nathan Ryan

Investor Relations

NWR Communications

0420 582 887

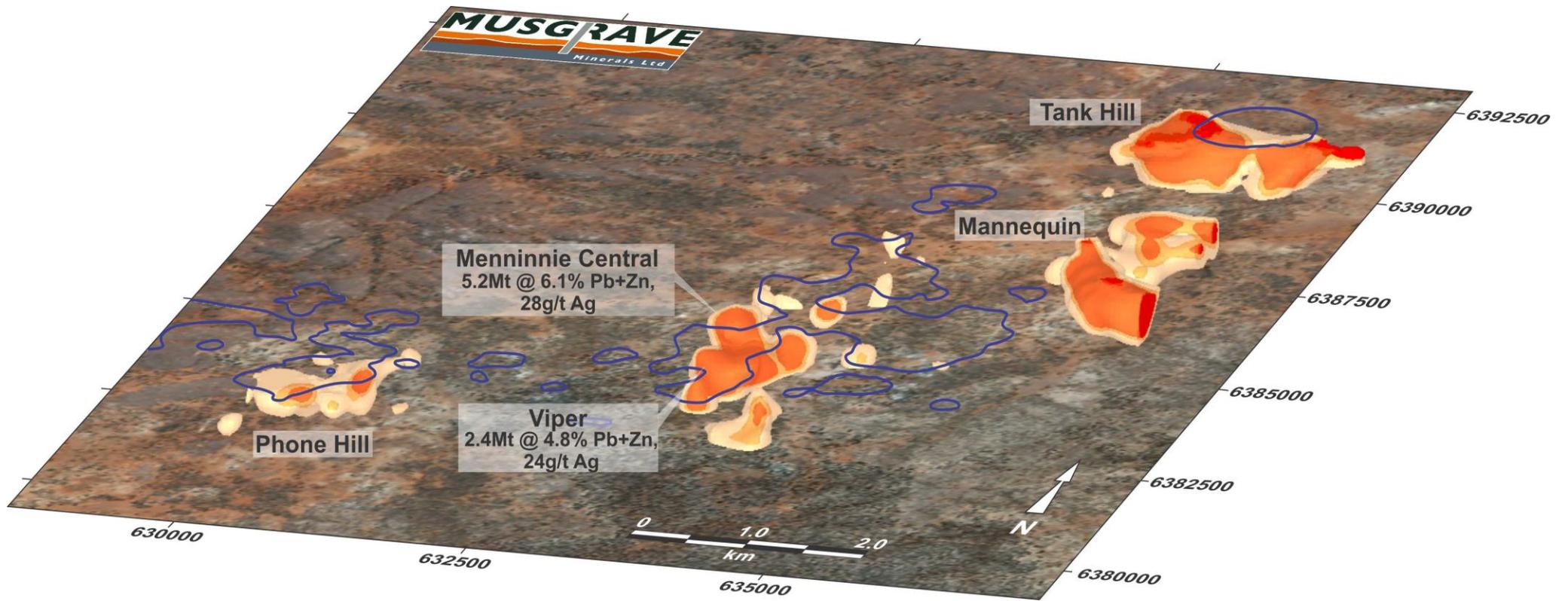


Figure 2: Schematic image of new drill ready targets at Menninnie Dam shown as IP chargeability shells on Landsat with anomalous Zn-Pb soil contours in blue

Key commercial terms:

- Musgrave will commit to a minimum of \$1 million of expenditure on the project within the first 12 months
- Musgrave will then have the option to spend an additional \$5 million on the project in a further four years to earn a 51% interest in the Project
- Following the acquisition of a 51% interest in the tenements, Musgrave and Menninnie Metals can contribute to exploration and development expenditure on a pro-rata basis
- If Menninnie Metals elects not to contribute, Musgrave may elect to earn a further 24% interest through the expenditure of an additional \$3 million over an additional two years
- Following the acquisition of a 75% interest in the project, Musgrave and Menninnie Metals can contribute to exploration and development expenditure on a pro-rata basis
- If either party elects not to contribute that party's interest will dilute. If a party's interest dilutes to less than 10% then that party's interest will revert to a 1% net smelter royalty

The agreement is subject to the following conditions:

- The grant of a substitution EL over the area previously included in EL 3640 on terms and conditions acceptable to Musgrave;
- The assignment to Musgrave Minerals of Menninnie Metals' interest in all existing native title access agreements in respect of the Tenements on terms and conditions:
- which provide that Menninnie Metals and Musgrave are both bound by the agreements;
- which provide that if Musgrave withdraws from this Heads of Agreement before earning an interest in the Tenements, Menninnie Metals will thereafter be solely bound by the agreements; and
- which are otherwise acceptable to Musgrave; and
- Any approvals or consents required under the Mining Act being obtained promptly after this agreement is signed by the parties. Musgrave must apply for all approvals and consents required under the Mining Act.

* JORC-compliant inferred resource for the Menninnie Central and Viper deposits was reported by Terramin Australia Limited (ASX: TZN) on 1st March 2011

Zone	Tonnes x10³	Zn (%)	Pb (%)	Ag (g/t)	Pb+Zn (%)
Total Menninnie Central	5,240	3.5	2.7	28	6.1
Total Viper	2,460	2.3	2.4	24	4.8
Total Menninnie Central and Viper	7,700	3.1	2.6	27	5.7

Inferred Resource (at 2.5% Pb+Zn cut-off) as at 15 February 2011

Competent Person's Statement

The information that relates to Mineral Resources for Menninnie Dam is based on information compiled by Mr Robert Singer. Mr Singer is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Singer was Chief Geologist and a full time employee of Terramin Australia Limited at the time of his estimates. Mr Singer 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'. Mr Singer consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

About Musgrave Minerals

Musgrave Minerals Ltd has a massive exploration footprint in the Musgrave Province in South Australia, with tenements covering an area of approximately 50,000km². The Company also has an active advanced stage exploration project in the prospective silver and base metals province of the southern Gawler Craton.

Musgrave has a powerful shareholder base with six mining and exploration companies participating as cornerstone investors. Musgrave Minerals Ltd is an active Australian base metals explorer currently exploring in South Australia and actively looking for new projects for joint venture or acquisition.

Competent Person's Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Robert Waugh. Mr Waugh is a fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and a member of the Australian Institute of Geoscientists (AIG). Mr Waugh is Managing Director of Musgrave Minerals Limited. Mr Waugh has sufficient industry experience 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'. Mr Waugh consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.