

ASX RELEASE 5<sup>th</sup> February 2014

ASX: MGV

# Musgrave intersects high grade silver (10m @ 990g/t Ag) at Menninnie Dam

- Significant intercepts from the Frakes Prospect include:
  - 10m @ 990g/t Ag, 0.3 g/t Au, 0.2% Cu, 0.4% Pb and 0.3% Zn from 43m
    - Including 2m @ 3,942g/t Ag, 1.0g/t Au, 0.9% Cu, 0.7%
       Pb, 0.8% Zn from 44m
- Mineralisation remains open along strike and down dip
- Additional lead and zinc mineralization in further drilling results from Spare Rib
- Follow-up drilling planned to commence as soon as possible
- Strong cash position of \$7.4m to continue exploration

Musgrave Minerals Ltd ("Musgrave Minerals" or "the Company") (ASX:MGV) is pleased to announce that it has intersected high grade silver mineralisation at the new **Frakes** target on the Menninnie Dam Project in the southern Gawler Craton region of South Australia (Figure 1). Musgrave Minerals has entered into a Joint Venture Agreement with Menninnie Metals Pty Ltd, a wholly-owned subsidiary of Terramin Australia Limited (ASX:TZN) to earn a 51% interest in the Menninnie Dam Project in the first stage, and up to a 75% interest thereafter.

Near surface aircore and slimline reverse circulation (RC) drilling has intersected **10m** @ **990g/t Ag**, 0.3 g/t Au, 0.4% Pb, 0.3% Zn and 0.2% Cu from 43m down hole including **2m** @ **3,942g/t Ag**, **1.0g/t Au**, **0.7% Pb**, **0.8% Zn and 0.9% Cu** from 44m down hole in MDAC375 at the Frakes prospect (Figure 3 and 4).

Musgrave considers these results from Frakes to be significant. Drill holes to the north encountered hard, altered silicified volcanic rocks close to surface and deep weathering to the south and will require further drilling to penetrate to the target depth. Consequently there remains significant upside potential for further mineralisation along strike to both the north and south. The magnetic interpretation suggests that the mineralisation may be structurally

controlled. The Frakes surface geochemical silver anomaly is more than 1.5km wide (Figure 3 and 4). Multiple structures are present in the Frakes area and many are not yet drill tested.

Additional lead and zinc mineralization has been highlighted in further drilling results received from **Spare Rib**, located 7km northeast of Frakes and less than 2km east of the Menninnie Central and Viper deposits. These include 10m @ 0.7% Zn, 0.3% Pb from 21m down hole in MDAC319 and 6m @ 0.4% Zn, 0.2% Pb from 21m and 8m @ 0.5% Zn, 0.3% Pb from 36m down hole in MDAC320.

Musgrave drilled a total of 87 aircore holes for 3,417 metres on five separate targets in late November 2013 (Figure 3). The shallow drilling program penetrated the weathered zone to a maximum depth of 103m but stopped near the interface with fresh rock. Assay results have now been received for all 87 drill holes. A full list of drill hole locations and assays can be found in Appendix 1.

The mineralisation at both Frakes and Spare Rib is associated with silicified epithermal breccias consistent with the latest porphyry-epithermal model Musgrave has for Menninnie Dam. Musgrave is targeting silver-lead-zinc and copper-gold-molybdenum mineralisation in this highly prospective, yet underexplored porphyry-epithermal field.

Commenting on the Menninnie Dam results the Company's Managing Director Rob Waugh said "This is a completely new target, never before drilled, making this a fantastic result which continues to validate our targeting methodology. The high grade mineralisation intersected at Frakes is extremely encouraging and is open along strike and down dip."

"The other positives from Frakes are the high gold and copper values which suggest we could have multiple mineralizing events in a well preserved epithermal field. Follow up drilling at Frakes and Spare Rib is a priority to determine the extent and grade of the mineralisation along strike and in fresh rock below these intersections and to continue to test parallel structures and targets in the area. We expect to commence follow up drilling as soon as possible."

Musgrave Minerals' is in a very strong financial position to successfully follow-up these encouraging results identified at **Frakes** and at **Spare Rib** with \$7.4M in cash.

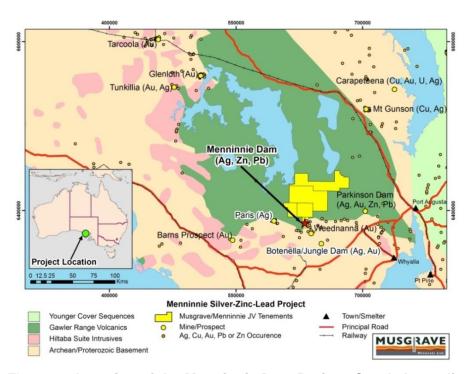


Figure 1: Location of the Menninnie Dam Project, South Australia

### **About Menninnie Dam**

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

The Project hosts the Menninnie Central and Viper deposits with a combined 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 2004 JORC code).

The Menninnie Dam Project is located in a new and very prospective silver province, only 20km east of Investigator Resources' recent Paris silver discovery.

| * JORC (2004 Edition)-compliant inferred resource for the Menninnie | Central and | Viper deposits was reported by | Terramin Australia Limited (A | SX: TZN) |
|---|-------------|--------------------------------|-------------------------------|----------|
| on 1 <sup>st</sup> March 2011                                       |             |                                |                               |          |

| Deposit                           | Tonnes x10³ | Zn<br>(%) | Pb<br>(%) | Ag<br>(g/t) | Pb+Zn<br>(%) |
|-----------------------------------|-------------|-----------|-----------|-------------|--------------|
| 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. <i>7</i>  |

Inferred Resource (at 2.5% Pb+Zn cut-off) as at 15 February 2011
MGV is not aware of any new information that would affect the material nature of this resource calculation

#### \*Competent Person's Statement

The information in this report that relates to Mineral Resources or Ore Reserves is based on information thoroughly reviewed by Mr Robert Waugh, a Competent Person who 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 and a full-time employee of Musgrave Minerals Ltd. Mr Waugh has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration 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 his information in the form and context in which it appears.



Figure 2: Photo of aircore drilling at Frakes prospect, Menninnie Dam.

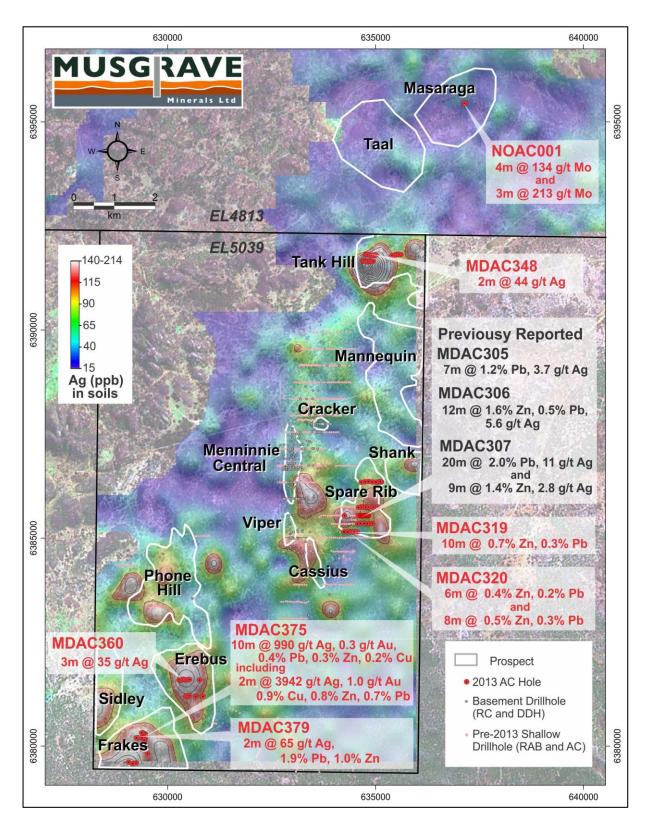


Figure 3: Location of Menninnie Dam prospects with drill hole collars and significant recent aircore drilling assay results on silver geochemical and landsat image.

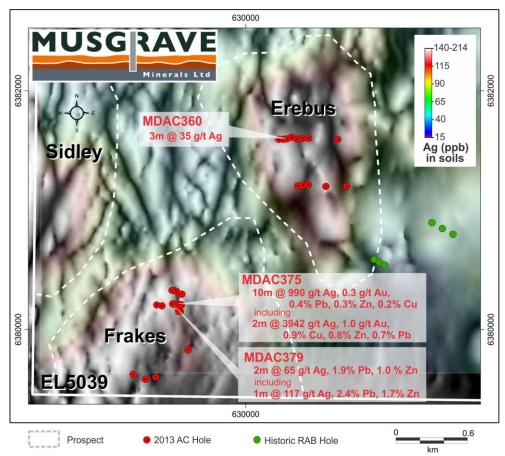


Figure 4: Location of drill hole collars at Frakes prospect showing significant recent aircore drilling assay results on aeromagnetics and colour draped surface silver geochemical image.

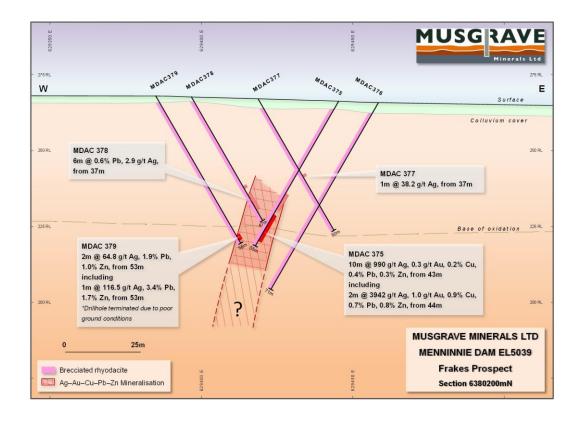


Figure 5: Cross section at 6380200mN at Frakes showing significant drill results.

## **Enquiries:**

Robert Waugh Managing Director Musgrave Minerals Ltd +61 8 93324 1061 Robert Gundelach Investor Relations NWR Communications 0451 896 420

#### Competent Person's Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled and/or thoroughly reviewed by Mr Robert Waugh, a Competent Person who 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 and a full-time employee of Musgrave Minerals Ltd. Mr Waugh has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 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 his information in the form and context in which it appears.

#### About Musgrave Minerals

Musgrave Minerals Ltd is an active Australian base metals explorer with a large 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, Menninnie Dam in the prospective silver and base metals province of the southern Gawler Craton of South Australia. Musgrave has a powerful shareholder base with six mining and exploration companies participating as cornerstone investors.

## Appendix 1: Summary of Menninnie Dam Aircore Drill Hole Locations and Significant Results

| Drill Hole ID | Drill<br>Type | Prospect  | Easting (m) | Northing (m) | Az    | Dip<br>(degrees) | RL  | Total<br>Depth<br>(m) | From (m) | Interval (m) | Pb (%) | Zn<br>(%) | Cu (%) | Ag<br>(ppm) |
|---------------|---------------|-----------|-------------|--------------|-------|------------------|-----|-----------------------|----------|--------------|--------|-----------|--------|-------------|
| *MDAC305      | AC            | Spare Rib | 634825      | 6385544      | 90.0  | -60.0            | 295 | 35                    | 14       | 7            | 1.21   | 0.02      | 0.01   | 3.7         |
| MD/10303      | , ic          | Spure Rio | 034023      | 0303344      | 70.0  | 00.0             | inc | luding                | 17       | 4            | 1.74   | 0.03      | 0.02   | 5.8         |
| *MDAC306      | AC            | Spare Rib | 634784      | 6385546      | 90.0  | -60.0            | 295 | 76                    | 53       | 1            | 0.43   | 0.34      | 0.05   | X           |
|               |               |           |             |              |       |                  | 295 | 76                    | 54       | 12           | 0.54   | 1.64      | 0.02   | 5.6         |
| *MDAC306      | AC            | Spare Rib | 634784      | 6385546      | 90.0  | -60.0            | inc | luding                | 54       | 3            | 0.35   | 3.11      | 0.04   | 10.2        |
|               |               |           |             |              |       |                  | inc | luding                | 58       | 3            | 0.22   | 1.30      | 0.01   | 3.5         |
|               |               |           |             |              |       |                  |     | luding                | 63       | 2            | 1.61   | 1.79      | 0.05   | 8.5         |
| *MDAC307      | AC            | Spare Rib | 634740      | 6385545      | 90.0  | -60.0            | 296 | 103                   | 56       | 1            | 0.53   | 0.01      | 0.01   | 1.0         |
|               |               |           |             |              |       |                  | 296 | 103                   | 67       | 20           | 2.04   | 0.11      | 0.12   | 11.0        |
| *MDAC307      | AC            | Spare Rib | 634740      | 6385545      | 90.0  | -60.0            |     | luding                | 71       | 1            | 1.04   | 0.05      | 0.03   | 26.7        |
|               |               |           |             |              |       |                  |     | luding                | 76       | 4            | 2.83   | 0.18      | 0.16   | 21.3        |
|               |               |           |             |              |       |                  |     | luding                | 82       | 5            | 4.29   | 0.08      | 0.25   | 18.4        |
| *MDAC307      | AC            | Spare Rib | 634740      | 6385545      | 90.0  | -60.0            | 296 | 103                   | 88       | 9            | 0.34   | 1.42      | 0.004  | 2.8         |
|               |               |           |             |              |       |                  |     |                       | 38       | 1            | 0.45   | 0.15      | 0.03   | 1.0         |
| *MDAC308      | AC            | Spare Rib | 634677      | 6385537      | 90.0  | -60.0            | 296 | 75                    | 49       | 1            | 0.42   | 0.07      | 0.01   | 1.2         |
|               |               |           |             |              |       |                  |     |                       | 55       | 1            | 0.01   | 0.46      | 0.01   | 1.9         |
| MDAC309       | AC            | Spare Rib | 634633      | 6385541      | 90.0  | -60.0            | 296 | 52                    | 42       | 1            | 0.44   | 0.22      | 0.02   | 2.0         |
| MDAC310       | AC            | Spare Rib | 634590      | 6385545      | 90.0  | -60.0            | 297 | 40                    | 3        | 1            | 0.73   | 0.01      | 0.00   | 0.6         |
| MDAC311       | AC            | Spare Rib | 634920      | 6385355      | 90.0  | -60.0            | 295 | 12                    |          |              | NS     |           |        |             |
| MDAC312       | AC            | Spare Rib | 634862      | 6385348      | 90.0  | -60.0            | 293 | 5                     |          |              | NS     |           |        |             |
| MDAC313       | AC            | Spare Rib | 634804      | 6385346      | 90.0  | -60.0            | 293 | 6                     |          |              | NS     |           |        |             |
| MDAC314       | AC            | Spare Rib | 634728      | 6385355      | 90.0  | -60.0            | 295 | 12                    |          |              | NS     |           |        |             |
| MDAC315       | AC            | Spare Rib | 634641      | 6385355      | 90.0  | -60.0            | 298 | 6                     |          |              | NS     | 1         | ı      |             |
| MDAC316       | AC            | Spare Rib | 634565      | 6385347      | 90.0  | -60.0            | 299 | 43                    | 31       | 1            | 0.65   | 0.43      | 0.17   | 9.0         |
| MDAC317       | AC            | Spare Rib | 634240      | 6385150      | 270.0 | -60.0            | 308 | 14                    |          |              | NS     |           |        |             |
| MDAC318       | AC            | Spare Rib | 634320      | 6385150      | 270.0 | -60.0            | 304 | 12                    |          |              | NS     | 1         | I      |             |
| MDAC319       | AC            | Spare Rib | 634400      | 6385150      | 270.0 | -60.0            | 303 | 46                    | 21       | 10           | 0.28   | 0.71      | 0.02   | 1.6         |
|               |               |           |             |              |       |                  |     | luding                | 25       | 2            | 0.23   | 1.25      | 0.02   | 2.0         |
| MDAC319       | AC            | Spare Rib | 634400      | 6385150      | 270.0 | -60.0            | 303 | 46                    | 36       | 2            | 0.65   | 0.34      | 0.02   | 1.5         |
|               |               |           |             |              |       |                  |     |                       | 8        | 1            | 0.50   | 0.14      | 0.02   | 1.6         |
|               |               |           |             |              |       |                  |     | _                     | 14       | 1            | 0.07   | 0.42      | 0.01   | X           |
| MDAC320       | AC            | Spare Rib | 634440      | 6385150      | 270.0 | -60.0            | 302 | 67                    | 21       | 6            | 0.22   | 0.41      | 0.00   | 0.9         |
|               |               |           |             |              |       |                  |     |                       | 33       | 8            | 0.25   | 0.51      | 0.01   | 1.8         |
|               |               |           |             |              |       |                  |     |                       | 41       | 1            | 0.52   | 0.36      | 0.01   | 1.4         |
| MDAC321       | AC            | Spare Rib | 634480      | 6385150      | 270.0 | -60.0            | 302 | 22                    |          |              | NS     |           |        |             |
| MDAC322       | AC            | Spare Rib | 634560      | 6385150      | 270.0 | -60.0            | 300 | 9                     |          |              | NS     |           | 0.00   |             |
| MDAC323       | AC            | Spare Rib | 634248      | 6385545      | 270.0 | -60.0            | 307 | 92                    | 73       | 1            | 0.84   | 0.12      | 0.00   | 2.4         |
| MDAC324       | AC            | Spare Rib | 635060      | 6385745      | 90.0  | -60.0            | 296 | 30                    |          |              | NS     |           |        |             |
| MDAC325       | AC            | Spare Rib | 634940      | 6385745      | 90.0  | -60.0            | 292 | 11                    |          |              | NS     |           |        |             |
| MDAC326       | AC            | Spare Rib | 634820      | 6385745      | 90.0  | -60.0            | 292 | 5                     |          |              | NS     |           |        |             |
| MDAC327       | AC            | Spare Rib | 634760      | 6385745      | 90.0  | -60.0            | 294 | 13                    |          |              | NS     |           |        |             |
| MDAC328       | AC            | Spare Rib | 634700      | 6385745      | 90.0  | -60.0            | 295 | 31                    |          |              | NS     |           |        |             |
| MDAC329       | AC            | Spare Rib | 634654      | 6385753      | 90.0  | -60.0            | 295 | 37                    |          |              | NS     |           |        |             |
| MDAC330       | AC            | Spare Rib | 634592      | 6385740      | 90.0  | -60.0            | 297 | 33                    |          |              | NS     | 1         | _      |             |
| MDAC331       | AC            | Spare Rib | 635056      | 6386349      | 90.0  | -60.0            | 286 | 65                    | 64       | 1            | 1.52   | 0.31      | 0.01   | 8.4         |

| Drill Hole ID | Drill<br>Type | Prospect  | Easting (m) | Northing (m) | Az    | Dip<br>(degrees) | RL  | Total<br>Depth<br>(m) | From (m)                | Interval<br>(m) | Pb (%) | Zn<br>(%) | Cu<br>(%) | Ag<br>(ppm) |
|---------------|---------------|-----------|-------------|--------------|-------|------------------|-----|-----------------------|-------------------------|-----------------|--------|-----------|-----------|-------------|
| MDAC332       | AC            | Spare Rib | 635012      | 6386346      | 90.0  | -60.0            | 288 | 59                    | NSA                     |                 |        |           |           |             |
| MDAC333       | AC            | Spare Rib | 634923      | 6386351      | 90.0  | -60.0            | 291 | 51                    |                         |                 | NS     | A         |           |             |
| MDAC334       | AC            | Spare Rib | 634831      | 6386360      | 90.0  | -60.0            | 292 | 63                    |                         |                 | NS     | A         |           |             |
| MDAC335       | AC            | Spare Rib | 634750      | 6386353      | 90.0  | -60.0            | 295 | 43                    |                         |                 | NS     | A         |           |             |
| MDAC336       | AC            | Spare Rib | 634655      | 6386343      | 90.0  | -60.0            | 298 | 51                    |                         |                 | NS     | A         |           |             |
| MDAC337       | AC            | Spare Rib | 635147      | 6386350      | 270.0 | -60.0            | 284 | 58                    |                         |                 | NS     | A         |           |             |
| MDAC338       | AC            | Spare Rib | 635119      | 6386362      | 270.0 | -60.0            | 285 | 66                    | 45                      | 1               | 0.06   | 0.44      | 0.02      | 1.1         |
| MDAC339       | AC            | Tank Hill | 634690      | 6391664      | 270.0 | -60.0            | 274 | 12                    |                         |                 | NS     | A         | ı         |             |
| MDAC340       | AC            | Tank Hill | 634727      | 6391664      | 270.0 | -60.0            | 274 | 27                    |                         |                 | NS     | A         |           |             |
| MDAC341       | AC            | Tank Hill | 634774      | 6391647      | 270.0 | -60.0            | 274 | 27                    |                         |                 | NS     | A         |           |             |
| MDAC342       | AC            | Tank Hill | 634813      | 6391647      | 270.0 | -60.0            | 275 | 16                    |                         |                 | NS     | A         |           |             |
| MDAC343       | AC            | Tank Hill | 634856      | 6391655      | 270.0 | -60.0            | 276 | 24                    |                         |                 | NS     | A         |           |             |
| MDAC344       | AC            | Tank Hill | 634896      | 6391645      | 270.0 | -60.0            | 276 | 16                    |                         |                 | NS     | A         |           |             |
| MDAC345       | AC            | Tank Hill | 634940      | 6391650      | 270.0 | -60.0            | 277 | 3                     |                         |                 | NS     | A         |           |             |
| MDAC346       | AC            | Tank Hill | 634755      | 6391810      | 270.0 | -60.0            | 274 | 27                    |                         |                 | NS     | A         |           |             |
| MDAC347       | AC            | Tank Hill | 634804      | 6391811      | 270.0 | -60.0            | 274 | 9                     |                         |                 | NS     | A         |           |             |
|               |               |           |             |              |       |                  |     |                       | 24                      | 4               | 0.07   | 0.02      | 0.00      | 10.6        |
| MDAC348       | AC            | Tank Hill | 634862      | 6391800      | 270.0 | -60.0            | 275 | 40                    | 32                      | 2               | 0.13   | 0.06      | 0.01      | 43.6        |
| MDAC349       | AC            | Tank Hill | 634909      | 6391800      | 270.0 | -60.0            | 275 | 49                    |                         |                 | NS     | A         | ı         |             |
| MDAC350       | AC            | Tank Hill | 634963      | 6391798      | 270.0 | -60.0            | 275 | 18                    |                         |                 | NS     | A         |           |             |
| MDAC351       | AC            | Tank Hill | 635010      | 6391800      | 270.0 | -60.0            | 276 | 37                    |                         |                 | NS     | A         |           |             |
| MDAC352       | AC            | Tank Hill | 635610      | 6391812      | 90.0  | -60.0            | 267 | 27                    |                         |                 | NS     | A         |           |             |
| MDAC353       | AC            | Tank Hill | 635561      | 6391817      | 90.0  | -60.0            | 268 | 18                    |                         |                 | NS     | A         |           |             |
| MDAC354       | AC            | Tank Hill | 635515      | 6391818      | 90.0  | -60.0            | 269 | 28                    |                         |                 | NS     | A         |           |             |
| MDAC355       | AC            | Tank Hill | 635479      | 6391808      | 90.0  | -60.0            | 270 | 57                    |                         |                 | NS     | A         |           |             |
| MDAC356       | AC            | Tank Hill | 635446      | 6391789      | 90.0  | -60.0            | 272 | 61                    |                         |                 | NS     | A         |           |             |
| MDAC357       | AC            | Tank Hill | 635398      | 6391789      | 90.0  | -60.0            | 273 | 60                    | 14                      | 5               | 0.04   | 0.00      | 0.00      | 14.9        |
| MDAC358       | AC            | Erebus    | 630275      | 6381595      | 270.0 | -60.0            | 276 | 31                    |                         |                 | NS     | A         |           |             |
| MDAC359       | AC            | Erebus    | 630315      | 6381594      | 270.0 | -60.0            | 277 | 59                    |                         |                 | NS     | A         |           |             |
| MDAC360       | AC            | Erebus    | 630342      | 6381598      | 270.0 | -60.0            | 278 | 74                    | 70                      | 3               | 0.11   | 0.05      | 0.00      | 35.3        |
| ND 1 00 01    |               |           | 520201      | 5201511      | 270.0 | 50.0             | 270 |                       | 53                      | 1               | 0.05   | 0.01      | 0.05      | 18.3        |
| MDAC361       | AC            | Erebus    | 630381      | 6381611      | 270.0 | -60.0            | 279 | 66                    | 54                      | 1               | 0.41   | 0.04      | 0.01      | 2.2         |
| MDAC362       | AC            | Erebus    | 630425      | 6381596      | 270.0 | -60.0            | 280 | 39                    |                         |                 | NS     | A         |           |             |
| MDAC363       | AC            | Erebus    | 630472      | 6381601      | 270.0 | -60.0            | 282 | 42                    | NSA                     |                 |        |           |           |             |
| MDAC364       | AC            | Erebus    | 630525      | 6381603      | 270.0 | -60.0            | 282 | 79                    |                         |                 | NS     | A         |           |             |
| MDAC365       | AC            | Erebus    | 630770      | 6381595      | 270.0 | -60.0            | 279 | 59                    | NSA                     |                 |        |           |           |             |
| MDAC366       | AC            | Erebus    | 630435      | 6381203      | 270.0 | -60.0            | 273 | 48                    | 21 1 0.47 0.01 0.00 4.5 |                 |        |           |           | 4.5         |
| MDAC367       | AC            | Erebus    | 630479      | 6381208      | 270.0 | -60.0            | 274 | 28                    | NSA                     |                 |        |           |           |             |
| MDAC368       | AC            | Erebus    | 630523      | 6381214      | 270.0 | -60.0            | 274 | 26                    | NSA                     |                 |        |           |           |             |
| MDAC369       | AC            | Erebus    | 630670      | 6381200      | 270.0 | -60.0            | 272 | 21                    |                         |                 | NS     | A         |           |             |
| MDAC370       | AC            | Erebus    | 630845      | 6381200      | 270.0 | -60.0            | 273 | 42                    |                         |                 | NS     | A         |           |             |

| Drill Hole<br>ID | Drill<br>Type | Prospect | Easting (m) | Northing (m) | Az  | Dip<br>(degrees) | RL  | Total<br>Depth<br>(m) | From (m) | Inter<br>val<br>(m) | Pb<br>(%) | Zn<br>(%) | Cu<br>(%) | Ag<br>ppm | Au<br>ppm |
|------------------|---------------|----------|-------------|--------------|-----|------------------|-----|-----------------------|----------|---------------------|-----------|-----------|-----------|-----------|-----------|
| MDAC371          | AC            | Frakes   | 629056      | 6379623      | 270 | -60.0            | 254 | 6                     |          |                     |           | NSA       |           |           |           |
| MDAC372          | AC            | Frakes   | 629155      | 6379582      | 270 | -60.0            | 254 | 14                    |          |                     |           | NSA       |           |           |           |
| MDAC373          | AC            | Frakes   | 629243      | 6379600      | 270 | -60.0            | 253 | 28                    |          |                     |           | NSA       |           |           |           |

| MDAC374    | AC | Frakes | 629516          | 6379830         | 90   | -60.0 | 255  | 27     |    |    |      | NSA  |      |       |      |
|------------|----|--------|-----------------|-----------------|------|-------|------|--------|----|----|------|------|------|-------|------|
| MDAC375    | AC | Frakes | 629445          | 6380207         | 270  | -60.0 | 266  | 55     | 35 | 1  | 0.02 | 0.01 | 0.18 | 75.6  | 0.15 |
| MDAC375    | AC | Frakes | 629445          | 6380207         | 270  | -60.0 | 266  | 55     | 36 | 1  | 0.79 | 0.05 | 0.05 | 4.5   | X    |
| MDAC375    | AC | Frakes | 629445          | 6380207         | 270  | -60.0 | 266  | 55     | 37 | 2  | 0.18 | 0.02 | 0.10 | 34.1  | X    |
| MDAC375    | AC | Frakes | 629445          | 6380207         | 270  | -60.0 | 266  | 55     | 39 | 2  | 0.62 | 0.22 | 0.02 | 3.6   | X    |
| MDAC375    | AC | Frakes | 629445          | 6380207         | 270  | -60.0 | 266  | 55     | 43 | 10 | 0.40 | 0.29 | 0.24 | 989.8 | 0.28 |
| 150 t C255 |    |        | <20.44 <b>5</b> | <20020 <b>=</b> | 250  | 60.0  | incl | uding  | 44 | 2  | 0.66 | 0.76 | 0.89 | 3942  | 0.97 |
| MDAC375    | AC | Frakes | 629445          | 6380207         | 270  | -60.0 | inc  | luding | 46 | 1  | 1.56 | 0.75 | 0.27 | 710   | 0.30 |
| MDAC376    | AC | Frakes | 629458          | 6380205         | 270  | -60.0 | 266  | 71     |    | •  |      | NSA  | •    |       |      |
| MDAC377    | AC | Frakes | 629419          | 6380207         | 90   | -60.0 | 267  | 50     | 29 | 1  | 0.04 | 0.00 | 0.00 | 38.2  | X    |
| MDAC378    | AC | Frakes | 629397          | 6380211         | 90   | -60.0 | 268  | 47     | 34 | 1  | 0.03 | 0.01 | 0.00 | 13.1  | X    |
| MDAC378    | AC | Frakes | 029397          | 0380211         | 90   | -00.0 | 208  | 47     | 37 | 6  | 0.58 | 0.02 | 0.01 | 2.9   | X    |
| MDAC379    | AC | Frakes | 629385          | 6380213         | 90   | -60.0 | 268  | 56     | 53 | 2  | 1.91 | 0.97 | 0.01 | 64.8  | 0.07 |
| WIDAC379   | AC | Trakes | 029363          | 0380213         | 90   | -00.0 | inc  | luding | 53 | 1  | 3.41 | 1.69 | 0.02 | 116.5 | 0.11 |
| MDAC380    | AC | Frakes | 629450          | 6380150         | 90.0 | -60.0 | 265  | 59     |    |    |      | NSA  |      |       |      |
| MDAC381    | AC | Frakes | 629435          | 6380150         | 90.0 | -60.0 | 265  | 72     |    |    |      | NSA  |      |       |      |
| MDAC382    | AC | Frakes | 629297          | 6380197         | 90.0 | -60.0 | 268  | 59     |    |    |      | NSA  |      |       |      |
| MDAC383    | AC | Frakes | 629253          | 6380204         | 90.0 | -60.0 | 268  | 60     |    |    |      | NSA  |      |       |      |
| MDAC384    | AC | Frakes | 629397          | 6380325         | 90.0 | -60.0 | 269  | 54     |    |    |      | NSA  |      |       |      |
| MDAC385    | AC | Frakes | 629464          | 6380294         | 90.0 | -60.0 | 267  | 30     |    |    |      | NSA  |      |       |      |
| MDAC386    | AC | Frakes | 629442          | 6380295         | 90.0 | -60.0 | 268  | 21     |    |    |      | NSA  |      |       |      |
| MDAC387    | AC | Frakes | 629417          | 6380318         | 90.0 | -60.0 | 269  | 31     |    |    |      | NSA  |      |       |      |
| MDAC388    | AC | Frakes | 629381          | 6380326         | 90.0 | -60.0 | 270  | 38     |    |    |      | NSA  |      |       |      |

| Drill Hole<br>ID | Drill<br>Type | Prospect | Easting (m) | Northing (m) | Az  | Dip<br>(degrees) | RL  | Total<br>Depth<br>(m) | From (m) | Inter<br>val<br>(m) | Cu<br>(%) | Ag<br>ppm | Au<br>ppm | Mo<br>ppm |
|------------------|---------------|----------|-------------|--------------|-----|------------------|-----|-----------------------|----------|---------------------|-----------|-----------|-----------|-----------|
|                  |               |          |             |              |     |                  |     |                       | 18       | 4                   | 0.01      | X         | X         | 134       |
| NOAC001          | AC            | Masaraga | 637142      | 6395447      | 270 | -60.0            | 248 | 47                    | 25       | 1                   | 0.01      | X         | X         | 238       |
|                  |               |          |             |              |     |                  |     |                       | 37       | 3                   | 0.01      | X         | X         | 213       |
| NOAC002          | AC            | Masaraga | 637160      | 6395452      | 90  | -60              | 248 | 37                    | 25       | 1                   | 0.11      | 14.9      | X         | 6         |
| NO 4 C002        | 4.0           |          | 627122      | 6205446      | 00  | 60               | 247 | 42                    | 15       | 1                   | 0.02      | X         | 0.03      | 181       |
| NOAC003          | AC            | Masaraga | 637133      | 6395446      | 90  | -60              | 247 | 42                    | 26       | 1                   | 0.04      | X         | 0.01      | 118       |

- 1. An accurate dip and strike and the controls on mineralisation are yet to be determined and the true width of the intercepts is not yet known
- 2. All intervals recorded in Appendix 1 above are >10ppm Ag or 0.4% Pb, or 0.4% Zn, or 0.4% Cu or 100ppm Mo and contain no more than 1m of internal dilution
- 3. All higher grade intervals are also separated reported in Appendix 1 with assays above 1.0% Pb, or 1.0% Zn and contain no more than 1m of internal dilution
- 4. NSA (no significant assay) No assay above 10ppm Ag or 0.4% Pb or 0.4% Zn or 0.4% Cu or 100ppm Mo
- 5. No high grade cut was used 6. g/t (grams per tonne)
- 7. ppm (parts per million)

- ppb (parts per billion)
   X = below detection limit
   \* denotes intersections previously reported

## Musgrave Project JORC TABLE 1

## **Section 1 Sampling Techniques and Data**

| Criteria                       | Explanation  | Commentary   |
|--------------------------------|--|--|
| Sampling<br>techniques         | Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.  Include reference to measures taken to ensure sample   | Sampling is undertaken using standard industry practices.  Aircore sample intervals are selected on geological criteria and sampled on site, before being transported and analysed in Adelaide. A handheld XRF device is utilized to determine composite sample intervals.  Drill hole co-ordinates are in UTM grid (GDA94 Z53)  |
|                                | representivity and the appropriate calibration of any measurement tools or systems used.   | and have been measured by hand-held GPS with an accuracy of ±4 metres.   |
|                                | Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. | Aircore drilling was used to obtain samples which were analysed at geological intervals of between 1m and 5m. Samples were pulverized and analysed using MS/ICP for base metals and precious metals.  Individual samples weigh less than 3kg to ensure total preparation at the laboratory pulverization stage.  The sample size is deemed appropriate for the grain size of the material being sampled. |
| Drilling<br>techniques         | Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  | Aircore drilling was used with a blade and RC was used to penetrate hard zones within the regolith.  |
| Drill sample recovery          | Method of recording and assessing core and chip sample recoveries and results assessed.  | Only visual sample recovery methods were used  |
|                                | Measures taken to maximise sample recovery and ensure representative nature of the samples.  | An effort was undertaken to ensure samples stayed dry. Dry samples were split using a riffle splitter and composites collected using a PVC tube.   |
|                                | Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.   | No bias has been observed between sample recovery and grade.   |
| Logging                        | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  | All geological, structural and alteration related observations are stored in the database.   |
|                                | Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.   | Logging of lithology, structure, alteration, mineralisation, colour and other features of drill samples are undertaken on a routine basis.   |
|                                | The total length and percentage of the relevant intersections logged.  | All drill holes are logged in full on completion.  |
| Sub-sampling<br>techniques and | If core, whether cut or sawn and whether quarter, half or all core taken.  | No core sampling has been undertaken.  |
| sample<br>preparation          | If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.  | Dry samples are riffle split and composites tube sampled.  |
|                                | For all sample types, the nature, quality and appropriateness of the sample preparation technique.   | Sample preparation and base metal and precious metal analysis is undertaken by Intertek Genalysis, in Wingfield, South Australia. Sample preparation by dry pulverisation to 90% passing 75 micron.  |
|                                | Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  | Field QC procedures involve the use of certified reference standards, duplicates and blanks at appropriate intervals.  |
|                                | Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.   | Sampling was carried out using MGV protocols and QAQC procedures as per industry best practice. Duplicate samples are routinely checked against originals.   |
|                                | Whether sample sizes are appropriate to the grain size of the material being sampled.  | Sample sizes are considered appropriate for the commodities and elements explored and analysed for.  |
| Quality of assay               | The nature, quality and appropriateness of the assaying and  | Drill sample analysis is undertaken by Intertek<br>Genalysis, in Wingfield, South Australia, multi element   |

| data and<br>laboratory tests                        | laboratory procedures used and whether the technique is considered partial or total.   | analysis by four acid total digest (hydrochloric, nitric, perchloric and hydrofluoric acid) and ICP-OES and ICP-MS to acceptable detection limits and Au, Pt & Pd by FA25/MS.  Analysis for a total of 34 elements is recorded.  |
|---|--|--|
|   | For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. | No geophysical tools were used to estimate mineral or element percentages.   |
|   | Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.                     | In addition to MGV standards, duplicates and blanks, Genalysis incorporate laboratory QAQC including standards, blanks and repeats as a standard procedure. Certified reference materials that are relevant to the type and style of mineralisation targeted are inserted at regular intervals.  |
| Verification of sampling and assaying               | The verification of significant intersections by either independent or alternative company personnel.  | At least two company representatives verify significant intersections including either, the Managing Director, Exploration Manager, Principal Geologist or Senior Geologist.   |
|   | The use of twinned holes.  | No twin holes have yet been drilled by MGV.  |
|   | Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.   | Primary data is collected using a standard set of Excel templates on a Toughbook laptop computer using lookup codes. Geological sample logging was undertaken on one metre intervals for aircore drilling with colour, structure, alteration and lithology recorded for each interval. Data is verified before loading to a CSA Global database. Geological logging of all samples was undertaken. |
|   | Discuss any adjustment to assay data.  | No adjustments or calibrations were made to any assay data reported by MGV.  |
| Location of data points                             | Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  | All maps and locations are in UTM grid (GDA94 Z53) and have been measured by hand-held GPS with an accuracy of ±4 metres.  No down hole survey data was collected. All holes dip at 60 degrees   |
|   | Specification of the grid system used.   | Drill hole co-ordinates are in UTM grid (GDA94 Z53)  |
|   | Quality and adequacy of topographic control.   | Drill hole RL's are approximate using hand held GPS.   |
| Data spacing  | Data spacing for reporting of Exploration Results.   | Variable drill hole spacings are used to adequately test targets.  |
| and distribution                                    | Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.     | The mineralisation has not yet been demonstrated to have sufficient continuity to support the definition of Mineral Resource and Reserves under the classification applied under the 2012 JORC Code.   |
|   | Whether sample compositing has been applied.   | Composite samples on 5m intervals were undertaken outside visually mineralised zones to determine background responses.  |
| Orientation of<br>data in relation<br>to geological | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.   | The precise dip and strike of the mineralisation is not yet known and it is unclear at this stage whether any sampling has a set bias.   |
| structure   | If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.                       | No orientation based sampling bias is known at this time.  |
| Sample security                                     | The measures taken to ensure sample security.  | Chain of custody is managed by MGV. Samples are stored on site and transported to Intertek Genalysis in Wingfield, South Australia by a licenced reputable transport company. When at Genalysis samples are stored in a locked yard before being processed and tracked through preparation and analysis using the Lab Track system.  |
| Audits or reviews                                   | The results of any audits or reviews of sampling techniques and data.  | No external audits or reviews of modeling techniques and data have been undertaken.  |

## **Section 2 Reporting of Exploration Results**

| Criteria   | Explanation  | Commentary   |
|--|--|--|
| Mineral<br>tenement and<br>land tenure<br>status                     | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.   | All aircore drilling has been within joint venture tenement EL5039 and EL4813 within the Menninnie Dam Project area. MGV is earning an initial 51% interest in the project with TZN. |
|  | The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.   | The tenements are in good standing and no known impediments exist.   |
| Exploration<br>done by other<br>parties                              | Acknowledgment and appraisal of exploration by other parties.  | Some historical drilling has been undertaken in different areas on the tenements by MGV and third parties but none is directly relevant to the current targets.                      |
| Geology  | Deposit type, geological setting and style of mineralisation.  | Musgrave is exploring for multi commodity style deposits consistent with an interpreted porphyryepithermal type model.   |
| Drill hole<br>Information  | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  • easting and northing of the drill hole collar  • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  • dip and azimuth of the hole  • down hole length and interception depth  • hole length. | A summary of drill collars and other drill hole information is presented in appendix 1.  |
| Data<br>aggregation<br>methods                                       | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.   | Cut off grades used for the reported intervals in<br>Appendix 1 are: >10ppm Ag or 0.4% Pb or 0.4% Zn or<br>0.4% Cu or 0.2ppm Au or 100ppm Mo   |
|  | Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.   | All intervals recorded in Appendix 1 are >10ppm Ag or 0.4% Pb or 0.4% Zn or 0.4% Cu or 0.2ppm Au or 100ppm Mo and contain no more than 1m of internal dilution.                      |
|  | The assumptions used for any reporting of metal equivalent values should be clearly stated.  | No metal equivalent values are currently used for reporting of exploration results.  |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept | These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported,  | An accurate dip and strike and the controls on mineralisation are yet to be determined and the true width of the intercepts is not yet known.  |
| lengths  | there should be a clear statement to this effect (eg 'down hole length, true width not known').  |  |
| Diagrams   | Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.  | Refer to figures and Appendix 1 in body of this announcement.  |
| Balanced<br>reporting  | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.  | All drill holes are shown in Appendix 1 and all significant results are reported.  |
| Other<br>substantive<br>exploration<br>data                          | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.                                | All material results from geochemical and geophysical surveys and drilling related to these prospects have previously been reported.   |
| Further work   | The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).   | A range of exploration techniques are being considered to progress exploration including additional drilling.  |
|  | Diagrams clearly highlighting the areas of possible extensions,  | Refer to figures in the body of this announcement.   |

| including the main geological interpretations and future      |
|---|
| drilling areas, provided this information is not commercially |
| sensitive.  |
|   |