

**Dust**

EPL No: 11912 <http://www.environment.nsw.gov.au/prpoeoapp/>  
 Licensee: Evolution Mining (Cowl) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 1 <McLintocks Shed>**

Dust monitoring, Dust gauge located on private property to the west of ML1535 boundary

| Frequency | Date Sampled | Date Obtained | Date Published | Particulates (g/m <sup>2</sup> /mth) | Comments |
|-----------|--------------|---------------|----------------|--------------------------------------|----------|
| Monthly   | 02/02/2016   | 19/02/2016    | 17/03/2016     | 7.6                                  |          |
| Monthly   | 03/03/2016   | 16/03/2016    | 17/03/2016     | 12.6                                 |          |
| Monthly   | 04/04/2016   | 15/04/2016    | 20/04/2016     | 1.6                                  |          |
| Monthly   | 29/04/2016   | 19/05/2016    | 20/06/2016     | 3.1                                  |          |
| Monthly   | 09/06/2016   | 20/06/2016    | 19/07/2016     | 4.4                                  |          |
| Monthly   | 07/07/2016   | 27/07/2016    | 19/08/2016     | 1.7                                  |          |
| Monthly   | 01/08/2016   | 22/08/2016    | 21/09/2016     | 1.7                                  |          |
| Monthly   | 06/09/2016   | 20/09/2016    | 20/10/2016     | 2.8                                  |          |
| Monthly   | 28/09/2016   | 07/11/2016    | 22/11/2016     | 1.5                                  |          |
| Monthly   | 01/11/2016   | 24/11/2016    | 21/12/2016     | 14.6                                 |          |
| Monthly   | 06/12/2016   | 23/12/2016    | 20/01/2017     | 4.3                                  |          |
| Monthly   | 03/01/2017   | 24/01/2017    | 21/02/2017     | 2.0                                  |          |

| Frequency   | Date Sampled | Date Obtained | Date Published | Aluminium (mg/kg) | Arsenic (mg/kg) | Cadmium (mg/kg) | Copper (mg/kg) | Lead (mg/kg) | Selenium (mg/kg) | Zinc (mg/kg) | Comments |
|-------------|--------------|---------------|----------------|-------------------|-----------------|-----------------|----------------|--------------|------------------|--------------|----------|
| Six Monthly | 04/04/2016   | 15/04/2016    | 20/04/2016     | 22500             | 6.7             | 3.7             | <0.05          | 24           | <0.2             | 110          |          |
| Six Monthly | 07/07/2016   | 27/07/2016    | 19/08/2016     | 27500             | 5.1             | 11              | 110            | 6.4          | 0.62             | 610          |          |
| Six Monthly | 28/09/2016   | 07/11/2016    | 21/12/2016     | 12000             | 4.7             | 2.2             | 270            | 6.1          | 0.21             | 220          |          |
| Six Monthly | 03/01/2017   | 24/01/2017    | 21/02/2017     | 10400             | 4.8             | 0.5             | 18             | 0.9          | <0.2             | 490          |          |

**Monitoring Point: 2 <Site Office>**

Dust monitoring, Dust gauge located on private property to the south of ML1535 boundary

| Frequency | Date Sampled | Date Obtained | Date Published | Particulates (g/m <sup>2</sup> /mth) | Comments |
|-----------|--------------|---------------|----------------|--------------------------------------|----------|
| Monthly   | 02/02/2016   | 19/02/2016    | 17/03/2016     | 1.7                                  |          |
| Monthly   | 26/02/2016   | 16/03/2016    | 17/03/2016     | 0.6                                  |          |
| Monthly   | 04/04/2016   | 15/04/2016    | 20/04/2016     | 1.3                                  |          |
| Monthly   | 29/04/2016   | 20/05/2016    | 20/06/2016     | 0.9                                  |          |
| Monthly   | 02/06/2016   | 20/06/2016    | 19/07/2016     | 4.8                                  |          |
| Monthly   | 07/07/2016   | 27/07/2016    | 19/08/2016     | 1.8                                  |          |
| Monthly   | 01/08/2016   | 22/08/2016    | 21/09/2016     | 4.8                                  |          |
| Monthly   | 05/09/2016   | 20/09/2016    | 20/10/2016     | 2.5                                  |          |
| Monthly   | 28/09/2016   | 07/11/2016    | 22/11/2016     | 2.8                                  |          |
| Monthly   | 01/11/2016   | 24/11/2016    | 21/12/2016     | 2.4                                  |          |
| Monthly   | 06/12/2016   | 23/12/2016    | 20/01/2017     | 6.6                                  |          |
| Monthly   | 03/01/2017   | 24/01/2017    | 21/02/2017     | 4.1                                  |          |

| Frequency   | Date Sampled | Date Obtained | Date Published | Aluminium (mg/kg) | Arsenic (mg/kg) | Cadmium (mg/kg) | Copper (mg/kg) | Lead (mg/kg) | Selenium (mg/kg) | Zinc (mg/kg) | Comments |
|-------------|--------------|---------------|----------------|-------------------|-----------------|-----------------|----------------|--------------|------------------|--------------|----------|
| Six Monthly | 04/04/2016   | 15/04/2016    | 20/04/2016     | 10900             | 7.1             | 18              | 57             | 7.2          | 0.53             | 1550         |          |
| Six Monthly | 07/07/2016   | 27/07/2016    | 19/08/2016     | 11100             | 4.7             | 23              | 86             | 7            | 0.23             | 470          |          |
| Six Monthly | 28/09/2016   | 07/11/2016    | 21/12/2016     | 10900             | 6.3             | 4.4             | 52             | 5.7          | 0.2              | 470          |          |
| Six Monthly | 03/01/2017   | 24/01/2017    | 21/02/2017     | 8310              | 4.5             | 0.7             | 15             | 1.3          | <0.2             | 280          |          |

**Monitoring Point: 3 <DG05>**

Dust monitoring, Dust gauge located within Lake Cowl to the east of ML1535 boundary

| Frequency | Date Sampled | Date Obtained | Date Published | Particulates (g/m <sup>2</sup> /mth) | Comments  |
|-----------|--------------|---------------|----------------|--------------------------------------|---|
| Monthly   | 04/02/2016   | 19/02/2016    | 17/03/2016     | 1.4                                  |   |
| Monthly   | 01/03/2016   | 16/03/2016    | 17/03/2016     | 0.3                                  |   |
| Monthly   | 04/04/2016   | 15/04/2016    | 20/04/2016     | 2.1                                  |   |
| Monthly   | 29/04/2016   | 20/05/2016    | 20/06/2016     | 0.6                                  |   |
| Monthly   | 02/06/2016   | 20/09/2016    | 19/07/2016     | 3.3                                  | Unable to access due to Lake Cowl filling event, results averaged across four months    |
| Monthly   | 07/07/2016   | 20/09/2016    | 19/08/2016     | 3.3                                  | Unable to access due to Lake Cowl filling event, results averaged across four months    |
| Monthly   | 01/08/2016   | 20/09/2016    | 21/09/2016     | 3.3                                  | Unable to access due to Lake Cowl filling event, results averaged across four months    |
| Monthly   | 29/08/2016   | 20/09/2016    | 20/10/2016     | 3.3                                  | Results averaged across four months due to previous access issues                       |
| Monthly   | 28/09/2016   | 07/11/2016    | 22/11/2016     | -                                    | Elevated Dust Gauge was inundated during significant flood event                        |
| Monthly   | 03/11/2016   | 24/11/2016    | 21/12/2016     | 43.5                                 | Elevated particulates due to inundation and deposition of lake sediments                |
| Monthly   | 06/12/2016   | 23/12/2016    | 20/01/2017     | 51.4                                 | Elevated particulates due to wave action against gauge and deposition of lake sediments |
| Monthly   | 03/01/2017   | 24/01/2017    | 21/02/2017     | 17.8                                 | Elevated particulates due to wave action against gauge and deposition of lake sediments |

| Frequency   | Date Sampled | Date Obtained | Date Published | Aluminium (mg/kg) | Arsenic (mg/kg) | Cadmium (mg/kg) | Copper (mg/kg) | Lead (mg/kg) | Selenium (mg/kg) | Zinc (mg/kg) | Comments   |
|-------------|--------------|---------------|----------------|-------------------|-----------------|-----------------|----------------|--------------|------------------|--------------|--|
| Six Monthly | 04/04/2016   | 15/04/2016    | 20/04/2016     | 6590              | 1.8             | 22              | 18             | 6.6          | <0.2             | 29           |  |
| Six Monthly | 07/07/2016   | -             | 19/08/2016     | -                 | -               | -               | -              | -            | -                | -            | Unable to access due to Lake Cowl filling event                  |
| Six Monthly | 28/09/2016   | -             | 21/12/2016     | -                 | -               | -               | -              | -            | -                | -            | Elevated Dust Gauge was inundated during significant flood event |
| Six Monthly | 03/01/2017   | 24/01/2017    | 21/02/2017     | 1050              | 3.3             | 0.2             | 25             | <0.05        | <0.2             | 38           |  |

**Monitoring Point: 4 <DG09>**

Dust monitoring, Dust gauge located on private property to the south of ML1535 boundary

| Frequency | Date Sampled | Date Obtained | Date Published | Particulates (g/m <sup>2</sup> /mth) | Comments |
|-----------|--------------|---------------|----------------|--------------------------------------|----------|
| Monthly   | 02/02/2016   | 19/02/2016    | 17/03/2016     | 2.6                                  |          |
| Monthly   | 26/02/2016   | 16/03/2016    | 21/02/2017     | 3.1                                  |          |
| Monthly   | 04/04/2016   | 15/04/2016    | 20/04/2016     | 0.7                                  |          |
| Monthly   | 29/04/2016   | 20/05/2016    | 20/06/2016     | 1.6                                  |          |
| Monthly   | 31/05/2016   | 20/06/2016    | 19/07/2016     | 4.7                                  |          |
| Monthly   | 04/07/2016   | 27/07/2016    | 19/08/2016     | 2.3                                  |          |
| Monthly   | 29/07/2016   | 22/08/2016    | 21/09/2016     | 1.7                                  |          |
| Monthly   | 05/09/2016   | 20/09/2016    | 20/10/2016     | 1.5                                  |          |
| Monthly   | 28/09/2016   | 07/11/2016    | 22/11/2016     | 1.2                                  |          |
| Monthly   | 01/11/2016   | 24/11/2016    | 21/12/2016     | 1.6                                  |          |
| Monthly   | 06/12/2016   | 23/12/2016    | 20/01/2017     | 2.5                                  |          |
| Monthly   | 03/01/2017   | 24/01/2017    | 21/02/2017     | 4.3                                  |          |

| Frequency   | Date Sampled | Date Obtained | Date Published | Aluminium (mg/kg) | Arsenic (mg/kg) | Cadmium (mg/kg) | Copper (mg/kg) | Lead (mg/kg) | Selenium (mg/kg) | Zinc (mg/kg) | Comments |
|-------------|--------------|---------------|----------------|-------------------|-----------------|-----------------|----------------|--------------|------------------|--------------|----------|
| Six Monthly | 04/04/2016   | 15/04/2016    | 20/04/2016     | 14600             | 6.5             | 9               | 52             | 13           | 1.4              | 1460         |          |
| Six Monthly | 04/07/2016   | 27/07/2016    | 21/02/2017     | 2080              | 1.1             | 26              | 24             | 1.1          | <0.2             | 2140         |          |
| Six Monthly | 28/09/2016   | 07/11/2016    | 21/12/2016     | 3010              | 2               | 1.3             | 16             | 1.7          | 0.2              | 220          |          |
| Six Monthly | 03/01/2017   | 24/01/2017    | 21/02/2017     | 6190              | 4.1             | 2.3             | 30             | 17           | <0.2             | 280          |          |

**Monitoring Point: 5 <Site 52>**

Dust monitoring, Dust gauge located within ML1535 and north of the open pit

| Frequency | Date Sampled | Date Obtained | Date Published | Particulates (g/m <sup>2</sup> /mth) | Comments   |
|-----------|--------------|---------------|----------------|--------------------------------------|--|
| Monthly   | 04/02/2016   | 19/02/2016    | 17/03/2016     | 2.0                                  |  |
| Monthly   | 26/02/2016   | 16/03/2016    | 17/03/2016     | 0.3                                  |  |
| Monthly   | 04/04/2016   | 15/04/2016    | 20/04/2016     | 1.8                                  |  |
| Monthly   | 26/04/2016   | 20/05/2016    | 20/06/2016     | 3.4                                  |  |
| Monthly   | 02/06/2016   | 20/06/2016    | 19/07/2016     | 1.2                                  |  |
| Monthly   | 05/07/2016   | 27/07/2016    | 19/08/2016     | 1.3                                  |  |
| Monthly   | 01/08/2016   | 22/08/2016    | 21/09/2016     | 1.5                                  |  |
| Monthly   | 05/09/2016   | 20/09/2016    | 20/10/2016     | 6.7                                  |  |
| Monthly   | 28/09/2016   | 07/11/2016    | 22/11/2016     | -                                    | Elevated Dust Gauge was inundated and damaged during significant flood event |
| Monthly   | 03/11/2016   | 24/11/2016    | 21/12/2016     | 32.2                                 | Elevated particulates due to inundation and deposition of lake sediments     |
| Monthly   | 06/12/2016   | 23/12/2016    | 20/01/2017     | -                                    | Elevated Dust Gauge under repair after flood damage. No sample collected.    |
| Monthly   | 05/01/2017   | 24/01/2017    | 21/02/2017     | 2.0                                  |  |

| Frequency   | Date Sampled | Date Obtained | Date Published | Aluminium (mg/kg) | Arsenic (mg/kg) | Cadmium (mg/kg) | Copper (mg/kg) | Lead (mg/kg) | Selenium (mg/kg) | Zinc (mg/kg) | Comments   |
|-------------|--------------|---------------|----------------|-------------------|-----------------|-----------------|----------------|--------------|------------------|--------------|--|
| Six Monthly | 04/04/2016   | 15/04/2016    | 20/04/2016     | 30600             | 18              | 9.5             | 140            | 310          | 0.62             | 1460         |  |
| Six Monthly | 05/07/2016   | 27/07/2016    | 19/08/2016     | 40700             | 40              | 20              | 230            | 150          | 0.31             | 2220         |  |
| Six Monthly | 28/09/2016   | 07/11/2016    | 21/12/2016     | -                 | -               | -               | -              | -            | -                | -            | Elevated Dust Gauge was inundated during significant flood event |
| Six Monthly | 05/01/2017   | 24/01/2017    | 21/02/2017     | 15900             | 18              | 0.4             | 150            | 7            | <0.2             | 1860         |  |

**Dust**

EPL No: 11912 <http://www.environment.nsw.gov.au/prpoeaapp/>  
 Licensee: Evolution Mining (Cowal) Pty Limited

**Monitoring Point: 6 <DG01>**

Dust monitoring, Dust gauge located on private property to the north of ML1535 boundary

| Frequency | Date Sampled | Date Obtained | Date Published | Particulates (g/m <sup>3</sup> /mth) | Comments |
|-----------|--------------|---------------|----------------|--------------------------------------|----------|
| Monthly   | 04/02/2016   | 19/02/2016    | 17/03/2016     | 1.2                                  |          |
| Monthly   | 01/03/2016   | 16/03/2016    | 17/03/2016     | 0.6                                  |          |
| Monthly   | 04/04/2016   | 15/04/2016    | 20/04/2016     | 2.2                                  |          |
| Monthly   | 29/04/2016   | 20/05/2016    | 20/06/2016     | 1.1                                  |          |
| Monthly   | 02/06/2016   | 20/06/2016    | 19/07/2016     | 0.7                                  |          |
| Monthly   | 04/07/2016   | 27/07/2016    | 19/08/2016     | 0.2                                  |          |
| Monthly   | 01/08/2016   | 22/08/2016    | 21/09/2016     | 0.3                                  |          |
| Monthly   | 06/09/2016   | 20/09/2016    | 20/10/2016     | 1.2                                  |          |
| Monthly   | 28/09/2016   | 07/11/2016    | 22/11/2016     | 1.5                                  |          |
| Monthly   | 01/11/2016   | 24/11/2016    | 21/12/2016     | 7.1                                  |          |
| Monthly   | 06/12/2016   | 23/12/2016    | 20/01/2017     | 3.7                                  |          |
| Monthly   | 03/01/2017   | 24/01/2017    | 21/02/2017     | 2.5                                  |          |

| Frequency   | Date Sampled | Date Obtained | Date Published | Aluminium (mg/kg) | Arsenic (mg/kg) | Cadmium (mg/kg) | Copper (mg/kg) | Lead (mg/kg) | Selenium (mg/kg) | Zinc (mg/kg) | Comments |
|-------------|--------------|---------------|----------------|-------------------|-----------------|-----------------|----------------|--------------|------------------|--------------|----------|
| Six Monthly | 04/04/2016   | 15/04/2016    | 20/04/2016     | 6900              | 2.5             | 150             | 18             | 7            | 1.9              | 210          |          |
| Six Monthly | 04/07/2016   | 27/07/2016    | 19/08/2016     | 15500             | 3.8             | 10              | 150            | 32           | 0.91             | 140          |          |
| Six Monthly | 28/09/2016   | 07/11/2016    | 21/12/2016     | 6230              | 2.4             | 6.3             | 47             | 5.1          | 0.2              | 170          |          |
| Six Monthly | 03/01/2017   | 24/01/2017    | 21/02/2017     | 4890              | 4.3             | <0.05           | 14             | <0.05        | <0.2             | 160          |          |

**Monitoring Point: 6 <HV1>**

Dust monitoring, High volume sampler located on private property to the north of ML1535 boundary

| Frequency    | Date Sampled | Date Obtained | Date Published | Total Suspended Particles (µg/m <sup>3</sup> ) | Comments                            |
|--------------|--------------|---------------|----------------|--|-------------------------------------|
| Every 6 days | 03/01/2016   | 20/01/2016    | 18/02/2016     | 28.6   |                                     |
| Every 6 days | 09/01/2016   | 17/02/2016    | 18/02/2016     | 50.5   |                                     |
| Every 6 days | 15/01/2016   | 17/02/2016    | 18/02/2016     | 39.7   |                                     |
| Every 6 days | 21/01/2016   | 17/02/2016    | 18/02/2016     | 45.0   |                                     |
| Every 6 days | 27/01/2016   | 17/02/2016    | 18/02/2016     | 13.0   |                                     |
| Every 6 days | 02/02/2016   | 17/02/2016    | 18/02/2016     | 32.1   |                                     |
| Every 6 days | 08/02/2016   | 11/03/2016    | 17/03/2016     | 57.8   |                                     |
| Every 6 days | 14/02/2016   | 11/03/2016    | 17/03/2016     | 66.9   |                                     |
| Every 6 days | 20/02/2016   | 11/03/2016    | 17/03/2016     | 85.0   |                                     |
| Every 6 days | 26/02/2016   | 11/03/2016    | 17/03/2016     | 80.0   |                                     |
| Every 6 days | 03/03/2016   | 18/05/2016    | 19/05/2016     | 86.4   |                                     |
| Every 6 days | 09/03/2016   | 18/05/2016    | 19/05/2016     | 72.4   |                                     |
| Every 6 days | 15/03/2016   | 18/05/2016    | 19/05/2016     | 41.4   |                                     |
| Every 6 days | 21/03/2016   | 18/05/2016    | 19/05/2016     | 33.7   |                                     |
| Every 6 days | 27/03/2016   | 18/05/2016    | 19/05/2016     | 50.8   |                                     |
| Every 6 days | 02/04/2016   | 18/05/2016    | 19/05/2016     | 48.8   |                                     |
| Every 6 days | 08/04/2016   | 18/05/2016    | 19/05/2016     | 70.1   |                                     |
| Every 6 days | 14/04/2016   | 18/05/2016    | 19/05/2016     | 52.3   |                                     |
| Every 6 days | 20/04/2016   | 18/05/2016    | 19/05/2016     | 68.8   |                                     |
| Every 6 days | 26/04/2016   | 18/05/2016    | 19/05/2016     | 48.7   |                                     |
| Every 6 days | 02/05/2016   | 18/05/2016    | 19/05/2016     | 21.2   |                                     |
| Every 6 days | 08/05/2016   | 14/06/2016    | 20/06/2016     | 21.6   |                                     |
| Every 6 days | 14/05/2016   | 14/06/2016    | 20/06/2016     | 15.9   |                                     |
| Every 6 days | 20/05/2016   | 14/06/2016    | 20/06/2016     | 23.1   |                                     |
| Every 6 days | 26/05/2016   | 14/06/2016    | 20/06/2016     | 6.8  |                                     |
| Every 6 days | 01/06/2016   | 14/07/2016    | 21/09/2016     | 13.0   | Republished due to laboratory error |
| Every 6 days | 07/06/2016   | 14/07/2016    | 21/09/2016     | 7.0  | Republished due to laboratory error |
| Every 6 days | 13/06/2016   | 14/07/2016    | 21/09/2016     | 13.4   | Republished due to laboratory error |
| Every 6 days | 19/06/2016   | 14/07/2016    | 21/09/2016     | 12.2   | Republished due to laboratory error |
| Every 6 days | 25/06/2016   | 14/07/2016    | 21/09/2016     | 8.9  | Republished due to laboratory error |
| Every 6 days | 01/07/2016   | 15/08/2016    | 21/09/2016     | 10.9   |                                     |
| Every 6 days | 07/07/2016   | 15/08/2016    | 21/09/2016     | 21.8   |                                     |
| Every 6 days | 13/07/2016   | 15/08/2016    | 21/09/2016     | 13.1   |                                     |
| Every 6 days | 19/07/2016   | 15/08/2016    | 21/09/2016     | 14.1   |                                     |
| Every 6 days | 25/07/2016   | 15/08/2016    | 21/09/2016     | 14.3   |                                     |
| Every 6 days | 31/07/2016   | 15/08/2016    | 21/09/2016     | 11.4   |                                     |
| Every 6 days | 06/08/2016   | 13/09/2016    | 21/09/2016     | 22.9   |                                     |
| Every 6 days | 12/08/2016   | 13/09/2016    | 21/09/2016     | 19.0   |                                     |
| Every 6 days | 18/08/2016   | 13/09/2016    | 21/09/2016     | 26.1   |                                     |
| Every 6 days | 24/08/2016   | 13/09/2016    | 21/09/2016     | 8.6  |                                     |
| Every 6 days | 30/08/2016   | 13/09/2016    | 21/09/2016     | 21.0   |                                     |
| Every 6 days | 05/09/2016   | 31/10/2016    | 22/11/2016     | 13.1   |                                     |
| Every 6 days | 11/09/2016   | 31/10/2016    | 22/11/2016     | 11.2   |                                     |
| Every 6 days | 17/09/2016   | 31/10/2016    | 22/11/2016     | 16.1   |                                     |
| Every 6 days | 23/09/2016   | 31/10/2016    | 22/11/2016     | 17.6   |                                     |
| Every 6 days | 29/09/2016   | 31/10/2016    | 22/11/2016     | 22.1   |                                     |
| Every 6 days | 05/10/2016   | 31/10/2016    | 22/11/2016     | 19.6   |                                     |
| Every 6 days | 11/10/2016   | 31/10/2016    | 22/11/2016     | 19.0   |                                     |
| Every 6 days | 17/10/2016   | 31/10/2016    | 22/11/2016     | 13.4   |                                     |
| Every 6 days | 23/10/2016   | 12/12/2016    | 21/12/2016     | 23.7   |                                     |
| Every 6 days | 29/10/2016   | 12/12/2016    | 21/12/2016     | 28.7   |                                     |
| Every 6 days | 04/11/2016   | 12/12/2016    | 21/12/2016     | 36.7   |                                     |
| Every 6 days | 10/11/2016   | 12/12/2016    | 21/12/2016     | 39.5   |                                     |
| Every 6 days | 16/11/2016   | 12/12/2016    | 21/12/2016     | 27.2   |                                     |
| Every 6 days | 22/11/2016   | 11/01/2017    | 20/01/2017     | 59.8   |                                     |
| Every 6 days | 28/11/2016   | 11/01/2017    | 20/01/2017     | 49.4   |                                     |
| Every 6 days | 04/12/2016   | 11/01/2017    | 20/01/2017     | 73.5   |                                     |
| Every 6 days | 10/12/2016   | 11/01/2017    | 20/01/2017     | 12.4   |                                     |
| Every 6 days | 16/12/2016   | 11/01/2017    | 20/01/2017     | 6.1  |                                     |
| Every 6 days | 22/12/2016   | 11/01/2017    | 20/01/2017     | 46.2   |                                     |
| Every 6 days | 28/12/2016   | 11/01/2017    | 20/01/2017     | 38.0   |                                     |

Surface Water

EPL No: 11912 <http://www.environment.nsw.gov.au/prpoeoapp/>  
 Licensee: Evolution Mining (Cowel) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

Monitoring Point: 12 <D1>

Stormwater quality monitoring, Northern waste emplacement contained water storage

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | Total Suspended Solids (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|------------|---------------------------------|-------------------------------|---|
| Weekly    | 07/01/2016   | 15/01/2016    | 18/02/2016     | 9.0        | 8906                            | 42                            |   |
| Weekly    | 11/01/2016   | 21/01/2016    | 18/02/2016     | 9.2        | 8823                            | 44                            |   |
| Weekly    | 18/01/2016   | 22/01/2016    | 18/02/2016     | 8.9        | 8354                            | 148                           |   |
| Weekly    | 22/01/2016   | 27/01/2016    | 18/02/2016     | 8.8        | 8354                            | -                             | Rainfall event. Total Suspended Solids not analysed as sample was lost in transit       |
| Weekly    | 25/01/2016   | 29/01/2016    | 18/02/2016     | 8.9        | 9686                            | 32                            |   |
| Weekly    | 28/01/2016   | 04/02/2016    | 18/02/2016     | 8.7        | 7701                            | 48                            |   |
| Event     | 28/01/2016   | 04/02/2016    | 18/02/2016     | 8.7        | 7701                            | 14                            | Rainfall Event.   |
| Weekly    | 04/02/2016   | 12/02/2016    | 18/02/2016     | 8.8        | 9305                            | 22                            |   |
| Weekly    | 10/02/2016   | 19/02/2016    | 17/03/2016     | 8.7        | 8646                            | 9                             |   |
| Weekly    | 17/02/2016   | 26/02/2016    | 17/03/2016     | 9.1        | 9038                            | 27                            |   |
| Weekly    | 23/02/2016   | 29/02/2016    | 17/03/2016     | 9.1        | 11000                           | 73                            |   |
| Weekly    | 01/03/2016   | 08/03/2016    | 17/03/2016     | 8.5        | 12700                           | 85                            |   |
| Weekly    | 07/03/2016   | 14/04/2016    | 20/04/2016     | 8.6        | 12790                           | 17                            |   |
| Weekly    | 14/03/2016   | 24/03/2016    | 20/04/2016     | 8.5        | 11600                           | 143                           |   |
| Weekly    | 22/03/2016   | 30/04/2016    | 20/04/2016     | 8.3        | 13930                           | 15                            |   |
| Weekly    | 30/03/2016   | 05/04/2016    | 20/04/2016     | 8.2        | 14760                           | 69                            |   |
| Weekly    | 06/04/2016   | 14/04/2016    | 20/04/2016     | 8.5        | 15560                           | 71                            |   |
| Weekly    | 14/04/2016   | 21/04/2016    | 19/05/2016     | 8.1        | 14260                           | 85                            |   |
| Weekly    | 19/04/2016   | 27/04/2016    | 19/05/2016     | 8.1        | 14860                           | 50                            |   |
| Weekly    | 26/04/2016   | 04/05/2016    | 19/05/2016     | 7.2        | 16060                           | 56                            |   |
| Weekly    | 03/05/2016   | 09/05/2016    | 19/05/2016     | 7.1        | 15540                           | 47                            |   |
| Weekly    | 09/05/2016   | 16/05/2016    | 20/06/2016     | 6.5        | 14110                           | 325                           | Rainfall event  |
| Weekly    | 19/05/2016   | 24/05/2016    | 20/06/2016     | 9.0        | 10250                           | 33                            |   |
| Weekly    | 23/05/2016   | 27/05/2016    | 20/06/2016     | 8.8        | 10898                           | 99                            |   |
| Weekly    | 01/06/2016   | 08/06/2016    | 20/06/2016     | 8.2        | 8442                            | 144                           |   |
| Weekly    | 06/06/2016   | 14/06/2016    | 20/06/2016     | 7.3        | 2988                            | 9                             | Rainfall event  |
| Weekly    | 14/06/2016   | 23/06/2016    | 19/07/2016     | 8.5        | 4257                            | 18                            | Rainfall event  |
| Weekly    | 20/06/2016   | 28/06/2016    | 19/07/2016     | 8.0        | 3393                            | 85                            |   |
| Weekly    | 27/06/2016   | 05/07/2016    | 09/07/2016     | 9.1        | 2873                            | 16                            |   |
| Weekly    | 04/07/2016   | 14/07/2016    | 19/08/2016     | 9.0        | 2920                            | 15                            |   |
| Weekly    | 08/07/2016   | 18/07/2016    | 19/08/2016     | 8.3        | 2989                            | 28                            | Rainfall event  |
| Weekly    | 12/07/2016   | 20/07/2016    | 19/08/2016     | 8.1        | 2072                            | 48                            |   |
| Weekly    | 19/07/2016   | 27/07/2016    | 19/08/2016     | 9.3        | 3265                            | 24                            |   |
| Weekly    | 25/07/2016   | 29/07/2016    | 19/08/2016     | 9.0        | 2774                            | 31                            |   |
| Weekly    | 02/08/2016   | 11/08/2016    | 21/09/2016     | 7.1        | 3030                            | 3                             |   |
| Weekly    | 08/08/2016   | 15/08/2016    | 21/09/2016     | 6.7        | 2770                            | 11                            |   |
| Weekly    | 15/08/2016   | 22/08/2016    | 21/09/2016     | 7.9        | 2670                            | 4                             |   |
| Weekly    | 22/08/2016   | 29/08/2016    | 21/09/2016     | 6.7        | 2820                            | 8                             |   |
| Weekly    | 29/08/2016   | 08/09/2016    | 21/09/2016     | 7.8        | 2630                            | 8                             |   |
| Weekly    | 05/09/2016   | 09/09/2016    | 20/10/2016     | 8.0        | 2510                            | 7                             | Rainfall event.   |
| Weekly    | 12/09/2016   | 16/09/2016    | 20/10/2016     | 7.1        | 2171                            | 2                             |   |
| Weekly    | 20/09/2016   | 28/09/2016    | 20/10/2016     | 7.9        | 2180                            | 26                            |   |
| Event     | 21/09/2016   | 28/09/2016    | 20/10/2016     | 7.4        | 1626                            | 184                           | Rainfall event  |
| Weekly    | 26/09/2016   | 30/09/2016    | 20/10/2016     | 7.7        | 1542                            | 11                            |   |
| Weekly    | 04/10/2016   | 13/10/2016    | 22/11/2016     | 8.1        | 1745                            | 116                           |   |
| Weekly    | 12/10/2016   | 18/10/2016    | 22/11/2016     | 8.2        | 1824                            | 4                             |   |
| Weekly    | 19/10/2016   | 21/10/2016    | 22/11/2016     | 8.4        | 2270                            | 2                             |   |
| Weekly    | 25/10/2016   | 26/10/2016    | 22/11/2016     | 9.1        | 2770                            | 73                            |   |
| Weekly    | 02/11/2016   | 09/11/2016    | 21/12/2016     | 9.2        | 2710                            | 9                             |   |
| Weekly    | 09/11/2016   | 16/11/2016    | 21/12/2016     | 9.3        | 2800                            | 6                             |   |
| Weekly    | 14/11/2016   | 23/11/2016    | 21/12/2016     | 9.3        | 3889                            | 42                            | Rainfall Event. Samples not supplied to lab within holding period due to transit error. |
| Weekly    | 21/11/2016   | 25/11/2016    | 21/12/2016     | 10.1       | 3670                            | 50                            |   |
| Weekly    | 29/11/2016   | 06/12/2016    | 21/12/2016     | 8.4        | 4307                            | 8                             |   |
| Weekly    | 07/12/2016   | 15/12/2016    | 20/01/2017     | 8.8        | 5970                            | 6                             |   |
| Weekly    | 13/12/2016   | 19/12/2016    | 20/01/2017     | 8.0        | 6630                            | 101                           |   |
| Weekly    | 20/12/2016   | 23/12/2016    | 20/01/2017     | 8.3        | 2730                            | 19                            | Freshwater from the temporary isolation bund being pumped into D1                       |
| Weekly    | 28/12/2016   | 04/01/2017    | 20/01/2017     | 8.1        | 1773                            | 33                            | Freshwater from the temporary isolation bund being pumped into D1                       |

Surface Water

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Monitoring Point: 13 <D4>

Stormwater quality monitoring, Southern waste emplacement contained water storage

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | Total Suspended Solids (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|------------|---------------------------------|-------------------------------|---|
| Weekly    | 07/01/2016   | 15/01/2016    | 18/02/2016     | 7.9        | 15930                           | 41                            |   |
| Weekly    | 11/01/2016   | 21/01/2016    | 18/02/2016     | 8.0        | 17670                           | 32                            |   |
| Weekly    | 18/01/2016   | 27/01/2016    | 18/02/2016     | 8.3        | 21620                           | 18                            |   |
| Weekly    | 22/01/2016   | 22/01/2016    | 18/02/2016     | 8.3        | 13830                           | -                             | Rainfall event. Total Suspended Solids not analysed as sample was lost in transit       |
| Weekly    | 25/01/2016   | 29/01/2016    | 18/02/2016     | 7.8        | 42320                           | 13                            |   |
| Weekly    | 28/01/2016   | 04/02/2016    | 18/02/2016     | 7.9        | 37570                           | 1                             |   |
| Event     | 28/01/2016   | 04/02/2016    | 18/02/2016     | 7.9        | 37570                           | 34                            | Rainfall event  |
| Weekly    | 04/02/2016   | 12/02/2016    | 18/02/2016     | 8.2        | 37320                           | 4                             |   |
| Weekly    | 10/02/2016   | 19/02/2016    | 17/03/2016     | 8.5        | 30910                           | 1                             |   |
| Weekly    | 17/02/2016   | 26/02/2016    | 17/03/2016     | 8.4        | 38300                           | 5                             |   |
| Weekly    | 23/02/2016   | 29/02/2016    | 17/03/2016     | 8.6        | 39320                           | <1                            |   |
| Weekly    | 01/03/2016   | 08/03/2016    | 17/03/2016     | 7.6        | 41560                           | <1                            |   |
| Weekly    | 07/03/2016   | 14/04/2016    | 20/04/2016     | 8.3        | 40840                           | 2                             |   |
| Weekly    | 14/03/2016   | 24/03/2016    | 20/04/2016     | 8.3        | 41380                           | 4                             |   |
| Weekly    | 22/03/2016   | 30/04/2016    | 20/04/2016     | 8.1        | 48380                           | 19                            |   |
| Weekly    | 30/03/2016   | 05/04/2016    | 20/04/2016     | 8.1        | 49090                           | 11                            |   |
| Weekly    | 04/07/2016   | 27/07/2016    | 20/04/2016     | 2.3        | 49900                           | 6                             |   |
| Weekly    | 14/04/2016   | 21/04/2016    | 19/05/2016     | 7.8        | 46650                           | <1                            |   |
| Weekly    | 19/04/2016   | 27/04/2016    | 19/05/2016     | 7.9        | 46830                           | 1                             |   |
| Weekly    | 26/04/2016   | 04/05/2016    | 19/05/2016     | 7.0        | 48170                           | 8                             |   |
| Weekly    | 03/05/2016   | 09/05/2016    | 19/05/2016     | 7.0        | 46570                           | 4                             |   |
| Weekly    | 09/05/2016   | 16/05/2016    | 20/06/2016     | 6.7        | 39140                           | 15                            | Rainfall event  |
| Weekly    | 19/05/2016   | 24/05/2016    | 20/06/2016     | 6.8        | 37200                           | 3                             |   |
| Weekly    | 23/05/2016   | 27/05/2016    | 20/06/2016     | 8.0        | 34554                           | 47                            |   |
| Weekly    | 01/06/2016   | 08/06/2016    | 20/06/2016     | 7.6        | 28449                           | 6                             |   |
| Weekly    | 06/06/2016   | 14/06/2016    | 20/06/2016     | 7.2        | 3719                            | 25                            | Rainfall event  |
| Weekly    | 14/06/2016   | 23/06/2016    | 19/07/2016     | 8.3        | 5982                            | 13                            | Rainfall event  |
| Weekly    | 20/06/2016   | 28/06/2016    | 19/07/2016     | 8.0        | 3976                            | 90                            |   |
| Weekly    | 27/06/2016   | 07/07/2016    | 19/07/2016     | 8.1        | 4894                            | 10                            |   |
| Weekly    | 04/07/2016   | 14/07/2016    | 19/08/2016     | 8.7        | 5507                            | 15                            |   |
| Weekly    | 08/07/2016   | 18/07/2016    | 19/08/2016     | 7.4        | 4702                            | 33                            | Rainfall event  |
| Weekly    | 12/07/2016   | 20/07/2016    | 19/08/2016     | 7.0        | 5415                            | 16                            |   |
| Weekly    | 19/07/2016   | 27/07/2016    | 19/08/2016     | 8.4        | 8376                            | 3                             |   |
| Weekly    | 25/07/2016   | 29/07/2016    | 19/08/2016     | 8.1        | 8221                            | 15                            |   |
| Weekly    | 02/08/2016   | 11/08/2016    | 21/09/2016     | 7.4        | 8240                            | 10                            |   |
| Weekly    | 08/08/2016   | 15/08/2016    | 21/09/2016     | 7.2        | 8270                            | 13                            |   |
| Weekly    | 15/08/2016   | 22/08/2016    | 21/09/2016     | 7.9        | 8250                            | <1                            |   |
| Weekly    | 22/08/2016   | 29/08/2016    | 21/09/2016     | 7.2        | 8820                            | 2                             |   |
| Weekly    | 29/08/2016   | 08/09/2016    | 21/09/2016     | 6.8        | 8860                            | 1                             |   |
| Weekly    | 05/09/2016   | 09/09/2016    | 20/10/2016     | 7.9        | 8070                            | <1                            | Rainfall event  |
| Weekly    | 12/09/2016   | 16/09/2016    | 20/10/2016     | 7.3        | 7970                            | 1                             |   |
| Weekly    | 20/09/2016   | 28/09/2016    | 20/10/2016     | 7.3        | 6580                            | 2                             |   |
| Event     | 21/09/2016   | 28/09/2016    | 20/10/2016     | 7.5        | 6500                            | 7                             | Rainfall event  |
| Weekly    | 26/09/2016   | 30/09/2016    | 20/10/2016     | 8.2        | 7277                            | 4                             |   |
| Weekly    | 04/10/2016   | 12/10/2016    | 22/11/2016     | 7.9        | 6550                            | 9                             |   |
| Weekly    | 12/10/2016   | 18/10/2016    | 22/11/2016     | 8.1        | 6350                            | 3                             |   |
| Weekly    | 19/10/2016   | 21/10/2016    | 22/11/2016     | 7.8        | 6730                            | 2                             |   |
| Weekly    | 25/10/2016   | 26/10/2016    | 22/11/2016     | 8.4        | 8230                            | 4                             |   |
| Weekly    | 02/11/2016   | 09/11/2016    | 21/12/2016     | 8.6        | 8800                            | 2                             |   |
| Weekly    | 09/11/2016   | 16/11/2016    | 21/12/2016     | 8.8        | 8110                            | 3                             |   |
| Weekly    | 14/11/2016   | 23/11/2016    | 21/12/2016     | 8.7        | 9269                            | 8                             | Rainfall Event. Samples not supplied to lab within holding period due to transit error. |
| Weekly    | 21/11/2016   | 25/11/2016    | 21/12/2016     | 9.2        | 24100                           | 531                           | Very low standing water level within dam  |
| Weekly    | 29/11/2016   | 06/12/2016    | 21/12/2016     | 6.9        | 40010                           | 98                            | Very low standing water level within dam  |
| Weekly    | 07/12/2016   | 15/12/2016    | 20/01/2017     | 7.4        | 29770                           | 78                            | Very low standing water level within dam  |
| Weekly    | 13/12/2016   | 19/12/2016    | 20/01/2017     | 6.8        | 59480                           | 436                           | Very low standing water level within dam  |
| Weekly    | 20/12/2016   | 23/12/2016    | 20/01/2017     | 8.6        | 41990                           | 341                           | Very low standing water level within dam  |
| Weekly    | 28/12/2016   | 04/01/2017    | 20/01/2017     | 9.1        | 112400                          | 250                           | Very low standing water level within dam  |

Lake Water

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Monitoring Point: 14 <P1>

Ambient water quality monitoring, Surface water point within ML1535 on Lake Cowal

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | Total Suspended Solids (mg/L) | Comments                        |
|-----------|--------------|---------------|----------------|------------|---------------------------------|-------------------------------|---------------------------------|
| Weekly    | 03/08/2016   | 15/08/2016    | 21/02/2017     | 7.72       | 314                             | 54                            |                                 |
| Weekly    | 11/08/2016   | 17/08/2016    | 21/02/2017     | 7.41       | 267                             | 24                            |                                 |
| Weekly    | 16/08/2016   | 16/08/2016    | 21/02/2017     | 7.77       | 292                             | 10                            |                                 |
| Weekly    | 23/08/2016   | 29/08/2016    | 21/09/2016     | 7.24       | 217                             | 83                            |                                 |
| Weekly    | 29/08/2016   | 12/09/2016    | 21/09/2016     | 7.4        | 138                             | 64                            | Laboratory EC results 215 µS/cm |
| Weekly    | 07/09/2016   | 15/09/2016    | 21/09/2016     | 7.62       | 284                             | 108                           | Rainfall event                  |
| Weekly    | 13/09/2016   | 20/09/2016    | 21/02/2017     | 7.94       | 213                             | 59                            |                                 |
| Weekly    | 23/09/2016   | 04/10/2016    | 20/10/2016     | 7.24       | 145                             | 59                            | Rainfall event                  |
| Weekly    | 26/09/2016   | 30/09/2016    | 20/10/2016     | 6.90       | 146                             | 23                            |                                 |
| Weekly    | 06/10/2016   | 19/10/2016    | 22/11/2016     | 7.21       | 116                             | 39                            |                                 |
| Weekly    | 13/10/2016   | 21/10/2016    | 22/11/2016     | 7.31       | 87                              | 28                            |                                 |
| Weekly    | 20/10/2016   | 26/10/2016    | 22/11/2016     | 7.33       | 107                             | 17                            |                                 |
| Weekly    | 24/10/2016   | 31/10/2016    | 22/11/2016     | 7.47       | 137                             | 22                            |                                 |
| Weekly    | 03/11/2016   | 11/11/2016    | 21/12/2016     | 7.74       | 201                             | 16                            |                                 |
| Weekly    | 08/11/2016   | 11/11/2016    | 21/12/2016     | 8.04       | 273                             | 16                            |                                 |
| Weekly    | 17/11/2016   | 23/11/2016    | 21/12/2016     | 8.31       | 292                             | 13                            |                                 |
| Weekly    | 24/11/2016   | 30/11/2016    | 21/12/2016     | 7.55       | 312                             | 19                            |                                 |
| Weekly    | 01/12/2016   | 07/12/2016    | 20/01/2017     | 7.96       | 363                             | 5                             |                                 |
| Weekly    | 07/12/2016   | 15/12/2016    | 20/01/2017     | 7.56       | 256                             | 9                             |                                 |
| Weekly    | 15/12/2016   | 22/12/2016    | 20/01/2017     | 7.33       | 338                             | 9                             |                                 |
| Weekly    | 21/12/2016   | 28/12/2016    | 20/01/2017     | 7.32       | 140                             | 50                            |                                 |
| Weekly    | 29/12/2016   | 04/01/2017    | 20/01/2017     | 7.41       | 265                             | 70                            |                                 |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments             |
|-----------|--------------|---------------|----------------|-------------------|----------------|----------------|---------------|-------------|----------------|-----------------|-------------|----------------------|
| Quarterly | 29/08/2016   | 12/09/2016    | 21/02/2017     | 82                | 0.004          | <0.0001        | 0.004         | 0.001       | <0.0001        | <0.01           | 0.046       |                      |
| Event     | 07/09/2016   | 15/09/2016    | 21/02/2017     | 71                | 0.002          | <0.0001        | 0.006         | 0.003       | -              | <0.01           | 0.03        | Mercury not analysed |
| Event     | 23/09/2016   | 04/10/2016    | 21/02/2017     | 16                | 0.002          | <0.0001        | 0.004         | <0.001      | -              | <0.01           | 0.005       | Mercury not analysed |
| Quarterly | 06/10/2016   | 19/10/2016    | 21/02/2017     | 58                | 0.001          | <0.0001        | 0.004         | <0.001      | <0.0001        | <0.01           | <0.005      |                      |

Monitoring Point: 15 <P2>

Ambient water quality monitoring, Surface water point within ML1535 on Lake Cowal

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | Total Suspended Solids (mg/L) | Comments                        |
|-----------|--------------|---------------|----------------|------------|---------------------------------|-------------------------------|---------------------------------|
| Weekly    | 03/08/2016   | 15/08/2016    | 21/02/2017     | 7.78       | 302                             | 92                            |                                 |
| Weekly    | 11/08/2016   | 17/08/2016    | 21/02/2017     | 7.46       | 269                             | 3                             |                                 |
| Weekly    | 16/08/2016   | 16/08/2016    | 21/02/2017     | 7.73       | 298                             | 12                            |                                 |
| Weekly    | 23/08/2016   | 29/08/2016    | 21/09/2016     | 7.27       | 220                             | 78                            |                                 |
| Weekly    | 29/08/2016   | 12/09/2016    | 21/02/2017     | 7.56       | 138                             | 68                            | Laboratory EC results 215 µS/cm |
| Weekly    | 07/09/2016   | 15/09/2016    | 21/09/2016     | 7.65       | 294                             | 142                           | Rainfall event                  |
| Weekly    | 13/09/2016   | 20/09/2016    | 20/10/2016     | 7.75       | 212                             | 204                           |                                 |
| Weekly    | 23/09/2016   | 04/10/2016    | 20/10/2016     | 7.22       | 143                             | 40                            | Rainfall event                  |
| Weekly    | 26/09/2016   | 30/09/2016    | 20/10/2016     | 6.85       | 164                             | 24                            |                                 |
| Weekly    | 06/10/2016   | 19/10/2016    | 22/11/2016     | 7.22       | 115                             | 38                            |                                 |
| Weekly    | 13/10/2016   | 21/10/2016    | 22/11/2016     | 7.18       | 91                              | 26                            |                                 |
| Weekly    | 20/10/2016   | 26/10/2016    | 22/11/2016     | 7.24       | 105                             | 20                            |                                 |
| Weekly    | 24/10/2016   | 31/10/2016    | 22/11/2016     | 7.42       | 98                              | 22                            |                                 |
| Weekly    | 03/11/2016   | 11/11/2016    | 21/12/2016     | 7.74       | 200                             | 19                            |                                 |
| Weekly    | 08/11/2016   | 11/11/2016    | 21/12/2016     | 8.04       | 273                             | 14                            |                                 |
| Weekly    | 17/11/2016   | 23/11/2016    | 21/12/2016     | 8.31       | 289                             | 14                            |                                 |
| Weekly    | 24/11/2016   | 30/11/2016    | 21/12/2016     | 7.58       | 318                             | 16                            |                                 |
| Weekly    | 01/12/2016   | 07/12/2016    | 20/01/2017     | 7.97       | 337                             | 6                             |                                 |
| Weekly    | 07/12/2016   | 15/12/2016    | 20/01/2017     | 7.56       | 256                             | 8                             |                                 |
| Weekly    | 15/12/2016   | 22/12/2016    | 20/01/2017     | 7.77       | 337                             | 6                             |                                 |
| Weekly    | 21/12/2016   | 28/12/2016    | 20/01/2017     | 7.39       | 144                             | 53                            |                                 |
| Weekly    | 29/12/2016   | 04/01/2017    | 20/01/2017     | 7.87       | 266                             | 52                            |                                 |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments             |
|-----------|--------------|---------------|----------------|-------------------|----------------|----------------|---------------|-------------|----------------|-----------------|-------------|----------------------|
| Quarterly | 29/08/2016   | 12/09/2016    | 21/09/2016     | 80                | 0.002          | <0.0001        | 0.004         | 0.001       | <0.0001        | <0.01           | 0.04        |                      |
| Event     | 07/09/2016   | 15/09/2016    | 21/02/2017     | 69                | 0.003          | <0.0001        | 0.005         | 0.002       | -              | <0.01           | 0.042       | Mercury not analysed |
| Event     | 23/09/2016   | 04/10/2016    | 21/02/2017     | 53                | 0.002          | <0.0001        | 0.004         | <0.001      | -              | <0.01           | <0.005      | Mercury not analysed |
| Quarterly | 06/10/2016   | 19/10/2016    | 21/02/2017     | 52                | 0.001          | <0.0001        | 0.003         | <0.001      | <0.0001        | <0.01           | <0.005      |                      |

Monitoring Point: 16 <P3>

Ambient water quality monitoring, Surface water point within ML1535 on Lake Cowal

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | Total Suspended Solids (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|------------|---------------------------------|-------------------------------|---|
| Weekly    | 03/08/2016   | 15/08/2016    | 21/02/2017     | 7.89       | 298                             | 89                            |   |
| Weekly    | 11/08/2016   | 17/08/2016    | 21/02/2017     | 7.48       | 263                             | 20                            |   |
| Weekly    | 16/08/2016   | 16/08/2016    | 21/02/2017     | 7.71       | 303                             | 8                             |   |
| Weekly    | 23/08/2016   | 29/08/2016    | 21/09/2016     | 7.34       | 216                             | 63                            |   |
| Weekly    | 29/08/2016   | 12/09/2016    | 21/02/2017     | 7.50       | 138                             | 68                            | Laboratory EC results 213 µS/cm                     |
| Weekly    | 07/09/2016   | 07/09/2016    | 21/09/2016     | 7.63       | 288                             | 116                           | Rainfall event                                      |
| Weekly    | 13/09/2016   | 20/09/2016    | 20/10/2016     | 6.55       | 220                             | 153                           |   |
| Weekly    | 23/09/2016   | 04/10/2016    | 20/10/2016     | 7.23       | 143                             | 32                            | Rainfall event                                      |
| Weekly    | 26/09/2016   | 30/09/2016    | 20/10/2016     | 6.67       | 162                             | 16                            |   |
| Weekly    | 06/10/2016   | 19/10/2016    | 21/02/2017     | 7.20       | 116                             | 39                            |   |
| Weekly    | 13/10/2016   | 21/10/2016    | 22/11/2016     | 7.24       | 89                              | 27                            |   |
| Weekly    | 20/10/2016   | 26/10/2016    | 22/11/2016     | 7.29       | 141                             | 20                            |   |
| Weekly    | 24/10/2016   | 31/10/2016    | 22/11/2016     | 7.61       | 107                             | 24                            |   |
| Weekly    | 03/11/2016   | 11/11/2016    | 21/12/2016     | 7.71       | 201                             | 16                            |   |
| Weekly    | 08/11/2016   | 11/11/2016    | 21/12/2016     | 8.07       | 274                             | 14                            |   |
| Weekly    | 17/11/2016   | 23/11/2016    | 21/12/2016     | 8.30       | 293                             | 14                            |   |
| Weekly    | 24/11/2016   | 30/11/2016    | 21/12/2016     | 7.59       | 319                             | 17                            |   |
| Weekly    | 01/12/2016   | 07/12/2016    | 21/02/2017     | 8.11       | 337                             | 9                             | Field sheet error - Laboratory EC results 250 µS/cm |
| Weekly    | 07/12/2016   | 15/12/2016    | 20/01/2017     | 7.55       | 256                             | 7                             |   |
| Weekly    | 15/12/2016   | 22/12/2016    | 20/01/2017     | 7.81       | 340                             | 7                             |   |
| Weekly    | 21/12/2016   | 28/12/2016    | 20/01/2017     | 7.4        | 147                             | 36                            |   |
| Weekly    | 29/12/2016   | 04/01/2017    | 20/01/2017     | 7.44       | 261                             | 58                            |   |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments             |
|-----------|--------------|---------------|----------------|-------------------|----------------|----------------|---------------|-------------|----------------|-----------------|-------------|----------------------|
| Quarterly | 29/08/2016   | 12/09/2016    | 21/09/2016     | 79                | 0.003          | <0.0001        | 0.004         | 0.001       | <0.0001        | <0.01           | <0.005      |                      |
| Event     | 07/09/2016   | 15/09/2016    | 21/02/2017     | 72                | 0.003          | <0.0001        | 0.004         | 0.002       | -              | <0.01           | 0.048       | Mercury not analysed |
| Event     | 23/09/2016   | 04/10/2016    | 21/02/2017     | 53                | 0.002          | <0.0001        | 0.004         | 0.001       | -              | <0.01           | <0.005      | Mercury not analysed |
| Quarterly | 06/10/2016   | 19/10/2016    | 22/11/2016     | 52                | 0.002          | <0.0001        | 0.004         | 0.003       | <0.0001        | <0.01           | <0.005      |                      |

Lake Water

EPL No: 11912 <http://www.environment.nsw.gov.au/prpoeoapp/>  
 Licensee: Evolution Mining (Coral) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

Monitoring Point: 17 <B1>

Ambient water quality monitoring, Surface water point within ML1535 on Lake Cowal

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | Total Suspended Solids (mg/L) | Comments       |
|-----------|--------------|---------------|----------------|------------|---------------------------------|-------------------------------|----------------|
| Weekly    | 03/08/2016   | 15/08/2016    | 21/02/2017     | 7.22       | 349                             | 39                            |                |
| Weekly    | 11/08/2016   | 17/08/2016    | 21/02/2017     | 7.65       | 246                             | 7                             |                |
| Weekly    | 16/08/2016   | 16/08/2016    | 19/08/2016     | 7.6        | 272                             | 5                             |                |
| Weekly    | 23/08/2016   | 29/08/2016    | 21/09/2016     | 7.35       | 214                             | 45                            |                |
| Weekly    | 29/08/2016   | 12/09/2016    | 21/09/2016     | 7.58       | 131                             | 22                            |                |
| Weekly    | 07/09/2016   | 07/09/2016    | 21/09/2016     | 7.73       | 284                             | 54                            | Rainfall event |
| Weekly    | 13/09/2016   | 20/09/2016    | 20/10/2016     | 7.35       | 210                             | 53                            |                |
| Weekly    | 23/09/2016   | 04/10/2016    | 20/10/2016     | 7.35       | 144                             | 30                            | Rainfall event |
| Weekly    | 26/09/2016   | 30/09/2016    | 20/10/2016     | 6.52       | 147                             | 16                            |                |
| Weekly    | 06/10/2016   | 19/10/2016    | 22/11/2016     | 7.80       | 100                             | 35                            |                |
| Weekly    | 13/10/2016   | 21/10/2016    | 22/11/2016     | 7.18       | 85                              | 22                            |                |
| Weekly    | 20/10/2016   | 26/10/2016    | 22/11/2016     | 7.27       | 149                             | 14                            |                |
| Weekly    | 24/10/2016   | 31/10/2016    | 22/11/2016     | 6.86       | 104                             | 25                            |                |
| Weekly    | 03/11/2016   | 11/11/2016    | 21/12/2016     | 7.87       | 202                             | 18                            |                |
| Weekly    | 08/11/2016   | 11/11/2016    | 21/12/2016     | 8.01       | 271                             | 13                            |                |
| Weekly    | 17/11/2016   | 23/11/2016    | 21/12/2016     | 8.58       | 511                             | 13                            |                |
| Weekly    | 24/11/2016   | 30/11/2016    | 21/12/2016     | 7.65       | 317                             | 13                            |                |
| Weekly    | 01/12/2016   | 07/12/2016    | 20/01/2017     | 8.08       | 350                             | 6                             |                |
| Weekly    | 07/12/2016   | 15/12/2016    | 20/01/2017     | 7.26       | 336                             | 5                             |                |
| Weekly    | 15/12/2016   | 22/12/2016    | 20/01/2017     | 7.77       | 332                             | 6                             |                |
| Weekly    | 21/12/2016   | 28/12/2016    | 20/01/2017     | 7.42       | 137                             | 26                            |                |
| Weekly    | 28/12/2016   | 04/01/2017    | 20/01/2017     | 7.35       | 255                             | 39                            |                |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments             |
|-----------|--------------|---------------|----------------|-------------------|----------------|----------------|---------------|-------------|----------------|-----------------|-------------|----------------------|
| Quarterly | 29/08/2016   | 12/09/2016    | 21/09/2016     | 82                | 0.004          | <0.0001        | 0.004         | <0.001      | <0.0001        | <0.01           | <0.005      |                      |
| Event     | 07/09/2016   | 15/09/2016    | 21/02/2017     | 72                | 0.002          | <0.0001        | 0.004         | 0.001       | -              | <0.01           | 0.67        | Mercury not analysed |
| Event     | 23/09/2016   | 04/10/2016    | 21/02/2017     | 55                | 0.002          | <0.0001        | 0.004         | <0.001      | -              | <0.01           | <0.005      | Mercury not analysed |
| Quarterly | 06/10/2016   | 19/10/2016    | 21/02/2017     | 57                | 0.001          | <0.0001        | 0.003         | <0.001      | <0.0001        | <0.01           | <0.005      |                      |

Monitoring Point: 18 <B5>

Ambient water quality monitoring, Surface water point on Lake Cowal to the south-east of ML1535 boundary

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | Total Suspended Solids (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|------------|---------------------------------|-------------------------------|---|
| Weekly    | 03/08/2016   | 15/08/2016    | 19/08/2016     | -          | -                               | -                             | Unsafe access to monitoring point due to lake water level   |
| Weekly    | 11/08/2016   | 17/08/2016    | 19/08/2016     | -          | -                               | -                             | Unsafe access to monitoring point due to lake water level   |
| Weekly    | 16/08/2016   | 16/08/2016    | 21/02/2017     | 7.67       | 314                             | 21                            |   |
| Weekly    | 23/08/2016   | 29/08/2016    | 21/09/2016     | 7.41       | 251                             | 233                           |   |
| Weekly    | 29/08/2016   | 12/09/2016    | 21/02/2017     | 7.63       | 168                             | 290                           |   |
| Weekly    | 07/09/2016   | 07/09/2016    | 21/09/2016     | 7.75       | 319                             | 36                            | Rainfall event  |
| Weekly    | 13/09/2016   | 20/09/2016    | 20/10/2016     | 7.45       | 169                             | 70                            |   |
| Weekly    | 23/09/2016   | 04/10/2016    | 20/10/2016     | 7.09       | 135                             | 28                            | Rainfall event  |
| Weekly    | 26/09/2016   | 30/09/2016    | 20/10/2016     | 6.73       | 127                             | 14                            |   |
| Weekly    | 06/10/2016   | 19/10/2016    | 22/11/2016     | 7.25       | 129                             | 40                            |   |
| Weekly    | 13/10/2016   | 21/10/2016    | 22/11/2016     | 7.19       | 107                             | 24                            |   |
| Weekly    | 20/10/2016   | 26/10/2016    | 22/11/2016     | 7.29       | 172                             | 21                            |   |
| Weekly    | 24/10/2016   | 31/10/2016    | 22/11/2016     | 7.50       | 174                             | 40                            |   |
| Weekly    | 03/11/2016   | 11/11/2016    | 21/12/2016     | 7.59       | 234                             | 22                            |   |
| Weekly    | 08/11/2016   | 11/11/2016    | 21/12/2016     | 7.97       | 302                             | 20                            |   |
| Weekly    | 17/11/2016   | 23/11/2016    | 21/12/2016     | 8.58       | 511                             | 19                            |   |
| Weekly    | 24/11/2016   | 30/11/2016    | 21/12/2016     | 6.42       | 347                             | 24                            |   |
| Weekly    | 01/12/2016   | 07/12/2016    | 20/01/2017     | 7.71       | 367                             | 13                            |   |
| Weekly    | 07/12/2016   | 15/12/2016    | 20/01/2017     | 7.67       | 277                             | 19                            |   |
| Weekly    | 15/12/2016   | 22/12/2016    | 20/01/2017     | -          | -                               | -                             | Unsafe access to monitoring point due to weather conditions |
| Weekly    | 21/12/2016   | 28/12/2016    | 20/01/2017     | 7.54       | 161                             | 51                            |   |
| Weekly    | 28/12/2016   | 04/01/2017    | 20/01/2017     | 7.76       | 291                             | 148                           |   |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments             |
|-----------|--------------|---------------|----------------|-------------------|----------------|----------------|---------------|-------------|----------------|-----------------|-------------|----------------------|
| Quarterly | 29/08/2016   | 12/09/2016    | 21/09/2016     | 59                | 0.002          | <0.0001        | 0.004         | <0.001      | <0.0001        | <0.01           | 0.03        |                      |
| Event     | 07/09/2016   | 15/09/2016    | 21/02/2017     | 66                | 0.001          | <0.0001        | 0.003         | <0.001      | -              | <0.01           | <0.04       | Mercury not analysed |
| Event     | 23/09/2016   | 04/10/2016    | 21/02/2017     | 50                | 0.001          | <0.0001        | 0.003         | <0.001      | -              | <0.01           | <0.005      | Mercury not analysed |
| Quarterly | 06/10/2016   | 19/10/2016    | 21/02/2017     | 56                | 0.001          | <0.0001        | 0.003         | <0.001      | <0.0001        | <0.01           | <0.005      |                      |





**Groundwater**

EPL No: 11912 [environment.nsw.gov.au/prpoeoapp/](http://environment.nsw.gov.au/prpoeoapp/)  
 Licensee: Evolution Mining (Cowan) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 24 <P414A>**  
 Groundwater quality monitoring. Piezometer located down gradient of southern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments                          |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|-----------------------------------|
| Monthly   | 06/01/2016   | 06/01/2016    | 18/02/2016     | 6.68       | 41220                           | 12.665  |                                   |
| Monthly   | 11/02/2016   | 11/02/2016    | 17/03/2016     | 6.66       | 41850                           | 12.633  |                                   |
| Monthly   | 17/03/2016   | 17/03/2016    | 20/04/2016     | 7.19       | 40699                           | 12.587  |                                   |
| Monthly   | 21/04/2016   | 21/04/2016    | 19/05/2016     | 6.83       | 37644                           | 12.593  | Laboratory EC results 41400 µS/cm |
| Monthly   | 23/05/2016   | 23/05/2016    | 20/06/2016     | 6.76       | 40438                           | 12.562  |                                   |
| Monthly   | 28/06/2016   | 28/06/2016    | 19/07/2016     | 6.89       | 40247                           | 12.623  |                                   |
| Monthly   | 11/07/2016   | 27/07/2016    | 19/08/2016     | 6.90       | 40335                           | 12.432  |                                   |
| Monthly   | 04/08/2016   | 04/08/2016    | 21/09/2016     | 6.78       | 40420                           | 12.552  |                                   |
| Monthly   | 26/09/2016   | 26/09/2016    | 20/10/2016     | 6.76       | 40110                           | 12.393  |                                   |
| Monthly   | 24/10/2016   | 24/10/2016    | 22/11/2016     | 6.50       | 40150                           | 12.390  |                                   |
| Monthly   | 23/11/2016   | 23/11/2016    | 21/12/2016     | 6.60       | 42080                           | 12.320  |                                   |
| Monthly   | 15/12/2016   | 15/12/2016    | 20/01/2017     | 6.67       | 42230                           | 12.353  |                                   |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|----------|
| Quarterly | 06/01/2016   | 18/01/2016    | 18/02/2016     | 596               | 431            | 12600           | 1350             | 37               | 7920          | 3230            | 6640                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0001       | < 0.001       | < 0.0002    | 0.015           | < 0.005     | < 0.004            |          |
| Quarterly | 21/04/2016   | 29/04/2016    | 21/02/2017     | 625               | 566            | 13100           | 1440             | 44               | 8400          | 2820            | 7340                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0005       | 0.001         | < 0.0002    | 0.016           | < 0.005     | < 0.004            |          |
| Quarterly | 11/07/2016   | 27/07/2016    | 19/08/2016     | 567               | 556            | 12800           | 1480             | 42               | 8320          | 2840            | 7480                  | <1                            | < 0.0005        | < 0.0005       | < 0.0005       | 0.002         | < 0.0002    | 0.016           | < 0.005     | < 0.004            |          |
| Quarterly | 23/11/2016   | 01/12/2016    | 21/12/2016     | 593               | 504            | 13200           | 1330             | 40               | 7990          | 3050            | 6740                  | <1                            | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.015           | < 0.005     | < 0.004            |          |

**Monitoring Point: 25 <P414B>**  
 Groundwater quality monitoring. Piezometer located down gradient of southern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 08/01/2016   | 08/01/2016    | 18/02/2016     | 6.71       | 42420                           | 12.731  |          |
| Monthly   | 10/02/2016   | 10/02/2016    | 17/03/2016     | 6.72       | 41500                           | 12.667  |          |
| Monthly   | 30/03/2016   | 30/03/2016    | 20/04/2016     | 6.88       | 45660                           | 12.653  |          |
| Monthly   | 19/04/2016   | 19/04/2016    | 19/05/2016     | 6.90       | 42110                           | 12.650  |          |
| Monthly   | 18/05/2016   | 18/05/2016    | 20/06/2016     | 6.77       | 34180                           | 12.636  |          |
| Monthly   | 16/06/2016   | 16/06/2016    | 19/07/2016     | 7.15       | 36961                           | 12.580  |          |
| Monthly   | 13/07/2016   | 27/07/2016    | 19/08/2016     | 7.39       | 41600                           | 12.606  |          |
| Monthly   | 26/08/2016   | 26/08/2016    | 21/09/2016     | 6.70       | 39950                           | 12.529  |          |
| Monthly   | 26/09/2018   | 26/09/2018    | 20/10/2016     | 6.83       | 40360                           | 12.451  |          |
| Monthly   | 31/10/2016   | 31/10/2016    | 22/11/2016     | 6.87       | 42100                           | 12.415  |          |
| Monthly   | 22/11/2016   | 22/11/2016    | 21/12/2016     | 6.65       | 42460                           | 12.365  |          |
| Monthly   | 15/12/2016   | 15/12/2016    | 20/01/2017     | 6.74       | 42480                           | 12.344  |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|----------|
| Quarterly | 08/01/2016   | 21/01/2016    | 18/02/2016     | 564               | 389            | 13200           | 1360             | 29               | 8250          | 3120            | 6570                  | 120                           | < 0.0005        | < 0.0005       | < 0.0001       | < 0.001       | < 0.0002    | 0.01            | 0.01        | < 0.004            |          |
| Quarterly | 19/04/2016   | 27/04/2016    | 19/05/2016     | 601               | 439            | 13100           | 1340             | 29               | 8370          | 3120            | 6610                  | 11                            | < 0.0005        | < 0.0005       | < 0.0001       | < 0.001       | < 0.0002    | 0.01            | 0.012       | < 0.004            |          |
| Quarterly | 13/07/2016   | 27/07/2016    | 19/08/2016     | 569               | 446            | 13000           | 1350             | 31               | 8290          | 2840            | 6670                  | 18                            | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.01            | 0.038       | < 0.004            |          |
| Quarterly | 22/11/2016   | 01/12/2016    | 21/12/2016     | 535               | 464            | 13100           | 1340             | 33               | 8420          | 2970            | 6680                  | 308                           | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.01            | 0.006       | < 0.004            |          |

**Monitoring Point: 26 <PP03>**  
 Groundwater quality monitoring. Piezometer located near the processing plant area

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 21/01/2016   | 21/01/2016    | 18/02/2016     | 7.64       | 3246                            | 17.552  |          |
| Monthly   | 24/02/2016   | 24/02/2016    | 17/03/2016     | 7.56       | 3660                            | 17.482  |          |
| Monthly   | 30/03/2016   | 30/03/2016    | 20/04/2016     | 7.89       | 3540                            | 17.507  |          |
| Monthly   | 28/04/2016   | 28/04/2016    | 19/05/2016     | 7.16       | 4500                            | 17.373  |          |
| Monthly   | 18/05/2016   | 18/05/2016    | 20/06/2016     | 7.25       | 4851                            | 17.297  |          |
| Monthly   | 30/06/2016   | 30/06/2016    | 19/07/2016     | 7.60       | 4407                            | 17.150  |          |
| Monthly   | 22/07/2016   | 27/07/2016    | 19/08/2016     | 7.70       | 4276                            | 16.994  |          |
| Monthly   | 30/08/2016   | 30/08/2016    | 21/09/2016     | 7.72       | 4011                            | 16.887  |          |
| Monthly   | 27/09/2016   | 27/09/2016    | 20/10/2016     | 7.80       | 3682                            | 16.742  |          |
| Monthly   | 31/10/2016   | 31/10/2016    | 22/11/2016     | 7.99       | 4629                            | 16.716  |          |
| Monthly   | 30/11/2016   | 30/11/2016    | 21/12/2016     | 7.83       | 4824                            | 16.635  |          |
| Monthly   | 22/12/2016   | 22/12/2016    | 20/01/2017     | 7.77       | 3854                            | 16.755  |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|----------|
| Quarterly | 21/01/2016   | 29/01/2016    | 18/02/2016     | 89                | 97             | 655             | 54               | 8                | 600           | 521             | 464                   | 3                             | < 0.0005        | 0.0011         | < 0.0001       | 0.005         | < 0.0002    | < 0.002         | < 0.005     | < 0.004            |          |
| Quarterly | 28/04/2016   | 10/05/2016    | 21/02/2017     | 91                | 70             | 645             | 45               | 3                | 449           | 543             | 360                   | 4                             | 0.0005          | 0.0011         | < 0.0002       | 0.005         | < 0.0002    | < 0.002         | 0.03        | < 0.004            |          |
| Quarterly | 22/07/2016   | 27/07/2016    | 19/08/2016     | 201               | 88             | 710             | 57               | 8                | 705           | 630             | 454                   | 4                             | < 0.0005        | 0.0008         | < 0.0002       | 0.003         | < 0.0002    | < 0.002         | 0.044       | < 0.004            |          |
| Quarterly | 30/11/2016   | 15/12/2016    | 21/12/2016     | 222               | 61             | 605             | 49               | 9                | 615           | 642             | 354                   | 52                            | < 0.0005        | 0.0008         | < 0.0002       | 0.004         | < 0.0002    | < 0.002         | < 0.005     | < 0.004            |          |

**Monitoring Point: 27 <PP04>**  
 Groundwater quality monitoring. Piezometer located near the processing plant area

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 21/01/2016   | 21/01/2016    | 18/02/2016     | 6.65       | 47350                           | 16.396  |          |
| Monthly   | 24/02/2016   | 24/02/2016    | 17/03/2016     | 6.68       | 47760                           | 16.403  |          |
| Monthly   | 31/03/2016   | 31/03/2016    | 20/04/2016     | 6.78       | 53100                           | 16.417  |          |
| Monthly   | 28/04/2016   | 28/04/2016    | 19/05/2016     | 6.74       | 46210                           | 16.410  |          |
| Monthly   | 18/05/2016   | 18/05/2016    | 20/06/2016     | 6.37       | 42812                           | 16.415  |          |
| Monthly   | 30/06/2016   | 30/06/2016    | 19/07/2016     | 6.47       | 40223                           | 16.632  |          |
| Monthly   | 22/07/2016   | 27/07/2016    | 19/08/2016     | 6.55       | 46000                           | 16.290  |          |
| Monthly   | 30/08/2016   | 30/08/2016    | 21/09/2016     | 6.58       | 40840                           | 16.201  |          |
| Monthly   | 27/09/2016   | 27/09/2016    | 20/10/2016     | 6.81       | 46080                           | 16.111  |          |
| Monthly   | 31/10/2016   | 31/10/2016    | 22/11/2016     | 6.63       | 47530                           | 16.023  |          |
| Monthly   | 30/11/2016   | 30/11/2016    | 21/12/2016     | 6.85       | 48180                           | 15.949  |          |
| Monthly   | 22/12/2016   | 22/12/2016    | 20/01/2017     | 6.61       | 44054                           | 15.975  |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|---|
| Quarterly | 21/01/2016   | 29/01/2016    | 18/02/2016     | 496               | 897            | 16800           | 1950             | 55               | 10400         | 3610            | 10300                 | 282                           | < 0.0005        | 0.0006         | < 0.0001       | < 0.001       | < 0.0002    | 0.009           | < 0.005     | < 0.004            |   |
| Quarterly | 28/04/2016   | 10/05/2016    | 19/05/2016     | 524               | 789            | 15500           | 1720             | 46               | 9990          | 3730            | 9050                  | 84                            | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.009           | < 0.005     | < 0.020            | LOR raised to 0.020 mg/L for WAD Cyanide due to elevated salinity |
| Quarterly | 22/07/2016   | 27/07/2016    | 19/08/2016     | 463               | 923            | 16500           | 1670             | 51               | 10200         | 3160            | 9180                  | 219                           | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.01            | 0.109       | < 0.004            |   |
| Quarterly | 30/11/2016   | 15/12/2016    | 21/12/2016     | 451               | 669            | 16400           | 1460             | 40               | 8440          | 3290            | 7680                  | 70                            | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.01            | < 0.005     | < 0.004            |   |



**Groundwater**

EPL No: 11912 [environment.nsw.gov.au/prpoeoapp/](http://environment.nsw.gov.au/prpoeoapp/)  
 Licensee: Evolution Mining (Cowan) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 30 <P417A>**

Groundwater quality monitoring. Piezometer located down gradient of southern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments                          |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|-----------------------------------|
| Monthly   | 06/01/2016   | 06/01/2016    | 18/02/2016     | 6.52       | 44960                           | 12.672  |                                   |
| Monthly   | 11/02/2016   | 11/02/2016    | 17/03/2016     | 6.51       | 45630                           | 12.658  |                                   |
| Monthly   | 15/03/2016   | 15/03/2016    | 20/04/2016     | 6.76       | 43556                           | 12.661  |                                   |
| Monthly   | 21/04/2016   | 21/04/2016    | 19/05/2016     | 6.73       | 40670                           | 12.646  | Laboratory EC results 45300 µS/cm |
| Monthly   | 23/05/2016   | 23/05/2016    | 20/06/2016     | 6.61       | 44080                           | 12.645  |                                   |
| Monthly   | 16/06/2016   | 16/06/2016    | 19/07/2016     | 6.72       | 44017                           | 12.642  |                                   |
| Monthly   | 11/07/2016   | 27/07/2016    | 19/08/2016     | 6.84       | 44128                           | 12.951  |                                   |
| Monthly   | 04/08/2016   | 04/08/2016    | 21/09/2016     | 6.58       | 44120                           | 12.661  |                                   |
| Monthly   | 01/09/2016   | 01/09/2016    | 20/10/2016     | 6.45       | 43790                           | 12.587  |                                   |
| Monthly   | 24/10/2016   | 24/10/2016    | 22/11/2016     | 6.36       | 43790                           | 12.573  |                                   |
| Monthly   | 09/11/2016   | 09/11/2016    | 21/12/2016     | 6.73       | 45840                           | 12.521  |                                   |
| Monthly   | 19/12/2016   | 19/12/2016    | 20/01/2017     | 6.56       | 46070                           | 12.554  |                                   |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|----------|
| Quarterly | 06/01/2016   | 18/01/2016    | 18/02/2016     | 509               | 589            | 13600           | 1510             | 33               | 8660          | 3210            | 7690                  | < 1                           | < 0.0005        | < 0.0005       | 0.0005         | 0.002         | < 0.0002    | 0.004           | 0.005       | < 0.004            |          |
| Quarterly | 21/04/2016   | 29/04/2016    | 19/05/2016     | 497               | 734            | 14400           | 1590             | 38               | 9030          | 2620            | 8380                  | < 1                           | < 0.0005        | < 0.0005       | 0.0006         | 0.001         | < 0.0002    | 0.004           | < 0.005     | < 0.004            |          |
| Quarterly | 11/07/2016   | 27/07/2016    | 19/08/2016     | 454               | 702            | 14500           | 1620             | 37               | 8810          | 2750            | 8420                  | < 1                           | < 0.0005        | < 0.0005       | 0.0008         | 0.002         | < 0.0002    | 0.003           | < 0.005     | < 0.004            |          |
| Quarterly | 09/11/2016   | 18/11/2016    | 21/02/2017     | 475               | 627            | 15700           | 1510             | 34               | 8890          | 3230            | 7780                  | 1                             | < 0.0005        | < 0.0005       | 0.0008         | 0.001         | < 0.0002    | 0.004           | < 0.005     | < 0.004            |          |

**Monitoring Point: 31 <P417B>**

Groundwater quality monitoring. Piezometer located down gradient of southern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 08/01/2016   | 08/01/2016    | 18/02/2016     | 6.71       | 40490                           | 12.650  |          |
| Monthly   | 10/02/2016   | 10/02/2016    | 17/03/2016     | 6.83       | 40960                           | 12.631  |          |
| Monthly   | 30/03/2016   | 30/03/2016    | 20/04/2016     | 6.85       | 44470                           | 12.628  |          |
| Monthly   | 19/04/2016   | 19/04/2016    | 19/05/2016     | 6.84       | 41690                           | 12.618  |          |
| Monthly   | 18/05/2016   | 18/05/2016    | 20/06/2016     | 6.58       | 36532                           | 12.307  |          |
| Monthly   | 16/06/2016   | 16/06/2016    | 19/07/2016     | 6.87       | 35000                           | 12.619  |          |
| Monthly   | 13/07/2016   | 27/07/2016    | 19/08/2016     | 7.36       | 41800                           | 12.610  |          |
| Monthly   | 26/08/2016   | 26/08/2016    | 21/09/2016     | 6.59       | 38960                           | 12.588  |          |
| Monthly   | 26/09/2016   | 26/09/2016    | 20/10/2016     | 6.88       | 39740                           | 12.545  |          |
| Monthly   | 31/10/2016   | 31/10/2016    | 22/11/2016     | 6.89       | 42240                           | 12.522  |          |
| Monthly   | 22/11/2016   | 22/11/2016    | 20/01/2017     | 6.72       | 41500                           | 12.501  |          |
| Monthly   | 15/12/2016   | 15/12/2016    | 20/01/2017     | 6.77       | 42000                           | 12.494  |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|----------|
| Quarterly | 08/01/2016   | 21/01/2016    | 18/02/2016     | 225               | 422            | 13300           | 1220             | 19               | 7230          | 2700            | 6080                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0001       | < 0.001       | < 0.0002    | 0.009           | 0.011       | < 0.004            |          |
| Quarterly | 19/04/2016   | 27/04/2016    | 19/05/2016     | 224               | 523            | 13300           | 1290             | 20               | 7590          | 2640            | 6620                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0001       | 0.002         | < 0.0002    | 0.01            | 0.014       | < 0.004            |          |
| Quarterly | 13/07/2016   | 27/07/2016    | 19/08/2016     | 211               | 595            | 13400           | 1310             | 23               | 8250          | 2530            | 6880                  | 126                           | < 0.0005        | < 0.0005       | < 0.0002       | 0.002         | < 0.0002    | 0.01            | 0.029       | < 0.004            |          |
| Quarterly | 22/11/2016   | 01/12/2016    | 21/12/2016     | 280               | 534            | 13400           | 1360             | 22               | 7710          | 2750            | 6930                  | 2                             | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | 0.0002      | 0.01            | 0.007       | < 0.004            |          |

**Monitoring Point: 32 <P418A>**

Groundwater quality monitoring. Piezometer located down gradient of northern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 05/01/2016   | 05/01/2016    | 18/02/2016     | 6.51       | 46360                           | 10.337  |          |
| Monthly   | 11/02/2016   | 11/02/2016    | 17/03/2016     | 6.48       | 47150                           | 10.296  |          |
| Monthly   | 16/03/2016   | 16/03/2016    | 20/04/2016     | 6.98       | 45889                           | 10.297  |          |
| Monthly   | 27/04/2016   | 27/04/2016    | 19/05/2016     | 6.77       | 42310                           | 10.271  |          |
| Monthly   | 24/05/2016   | 24/05/2016    | 20/06/2016     | 6.54       | 45424                           | 10.274  |          |
| Monthly   | 15/06/2016   | 15/06/2016    | 19/07/2016     | 7.51       | 45575                           | 10.274  |          |
| Monthly   | 13/07/2016   | 27/07/2016    | 19/08/2016     | 6.75       | 45688                           | 10.196  |          |
| Monthly   | 02/08/2016   | 02/08/2016    | 21/09/2016     | 6.60       | 45900                           | 10.126  |          |
| Monthly   | 01/09/2016   | 01/09/2016    | 20/10/2016     | 6.48       | 45640                           | 10.120  |          |
| Monthly   | 24/10/2016   | 24/10/2016    | 22/11/2016     | 6.84       | 45590                           | 10.028  |          |
| Monthly   | 14/11/2016   | 14/11/2016    | 21/12/2016     | 6.88       | 47880                           | 9.968   |          |
| Monthly   | 13/12/2016   | 13/12/2016    | 20/01/2017     | 6.55       | 48070                           | 9.985   |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|---|
| Quarterly | 05/01/2016   | 18/01/2016    | 21/02/2017     | 579               | 277            | 12500           | 1140             | 10               | 9090          | 4230            | 5390                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0001       | 0.001         | < 0.0002    | 0.003           | < 0.005     | < 0.004            |   |
| Quarterly | 27/04/2016   | 10/05/2016    | 19/05/2016     | 610               | 498            | 14400           | 1470             | 27               | 10700         | 4050            | 7300                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.004           | < 0.005     | < 0.020            | LOR raised to 0.020 mg/L for WAD Cyanide due to elevated salinity |
| Quarterly | 13/07/2016   | 27/07/2016    | 19/08/2016     | 592               | 571            | 16100           | 1700             | 22               | 10900         | 4390            | 8430                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0002       | 0.002         | < 0.0002    | 0.002           | 0.022       | < 0.004            |   |
| Quarterly | 14/11/2016   | 25/11/2016    | 21/12/2016     | 589               | 300            | 15400           | 1120             | 12               | 9010          | 5000            | 5360                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | < 0.002         | < 0.005     | < 0.004            |   |

**Monitoring Point: 33 <P418B>**

Groundwater quality monitoring. Piezometer located down gradient of northern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 05/01/2016   | 05/01/2016    | 18/02/2016     | 6.48       | 42410                           | 10.298  |          |
| Monthly   | 11/02/2016   | 11/02/2016    | 17/03/2016     | 6.46       | 43270                           | 10.287  |          |
| Monthly   | 24/03/2016   | 24/03/2016    | 20/04/2016     | 6.63       | 42697                           | 10.316  |          |
| Monthly   | 27/04/2016   | 27/04/2016    | 19/05/2016     | 6.76       | 38282                           | 10.244  |          |
| Monthly   | 24/05/2016   | 24/05/2016    | 20/06/2016     | 6.52       | 41080                           | 10.245  |          |
| Monthly   | 15/06/2016   | 15/06/2016    | 19/07/2016     | 6.70       | 41489                           | 10.560  |          |
| Monthly   | 13/07/2016   | 27/07/2016    | 19/08/2016     | 6.73       | 41632                           | 10.199  |          |
| Monthly   | 22/08/2016   | 22/08/2016    | 21/09/2016     | 6.54       | 41690                           | 10.104  |          |
| Monthly   | 01/09/2016   | 01/09/2016    | 20/10/2016     | 6.39       | 41650                           | 10.102  |          |
| Monthly   | 24/10/2016   | 24/10/2016    | 22/11/2016     | 6.80       | 41540                           | 10.023  |          |
| Monthly   | 14/11/2016   | 14/11/2016    | 21/12/2016     | 6.82       | 43330                           | 9.958   |          |
| Monthly   | 13/12/2016   | 13/12/2016    | 20/01/2017     | 6.46       | 43530                           | 9.965   |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|---|
| Quarterly | 05/01/2016   | 18/01/2016    | 18/02/2016     | 658               | 440            | 13500           | 1390             | 22               | 9820          | 4510            | 6820                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0001       | < 0.001       | < 0.0002    | 0.003           | < 0.005     | < 0.004            |   |
| Quarterly | 27/04/2016   | 10/05/2016    | 19/05/2016     | 565               | 302            | 13000           | 1160             | 11               | 9670          | 3540            | 5530                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.003           | < 0.005     | < 0.020            | LOR raised to 0.020 mg/L for WAD Cyanide due to elevated salinity |
| Quarterly | 13/07/2016   | 27/07/2016    | 19/08/2016     | 552               | 346            | 12800           | 1090             | 10               | 9680          | 3630            | 5350                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0002       | < 0.003       | < 0.0002    | 0.003           | 0.023       | < 0.004            |   |
| Quarterly | 14/11/2016   | 25/11/2016    | 21/12/2016     | 574               | 471            | 14000           | 1330             | 22               | 9410          | 4590            | 6650                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0002       | 0.011         | < 0.0002    | 0.003           | < 0.005     | < 0.004            |   |



**Groundwater**

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 Licensee: Evolution Mining (Cowan) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 36 <PDB1B>**  
 Groundwater quality monitoring, Pit dewatering bore

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 19/01/2016   | 19/01/2016    | 18/02/2016     | 6.14       | 49600                           | 6.394   |          |
| Monthly   | 12/02/2016   | 12/02/2016    | 17/03/2016     | 6.16       | 50380                           | 6.458   |          |
| Monthly   | 23/03/2016   | 23/03/2016    | 20/04/2016     | 6.50       | 51585                           | 6.540   |          |
| Monthly   | 28/04/2016   | 28/04/2016    | 19/05/2016     | 6.55       | 45618                           | 6.668   |          |
| Monthly   | 24/05/2016   | 24/05/2016    | 20/06/2016     | 6.22       | 48447                           | 6.765   |          |
| Monthly   | 16/06/2016   | 16/06/2016    | 19/07/2016     | 6.40       | 48685                           | 6.675   |          |
| Monthly   | 07/07/2016   | 27/07/2016    | 19/08/2016     | 6.21       | 48699                           | 6.231   |          |
| Monthly   | 02/08/2016   | 02/08/2016    | 21/09/2016     | 6.21       | 48710                           | 5.650   |          |
| Monthly   | 01/09/2016   | 01/09/2016    | 20/10/2016     | 6.03       | 48260                           | 5.943   |          |
| Monthly   | 31/10/2016   | 31/10/2016    | 22/11/2016     | 6.13       | 50690                           | 4.940   |          |
| Monthly   | 10/11/2016   | 10/11/2016    | 21/12/2016     | 6.37       | 50380                           | 4.895   |          |
| Monthly   | 19/12/2016   | 19/12/2016    | 20/01/2017     | 6.22       | 50980                           | 4.765   |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments |
|-----------|--------------|---------------|----------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|----------|
| Quarterly | 19/01/2016   | 29/01/2016    | 18/02/2016     | 966            | 18300           | 2140             | 26               | 10600         | 4090            | 11200                 | 4                             | < 0.0005        | 0.0008         | < 0.0001       | 0.002         | < 0.0002    | < 0.002         | 0.012       |          |
| Quarterly | 28/04/2016   | 10/05/2016    | 19/05/2016     | 883            | 15900           | 1910             | 30               | 10400         | 3610            | 10100                 | 2                             | < 0.0005        | 0.0009         | < 0.0002       | < 0.001       | < 0.0002    | < 0.002         | 0.01        |          |
| Quarterly | 07/07/2016   | 27/07/2016    | 19/08/2016     | 987            | 17400           | 2070             | 25               | 10800         | 3920            | 11000                 | 1                             | < 0.0005        | 0.001          | < 0.0002       | < 0.001       | < 0.0002    | < 0.002         | 0.036       |          |
| Quarterly | 09/11/2016   | 18/11/2016    | 21/02/2017     | 882            | 17700           | 1800             | 26               | 9920          | 4020            | 9610                  | 14                            | < 0.0005        | 0.0007         | < 0.0002       | 0.001         | < 0.0002    | < 0.002         | 0.016       |          |

**Monitoring Point: 38 <PDB3A>**  
 Groundwater quality monitoring, Pit dewatering bore

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments                   |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------------------------|
| Monthly   | 14/01/2016   | 14/01/2016    | 18/02/2016     | 6.52       | 52740                           | 82.475  | Laboratory pH results 7.37 |
| Monthly   | 08/02/2016   | 08/02/2016    | 17/03/2016     | 8.27       | 52720                           | 82.557  |                            |
| Monthly   | 31/03/2016   | 31/03/2016    | 20/04/2016     | 6.93       | 57720                           | 82.723  |                            |
| Monthly   | 19/04/2016   | 19/04/2016    | 19/05/2016     | 6.61       | 52220                           | 82.823  |                            |
| Monthly   | 30/05/2016   | 30/05/2016    | 20/06/2016     | 6.47       | 45146                           | 82.820  |                            |
| Monthly   | 30/06/2016   | 30/06/2016    | 19/07/2016     | 6.70       | 43479                           | 82.477  |                            |
| Monthly   | 18/07/2016   | 27/07/2016    | 19/08/2016     | 6.70       | 52550                           | 82.425  |                            |
| Monthly   | 26/08/2016   | 26/08/2016    | 21/09/2016     | 6.76       | 49390                           | 82.267  |                            |
| Monthly   | 08/09/2016   | 08/09/2016    | 20/10/2016     | 6.53       | 50920                           | 82.313  |                            |
| Monthly   | 31/10/2016   | 31/10/2016    | 22/11/2016     | 6.73       | 53070                           | 82.275  |                            |
| Monthly   | 29/11/2016   | 29/11/2016    | 21/12/2016     | 6.56       | 54000                           | 82.224  |                            |
| Monthly   | 22/12/2016   | 22/12/2016    | 20/01/2017     | 6.49       | 53090                           | 82.240  |                            |

| Frequency | Date Sampled | Date Obtained | Date Published | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments |
|-----------|--------------|---------------|----------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|----------|
| Quarterly | 14/01/2016   | 27/01/2016    | 18/02/2016     | 1380           | 19000           | 2200             | 45               | 11000         | 3740            | 12500                 | 21                            | 0.0015          | 0.002          | 0.0051         | 0.01          | < 0.0002    | 0.004           | 0.776       |          |
| Quarterly | 19/04/2016   | 27/04/2016    | 19/05/2016     | 1230           | 17800           | 2030             | 38               | 10400         | 3540            | 11400                 | 10                            | < 0.0005        | 0.0019         | 0.0066         | 0.005         | < 0.0002    | 0.003           | 0.232       |          |
| Quarterly | 18/07/2016   | 27/07/2016    | 19/08/2016     | 1210           | 18900           | 2040             | 47               | 11000         | 3510            | 11400                 | <1                            | < 0.0005        | 0.0015         | 0.0073         | 0.008         | < 0.0002    | 0.004           | 0.254       |          |
| Quarterly | 29/11/2016   | 07/12/2016    | 21/12/2016     | 1050           | 17500           | 1890             | 43               | 9350          | 3450            | 10400                 | 5                             | 0.0008          | 0.0018         | 0.0064         | 0.007         | 0.0003      | 0.004           | 0.346       |          |

**Monitoring Point: 38 <PDB3B>**  
 Groundwater quality monitoring, Pit dewatering bore

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 14/01/2016   | 14/01/2016    | 18/02/2016     | 6.03       | 49930                           | 20.501  |          |
| Monthly   | 12/02/2016   | 12/02/2016    | 17/03/2016     | 6.03       | 51000                           | 20.632  |          |
| Monthly   | 17/03/2016   | 17/03/2016    | 20/04/2016     | 6.89       | 48156                           | 20.722  |          |
| Monthly   | 27/04/2016   | 27/04/2016    | 19/05/2016     | 6.53       | 45080                           | 20.872  |          |
| Monthly   | 30/05/2016   | 30/05/2016    | 20/06/2016     | 6.10       | 49363                           | 21.003  |          |
| Monthly   | 30/06/2016   | 30/06/2016    | 19/07/2016     | 6.31       | 50508                           | 21.121  |          |
| Monthly   | 18/07/2016   | 27/07/2016    | 19/08/2016     | 6.14       | 50082                           | 21.172  |          |
| Monthly   | 12/08/2016   | 12/08/2016    | 21/09/2016     | 6.16       | 49500                           | 21.291  |          |
| Monthly   | 08/09/2016   | 08/09/2016    | 20/10/2016     | 5.97       | 49180                           | 21.366  |          |
| Monthly   | 24/10/2016   | 24/10/2016    | 22/11/2016     | 5.86       | 49200                           | 21.445  |          |
| Monthly   | 29/11/2016   | 29/11/2016    | 21/12/2016     | 6.06       | 51660                           | 21.505  |          |
| Monthly   | 22/12/2016   | 22/12/2016    | 20/01/2017     | 6.06       | 51880                           | 21.520  |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments |
|-----------|--------------|---------------|----------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|----------|
| Quarterly | 14/01/2016   | 27/01/2016    | 18/02/2016     | 1330           | 17600           | 2470             | 52               | 10100         | 4900            | 13500                 | < 1                           | < 0.0005        | < 0.0005       | 0.0006         | < 0.001       | < 0.0002    | 0.016           | < 0.005     |          |
| Quarterly | 27/04/2016   | 10/05/2016    | 19/05/2016     | 1150           | 16300           | 2180             | 51               | 9760          | 4430            | 11800                 | < 1                           | < 0.0005        | < 0.0005       | 0.0006         | < 0.001       | < 0.0002    | 0.014           | < 0.005     |          |
| Quarterly | 18/07/2016   | 27/07/2016    | 19/08/2016     | 1200           | 17600           | 2330             | 55               | 10800         | 5640            | 12600                 | <1                            | < 0.0005        | < 0.0005       | 0.001          | < 0.001       | < 0.0002    | 0.021           | 0.029       |          |
| Quarterly | 29/11/2016   | 07/12/2016    | 21/12/2016     | 1050           | 16200           | 2120             | 52               | 8900          | 4990            | 11400                 | <1                            | < 0.0005        | 0.0005         | 0.0007         | < 0.001       | < 0.0002    | 0.017           | < 0.005     |          |

**Monitoring Point: 40 <PDBSA>**  
 Groundwater quality monitoring, Pit dewatering bore

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 14/01/2016   | 14/01/2016    | 18/02/2016     | 6.31       | 51880                           | 31.553  |          |
| Monthly   | 09/02/2016   | 09/02/2016    | 17/03/2016     | 6.77       | 53030                           | 31.615  |          |
| Monthly   | 23/03/2016   | 23/03/2016    | 20/04/2016     | 6.55       | 54463                           | 31.505  |          |
| Monthly   | 27/04/2016   | 27/04/2016    | 19/05/2016     | 6.65       | 46773                           | 31.496  |          |
| Monthly   | 25/05/2016   | 25/05/2016    | 20/06/2016     | 6.42       | 50916                           | 31.502  |          |
| Monthly   | 28/06/2016   | 28/06/2016    | 19/07/2016     | 6.58       | 51028                           | 31.431  |          |
| Monthly   | 07/07/2016   | 27/07/2016    | 19/08/2016     | 6.51       | 50948                           | 31.172  |          |
| Monthly   | 04/08/2016   | 04/08/2016    | 21/09/2016     | 6.40       | 50960                           | 31.230  |          |
| Monthly   | 08/09/2016   | 08/09/2016    | 20/10/2016     | 6.33       | 50510                           | 30.893  |          |
| Monthly   | 25/10/2016   | 25/10/2016    | 22/11/2016     | 6.31       | 52070                           | 29.902  |          |
| Monthly   | 22/11/2016   | 22/11/2016    | 21/12/2016     | 6.29       | 51400                           | 29.512  |          |
| Monthly   | 19/12/2016   | 19/12/2016    | 20/01/2017     | 6.41       | 51760                           | 29.420  |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments |
|-----------|--------------|---------------|----------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|----------|
| Quarterly | 14/01/2016   | 27/01/2016    | 18/02/2016     | 818            | 19200           | 2170             | 41               | 10800         | 3320            | 11000                 | < 1                           | < 0.0005        | 0.0053         | 0.0041         | < 0.001       | < 0.0002    | 0.003           | 0.065       |          |
| Quarterly | 27/04/2016   | 10/05/2016    | 19/05/2016     | 771            | 16400           | 1920             | 48               | 9920          | 3140            | 9830                  | < 1                           | < 0.0005        | 0.0048         | 0.0032         | 0.001         | < 0.0002    | 0.003           | 0.049       |          |
| Quarterly | 07/07/2016   | 27/07/2016    | 19/08/2016     | 946            | 18700           | 2240             | 48               | 11400         | 3100            | 11600                 | 9                             | < 0.0005        | 0.0051         | 0.0046         | 0.002         | < 0.0002    | 0.003           | 0.062       |          |
| Quarterly | 22/11/2016   | 01/12/2016    | 21/12/2016     | 824            | 19100           | 1820             | 45               | 9450          | 3420            | 9550                  | < 1                           | < 0.0005        | 0.005          | 0.0062         | 0.001         | < 0.0002    | 0.002           | 0.056       |          |

**Groundwater**

EPL No: 11912 [environment.nsw.gov.au/prpoeoapp/](http://environment.nsw.gov.au/prpoeoapp/)  
 Licensee: Evolution Mining (Cowan) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 40 <PD85B>**  
 Groundwater quality monitoring, Pit dewatering bore

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments   |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|--|
| Monthly   | 14/01/2016   | 14/01/2016    | 18/02/2016     | 5.92       | 49520                           | 18.801  |  |
| Monthly   | 09/02/2016   | 09/02/2016    | 17/03/2016     | 6.41       | 50650                           | 18.862  |  |
| Monthly   | 23/03/2016   | 23/03/2016    | 20/04/2016     | 6.25       | 51792                           | 18.856  |  |
| Monthly   | 27/04/2016   | 27/04/2016    | 19/05/2016     | 6.46       | 45027                           | 18.338  |  |
| Monthly   | 30/05/2016   | 30/05/2016    | 20/06/2016     | 5.99       | 48995                           | 18.275  |  |
| Monthly   | 28/06/2016   | 28/06/2016    | 19/07/2016     | 6.21       | 49118                           | 17.967  |  |
| Monthly   | 07/07/2016   | 27/07/2016    | 19/08/2016     | 6.19       | 48988                           | 17.813  |  |
| Monthly   | 04/08/2016   | 04/08/2016    | 21/09/2016     | 6.00       | 48910                           | 17.162  |  |
| Monthly   | 08/09/2016   | 08/09/2016    | 20/10/2016     | 5.92       | 48610                           | 16.895  |  |
| Monthly   | 25/10/2016   | 25/10/2016    | 22/11/2016     | 5.86       | 50830                           | 12.141  | Increasing SWL displaying similar trend to previous wet weather events |
| Monthly   | 22/11/2016   | 22/11/2016    | 21/12/2016     | 5.85       | 50590                           | 11.052  |  |
| Monthly   | 19/12/2016   | 19/12/2016    | 20/01/2017     | 5.95       | 50720                           | 10.335  |  |

| Frequency | Date Sampled | Date Obtained | Date Published | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | Comments |
|-----------|--------------|---------------|----------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|----------|
| Quarterly | 14/01/2016   | 27/01/2016    | 18/02/2016     | 887            | 18000           | 2120             | 45               | 10500         | 3350            | 10900                 | 26                            | < 0.0005        | 0.0015         | 0.0012         | < 0.001       | < 0.0002    | < 0.002         | 0.007       |          |
| Quarterly | 27/04/2016   | 10/05/2016    | 19/05/2016     | 856            | 16500           | 1970             | 53               | 9890          | 3150            | 10200                 | < 1                           | < 0.0005        | 0.0015         | 0.0012         | < 0.001       | < 0.0002    | < 0.002         | 0.008       |          |
| Quarterly | 07/07/2016   | 27/07/2016    | 19/08/2016     | 950            | 18000           | 2100             | 51               | 10300         | 3210            | 11000                 | 1                             | < 0.0005        | 0.0014         | 0.0013         | < 0.001       | < 0.0002    | < 0.002         | 0.038       |          |
| Quarterly | 22/11/2016   | 01/12/2016    | 21/12/2016     | 882            | 18600           | 1920             | 48               | 9560          | 3340            | 10100                 | 8                             | < 0.0005        | 0.0018         | 0.0014         | < 0.001       | < 0.0002    | < 0.002         | 0.007       |          |

**Monitoring Point: 44 <MON01A>**  
 Groundwater quality monitoring, Groundwater monitoring bore located to the east of the northern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 06/01/2016   | 06/01/2016    | 18/02/2016     | 6.50       | 46500                           | 11.504  |          |
| Monthly   | 25/02/2016   | 25/02/2016    | 17/03/2016     | 6.52       | 47410                           | 11.603  |          |
| Monthly   | 24/03/2016   | 24/03/2016    | 20/04/2016     | 6.63       | 48747                           | 11.602  |          |
| Monthly   | 27/04/2016   | 27/04/2016    | 19/05/2016     | 6.75       | 43415                           | 11.365  |          |
| Monthly   | 30/05/2016   | 30/05/2016    | 20/06/2016     | 6.52       | 45786                           | 11.632  |          |
| Monthly   | 29/06/2016   | 29/06/2016    | 19/07/2016     | 6.76       | 46670                           | 11.570  |          |
| Monthly   | 21/07/2016   | 27/07/2016    | 19/08/2016     | 6.48       | 45770                           | 11.505  |          |
| Monthly   | 24/08/2016   | 24/08/2016    | 21/09/2016     | 6.66       | 45900                           | 11.493  |          |
| Monthly   | 27/09/2016   | 27/09/2016    | 20/10/2016     | 6.74       | 45400                           | 11.318  |          |
| Monthly   | 24/10/2016   | 24/10/2016    | 22/11/2016     | 6.31       | 45590                           | 11.287  |          |
| Monthly   | 25/11/2016   | 25/11/2016    | 21/12/2016     | 6.43       | 47730                           | 11.297  |          |
| Monthly   | 19/12/2016   | 19/12/2016    | 20/01/2017     | 6.50       | 47960                           | 11.200  |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments  |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|---|
| Quarterly | 06/01/2016   | 18/01/2016    | 18/02/2016     | 334               | 460            | 14000           | 1400             | 24               | 9960          | 4490            | 6910                  | < 1                           | < 0.0005        | 0.0024         | 0.0001         | < 0.001       | < 0.0002    | < 0.002         | < 0.005     | < 0.004            |   |
| Quarterly | 27/04/2016   | 10/05/2016    | 19/05/2016     | 334               | 503            | 14800           | 1420             | 25               | 10100         | 3810            | 7100                  | 1                             | < 0.0005        | < 0.0005       | 0.0009         | < 0.001       | < 0.0002    | < 0.002         | < 0.005     | < 0.020            | LOR raised to 0.020 mg/L for WAD Cyanide due to elevated salinity |
| Quarterly | 21/07/2016   | 27/07/2016    | 19/08/2016     | 302               | 589            | 15700           | 1440             | 26               | 10500         | 3930            | 7400                  | < 1                           | < 0.0005        | < 0.0005       | 0.0012         | < 0.001       | < 0.0002    | < 0.002         | 0.037       | < 0.004            |   |
| Quarterly | 25/11/2016   | 01/12/2016    | 21/12/2016     | 318               | 471            | 15000           | 1320             | 25               | 8950          | 4600            | 6610                  | < 1                           | < 0.0005        | < 0.0005       | 0.0008         | < 0.001       | < 0.0002    | < 0.002         | 0.028       | < 0.004            |   |

**Monitoring Point: 44 <MON01B>**  
 Groundwater quality monitoring, Groundwater monitoring bore located to the east of the northern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments  |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|---|
| Monthly   | 08/01/2016   | 08/01/2016    | 18/02/2016     | 5.89       | 35390                           | 13.337  | Laboratory EC results 41500 µS/cm                     |
| Monthly   | 10/02/2016   | 10/02/2016    | 17/03/2016     | 6.13       | 36440                           | 13.295  |   |
| Monthly   | 30/03/2016   | 30/03/2016    | 20/04/2016     | 6.47       | 49000                           | 13.283  |   |
| Monthly   | 19/04/2016   | 19/04/2016    | 19/05/2016     | 5.78       | 47860                           | 13.303  | Laboratory EC results 44500 µS/cm                     |
| Monthly   | 25/05/2016   | 25/05/2016    | 20/06/2016     | 6.31       | 40482                           | 13.242  |   |
| Monthly   | 29/06/2016   | 29/06/2016    | 19/07/2016     | 6.61       | 38405                           | 13.360  |   |
| Monthly   | 13/07/2016   | 27/07/2016    | 19/08/2016     | 6.77       | 29000                           | 13.131  | Laboratory EC results 29000 µS/cm                     |
| Monthly   | 26/08/2016   | 26/08/2016    | 21/09/2016     | 5.68       | 42570                           | 13.226  |   |
| Monthly   | 27/09/2016   | 27/09/2016    | 20/10/2016     | 6.60       | 21100                           | 13.163  | Suspected freshwater inflow into bore well after rain |
| Monthly   | 31/10/2016   | 31/10/2016    | 22/11/2016     | 7.10       | 22240                           | 13.179  | Suspected freshwater inflow into bore well after rain |
| Monthly   | 22/11/2016   | 22/11/2016    | 21/12/2016     | 6.18       | 43490                           | 13.312  |   |
| Monthly   | 15/12/2016   | 15/12/2016    | 20/01/2017     | 5.61       | 47200                           | 13.145  |   |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|----------|
| Quarterly | 08/01/2016   | 21/01/2016    | 18/02/2016     | 26                | 289            | 12900           | 935              | 31               | 6640          | 3650            | 4570                  | < 1                           | < 0.0005        | 0.0008         | 0.0002         | 0.002         | 0.0022      | 0.002           | 0.027       | < 0.004            |          |
| Quarterly | 19/04/2016   | 27/04/2016    | 19/05/2016     | 316               | 476            | 13900           | 1430             | 37               | 9110          | 3780            | 7080                  | < 1                           | < 0.0005        | 0.0042         | 0.0004         | 0.014         | 0.0204      | 0.007           | 0.048       | < 0.004            |          |
| Quarterly | 13/07/2016   | 27/07/2016    | 21/02/2017     | 98                | 259            | 8780            | 733              | 28               | 5990          | 2380            | 3660                  | 4                             | < 0.0005        | 0.001          | 0.0002         | 0.008         | 0.0012      | < 0.002         | 0.076       | < 0.004            |          |
| Quarterly | 22/11/2016   | 01/12/2016    | 21/12/2016     | 22                | 479            | 13900           | 1440             | 43               | 9430          | 4020            | 7120                  | 4                             | < 0.0005        | 0.0016         | 0.0003         | 0.003         | 0.0033      | 0.003           | 0.037       | < 0.004            |          |

**Monitoring Point: 45 <MON02A>**  
 Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|----------|
| Monthly   | 06/01/2016   | 06/01/2016    | 18/02/2016     | 6.70       | 40490                           | 11.106  |          |
| Monthly   | 10/02/2016   | 10/02/2016    | 17/03/2016     | 6.62       | 41180                           | 10.847  |          |
| Monthly   | 17/03/2016   | 17/03/2016    | 20/04/2016     | 7.16       | 39943                           | 10.926  |          |
| Monthly   | 22/04/2016   | 22/04/2016    | 19/05/2016     | 6.86       | 36532                           | 10.803  |          |
| Monthly   | 23/05/2016   | 23/05/2016    | 20/06/2016     | 6.73       | 39530                           | 10.762  |          |
| Monthly   | 27/06/2016   | 27/06/2016    | 19/07/2016     | 6.92       | 39693                           | 10.405  |          |
| Monthly   | 07/07/2016   | 27/07/2016    | 19/08/2016     | 6.77       | 35519                           | 10.445  |          |
| Monthly   | 30/08/2016   | 30/08/2016    | 21/09/2016     | 6.70       | 38350                           | 10.632  |          |
| Monthly   | 08/09/2016   | 08/09/2016    | 20/10/2016     | 6.69       | 39470                           | 10.383  |          |
| Monthly   | 25/10/2016   | 25/10/2016    | 22/11/2016     | 6.64       | 41390                           | 10.160  |          |
| Monthly   | 25/11/2016   | 25/11/2016    | 21/12/2016     | 6.65       | 41400                           | 10.116  |          |
| Monthly   | 12/12/2016   | 12/12/2016    | 20/01/2017     | 6.69       | 41450                           | 9.890   |          |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments                        |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|---------------------------------|
| Quarterly | 06/01/2016   | 18/01/2016    | 18/02/2016     | 700               | 438            | 12200           | 1230             | 46               | 8310          | 3400            | 6160                  | < 1                           | < 0.0005        | < 0.0005       | 0.0002         | < 0.001       | < 0.0002    | 0.008           | < 0.005     | < 0.004            |                                 |
| Quarterly | 22/04/2016   | 29/04/2016    | 19/05/2016     | 715               | 488            | 12700           | 1160             | 49               | 7800          | 2850            | 6000                  | < 1                           | < 0.0005        | < 0.0005       | 0.0001         | 0.001         | < 0.0002    | 0.009           | < 0.005     | < 0.004            |                                 |
| Quarterly | 07/07/2016   | 27/07/2016    | 19/08/2016     | 716               | 573            | 12400           | 1390             | 52               | 9380          | 3110            | 7150                  | 1                             | < 0.0005        | < 0.0005       | < 0.0002       | 0.008         | < 0.0002    | 0.008           | 0.034       | < 0.010            | LOR raised due to sample matrix |
| Quarterly | 25/11/2016   | 01/12/2016    | 21/12/2016     | 674               | 440            | 12800           | 1210             | 51               | 7820          | 2870            | 6080                  | < 1                           | < 0.0005        | < 0.0005       | < 0.0002       | < 0.001       | < 0.0002    | 0.01            | 0.029       | < 0.004            |                                 |

**Groundwater**

EPL No: 11912 [environment.nsw.gov.au/prpoeoapp/](http://environment.nsw.gov.au/prpoeoapp/)  
 Licensee: Evolution Mining (Cowal) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 45 <MON02B>**  
 Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments  |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|---|
| Monthly   | 06/01/2016   | 06/01/2016    | 18/02/2016     | 6.67       | 39450                           | 10.528  |   |
| Monthly   | 10/02/2016   | 10/02/2016    | 17/03/2016     | 6.57       | 40140                           | 10.553  |   |
| Monthly   | 17/03/2016   | 17/03/2016    | 20/04/2016     | 7.14       | 39368                           | 10.460  |   |
| Monthly   | 22/04/2016   | 22/04/2016    | 19/05/2016     | 6.82       | 35965                           | 10.410  |   |
| Monthly   | 23/05/2016   | 23/05/2016    | 20/06/2016     | 6.66       | 38563                           | 10.300  |   |
| Monthly   | 27/06/2016   | 27/06/2016    | 19/07/2016     | 6.89       | 38692                           | 10.110  |   |
| Monthly   | 07/07/2016   | 27/07/2016    | 19/08/2016     | 6.78       | 38558                           | 10.102  |   |
| Monthly   | 30/08/2016   | 30/08/2016    | 21/09/2016     | 6.87       | 18270                           | 9.953   | Suspected freshwater inflow into bore well after rain   |
| Monthly   | 08/09/2016   | 08/09/2016    | 20/10/2016     | 6.80       | 34550                           | 10.832  | Monitoring error - SWL recorded at 9.565m on 20/10/2016 |
| Monthly   | 25/10/2016   | 25/10/2016    | 22/11/2016     | 6.62       | 40080                           | 9.542   |   |
| Monthly   | 25/11/2016   | 25/11/2016    | 21/12/2016     | 6.63       | 40350                           | 9.542   |   |
| Monthly   | 12/12/2016   | 12/12/2016    | 20/01/2017     | 6.66       | 40450                           | 9.490   |   |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Sodium (mg/L) | Sulphate (mg/L) | Total Hardness (mg/L) | Total Suspended Solids (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Copper (mg/L) | Lead (mg/L) | Selenium (mg/L) | Zinc (mg/L) | WAD Cyanide (mg/L) | Comments                        |
|-----------|--------------|---------------|----------------|-------------------|----------------|-----------------|------------------|------------------|---------------|-----------------|-----------------------|-------------------------------|-----------------|----------------|----------------|---------------|-------------|-----------------|-------------|--------------------|---------------------------------|
| Quarterly | 06/01/2016   | 18/01/2016    | 18/02/2016     | 799               | 380            | 11800           | 1110             | 58               | 6880          | 3240            | 5520                  | 21                            | < 0.0005        | < 0.0005       | < 0.0001       | 0.034         | < 0.0002    | 0.012           | < 0.005     | < 0.004            |                                 |
| Quarterly | 22/04/2016   | 29/04/2016    | 19/05/2016     | 859               | 453            | 12300           | 1320             | 71               | 8040          | 2770            | 6570                  | 6                             | < 0.0005        | < 0.0005       | < 0.0005       | 0.055         | < 0.0002    | 0.014           | < 0.005     | < 0.004            |                                 |
| Quarterly | 07/07/2016   | 27/07/2016    | 19/08/2016     | 825               | 499            | 12200           | 1480             | 73               | 8990          | 2990            | 7340                  | 7                             | <0.0005         | <0.0005        | <0.0002        | 0.034         | <0.0002     | 0.014           | 0.029       | <0.010             | LOR raised due to sample matrix |
| Quarterly | 25/11/2016   | 01/12/2016    | 21/12/2016     | 814               | 375            | 12500           | 1210             | 66               | 7260          | 2820            | 5920                  | 10                            | <0.0005         | <0.0005        | <0.0002        | 0.037         | <0.0002     | 0.013           | 0.032       | < 0.004            |                                 |

**Waste Rock Leachate**

EPL No: 11913 <http://www.environment.nsw.gov.au/epoapp/>  
 Licensee: Evolution Mining (Cowan) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 41 -Northern Waste Emplacement-**  
 Northern Waste Emplacement leachate quality monitoring, Northern Waste Emplacement External Toe Drain

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments                                    |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|---|
| Monthly   | 07/01/2016   | 07/01/2016    | 18/02/2016     | 8.49       | 3670                            | -       | Insufficient water available to measure SWL |
| Monthly   | 10/02/2016   | 10/02/2016    | 18/02/2016     | 8.09       | 10850                           | -       | Insufficient water available to measure SWL |
| Monthly   | 14/03/2016   | 14/03/2016    | 17/03/2016     | 8.09       | 19010                           | -       | Insufficient water available to measure SWL |
| Monthly   | 20/04/2016   | 20/04/2016    | 19/05/2016     | 7.63       | 19560                           | -       | Insufficient water available to measure SWL |
| Monthly   | 03/05/2016   | 03/05/2016    | 19/05/2016     | 7.43       | 23240                           | -       | Insufficient water available to measure SWL |
| Monthly   | 01/06/2016   | 01/06/2016    | 20/06/2016     | 8.16       | 6353                            | -       | Insufficient water available to measure SWL |
| Monthly   | 04/07/2016   | 04/07/2016    | 19/07/2016     | 7.8        | 9743                            | -       | Insufficient water available to measure SWL |
| Monthly   | 02/08/2016   | 02/08/2016    | 19/08/2016     | 7.59       | 12540                           | -       | Insufficient water available to measure SWL |
| Monthly   | 05/09/2016   | 05/09/2016    | 21/09/2016     | 7.99       | 13220                           | -       | Insufficient water available to measure SWL |
| Monthly   | 25/10/2016   | 03/11/2016    | 22/11/2016     | 8.54       | 20630                           | -       | Insufficient water available to measure SWL |
| Monthly   | 02/12/2016   | -             | 21/12/2016     | -          | -                               | -       | No water present in external toe drain      |
| Monthly   | 08/12/2016   | -             | 21/12/2016     | -          | -                               | -       | No water present in external toe drain      |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Copper (mg/L) | Lead (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Selenium (mg/L) | Sodium (mg/L) | Sulfate (mg/L) | Total Hardness (mg/L) | Total suspended solids (mg/L) | Zinc (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|-----------------|----------------|----------------|----------------|-----------------|---------------|-------------|------------------|------------------|-----------------|---------------|----------------|-----------------------|-------------------------------|-------------|----------|
| Quarterly | 07/01/2016   | 15/01/2016    | 21/02/2017     | 105               | <0.010          | <0.010         | 0.0012         | 608            | 11000           | <0.010        | <0.010      | 924              | 28               | <0.01           | 6960          | 3530           | 5320                  | 82                            | <0.05       |          |
| Quarterly | 20/04/2016   | 28/04/2016    | 21/02/2017     | 170               | 0.0013          | 0.0139         | 0.0008         | 284            | 5920            | 0.003         | <0.0002     | 464              | 17               | 0.006           | 3910          | 1880           | 2620                  | 26                            | 0.010       |          |
| Quarterly | 04/07/2016   | 12/07/2016    | 21/02/2017     | 216               | 0.001           | 0.019          | 0.0002         | 298            | 3520            | 0.005         | <0.0002     | 274              | 10               | 0.012           | 2360          | 1740           | 1870                  | 8                             | 0.011       |          |
| Quarterly | 25/10/2016   | 03/11/2016    | 21/02/2017     | 144               | 0.001           | 0.003          | <0.0002        | 485            | 6600            | 0.01          | <0.0002     | 565              | 18               | 0.002           | 3860          | 2400           | 3540                  | 32                            | <0.05       |          |

**Monitoring Point: 42 -Southern Waste Emplacement-**  
 Southern Waste Emplacement leachate quality monitoring, Northern Waste Emplacement External Toe Drain

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments                                    |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|---|
| Monthly   | 07/01/2016   | 07/01/2016    | 18/02/2016     | 7.59       | 21200                           | -       | Insufficient water available to measure SWL |
| Monthly   | 10/02/2016   | 10/02/2016    | 18/02/2016     | 7.64       | 14840                           | -       | Insufficient water available to measure SWL |
| Monthly   | 02/03/2016   | 02/03/2016    | 17/03/2016     | 7.90       | 20800                           | -       | Insufficient water available to measure SWL |
| Monthly   | 20/04/2016   | 20/04/2016    | 19/05/2016     | 7.31       | 22860                           | -       | Insufficient water available to measure SWL |
| Monthly   | 03/05/2016   | 03/05/2016    | 20/06/2016     | 7.49       | 21440                           | -       | Insufficient water available to measure SWL |
| Monthly   | 01/06/2016   | 01/06/2016    | 20/06/2016     | 7.36       | 12604                           | -       | Insufficient water available to measure SWL |
| Monthly   | 04/07/2016   | 04/07/2016    | 19/07/2016     | 7.75       | 7103                            | -       | Insufficient water available to measure SWL |
| Monthly   | 02/08/2016   | 02/08/2016    | 19/08/2016     | 7.54       | 9350                            | -       | Insufficient water available to measure SWL |
| Monthly   | 05/09/2016   | 05/09/2016    | 21/09/2016     | 7.41       | 10600                           | -       | Insufficient water available to measure SWL |
| Monthly   | 25/10/2016   | 03/11/2016    | 22/11/2016     | 7.8        | 9500                            | -       | Insufficient water available to measure SWL |
| Monthly   | 02/11/2016   | 02/11/2016    | 21/12/2016     | 7.74       | 9900                            | -       | Insufficient water available to measure SWL |
| Monthly   | 08/12/2016   | 08/12/2016    | 21/12/2016     | 7.49       | 10880                           | -       | Insufficient water available to measure SWL |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Copper (mg/L) | Lead (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Selenium (mg/L) | Sodium (mg/L) | Sulfate (mg/L) | Total Hardness (mg/L) | Total suspended solids (mg/L) | Zinc (mg/L) | Comments |
|-----------|--------------|---------------|----------------|-------------------|-----------------|----------------|----------------|----------------|-----------------|---------------|-------------|------------------|------------------|-----------------|---------------|----------------|-----------------------|-------------------------------|-------------|----------|
| Quarterly | 07/01/2016   | 15/01/2016    | 21/02/2017     | 166               | 0.001           | 0.006          | 0.0015         | 466            | 6380            | 0.002         | <0.001      | 586              | 21               | 0.02            | 3620          | 2410           | 3580                  | 365                           | 0.031       |          |
| Quarterly | 20/04/2016   | 28/04/2016    | 21/02/2017     | 203               | 0.001           | 0.0042         | 0.0017         | 508            | 6920            | 0.002         | 0.0002      | 678              | 24               | 0.01            | 4230          | 2370           | 4060                  | 355                           | 0.031       |          |
| Quarterly | 04/07/2016   | 12/07/2016    | 21/02/2017     | 295               | <0.0005         | <0.0005        | 0.0021         | 350            | 2210            | <0.001        | <0.0002     | 237              | 20               | 0.005           | 1400          | 2210           | 1850                  | 4                             | 0.113       |          |
| Quarterly | 25/10/2016   | 03/11/2016    | 21/02/2017     | 264               | <0.0005         | <0.0005        | <0.0022        | 382            | 2400            | <0.001        | <0.0002     | 356              | 20               | 0.003           | 1270          | 1120           | 2010                  | 5                             | 0.085       |          |

**Monitoring Point: 43 -Perimeter Waste Emplacement-**  
 Perimeter Waste Emplacement leachate quality monitoring, Northern Waste Emplacement External Toe Drain

| Frequency | Date Sampled | Date Obtained | Date Published | pH (units) | Electrical Conductivity (µS/cm) | SWL (m) | Comments                               |
|-----------|--------------|---------------|----------------|------------|---------------------------------|---------|--|
| Monthly   | 07/01/2016   | -             | 18/02/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 10/02/2016   | -             | 18/02/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 02/03/2016   | -             | 17/03/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 20/04/2016   | -             | 19/05/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 03/05/2016   | -             | 20/06/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 01/06/2016   | -             | 20/06/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 01/07/2016   | -             | 19/07/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 02/08/2016   | -             | 19/08/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 05/09/2016   | -             | 21/09/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 06/09/2016   | -             | 22/09/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 25/10/2016   | -             | 22/11/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 02/11/2016   | -             | 21/12/2016     | -          | -                               | -       | No water present in external toe drain |
| Monthly   | 08/12/2016   | -             | 21/12/2016     | -          | -                               | -       | No water present in external toe drain |

| Frequency | Date Sampled | Date Obtained | Date Published | Alkalinity (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Cadmium (mg/L) | Calcium (mg/L) | Chloride (mg/L) | Copper (mg/L) | Lead (mg/L) | Magnesium (mg/L) | Potassium (mg/L) | Selenium (mg/L) | Sodium (mg/L) | Sulfate (mg/L) | Total Hardness (mg/L) | Total suspended solids (mg/L) | Zinc (mg/L) | Comments                               |
|-----------|--------------|---------------|----------------|-------------------|-----------------|----------------|----------------|----------------|-----------------|---------------|-------------|------------------|------------------|-----------------|---------------|----------------|-----------------------|-------------------------------|-------------|--|
| Quarterly | 07/01/2016   | -             | 21/02/2017     | -                 | -               | -              | -              | -              | -               | -             | -           | -                | -                | -               | -             | -              | -                     | -                             | -           | No water present in external toe drain |
| Quarterly | 20/04/2016   | -             | 21/02/2017     | -                 | -               | -              | -              | -              | -               | -             | -           | -                | -                | -               | -             | -              | -                     | -                             | -           | No water present in external toe drain |
| Quarterly | 01/07/2016   | -             | 21/02/2017     | -                 | -               | -              | -              | -              | -               | -             | -           | -                | -                | -               | -             | -              | -                     | -                             | -           | No water present in external toe drain |
| Quarterly | 25/10/2016   | -             | 21/02/2017     | -                 | -               | -              | -              | -              | -               | -             | -           | -                | -                | -               | -             | -              | -                     | -                             | -           | No water present in external toe drain |



Q1 Noise Monitoring - January 2016

| Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments                   |
|---|--------------|---------------|----------------|---|----------|---|----------------------------|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |                            |
| N01   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 29  | 30       | -   | Birds (28 & 29); CGO (21)  |
| N05   | 13/01/2016   | 26/02/2016    | 17/03/2016     | 49  | 49       | 36  | Birds (47 & 47); CGO (<20) |
| N09   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 42  | 44       | 35  | Birds (42 & 44); CGO (<20) |
| N10   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 40  | 36       | 36  | Birds (40 & 36); CGO (<20) |
| N11   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 40  | 37       | 37  | Birds (38 & 36); CGO (<20) |
| N12   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 27  | 29       | 36  | Birds (27 & 29); CGO (<20) |
| N13   | 13/01/2016   | 26/02/2016    | 17/03/2016     | 48  | 46       | 36  | Birds (48 & 46); CGO (<20) |
| N14   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 30  | 29       | 35  | Birds (30 & 29); CGO (<20) |

| Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments                             |
|---|--------------|---------------|----------------|---|----------|---|--------------------------------------|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |                                      |
| N01   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 38  | 39       | -   | Insects (38 & 39); CGO (<20)         |
| N05   | 11/01/2016   | 26/02/2016    | 17/03/2016     | 39  | 38       | 36  | Insects (39 & 38); CGO (<20)         |
| N09   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 40  | 47       | 35  | Birds (40 & 47); CGO (<20)           |
| N10   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 44  | 42       | 36  | Birds (44 & 42); CGO (<20)           |
| N11   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 43  | 44       | 37  | Birds (43 & 44); CGO (<20)           |
| N12   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 29  | 29       | 36  | Birds (29 & 29); CGO (<20)           |
| N13   | 11/01/2016   | 26/02/2016    | 17/03/2016     | 41  | 39       | 36  | Frogs & Insects (41 & 39); CGO (<20) |
| N14   | 12/01/2016   | 26/02/2016    | 17/03/2016     | 43  | 44       | 35  | Insects (43 & 44); CGO (<20)         |

| Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments                             |
|--|--------------|---------------|----------------|---|----------|---|--------------------------------------|
| Location   | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |                                      |
| N01  | 12/01/2016   | 26/02/2016    | 17/03/2016     | 42  | 47       | -   | Insects (42 & 47); CGO (<20)         |
| N05  | 11/01/2016   | 26/02/2016    | 17/03/2016     | 36  | 37       | 36  | Frogs & Insects (36 & 37); CGO (<20) |
| N09  | 12/01/2016   | 26/02/2016    | 17/03/2016     | 23  | 25       | 35  | Insects (23 & 25); CGO (<20)         |
| N10  | 12/01/2016   | 26/02/2016    | 17/03/2016     | 45  | 48       | 36  | Insects (45 & 48); CGO (<20)         |
| N11  | 12/01/2016   | 26/02/2016    | 17/03/2016     | 30  | 27       | 37  | Insects (30 & 27); CGO (<20)         |
| 07/07/2016   | 27/07/2016   | 26/02/2016    | 01/01/1900     | 45  | 44       | 36  | Insects (45 & 44); CGO (<20)         |
| N13  | 11/01/2016   | 26/02/2016    | 17/03/2016     | 40  | 38       | 36  | Frogs & Insects (40 & 38); CGO (<20) |
| N14  | 12/01/2016   | 26/02/2016    | 17/03/2016     | 51  | 50       | 35  | Insects (51 & 50); CGO (22 & 22)     |

n/a - Mine noise emission not discernible

Q2 Noise Monitoring

| Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments  |
|---|--------------|---------------|----------------|---|----------|---|---|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |   |
| N01   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 36  | 34       | -   | CGO (34 & 33), wind (32 & 27)                     |
| N05   | 12/04/2016   | 11/07/2016    | 19/07/2016     | 36  | 36       | 36  | Birds (36), water pump (23), CGO (<20)            |
| N09   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 44  | 40       | 36  | Birds (42 & 35), wind (39 & 38), CGO (<20)        |
| N10   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 44  | 44       | 36  | Farming machinery (43 & 36), wind (36), CGO (<20) |
| N11   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 44  | 40       | 37  | Birds (44 & 40), wind (29 & 27), CGO (<20)        |
| N12   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 34  | 35       | 36  | Birds (34 & 35), CGO (<20)                        |
| N13   | 12/04/2016   | 11/07/2016    | 19/07/2016     | 42  | 36       | 36  | Wind (48 & 46), birds (33 & 31), CGO (<20)        |
| N14   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 37  | 31       | 35  | Birds (36 & 28), sheep (29 & 28), CGO (<20)       |

| Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments                          |
|---|--------------|---------------|----------------|---|----------|---|-----------------------------------|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |                                   |
| N01   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 33  | 32       | -   | CGO (33 & 32)                     |
| N05   | 10/04/2016   | 11/07/2016    | 19/07/2016     | 26  | 26       | 36  | Wind (24 & 26), CGO (21 & <20)    |
| N09   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 26  | 26       | 36  | Wind (24 & 26), CGO (21 & <20)    |
| N10   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 23  | 23       | 36  | Insects (20), CGO (20)            |
| N11   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 21  | 21       | 37  | CGO (21)                          |
| N12   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 23  | 24       | 36  | CGO (23 & 24)                     |
| N13   | 10/04/2016   | 11/07/2016    | 19/07/2016     | 23  | 24       | 36  | Traffic (20 & 24), CGO (20 & <20) |
| N14   | 11/04/2016   | 11/07/2016    | 19/07/2016     | 27  | 25       | 35  | Sheep (27 & 25), CGO (<20)        |

| Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments                         |
|--|--------------|---------------|----------------|---|----------|---|----------------------------------|
| Location   | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |                                  |
| N01  | 11/04/2016   | 11/07/2016    | 19/07/2016     | 33  | 34       | -   | CGO (33 & 34)                    |
| N05  | 10/04/2016   | 11/07/2016    | 19/07/2016     | 24  | 25       | 36  | CGO (22 & 20), traffic (20 & 23) |
| N09  | 12/04/2016   | 11/07/2016    | 19/07/2016     | 26  | 21       | 36  | Insects (24), CGO (21 & 21)      |
| N10  | 12/04/2016   | 11/07/2016    | 19/07/2016     | 25  | 22       | 36  | CGO (25 & 22)                    |
| N11  | 11/04/2016   | 11/07/2016    | 19/07/2016     | 26  | 27       | 37  | CGO (26 & 24); wind (24)         |
| N12  | 11/04/2016   | 11/07/2016    | 19/07/2016     | 23  | 22       | 36  | CGO (23 & 22)                    |
| N13  | 10/04/2016   | 11/07/2016    | 19/07/2016     | 21  | 21       | 36  | Traffic (21), CGO (<20)          |
| N14  | 12/04/2016   | 11/07/2016    | 19/07/2016     | 22  | 26       | 35  | Sheep (22 & 26), CGO (<20)       |

N/A - Mine noise emission not discernible

Q3 Noise Monitoring

| Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments  |
|---|--------------|---------------|----------------|---|----------|---|---|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |   |
| N01   | 18/07/2016   | 23/08/2016    | 21/09/2016     | 30  | 31       | -   | Birds and Frogs (35 & 37), CGO (30 & 31)            |
| N05   | 17/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Birds and Frogs (38 & 39), CGO (<20 & <20)          |
| N09   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Birds (34 & 40), Tractor (29 & 26), CGO (<20 & <20) |
| N10   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Birds (34 & 38), CGO (<20 & <20)                    |
| N11   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 37  | Birds (38 & 38), CGO (<20 & <20)                    |
| N12   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Birds (27 & 27), CGO (<20 & <20)                    |
| N13   | 17/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Birds and Frogs (47 & 41), CGO (<20 & <20)          |
| N14   | 18/07/2016   | 23/08/2016    | 21/09/2016     | 30  | 29       | 35  | Birds (35 & 32), CGO (30 & 29), Traffic (28 & 22)   |

| Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments                         |
|---|--------------|---------------|----------------|---|----------|---|----------------------------------|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |                                  |
| N01   | 18/07/2016   | 23/08/2016    | 21/09/2016     | 32  | 31       | -   | Frogs (52 & 54), CGO (32 & 31)   |
| N05   | 17/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (40 & 39), CGO (<20 & <20) |
| N09   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (24 & 27), CGO (<20 & <20) |
| N10   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (32 & 33), CGO (<20 & <20) |
| N11   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 37  | Frogs (28 & 29), CGO (<20 & <20) |
| N12   | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (37 & 35), CGO (<20 & <20) |
| N13   | 17/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (39 & 38), CGO (<20 & <20) |
| N14   | 18/07/2016   | 23/08/2016    | 21/09/2016     | 23  | 23       | 35  | Frogs (29 & 28), CGO (23 & 23)   |

| Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments                                    |
|--|--------------|---------------|----------------|---|----------|---|---|
| Location   | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |   |
| N01  | 18/07/2016   | 23/08/2016    | 21/09/2016     | 32  | 35       | -   | Frogs (54 & 54), CGO (<20 & <20)            |
| N05  | 17/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (40 & 41), CGO (<20 & <20)            |
| N09  | 18/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (28 & 26), CGO (<20 & <20)            |
| N10  | 19/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (29 & 28), CGO (<20 & <20)            |
| N11  | 19/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 37  | Frogs (28 & 30), Sheep (35) CGO (<20 & <20) |
| N12  | 19/07/2016   | 23/08/2016    | 21/09/2016     | <20   | <20      | 36  | Frogs (30 & 32), CGO (<20 & <20)            |
| N13  | 17/07/2016   | 23/08/2016    | 21/09/2016     | 22  | 24       | 36  | Frogs (40 & 42), CGO (22 & 24)              |
| N14  | 18/07/2016   | 23/08/2016    | 21/09/2016     | 25  | 25       | 35  | Frogs (31 & 31), CGO (25 & 25)              |

N/A - Mine noise emission not discernible

Q4 Noise Monitoring

| Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments   |
|---|--------------|---------------|----------------|---|----------|---|--|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |  |
| N01   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 41  | 41       | -   | Birds & insects (41), CGO (<20)                          |
| N05   | 28/11/2016   | 09/01/2017    | 20/01/2017     | 38  | 46       | 36  | Wind (46), birds (38), lapping dam water (30), CGO (<20) |
| N09   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 41  | 35       | 36  | Birds & insects (38), wind (38), traffic (26), CGO (<20) |
| N10   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 42  | 42       | 36  | Birds & insects (40), Wind (41), traffic (26), CGO (<20) |
| N11   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 35  | 35       | 37  | Birds & insects (34), wind (28), CGO (<20)               |
| N12   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 41  | 38       | 36  | Birds & insects (41), CGO (22)                           |
| N13   | 28/11/2016   | 09/01/2017    | 20/01/2017     | 37  | 34       | 36  | Birds (37), lapping dam water (26), CGO (<20)            |
| N14   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 40  | 48       | 35  | Wind (47), insects (40), wind (27), CGO (<20)            |

| Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments  |
|---|--------------|---------------|----------------|---|----------|---|---|
| Location  | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |   |
| N01   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 44  | 43       | -   | Birds & insects (44), CGO (21)  |
| N05   | 28/11/2016   | 09/01/2017    | 20/01/2017     | 43  | 39       | 36  | Frogs & insects (43), lapping dam water (28), traffic (23), CGO (<20) |
| N09   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 38  | 36       | 36  | Domestic (37), birds & insects (30), CGO (<20)                        |
| N10   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 47  | 39       | 36  | Frogs (32), Birds & insects (42), CGO (<20)                           |
| N11   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 37  | 43       | 37  | Insects (43), CGO (23),   |
| N12   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 44  | 47       | 36  | Insects (47), CGO (<20)   |
| N13   | 28/11/2016   | 09/01/2017    | 20/01/2017     | 40  | 40       | 36  | Frogs & insects (40), traffic (25), CGO (<20)                         |
| N14   | 29/11/2016   | 09/01/2017    | 20/01/2017     | 35  | 36       | 35  | Birds & insects (36), traffic (23), CGO (<20)                         |

| Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa) |              |               |                | Mine Contributed LA <sub>eq(15minute)</sub> - dBA |          | Noise Criteria LA <sub>eq(15minute)</sub> - dBA | Comments  |
|--|--------------|---------------|----------------|---|----------|---|---|
| Location   | Date Sampled | Date Obtained | Date Published | Survey 1  | Survey 2 |   |   |
| N01  | 29/11/2016   | 09/01/2017    | 20/01/2017     | 44  | 43       | -   | Insects (44), CGO (<20)   |
| N05  | 28/11/2016   | 09/01/2017    | 20/01/2017     | 39  | 40       | 36  | Lapping dam water (37) frogs & insects (37), traffic (23), CGO (<20)  |
| N09  | 29/11/2016   | 09/01/2017    | 20/01/2017     | 27  | 28       | 36  | Insects (28), CGO (<20)   |
| N10  | 29/11/2016   | 09/01/2017    | 20/01/2017     | 34  | 33       | 36  | Insects (34), CGO (<20)   |
| N11  | 29/11/2016   | 09/01/2017    | 20/01/2017     | 35  | 37       | 37  | Wind (37), CGO (<20)  |
| N12  | 29/11/2016   | 09/01/2017    | 20/01/2017     | 46  | 45       | 36  | Insects (46), CGO (<20)   |
| N13  | 28/11/2016   | 09/01/2017    | 20/01/2017     | 40  | 39       | 36  | Frogs & insects (39), traffic (29), lapping dam water (27), CGO (<20) |
| N14  | 29/11/2016   | 09/01/2017    | 20/01/2017     | 31  | 30       | 35  | Insects (31), CGO (<20)   |

N/A - Mine noise emission not discernible











Monitoring Point: BM05 <Bird Breeding Area>

Blast monitoring: Airblast overpressure and ground vibration peak particle velocity recorded in Lake Cowal to the north-east of ML1535 boundary

Table with columns: Blast Number, Day/Date, Time, Date Obtained, Date Published, Compliance Limits (Ground Vibration, Airblast Overpressure), BM05 at Blast Time (Ground Vibration, Airblast Overpressure), and Comments. Rows are organized by month from January to December.



**Cyanide**

EPL No: 11912 <http://www.environment.nsw.gov.au/prpoeoapp/>

Licensee: Evolution Mining (Cowal) Pty Limited

Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: 48**

Water quality monitoring, automated sampler located at the processing plant

| Frequency | Month     | No Sampled during Month | Total Cyanide (mg/L) |       |        |         | Comments |
|-----------|-----------|-------------------------|----------------------|-------|--------|---------|----------|
|           |           |                         | Minimum              | Mean  | Median | Maximum |          |
| Weekly    | January   | 5                       | 4.49                 | 8.44  | 6.25   | 19.43   |          |
| Weekly    | February  | 4                       | 3.71                 | 8.31  | 6.57   | 16.40   |          |
| Weekly    | March     | 4                       | 10.77                | 14.38 | 14.35  | 18.04   |          |
| Weekly    | April     | 3                       | 16.01                | 17.43 | 16.55  | 19.73   |          |
| Weekly    | May       | 5                       | 19.56                | 25.70 | 24.52  | 31.29   |          |
| Weekly    | June      | 4                       | 8.62                 | 11.96 | 10.59  | 18.04   |          |
| Weekly    | July      | 5                       | 6.61                 | 12.58 | 12.99  | 15.45   |          |
| Weekly    | August    | 4                       | 9.77                 | 12.99 | 13.62  | 14.94   |          |
| Weekly    | September | 4                       | 9.30                 | 14.51 | 15.06  | 18.60   |          |
| Weekly    | October   | 5                       | 10.12                | 14.79 | 15.45  | 20.70   |          |
| Weekly    | November  | 4                       | 15.79                | 20.72 | 20.32  | 26.44   |          |
| Weekly    | December  | 4                       | 9.04                 | 21.98 | 22.40  | 34.07   |          |

| Frequency   | Month     | No Sampled during Month | WAD Cyanide (mg/L) |         | Concentration Limits |                  | Comments  |
|-------------|-----------|-------------------------|--------------------|---------|----------------------|------------------|---|
|             |           |                         | Minimum            | Maximum | 90th Percentile      | 100th Percentile |   |
| Twice daily | January   | 57                      | 0.7                | 13.1    | 20ppm                | 30ppm            | On the following dates, samples were not collected due to mill shutdown: 18/1/16 (morning) until 20/01/16 (morning)   |
| Twice daily | February  | 57                      | 0.1                | 11.3    | 20ppm                | 30ppm            | On the following dates, samples were not collected due to mill shutdown: 16/02/16 (morning)   |
| Twice daily | March     | 62                      | 1.8                | 12.0    | 20ppm                | 30ppm            |   |
| Twice daily | April     | 47                      | 0.2                | 25.2    | 20ppm                | 30ppm            | On the following dates, samples were not collected due to mill shutdown: 15/04/16 (morning) until 21/04/16 (morning)  |
| Twice daily | May       | 62                      | 0.6                | 13.5    | 20ppm                | 30ppm            |   |
| Twice daily | June      | 58                      | 0.5                | 12.3    | 20ppm                | 30ppm            | On the following dates, samples were not collected due to mill shutdown: 21/04/16 (morning and night)   |
| Twice daily | July      | 62                      | 1.5                | 14.9    | 20ppm                | 30ppm            |   |
| Twice daily | August    | 55                      | 0.2                | 15.3    | 20ppm                | 30ppm            | On the following dates, samples were not collected due to mill shutdown: 16/08/16 (morning ) until 19/08/16 (morning)   |
| Twice daily | September | 53                      | 0.6                | 13.3    | 20ppm                | 30ppm            | On the following dates, samples were not collected due to mill shutdown: 13/10/16 (morning and night) and the 27/10/2016 (Morning) until the 29/10/2016 (Morning) |
| Twice daily | October   | 62                      | 0.2                | 14.7    | 20ppm                | 30ppm            |   |
| Twice daily | November  | 60                      | 0.4                | 15.7    | 20ppm                | 30ppm            |   |
| Twice daily | December  | 57                      | 2.3                | 10.9    | 20ppm                | 30ppm            | On the following dates, samples were not collected due to mill shutdown: 13/12/16 (morning and night), 14/12/16 (morning and night); and 15/12/16 (morning)       |

**EPL Exceedances**

EPL No: 11912 <http://www.environment.nsw.gov.au/prpoeoapp/>  
 Licensee: Evolution Mining (Cowel) Pty Limited  
 Address: PO Box 210 West Wyalong NSW 2671

**Monitoring Point: BM01**

Blast monitoring, Airblast overpressure and ground vibration peak particle velocity recorded at private residence to the south-east of ML1535 boundary

4 Dust 04/07/2016 27/07/2016 19/08/2016 08/02/2017 Zinc (mg/L) 2140 Database translation error  
 Particulates (g/m2/mth) Database translation error

| Blast Number    | Blast Day/Date       | Blast Time | Date Obtained | Date Published | Compliance Limits       |                               | BM01 at Blast Time      |                               | EPL Condition   | Comments  |
|-----------------|----------------------|------------|---------------|----------------|-------------------------|-------------------------------|-------------------------|-------------------------------|---|---|
|                 |                      |            |               |                | Ground Vibration (mm/s) | Airblast Overpressure (dB(L)) | Ground Vibration (mm/s) | Airblast Overpressure (dB(L)) |   |   |
| 939-528 939-530 | Saturday, 26/03/2016 | 12:35:05   | 11/04/2016    | 20/04/2016     | 1                       | 95                            | 0.09                    | 95.9                          | L7.2 The overpressure level from blasting operations at the premises at residences on privately owned land must not exceed 95dB (Lin Peak) at night or on Sundays and public holidays (24 hours) for more than five percent of the total number of blasts over a period of 12 months. | Airblast overpressure exceeded the 95 dB(L) limit for blasting on a public holiday at BM01. Cowal remains in compliance with the 5% exceedance allowable within the 12 month moving window (currently 1% exceedance). |

**Monitoring Point: BM02**

Blast monitoring, Airblast overpressure and ground vibration peak particle velocity recorded to the south of ML1535 boundary

| Blast Number | Blast Day/Date     | Blast Time | Date Obtained | Date Published | Compliance Limits       |                               | BM02 at Blast Time      |                               | EPL Condition   | Comments  |
|--------------|--------------------|------------|---------------|----------------|-------------------------|-------------------------------|-------------------------|-------------------------------|---|---|
|              |                    |            |               |                | Ground Vibration (mm/s) | Airblast Overpressure (dB(L)) | Ground Vibration (mm/s) | Airblast Overpressure (dB(L)) |   |   |
| 939-56       | Sunday, 13/03/2016 | 12:39:00   | 11/04/2016    | 20/04/2016     | 1                       | 95                            | 0.11                    | 95.9                          | L7.2 The overpressure level from blasting operations at the premises at residences on privately owned land must not exceed 95dB (Lin Peak) at night or on Sundays and public holidays (24 hours) for more than five percent of the total number of blasts over a period of 12 months. | Airblast overpressure exceeded the 95 dB(L) limit for blasting on a Sunday at BM02. Cowal remains in compliance with the 5% exceedance allowable within the 12 month moving window (currently 1% exceedance). |

**Monitoring Point: BM01**

Blast monitoring, Airblast overpressure and ground vibration peak particle velocity recorded at private residence to the south-east of ML1535 boundary

| Blast Number | Blast Day/Date     | Blast Time | Date Obtained | Date Published | Compliance Limits       |                               | BM01 at Blast Time      |                               | EPL Condition   | Comments  |
|--------------|--------------------|------------|---------------|----------------|-------------------------|-------------------------------|-------------------------|-------------------------------|---|---|
|              |                    |            |               |                | Ground Vibration (mm/s) | Airblast Overpressure (dB(L)) | Ground Vibration (mm/s) | Airblast Overpressure (dB(L)) |   |   |
| 921-Toe      | Sunday, 04/12/2016 | 12:30:51   | 10/01/2017    | 20/01/2017     | 1                       | 95                            | 0.11                    | 100.0                         | L7.2 The overpressure level from blasting operations at the premises at residences on privately owned land must not exceed 95dB (Lin Peak) at night or on Sundays and public holidays (24 hours) for more than five percent of the total number of blasts over a period of 12 months. | Airblast overpressure exceeded the 95 dB(L) limit for blasting on a Sunday at BM01. Cowal remains in compliance with the 5% exceedance allowable within the 12 month moving window (currently 1.8% exceedance). |







|    |                     |            |            |            |                               |         |         |  |
|----|---------------------|------------|------------|------------|-------------------------------|---------|---------|--|
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | 18/02/2016 | Alkalinity (mg/L)             | 33      | 105     | Rounding error identified during Annual Return submission      |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | 18/02/2016 | Antimony (mg/L)               | <0.001  | <0.010  | Transcription error identified during Annual Return submission |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | 18/02/2016 | Arsenic (mg/L)                | <0.001  | <0.010  | Transcription error identified during Annual Return submission |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | 18/02/2016 | Copper (mg/L)                 | <0.001  | <0.010  | Transcription error identified during Annual Return submission |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | 18/02/2016 | Lead (mg/L)                   | <0.001  | <0.010  | Transcription error identified during Annual Return submission |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Sulfate (mg/L)                | -       | 3530    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Total Hardness (mg/L)         | -       | 5320    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Total Suspended Solids (mg/L) | -       | 82      | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Zinc (mg/L)                   | -       | <0.050  | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | 19/05/2016 | Alkalinity (mg/L)             | <1      | 170     | Error in reporting form of Alkalinity                          |
| 41 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Sulfate (mg/L)                | -       | 1880    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Total Hardness (mg/L)         | -       | 2620    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Total Suspended Solids (mg/L) | -       | 26      | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Zinc (mg/L)                   | -       | 0.01    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | 19/08/2016 | Alkalinity (mg/L)             | <1      | 216     | Error in reporting form of Alkalinity                          |
| 41 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Sulfate (mg/L)                | -       | 1740    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Total Hardness (mg/L)         | -       | 1870    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Total Suspended Solids (mg/L) | -       | 8       | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Zinc (mg/L)                   | -       | 0.011   | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | 22/11/2016 | Alkalinity (mg/L)             | <1      | 144     | Error in reporting form of Alkalinity                          |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | 22/11/2016 | Antimony (mg/L)               | <0.001  | 0.001   | Transcription error identified during Annual Return submission |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | 22/11/2016 | Arsenic (mg/L)                | <0.001  | 0.003   | Transcription error identified during Annual Return submission |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | 22/11/2016 | Selenium (mg/L)               | <0.01   | 0.002   | Transcription error identified during Annual Return submission |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Sulfate (mg/L)                | -       | 2400    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Total Hardness (mg/L)         | -       | 3540    | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Total Suspended Solids (mg/L) | -       | 32      | Inadvertantly excluded   |
| 41 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Zinc (mg/L)                   | -       | <0.05   | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | 18/02/2016 | Alkalinity (mg/L)             | <1      | 166     | Error in reporting form of Alkalinity                          |
| 42 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Sulfate (mg/L)                | -       | 2410    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Total Hardness (mg/L)         | -       | 3580    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Total Suspended Solids (mg/L) | -       | 365     | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 07/01/2016 | 15/01/2016 | -          | Zinc (mg/L)                   | -       | 0.031   | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | 19/05/2016 | Alkalinity (mg/L)             | <1      | 203     | Error in reporting form of Alkalinity                          |
| 42 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Sulfate (mg/L)                | -       | 2370    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Total Hardness (mg/L)         | -       | 4060    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Total Suspended Solids (mg/L) | -       | 355     | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 20/04/2016 | 28/04/2016 | -          | Zinc (mg/L)                   | -       | 0.031   | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | 19/08/2016 | Alkalinity (mg/L)             | <1      | 295     | Error in reporting form of Alkalinity                          |
| 42 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | 19/08/2016 | Selenium (mg/L)               | 0.05    | 0.005   | Transcription error identified during Annual Return submission |
| 42 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Sulfate (mg/L)                | -       | 2210    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Total Hardness (mg/L)         | -       | 1850    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Total Suspended Solids (mg/L) | -       | <1      | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 04/07/2016 | 12/07/2016 | -          | Zinc (mg/L)                   | -       | 0.113   | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | 22/11/2016 | Alkalinity (mg/L)             | <1      | 264     | Error in reporting form of Alkalinity                          |
| 42 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | 22/11/2016 | Cadmium (mg/L)                | <0.0002 | <0.0022 | Transcription error identified during Annual Return submission |
| 42 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Sulfate (mg/L)                | -       | 1120    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Total Hardness (mg/L)         | -       | 2010    | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Total Suspended Solids (mg/L) | -       | 5       | Inadvertantly excluded   |
| 42 | Waste Rock Leachate | 25/10/2016 | 03/11/2016 | -          | Zinc (mg/L)                   | -       | 0.085   | Inadvertantly excluded   |
| 43 | Waste Rock Leachate | 07/01/2016 | -          | -          | Sulfate (mg/L)                | -       | -       | Inadvertantly excluded   |
| 43 | Waste Rock Leachate | 20/04/2016 | -          | -          | Total Hardness (mg/L)         | -       | -       | Inadvertantly excluded   |
| 43 | Waste Rock Leachate | 01/07/2016 | -          | -          | Total Suspended Solids (mg/L) | -       | -       | Inadvertantly excluded   |
| 43 | Waste Rock Leachate | 25/10/2016 | -          | -          | Zinc (mg/L)                   | -       | -       | Inadvertantly excluded   |