



Annual Return

BROULA KING JOINT VENTURE PTY LTD

Licence 12845

A. Statement of Compliance - Licence Details

ALL Licence holders must check that the Licence details in Section A are correct.

If there are changes to any of these details, **you must advise Environment Protection Authority (EPA) and apply as soon as possible for a variation to your Licence or for a Licence transfer.**

Licence variation and transfer application forms are available on the EPA website at:
<http://www.epa.nsw.gov.au/licensing-and-regulation/licensing> or from regional offices of the EPA, or by contacting by telephone 02 9995 5700.

If you are applying to vary or transfer your Licence, you must still complete and submit this Annual Return.

A1. Licence holder

Licence number : 12845
Licence holder : BROULA KING JOINT VENTURE PTY LTD
Trading name (if applicable) :
ABN : 24 113 348 459
ACN :
Reporting period : From: 26-2-2022 To: 25-2-2023

A2. Premises to which Licence Applies (if applicable)

Common name (if any) : BROULA KING GOLD MINE
Premises : 2715 MID WESTERN HIGHWAY BUMBALDRY 2794 NSW

A3. Activities to which Licence Applies

Mining for minerals

A4. Other Activities (if applicable)

A5. Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Mining for minerals	> 0.00 - 30,000.00	T annual production capacity

A6. Assessable Pollutants (if applicable)

Note that the identification of assessable pollutants is used to calculate the **load-based fee**.

The following assessable pollutants are identified for the fee-based activity classifications in the licence:

B. Monitoring and Complaints Summary

B1. Number of Pollution Complaints

Pollution Complaint Category	Complaints
Air	0



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Water	1
Noise	0
Waste	0
Other	0
Total complaints recorded by the licensee during the reporting period	1

B2. Concentration Monitoring Summary

For each concentration monitoring point identified in your licence, details are displayed below. If concentration monitoring is not required by your licence, **no data** will appear below.

If data was provided from an uploaded file, the file name will be displayed below instead of any data.

Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

Discharge & Monitoring Point 1

Discharge water quality monitoring, End of process water pipe at discharge to the tailings storage facility

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labelled DC 1 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Cyanide (total)	milligrams per litre	0	0	0	0	0
Cyanide (weak acid dissociable)	milligrams per litre	0	0	0	0	0



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Monitoring Point 2

Groundwater quality monitoring, Piezometer labelled GMP1 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Alkalinity (as calcium carbonate)	milligrams per litre	4	4	944	963	997
Arsenic	milligrams per litre	4	4	0.001	0.001	0.001
Cadmium	milligrams per litre	4	4	0.0001	0.004	0.001
Calcium	milligrams per litre	4	4	349	378	416
Chloride	milligrams per litre	4	4	495	513	534
Conductivity	microsiemens per centimetre	4	4	4160	4786	5170
Copper	milligrams per litre	4	4	0.001	0.0013	0.002
Cyanide (weak acid dissociable)	milligrams per litre	4	4	0.004	0.004	0.004
Iron	milligrams per litre	4	4	0.05	0.75	1.52
Lead	milligrams per litre	4	4	0.001	0.0013	0.002
Magnesium	milligrams per litre	4	4	526	570	654
Manganese	milligrams per litre	4	4	0.289	0.3087	0.340
Mercury	milligrams per litre	4	4	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	4	0.001	0.001	0.001
pH	pH	4	4	7.12	7.39	7.87
Potassium	milligrams per litre	4	4	10	11.33	12
Selenium	milligrams per litre	4	4	0	0	0
Sodium	milligrams per litre	4	4	320	324	326
Standing Water Level	metres	4	4	0	0	0
Sulfate	milligrams per litre	4	4	2030	2183	2260
Total dissolved solids	milligrams per litre	4	4	4160	4786	5170
Total suspended solids	milligrams per litre	4	4	8	13	22
Zinc	milligrams per litre	4	4	0.005	0.006	0.008



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Monitoring Point 3

Groundwater quality monitoring, Piezometer labelled GMP2 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Alkalinity (as calcium carbonate)	milligrams per litre	4	4	944	963	997
Arsenic	milligrams per litre	4	4	0.001	0.001	0.001
Cadmium	milligrams per litre	4	4	0.0001	0.0025	0.0067
Calcium	milligrams per litre	4	4	298	309	320
Chloride	milligrams per litre	4	4	34	36.3	38
Conductivity	microsiemens per centimetre	4	4	3140	3230	3350
Copper	milligrams per litre	4	4	0.001	0.0013	0.002
Cyanide (weak acid dissociable)	milligrams per litre	4	4	0.001	0.005	0.008
Iron	milligrams per litre	4	4	0.05	0.20	0.50
Lead	milligrams per litre	4	4	0.001	0.022	0.034
Magnesium	milligrams per litre	4	4	358	372	382
Manganese	milligrams per litre	4	4	0.138	0.266	0.437
Mercury	milligrams per litre	4	4	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	4	0.002	0.0027	0.003
pH	pH	4	4	7.24	7.55	8.01
Potassium	milligrams per litre	4	4	6	6.67	7
Selenium	milligrams per litre	4	4	0	0	0
Sodium	milligrams per litre	4	4	57	61.67	68
Standing Water Level	metres	4	4	6.8	7.20	7.40
Sulfate	milligrams per litre	4	4	1940	2040	2220
Total dissolved solids	milligrams per litre	4	4	3410	3443	3480
Total suspended solids	milligrams per litre	4	4	5	9.33	18
Zinc	milligrams per litre	4	4	0.367	0.554	0.909



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Monitoring Point 4

Groundwater quality monitoring, Piezometer labelled GMP3 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Alkalinity (as calcium carbonate)	milligrams per litre	4	2	729	733	737
Arsenic	milligrams per litre	4	2	0.001	0.001	0.001
Cadmium	milligrams per litre	4	2	0.0001	0.0001	0.0001
Calcium	milligrams per litre	4	2	261	268.5	276
Chloride	milligrams per litre	4	2	258	273	288
Conductivity	microsiemens per centimetre	4	2	3150	3700	3890
Copper	milligrams per litre	4	2	0.001	0.002	0.003
Cyanide (weak acid dissociable)	milligrams per litre	4	2	0.004	0.004	0.004
Iron	milligrams per litre	4	2	0.05	0.315	0.58
Lead	milligrams per litre	4	2	0.001	0.002	0.003
Magnesium	milligrams per litre	4	2	357	379.5	402
Manganese	milligrams per litre	4	2	0.276	0.3	0.324
Mercury	milligrams per litre	4	2	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	2	0.001	0.0025	0.004
pH	pH	4	2	7.23	7.26	7.29
Potassium	milligrams per litre	4	2	8	8.5	9
Selenium	milligrams per litre	4	2	0	0	0
Sodium	milligrams per litre	4	2	181	188	195
Standing Water Level	metres	4	2	6.3	6.5	6.7
Sulfate	milligrams per litre	4	2	1300	1505	1710
Total dissolved solids	milligrams per litre	4	2	3480	3700	3890
Total suspended solids	milligrams per litre	4	2	14	36.5	59
Zinc	milligrams per litre	4	2	0.005	0.0155	0.026



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Monitoring Point 5

Groundwater quality monitoring, Piezometer labelled GMP4 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Alkalinity (as calcium carbonate)	milligrams per litre	4	2	331	463	595
Arsenic	milligrams per litre	4	2	0.001	0.001	0.001
Cadmium	milligrams per litre	4	2	0.0001	0.0001	0.0001
Calcium	milligrams per litre	4	2	135	258.5	382
Chloride	milligrams per litre	4	2	293	471	649
Conductivity	microsiemens per centimetre	4	2	3080	4095	5110
Copper	milligrams per litre	4	2	0.001	0.0015	0.002
Cyanide (weak acid dissociable)	milligrams per litre	4	2	0.004	0.004	0.004
Iron	milligrams per litre	4	2	0.05	0.275	0.5
Lead	milligrams per litre	4	2	0.001	0.001	0.001
Magnesium	milligrams per litre	4	2	302	572	842
Manganese	milligrams per litre	4	2	0.219	0.262	0.305
Mercury	milligrams per litre	4	2	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	2	0.001	0.0015	0.002
pH	pH	4	2	7.18	7.18	7.18
Potassium	milligrams per litre	4	2	5	7	9
Selenium	milligrams per litre	4	2	0	0	0
Sodium	milligrams per litre	4	2	218	372.5	527
Standing Water Level	metres	4	2	8.2	8.5	8.9
Sulfate	milligrams per litre	4	2	1250	2555	3860
Total dissolved solids	milligrams per litre	4	2	2970	5165	7360
Total suspended solids	milligrams per litre	4	2	6	6	6
Zinc	milligrams per litre	4	2	0.005	0.007	0.009



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Monitoring Point 6

Surface water quality monitoring, Surface water monitoring point at dam SB 6, labelled SMP 1 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	4	4	0.01	0.015	0.02
Arsenic	milligrams per litre	4	4	0.005	0.005	0.006
Cadmium	milligrams per litre	4	4	0.133	0.0912	0.494
Calcium	milligrams per litre	4	4	23	25.5	28
Carbonate	milligrams per litre	4	4	1	1	1
Chloride	milligrams per litre	4	4	7	10	13
Conductivity	microsiemens per centimetre	4	4	1240	1290	1340
Copper	milligrams per litre	4	4	0.126	0.232	0.338
Cyanide (weak acid dissociable)	milligrams per litre	4	4	0.004	0.004	0.004
Iron	milligrams per litre	4	4	0.99	1.315	1.64
Lead	milligrams per litre	4	4	0.051	0.0695	0.088
Magnesium	milligrams per litre	4	4	124	130	136
Manganese	milligrams per litre	4	4	3.92	3.97	4.02
Mercury	milligrams per litre	4	4	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	4	0.193	0.2065	0.22
Nitrate	milligrams per litre	4	4	0.01	0.01	0.01
pH	pH	4	4	3.55	3.665	3.78
Phosphorus (total)	milligrams per litre	4	4	0.01	0.02	0.03
Potassium	milligrams per litre	4	4	8	9	10
Sodium	milligrams per litre	4	4	12	14	16
Standing Water Level	metres	4	4	200	1650	2400
Sulfate	milligrams per litre	4	4	689	692.5	696
Total dissolved solids	milligrams per litre	4	4	1160	1190	1220
Total suspended solids	milligrams per litre	4	4	5	8	11
Zinc	milligrams per litre	4	4	8.20	10.35	12.5



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Monitoring Point 7

Surface water quality monitoring, Surface water monitoring point at dam SB 7, labelled as SMP 2 on DC 1 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	4	4	0.01	0.0225	0.04
Arsenic	milligrams per litre	4	4	0.001	0.0018	0.002
Cadmium	milligrams per litre	4	4	0.0001	0.0185	0.0472
Calcium	milligrams per litre	4	4	15	22.25	37
Carbonate	milligrams per litre	4	4	58	100.25	148
Chloride	milligrams per litre	4	4	42	87.25	175
Conductivity	microsiemens per centimetre	4	4	850	1252.5	2030
Copper	milligrams per litre	4	4	0.002	0.1088	0.304
Cyanide (weak acid dissociable)	milligrams per litre	4	4	0.004	0.004	0.004
Iron	milligrams per litre	4	4	0.32	1.4875	2.56
Lead	milligrams per litre	4	4	0.001	0.1133	0.408
Magnesium	milligrams per litre	4	4	70	114.75	202
Manganese	milligrams per litre	4	4	0.211	0.4833	0.924
Mercury	milligrams per litre	4	4	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	4	0.006	0.0143	0.026
Nitrate	milligrams per litre	4	4	0.01	0.01	0.01
pH	pH	4	4	7.02	7.39	7.71
Phosphorus (total)	milligrams per litre	4	4	0.01	0.04	0.05
Potassium	milligrams per litre	4	4	4	6.75	10
Sodium	milligrams per litre	4	4	41	72.5	125
Standing Water Level	metres	4	4	2.550	2.600	2.700
Sulfate	milligrams per litre	4	4	339	484	808
Total dissolved solids	milligrams per litre	4	4	548	942.75	1700
Total suspended solids	milligrams per litre	4	4	5	7.25	11
Zinc	milligrams per litre	4	4	0.015	1.3658	3.48



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Monitoring Point 8

Surface water quality monitoring, Surface water monitoring point at dam SB 9, labelled as SMP 3 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	4	3	0.001	0.0233	0.05
Arsenic	milligrams per litre	4	3	0.002	0.0023	0.003
Cadmium	milligrams per litre	4	3	0.0001	0.0037	0.0059
Calcium	milligrams per litre	4	3	4	4.33	5
Carbonate	milligrams per litre	4	3	30	36	48
Chloride	milligrams per litre	4	3	12	16.67	26
Conductivity	microsiemens per centimetre	4	3	241	298	405
Copper	milligrams per litre	4	3	0.038	0.0293	0.045
Cyanide (weak acid dissociable)	milligrams per litre	4	3	0.004	0.004	0.004
Iron	milligrams per litre	4	3	1.28	1.8633	2.98
Lead	milligrams per litre	4	3	0.006	0.0120	0.019
Magnesium	milligrams per litre	4	3	16	22.67	32
Manganese	milligrams per litre	4	3	0.064	0.0783	0.090
Mercury	milligrams per litre	4	3	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	3	0.001	0.0053	0.008
Nitrate	milligrams per litre	4	3	0.01	0.01	0.01
pH	pH	4	3	7.24	7.36	7.58
Phosphorus (total)	milligrams per litre	4	3	0.05	0.0667	0.08
Potassium	milligrams per litre	4	3	2	3	4
Sodium	milligrams per litre	4	3	10	15.67	24
Standing Water Level	metres	4	3	0	0	0
Sulfate	milligrams per litre	4	3	66	82.67	114
Total dissolved solids	milligrams per litre	4	3	224	263.67	340
Total suspended solids	milligrams per litre	4	3	6	10.67	18
Zinc	milligrams per litre	4	3	0.014	0.29	0.46



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Monitoring Point 9

Surface water quality monitoring, Surface water monitoring point at upstream location on Tyagong Creek, labelled as SMP 4 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	4	3	0.01	0.03	0.06
Arsenic	milligrams per litre	4	3	0.001	0.0013	0.002
Cadmium	milligrams per litre	4	3	0.0001	0.0004	0.001
Calcium	milligrams per litre	4	3	21	74	172
Carbonate	milligrams per litre	4	3	66	182	388
Chloride	milligrams per litre	4	3	50	271.33	648
Conductivity	microsiemens per centimetre	4	3	354	1265	2830
Copper	milligrams per litre	4	3	0.001	0.003	0.006
Cyanide (weak acid dissociable)	milligrams per litre	4	3	0	0.00027	0.004
Iron	milligrams per litre	4	3	0.37	0.8133	1.81
Lead	milligrams per litre	4	3	0.001	0.0013	0.002
Magnesium	milligrams per litre	4	3	14	58.67	137
Manganese	milligrams per litre	4	3	0.006	0.2013	0.434
Mercury	milligrams per litre	4	3	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	3	0.001	0.0017	0.003
Nitrate	milligrams per litre	4	3	0.17	0.5967	1.4
pH	pH	4	3	7.23	7.58	7.89
Phosphorus (total)	milligrams per litre	4	3	0.10	0.4667	1.17
Potassium	milligrams per litre	4	3	4	8.67	16
Sodium	milligrams per litre	4	3	25	94	220
Standing Water Level	metres	4	3	0	0	0
Sulfate	milligrams per litre	4	3	21	78.67	179
Total dissolved solids	milligrams per litre	4	3	236	934	2150
Total suspended solids	milligrams per litre	4	3	16	55	127
Zinc	milligrams per litre	4	3	0.005	0.0097	0.018



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Monitoring Point 10

Surface water quality monitoring, Surface water monitoring point at downstream location on Tyagong Creek, labelled as SMP 5 on figure received from licensee on 13 May 2022 (DOC22/376583)

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Ammonia	milligrams per litre	4	2	0.01	0.04	0.07
Arsenic	milligrams per litre	4	2	0.001	0.0015	0.002
Cadmium	milligrams per litre	4	2	0.0001	0.00055	0.001
Calcium	milligrams per litre	4	2	8	99.5	177
Carbonate	milligrams per litre	4	2	36	236	436
Chloride	milligrams per litre	4	2	19	330.5	642
Conductivity	microsiemens per centimetre	4	2	146	1388	2630
Copper	milligrams per litre	4	2	0.001	0.001	0.001
Cyanide (weak acid dissociable)	milligrams per litre	4	2	0	0.0002	0.004
Iron	milligrams per litre	4	2	0.76	2.2	3.64
Lead	milligrams per litre	4	2	0.001	0.0015	0.002
Magnesium	milligrams per litre	4	2	5	73	141
Manganese	milligrams per litre	4	2	0.137	0.5785	1.02
Mercury	milligrams per litre	4	2	0.0001	0.0001	0.0001
Nickel	milligrams per litre	4	2	0.001	0.0015	0.002
Nitrate	milligrams per litre	4	2	0.25	0.7	1.15
pH	pH	4	2	6.63	7.3	7.92
Phosphorus (total)	milligrams per litre	4	2	0.14	0.165	0.19
Potassium	milligrams per litre	4	2	5	5.5	6
Sodium	milligrams per litre	4	2	11	113.5	216
Standing Water Level	metres	4	2	0	0	0
Sulfate	milligrams per litre	4	2	6	118	230
Total dissolved solids	milligrams per litre	4	2	164	1112	2060
Total suspended solids	milligrams per litre	4	2	74	75	76
Zinc	milligrams per litre	4	2	0.008	0.0085	0.009



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Discharge & Monitoring Point 15

Discharge to waters & discharge water quality monitoring, Discharge from sediment dam SB 6, labelled as DC 2 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Conductivity	microsiemens per centimetre	6	6	462	648	878
Cyanide (weak acid dissociable)	milligrams per litre	6	6	0.004	0.004	0.004
Oil and Grease	milligrams per litre	6	6	0	0	0
pH	pH	6	6	4.1	4.45	4.86
Total suspended solids	milligrams per litre	6	6	22	26	38

Discharge & Monitoring Point 16

Discharge to waters & discharge water quality monitoring, Discharge from sediment dam SB 11, labelled as DC 3 on figure received from licensee on 13 May 2022 (DOC22/376583).

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Conductivity	microsiemens per centimetre	4	4	134	182.33	251
Cyanide (weak acid dissociable)	milligrams per litre	4	4	0.00	0.0027	0.004
Oil and Grease	milligrams per litre	4	4	0	0	0
pH	pH	4	4	5.50	5.71	5.91
Total suspended solids	milligrams per litre	4	4	12	24.33	45



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B3. Volume or Mass Monitoring Summary

For each volume or mass monitoring point identified in your licence, details are displayed below. If volume or mass monitoring is not required by your licence, **no data** will appear below.

If data was provided from an uploaded file, the file name will be displayed below instead of any data. **Note** that this does not exclude the need to conduct appropriate volume or mass monitoring of assessable pollutants are required by load-based licensing (if applicable).

Discharge & Monitoring Point 15

Discharge to waters & discharge water quality monitoring, Discharge from sediment dam SB 6, labelled as DC 2 on figure received from licensee on 13 May 2022 (DOC22/376583).

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
kilolitres per day	Daily during any discharge	10	7.8	188.9	370

B3 Mass Monitoring Comments

Discharge January 2022 - Dates 7&8- 15 hours TOTAL. Discharge October 2022- dates 23-27 - 93 hours TOTAL. Discharge November Dates 1- 4 -72 hrs Total