Water Monitoring - Teralba Quarry - 2019 - EPA Point No.4 - Adit Overflow

	Sample No.	EPA No 4 - 161AB		EPA No 4 - 161AB		EPA No 4 -		EPA No 4 -		EPA No 4 -		EPA No 4 -		
	Dates	January 2019.		Febrary 2019.		March 2019.		April 2019.		May 2019.		June 2019.		
0		Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Guidelines
Sample	Units													
pH	**ph Unit**	7.12		7.45		7.18		7.82		7.05		7.37		**6.5 to 8.5 units**
Conductivity	**µS/cm**	2130		2140		2310		2020		2170		779		**125 - 2200[b]**
TSS	**mg/L**	8		<5		<5		<5		11		105		**<50**
Oil & Grease	**mg/L**	<5		<5		<5		<5		<5		<5		**5**
Aluminium	**mg/L**													**0.2**
Ammonia as N	**mg/L**													**0.01**
Antimony	**mg/L**													**NA**
Arsenic	**mg/L**													**0.05**
Barium	**mg/L**													**1**
Beryllium	**mg/L**													**NA**
Boron	**mg/L**													**1**
Cadmium	**mg/L**													**0.005**
Calcium	**mg/L**													**1000[c]**
Chromium	**mg/L**													**0.05**
Cobalt	**mg/L**													**1000**
Copper	**mg/L**													**1**
Iron	**mg/L**													**0.3**
Lead	**mg/L**													**0.05**
Lithium	**mg/L**													**0.075[d]**
Magnesium	**mg/L**													**NA**
Manganese	**mg/L**													**0.1**
Mercury	**mg/L**													**0.001**
Molybdenum	**mg/L**													**0.15[c]**
Nickel	**mg/L**													**0.1**
Phosphorous as P	**mg/L**													**NA**
Potassium	**mg/L**													**NA**
Selenium	**mg/L**													**0.01**
Silica as SiO2	**mg/L**													**NA**
Silver	**mg/L**													**0.05**
Sulfur as S	**mg/L**													**NA**
Tin	**mg/L**													**NA**
Titanium	**mg/L**													**NA**
Vanadium	**mg/L**													**NA**
Zinc	**mg/L**													**NA**

Indicates result Indicates results that varied between filtered and unfiltered samples

ND = Not Determined

NA = Not Applicable

[a] Based on ANZECC Guidelines for Fresh and Marine Water Quality - Recreational Water Quality (ANZECC 2000) except where indicate

[b] Based on ANZECC Guidelines slightly disturbed lowland river ecosystems in south-east Australia (ANZECC 2000

[c] Based on ANZECC Guidelines for Fresh and Marine Water Quality -Livestock Water Quality (ANZECC 2000

[d] Based on ANZECC Guidelines for Fresh and Marine Water Quality -Irrigation Water Quality (ANZECC 2000)

Water Monitoring - Teralba Quarry - 2019 - EPA Point No.4 - Adit Overflow

	Sample No.	EPA No 4 -		EPA No 4 -		EPA No 4 -		EPA No 4 -		EPA No 4 -		EPA No 4 -		
	Dates	July 2019.		August 2019.		September 2019.		October 2019.		November 2019.		December 2019.		
		Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Guidelines
Sample	Units													
pH	**ph Unit**	7.33		7.31		6.99		7.31		7.21		7.38		**6.5 to 8.5 units**
Conductivity	**µS/cm**	2340		2280		1990		2220		2060		2120		**125 - 2200[b]**
TSS	**mg/L**	11		<5		<5		<5		<5		10		**<50**
Oil & Grease	**mg/L**	<5		<5		<5		<5		<5		<5		**5**
Aluminium	**mg/L**													**0.2**
Ammonia as N	**mg/L**													**0.01**
Antimony	**mg/L**													**NA**
Arsenic	**mg/L**													**0.05**
Barium	**mg/L**													**1**
Beryllium	**mg/L**													**NA**
Boron	**mg/L**													**1**
Cadmium	**mg/L**													**0.005**
Calcium	**mg/L**													**1000[c]**
Chromium	**mg/L**													**0.05**
Cobalt	**mg/L**													**1000**
Copper	**mg/L**													**1**
Iron	**mg/L**													**0.3**
Lead	**mg/L**													**0.05**
Lithium	**mg/L**													**0.075[d]**
Magnesium	**mg/L**													**NA**
Manganese	**mg/L**													**0.1**
Mercury	**mg/L**													**0.001**
Molybdenum	**mg/L**													**0.15[c]**
Nickel	**mg/L**													**0.1**
Phosphorous as P	**mg/L**													**NA**
Potassium	**mg/L**													**NA**
Selenium	**mg/L**													**0.01**
Silicon as SiO2	**mg/L**													**NA**
Silver	**mg/L**													**0.05**
Sulfur as S	**mg/L**													**NA**
Tin	**mg/L**													**NA**
Titanium	**mg/L**													**NA**
Vanadium	**mg/L**													**NA**
Zinc	**mg/L**													**NA**

Water Monitoring - Teralba Quarry - 2019 - EPA Point No.5 - Overflow Dam B

	Sample No.	EPA No 5 - 161C												
	Dates	January 2019.		Febrary 2019.		March 2019.		April 2019.		May 2019.		June 2019.		
0		Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Guidelines
Sample	Units			No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA Point 5		
pH	**ph Unit**	7.26		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		**6.5 to 8.5 units**
Conductivity	**µS/cm**	1110		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		**125 - 2200[b]**
TSS	**mg/L**	6		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		**<50**
Oil & Grease	**mg/L**	Not Sampled		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		No Water Discharge at EPA P		**5**
Aluminium	**mg/L**													**0.2**
Ammonia as N	**mg/L**													**0.01**
Antimony	**mg/L**													**NA**
Arsenic	**mg/L**													**0.05**
Barium	**mg/L**													**1**
Beryllium	**mg/L**													**NA**
Boron	**mg/L**													**1**
Cadmium	**mg/L**													**0.005**
Calcium	**mg/L**													**1000[c]**
Chromium	**mg/L**													**0.05**
Cobalt	**mg/L**													**1000**
Copper	**mg/L**													**1**
Iron	**mg/L**													**0.3**
Lead	**mg/L**													**0.05**
Lithium	**mg/L**													**0.075[d]**
Magnesium	**mg/L**													**NA**
Manganese	**mg/L**													**0.1**
Mercury	**mg/L**													**0.001**
Molybdenum	**mg/L**													**0.15[c]**
Nickel	**mg/L**													**0.1**
Phosphorous as P	**mg/L**													**NA**
Potassium	**mg/L**													**NA**
Selenium	**mg/L**													**0.01**
Silica as SiO2	**mg/L**													**NA**
Silver	**mg/L**													**0.05**
Sulfur as S	**mg/L**													**NA**
Tin	**mg/L**													**NA**
Titanium	**mg/L**													**NA**
Vanadium	**mg/L**													**NA**
Zinc	**mg/L**													**NA**

Indicates results that varied between filtered and unfiltered samples

ND = Not Determined

NA = Not Applicable

[a] Based on ANZECC Guidelines for Fresh and Marine Water Quality - Recreational Water Quality (ANZECC 2000) except where indicated

[b] Based on ANZECC Guidelines slightly disturbed lowland river ecosystems in south-east Australia (ANZECC 2000)

[c] Based on ANZECC Guidelines for Fresh and Marine Water Quality -Livestock Water Quality (ANZECC 2000)

[d] Based on ANZECC Guidelines for Fresh and Marine Water Quality -Irrigation Water Quality (ANZECC 2000)

Water Monitoring - Teralba Quarry - 2019 - EPA Point No.5 - Overflow Dam B

	Sample No.																						
	Dates	July 2019.		August 2019.		September 2019.																	
0		Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)																	Dissolved (Filtered)
Sample	Units	No Water Discharge at EPA		No Water Discharge at EPA		4/09/2019	5/09/2019	9/09/2019	11/09/2019	12/09/2019	13/09/2019	16/09/2019	17/09/2019	18/09/2019	19/09/2019	20/09/2019	23/09/2019	24/09/2019	25/09/2019	26/09/2019	27/09/2019	30/09/2019	
pH	ph Unit	No Water Discharge at EPA		No Water Discharge at EPA		7.22	6.52	6.78	7.4	6.9	6.82	6.82	7.01	7.12	6.92	6.86	6.83	6.86	7.6	6.84	6.82	6.84	
Conductivity	µS/cm	No Water Discharge at EPA		No Water Discharge at EPA		1050	816	1230	1190	1180	1140	1140	1150	914	1020	1090	1120	1240	1170	1210	1070	1250	
TSS	mg/L	No Water Discharge at EPA		No Water Discharge at EPA		<5	13	<5	11	<5	<5	<5	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Oil & Grease	mg/L	No Water Discharge at EPA		No Water Discharge at EPA		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Aluminium	mg/L																						
Ammonia as N	mg/L																						
Antimony	mg/L																						
Arsenic	mg/L																						
Barium	mg/L																						
Beryllium	mg/L																						
Boron	mg/L																						
Cadmium	mg/L																						
Calcium	mg/L																						
Chromium	mg/L																						
Cobalt	mg/L																						
Copper	mg/L																						
Iron	mg/L																						
Lead	mg/L																						
Lithium	mg/L																						
Magnesium	mg/L																						
Manganese	mg/L																						
Mercury	mg/L																						
Molybdenum	mg/L																						
Nickel	mg/L																						
Phosphorous as P	mg/L																						
Potassium	mg/L																						
Selenium	mg/L																						
Silica as SiO2	mg/L																						
Silver	mg/L																						
Sulfur as S	mg/L																						
Tin	mg/L																						
Titanium	mg/L																						
Vanadium	mg/L																						
Zinc	mg/L																						

		October 2019.													
		Total (Unfiltered)													Dissolved (Filtered)
Sample	Units	1/10/2019	2/10/2019	3/10/2019	4/10/2019	8/10/2019	9/10/2019	14/10/2019	15/10/2019	16/10/2019	17/10/2019	18/10/2019	21/10/2019	22/10/2019	
pH	ph Unit	6.87	6.85	6.97	7	7.05	7.07	7.28	7.28	7.24	8.26	7.35	7.33	7.33	
Conductivity	µS/cm	1090	1080	1200	1170	1040	1200	1180	1120	1120	1220	1270	1360	1350	
TSS	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Oil & Grease	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Aluminium	mg/L														
Ammonia as N	mg/L														
Antimony	mg/L														
Arsenic	mg/L														
Barium	mg/L														
Beryllium	mg/L														
Boron	mg/L														
Cadmium	mg/L														
Calcium	mg/L														
Chromium	mg/L														
Cobalt	mg/L														
Copper	mg/L														
Iron	mg/L														
Lead	mg/L														
Lithium	mg/L														
Magnesium	mg/L														
Manganese	mg/L														
Mercury	mg/L														
Molybdenum	mg/L														
Nickel	mg/L														
Phosphorous as P	mg/L														
Potassium	mg/L														
Selenium	mg/L														
Silica as SiO2	mg/L														
Silver	mg/L														
Sulfur as S	mg/L														
Tin	mg/L														
Titanium	mg/L														
Vanadium	mg/L														
Zinc	mg/L														

		November 2019.		December 2019.		
		Total (Unfiltered)	Dissolved (Filtered)	Total (Unfiltered)	Dissolved (Filtered)	Guidelines
Sample	Units	No Water Discharge at EPA Point 5		No Water Discharge at EPA Point 5		
pH	ph Unit	No Water Discharge at EPA Point 5		No Water Discharge at EPA Point 5		6.5 to 8.5 units
Conductivity	µS/cm	No Water Discharge at EPA Point 5		No Water Discharge at EPA Point 5		125 - 2200[b]
TSS	mg/L	No Water Discharge at EPA Point 5		No Water Discharge at EPA Point 5		<50
Oil & Grease	mg/L	No Water Discharge at EPA Point 5		No Water Discharge at EPA Point 5		5
Aluminium	mg/L					0.2
Ammonia as N	mg/L					0.01
Antimony	mg/L					NA
Arsenic	mg/L					0.05
Barium	mg/L					1
Beryllium	mg/L					NA
Boron	mg/L					1
Cadmium	mg/L					0.005
Calcium	mg/L					1000[c]
Chromium	mg/L					0.05
Cobalt	mg/L					1000
Copper	mg/L					1
Iron	mg/L					0.3
Lead	mg/L					0.05
Lithium	mg/L					0.075[d]
Magnesium	mg/L					NA
Manganese	mg/L					0.1
Mercury	mg/L					0.001
Molybdenum	mg/L					0.15[c]
Nickel	mg/L					0.1
Phosphorous as P	mg/L					NA
Potassium	mg/L					NA
Selenium	mg/L					0.01
Silica as SiO2	mg/L					NA
Silver	mg/L					0.05
Sulfur as S	mg/L					NA
Tin	mg/L					NA
Titanium	mg/L					NA
Vanadium	mg/L					NA
Zinc	mg/L					NA

Indicates results that varied between filtered and unfiltered samples

ND = Not Determined

NA = Not Applicable

[a] Based on ANZECC Guidelines for Fresh and Marine Water Quality - Recreational Water Quality (ANZECC 2000) except where indic

[b] Based on ANZECC Guidelines slightly disturbed lowland river ecosystems in south-east Australia (ANZECC 2

[c] Based on ANZECC Guidelines for Fresh and Marine Water Quality -Livestock Water Quality (ANZECC 20

[d] Based on ANZECC Guidelines for Fresh and Marine Water Quality -Irrigation Water Quality (ANZECC 20

Daily Discharge EPA No.6				
Date	**Metromix Sample No.**	**pH**	**Suspended Solids (mg/L)**	**Comments**
Jan-19	**No Water Discharge at EPA Point 6**			
Feb-19	**No Water Discharge at EPA Point 6**			
Mar-19	**No Water Discharge at EPA Point 6**			
May-19	**No Water Discharge at EPA Point 6**			
Jun-19	**No Water Discharge at EPA Point 6**			
Jul-19	**No Water Discharge at EPA Point 6**			
Aug-19	**No Water Discharge at EPA Point 6**			
Sep-19	**No Water Discharge at EPA Point 6**			
Oct-19	**No Water Discharge at EPA Point 6**			
Nov-19	**No Water Discharge at EPA Point 6**			
Dec-19	**No Water Discharge at EPA Point 6**			

Daily Discharge EPA No.7				
Date	**Metromix Sample No.**	**pH**	**Suspended Solids (mg/L)**	**Comments**
Jan-19	**No Water Discharge at EPA Point 7**			
Feb-19	**No Water Discharge at EPA Point 7**			
Mar-19	**No Water Discharge at EPA Point 7**			
May-19	**No Water Discharge at EPA Point 7**			
Jun-19	**No Water Discharge at EPA Point 7**			
Jul-19	**No Water Discharge at EPA Point 7**			
Aug-19	**No Water Discharge at EPA Point 7**			
Sep-19	**No Water Discharge at EPA Point 7**			
Oct-19	**No Water Discharge at EPA Point 7**			
Nov-19	**No Water Discharge at EPA Point 7**			
Dec-19	**No Water Discharge at EPA Point 7**			