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Sampled: 25/06/2019
Obtained: 11/07/2019
Published: 24/07/2019

Licensee: Sumitomo Metal Mining Oceana P/L
 CMOC Mining Pty Ltd
 SC Mineral Resources Pty Ltd
EPL No.: 4784

EPA Identification no.	Monitoring Frequency	Pollutant		Unit	Comments
1 (W14)	Quarterly	Conductivity	9044	µS/cm	The Q2 2019 water monitoring results for W14 bore are in line with historical water quality results. There is an increase (+24cm) in the relative standing water level from the previous quarter which was 264.26m. The conductivity decreased (-678µS/cm) from last quarter which recorded 9722µS/cm and copper concentration remained the same as the last reporting period, which was 0.01mg/L. The pH increased (+0.28) from last quarter which was 7.08. These minor variances are typically the result of natural groundwater migrations and are homogenous with previous reporting periods.
	Quarterly	Copper	0.01	mg/L	
	Quarterly	pH	7.36		
	Quarterly	Standing Water Level	264.5	m	
	Yearly	Aluminum	0.03	mg/L	
	Yearly	Arsenic	0.001	mg/L	
	Yearly	Barium	0.017	mg/L	
	Yearly	Beryllium	<0.001	mg/L	
	Yearly	Bicarbonate	410	mg/L	
	Yearly	Cadmium	0.0002	mg/L	
	Yearly	Calcium	183	mg/L	
	Yearly	Chloride	1790	mg/L	
	Yearly	Chromium	0.001	mg/L	
	Yearly	Cobalt	0.001	mg/L	
	Yearly	Lead	0.002	mg/L	
	Yearly	Magnesium	257	mg/L	
	Yearly	Molybdenum	0.011	mg/L	
	Yearly	Nickel	0.001	mg/L	
	Yearly	Potassium	4	mg/L	
	Yearly	Selenium	0.01	mg/L	
Yearly	Sodium	1360	mg/L		
Yearly	Sulfate	1220	mg/L		
Yearly	Total dissolved solids	5950	mg/L		
Yearly	Zinc	0.043	mg/L		

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2 (W19)	Quarterly	Conductivity	6390	µS/cm	The Q2 2019 water monitoring results for W19 bore are in line with historical water quality results. There is an increase (+13cm) in the relative standing water level from previous quarter which was 246.38m. The conductivity decreased (-244µS/cm) from last quarter which recorded 6634µS/cm. Copper concentration decreased (-0.003mg/L) from the previous reporting period, recording 0.014mg/L. The pH increased (+0.14) from last quarter which was 7.38. These minor variances are typically the result of natural groundwater migrations and are homogenous with previous reporting periods.
	Quarterly	Copper	0.011	mg/L	
	Quarterly	pH	7.52		
	Quarterly	Standing Water Level	246.51	m	
	Yearly	Aluminum	0.02	mg/L	
	Yearly	Arsenic	0.001	mg/L	
	Yearly	Barium	0.133	mg/L	
	Yearly	Berylium	<0.001	mg/L	
	Yearly	Bicarbonate	149	mg/L	
	Yearly	Cadmium	0.0001	mg/L	
	Yearly	Calcium	453	mg/L	
	Yearly	Chloride	1510	mg/L	
	Yearly	Chromium	0.002	mg/L	
	Yearly	Cobalt	0.001	mg/L	
	Yearly	Lead	0.001	mg/L	
	Yearly	Magnesium	112	mg/L	
	Yearly	Molybdenum	0.005	mg/L	
	Yearly	Nickel	0.001	mg/L	
	Yearly	Potassium	7	mg/L	
	Yearly	Selenium	0.01	mg/L	
Yearly	Sodium	703	mg/L		
Yearly	Sulfate	465	mg/L		
Yearly	Total dissolved solids	4380	mg/L		
Yearly	Zinc	0.044	mg/L		

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3 (W21)	Quarterly	Conductivity	14611	µS/cm	The Q2 2019 water monitoring results for W21 bore are in line with historical water quality results. There is an increase (+4cm) in the relative standing water level from previous quarter which was 268.3m. Conductivity decreased (-1221µS/cm) from last quarter which recorded 15832µS/cm. Copper concentration slightly decreased 0.009mg/L from the last reporting period, which recorded 0.019 mg/L. pH recorded a 0.24 increase from last quarter which was 10.67. These minor variances are typically the result of natural groundwater migrations and are homogenous with previous reporting periods.
	Quarterly	Copper	0.01	mg/L	
	Quarterly	pH	10.91		
	Quarterly	Standing Water Level	268.34	m	
	Yearly	Aluminum	0.04	mg/L	
	Yearly	Arsenic	0.001	mg/L	
	Yearly	Barium	0.093	mg/L	
	Yearly	Berylium	<0.001	mg/L	
	Yearly	Bicarbonate	2	mg/L	
	Yearly	Cadmium	0.0001	mg/L	
	Yearly	Calcium	959	mg/L	
	Yearly	Chloride	4560	mg/L	
	Yearly	Chromium	0.001	mg/L	
	Yearly	Cobalt	0.001	mg/L	
	Yearly	Lead	0.001	mg/L	
	Yearly	Magnesium	4	mg/L	
	Yearly	Molybdenum	0.03	mg/L	
	Yearly	Nickel	<0.001	mg/L	
	Yearly	Potassium	32	mg/L	
	Yearly	Selenium	0.01	mg/L	
Yearly	Sodium	2110	mg/L		
Yearly	Sulfate	844	mg/L		
Yearly	Total dissolved solids	11300	mg/L		
Yearly	Zinc	0.027	mg/L		

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4 (W23)	Quarterly	Conductivity	20581	µS/cm	The Q2 2019 water monitoring results for W23 bore are in line with historical water quality results. There is an increase (+25cm) in the relative standing water level from the previous quarter which was 258.9m. The conductivity decreased (-736µS/cm) from the last quarter which recorded 21317µS/cm. Copper concentration decreased (-0.009mg/L) from the last reporting period, which was 0.058 mg/L. pH recorded a slight increase (+0.04) from last quarter which was 6.83. These minor variances are typically the result of natural groundwater migrations and are homogenous with previous reporting periods.
	Quarterly	Copper	0.049	mg/L	
	Quarterly	pH	6.87		
	Quarterly	Standing Water Level	259.15	m	
	Yearly	Aluminum	0.03	mg/L	
	Yearly	Arsenic	0.001	mg/L	
	Yearly	Barium	0.05	mg/L	
	Yearly	Beryllium	<0.001	mg/L	
	Yearly	Bicarbonate	397	mg/L	
	Yearly	Cadmium	0.0006	mg/L	
	Yearly	Calcium	504	mg/L	
	Yearly	Chloride	6290	mg/L	
	Yearly	Chromium	0.001	mg/L	
	Yearly	Cobalt	0.23	mg/L	
	Yearly	Lead	0.001	mg/L	
	Yearly	Magnesium	752	mg/L	
	Yearly	Molybdenum	0.005	mg/L	
	Yearly	Nickel	0.001	mg/L	
	Yearly	Potassium	8	mg/L	
	Yearly	Selenium	0.02	mg/L	
Yearly	Sodium	2970	mg/L		
Yearly	Sulfate	1860	mg/L		
Yearly	Total dissolved solids	14500	mg/L		
Yearly	Zinc	0.298	mg/L		

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5 (W25)	Quarterly	Conductivity	1520	µS/cm	<p>The Q2 2019 water monitoring results for W25 bore are in line with historical water quality results. There was a decrease (-82cm) in the relative standing water level from previous quarter which was 282.75m. The conductivity decreased (-94µS/cm) from last quarter which recorded 1614µS/cm and copper concentration remained the same as the last reporting period, which was 0.019mg/L. pH recorded a slight increase (+0.17) from last quarter which was 7.90.</p> <p>These minor variances are typically the result of natural groundwater migrations and are homogenous with previous reporting periods.</p>
	Quarterly	Copper	0.019	mg/L	
	Quarterly	pH	8.07		
	Quarterly	Standing Water Level	281.93	m	
	Yearly	Aluminum	0.02	mg/L	
	Yearly	Arsenic	<0.001	mg/L	
	Yearly	Barium	0.011	mg/L	
	Yearly	Beryllium	<0.001	mg/L	
	Yearly	Bicarbonate	166	mg/L	
	Yearly	Cadmium	0.0001	mg/L	
	Yearly	Calcium	80	mg/L	
	Yearly	Chloride	40	mg/L	
	Yearly	Chromium	0.001	mg/L	
	Yearly	Cobalt	<0.001	mg/L	
	Yearly	Lead	0.001	mg/L	
	Yearly	Magnesium	63	mg/L	
	Yearly	Molybdenum	0.001	mg/L	
	Yearly	Nickel	0.001	mg/L	
	Yearly	Potassium	3	mg/L	
	Yearly	Selenium	0.02	mg/L	
Yearly	Sodium	157	mg/L		
Yearly	Sulfate	502	mg/L		
Yearly	Total dissolved solids	1010	mg/L		
Yearly	Zinc	0.02	mg/L		

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6 (W20)	Quarterly	Conductivity	14746	µS/cm	The Q2 2019 water monitoring results for W20 bore are in line with historical water quality results. There is a slight decrease (-1 cm) in the relative standing water level from the previous quarter which was 266.11m. The conductivity decreased (-859µS/cm) from last quarter which recorded 15605µS/cm. Copper concentration increased slightly (+0.002mg/L) from the last reporting period, which was 0.008 mg/L. pH recorded a slight increase (+0.03) from last quarter which was 6.89. These minor variances are typically the result of natural groundwater migrations and are homogenous with previous reporting periods.
	Quarterly	Copper	0.01	mg/L	
	Quarterly	pH	6.92		
	Quarterly	Standing Water Level	266.1	m	
	Yearly	Aluminum	0.03	mg/L	
	Yearly	Arsenic	0.001	mg/L	
	Yearly	Barium	0.012	mg/L	
	Yearly	Beryllium	<0.001	mg/L	
	Yearly	Bicarbonate	452	mg/L	
	Yearly	Cadmium	0.0005	mg/L	
	Yearly	Calcium	365	mg/L	
	Yearly	Chloride	4240	mg/L	
	Yearly	Chromium	0.001	mg/L	
	Yearly	Cobalt	0.002	mg/L	
	Yearly	Lead	0.001	mg/L	
	Yearly	Magnesium	405	mg/L	
	Yearly	Molybdenum	0.003	mg/L	
	Yearly	Nickel	0.001	mg/L	
	Yearly	Potassium	9	mg/L	
	Yearly	Selenium	0.01	mg/L	
Yearly	Sodium	2320	mg/L		
Yearly	Sulfate	1590	mg/L		
Yearly	Total dissolved solids	9820	mg/L		
Yearly	Zinc	0.072	mg/L		