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 Published:
 18/10/2017

 Sampled:
 1/09/2017

 Obtained:
 28/09/2017

**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	10110	μ\$/cm	
	Quarterly	Copper	0.012	mg/L	
	Quarterly	рН	7.16		
	Quarterly	Standing Water Level	262.7	m	
	Yearly	Aluminum	0.03	mg/L	
	Yearly	Arsenic	<0.001	mg/L	
	Yearly	Barium	0.013	mg/L	
	Yearly	Berylium	<0.001	mg/L	
	Yearly	Bicarbonate	474	mg/L	
	Yearly	Cadmium	0.0003	mg/L	The Q3 2017 water monitoring results for W14 bore are inline with historical water quality. There is minimal elevation in the standing
	Yearly	Calcium	249	mg/L	water level from previous quarter which was 21.8 m. The
	Yearly	Chloride	3100	mg/L	conductivity decreased from last quater which recorded 12850
	Yearly	Chromium	<0.001	mg/L	μS/cm . The pH concentration decreased from last quarter which
	Yearly	Cobalt	0.001	mg/L	was 7.40, copper concentration increased slightly from last
	Yearly	Lead	<0.001	mg/L	reporting period, which was 0.006 mg/L. These variances are the result of lower than average rainfall for the quarter.
	Yearly	Magnesium	419	mg/L	Tossen or to not main a relage tamban for me quarter
	Yearly	Molybdenum	0.01	mg/L	
	Yearly	Nickel	<0.001	mg/L	
	Yearly	Potassium	4	mg/L	
	Yearly	Selenium	0.02	mg/L	
	Yearly	Sodium	1770	mg/L	
	Yearly	Sulfate	1080	mg/L	
	Yearly	Total dissolved solids	7980	mg/L	
	Yearly	Zinc	0.006	mg/L	

EPA Identification no.	Monitoring Frequency	Pollutant		Unit	Comments
2 (W19)	Quarterly	Conductivity	5490	μ\$/cm	
	Quarterly	Copper	0.015	mg/L	
	Quarterly	рН	7.83		
	Quarterly	Standing Water Level	244.41	m	
	Yearly	Aluminum	0.06	mg/L	
	Yearly	Arsenic	<0.001	mg/L	
	Yearly	Barium	0.162	mg/L	
	Yearly	Berylium	<0.001	mg/L	
	Yearly	Bicarbonate	215	mg/L	The Q3 2017 water monitoring results for W19 bore are inline with
	Yearly	Cadmium	<0.0001	mg/L	historical water quality. The pH and EC recorded lower values compared to previous reporting period. There was a minor decli
	Yearly	Calcium	423	mg/L	
	Yearly	Chloride	1440	mg/L	in the standing water level from previous quarter which was 34.25m. The pH observed a slight decrease from last quater which
	Yearly	Chromium	0.001	mg/L	was 7.85, similarly the conductivity decreased from the last quarter
	Yearly	Cobalt	<0.001	mg/L	which was 6214 µS/cm. The copper concentration increasesd from
	Yearly	Lead	<0.001	mg/L	last quarter which was 0.006 mg/L. These variances are the result of
	Yearly	Magnesium	106	mg/L	lower than average rainfall over the reporting period.
	Yearly	Molybdenum	0.005	mg/L	
	Yearly	Nickel	<0.001	mg/L	
	Yearly	Potassium	6	mg/L	
	Yearly	Selenium	<0.01	mg/L	
	Yearly	Sodium	639	mg/L	
	Yearly	Sulfate	460	mg/L	
	Yearly	Total dissolved solids	4160	mg/L	
	Yearly	Zinc	0.02	mg/L	

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3 (W21)	Quarterly	Conductivity	13300	μS/cm	
	Quarterly	Copper	0.016	mg/L	
	Quarterly	рН	7.8		
	Quarterly	Standing Water Level	268.41	m	
	Yearly	Aluminum	0.19	mg/L	
	Yearly	Arsenic	<0.001	mg/L	
	Yearly	Barium	0.1	mg/L	
	Yearly	Berylium	<0.001	mg/L	
	Yearly	Bicarbonate	14	mg/L	The Q3 2017 water monitoring results for W21 bore are inline with historical water quality with the exception of pH recording a lo
	Yearly	Cadmium	<0.0001	mg/L	
	Yearly	Calcium	922	mg/L	
	Yearly	I CHICHAE I 4000 I HIA/L I	value from the previous 10.1. There is an increase in the standing		
	Yearly	Chromium	0.01	mg/L	water level from previous quarter which recorded 13.18m. Copper concentrations increased from the last quarters results at 0.008 mg,
	Yearly	Cobalt	0.001	mg/L	and conductivity decreased from the previous 14256 $\mu$ S/cm.
	Yearly	Lead	0.001	mg/L	Findings are due to lower infiltraion as a result of lower rainfall.
	Yearly	Magnesium	2	mg/L	
	Yearly	Molybdenum	0.035	mg/L	
	Yearly	Nickel	<0.001	mg/L	
	Yearly	Potassium	31	mg/L	
	Yearly	Selenium	<0.01	mg/L	
	Yearly	Sodium	2070	mg/L	
	Yearly	Sulfate	834	mg/L	
	Yearly	Total dissolved solids	10200	mg/L	
	Yearly	Zinc	0.019	mg/L	

EPA Identification no.	Monitoring Frequency	Pollutant		Unit	Comments
4 (W23)	Quarterly	Conductivity	15350	μS/cm	
	Quarterly	Copper	0.019	mg/L	
	Quarterly	рН	7.7		
	Quarterly	Standing Water Level	257.01	m	
	Yearly	Aluminum	0.02	mg/L	
	Yearly	Arsenic	<0.001	mg/L	
	Yearly	Barium	0.121	mg/L	
	Yearly	Berylium	<0.001	mg/L	
	Yearly	Bicarbonate	385	mg/L	The Q3 2017 water monitoring results for W23 bore are inline with historical water quality. pH and electrical conductivity decrease from the the last quarter - pH was 7.95 and electrical conductivity was 16030 µS/cm. The standing water level is inline with long ten averages, and was a slight increase in recorded water level whise was 26.1 m from last reporting period. Copper concentration slightly increased from 0.015mg/L in the last period. Findings are due to lower infiltration as a result of lower rainfall.
	Yearly	Cadmium	0.0002	mg/L	
	Yearly	Calcium	456	mg/L	
	Yearly	Chloride	5160	mg/L	
	Yearly	Chromium	0.002	mg/L	
	Yearly	Cobalt	0.51	mg/L	
	Yearly	Lead	<0.001	mg/L	
	Yearly	Magnesium	616	mg/L	
	Yearly	Molybdenum	0.006	mg/L	
	Yearly	Nickel	0.002	mg/L	
	Yearly	Potassium	8	mg/L	
	Yearly	Selenium	<0.01	mg/L	
	Yearly	Sodium	2450	mg/L	
	Yearly	Sulfate	1310	mg/L	
	Yearly	Total dissolved solids	12700	mg/L	
	Yearly	Zinc	0.06	mg/L	

EPA Identification no.	Monitoring Frequency	Pollutant		Unit	Comments
5 (W25)	Quarterly	Conductivity	1455	μS/cm	
	Quarterly	Copper	0.011	mg/L	
	Quarterly	рН	8.65		
	Quarterly	Standing Water Level	283.67	m	
	Yearly	Aluminum	0.06	mg/L	
	Yearly	Arsenic	<0.001	mg/L	
	Yearly	Barium	0.006	mg/L	
	Yearly	Berylium	<0.001	mg/L	The Q3 2017 water monitoring results for W25 bore are inline wit historical water quality. There was no change in the standing wa level from previous quarter which was 2.40 m. The conductivity concentration increased slighty from the last quarter, conductive was 1396 µS/cm. The copper and pH concentrations also decreased from the last quarter. Previous copper concentration
	Yearly	Bicarbonate	200	mg/L	
	Yearly	Cadmium	<0.0001	mg/L	
	Yearly	Calcium	76	mg/L	
	Yearly	Chloride	47	mg/L	
	Yearly	Chromium	<0.001	mg/L	
	Yearly	Cobalt	<0.001	mg/L	
	Yearly Lead	<0.001	mg/L	recorded 0.016 mg/L and pH 8.85.	
	Yearly	Magnesium	59	mg/L	
	Yearly	Molybdenum	<0.001	mg/L	
	Yearly	Nickel	<0.001	mg/L	
	Yearly	Potassium	2	mg/L	
	Yearly	Selenium	0.02	mg/L	
	Yearly	Sodium	153	mg/L	
	Yearly	Sulfate	483	mg/L	
	Yearly	Total dissolved solids	917	mg/L	
	Yearly	Zinc	0.011	mg/L	

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6 (W20)	Quarterly	Conductivity	14500	μS/cm	
	Quarterly	Copper	0.014	mg/L	
	Quarterly	рН	7.33		
	Quarterly	Standing Water Level	265.43	m	
	Yearly	Aluminum	0.1	mg/L	
	Yearly	Arsenic	<0.001	mg/L	
	Yearly	Barium	0.011	mg/L	
	Yearly	Berylium	<0.001	mg/L	The Q3 2017 water monitoring results for W20 bore are inline wit historical water quality. There was a decrease in conductivity concentrations from the previous quarter which was 15980 µS/c The copper concentrations decreased to the previous quarter
	Yearly	Bicarbonate	464	mg/L	
	Yearly	Cadmium	0.0006	mg/L	
	Yearly	Calcium	383	mg/L	
	Yearly	Chloride	4640	mg/L	
	V	the copper concentrations decreased to the previous quarte vhich recorded 0.015 mg/L. pH also decreased slightly from la			
	Yearly	Cobalt	0.005	mg/L	reporting period which recorded 7.64. Standing water level from
	Yearly	Lead	<0.001	mg/L	the previous period increased from a depth of 17.85m
	Yearly	Magnesium	436	mg/L	
	Yearly	Molybdenum	0.003	mg/L	
	Yearly	Nickel	0.001	mg/L	
	Yearly	Potassium	8	mg/L	
	Yearly	Selenium	<0.01	mg/L	
	Yearly	Sodium	2300	mg/L	
	Yearly	Sulfate	1370	mg/L	
	Yearly	Total dissolved solids	12300	mg/L	
	Yearly	Zinc	0.021	mg/L	