


CSIR WATER QUALITY AUDIT RESULTS OF WATER SUPPLIED BY RAND WATER

CSIR randomly selected sample point	D-Q2	D-MERE	D-MERE_2	D-SPK_RES1_OUT		
Sampling area	Johannesburg	Johannesburg	Johannesburg	Midvaal		
Sampling date : 10/05/2017					Report date:01/06/2017	
Parameter	Units of measure	Specifications (based on SANS241: 2015)		No of results	Achieved compliance levels	
		Required compliance			Class I	
		99% Class I				
SPECIFICATIONS						
Chemical and Physical properties						
Colour	(mg / l as Pt)	< 15		4	100.00%	
Conductivity	(mS / m)	< 170		4	100.00%	
pH	(pH units)	≥ 5.0 to ≤ 9.5		4	100.00%	
Turbidity	(NTU)	< 5		4	100.00%	
Total Dissolved Solids	(mg / l)	< 1200		4	100.00%	
Taste	(TTN)	< 5		4	100.00%	
Odour	(TON)	< 5		4	100.00%	
Organic Determinants						
Total Trihalomethanes	(ug / l)	<1		4	100.00%	
Phenols as C ₆ H ₅ OH	(ug / l)	< 10		4	100.00%	
Dissolved Organic Carbon	(mg / l)	N/A		4	100.00%	
Micro Elements						
Antimony	(µg / l as Sb)	< 20		4	100.00%	
Boron	(µg / l as B)	2400		4	100.00%	
Barium	(µg / l as Ba)	700		4	100.00%	
Arsenic	(µg / l as As)	10		4	100.00%	
Cadmium	(µg / l as Cd)	3		4	100.00%	
Chromium (Total)	(µg / l as Cr)	< 50		4	100.00%	
Cobalt	(µg / l as Co)	N/A		4	100.00%	
Cyanide (Recoverable)	(µg / l as CN)	< 200		4	100.00%	
Lead	(µg / l as Pb)	< 10		4	100.00%	
Mercury	(µg / l as Hg)	< 6		4	100.00%	
Nickel	(µg / l as Ni)	< 70		4	100.00%	
Selenium	(µg / l as Se)	< 40		4	100.00%	
Uranium	(µg / l as U*)	<30		4		
Vanadium	(µg / l as V)	N/A		4	100.00%	
Macro Elements & Miscellaneous Determinants						
Aluminium	(mg / l as Al)	< 0.3		4	100.00%	
Ammonia	(mg / l as N)	< 1.5		4	100.00%	
Calcium	(mg / l as Ca)	N/A		4	100.00%	
Chloride	(mg / l as Cl)	< 300		4	100.00%	
Copper	(mg / l as Cu)	< 2		4	100.00%	
Fluoride	(mg / l as F)	< 1.5		4	100.00%	
Iron	(mg / l as Fe)	< 2		4	100.00%	
Magnesium	(mg / l as Mg)	N/A		4	100.00%	
Manganese	(mg / l as Mn)	< 0.4		4	100.00%	
Nitrate	(mg / l as N)	<11		4	100.00%	
Nitrite	(mg / l as N)	<0.9		4	100.00%	
Nitrate & Nitrite	(mg / l as N)	< 1		4	100.00%	
Potassium	(mg / l as K)	N/A		4	100.00%	
Sodium	(mg / l as Na)	< 200		4	100.00%	
Sulphate	(mg / l as SO ₄)	< 500		4	100.00%	
Zinc	(mg / l as Zn)	< 5		4	100.00%	
Microbiological						
E. coli	(cfu per 100 ml)	minimum of 99% of the original results shall be non-detected		4	100.0%	
Other Determinants as required by supply contract						
Free chlorine and monochloramine	(mg / l)	≥ 0.2		4	100.0%	
Notes :						
(1) Specification date of effect : March 2015						
CSIR representative:			Name: MG Kirkpatrick Title: Laboratory Supervisor Contact number: 012-841 2261			
Signature:						