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SA

Preliminary Water Quality Report

Report Number: 69655

**Physical Address** 

Amatola Water Scientific Services Nahoon Dam Complex **Postal Address** 

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Samples Submitted By: Ntombi Tshicilela

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Reported Date: 06/10/2015

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Test List: EFFLUENT

Scheme: Delmontvalley WWTW Received Date: 16/09/2015

Sample Number			130202
Sample Description			Delmontvalley WWTW
Sample Received Date			16/09/2015
Sample Commencement Date			16/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
/ xnia as N	mg/l	C32	0
mical Oxygen Demand - DR3900	mg/l	C50	177
rine	mg/l		0.06
E coli waste water(colilert)	MPN/100ML	M01	1553
EC @ 25°C	m\$/m	C15	38.5
Nitrite as N	mg/l	C39	0.07
Ortho phosphate - Aquakem as P	mg/l	C37	0
PH @ 25°C		C14	7.98
Solids - Total suspended	mg/l		10

Test List: EFFLUENT Scheme: Mayfield Effluent Received Date: 02/09/2015

Sample Number			130058
Sample Description			Mayfield Effluent
Sample Received Date	112		02/09/2015
Sample Commencement Date			02/09/2015
Sample Completed Date			
nent			
Test	Units	Method No	
Ammonia as N	mg/l	C32	30.22
E coli waste water(colilert)	MPN/100ML	M01	345
EC @ 25°C	mS/m	C15	122.9
Nitrite as N	mg/l	C39	2.04
Ortho phosphate - Aquakem as P	mg/l	C37	5.02
PH @ 25°C	-	C14	7.59
Solids - Total suspended	mg/l		11



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Test List: EFFLUENT Scheme: Mayfield Effluent Received Date: 16/09/2015

Sample Number			130200
Sample Description			Mayfield Effluent
Sample Received Date	16/09/2015		
Sample Commencement Date			16/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
onia as N	mg/l	C32	19.08
mical Oxygen Demand - DR3900	mg/l	C50	73
rine	mg/l		0.1
E coli waste water(colilert)	MPN/100ML	M01	>2420
EC @ 25°C	mS/m	C15	130.9
Nitrite as N	mg/l	C39	1.08
Ortho phosphate - Aquakem as P	mg/l	C37	4.56
PH @ 25°C	1.40	C14	7.76
Solids - Total suspended	mg/l	İ	27



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Test List: SANS\_241

Scheme: Alicedale Community Tap WTW

Received Date: 22/09/2015

Sample Number			130240
Sample Description	Alicedale Communi Tap WTW		
Sample Received Date	22/09/2015		
Sample Commencement Date	22/09/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
inity - Autotitrator	mg/l	C28	69.65
¹ ninium as Al	μд∕І	C09	111.5
onla as N	mg/l	C32	0
Cadmium as Cd	hð\J	C03	0
Chloride as Cl	mg/l	C34	154.55
Chlorine	mg/l		2.09
Chromium as Cr	μg/Ι	C03	0,54
Cobalt as Co	μgΛ	C03	0
Copper as Cu	h8\J	C02	0.3
Cyanide (recoverable) as CN	µg∕1	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	69.91
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.12
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Iron (total) as Fe	удЛ	C02	57
Lead as Pb	µg/l	C02	0
Manganese as Mn	h8vl	C02	2.64
Nickel as Ni	hgЛ	C03	0
Nitrite as N	mg/l	C39	0
pH - Autotitrator @ 25°C	-	C30	7.7
P- ¹ohate as SO4	mg/l	C33	37.12
J coliform	MPN/100ML	M02	<1
Volids - dissolved	mg/l		349.53
Turnidity @ WTW	NTU		1.14
Zinc as Zn	µg/l	C02	14



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Test List: SANS\_241

Scheme: Beaufort Str Police Station

Received Date: 02/09/2015

Sample Number			130043
Sample Description	Beaufort Str Police Station		
Sample Received Date			
Sample Commencement Date			
Sample Completed Date			
Comment			<u> </u>
	_		
Test	Units	Method No	
!inity - Autotitrator	mg/l	C28	7.56
1 ninium as Al	hg/l	C09	106.48
onia as N	mg/l	C32	0.02
Cadmium as Cd	µg∕l	C03	0
Chloride as Cl	mg/l	C34	43.77
Chlorine	mg/l		0.1
Chromium as Cr	h8v	C03	0
Cobalt as Co	hg/l	C03	0
Copper as Cu	h8yl	C02	33.73
Cyanide (recoverable) as CN	hgvl	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	19.01
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.07
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Iron (total) as Fe	hgvi	C02	71.09
Lead as Pb	рдл	C02	0
Manganese as Mn	μαλ	C02	73.88
Nickel as Ni	hBVI	C03	0.57
Nitrite as N	mg/l	C39	0.02
pH - Autotitrator @ 25°C	-	C30	6.61
endium as Na	mg/l	C01	45.76
phate as SO4	mg/l	C33	8.73
oliform	MPN/100ML	M02	<1
Total Solids - dissolved	mg/l	İ	95.05
Turbidity	NTU	C16	1.45
Turbidity @ WTW	NTU		1.33
Zinc as Zn	идл	C02	35.57





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Test List: SANS\_241

Scheme: Beaufort Str Police Station

Received Date: 16/09/2015

Sample Number			130184
Sample Received Date Sample Commencement Date			Beaufort Str Polic Station
			16/09/2015
			16/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
inium as Al	hgri	C09	31.95
A ronia as N	mg/l	C32	0
um as Cd	hgvl	C03	0
Chloride as Cl	mg/l	C34	41.35
Chlorine	mg/l		0.23
Chromium as Cr	hay	C03	0.1
Cobalt as Co	ha\l	C03	0
Copper as Cu	hg/l	C02	39.58
Cyanide (recoverable) as CN	µд∕1	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	19.98
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Iron (total) as Fe	μд/1	C02	44.8
Lead as Pb	hB\J	C02	0
Manganese as Mn	hay	C02	3.74
Nickel as Ni	γgq	C03	0
Nitrite as N	mg/l	C39	0.07
pH - Autotitrator @ 25°C		C30	6.7
Sulphate as SO4	mg/l	C33	8.87
T~⁴al coliform	MPN/100ML	M02	<1
al Solids - dissolved	mg/l		99.9
T ty	NTU	C16	0.48
Turndity @ WTW	NTU		0.72
Zinc as Zn	μдΛ	C02	4.93





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Test List: SANS\_241

Scheme: Riebeeck Communal Tap Received Date: 02/09/2015

Sample Number			130044
Sample Description	Riebeeck Communa Tap		
Sample Received Date	02/09/2015		
Sample Commencement Date	02/09/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
linity - Autotitrator	mg/l	C28	69.35
A' minium as Al	μg/l	C09	0.68
onia as N	mg/l	C32	0
Cadmium as Cd	hoy	C03	0
Chloride as Cl	mg/l	C34	122.04
Chlorine	mg/l		0.89
Chromium as Cr	Ngq	C03	0
Cobalt as Co	Nguj	C03	0
Copper as Cu	l/grļ	C02	6.46
Cyanide (recoverable) as CN	hā/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	58.05
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.22
Heterotrophic plate count @35*C	CFU/1ml	M03	<1
Iron (total) as Fe	hāv	C02	6.18
Lead as Pb	hgri	C02	0
Manganese as Mn	γgrį	C02	0
Nickel as Ni	µg/l	C03	2.04
Nitrite as N	mg/l	C39	0
pH - Autotitrator @ 25°C	1.0	C30	6.97
≏dium as Na	mg/i	C01	27.07
phate as SO4	mg/l	C33	16.65
roliform	MPN/100ML	M02	<1
Towa Solids - dissolved	mg/l		290.26
Turbidity	NTU	C16	1.94
Turbidity @ WTW	NTU		2.71
Zinc as Zn	Nou	C02	59.8



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Scheme: Riebeeck Communal Tap

Received Date: 16/09/2015

Sample Number		130185	
Sample Received Date Sample Commencement Date			Riebeeck Communa Tap
			16/09/2015
			16/09/2015
Sample Completed Date			1
Comment			
Test	Units	Method No	-
ninium as Al	μg/l	C09	10.75
nonia as N	mg/l	C32	0.04
ulum as Cd	μgΛ	C03	0
Chloride as Cl	mg/l	C34	117.57
Chlorine	mg/l		0.25
Chromium as Cr	hay	C03	0.01
Cobalt as Co	hg/l	C03	0.09
Copper as Cu	hay	C02	0.02
Cyanide (recoverable) as CN	hg/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	56.45
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.19
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Iron (total) as Fe	μg/Ι	C02	0
Lead as Pb	hg/l	C02	0
Manganese as Mn	μg/Ι	C02	6.96
Nickel as Ni	h8\lambda	C03	1.34
Nitrite as N	mg/l	C39	0.05
pH - Autotitrator @ 25°C	11.0	C30	7.02
Sulphate as SO4	mg/l	C33	16.81
"tal coliform	MPN/100ML	M02	<1
.tal Solids - dissolved	mg/l		282.23
ity ity	NTU	C16	1.65
Turndity @ WTW	NTU		2.56
Zinc as Zn	µg/l	C02	95.62





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Test List: SANS\_241

Scheme: Environmental Health Office

Received Date: 02/09/2015

Sample Number			130045
Sample Received Date Sample Commencement Date			Environmental Heal
			02/09/2015
			02/09/2015
Sample Completed Date		manager	
Comment			
Test	Units	Method No	
alinity - Autotitrator	mg/l	C28	6.72
^ ninium as Al	hâ\l	C09	17.68
onia as N	mg/l	C32	0
Cadmium as Cd	hBy	C03	0
Chloride as Cl	mg/l	C34	43.72
Chlorine	mg/l		0.1
Chromium as Cr	μg/l	C03	0
Cobalt as Co	μg/l	C03	0
Copper as Cu	hBV	C02	26.37
Cyanide (recoverable) as CN	µg/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	18.72
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.02
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Iron (total) as Fe	h8\J	C02	2.8
Lead as Pb	μg/l	C02	0
Manganese as Mn	μgΛ	C02	2.81
Nickel as Ni	hgv	C03	0
Nitrite as N	mg/l	C39	0.01
pH - Autotitrator @ 25°C	+	C30	6.39
ndium as Na	mg/l	C01	131.97
iphate as SO4	mg/l	C33	8.71
oliform	MPN/100ML	M02	<1
Toral Solids - dissolved	mg/l		93.6
Turbidity	NTU	C16	1.18
Turbidity @ WTW	NTU		1.36
Zinc as Zn	μg/1	C02	33.53



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Test List: SANS\_241

Scheme: Environmental Health Office

**Received Date: 16/09/2015** 

Sample Number			130186
Sample Description			Environmental Health Office
Sample Received Date	16/09/2015		
Sample Commencement Date	16/09/2015		
Sample Completed Date			
Comment			
Test	l Units	Method No	_
ninium as Al	hg/l	C09	39.97
Ar monia as N		C32	39.97
	mg/l	C03	0
um as Cd	hBy		
Chloride as CI	mg/l	C34	41.81
Chlorine	mg/l		0.11
Chromium as Cr	µ9∕I	C03	0.53
Cobalt as Co	hg/l	C03	0
Copper as Cu	hg/l	C02	8.39
Cyanide (recoverable) as CN	μgΛ	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	19.38
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.02
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Iron (total) as Fe	μg/l	C02	3.56
Lead as Pb	hðy	C02	0.01
Manganese as Mn	hg/l	C02	16.39
Nickel as Ni	μgΛ	C03	0
Nitrite as N	mg/l	C39	0.08
pH - Autotitrator @ 25°C	7-1	C30	6.39
Sulphate as SO4	mg/l	C33	8.83
x-+al coliform	MPN/100ML	M02	<1
.al Solids - dissolved	mg/l		96.9
T: 'Y	NTU	C16	8.75
Turnanty @ WTW	NTU		10.6
Zinc as Zn	μΩ/Ι	C02	47.73





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Test List: SANS\_241 Scheme: Extension 7 Clinic Received Date: 02/09/2015

Sample Number	130046		
Sample Description	Extension 7 Clin		
Sample Received Date	02/09/2015		
Sample Commencement Date			02/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
/ nity - Autotitrator	mg/l	C28	239.2
At ¬inium as Al	μgΛ	C09	7.19
nia as N	mg/l	C32	0
Cadmium as Cd	h8\psi	C03	0
Chloride as Cl	mg/l	C34	96.36
Chlorine	mg/l		0.06
Chromium as Cr	hây	C03	0.02
Cobait as Co	hBy	C03	0
Copper as Cu	hg/l	C02	8.5
Cyanide (recoverable) as CN	γgq	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	87.28
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.6
Heterotrophic plate count @35°C	CFU/1ml	M03	73
Iron (total) as Fe	h8\J	C02	5.14
Lead as Pb	μg/l	C02	0
Manganese as Mn	µg/l	C02	0.85
Nickel as Ni	hg/i	C03	0
Nitrite as N	mg/l	C39	0.01
pH - Autotitrator @ 25°C	-	C30	7.97
Scriim as Na	mg/l	C01	107.37
tate as SO4	mg/l	C33	59.5
T liform	MPN/100ML	M02	<1
Total Solids - dissolved	mg/l		436.4
Turbidity	NTU	C16	2.08
Turbidity @ WTW	NTU		2.38
Zinc as Zn	ha\/	C02	0.42





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Test List: SANS\_241 Scheme: Extension 7 Clinic Received Date: 16/09/2015

Sample Number			130190
Sample Description	Extension 7 Clinic		
Sample Received Date	16/09/2015		
Sample Commencement Date	16/09/2015		
Sample Completed Date			
Comment			
Test			
Al jum as Al	Units	Method No	440.00
	h@/l	C09	113.26
Ammonia as N	mg/l	C32	0
um as Cd	h8\J	C03	0
Chloride as Cl	mg/l	C34	94
Chlorine	mg/l		0.33
Chromium as Cr	hBy	C03	0.65
Cobalt as Co	µg/l	C03	0
Copper as Cu	hgv	C02	2
Cyanide (recoverable) as CN	hg/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	88.07
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.58
Heterotrophic plate count @35°C	CFU/1ml	M03	8
Iron (total) as Fe	μg/l	C02	51.04
Lead as Pb	μg/l	C02	0
Manganese as Mn	µg/l	C02	2.17
Nickel as Ni	hg/l	C03	0
Nitrite as N	mg/l	C39	0.08
pH - Autotitrator @ 25°C		C30	8.27
Sulphate as SO4	mg/l	C33	60.71
Total coliform	MPN/100ML	MO2	<1
Tc olids - dissolved	mg/i		440.35
Tr· 'v	NTU	C16	1.97
Tu> @ WTW	NTU		2.77
Zinc as Zn	μд/Ι	C02	0





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Test List: SANS\_241

Scheme: Indoor Sports Centre Received Date: 02/09/2015

Sample Number			130047
Sample Description			Indoor Sports Centr
Sample Received Date	02/09/2015		
Sample Commencement Date			02/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
alinity - Autotitrator	mg/l	C28	236.9
Juminium as Al	hBy	C09	3.43
mia as N	mg/l	C32	0
Cadmium as Cd	hBy	C03	0
Chloride as CI	mg/l	C34	96.4
Chlorine	mg/l		0.41
Chromium as Cr	рдЛ	C03	0
Cobalt as Co	µg/I	C03	0
Copper as Cu	h8\J	C02	4.22
Cyanide (recoverable) as CN	hg/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	87.09
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.59
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Iron (total) as Fe	h8\J	C02	3.69
Lead as Pb	μg/l	C02	0
Manganese as Mn	hðy	C02	0.18
Nickel as Ni	μg/Ι	C03	0.51
Nitrite as N	mg/l	C39	0.01
pH - Autotitrator @ 25°C	-	C30	8.29
Sulphate as SO4	mg/l	C33	59.58
al coliform	MPN/100ML	M02	<1
Tr' `alids - dissolved	mg/l		435.43
Tury	NTU	C16	0.98
Turbidity @ WTW	NTU		1,22
Zinc as Zn	μgΛ	C02	0





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Test List: SANS\_241

Scheme: Indoor Sports Centre Received Date: 16/09/2015

Sample Number			130196
Sample Description			Indoor Sports Centre
Sample Received Date			16/09/2015
Sample Commencement Date			16/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	_
·minium as Al	Лен	C09	120.71
- imonia as N	mg/l	C32	0
ium as Cd	ligh	C03	0
Chloride as Cl	mg/l	C34	94.22
Chlorine	mg/l	034	0.89
Chromium as Cr	Тург	C03	0.88
Cobalt as Co	Ned	C03	0.00
Copper as Cu		C02	1.45
Cyanide (recoverable) as CN	hg/l	C36	0
EC - Autotitrator @ 25°C	µg/l mS/m	C29	87.51
Ecoli	MPN/100ML	M01	<1
Fluoride as F		C3_	0.57
	mg/l CFU/1ml	M03	5
Heterotrophic plate count @35°C			54.03
Iron (total) as Fe	h8\land	C02	0
Lead as Pb	hây	C02	
Manganese as Mn	hôl	C02	0.65
Nickel as Ni	h8y	C03	0
Nitrite as N	mg/l	C39	0.07
pH - Autotitrator @ 25°C		C30	8.29
Sulphate as SO4	mg/l	C33	61.11
Total coliform	MPN/100ML	M02	<1
Solids - dissolved	mg/l		437.55
Tr "ty	NTU	C16	1.81
TO ITY @ WTW	NTU		2.74
Zinc as Zn	μαЛ	C02	0





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Scheme: J / Kleinshans Final WTW

Received Date: 08/09/2015

Sample Number			130104
Sample Description	J / Kleinshans Fina WTW		
Sample Received Date	08/09/2015		
Sample Commencement Date	06/09/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
alinity - Autotitrator	mg/l	C28	238.1
romonia as N	mg/l	C32	0
de as Cl	mg/l	C34	93.56
Chlorine	mg/l		1.63
Cyanide (recoverable) as CN	нау	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	86.21
Ecoli	MPN/100ML	M01	<1
Fluoride as F	Ngm	C35	0.63
Heterotrophic plate count @35°C	CFU/1ml	M03	56
Nitrite as N	mg/l	C39	0
pH - Autotitrator @ 25°C	-	C30	8.39
Sodium as Na	mg/l	C01	54.93
Sulphate as SO4	Ngm	C33	62.41
Total coliform	MPN/100ML	M02	<1
Total Solids - dissolved	mg/l		431.05
Turbidity	NTU	C16	1.87
Turbidity @ WTW	NTU		2.59



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Test List: SANS\_241

Scheme: J / Kleinshans Final WTW Received Date: 16/09/2015

Sample Number			130192
Sample Description			J / Kleinshans Final WTW
Sample Received Date			16/09/2015
Sample Commencement Date			16/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	-
ninium as Al	hg/l	C09	19.83
Ar-monia as N	mg/l	C32	0
ilum as Cd	µg/l	C03	0
Chloride as Cl	mg/l	C34	95.66
Chlorine	mg/l		0.07
Chromium as Cr	<b>µg/</b> 1	C03	0.46
Cobalt as Co	μg/Ι	C03	0
Copper as Cu	hg/l	C02	1.53
Cyanide (recoverable) as CN	hð\j	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	88
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.56
Heterotrophic plate count @35°C	CFU/1m1	M03	200
Iron (total) as Fe	μд/Ι	C02	5.09
Lead as Pb	hâ\J	C02	0
Manganese as Mn	hây	C02	0.09
Nickel as Ni	hg/l	C03	0
Nitrite as N	mg/l	C39	0.15
pH - Autotitrator @ 25°C	•	C30	8.23
Sulphate as SO4	mg/l	C33	61.98
Total coliform	MPN/100ML	M02	<1
i Solids - dissolved	mg/l		440.02
T∙ "ty	NTU	C16	1.28
The arty @ WTW	NTU		1.45
Zinc as Zn	µg/I	C02	0





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Test List: SANS\_241

Scheme: J / Kleinshans Final WTW Received Date: 22/09/2015

Sample Number			130241
Sample Description			J / Kleinshans Fine WTW
Sample Received Date			22/09/2015
Sample Commencement Date			22/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	-
alinity - Autolitrator	•	C28	243.4
mining - Autorgator	mg/l	C28	243.4
onia as N	µg/l	C32	25.37
	mg/l	1	
Cadmium as Cd	Noti	C03	0
Chloride as CI	mg/l	C34	97.07
Chlorine	mg/l		0.45
Chromium as Cr	hgri	C03	0.39
Cobalt as Co	hay	C03	0
Copper as Cu	νρη	C02	0.81
Cyanide (recoverable) as CN	hg/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	87.69
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.62
Heterotrophic plate count @35*C	CFU/1ml	M03	63
Iron (total) as Fe	hav	C02	5.51
Lead as Pb	μg/l	C02	1.05
Manganese as Mn	Ngu	C02	0
Nickel as Ni	μдΛ	C03	0
Nitrite as N	mg/l	C39	0
pH - Autotitrator @ 25°C		C30	8.18
Total coliform	MPN/100ML	M02	<1
al Solids - dissolved	mg/l	†	438.43
T "ty @ WTW	NTU		1.06
Ž Zn	Nov	C02	0



Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: J / Kleinshans Raw WTW Received Date: 08/09/2015

Sample Number			130105
Sample Description Sample Received Date			J / Kleinshans Ray WTW
			08/09/2015
Sample Commencement Date	08/09/2015		
Sample Completed Date			
Comment			
Test	Units	i Method No	
'inium as Al	μg/l	C09	12.63
Au-nonia as N	mg/l	C32	0
ium as Cd	µg/l	C03	0
Chloride as Cl	mg/i	C34	90.13
Chromium as Cr	µg/I	C03	0.58
Cobalt as Co	μg/ι	C03	0.02
Copper as Cu	hav	C02	1.33
Cyanide (recoverable) as CN	µg/1	C36	0
E coli waste water(colliert)	MPN/100ML	M01	2
EC @ 25°C	mS/m	C15	84
Fluoride as F	mg/l	C35	0.66
Iron (total) as Fe	µg/i	C02	2.44
Lead as Pb	ид∕1	C02	2.97
Manganese as Mn	µg∕1	C02	0
Nickel as Ni	μg/Ι	C03	0
Nitrite as N	mg/t	C39	0
PH @ 25°C		C14	7.7
Sodium as Na	mg/l	C01	56.17
Sulphate as SO4	mg/l	C33	62.75
Total Solids - dissolved	mg/l		420
Turbidity	NTU	C16	26.7
dity @ WTW	NTU		9.99
Z <sup>t.</sup> Zn	μgΛ	C02	18.16



Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: J / Kleinshans Raw WTW

Received Date: 16/09/2015

Sample Number			130193
Sample Description			J / Kielnshans Raw WTW
Sample Received Date	16/09/2015		
Sample Commencement Date	16/09/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
'alinity - Autotitrator	mg/t	C28	232.3
· ··minium as Al	hov	C09	8.18
N sa sinc	mg/l	C32	0
Cadmium as Cd	Nort	C03	0
Chloride as Cl	mg/l	C34	93.55
Chromium as Cr	Ngu	C03	0.73
Cobalt as Co	h0\l	C03	0
Copper as Cu	l/grl	C02	1
Cyanide (recoverable) as CN	Иди	C36	0
EC @ 25°C	mS/m	C15	84.8
Fluoride as F	mg/l	C35	0.63
Iron (total) as Fe	Nguj	C02	0
Lead as Pb	µg/l	C02	0
Manganese as Mn	μg/Ι	C02	0
Nickel as Ni	μg/Ι	C03	0
Nitrite as N	mg/l	C39	0.13
PH @ 25°C	3,51	C14	7.7
Sulphate as SO4	mg/l	C33	62.99
Total Solids - dissolved	mg/l		424
Turbidity	NTU	C16	29.7
7inc as Zn	μg/Ι	C02	4.67



Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: J / Kleinshans Raw WTW

Received Date: 22/09/2015

Sample Number			130242
Sample Description	J / Kleinshans Raw WTW		
Sample Received Date	22/09/2015		
Sample Commencement Date	22/09/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
alinity - Autotitrator	mg/l	C28	249.2
rinium as Al	hay	C09	14.15
onla as N	mg/l	C32	0
Cadmium as Cd	µg/1	C03	0
Chloride as CI	mg/l	C34	94.3
Chromium as Cr	hg/l	C03	0.54
Cobalt as Co	/Lg/l	C03	0
Copper as Cu	рд∕1	C02	0.61
Cyanide (recoverable) as CN	μgΛ	C36	0
E coli waste water(colilert)	MPN/100ML	M01	2
EC - Autotitrator @ 25°C	mS/m	C15	85.1
Fluoride as F	mg/l	C35	0.66
Iron (total) as Fe	hØų	C02	1.01
Lead as Pb	hBy	C02	0
Manganese as Mn	µg/l	C02	0
Nickel as Ni	μg/l	C03	0
Nitrite as N	mg/l	C39	0.01
pH - Autotitrator @ 25°C	1.00	C14	7.7
Total Solids - dissolved	mg/l		425
Turbidity @ WTW	NTU		36.2
7inc as Zn	µg/l	C02	10.77



Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: J Street Community Tap Received Date: 02/09/2015

Sample Number			130048
Sample Received Date Sample Commencement Date			J Street Community
			02/09/2015
			02/09/2015
Sample Completed Date			
Comment	-		
Test	į Units	Method No	
alinity - Autotitrator	mg/l	C28	235.9
rinium as Al	hg/l	C09	9.81
onia as N	mg/l	C32	0
Cadmium as Cd	μg/l	C03	0
Chloride as Cl	mg/l	C34	96.6
Chlorine	mg/l		0.44
Chromium as Cr	hgvl	C03	0.09
Cobalt as Co	h8\J	C03	0.03
Copper as Cu	hg/l	C02	2.22
Cyanide (recoverable) as CN	μдΛ	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	87.13
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.56
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Iron (total) as Fe	hâ\l	C02	5.88
Lead as Pb	hg/l	C02	1,01
Manganese as Mn	hð\j	C02	1.32
Nickel as Ni	μg/l	C03	0
Nitrite as N	mg/l	C39	0.01
pH - Autotitrator @ 25°C	17#.1	C30	8.31
Sulphate as SO4	mg/l	C33	59.45
tal coliform	MPN/100ML	M02	<1
Solids - dissolved	mg/l		435.66
Turoldity	NTU	C16	2.64
Turbidity @ WTW	NTU		3.35
Zinc as Zn	μg/l	C02	0





Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: J Street Community Tap

Received Date: 16/09/2015

Sample Number			130197
Sample Description Sample Received Date Sample Commencement Date			J Street Community
			16/09/2015
			16/09/2015
Sample Completed Date			
Comment			Ï
Test	Units	Method No	-
A' nium as Al	µg/l	C09	141.14
onia as N	mg/l	C32	0
nium as Cd	µg/l	C03	0
Chloride as CI	mg/l	C34	94.64
Chlorine	mg/l		1.14
Chromium as Cr	μgΛ	C03	1.12
Cobalt as Co	hg/l	C03	0
Copper as Cu	рд∕і	C02	12.74
Cyanide (recoverable) as CN	ру/1	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	88.42
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.58
Heterotrophic plate count @35°C	CFU/1ml	M03	1
iron (total) as Fe	για	C02	64.56
Lead as Pb	hðy	C02	0.18
Manganese as Mn	µg/l	C02	0.88
Nickel as Ni	hBV	C03	0
Nitrite as N	mg/l	C39	0.08
pH - Autotitrator @ 25°C		C30	8.27
Sulphate as SO4	mg/l	C33	60.78
Total coliform	MPN/100ML	M02	<1
Solids - dissolved	mg/l		442.09
lity	NTU	C16	2.73
Turbidity @ WTW	NTU		2.94
Zinc as Zn	hgл	C02	0.83

Key: (s) - Subcontracted  $\mid$  ( $\overline{\top}$ ) - New result  $\mid$  ( $\overline{\top}\overline{\top}$ ) - Result updated



Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Nonzwakazi Community Tap in Alicedale

Received Date: 02/09/2015

Sample Number			130049
Sample Description			Nonzwakazi Community Tap in
Sample Received Date	02/09/2015		
Sample Commencement Date			02/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	-
alinity - Autotitrator	mg/l	C28	68.21
, monia as N	mg/i	C32	0
.de as Cl	mg/l	C34	147.68
Chlorine	mg/l		0.07
Cyanide (recoverable) as CN	hāų	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	68.63
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.1
Heterotrophic plate count @35*C	CFU/1ml	M03	<1
Nitrite as N	mg/l	C39	0
pH - Autotitrator @ 25°C	•	C30	7.77
Sodium as Na	mg/l	C01	36.39
Sulphate as SO4	mg/l	C33	19.86
Total coliform	MPN/100ML	M02	<1
Total Solids - dissolved	mg/l		343.14
Turbidity	NTU	C16	2.83
Turbidity @ WTW	NTU		3.36



Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Riebeeck East Network Resevior

Received Date: 02/09/2015

Sample Number			130050
Sample Description	Riebeeck East Netwo		
Sample Received Date	02/09/2015		
Sample Commencement Date	02/09/2015		
Sample Completed Date			
Comment			
Test	Units	Method No	
nity - Autotitrator	mg/l	C28	68.32
^ inium as Al	μg/l	C09	0
onia as N	mg/l	C32	0
Cadmium as Cd	hBy	C03	0
Chloride as Cl	mg/l	C34	122.85
Chlorine	mg/l		2.2
Chromium as Cr	hBV	C03	0
Cobait as Co	μg/Ι	C03	0
Copper as Cu	μg/Ι	C02	0
Cyanide (recoverable) as CN	hg/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	58.03
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.23
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Iron (total) as Fe	μg/Ι	C02	6.34
Lead as Pb	μgΛ	C02	0
Manganese as Mn	μg/۱	C02	0
Nickel as Ni	µg/1	C03	0.88
Nitrite as N	mg/l	C39	0
oH - Autotitrator @ 25°C		C30	6.86
Sorlium as Na	mg/l	C01	33.53
late as SO4	mg/l	C33	16.21
:oliform	MPN/100ML	M02	<1
Ional Solids - dissolved	mg/l		290.14
Furbidity	NTU	C16	2.85
Turbidity @ WTW	NTU	1	3.55
Zinc as Zn	l/g/l	C02	66.03



Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Riebeeck East Network Resevior

Received Date: 16/09/2015

Sample Number			130199
Sample Description Sample Received Date Sample Commencement Date			Riebeeck East Network Resevior
			16/09/2015
			16/09/2015
Sample Completed Date			
Comment			
Test	Units	Method No	
minium as Al	µg/l	C09	6.93
onia as N	mg/l	C32	0
ium as Cd	µg/l	C03	0
Chloride as Cl	mg/l	C34	118.04
Chlorine	mg/i		1.11
Chromium as Cr	рд/1	C03	0
Cobalt as Co	hgvl	C03	0.32
Copper as Cu	ру/1	C02	0
Cyanide (recoverable) as CN	рд∕і	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	56.3
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0.19
Heterotrophic plate count @35°C	CFU/1ml	M03	<1
Iron (total) as Fe	µg/l	C02	0
Lead as Pb	µg∕I	C02	0.16
Manganese as Mn	µg/l	C02	0
Nickel as Ni	h8\land	C03	1.58
Nitrite as N	mg/l	C39	0.04
pH - Autotitrator @ 25°C		C30	6.83
Sulphate as SO4	mg/l	C33	17.08
Total coliform	MPN/100ML	M02	<1
il Solids - dissolved	mg/l		281.5
lity	NTU	C16	2.09
Turbidity @ WTW	NTU		2.46
Zinc as Zn	µg/l	C02	96.13

Key: (s) - Subcontracted  $\mid$  ( $\overline{\phantom{a}}$ ) - New result  $\mid$  ( $\overline{\phantom{a}}\overline{\phantom{a}}$ ) - Result updated





Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Waainek WTW Final Received Date: 02/09/2015

Sample Number			130056				
Sample Description Sample Received Date Sample Commencement Date			Waainek WTW Fina 02/09/2015 02/09/2015				
				Sample Completed Date			
				Comment			
Test	į Units	Method No					
alinity - Autotitrator	mg/l	C28	6.9				
onia as N	mg/l	C32	0				
ride as Cl	mg/l	C34	43.05				
Chlorine	mg/l		0.57				
Cyanide (recoverable) as CN	l/g/l	C36	0				
EC - Autotitrator @ 25°C	mS/m	C29	18.79				
Ecoli	MPN/100ML	M01	<1				
Fluoride as F	mg/l	C35	0				
Heterotrophic plate count @35°C	CFU/1ml	M03	<1				
Nitrite as N	mg/l	C39	0.01				
pH - Autotitrator @ 25°C		C30	6.48				
Sulphate as SO4	mg/l	C33	9.37				
Total coliform	MPN/100ML	M02	<1				
Total Solids - dissolved	mg/l	1	94				
Turbidity	NTU	C16	1.91				
Turbidity @ WTW	NTU		2.29				





Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241 Scheme: Waainek WTW Final Received Date: 16/09/2015

Sample Number			130194
Sample Description Sample Received Date Sample Commencement Date			Waainek WTW Fina
			16/09/2015
			16/09/2015
Sample Completed Date			
Comment		-	
Test	/ Units	Method No	
A: ium as Al	µg/l	C09	100.31
N se sinc	mg/l	C32	0
nium as Cd	ру/1	C03	0
Chloride as Cl	mg/l	C34	42.6
Chlorine	mg/l		0.19
Chromium as Cr	hā/J	C03	0.38
Cobalt as Co	μg/Ι	C03	0
Copper as Cu	hây	C02	0
Cyanide (recoverable) as CN	h8/l	C36	0
EC - Autotitrator @ 25°C	mS/m	C29	22.86
Ecoli	MPN/100ML	M01	<1
Fluoride as F	mg/l	C35	0
Heterotrophic plate count @35°C	CFU/1ml	M03	1
Iron (total) as Fe	hgv	C02	33.91
Lead as Pb	µg/l	C02	0.1
Manganese as Mn	hg/l	C02	6.8
Nickel as Ni	Ngu	C03	0
Nitrite as N	mg/l	C39	0.06
pH - Autotitrator @ 25°C	*.01	C30	7.36
Sulphate as SO4	mg/l	C33	9.1
Total coliform	MPN/100ML	M02	<1
iolids - dissolved	mg/l		114.3
dity	NTU	C16	0.72
Turbidity @ WTW	NTU		0.93
Zinc as Zn	μg/Ι	C02	0.29





Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Waainek WTW Final Received Date: 22/09/2015

Sample Number			130243				
Sample Description Sample Received Date Sample Commencement Date			Waainek WTW Final 22/09/2015 22/09/2015				
				Sample Completed Date	7111.		
				Comment			
Test	Units	Method No					
alinity - Autotitrator	mg/f	C28	4.86				
, inium as Al	hðy	C09	151.05				
Aunia as N	mg/l	C32	0				
Cadmium as Cd	hðy	C03	0				
Chloride as Cl	mg/l	C34	45.38				
Chlorine	mg/l		2.3				
Chromium as Cr	hãy	C03	0.26				
Cobalt as Co	μgΛ	C03	0				
Copper as Cu	hB\J	C02	0				
Cyanide (recoverable) as CN	hðy	C36	0				
EC - Autotitrator @ 25°C	mS/m	C29	19.68				
Ecoli	MPN/100ML	M01	<1				
Fluoride as F	mg/l	C35	0.02				
Heterotrophic plate count @35°C	CFU/1ml	M03	<1				
Iron (total) as Fe	µg/l	C02	55.33				
Lead as Pb	hg/l	C02	0				
Manganese as Mn	μg/l	C02	7.81				
Nickel as Ni	hByl	C03	0				
Nitrite as N	mg/l	C39	0				
pH - Autotitrator @ 25°C	•	C30	6.27				
Sulphate as SO4	mg/l	C33	15.68				
al coliform	MPN/100ML	M02	<1				
Solids - dissolved	mg/l		98.4				
Turbidity @ WTW	NTU		1.32				
Zinc as Zn	μg/ι	C02	1.37				





Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Waainek WTW Raw Received Date: 02/09/2015

Sample Number			130057
Sample Description Sample Received Date Sample Commencement Date			Waainek WTW Raw
			02/09/2015
			02/09/2015
Sample Completed Date			
Comment		-	
Test	i Units	I Method No	
		•	
alinity - Autotitrator	mg/l	C28	9.56
, mia as N	mg/l	C32	0
Cum as Cd	h8\J	C03	0
Chloride as Cl	mg/l	C34	41.58
Chromium as Cr	h0/l	C03	1.11
Cobalt as Co	hBV	C03	0
Copper as Cu	hâ\J	C02	12.68
Cyanide (recoverable) as CN	νργ	C36	0
E coli waste water(colilert)	MPN/100ML	M01	21
EC @ 25°C	mS/m	C15	18.23
Fluoride as F	mg/l	C35	0.1
Lead as Pb	µg/l	C02	0
Manganese as Mn	μg/l	C02	28.61
Nickel as Ni	μg/ι	C03	1.19
Nitrite as N	mg/l	C39	0.01
PH @ 25°C		C14	6.83
Sodium as Na	mg/l	C01	107.69
Sulphate as SO4	mg/l	C33	10.97
Total Solids - dissolved	mg/l		91.2
Turbidity	NTU	C16	28.3
Turbidity @ WTW	NTU		9.99
c as Zn	μд/1	C02	39.63





Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Waainek WTW Raw Received Date: 16/09/2015

Sample Number			130195	
Sample Description Sample Received Date Sample Commencement Date			Waainek WTW Raw 16/09/2015 16/09/2015	
				Sample Completed Date
				Comment
Test	Units	Method No		-
Aļ' 'ty - Autotitrator	mg/l	C28	17.37	
nia as N	mg/l	C32	0	
Lium as Cd	μg/Ι	C03	0	
Chloride as Cl	mg/l	C34	39.92	
Chromium as Cr	hāų	C03	2.75	
Cobalt as Co	hay	C03	0	
Copper as Cu	hg/l	C02	0.07	
Cyanide (recoverable) as CN	µgЛ	C36	0	
E coli waste water(colilert)	MPN/100ML	M01	9	
EC @ 25°C	mS/m	C15	18.03	
Fluoride as F	mg/l	C35	0.02	
Lead as Pb	µgЛ	C02	1.66	
Manganese as Mn	идл	C02	3.57	
Nickel as Ni	hav	C03	0	
Nitrite as N	mg/l	C39	0.14	
PH @ 25°C	-	C14	8.02	
Sulphate as SO4	mg/l	C33	11.28	
Total Solids - dissolved	mg/l		90.1	
Turbidity	NTU	C16	26.8	
Turbidity @ WTW	NTU		25.2	
Zinc as Zn	Jug/L	C02	83.7	





Preliminary Water Quality Report

Report Number: 69655

Test List: SANS\_241

Scheme: Waainek WTW Raw Received Date: 22/09/2015

Sample Number			130244				
Sample Description Sample Received Date Sample Commencement Date			Waainek WTW Raw 22/09/2015 22/09/2015				
				Sample Completed Date			
				Comment			
Test	Units	Method No					
alinity - Autotitrator	mg/l	C28	11.29				
onia as N	mg/l	C32	0				
Caunium as Cd	γολ	C03	0				
Chloride as Cl	mg/l	C34	41.53				
Chromium as Cr	hāy	C03	1.93				
Cobalt as Co	hav	C03	0				
Copper as Cu	hay!	C02	4.23				
Cyanide (recoverable) as CN	hōų	C36	0				
E coli waste water(colilert)	MPN/100ML	M01	6				
EC - Autotitrator @ 25°C	mS/m	C15	18.32				
Fluoride as F	mg/l	C35	0.1				
Lead as Pb	hg/l	C02	0				
Manganese as Mn	μg/l	C02	69.81				
Nickel as Ni	hāv	C03	0.6				
Nitrite as N	mg/l	C39	0				
pH - Autotitrator @ 25°C		C14	7.1				
Sulphate as SO4	mg/l	C33	18.01				
Total Solids - dissolved	mg/l		91.6				
Zinc as Zn	hg/l	C02	40.39				