

Integral Laboratories (Pty) Ltd, No. 1 Zandwyk Park, Old Paarl Road (R101), Paarl, 7646

T0417

Tel: 021 871 1109

Fax: 086 635 8874

CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela WTW Raw
Lab Number	S71113

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	17.60	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	9.59	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/30 08:24:25AM
Conductivity	M4 - Electrical Conductivity	mS/m	5.71	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	13.50	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	<0.20	2013/10/16 04:18:49PM
Odour	*NSA		Present	2013/10/30 08:52:45AM
pH	M6 - pH at 25°C	pH units	7.18	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	Not Done	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	57.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	5.31	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	Not Done	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	Not Done	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	Not Done	2013/10/30 09:26:03AM

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Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela WTW Final
Lab Number	S71114

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	19.80	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	6.82	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	7.41	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	1.30	2013/10/16 04:18:49PM
Odour	*NSA		Present	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.86	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	0.50	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	74.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	2.39	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	2.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	30.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	78.00	2013/10/30 09:26:03AM

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Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Town Clinic
Lab Number	S71115

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	55.20	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	18.90	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	21.50	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	0.67	2013/10/16 04:18:49PM
Odour	*NSA		No Odour	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.37	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	0.10	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	216.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	1.65	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	22.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	3.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	201.00	2013/10/30 09:26:03AM

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Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Township Clinic
Lab Number	S71116

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	43.60	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	15.00	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	18.30	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	0.89	2013/10/16 04:18:49PM
Odour	*NSA		Present	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.50	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	0.20	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	183.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	1.08	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	22.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	1.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	201.00	2013/10/30 09:26:03AM

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Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Receival at Lab	25/9/2013		

Sample Description	Bela Bela House 1316
Lab Number	S71117

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	102.00	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	41.50	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	44.10	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	1.55	2013/10/16 04:18:49PM
Odour	*NSA		Present	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.11	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	0.20	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	248.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	0.54	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	12.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	98.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	165.00	2013/10/30 09:26:03AM

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Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Receival at Lab	25/9/2013		

Sample Description	Bela Bela Jinah Park
Lab Number	S71118

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	54.40	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	17.40	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	22.20	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	2.73	2013/10/16 04:18:49PM
Odour	*NSA		No Odour	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.52	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	0.10	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	223.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	1.96	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	1.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	No Growth	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	15.00	2013/10/30 09:26:03AM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Radium Reservoir
Lab Number	S71119

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	190.00	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	34.96	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	82.80	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	15.87	2013/10/16 04:18:49PM
Odour	*NSA		No Odour	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	7.50	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	<0.1	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	633.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	1.81	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	10.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	No Growth	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	201.00	2013/10/30 09:26:03AM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Radium Clinic
Lab Number	S71120

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	189.00	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	154.00	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	75.40	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	71.30	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	12.30	2013/10/16 04:18:49PM
Odour	*NSA		No Odour	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	7.65	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	<0.1	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	540.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	2.70	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	8.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	2.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	48.00	2013/10/30 09:26:03AM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Pienaar Clinic
Lab Number	S71121

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	107.00	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	31.50	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	45.20	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	2.62	2013/10/16 04:18:49PM
Odour	*NSA		No Odour	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.10	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	0.10	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	272.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	1.75	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	25.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	1.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	201.00	2013/10/30 09:26:03AM

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Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Rapotokwana BH
Lab Number	S71122

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	240.00	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	44.00	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	60.80	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	1.25	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	2.06	2013/10/16 04:18:49PM
Odour	*NSA		No Odour	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.08	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	<0.1	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	369.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	4.01	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	19.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	1.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	130.00	2013/10/30 09:26:03AM

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Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela WTW BH
Lab Number	S71123

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	M7 - Total Alkalinity	mg/L as CaCO ₃	51.80	2013/10/16 03:37:25PM
Calcium Hardness	*NSA	mg/L as CaCO ₃	12.40	2013/10/30 08:27:49AM
Colour	*Spectroquant Pharo	Pt-Co-true	<1	2013/10/15 02:13:17PM
Conductivity	M4 - Electrical Conductivity	mS/m	19.00	2013/10/17 02:46:53PM
Fluoride	*Merck Test Kit	mg/L	<0.10	2013/10/16 04:43:40PM
Iron (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:28:46AM
Manganese (Dissolved)	*ICP-OES (dissolved - value)	µg/L	<10	2013/10/22 08:59:31AM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	1.67	2013/10/16 04:18:49PM
Odour	*NSA		No Odour	2013/10/30 08:52:46AM
pH	M6 - pH at 25°C	pH units	8.53	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	<0.1	2013/10/30 09:21:47AM
Total Dissolved Solids	*NSA	mg/L	191.00	2013/10/18 02:41:47PM
Turbidity	*HACH Turbidity Meter	NTU	0.68	2013/10/17 12:57:24PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	15.00	2013/10/30 09:08:49AM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	2.00	2013/10/30 09:27:47AM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	145.00	2013/10/30 09:26:03AM

Integral Laboratories (Pty) Ltd, No. 1 Zandwyk Park, Old Paarl Road (R101), Paarl, 7646

T0417

Tel: 021 871 1109

Fax: 086 635 8874

CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela WTTWW Raw Sew
Lab Number	S71124

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	M1 - Ammonia	mg/L	2.99	2013/10/16 04:13:18PM
COD - Unfiltered	M2 - COD	mg/L	1 910.00	2013/10/16 08:29:16AM
Conductivity	M4 - Electrical Conductivity	mS/m	106.00	2013/10/17 02:46:53PM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	1.29	2013/10/16 04:18:49PM
Orthophosphate (PO ₄ -P)	*Merck Test Kit	mg/L	11.30	2013/10/16 08:10:03AM
pH	M6 - pH at 25°C	pH units	7.15	2013/10/16 03:35:28PM
Total Suspended Solids	M8 - Suspended Solids	mg/L	498.00	2013/10/16 08:36:25AM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela WTTWW Final Sew
Lab Number	S71125

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	M1 - Ammonia	mg/L	56.30	2013/10/16 04:13:18PM
COD - Unfiltered	M2 - COD	mg/L	461.00	2013/10/16 08:29:16AM
Conductivity	M4 - Electrical Conductivity	mS/m	85.90	2013/10/17 02:46:53PM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	0.95	2013/10/16 04:18:49PM
Orthophosphate (PO ₄ -P)	*Merck Test Kit	mg/L	8.30	2013/10/16 08:10:03AM
pH	M6 - pH at 25°C	pH units	7.18	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	<0.1	2013/10/30 09:21:47AM
Total Suspended Solids	M8 - Suspended Solids	mg/L	86.00	2013/10/16 08:36:25AM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	2 420.00	2013/10/30 09:11:08AM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Radium Raw Sew
Lab Number	S71126

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	M1 - Ammonia	mg/L	2.93	2013/10/16 04:13:18PM
COD - Unfiltered	M2 - COD	mg/L	349.00	2013/10/16 08:29:16AM
Conductivity	M4 - Electrical Conductivity	mS/m	174.00	2013/10/17 02:46:53PM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	1.97	2013/10/16 04:18:49PM
Orthophosphate (PO ₄ -P)	*Merck Test Kit	mg/L	5.10	2013/10/16 08:10:03AM
pH	M6 - pH at 25°C	pH units	8.08	2013/10/16 03:35:28PM
Total Suspended Solids	M8 - Suspended Solids	mg/L	218.00	2013/10/16 08:36:25AM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Radium Final Sew
Lab Number	S71127

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	M1 - Ammonia	mg/L	41.40	2013/10/16 04:13:18PM
COD - Unfiltered	M2 - COD	mg/L	229.00	2013/10/16 08:29:16AM
Conductivity	M4 - Electrical Conductivity	mS/m	145.00	2013/10/17 02:46:53PM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	0.87	2013/10/16 04:18:49PM
Orthophosphate (PO ₄ -P)	*Merck Test Kit	mg/L	3.70	2013/10/16 08:10:03AM
pH	M6 - pH at 25°C	pH units	8.00	2013/10/16 03:35:28PM
Residual chlorine	**Mpumamanzi Lab	mg/L	<0.1	2013/10/30 09:23:10AM
Total Suspended Solids	M8 - Suspended Solids	mg/L	212.00	2013/10/16 08:36:25AM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	199.00	2013/10/30 09:10:24AM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Sample Description	Bela Bela Pienaar Raw Sew
Lab Number	S71128

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	M1 - Ammonia	mg/L	40.80	2013/10/16 04:13:18PM
COD - Unfiltered	M2 - COD	mg/L	425.00	2013/10/16 08:29:16AM
Conductivity	M4 - Electrical Conductivity	mS/m	104.00	2013/10/17 02:46:53PM
Nitrate (NO ₃ -N)	M5 - Nitrate	mg/L	0.98	2013/10/16 04:18:49PM
Orthophosphate (PO ₄ -P)	*Merck Test Kit	mg/L	4.10	2013/10/16 08:10:03AM
pH	M6 - pH at 25°C	pH units	7.29	2013/10/16 03:35:28PM
Total Suspended Solids	M8 - Suspended Solids	mg/L	198.00	2013/10/16 08:36:25AM

CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR27051
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	30/10/2013
Contact Person	Archie Magana		
Date of Sampling	23/9/2013		
Date of Reveal at Lab	25/9/2013		

Authorised By:



N Africa

Technical Signatory



S Salie

Management Signatory

(Signature/s authorised signatories)

All results have been reviewed and authorised by a technical signatory

1. Sampling is outside the laboratory's scope of accreditation, where applicable free and total chlorine results are supplied by the sampling officer.
2. This report shall not be reproduced except in full, without written approval from the laboratory.
3. Results reflected on this report relate only to the items as received and analysed.
4. Uncertainty of measurement for accredited analysis will be provided on request
5. Reports can be emailed, but the laboratory will not be responsible for changes to emailed reports.
6. Parameters indicated by an * are not accredited.
7. Parameters indicated by ** are outsourced.
8. ICP results reported as 'Dissolved' - sample has been filtered using a 0.45 µm filter.
9. The following abbreviations are applicable:
 - NS - Not Settling
 - ND -Not Detected
 - NG - No Growth
10. Where applicable, limits reflected are based on SANS 241-2011 and General Effluent Standards.
11. Time stamps reflect time of analysis completion and final capturing of analytical results.

Certificate Number: SR27051

Ammended: Y/N