

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

Tel: 021 871 1109

Fax: 086 635 8874

T0417

CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela WTW Raw
Lab Number	S56302

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	13.60	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	3.00	2013/06/28 08:22:02AM
Colour	Spectroquant Pharo	Pt-Co-true	10.00	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	5.70	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	0.18	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	34.30	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.40	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	6.00	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	Not Done	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	23.00	2013/06/26 02:57:38PM
Turbidity	HACH Turbidity Meter	NTU	7.73	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 02:49:42PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	Not Done	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela WTW Final
Lab Number	S56303

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	30.40	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	20.03	2013/06/28 08:22:02AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	12.80	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	0.19	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	25.50	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.55	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.43	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	0.20	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	51.00	2013/06/26 02:57:38PM
Turbidity	HACH Turbidity Meter	NTU	3.14	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	4.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Town Clinic
Lab Number	S56304

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	46.20	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	29.22	2013/06/28 08:22:02AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	19.10	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	0.18	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	13.50	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.53	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.50	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	76.00	2013/06/26 02:57:38PM
Turbidity	HACH Turbidity Meter	NTU	3.99	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	2.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Township Clinic
Lab Number	S56305

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	13.80	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	9.66	2013/06/28 08:22:02AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	5.14	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	<0.10	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.50	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	8.08	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	0.10	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	20.00	2013/06/26 02:57:38PM
Turbidity	HACH Turbidity Meter	NTU	3.35	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	1.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela House 1316
Lab Number	S56306

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	92.60	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	53.94	2013/06/28 08:22:03AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	40.40	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	0.21	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	15.80	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	1.66	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.54	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	272.00	2013/06/27 10:24:38AM
Turbidity	HACH Turbidity Meter	NTU	1.97	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	11.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Jinah Park
Lab Number	S56307

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	56.20	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	30.22	2013/06/28 08:22:03AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	23.50	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	0.19	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	1.32	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.80	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	93.00	2013/06/26 02:57:38PM
Turbidity	HACH Turbidity Meter	NTU	2.82	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	5.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Radium Reservoir
Lab Number	S56308

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	218.00	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	264.71	2013/06/28 08:22:03AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	95.00	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	<0.10	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	41.90	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	14.60	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	19.70	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.06	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	800.00	2013/06/27 10:24:38AM
Turbidity	HACH Turbidity Meter	NTU	17.60	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	1.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Radium Clinic
Lab Number	S56309

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	223.00	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	267.21	2013/06/28 08:22:03AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	95.20	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	<0.10	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	42.00	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	11.70	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	20.80	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.10	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	888.00	2013/06/27 10:24:38AM
Turbidity	HACH Turbidity Meter	NTU	15.20	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	1.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Pienaar Clinic
Lab Number	S56310

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	64.00	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	40.71	2013/06/28 08:22:03AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	29.00	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	0.25	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	1.20	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.63	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	185.00	2013/06/27 10:24:38AM
Turbidity	HACH Turbidity Meter	NTU	2.56	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	1.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Rapotokwana BH
Lab Number	S56311

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	245.00	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	108.13	2013/06/28 08:22:03AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	60.10	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	3.30	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	26.10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	11.30	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	1.28	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.71	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	418.00	2013/06/27 10:24:38AM
Turbidity	HACH Turbidity Meter	NTU	4.80	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	2.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	1.00	2013/07/05 12:52:38PM

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Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela WTW BH
Lab Number	S56312

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	47.80	2013/06/26 12:16:43PM
Calcium Hardness	NSA	mg/L as CaCO ₃	33.71	2013/06/28 08:22:03AM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2013/06/25 11:26:14AM
Conductivity	*M4 - Electrical Conductivity	mS/m	16.20	2013/06/26 03:04:54PM
Fluoride	Merck Test Kit	mg/L	0.51	2013/06/26 01:03:31PM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:50:40PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2013/06/25 02:53:09PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.58	2013/06/24 04:51:41PM
Odour	NSA		No Odour	2013/06/28 08:25:16AM
pH	*M6 - pH at 25°C	pH units	7.32	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	<0.1	2013/07/05 12:22:36PM
Total Dissolved Solids	NSA	mg/L	65.00	2013/06/26 02:57:38PM
Turbidity	HACH Turbidity Meter	NTU	3.50	2013/06/26 02:59:58PM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:33:51PM
Heterotrophic Plate Count	Mpumamanzi Lab	cfu's/1ml	1.00	2013/07/05 12:56:25PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	No Growth	2013/07/05 12:52:38PM

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	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela WTTWW Raw Sew
Lab Number	S56313

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	*M1 - Ammonia	mg/L	93.00	2013/06/25 11:23:11AM
COD - Unfiltered	*M2 - COD	mg/L	1 257.00	2013/06/26 12:10:42PM
Conductivity	*M4 - Electrical Conductivity	mS/m	133.00	2013/06/26 03:04:54PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	1.39	2013/06/24 04:51:41PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	45.80	2013/06/24 04:53:18PM
pH	*M6 - pH at 25°C	pH units	7.01	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	Not Done	2013/07/05 12:25:02PM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	620.00	2013/06/25 10:58:50AM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 12:35:07PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 02:33:34PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela WTTWW Final Sew
Lab Number	S56314

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	*M1 - Ammonia	mg/L	18.30	2013/06/25 11:23:11AM
COD - Unfiltered	*M2 - COD	mg/L	70.00	2013/06/26 12:10:42PM
Conductivity	*M4 - Electrical Conductivity	mS/m	75.70	2013/06/26 03:04:54PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	18.10	2013/06/24 04:51:41PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	18.20	2013/06/24 04:53:18PM
pH	*M6 - pH at 25°C	pH units	7.03	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	Not Done	2013/07/05 12:22:36PM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	20.00	2013/06/25 10:58:50AM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	2 420.00	2013/07/05 12:35:07PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	2 420.00	2013/07/05 02:33:34PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Pienaar Raw Sew
Lab Number	S56315

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	*M1 - Ammonia	mg/L	35.60	2013/06/25 11:23:11AM
COD - Unfiltered	*M2 - COD	mg/L	481.00	2013/06/26 12:10:42PM
Conductivity	*M4 - Electrical Conductivity	mS/m	94.00	2013/06/26 03:04:54PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.62	2013/06/24 04:51:41PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	15.10	2013/06/24 04:53:18PM
pH	*M6 - pH at 25°C	pH units	7.37	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	Not Done	2013/07/05 12:25:02PM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	154.00	2013/06/25 10:58:50AM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 12:35:07PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 02:33:34PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Radium Raw Sew
Lab Number	S56316

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	*M1 - Ammonia	mg/L	40.60	2013/06/25 11:23:11AM
COD - Unfiltered	*M2 - COD	mg/L	652.00	2013/06/26 12:10:42PM
Conductivity	*M4 - Electrical Conductivity	mS/m	138.00	2013/06/26 03:04:54PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.67	2013/06/24 04:51:41PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	19.30	2013/06/24 04:53:18PM
pH	*M6 - pH at 25°C	pH units	7.58	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	Not Done	2013/07/05 12:25:02PM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	318.00	2013/06/25 10:58:50AM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 12:35:07PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	Not Done	2013/07/05 02:33:34PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Sample Description	Bela Bela Radium Final Sewage
Lab Number	S56317

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonia (NH ₄ -N)	*M1 - Ammonia	mg/L	24.30	2013/06/25 11:23:11AM
COD - Unfiltered	*M2 - COD	mg/L	100.00	2013/06/26 12:10:42PM
Conductivity	*M4 - Electrical Conductivity	mS/m	136.00	2013/06/26 03:04:54PM
Nitrate (NO ₃ -N)	*M5 - Nitrate	mg/L	0.58	2013/06/24 04:51:41PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	11.60	2013/06/24 04:53:18PM
pH	*M6 - pH at 25°C	pH units	7.78	2013/06/26 12:15:06PM
Residual chlorine	Mpumamanzi Lab	mg/L	Not Done	2013/07/05 12:25:02PM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	78.00	2013/06/25 10:58:50AM
Microbiological Parameters				
E. Coli	Mpumamanzi Lab	cfu's/100ml	228.00	2013/07/05 12:35:07PM
Total Coliforms	Mpumamanzi Lab	cfu's/100ml	2 420.00	2013/07/05 02:33:34PM

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Company	Bela Bela Municipality	Service Request Number	SR22980
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	5/7/2013
Contact Person	Archie Magana		
Date of Sampling	12/6/2013		
Date of Reveal at Lab	13/6/2013		

Authorised By:



N Africa



S Salie

(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 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: SR22980

Ammended: Y/N