

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	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela WTW Raw		
Lab Number		S31583		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	19.20	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	31.20	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	61.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	5.65	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	0.22	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	0.76	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	7.16	2012/12/11 02:39:22PM
Residual chlorine	Merck Test Kit	mg/L	Not Done	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	24.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	42.90	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	Not Done	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	Not Done	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	Not Done	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate: 8/2/2013
Contact Person	Archie Magana	
Date of Sampling	3/12/2012	
Date of Receival at Lab	4/12/2012	

Sample Description		Bela Bela WTW Final		
Lab Number		S31584		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	31.80	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	22.40	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	2.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	8.71	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	<0.10	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	0.96	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	8.71	2012/12/11 02:39:22PM
Residual chlorine	Merck Test Kit	mg/L	1.00	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	37.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.55	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	5.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela BH		
Lab Number		S31585		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	43.20	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	31.90	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	3.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	13.90	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	<0.10	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	1.77	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	8.18	2012/12/11 02:39:22PM
Residual chlorine	Merck Test Kit	mg/L	<0.1	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	60.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.85	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	12.00	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	84.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	25.00	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Town Clinic		
Lab Number		S31586		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	46.80	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	33.20	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	4.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	14.10	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	<0.10	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	1.91	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	8.12	2012/12/11 02:39:22PM
Residual chlorine	Merck Test Kit	mg/L	<0.1	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	61.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.97	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	52.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate: 8/2/2013
Contact Person	Archie Magana	
Date of Sampling	3/12/2012	
Date of Receival at Lab	4/12/2012	

Sample Description	Bela Bela Township Clinic
Lab Number	S31587

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	45.20	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	31.20	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	4.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	14.10	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	<0.10	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	1.78	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	8.00	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	<0.1	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	61.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.94	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	23.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Jinah Park		
Lab Number		S31588		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	43.60	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	30.50	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	5.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	14.10	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	0.12	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	2.04	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	8.05	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	0.10	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	61.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	1.56	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	2.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Radium Reservoir		
Lab Number		S31589		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	305.00	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	362.00	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	2.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	96.70	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	<0.10	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	112.00	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	7.30	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	<0.1	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	763.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.41	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	9.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	4.00	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Radium Clinic		
Lab Number		S31590		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	308.00	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	364.00	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	1.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	97.10	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	<0.10	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:08PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	115.00	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	7.25	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	<0.1	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	807.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.45	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	13.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Pienaar Clinic		
Lab Number		S31591		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	122.00	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	73.20	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	6.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	42.30	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	0.15	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:09PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	8.41	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	7.58	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	<0.1	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	246.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	1.51	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	12.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description	Bela Bela House 1316
Lab Number	S31592

Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	134.00	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	59.40	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	2.00	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	40.20	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	0.24	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:09PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	4.75	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	7.53	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	0.10	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	227.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.53	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	No Growth	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Rapotokwana BH		
Lab Number		S31593		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Alkalinity - Total	*M7 - Total Alkalinity	mg/L as CaCO ₃	236.00	2012/12/11 02:40:21PM
Calcium Hardness	NSA	mg/L as CaCO ₃	117.00	2012/12/11 12:43:30PM
Colour	Spectroquant Pharo	Pt-Co-true	<1	2012/12/11 02:48:45PM
Conductivity	*M4 - Electrical Conductivity	mS/m	49.90	2012/12/12 09:48:26AM
Fluoride	Merck Test Kit	mg/L	2.50	2012/12/12 09:40:50AM
Iron	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:42:34PM
Manganese	ICP-AES (dissolved - value)	µg/L	<10	2012/12/11 02:41:09PM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	18.40	2012/12/12 04:34:27PM
Odour	NSA		No Odour	2012/12/18 01:04:23PM
pH	*M6 - pH at 25°C	pH units	7.56	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	<0.1	2012/12/21 08:41:13AM
Total Dissolved Solids	NSA	mg/L	319.00	2012/12/12 10:53:32AM
Turbidity	HACH Turbidity Meter	NTU	0.26	2012/12/11 04:17:45PM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:22:33PM
Heterotrophic Plate Count	**Mpumamanzi Lab	cfu's/1ml	63.00	2012/12/18 01:57:56PM
Total Coliforms	**Mpumamanzi Lab	cfu's/100ml	No Growth	2012/12/18 02:25:52PM

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	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela WTTWW Raw Sew		
Lab Number		S31594		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonium (NH ₄)	*M1 - Ammonia	mg/L	41.70	2012/12/12 04:20:41PM
COD - Unfiltered	*M2 - COD	mg/L	986.00	2012/12/11 02:33:34PM
Conductivity	*M4 - Electrical Conductivity	mS/m	81.00	2012/12/12 09:48:26AM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	1.86	2012/12/12 04:34:27PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	23.70	2012/12/11 04:04:07PM
pH	*M6 - pH at 25°C	pH units	6.44	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	Not Done	2012/12/21 08:41:13AM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	500.00	2012/12/12 09:52:01AM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	Not Done	2012/12/18 02:22:33PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela WTTWW Final Sew		
Lab Number		S31595		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonium (NH ₄)	*M1 - Ammonia	mg/L	13.80	2012/12/12 04:20:41PM
COD - Unfiltered	*M2 - COD	mg/L	74.00	2012/12/11 02:33:34PM
Conductivity	*M4 - Electrical Conductivity	mS/m	64.80	2012/12/12 09:48:26AM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	122.00	2012/12/12 04:34:27PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	5.70	2012/12/11 04:04:07PM
pH	*M6 - pH at 25°C	pH units	6.95	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	Not Done	2012/12/21 08:41:13AM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	10.00	2012/12/12 09:52:01AM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	107.00	2012/12/18 02:22:33PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Radium Raw Sew		
Lab Number		S31596		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonium (NH ₄)	*M1 - Ammonia	mg/L	38.90	2012/12/12 04:20:41PM
COD - Unfiltered	*M2 - COD	mg/L	540.00	2012/12/11 02:33:34PM
Conductivity	*M4 - Electrical Conductivity	mS/m	131.00	2012/12/12 09:48:26AM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	2.78	2012/12/12 04:34:27PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	23.90	2012/12/11 04:04:07PM
pH	*M6 - pH at 25°C	pH units	6.71	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	Not Done	2012/12/21 08:41:13AM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	480.00	2012/12/12 09:52:01AM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	Not Done	2012/12/18 02:22:33PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Radium Raw Sew		
Lab Number		S31597		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonium (NH ₄)	*M1 - Ammonia	mg/L	29.10	2012/12/12 04:20:41PM
COD - Unfiltered	*M2 - COD	mg/L	163.00	2012/12/11 02:33:34PM
Conductivity	*M4 - Electrical Conductivity	mS/m	125.00	2012/12/12 09:48:26AM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	1.28	2012/12/12 04:34:27PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	9.90	2012/12/11 04:04:07PM
pH	*M6 - pH at 25°C	pH units	7.26	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	Not Done	2012/12/21 08:41:13AM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	62.00	2012/12/12 09:52:01AM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	125.00	2012/12/18 02:22:33PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Sample Description		Bela Bela Pienaar Raw Sew		
Lab Number		S31598		
Parameters	Method	Unit	Results	Date
Chemical Parameters				
Ammonium (NH ₄)	*M1 - Ammonia	mg/L	35.60	2012/12/12 04:20:41PM
COD - Unfiltered	*M2 - COD	mg/L	300.00	2012/12/11 02:33:34PM
Conductivity	*M4 - Electrical Conductivity	mS/m	86.30	2012/12/12 09:48:26AM
Nitrate (NO ₃)	*M5 - Nitrate	mg/L	1.98	2012/12/12 04:34:27PM
Orthophosphate (PO ₄)	Merck Test Kit	mg/L	8.20	2012/12/11 04:04:07PM
pH	*M6 - pH at 25°C	pH units	6.90	2012/12/11 02:39:23PM
Residual chlorine	Merck Test Kit	mg/L	Not Done	2012/12/21 08:41:13AM
Total Suspended Solids	*M8 - Suspended Solids	mg/L	128.00	2012/12/12 09:52:01AM
Microbiological Parameters				
E. Coli	**Mpumamanzi Lab	cfu's/100ml	Not Done	2012/12/18 02:22:33PM

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CERTIFICATE OF ANALYSIS

Company	Bela Bela Municipality	Service Request Number	SR14649
Customer Address	Private Bag X 1609, Bela Bela, Limpopo, Bela Bela, Limpopo, South Africa, 0480	Date of Certificate:	8/2/2013
Contact Person	Archie Magana		
Date of Sampling	3/12/2012		
Date of Receival at Lab	4/12/2012		

Authorised By:



N Africa



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(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: SR14649

Ammended: Y/N