

Upington Private Hospital
Du Toit Ave
Tel: 054 332 2653



PathCare

Drs Dietrich, Voigt, Mia

Vennote Partners
Page: 1

Prac.No. : 5200539

FINAL REPORT - Lab Ref : 716109988

Report To

TRANSNET FREIGHT RAIL

ATT: SHAHEED GANIEF

SALKOR BLDG; PRIVATE BAG X11
7380 VREDENBURG

Patient Name

NOORD WATER

Identity Number : NOT AVAILABLE

Age : Sex : DOB : 32:U:

Auth/PO/Order No : NONE

Employer/Emp No : NOT AVAILABLE

Specimen : 0301:BS00236R
Collection Date : 2018-03-01 17:00
Received Date : 2018-03-02 10:30
Report Date : 2018-04-12 08:31

Tests Requested :
SANS 241 WATER

Specimen Types : Blood

----- BIOCHEMISTRY -----

Test

Result Flag Reference

-- CERTIFICATE OF ANALYSIS --

CHEMICAL ANALYSES OF WATER:

RISK: Operational

> ALUMINIUM	< 30	0-300 ug/L
> PH VALUE	7.3	5.0-9.7 pH units
> TURBIDITY	12	NTU
Guidelines:		
Operational		0-1 NTU
Aesthetic		0-5 NTU

RISK: Aesthetic

> AMMONIA	0.5	0-1.5 mg/L
> CHLORIDE	943	H 0-300 mg/L
> CONDUCTIVITY mS/m @ 25 C	437.00	H 0-170 mS/m
> SODIUM	547	H 0-200 mg/L
> TOTAL DISSOLVED SOLIDS	2710	H 0-1200 mg/L
> TURBIDITY	12	NTU
Guidelines:		
Operational		0-1 NTU
Aesthetic		0-5 NTU
> ZINC	< 0.03	0-5 mg/L
> WATER COLOUR	4	0-15 mg/l Pt

RISK: Acute Health - 1

> CYANIDE FREE/TOTAL	4	0-200 ug/L
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** Report Continues on Page : 2 **



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TRANSNET FREIGHT RAIL	Lab Ref	Page : 2
Specimen	716109988	NOORD WATER
0301:BS00236R	Collection Date	Received Date
	2018-03-01 17:00	2018-03-02 10:30
		Report Date
		2018-04-12 08:31

----- BIOCHEMISTRY -----

Test Result Flag Reference

- CERTIFICATE OF ANALYSIS -

CHEMICAL ANALYSES OF WATER:

RISK: Acute Health - 1

> NITRATES	3.18	0-11 mg/L
> NITRITE	0.2	0-0.9 mg/L

RISK: Chronic health

> ANTIMONY	9	0-20 ug/L
> ARSENIC (As)	< 5	0-10 ug/L
> CADMIUM (Cd)	< 3	0-3 ug/L
> CHROMIUM (Cr)	< 27	0-50 ug/L
> COPPER (Cu)	< 20	0-2000 ug/L
> FLUORIDE	0.1	0-1.5 mg/L
> LEAD (Pb)	< 7	0-10 ug/L
> MERCURY (Hg)	5	0-6 ug/L
> NICKEL	0	0-70 ug/L
> SELENIUM	< 12	0-40 ug/L

RISK: Multiple

> IRON	0	ug/L
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Guidelines:

Aesthetic

0-300 ug/L

Chronic health

0-2000 ug/L

> MANGANESE

170

ug/L

Guidelines:

Aesthetic

0-100 ug/L

Chronic health

0-400 ug/L

> SULPHATES

1099

mg/L

Guidelines:

Aesthetic

0-250 mg/L

Acute health

0-500 mg/L

Reference:

> .

Sampling done by client.

Test results are specific only to the sample tested.

Samples from the same or similar source may deliver a different result.

Water testing was performed by Pathcare's wholly owned

** Report Continues on Page : 3 **



PathCare

Drs Dietrich, Voigt, Mia
Venoto • Partners

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TRANSNET FREIGHT RAIL

Lab Ref

716109988

NOORD WATER

Specimen

Collection Date

Received Date

Report Date

0301:BS00236R

2018-03-01 17:00

2018-03-02 10:30

2018-04-12 08:31

----- BIOCHEMISTRY -----

Test

Result

Flag

Reference

**- CERTIFICATE OF ANALYSIS **-

CHEMICAL ANALYSES OF WATER:

Reference:

subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Guidelines as per SANS 241-1:2015 Drinking water.

> BARIUM (Ba) (H2O)	63	0-700 ug/L
> FREE CHLORINE (WATER)	0.03	0-5 mg/L
Guidelines:		
Chronic health		< 5 mg/L
> URANIUM (U) (H2O)	< 14	0-30 ug/L
> TOTAL ORGANIC CARBON (H2O)	9	0-10 mg/L
> BORON (WATER ANALYSIS)	1010	0-2400 ug/L

Sampling done by client

Test results are specific only to the sample tested.

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subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Authorised by: DR YOUNUS ESSACK on 2018-04-12 08:27:00

CHEM. PATHOLOGIST Tel:021 5963400

~ H=High, L=Low, *H=Critically High, *L=Critically Low

In rare cases, analytical interference may cause erroneous results.

Please inform pathologist if results and clinical picture do not concur.

END OF REPORT : Total Number of Pages : 3

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**PathCare**

Drs Dietrich, Voigt, Mia
Vennooth Partners
Page: 1

Prac.No. : 5200539

FINAL REPORT - Lab Ref : 716109986

Report To

TRANSNET FREIGHT RAIL

ATT: SHAHEED GANIEF

SALKOR BLDG; PRIVATE BAG X11
7380 VREDENBURG

Patient Name

SOCCER FIELD WATER

Identity Number : NOT AVAILABLE

Age : Sex : DOB : 32:U:

Auth/PO/Order No : NONE

Employer/Emp No : NOT AVAILABLE

Specimen : 0301:BS00233R
Collection Date : 2018-03-01 17:00
Received Date : 2018-03-02 10:30
Report Date : 2018-04-12 08:31

Tests Requested :

SANS 241 WATER

Specimen Types : Blood

----- BIOCHEMISTRY -----

Test	Result	Flag	Reference
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--* CERTIFICATE OF ANALYSIS --*

CHEMICAL ANALYSES OF WATER:**RISK: Operational**

> ALUMINIUM	< 30		0-300 ug/L
> PH VALUE	7.2		5.0-9.7 pH units
> TURBIDITY	40		NTU
Guidelines:			
Operational			0-1 NTU
Aesthetic			0-5 NTU

RISK: Aesthetic

> AMMONIA	< 0.3		0-1.5 mg/L
> CHLORIDE	629	H	0-300 mg/L
> CONDUCTIVITY mS/m @ 25 C	248.00	H	0-170 mS/m
> SODIUM	281	H	0-200 mg/L
> TOTAL DISSOLVED SOLIDS	1553	H	0-1200 mg/L
> TURBIDITY	40		NTU
Guidelines:			
Operational			0-1 NTU
Aesthetic			0-5 NTU
> ZINC	0.54		0-5 mg/L
> WATER COLOUR	16	H	0-15 mg/l Pt

RISK: Acute Health - 1

> CYANIDE FREE/TOTAL	8		0-200 ug/L
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** Report Continues on Page : 2 **



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TRANSNET FREIGHT RAIL	Lab Ref	Page : 2
Specimen	716109986	SOCCER FIELD WATER
0301:BS00233R	Collection Date	Received Date
	2018-03-01 17:00	2018-03-02 10:30
		Report Date
		2018-04-12 08:31

----- BIOCHEMISTRY -----

Test	Result	Flag	Reference
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**- CERTIFICATE OF ANALYSIS **-

CHEMICAL ANALYSES OF WATER:

RISK: Acute Health - 1

> NITRATES	1.10	0-11 mg/L
> NITRITE	0.1	0-0.9 mg/L

RISK: Chronic health

> ANTIMONY	< 2	0-20 ug/L
> ARSENIC (As)	< 5	0-10 ug/L
> CADMIUM (Cd)	< 3	0-3 ug/L
> CHROMIUM (Cr)	< 27	0-50 ug/L
> COPPER (Cu)	40	0-2000 ug/L
> FLUORIDE	0.2	0-1.5 mg/L
> LEAD (Pb)	< 7	0-10 ug/L
> MERCURY (Hg)	5	0-6 ug/L
> NICKEL	2	0-70 ug/L
> SELENIUM	40	0-40 ug/L

RISK: Multiple

> IRON	9700	ug/L
Guidelines:		
Aesthetic		0-300 ug/L
Chronic health		0-2000 ug/L
> MANGANESE	140	ug/L
Guidelines:		
Aesthetic		0-100 ug/L
Chronic health		0-400 ug/L
> SULPHATES	268	mg/L
Guidelines:		
Aesthetic		0-250 mg/L
Acute health		0-500 mg/L

Reference:

Sampling done by client.

Test results are specific only to the sample tested.

Samples from the same or similar source may deliver a different result.

Water testing was performed by Pathcare's wholly owned

** Report Continues on Page : 3 **



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TRANSNET FREIGHT RAIL

Lab Ref

716109986

SOCER FIELD WATER

Specimen

Collection Date

Received Date

Report Date

0301:BS00233R

2018-03-01 17:00

2018-03-02 10:30

2018-04-12 08:31

----- BIOCHEMISTRY -----

Test

Result

Flag

Reference

- CERTIFICATE OF ANALYSIS -

CHEMICAL ANALYSES OF WATER:

Reference:

subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Guidelines as per SANS 241-1:2015 Drinking water.

> BARIUM (Ba) (H2O)

31

0-700 ug/L

> FREE CHLORINE (WATER)

0.12

0-5 mg/L

Guidelines:

Chronic health

< 5 mg/L

> URANIUM (U) (H2O)

< 14

0-30 ug/L

> TOTAL ORGANIC CARBON (H2O)

10

0-10 mg/L

> BORON (WATER ANALYSIS)

1090

0-2400 ug/L

Sampling done by client.

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subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Authorised by: DR YOUNUS ESSACK on 2018-04-12 08:26:00

CHEM. PATHOLOGIST Tel:021 5963400

~ H=High, L=Low, *H=Critically High, *L=Critically Low

In rare cases, analytical interference may cause erroneous results.

Please inform pathologist if results and clinical picture do not concur.

END OF REPORT : Total Number of Pages : 3

Upington Private Hospital
Du Toit Ave
Tel: 054 332 2653



Drs Dietrich, Voigt, Mia
Venette Partners
Page: 1

Prac.No. : 5200539

FINAL REPORT - Lab Ref : 716109987

Report To

TRANSNET FREIGHT RAIL

ATT: SHAHEED GANIEF

SALKOR BLDG; PRIVATE BAG X11
7380 VREDENBURG

Patient Name

STRAUSS WATER

Identity Number : NOT AVAILABLE

Age : Sex : DOB : 32:U:

Auth/PO/Order No : NONE

Employer/Emp No : NOT AVAILABLE

Specimen : 0301:BS00232R
Collection Date : 2018-03-01 17:00
Received Date : 2018-03-02 10:30
Report Date : 2018-04-12 08:31

Tests Requested :
SANS 241 WATER

Specimen Types : Blood

----- BIOCHEMISTRY -----

Test

Result Flag Reference

-- CERTIFICATE OF ANALYSIS --

CHEMICAL ANALYSES OF WATER:

RISK: Operational

> ALUMINIUM	< 30		0-300 ug/L
> PH VALUE	7.5		5.0-9.7 pH units
> TURBIDITY	1		NTU
Guidelines:			
Operational			0-1 NTU
Aesthetic			0-5 NTU

RISK: Aesthetic

> AMMONIA	< 0.3		0-1.5 mg/L
> CHLORIDE	766	H	0-300 mg/L
> CONDUCTIVITY mS/m @ 25 C	362.00	H	0-170 mS/m
> SODIUM	319	H	0-200 mg/L
> TOTAL DISSOLVED SOLIDS	2180	H	0-1200 mg/L
> TURBIDITY	1		NTU
Guidelines:			
Operational			0-1 NTU
Aesthetic			0-5 NTU
> ZINC	0.19		0-5 mg/L
> WATER COLOUR	< 1		0-15 mg/l Pt

RISK: Acute Health - 1

> CYANIDE FREE/TOTAL	0		0-200 ug/L
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** Report Continues on Page : 2 **



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TRANSNET FREIGHT RAIL

Lab Ref

716109987

STRAUSS WATER

Specimen

0301:BS00232R

Collection Date

2018-03-01 17:00

Received Date

2018-03-02 10:30

Report Date

2018-04-12 08:31

----- BIOCHEMISTRY -----

Test

Result

Flag

Reference

*** CERTIFICATE OF ANALYSIS ***

CHEMICAL ANALYSES OF WATER:

RISK: Acute Health - 1

> NITRATES 20.07 H 0-11 mg/L
> NITRITE 0.0 0-0.9 mg/L

RISK: Chronic health

> ANTIMONY 9 0-20 ug/L
> ARSENIC (As) < 5 0-10 ug/L
> CADMIUM (Cd) < 3 0-3 ug/L
> CHROMIUM (Cr) < 27 0-50 ug/L
> COPPER (Cu) < 20 0-2000 ug/L
> FLUORIDE 0.1 0-1.5 mg/L
> LEAD (Pb) < 7 0-10 ug/L
> MERCURY (Hg) < 3 0-6 ug/L
> NICKEL 1 0-70 ug/L
> SELENIUM < 12 0-40 ug/L

RISK: Multiple

> IRON 0 ug/L

Guidelines:

Aesthetic

0-300 ug/L

Chronic health

0-2000 ug/L

> MANGANESE

< 30

ug/L

Guidelines:

Aesthetic

0-100 ug/L

Chronic health

0-400 ug/L

> SULPHATES

344

mg/L

Guidelines:

Aesthetic

0-250 mg/L

Acute health

0-500 mg/L

Reference:

> .
Sampling done by client.
Test results are specific only to the sample tested.
Samples from the same or similar source may deliver a different result.
Water testing was performed by Pathcare's wholly owned

** Report Continues on Page : 3 **



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TRANSNET FREIGHT RAIL	Lab Ref	716109987	STRAUSS WATER
Specimen	Collection Date	Received Date	Report Date
0301:BS00232R	2018-03-01 17:00	2018-03-02 10:30	2018-04-12 08:31

----- BIOCHEMISTRY -----

Test

Result Flag Reference

- CERTIFICATE OF ANALYSIS -

CHEMICAL ANALYSES OF WATER:

Reference:

subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Guidelines as per SANS 241-1:2015 Drinking water.

> BARIUM (Ba) (H2O) 25 0-700 ug/L

> FREE CHLORINE (WATER) 0.08 0-5 mg/L

Guidelines:

Chronic health

> URANIUM (U) (H2O) < 14 0-30 ug/L

> TOTAL ORGANIC CARBON (H2O) 7 0-10 mg/L

> BORON (WATER ANALYSIS) 760 0-2400 ug/L

Sampling done by client.

Test results are specific only to the sample tested.

Samples from the same or similar source may deliver a different result.

Water testing was performed by Pathcare's wholly owned

subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Authorised by: DR YOUNUS ESSACK on 2018-04-12 08:26:00

CHEM. PATHOLOGIST Tel:021 5963400

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In rare cases, analytical interference may cause erroneous results.

Please inform pathologist if results and clinical picture do not concur.

END OF REPORT : Total Number of Pages : 3

Upington Private Hospital
Du Toit Ave
Tel: 054 332 2653

 **PathCare**
Drs Dietrich, Voigt, Mia
Vennote • Partners

Prac.No. : 5200539

FINAL REPORT - Lab Ref : 716109989

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Report To
TRANSNET FREIGHT RAIL

Patient Name

ATT: SHAHEED GANIEF
SALKOR BLDG, PRIVATE BAG X11
7380 VREDENBURG

SUID 1 WATER

Specimen : 0301:BS00241R
Collection Date : 2018-03-01 17:00
Received Date : 2018-03-02 10:30
Report Date : 2018-04-24 08:01

Identity Number : NOT AVAILABLE
Age : Sex : DOB : 32:U;
Auth/PO/Order No : NONE
Employer/Emp No : NOT AVAILABLE

Tests Requested :
SANS 241 WATER

Specimen Types : Blood

----- BIOCHEMISTRY -----

Test

Result Flag Reference

CHEMICAL ANALYSES OF WATER:

*** CERTIFICATE OF ANALYSIS ***

RISK: Operational

> ALUMINIUM
> PH VALUE
> TURBIDITY

< 30 0-300 ug/L
7.5 5.0-9.7 PH units
3 NTU

Guidelines:
Operational
Aesthetic

0-1 NTU
0-5 NTU

RISK: Aesthetic

> AMMONIA
> CHLORIDE
> CONDUCTIVITY mS/m @ 25 C
> SODIUM
> TOTAL DISSOLVED SOLIDS
> TURBIDITY

< 0.3 0-1.5 mg/L
835 H 0-300 mg/L
379.00 H 0-170 mS/m
353 H 0-200 mg/L
2280 H 0-1200 mg/L
3 NTU

Guidelines:
Operational
Aesthetic

0-1 NTU
0-5 NTU

*** Report Continues on Page : 2 ***



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Vennote + Partners

TRANSNET FREIGHT RAIL	Lab Ref	Page : 2
Specimen	716109989	SUID 1 WATER
0301:BS00241R	Collection Date	Received Date
	2018-03-01 17:00	2018-03-02 10:30
		Report Date
		2018-04-24 08:01

Test

----- BIOCHEMISTRY -----

Result Flag Reference

CHEMICAL ANALYSES OF WATER:

-- CERTIFICATE OF ANALYSIS --

RISK: Aesthetic

> ZINC

> WATER COLOUR

0.27

0-5 mg/L

< 1

0-15 mg/l pt

RISK: Acute Health - 1

> CYANIDE FREE/TOTAL

> NITRATES

> NITRITE

0

0-200 ug/L

21.24

H

0-21 mg/L

0.0

0-0.9 mg/L

RISK: Chronic health

> ANTIMONY

> ARSENIC (As)

> CADMIUM (Cd)

> CHROMIUM (Cr)

> COPPER (Cu)

> FLUORIDE

> LEAD (Pb)

> MERCURY (Hg)

> NICKEL

> SELENIUM

< 2

0-20 ug/L

< 5

0-10 ug/L

< 3

0-3 ug/L

< 27

0-50 ug/L

< 20

0-2000 ug/L

0.1

0-1.5 mg/L

< 7

0-10 ug/L

4

0-6 ug/L

2

0-70 ug/L

< 12

0-40 ug/L

RISK: Multiple

> IRON

Guidelines:

Aesthetic

Chronic health

0

ug/L

0-300 ug/L

0-2000 ug/L

< 30

ug/L

Guidelines:

Aesthetic

Chronic health

0-100 ug/L

0-400 ug/L

** Report continues on Page : 3 **



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Drs Dietrich, Voigt, Mia
Van der Merwe - Partners

TRANSNET FREIGHT RAIL	Lab Ref	Page : 3
Specimen	716109989	SUID 1 WATER
0301:BS00241R	Collection Date 2018-03-01 17:00	Received Date 2018-03-02 10:30
		Report Date 2018-04-24 09:01

Test

----- BIOCHEMISTRY -----

Result Flag Reference

CHEMICAL ANALYSES OF WATER:

--- CERTIFICATE OF ANALYSIS ---

RISK: Multiple

> SULPHATES

Guidelines:	378	mg/L
Aesthetic		0-250 mg/L
Acute health		0-500 mg/L

Reference:

Guidelines as per SANS 241-1:2015 Drinking water.

> BARIUM (Ba) (H2O)	24	0-700 ug/L
> FREE CHLORINE (WATER)	0.00	0-5 mg/L
	Guidelines:	
	Chronic health	< 5 mg/L
> URANIUM (U) (H2O)	< 14	0-30 ug/L
> TOTAL ORGANIC CARBON (H2O)	8	0-10 mg/L
> BORON (WATER ANALYSIS)	920	0-2400 ug/L

Sampling done by client.

Test results are specific only to the sample tested.
Samples from the same or similar source may deliver a different result.

Water testing was performed by Pathcare's wholly owned subsidiary, Bemlab Pty Ltd
Accreditation number T0654
For a list of accredited analytes, please contact Bemlab at 021 8531490 or email admin@bemlab.co.za

Authorised by: DR YOUNUS ESSACK on 2018-04-12 08:27:00
CHEM. PATHOLOGIST Tel: 021 5963400

- H=High, L=Low, *H=Critically High, *L=Critically Low

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Please inform pathologist if results and clinical picture do not concur.

END OF REPORT : Total Number of Pages : 3

Upington Private Hospital
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PathCare

Drs Dietrich, Voigt, Mia
Van der Merwe, Pathways
Page: 1

Prac.No. : 5200539

FINAL REPORT - Lab Ref : 716109985

Report To

TRANSNET FREIGHT RAIL

ATT: SHAHEED GANIEF

SALKOR BLDG; PRIVATE BAG X11
7380 VREDENBURG

Patient Name

SUID 2 WATER

Specimen : 0301:BS00234R
Collection Date : 2018-03-01 17:00
Received Date : 2018-03-02 10:30
Report Date : 2018-04-12 08:31

Identity Number : NOT AVAILABLE
Age : Sex : DOB : 32:U:
Auth/PO/Order No : NONE
Employer/Emp No : NOT AVAILABLE

Tests Requested :
SANS 241 WATER

Specimen Types : Blood

----- BIOCHEMISTRY -----

Test

Result Flag Reference

**- CERTIFICATE OF ANALYSIS **-

CHEMICAL ANALYSES OF WATER:

RISK: Operational

> ALUMINIUM	< 30		0-300 ug/L
> PH VALUE	7.4		5.0-9.7 pH units
> TURBIDITY	43		NTU

Guidelines:

Operational

Aesthetic

0-1 NTU

0-5 NTU

RISK: Aesthetic

> AMMONIA	< 0.3		0-1.5 mg/L
> CHLORIDE	109		0-300 mg/L
> CONDUCTIVITY mS/m @ 25 C	177.00	H	0-170 mS/m
> SODIUM	109		0-200 mg/L
> TOTAL DISSOLVED SOLIDS	1063		0-1200 mg/L
> TURBIDITY	43		NTU

Guidelines:

Operational

Aesthetic

0-1 NTU

0-5 NTU

> ZINC	0.03		0-5 mg/L
> WATER COLOUR	25	H	0-15 mg/l Pt

RISK: Acute Health - 1

> CYANIDE FREE/TOTAL	22		0-200 ug/L
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** Report Continues on Page : 2 **



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Drs Dietrich, Voigt, Mia
Vennote - Partners

Lab Ref		Page : 2	
TRANSNET FREIGHT RAIL	716109985	SUID 2 WATER	
Specimen	Collection Date	Received Date	Report Date
0301:BS00234R	2018-03-01 17:00	2018-03-02 10:30	2018-04-12 08:31

----- BIOCHEMISTRY -----

Test Result Flag Reference

*** CERTIFICATE OF ANALYSIS ***

CHEMICAL ANALYSES OF WATER:

RISK: Acute Health - 1

> NITRATES	48.38	H	0-11 mg/L
> NITRITE	0.5		0-0.9 mg/L

RISK: Chronic health

> ANTIMONY	< 2		0-20 ug/L
> ARSENIC (As)	< 5		0-10 ug/L
> CADMIUM (Cd)	< 3		0-3 ug/L
> CHROMIUM (Cr)	< 27		0-50 ug/L
> COPPER (Cu)	< 20		0-2000 ug/L
> FLUORIDE	0.1		0-1.5 mg/L
> LEAD (Pb)	< 7		0-10 ug/L
> MERCURY (Hg)	6		0-6 ug/L
> NICKEL	5		0-70 ug/L
> SELENIUM	21		0-40 ug/L

RISK: Multiple

> IRON	2200	ug/L
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Guidelines:

Aesthetic

0-300 ug/L

Chronic health

0-2000 ug/L

> MANGANESE

70

ug/L

Guidelines:

Aesthetic

0-100 ug/L

Chronic health

0-400 ug/L

> SULPHATES

150

mg/L

Guidelines:

Aesthetic

0-250 mg/L

Acute health

0-500 mg/L

Reference:

> .
Sampling done by client.
Test results are specific only to the sample tested.
Samples from the same or similar source may deliver a different result.
Water testing was performed by Pathcare's wholly owned

** Report Continues on Page : 3 **



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TRANSNET FREIGHT RAIL	Lab Ref	716109985	Page : 3
Specimen	Collection Date	Received Date	SUID 2 WATER
0301:BS00234R	2018-03-01 17:00	2018-03-02 10:30	Report Date
			2018-04-12 08:31

----- BIOCHEMISTRY -----

Test

Result Flag Reference

-- CERTIFICATE OF ANALYSIS --

CHEMICAL ANALYSES OF WATER:

Reference:

subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Guidelines as per SANS 241-1:2015 Drinking water

> BARIUM (Ba) (H2O)	34	0-700 ug/L
> FREE CHLORINE (WATER)	0.65	0-5 mg/L
Guidelines:		
	Chronic health	< 5 mg/L
> URANIUM (U) (H2O)	< 14	0-30 ug/L
> TOTAL ORGANIC CARBON (H2O)	8	0-10 mg/L
> BORON (WATER ANALYSIS)	270	0-2400 ug/L

Sampling done by client.

Test results are specific only to the sample tested.

Samples from the same or similar source may deliver a different result.

Water testing was performed by Pathcare's wholly owned

subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Authorised by: DR YOUNUS ESSACK on 2018-04-12 08:25:00

CHEM. PATHOLOGIST Tel:021 5963400

- H=High, L=Low, *H=Critically High, *L=Critically Low

In rare cases, analytical interference may cause erroneous results.

Please inform pathologist if results and clinical picture do not concur.

END OF REPORT : Total Number of Pages : 3



PathCare

Drs Dietrich, Voigt, Mia
Vennote - Partners

Page : 2

TRANSNET FREIGHT RAIL	Lab Ref 716109984	VISAGIE WATER	
Specimen 0301:BS00235R	Collection Date 2018-03-01 17:00	Received Date 2018-03-02 10:30	Report Date 2018-04-12 08:31

----- BIOCHEMISTRY -----

Test

Result Flag Reference

**- CERTIFICATE OF ANALYSIS **-

CHEMICAL ANALYSES OF WATER:

RISK: Acute Health - 1

> NITRATES	24.73	H	0-11 mg/L
> NITRITE	0.0		0-0.9 mg/L

RISK: Chronic health

> ANTIMONY	< 2		0-20 ug/L
> ARSENIC (As)	< 5		0-10 ug/L
> CADMIUM (Cd)	< 3		0-3 ug/L
> CHROMIUM (Cr)	< 27		0-50 ug/L
> COPPER (Cu)	< 20		0-2000 ug/L
> FLUORIDE	0.1		0-1.5 mg/L
> LEAD (Pb)	10		0-10 ug/L
> MERCURY (Hg)	6		0-6 ug/L
> NICKEL	5		0-70 ug/L
> SELENIUM	15		0-40 ug/L

RISK: Multiple

> IRON	1700	ug/L
--------	------	------

Guidelines:

Aesthetic

0-300 ug/L

Chronic health

0-2000 ug/L

> MANGANESE

< 30

ug/L

Guidelines:

Aesthetic

0-100 ug/L

Chronic health

0-400 ug/L

> SULPHATES

631

mg/L

Guidelines:

Aesthetic

0-250 mg/L

Acute health

0-500 mg/L

Reference:

>

Sampling done by client.

Test results are specific only to the sample tested.

Samples from the same or similar source may deliver a different result.

Water testing was performed by Pathcare's wholly owned

** Report Continues on Page : 3 **



PathCare

Drs Dietrich, Voigt, Mia
Vinnote - Partners

Lab Ref

Page : 3

TRANSNET FREIGHT RAIL

716109984

VISAGIE WATER

Specimen

Collection Date

Received Date

Report Date

0301:BS00235R

2018-03-01 17:00

2018-03-02 10:30

2018-04-12 08:31

----- BIOCHEMISTRY -----

Test

Result

Flag

Reference

-- CERTIFICATE OF ANALYSIS --

CHEMICAL ANALYSES OF WATER:

Reference:

subsidary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Guidelines as per SANS 241-1:2015 Drinking water.

> BARIUM (Ba) (H2O)

67

0-700 ug/L

> FREE CHLORINE (WATER)

0.00

0-5 mg/L

Guidelines:

Chronic health

< 5 mg/L

> URANIUM (U) (H2O)

< 14

0-30 ug/L

> TOTAL ORGANIC CARBON (H2O)

9

0-10 mg/L

> BORON (WATER ANALYSIS)

1260

0-2400 ug/L

Sampling done by client.

Test results are specific only to the sample tested.

Samples from the same or similar source may deliver a different result.

Water testing was performed by Pathcare's wholly owned subsidiary, Bemlab Pty Ltd

Accreditation number T0654

For a list of accredited analytes, please contact Bemlab at

021 8531490 or email admin@bemlab.co.za

Authorised by: DR YOUNUS ESSACK on 2018-04-12 08:24:00

CHEM. PATHOLOGIST Tel:021 5963400

~ H=High, L=Low, *H=Critically High, *L=Critically Low

In rare cases, analytical interference may cause erroneous results.

Please inform pathologist if results and clinical picture do not concur.

END OF REPORT : Total Number of Pages : 3