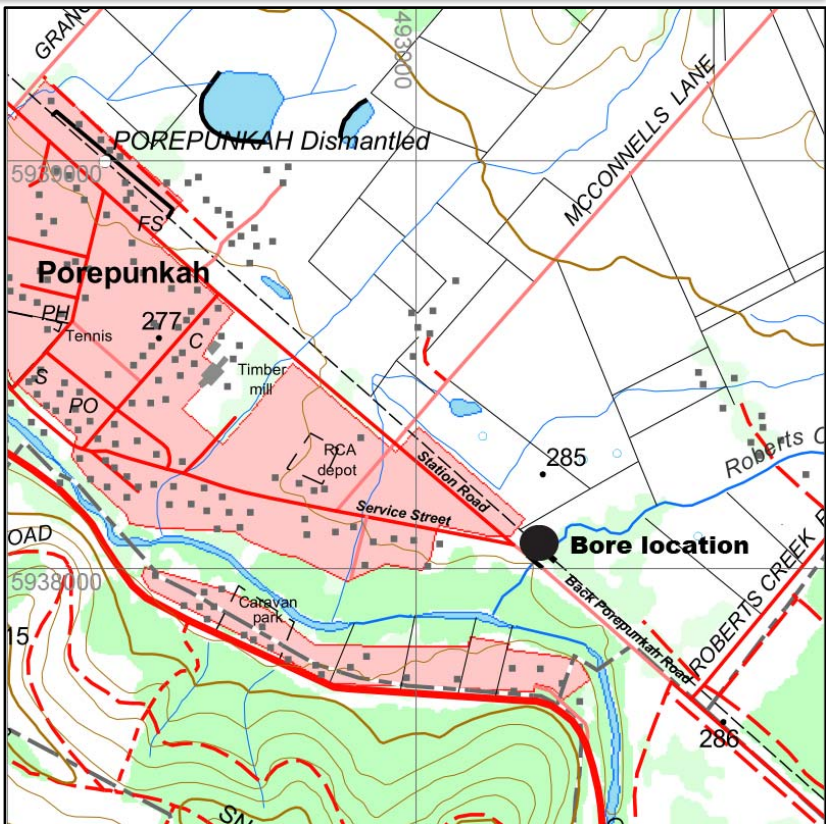




Borehole Infrastructure Report

Site Data

Site Code	WRK 068289	
Site Name	Porepunkah	
Region	Ovens River, VIC	
Easting	GDA94 Zone 55	493292
Northing		5938063
Elevation (m AHD)		
Bore Depth (m)	60	
Screen Length (m)	6	
Screen Top (m)	53	
Screen Bottom (m)	59	
Bore Top	Monument	
Top of Pipe (m)	0.944	
Date Completed	14 <sup>th</sup> March 2012	



Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores opposite site of round-about on Tip Road next to Roberts Creek. The borehole is finished in weathered basement below the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:

Contact Details:

Checked by: Prof Ian Cartwright

Dr Harald Hofmann

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)

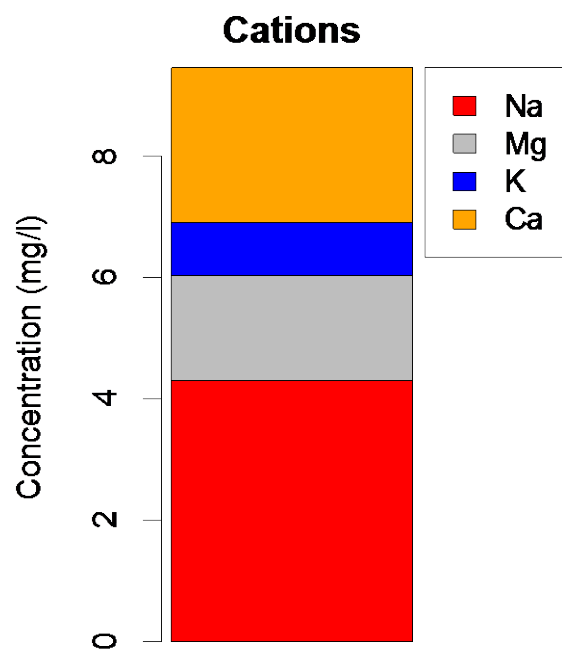
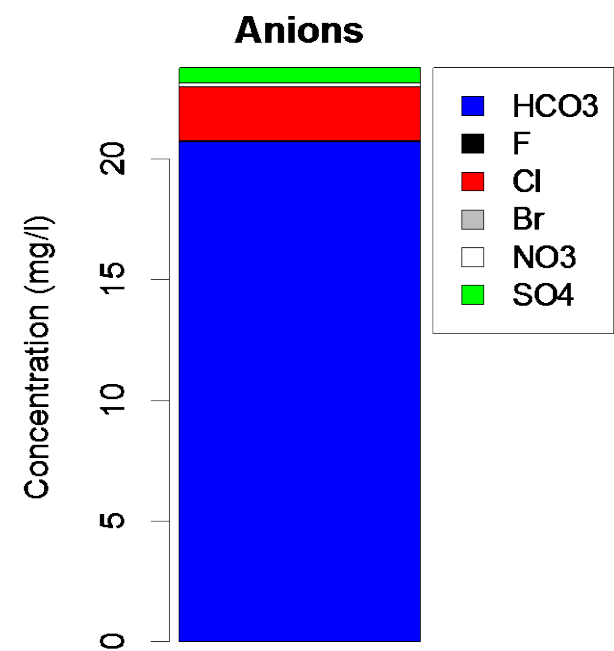
# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	2.247
Reduced Water Level (m)	
EC (µS/cm)	57.1
pH	5.5
DO (mg/l)	Trace

## Stratigraphy:

0- 52 m                      Gravels  
52-60 m                    Weathered basement

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	20.74	Li (µg/L)	5.39	Radon (Bq/m <sup>3</sup> )	100208
F (mg/L)	0.04	Na (mg/L)	4.31	δ <sup>18</sup> O (‰)	-6.4
Cl (mg/L)	2.22	Mg (mg/L)	1.73	δ <sup>2</sup> H (‰)	-40
Br (mg/L)	0.01	K (mg/L)	0.87	δ <sup>13</sup> C (‰)	-20.1
NO <sub>3</sub> (mg/L)	0.15	Ca (mg/L)	2.55	<sup>14</sup> C pMC	83.66
SO <sub>4</sub> (mg/L)	0.62	Mn (µg/L)	43.67	Tritium (TU)	0.002
		Fe (µg/L)	54.05		
		Sr (µg/L)	18.69		
		Ba (µg/L)	11.00		

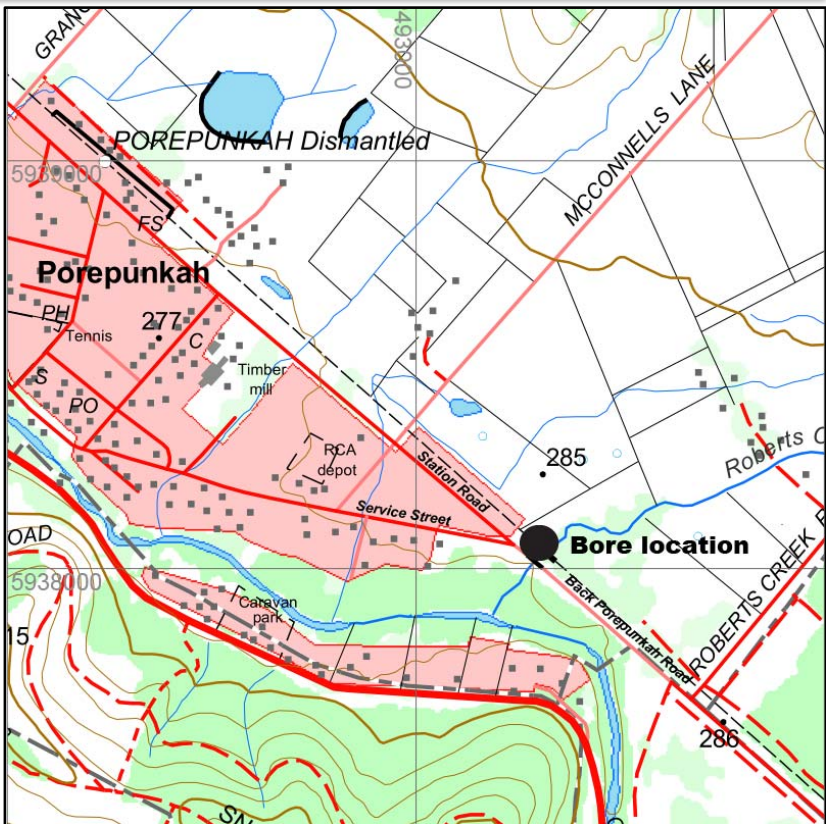




Borehole Infrastructure Report

Site Data

Site Code		WRK 068290
Site Name		Porepunkah
Region		Ovens River, VIC
Easting	GDA94 Zone 55	493303
Northing		5938043
Elevation (m AHD)		
Bore Depth (m)		6
Screen Length (m)		2
Screen Top (m)		5
Screen Bottom (m)		6
Bore Top		Monument
Top of Pipe (m)		0.878
Date Completed		14 <sup>Th</sup> March 2012



Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80 mm Class A PVC
Development Details	



**Description and Comments:** Nested bores opposite site of roundabout on Tip Road next to Roberts Creek. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:

Dr Harald Hofmann

Contact Details:

Checked by: Prof Ian Cartwright

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)



# Groundwater Chemistry

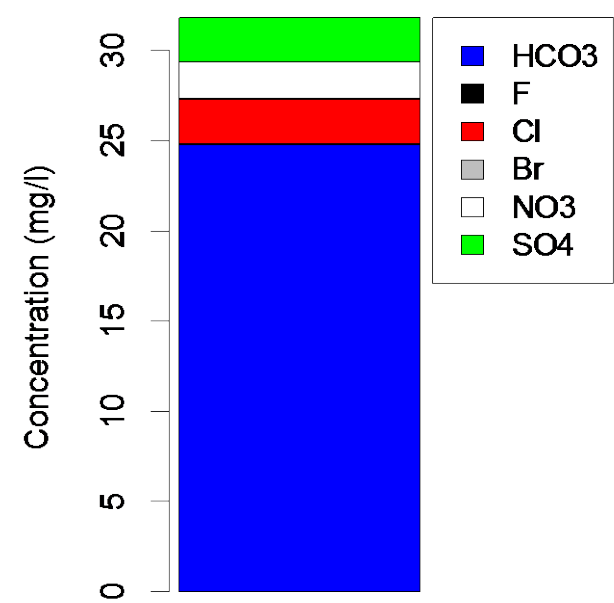
Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	2.814
Reduced Water Level (m)	
EC (µS/cm)	69.8
pH	5.78
DO (mg/l)	2

## Stratigraphy:

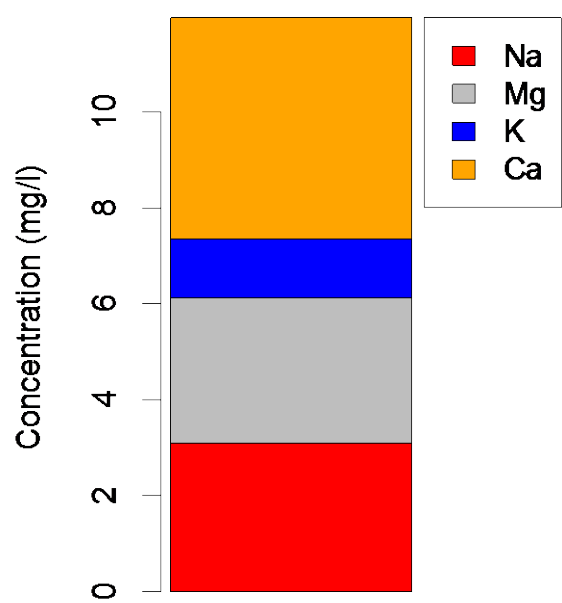
0- 6 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	24.77	Li (µg/L)	0.40	Radon (Bq/m <sup>3</sup> )	79260
F (mg/L)	0.04	Na (mg/L)	3.10	δ <sup>18</sup> O (‰)	-6.5
Cl (mg/L)	2.48	Mg (mg/L)	3.02	δ <sup>2</sup> H (‰)	-39
Br (mg/L)	0.03	K (mg/L)	1.23	δ <sup>13</sup> C (‰)	-19.6
NO <sub>3</sub> (mg/L)	2.04	Ca (mg/L)	4.61	<sup>14</sup> C pMC	105.10
SO <sub>4</sub> (mg/L)	2.45	Mn (µg/L)	7.83	Tritium (TU)	1.627
		Fe (µg/L)	83.69		
		Sr (µg/L)	37.58		
		Ba (µg/L)	10.79		

Anions



Cations

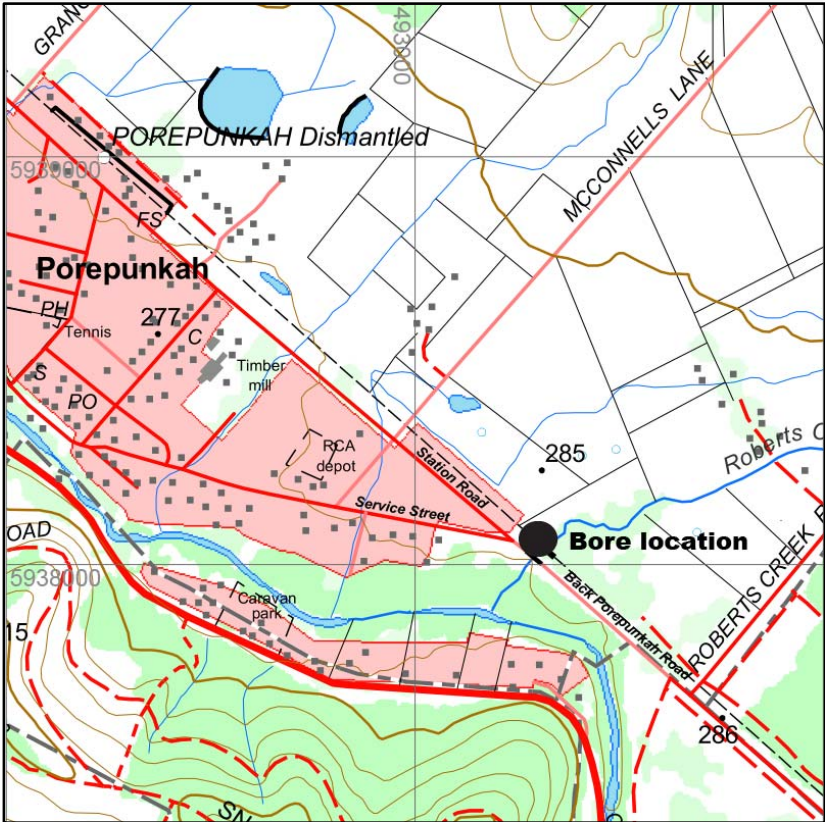






Borehole Infrastructure Report

Site Data		
Site Code		WRK 068291
Site Name		Porepunkah
Region		Ovens River, VIC
Easting	GDA94 Zone 55	493302
Northing		5938044
Elevation (m AHD)		
Bore Depth (m)		12
Screen Length (m)		2
Screen Top (m)		9
Screen Bottom (m)		11
Bore Top		Monument
Top of Pipe (m)		0.84
Date Completed		14 <sup>Th</sup> March 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80 mm Class A PVC
Development Details	



**Description and Comments:** Nested bores opposite site of round-about on Tip Road next to Roberts Creek. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

# Groundwater Chemistry

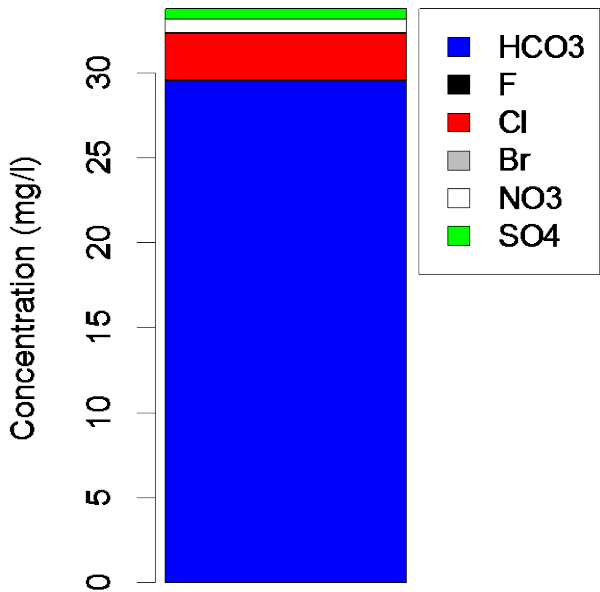
Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	2.638
Reduced Water Level (m)	
EC (µS/cm)	65
pH	5.7
DO (mg/l)	3

## Stratigraphy:

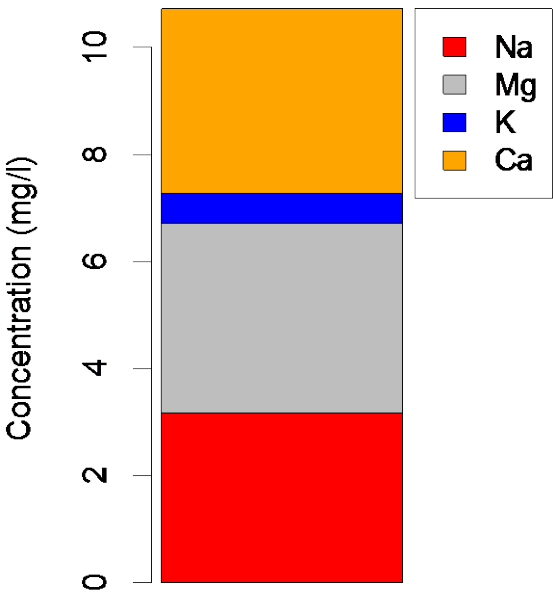
0- 12 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	29.52	Li (µg/L)	1.66	Radon (Bq/m <sup>3</sup> )	64583
F (mg/L)	0.05	Na (mg/L)	3.17	δ <sup>18</sup> O (‰)	-6.0
Cl (mg/L)	2.74	Mg (mg/L)	3.54	δ <sup>2</sup> H (‰)	-36
Br (mg/L)	0.04	K (mg/L)	0.57	δ <sup>13</sup> C (‰)	-20.7
NO <sub>3</sub> (mg/L)	0.78	Ca (mg/L)	3.44	<sup>14</sup> C pMC	93.96
SO <sub>4</sub> (mg/L)	0.63	Mn (µg/L)	5.04	Tritium (TU)	0.015
		Fe (µg/L)	67.00		
		Sr (µg/L)	33.43		
		Ba (µg/L)	8.54		

Anions



Cations

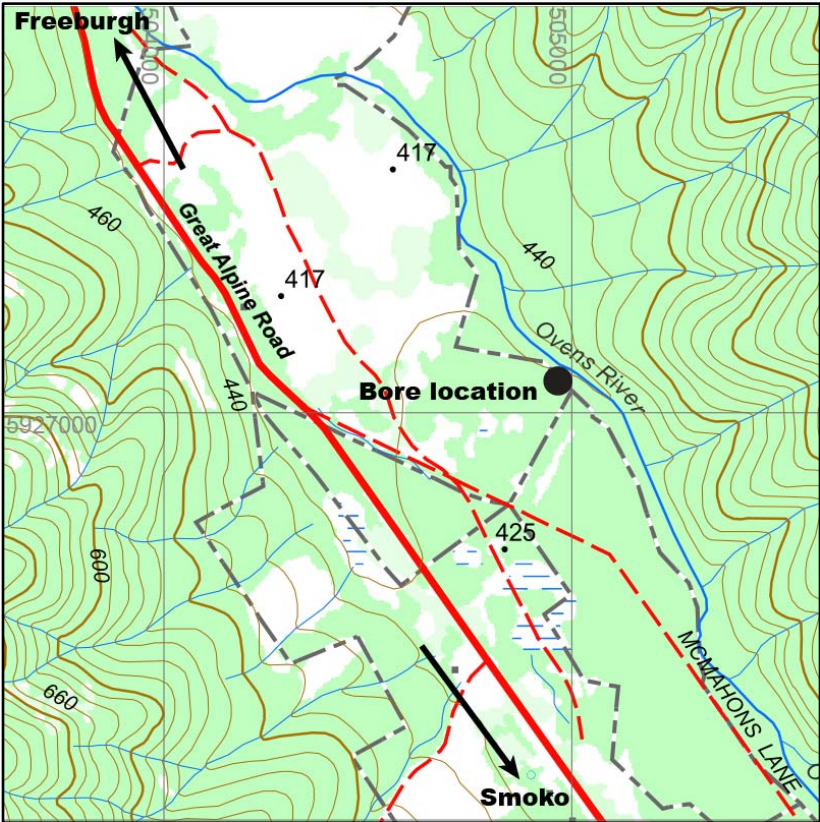






Borehole Infrastructure Report

Site Data		
Site Code		WRK 068293
Site Name		Smoko
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505021
Northing		5927033
Elevation (m AHD)		
Bore Depth (m)		6
Screen Length (m)		2
Screen Top (m)		3
Screen Bottom (m)		5
Bore Top		Monument
Top of Pipe (m)		0.68
Date Completed		8 <sup>th</sup> March 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores at the end of a track coming off McMahon's Lane. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>



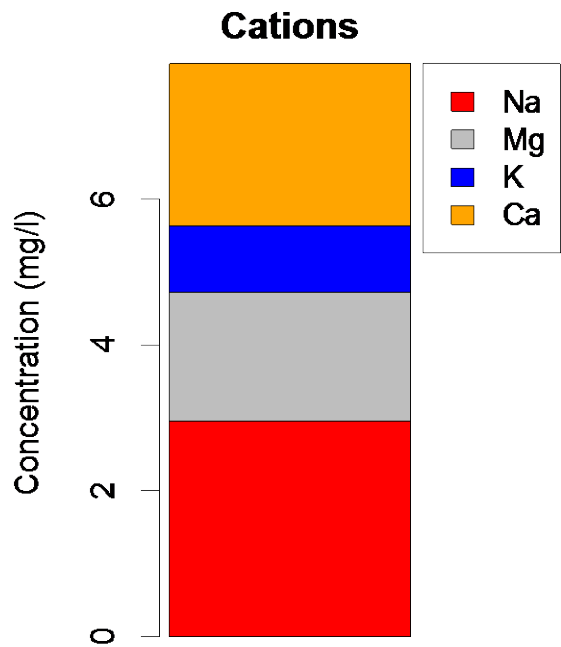
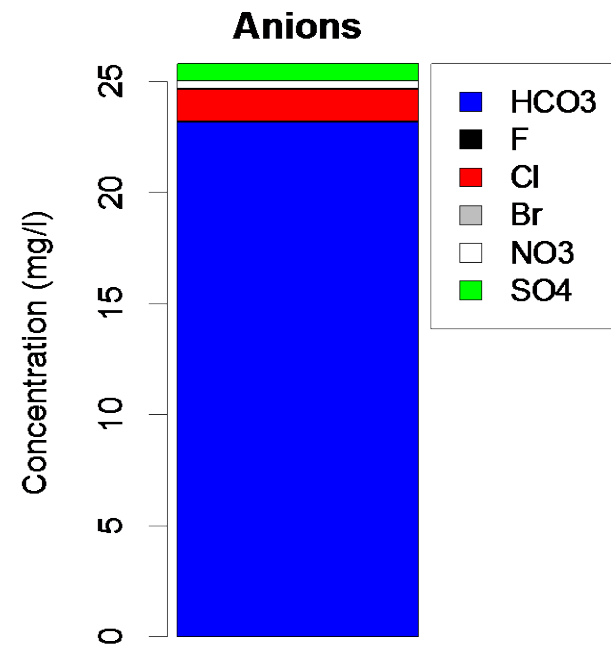
# Groundwater Chemistry

Field Data	
Date of Sampling	30.05.2012
Depth Below Natural Surface (m)	3.161
Reduced Water Level (m)	
EC (µS/cm)	52.5
pH	5.92
DO (mg/l)	1

## Stratigraphy:

0- 20 m                      Gravels

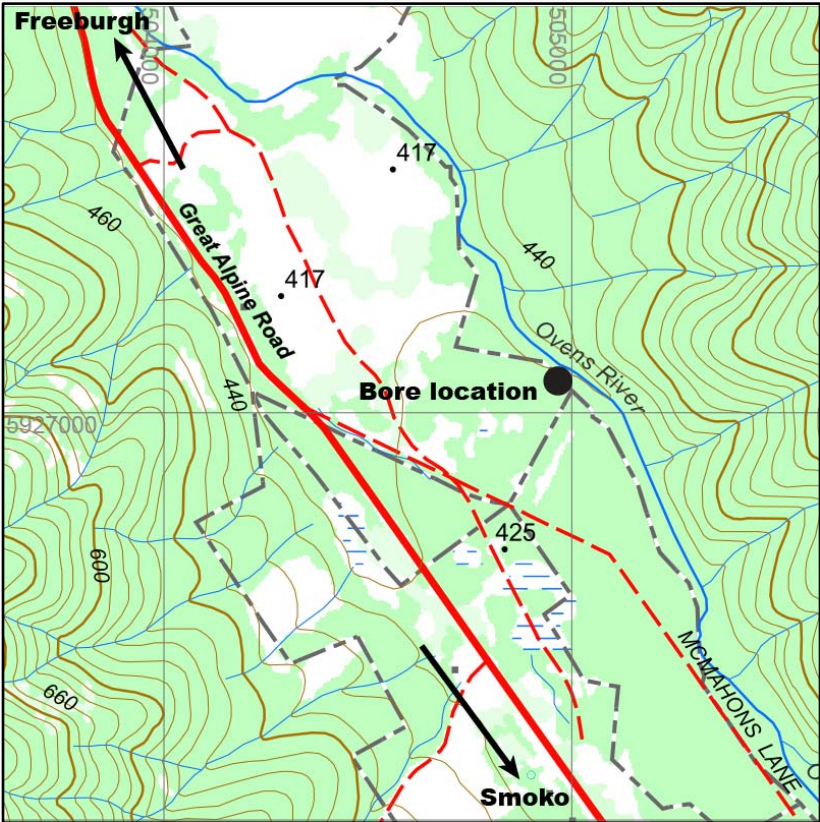
Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	23.18	Li (µg/L)	0.69	Radon (Bq/m <sup>3</sup> )	79375
F (mg/L)	0.04	Na (mg/L)	2.95	δ <sup>18</sup> O (‰)	-7.0
Cl (mg/L)	1.45	Mg (mg/L)	1.77	δ <sup>2</sup> H (‰)	-40
Br (mg/L)	0.01	K (mg/L)	0.92	δ <sup>13</sup> C (‰)	-20.9
NO <sub>3</sub> (mg/L)	0.36	Ca (mg/L)	2.22	<sup>14</sup> C pMC	105.65
SO <sub>4</sub> (mg/L)	0.77	Mn (µg/L)	6.64	Tritium (TU)	2.368
		Fe (µg/L)	39.20		
		Sr (µg/L)	18.87		
		Ba (µg/L)	12.18		





Borehole Infrastructure Report

Site Data		
Site Code		WRK 068294
Site Name		Smoko
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505020
Northing		5927034
Elevation (m AHD)		
Bore Depth (m)		12
Screen Length (m)		2
Screen Top (m)		9
Screen Bottom (m)		11
Bore Top		Monument
Top of Pipe (m)		0.665
Date Completed		8 <sup>th</sup> March 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores at the end of a track coming off McMahon's Lane. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

# Groundwater Chemistry

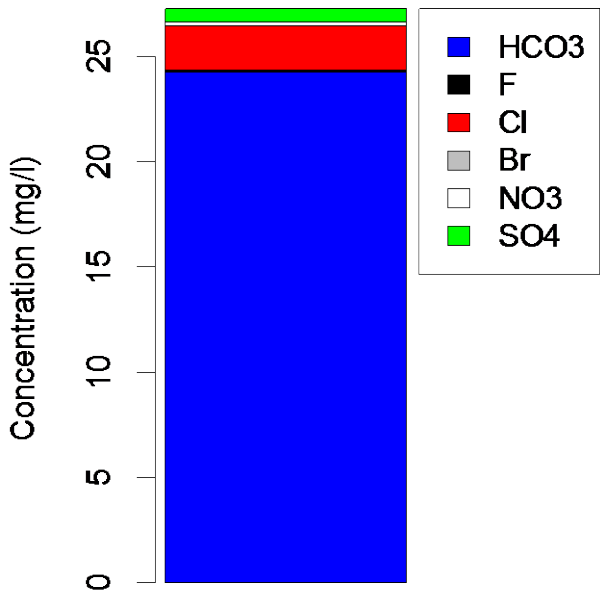
Field Data	
Date of Sampling	30.05.2012
Depth Below Natural Surface (m)	3.183
Reduced Water Level (m)	
EC (μS/cm)	77.6
pH	6.23
DO (mg/l)	2

## Stratigraphy:

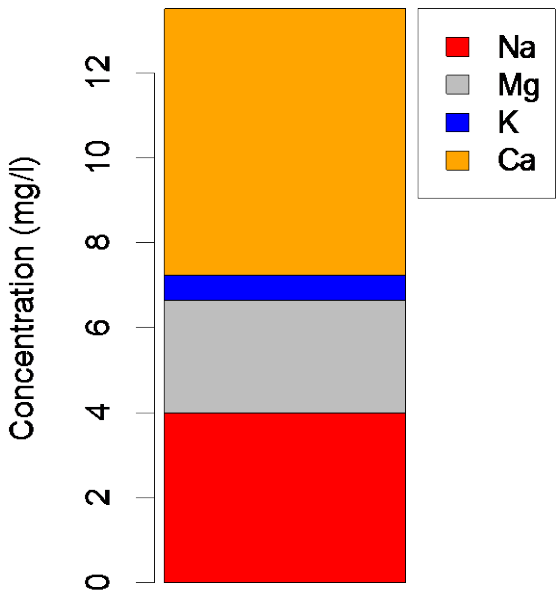
0- 12 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	24.278	Li (μg/L)	1.397	Radon (Bq/m <sup>3</sup> )	2587.5
F (mg/L)	0.07	Na (mg/L)	3.979	δ <sup>18</sup> O (‰)	-6.7
Cl (mg/L)	2.11	Mg (mg/L)	2.67	δ <sup>2</sup> H (‰)	-39
Br (mg/L)	0.01	K (mg/L)	0.581	δ <sup>13</sup> C (‰)	-22.4
NO <sub>3</sub> (mg/L)	0.17	Ca (mg/L)	6.269	<sup>14</sup> C pMC	104.60
SO <sub>4</sub> (mg/L)	0.63	Mn (μg/L)	202.2	Tritium (TU)	2.418
		Fe (μg/L)	31.59		
		Sr (μg/L)	33.57		
		Ba (μg/L)	8.805		

Anions



Cations



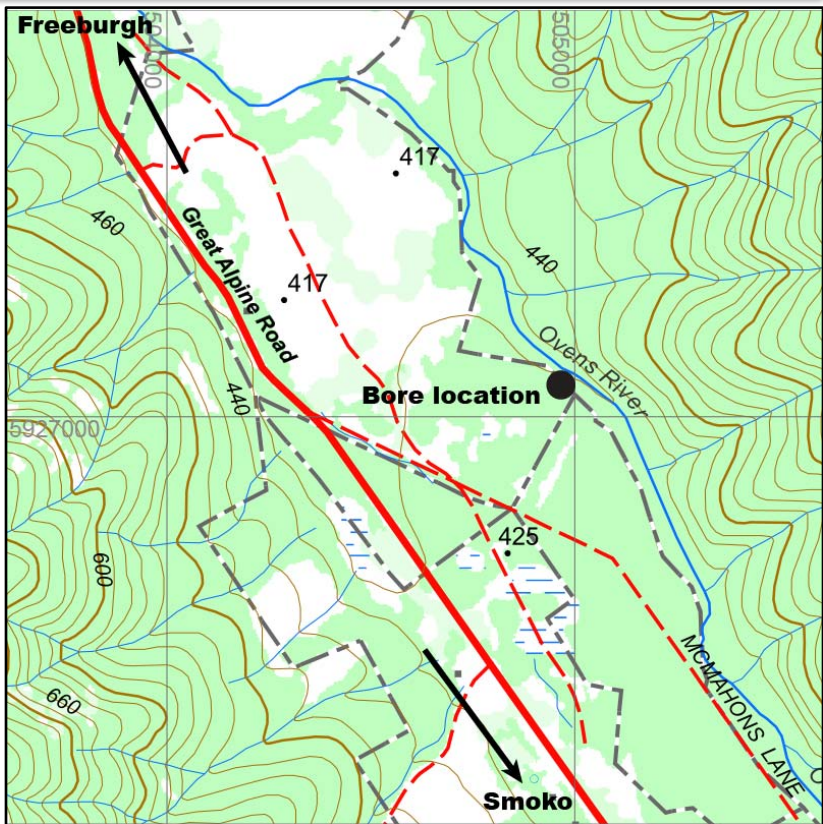




Borehole Infrastructure Report

Site Data

Site Code		WRK 068295
Site Name		Smoko
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505018.33
Northing		5927034.52
Elevation (m AHD)		
Bore Depth (m)		24
Screen Length (m)		2
Screen Top (m)		21
Screen Bottom (m)		23
Bore Top		Monument
Top of Pipe (m)		0.701
Date Completed		8 <sup>th</sup> March 2012



Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores at the end of a track coming off McMahon's Lane. The borehole is finished in weathered basement underlying the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

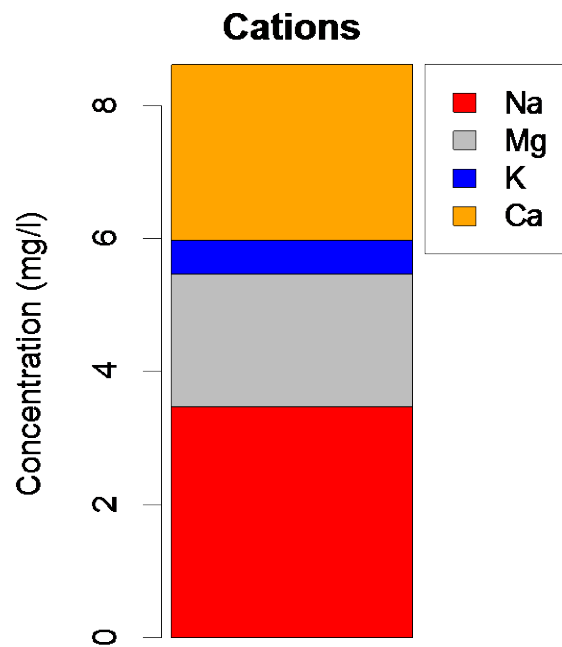
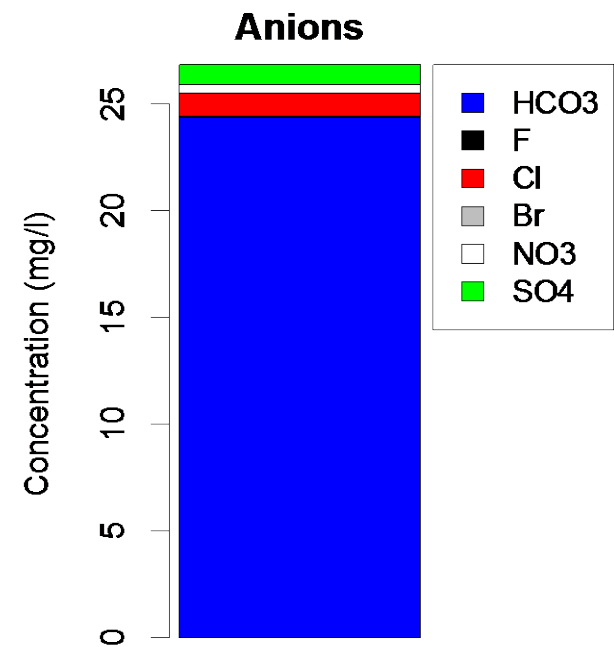
# Groundwater Chemistry

Field Data	
Date of Sampling	30.05.2012
Depth Below Natural Surface (m)	3.184
Reduced Water Level (m)	
EC (µS/cm)	46.9
pH	5.9
DO (mg/l)	Trace

## Stratigraphy:

0- 17 m                      Gravels  
17-24 m                    Weathered basement

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	24.40	Li (µg/L)	0.89	Radon (Bq/m <sup>3</sup> )	100250
F (mg/L)	0.05	Na (mg/L)	3.47	δ <sup>18</sup> O (‰)	-6.8
Cl (mg/L)	1.07	Mg (mg/L)	2.00	δ <sup>2</sup> H (‰)	-41
Br (mg/L)	0.00	K (mg/L)	0.50	δ <sup>13</sup> C (‰)	-19.4
NO <sub>3</sub> (mg/L)	0.42	Ca (mg/L)	2.64	<sup>14</sup> C pMC	104.83
SO <sub>4</sub> (mg/L)	0.91	Mn (µg/L)	7.55	Tritium (TU)	2.324
		Fe (µg/L)	48.59		
		Sr (µg/L)	23.79		
		Ba (µg/L)	4.63		

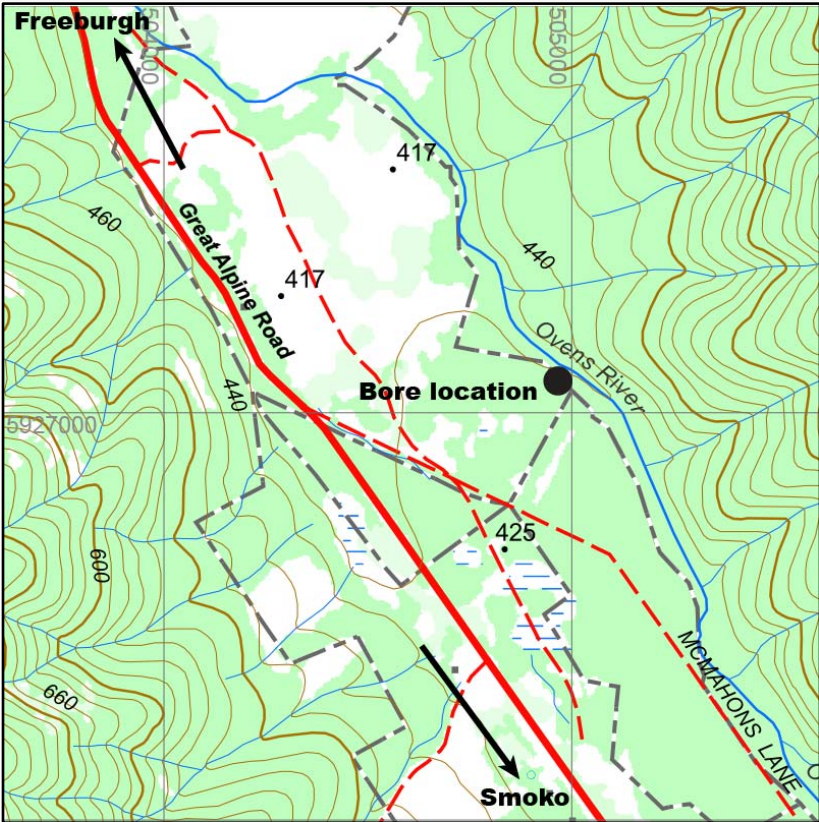






Borehole Infrastructure Report

Site Data		
Site Code		WRK 068296
Site Name		Smoko
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505039
Northing		5927062
Elevation (m AHD)		
Bore Depth (m)		6
Screen Length (m)		2
Screen Top (m)		3
Screen Bottom (m)		5
Bore Top		Monument
Top of Pipe (m)		0.875
Date Completed		8 <sup>th</sup> March 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80 mm Class A PVC
Development Details	



**Description and Comments:** Nested bores at the end of a track coming off McMahon's Lane. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>



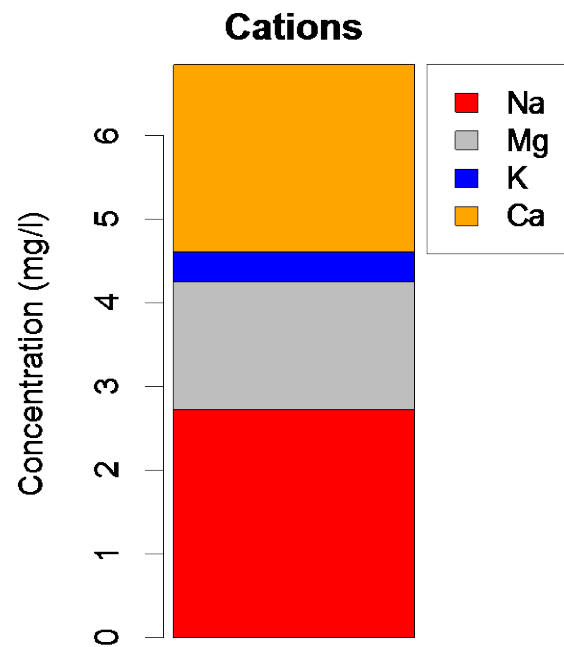
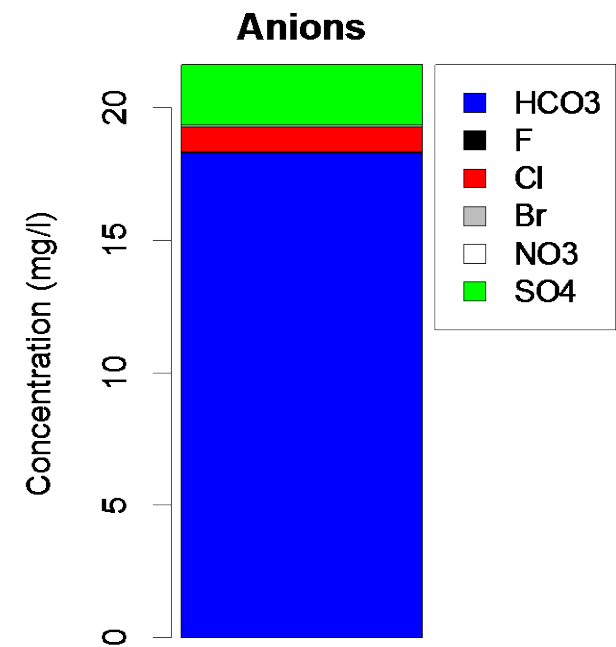
# Groundwater Chemistry

Field Data	
Date of Sampling	30.05.2012
Depth Below Natural Surface (m)	2.745
Reduced Water Level (m)	
EC (µS/cm)	50.4
pH	6.15
DO (mg/l)	3

## Stratigraphy:

0- 6 m                      Gravels

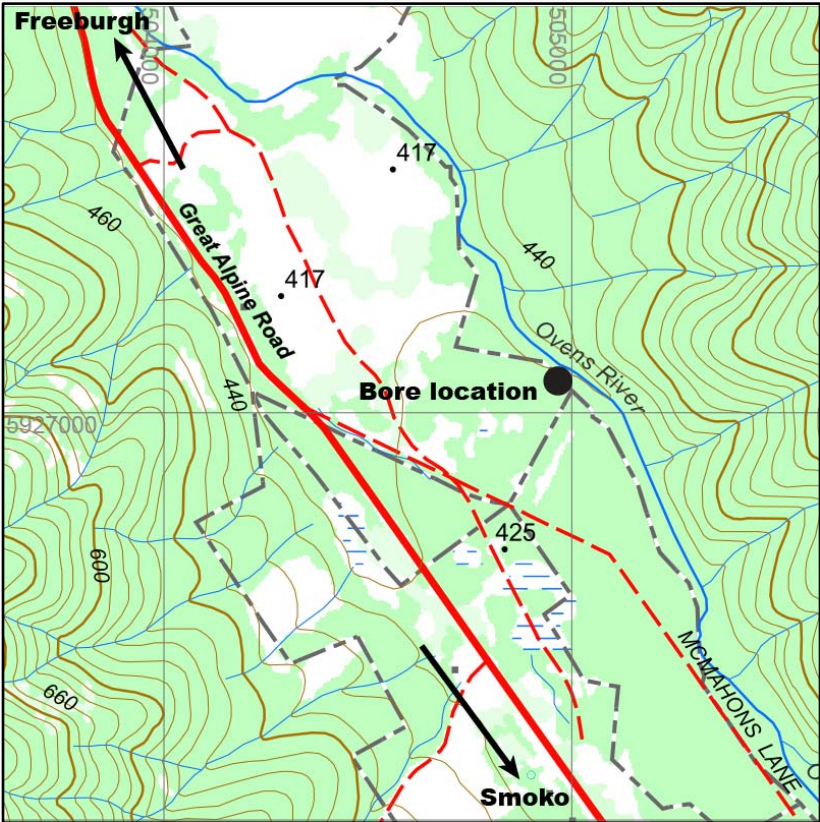
Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	18.30	Li (µg/L)	0.42	Radon (Bq/m <sup>3</sup> )	22283
F (mg/L)	0.03	Na (mg/L)	2.73	δ <sup>18</sup> O (‰)	-7.1
Cl (mg/L)	0.96	Mg (mg/L)	1.53	δ <sup>2</sup> H (‰)	-43
Br (mg/L)	0.00	K (mg/L)	0.35	δ <sup>13</sup> C (‰)	-19.0
NO <sub>3</sub> (mg/L)	0.05	Ca (mg/L)	2.24	<sup>14</sup> C pMC	103.63
SO <sub>4</sub> (mg/L)	2.29	Mn (µg/L)	384.80	Tritium (TU)	2.411
		Fe (µg/L)	91.19		
		Sr (µg/L)	19.25		
		Ba (µg/L)	4.55		





Borehole Infrastructure Report

Site Data		
Site Code		WRK 068297
Site Name		Smoko
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505039
Northing		5927060
Elevation (m AHD)		
Bore Depth (m)		12
Screen Length (m)		2
Screen Top (m)		9
Screen Bottom (m)		11
Bore Top		Monument
Top of Pipe (m)		0.856
Date Completed		8 <sup>th</sup> March 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80 mm Class A PVC
Development Details	



**Description and Comments:** Nested bores at the end of a track coming off McMahon's Lane. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

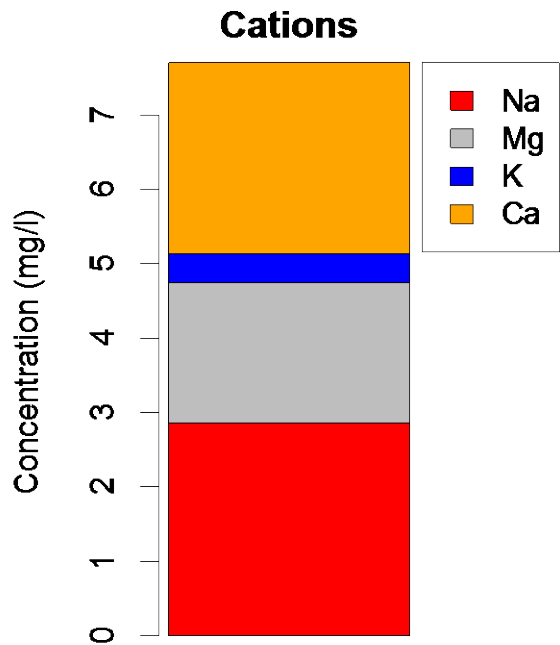
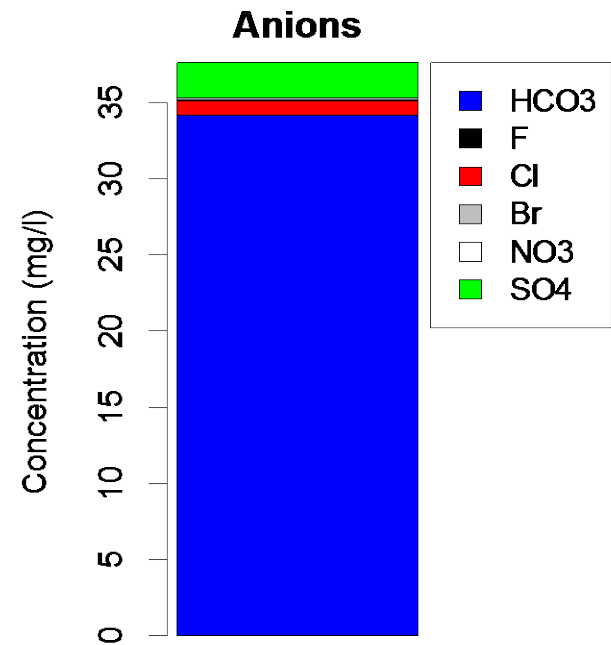
# Groundwater Chemistry

Field Data	
Date of Sampling	30.05.2012
Depth Below Natural Surface (m)	2.554
Reduced Water Level (m)	
EC (µS/cm)	58
pH	6.134
DO (mg/l)	1

## Stratigraphy:

0- 12 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	34.16	Li (µg/L)	0.42	Radon (Bq/m <sup>3</sup> )	22283
F (mg/L)	0.04	Na (mg/L)	2.86	δ <sup>18</sup> O (‰)	-5.5
Cl (mg/L)	0.95	Mg (mg/L)	1.88	δ <sup>2</sup> H (‰)	-42
Br (mg/L)	0.01	K (mg/L)	0.39	δ <sup>13</sup> C (‰)	-22.5
NO <sub>3</sub> (mg/L)	0.14	Ca (mg/L)	2.57	<sup>14</sup> C pMC	104.25
SO <sub>4</sub> (mg/L)	2.33	Mn (µg/L)	578.70	Tritium (TU)	2.270
		Fe (µg/L)	58.44		
		Sr (µg/L)	22.78		
		Ba (µg/L)	5.89		

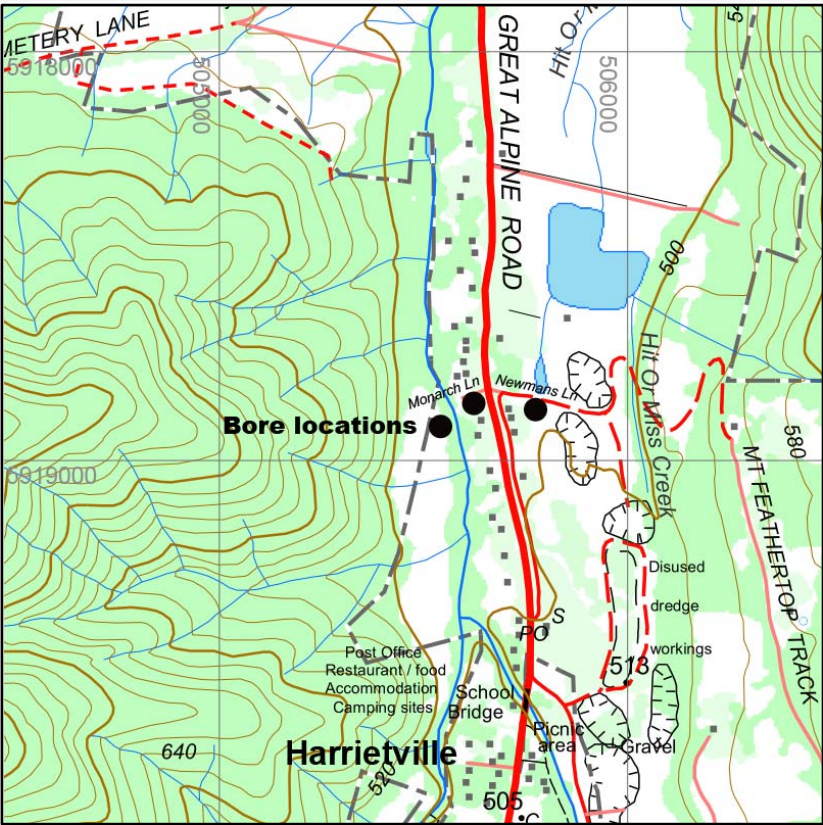






Borehole Infrastructure Report

Site Data		
Site Code		WRK 068299
Site Name		Harrietville
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505758
Northing		5918149
Elevation (m AHD)		
Bore Depth (m)		26
Screen Length (m)		2
Screen Top (m)		23
Screen Bottom (m)		25
Bore Top		Monument
Top of Pipe (m)		0.782
Date Completed		12 <sup>th</sup> April 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores on Newmans lane. The borehole is finished in basement beneath the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

# Groundwater Chemistry

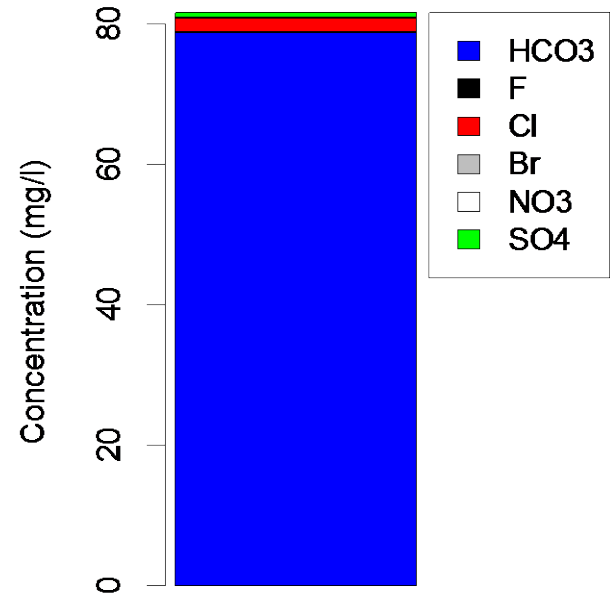
Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	3.958
Reduced Water Level (m)	
EC (µS/cm)	132.9
pH	6.29
DO (mg/l)	2

## Stratigraphy:

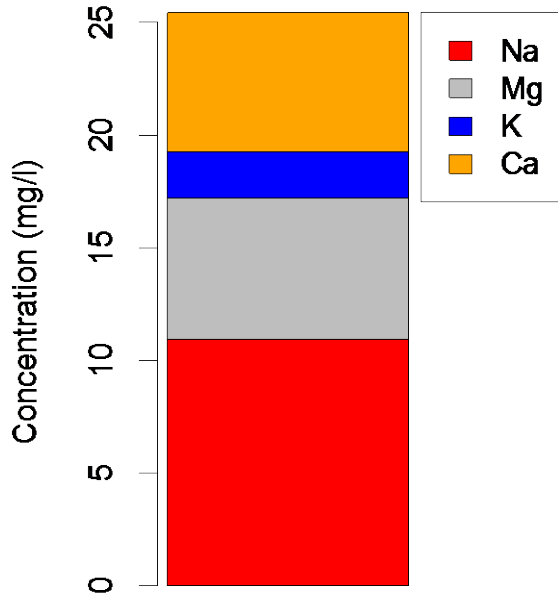
0- 18 m                      Gravels  
18-26 m                    Weathered Basement

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	78.81	Li (µg/L)	10.61	Radon (Bq/m <sup>3</sup> )	56875
F (mg/L)	0.14	Na (mg/L)	10.93	δ <sup>18</sup> O (‰)	-6.9
Cl (mg/L)	1.89	Mg (mg/L)	6.276	δ <sup>2</sup> H (‰)	-40
Br (mg/L)	0.00	K (mg/L)	2.05	δ <sup>13</sup> C (‰)	-18.3
NO <sub>3</sub> (mg/L)	0.15	Ca (mg/L)	6.167	<sup>14</sup> C pMC	71.68
SO <sub>4</sub> (mg/L)	0.58	Mn (µg/L)	2188	Tritium (TU)	0.183
		Fe (µg/L)	212.1		
		Sr (µg/L)	64.68		
		Ba (µg/L)	30.67		

Anions



Cations

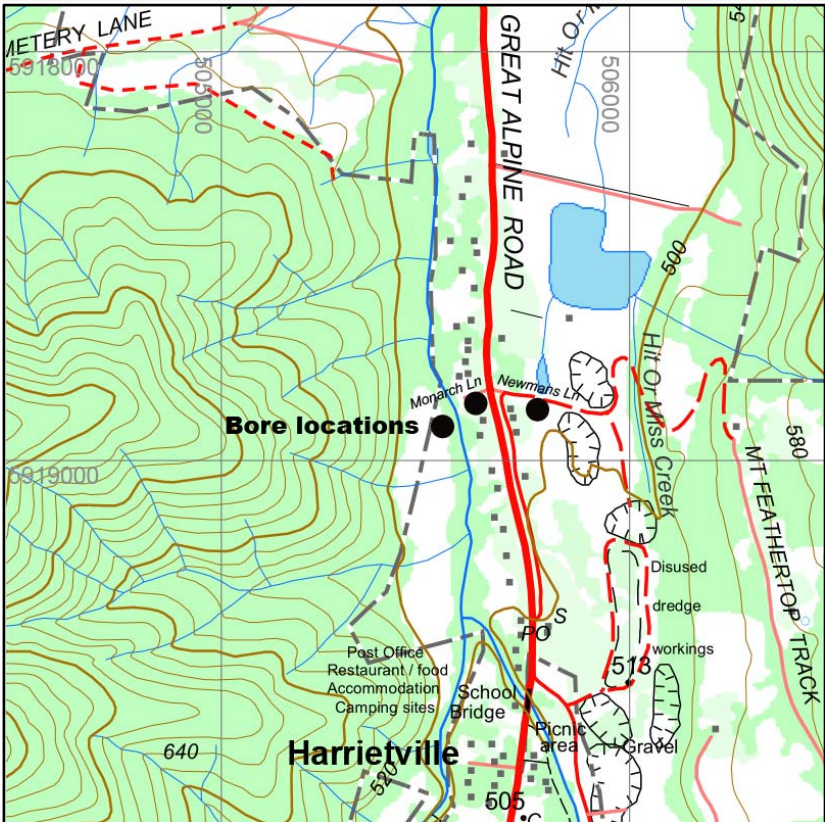






Borehole Infrastructure Report

Site Data		
Site Code		WRK 068300
Site Name		Harrietville
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505760
Northing		5918148
Elevation (m AHD)		
Bore Depth (m)		12
Screen Length (m)		2
Screen Top (m)		9
Screen Bottom (m)		11
Bore Top		Monument
Top of Pipe (m)		0.77
Date Completed		12 <sup>th</sup> April 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores on Newmans lane. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with InSitu Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>



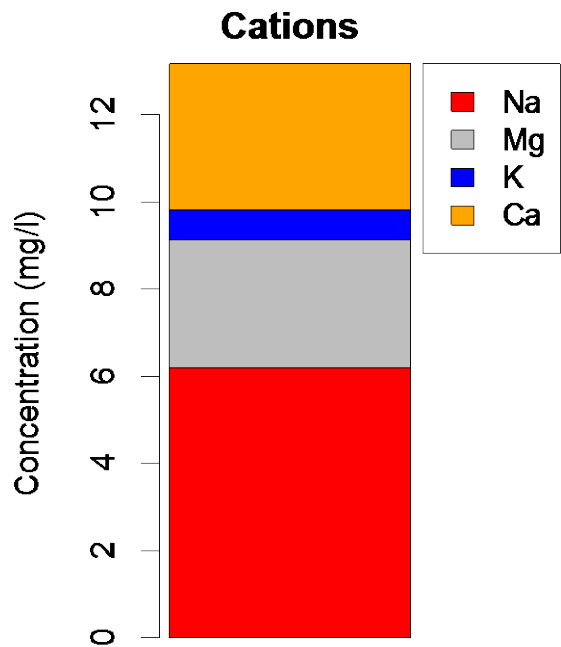
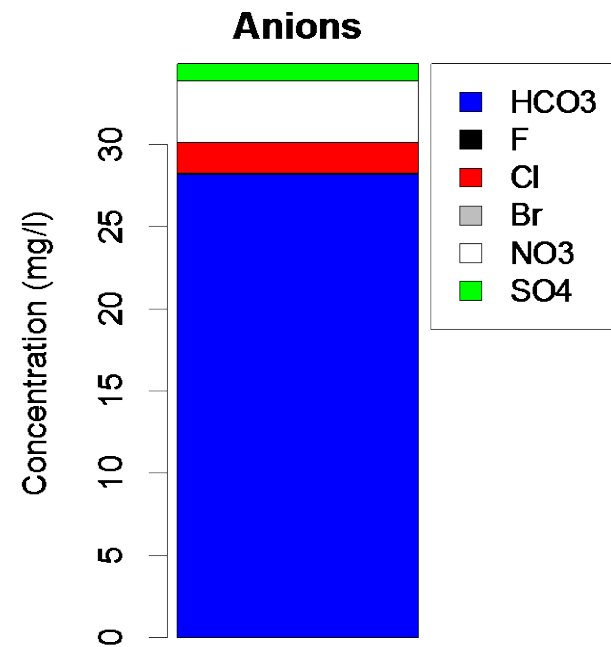
# Groundwater Chemistry

Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	3.50
Reduced Water Level (m)	
EC (µS/cm)	70.9
pH	6.15
DO (mg/l)	3

## Stratigraphy:

0- 12 m                      Gravels

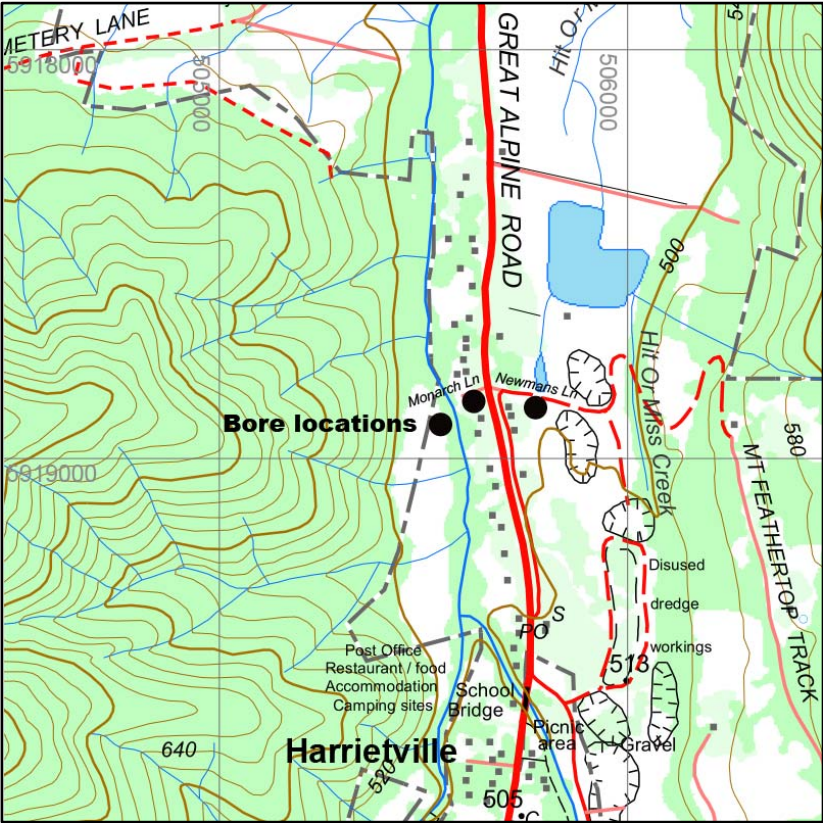
Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	28.18	Li (µg/L)	0.70	Radon (Bq/m <sup>3</sup> )	68615
F (mg/L)	0.05	Na (mg/L)	6.19	δ <sup>18</sup> O (‰)	-6.8
Cl (mg/L)	1.90	Mg (mg/L)	2.94	δ <sup>2</sup> H (‰)	-39
Br (mg/L)	0.01	K (mg/L)	0.69	δ <sup>13</sup> C (‰)	-20.7
NO <sub>3</sub> (mg/L)	3.71	Ca (mg/L)	3.35	<sup>14</sup> C pMC	93.81
SO <sub>4</sub> (mg/L)	1.06	Mn (µg/L)	4.71	Tritium (TU)	2.405
		Fe (µg/L)	20.38		
		Sr (µg/L)	32.51		
		Ba (µg/L)	11.92		





Borehole Infrastructure Report

Site Data		
Site Code		WRK 068301
Site Name		Harrietville
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505634
Northing		5918160
Elevation (m AHD)		
Bore Depth (m)		12
Screen Length (m)		2
Screen Top (m)		9
Screen Bottom (m)		11
Bore Top		Gatic
Top of Pipe (m)		0
Date Completed		12 <sup>th</sup> April 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Single bore on side of Monarch Lane (corner Great Alpine Road). The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

# Groundwater Chemistry

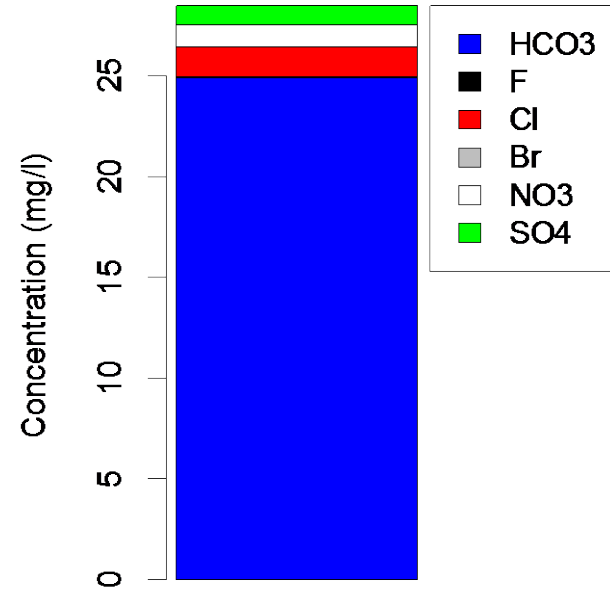
Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	2.571
Reduced Water Level (m)	
EC (µS/cm)	57
pH	6.27
DO (mg/l)	3

## Stratigraphy:

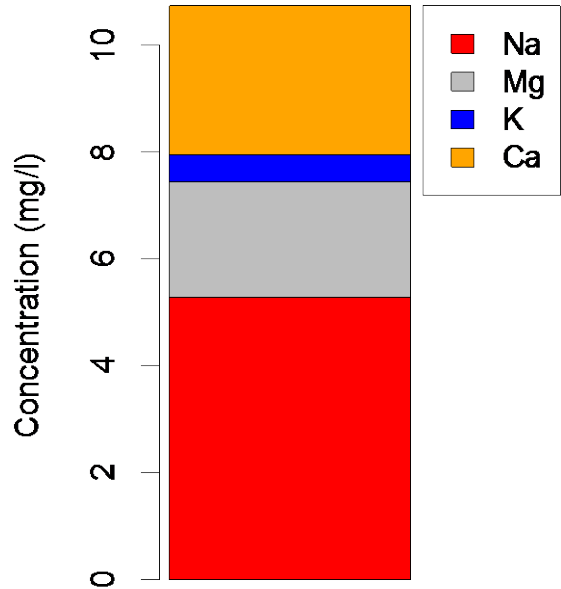
0-12 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	24.89	Li (µg/L)	0.98	Radon (Bq/m <sup>3</sup> )	23875
F (mg/L)	0.04	Na (mg/L)	5.28	δ <sup>18</sup> O (‰)	-6.8
Cl (mg/L)	1.52	Mg (mg/L)	2.16	δ <sup>2</sup> H (‰)	-39
Br (mg/L)	0.00	K (mg/L)	0.52	δ <sup>13</sup> C (‰)	-20.4
NO <sub>3</sub> (mg/L)	1.06	Ca (mg/L)	2.78	<sup>14</sup> C pMC	93.47
SO <sub>4</sub> (mg/L)	0.96	Mn (µg/L)	48.25	Tritium (TU)	2.270
		Fe (µg/L)	21.98		
		Sr (µg/L)	24.18		
		Ba (µg/L)	4.50		

Anions



Cations

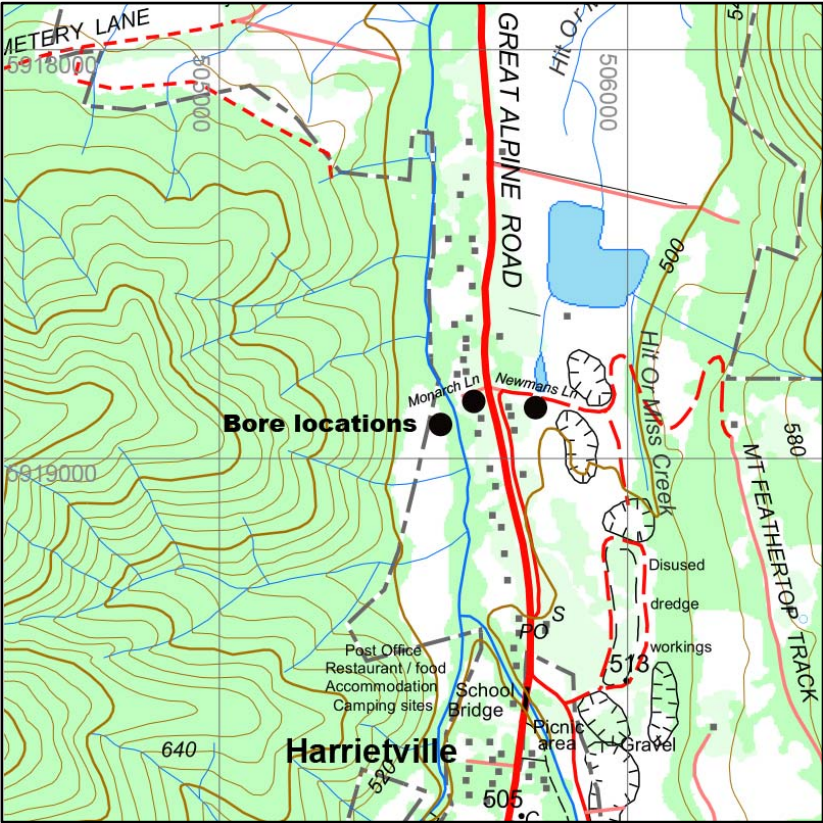






Borehole Infrastructure Report

Site Data		
Site Code		WRK 068302
Site Name		Harrietville
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505634
Northing		5918160
Elevation (m AHD)		
Bore Depth (m)		6
Screen Length (m)		2
Screen Top (m)		3
Screen Bottom (m)		5
Bore Top		Gatic
Top of Pipe (m)		0
Date Completed		12 <sup>th</sup> April 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Cap Type	Gatic
Development Details	



**Description and Comments:** Nested bores on side of Monarch lane. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

# Groundwater Chemistry

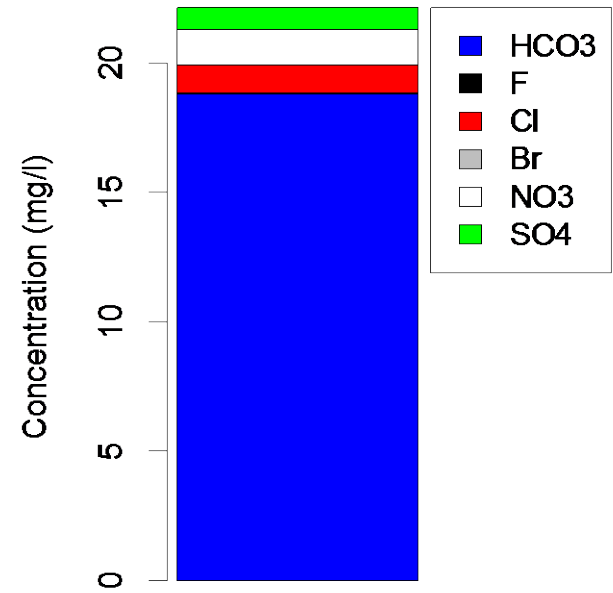
Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	2.278
Reduced Water Level (m)	
EC (µS/cm)	43.1
pH	5.85
DO (mg/l)	2

## Stratigraphy:

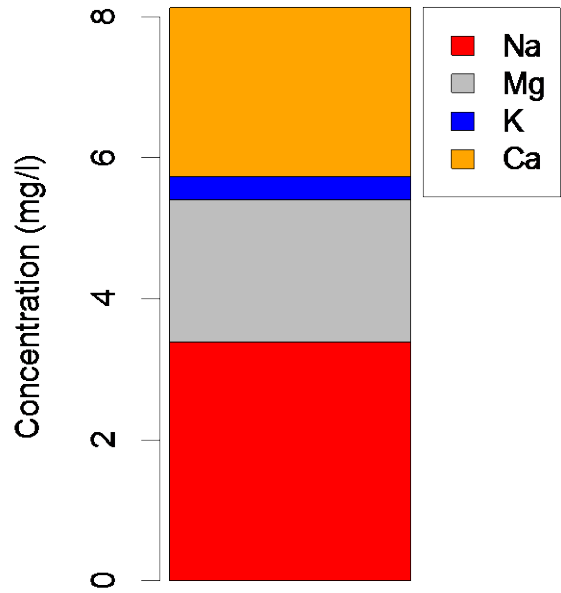
0- 6 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	18.79	Li (µg/L)	0.63	Radon (Bq/m³)	21573
F (mg/L)	0.034	Na (mg/L)	3.39	δ <sup>18</sup> O (‰)	-7.0
Cl (mg/L)	1.09	Mg (mg/L)	2.01	δ <sup>2</sup> H (‰)	-40
Br (mg/L)	0.0013	K (mg/L)	0.34	δ <sup>13</sup> C (‰)	-22.0
NO <sub>3</sub> (mg/L)	1.38	Ca (mg/L)	2.39	<sup>14</sup> C pMC	100.71
SO <sub>4</sub> (mg/L)	0.84	Mn (µg/L)	2.09	Tritium (TU)	2.522
		Fe (µg/L)	20.04		
		Sr (µg/L)	19.70		
		Ba (µg/L)	3.35		

Anions



Cations

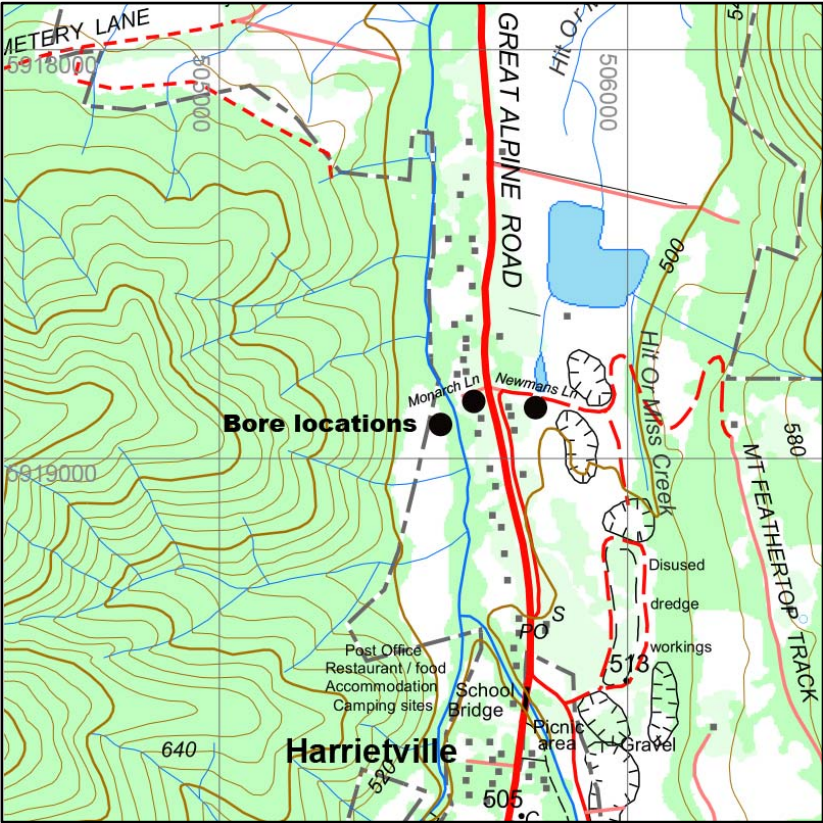






Borehole Infrastructure Report

Site Data		
Site Code		WRK 068303
Site Name		Harrietville
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505611
Northing		5918153
Elevation (m AHD)		
Bore Depth (m)		12
Screen Length (m)		2
Screen Top (m)		9
Screen Bottom (m)		11
Bore Top		Gatic
Top of Pipe(m)		0
Date Completed		12 <sup>th</sup> April 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores on side of the Monarch lane. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>



# Groundwater Chemistry

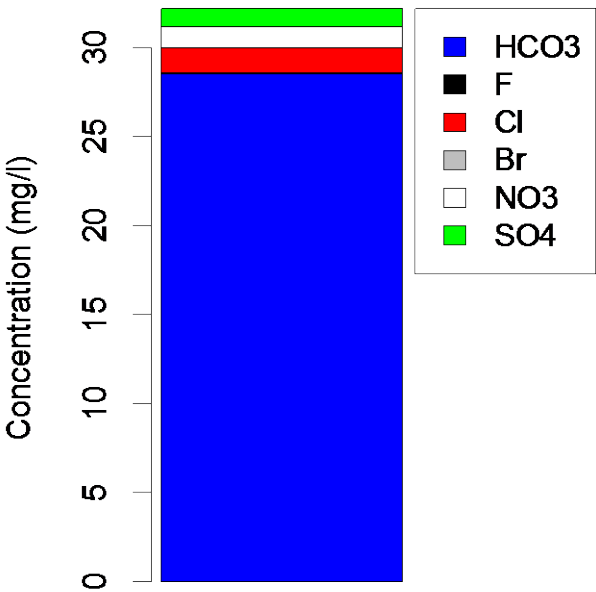
Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	2.36
Reduced Water Level (m)	
EC (µS/cm)	63.3
pH	5.97
DO (mg/l)	2

## Stratigraphy:

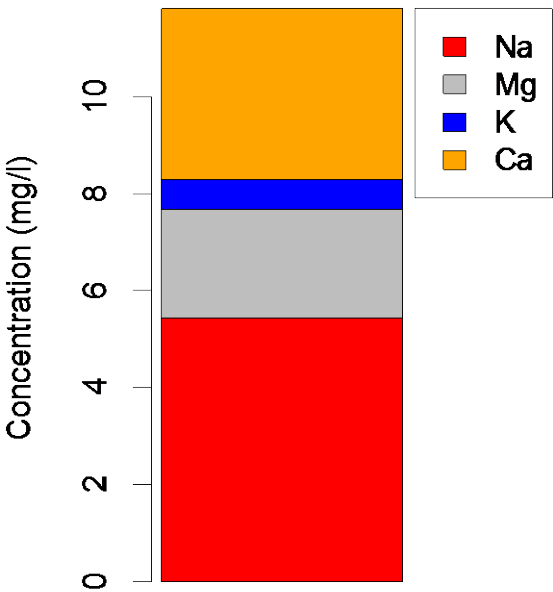
0- 12 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	28.55	Li (µg/L)	0.78	Radon (Bq/m <sup>3</sup> )	44896
F (mg/L)	0.05	Na (mg/L)	5.44	δ <sup>18</sup> O (‰)	-6.9
Cl (mg/L)	1.36	Mg (mg/L)	2.24	δ <sup>2</sup> H (‰)	-38
Br (mg/L)	0.00	K (mg/L)	0.60	δ <sup>13</sup> C (‰)	-20.7
NO <sub>3</sub> (mg/L)	1.23	Ca (mg/L)	3.53	<sup>14</sup> C pMC	92.79
SO <sub>4</sub> (mg/L)	0.99	Mn (µg/L)	238.00	Tritium (TU)	1.930
		Fe (µg/L)	36.94		
		Sr (µg/L)	29.51		
		Ba (µg/L)	6.98		

Anions



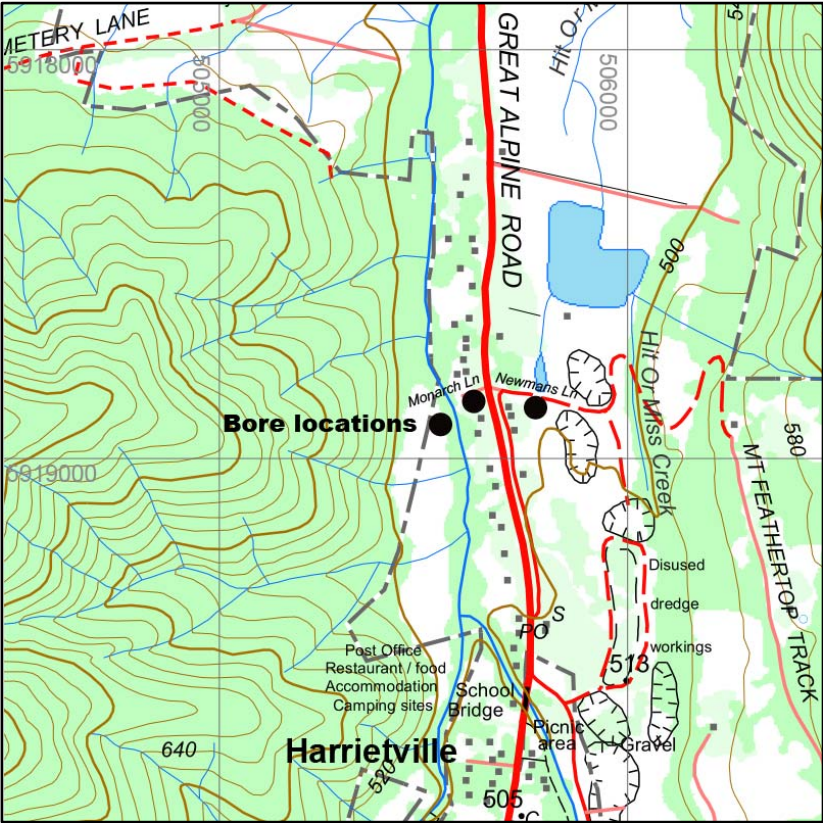
Cations





Borehole Infrastructure Report

Site Data		
Site Code		WRK 068304
Site Name		Harrietville
Region		Ovens River, VIC
Easting	GDA94 Zone 55	505610
Northing		5918153
Elevation (m AHD)		
Bore Depth (m)		26
Screen Length (m)		2
Screen Top (m)		23
Screen Bottom (m)		25
Bore Top		Gatic
Top of Pipe (m)		0
Date Completed		12 <sup>th</sup> April 2012



Construction details	
Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Nested bores on side of the Monarch lane. The borehole is finished in weathered basement underlying the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with In Situ Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:	Contact Details:	Checked by: Prof Ian Cartwright
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>

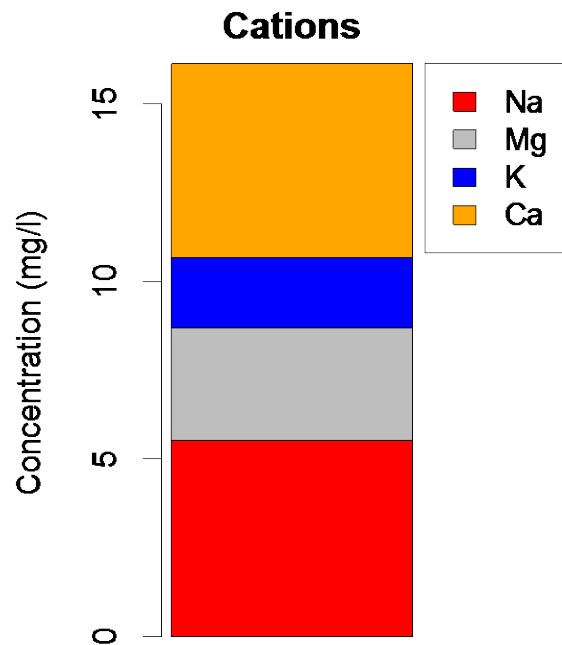
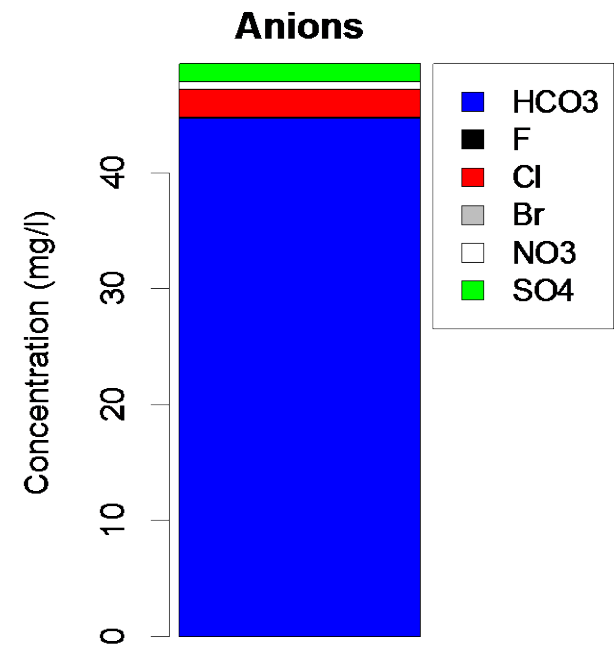
# Groundwater Chemistry

Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	5.062
Reduced Water Level (m)	
EC (µS/cm)	93.5
pH	6.7
DO (mg/l)	4

## Stratigraphy:

0- 18 m            Gravels  
18-26 m          Weathered Basement

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	44.65	Li (µg/L)	3.32	Radon (Bq/m <sup>3</sup> )	60938
F (mg/L)	0.10	Na (mg/L)	5.54	δ <sup>18</sup> O (‰)	-7.0
Cl (mg/L)	2.39	Mg (mg/L)	3.16	δ <sup>2</sup> H (‰)	-40
Br (mg/L)	0.00	K (mg/L)	1.97	δ <sup>13</sup> C (‰)	-25.0
NO <sub>3</sub> (mg/L)	0.72	Ca (mg/L)	5.47	<sup>14</sup> C pMC	74.73
SO <sub>4</sub> (mg/L)	1.52	Mn (µg/L)	764.60	Tritium (TU)	2.320
		Fe (µg/L)	8.54		
		Sr (µg/L)	35.64		
		Ba (µg/L)	9.58		







# Groundwater Chemistry

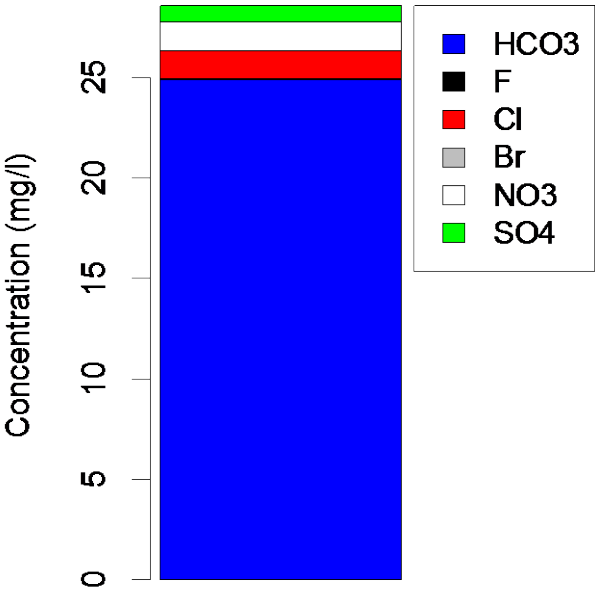
Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	1.90
Reduced Water Level (m)	
EC (µS/cm)	59.1
pH	5.73
DO (mg/l)	3

## Stratigraphy:

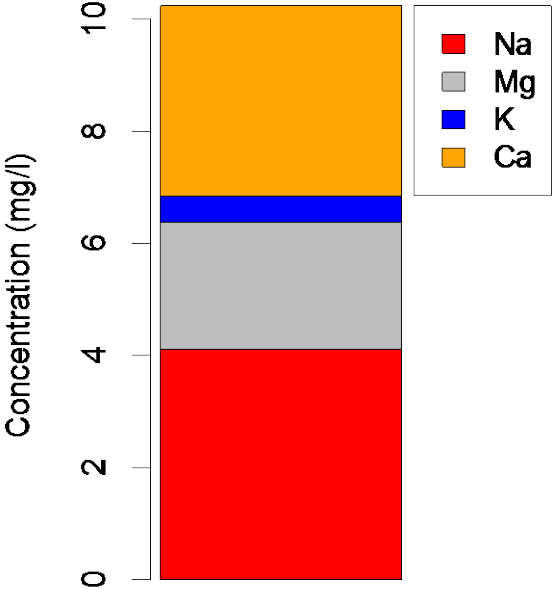
0- 6 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	24.89	Li (µg/L)	0.69	Radon (Bq/m <sup>3</sup> )	67083
F (mg/L)	0.05	Na (mg/L)	4.11	δ <sup>18</sup> O (‰)	-6.5
Cl (mg/L)	1.39	Mg (mg/L)	2.27	δ <sup>2</sup> H (‰)	-37
Br (mg/L)	0.01	K (mg/L)	0.47	δ <sup>13</sup> C (‰)	-19.7
NO <sub>3</sub> (mg/L)	1.45	Ca (mg/L)	3.39	<sup>14</sup> C pMC	99.16
SO <sub>4</sub> (mg/L)	0.79	Mn (µg/L)	166.00	Tritium (TU)	2.125
		Fe (µg/L)	35.61		
		Sr (µg/L)	26.66		
		Ba (µg/L)	49.60		

Anions



Cations









# Groundwater Chemistry

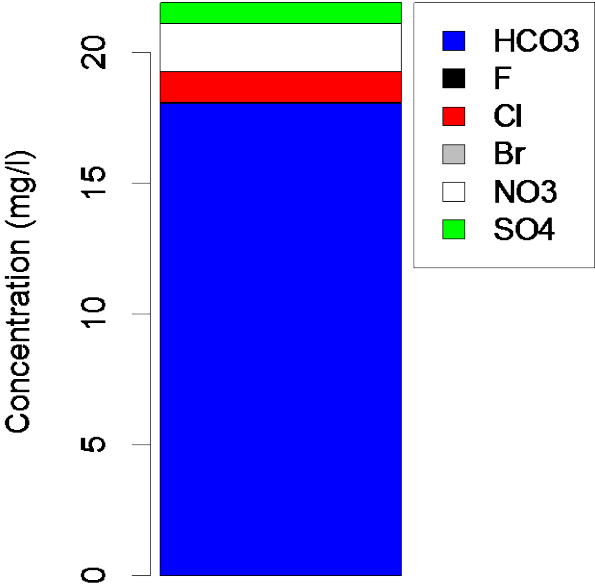
Field Data	
Date of Sampling	29.05.2012
Depth Below Natural Surface (m)	1.698
Reduced Water Level (m)	
EC (µS/cm)	45.7
pH	5.88
DO (mg/l)	2

## Stratigraphy:

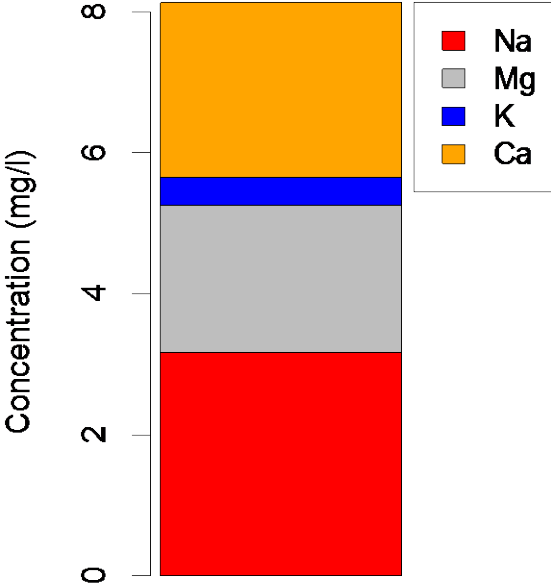
0- 12 m                      Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	18.06	Li (µg/L)	0.52	Radon (Bq/m³)	48646
F (mg/L)	0.05	Na (mg/L)	3.16	δ <sup>18</sup> O (‰)	-7.0
Cl (mg/L)	1.17	Mg (mg/L)	2.09	δ <sup>2</sup> H (‰)	-39
Br (mg/L)	0.01	K (mg/L)	0.40	δ <sup>13</sup> C (‰)	-20.7
NO <sub>3</sub> (mg/L)	1.81	Ca (mg/L)	2.48	<sup>14</sup> C pMC	102.22
SO <sub>4</sub> (mg/L)	0.81	Mn (µg/L)	5.35	Tritium (TU)	2.428
		Fe (µg/L)	34.37		
		Sr (µg/L)	19.76		
		Ba (µg/L)	3.38		

Anions



Cations

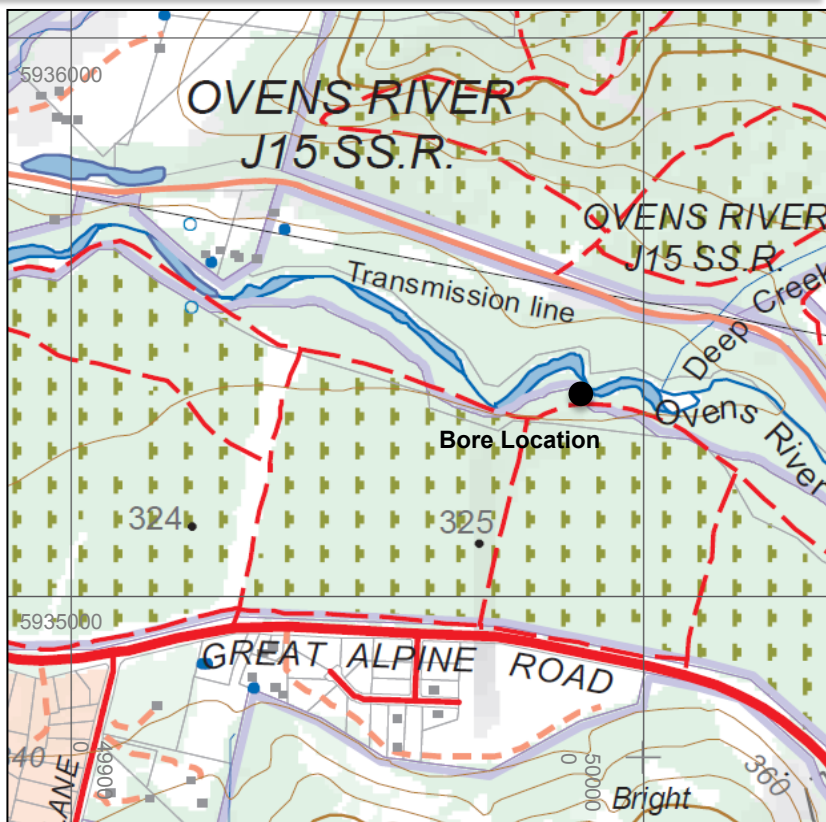




## Borehole Infrastructure Report

### Site Data

Site Code		Monash B1
Site Name		Bright
Region		Ovens River, VIC
Easting	GDA94 Zone 55	499270
Northing		5935517
Elevation (m AHD)		
Bore Depth (m)		7
Screen Length (m)		2
Screen Top (m)		2
Screen Bottom (m)		4
Bore Top		Monument
Top of Pipe to surface (m)		0.73
Date Completed		24 <sup>th</sup> January 2011



### Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** The Bore is located in the plantation forests 5 metres away from the State Observation Bore (B51743). The borehole is finished in the alluvial deposits of the Ovens valley.

**Continuous Data:** Continuous water depth data are available for this site, measured with InSitu Rugged TROLL 100 at 30 minute intervals.

Infrastructure Report by:

Dr Harald Hofmann

Contact Details:

Checked by: Prof Ian Cartwright

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)

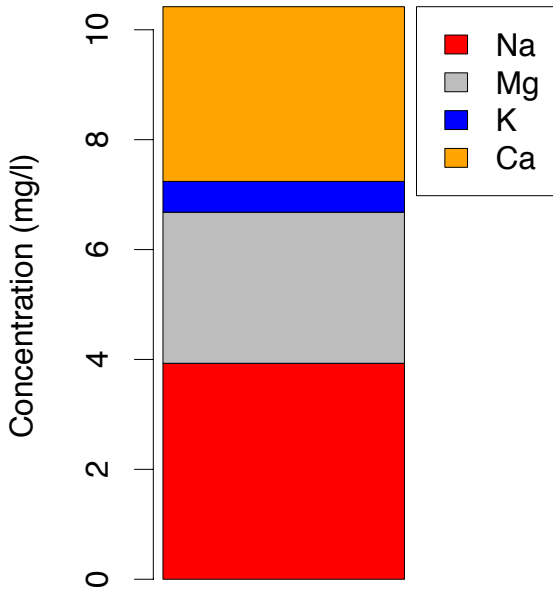
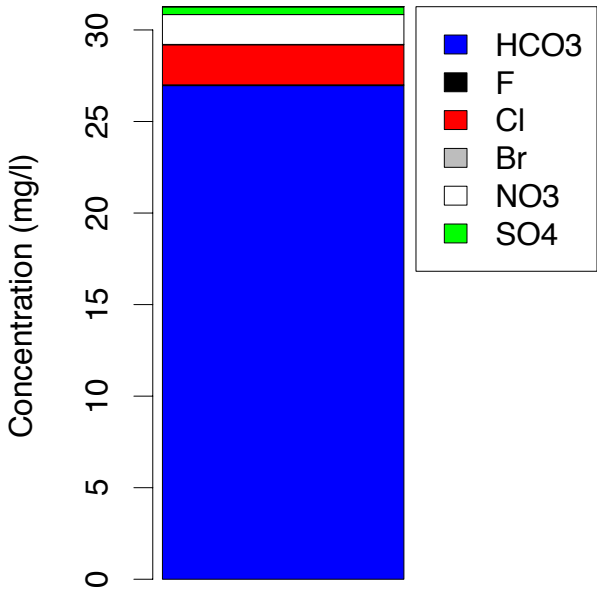
# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	1.890
Reduced Water Level (m)	
EC (µS/cm)	65.40
pH	5.7
DO (mg/l)	--

## Stratigraphy:

0- 7 m Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	26.96	Li (µg/L)	3.75	Radon (Bq/m <sup>3</sup> )	35990
F (mg/L)	0.04	Na (mg/L)	3.93	δ <sup>18</sup> O (‰)	-6.2
Cl (mg/L)	2.19	Mg (mg/L)	2.75	δ <sup>2</sup> H (‰)	-38
Br (mg/L)	0.02	K (mg/L)	0.56	δ <sup>13</sup> C (‰)	-25.8
NO <sub>3</sub> (mg/L)	1.63	Ca (mg/L)	3.18	<sup>14</sup> C pMC	95.94
SO <sub>4</sub> (mg/L)	0.43	Mn (µg/L)	45.68	Tritium (TU)	1.135
		Fe (µg/L)	81.37		
		Sr (µg/L)	33.03		
		Ba (µg/L)	13.84		



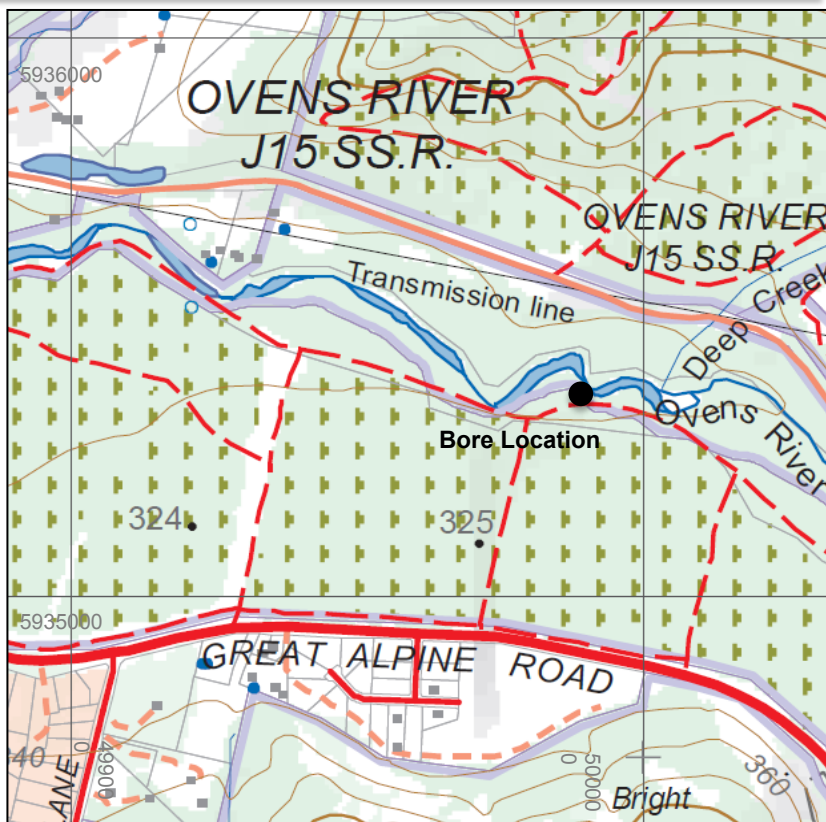




## Borehole Infrastructure Report

### Site Data

Site Code		Monash B2
Site Name		Bright
Region		Ovens River, VIC
Easting	GDA94 Zone 55	499260
Northing		59355173
Elevation (m AHD)		
Bore Depth (m)		6
Screen Length (m)		2
Screen Top (m)		2
Screen Bottom (m)		4
Bore Top		Monument
Top of Pipe to surface (m)		0.58
Date Completed		24 <sup>th</sup> January 2011



### Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** The bore is located in the plantation forests. The borehole is finished in the alluvial deposits of the Ovens valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with InSitu Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:

Dr Harald Hofmann

Contact Details:

Checked by: Prof Ian Cartwright

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)

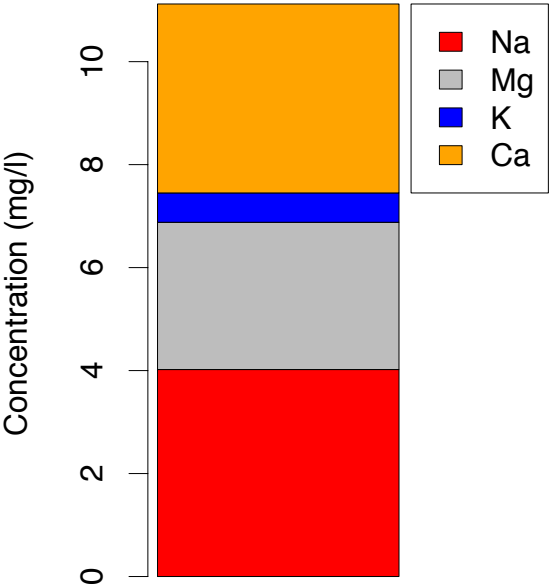
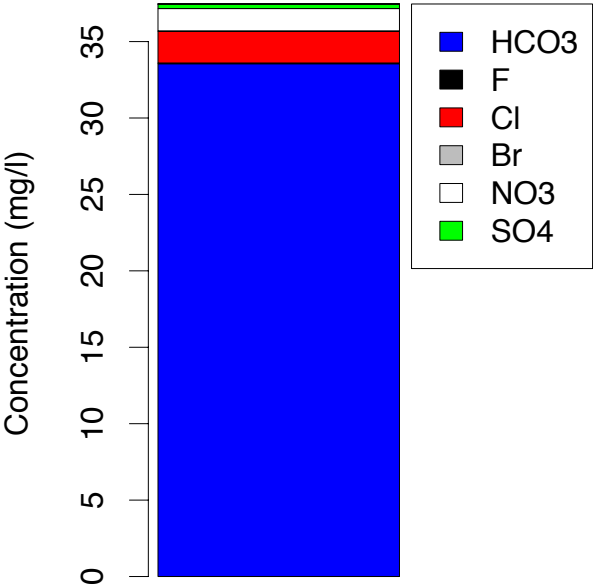
# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	1.420
Reduced Water Level (m)	
EC (µS/cm)	73.30
pH	5.6
DO (mg/l)	--

## Stratigraphy:

0- 6 m   Gravels

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	33.55	Li (µg/L)	4.67	Radon (Bq/m <sup>3</sup> )	44646
F (mg/L)	0.05	Na (mg/L)	4.02	δ <sup>18</sup> O (‰)	-6.3
Cl (mg/L)	2.07	Mg (mg/L)	2.86	δ <sup>2</sup> H (‰)	-37
Br (mg/L)	0.03	K (mg/L)	0.57	δ <sup>13</sup> C (‰)	-26.0
NO <sub>3</sub> (mg/L)	1.46	Ca (mg/L)	3.67	<sup>14</sup> C pMC	94.76
SO <sub>4</sub> (mg/L)	0.30	Mn (µg/L)	258.70	Tritium (TU)	0.973
		Fe (µg/L)	68.38		
		Sr (µg/L)	40.43		
		Ba (µg/L)	14.40		

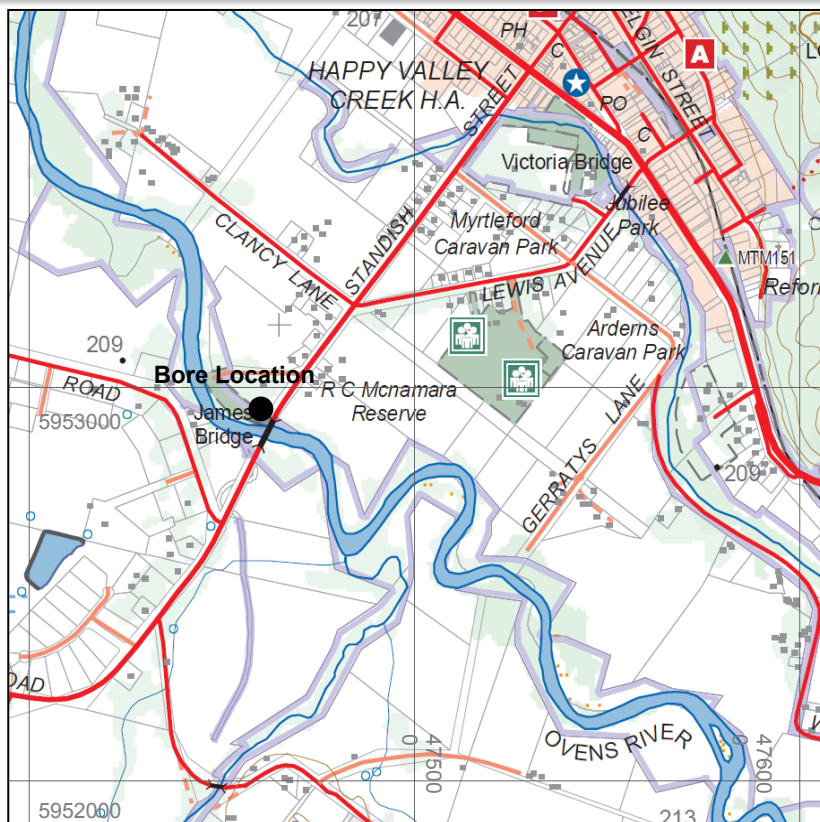




## Borehole Infrastructure Report

### Site Data

Site Code		Monash M1
Site Name		Myrtleford
Region		Ovens River, VIC
Easting	GDA94 Zone 55	474605
Northing		5952920
Elevation (m AHD)		
Bore Depth (m)		7
Screen Length (m)		2
Screen Top (m)		4
Screen Bottom (m)		6
Bore Top		Monument
Top of Pipe to surface (m)		0.75
Date Completed		24 <sup>th</sup> January 2011



### Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Bore located close to the James Bridge (north side), next to the State Observation Bore (B83229). The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with InSitu Aquatrol 200 at 30 minute intervals.

<b>Infrastructure Report by:</b>	<b>Contact Details:</b>	<b>Checked by: Prof Ian Cartwright</b>
Dr Harald Hofmann		<a href="mailto:Ian.Cartwright@monash.edu">Ian.Cartwright@monash.edu</a>



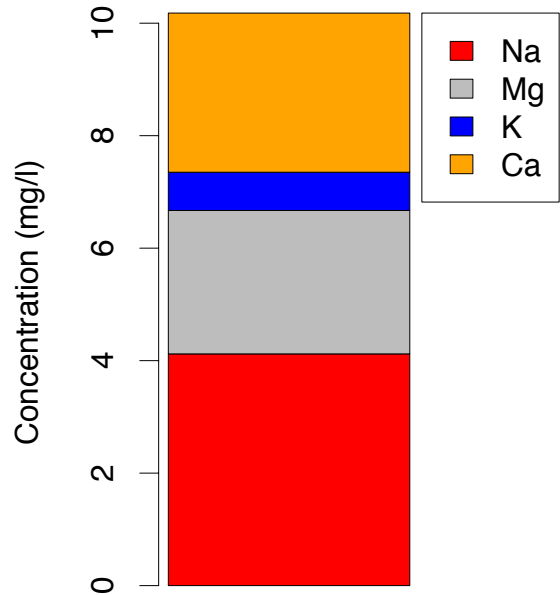
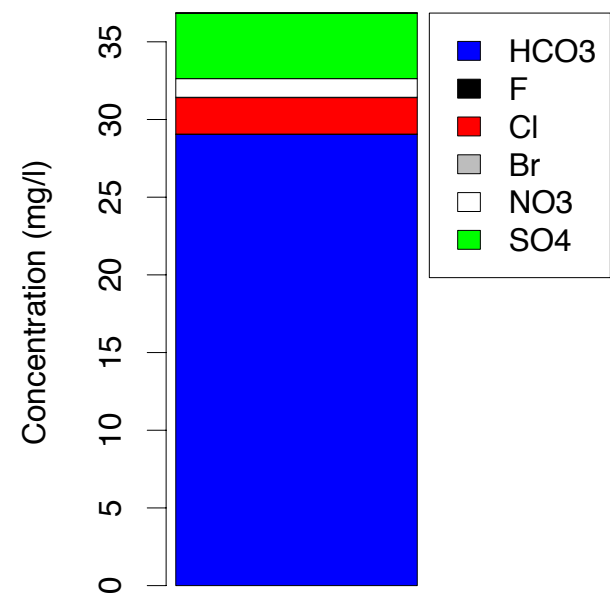
# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	4.060
Reduced Water Level (m)	
EC (µS/cm)	77.4
pH	5.8
DO (mg/l)	--

## Stratigraphy:

0- 7 m   Gravels and sand

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	29.04	Li (µg/L)	0.81	Radon (Bq/m <sup>3</sup> )	15250
F (mg/L)	0.02	Na (mg/L)	4.12	δ <sup>18</sup> O (‰)	-6.6
Cl (mg/L)	2.35	Mg (mg/L)	2.55	δ <sup>2</sup> H (‰)	-39
Br (mg/L)	0.02	K (mg/L)	0.68	δ <sup>13</sup> C (‰)	-27.1
NO <sub>3</sub> (mg/L)	1.20	Ca (mg/L)	2.83	<sup>14</sup> C pMC	100.36
SO <sub>4</sub> (mg/L)	4.22	Mn (µg/L)	96.15	Tritium (TU)	2.390
		Fe (µg/L)	BDL	BDL=Below detection limit	
		Sr (µg/L)	26.55		
		Ba (µg/L)	10.92		

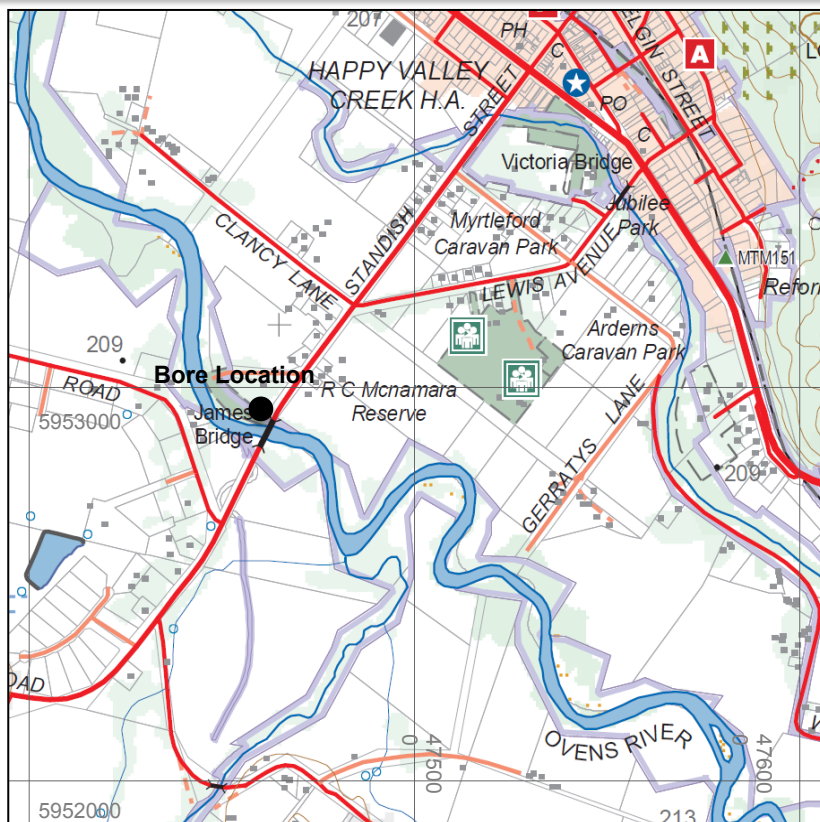




## Borehole Infrastructure Report

### Site Data

Site Code		Monash M2
Site Name		Myrtleford
Region		Ovens River, VIC
Easting	GDA94 Zone 55	474606
Northing		5952936
Elevation (m AHD)		
Bore Depth (m)		7
Screen Length (m)		2
Screen Top (m)		4
Screen Bottom (m)		6
Bore Top		Monument
Top of Pipe to surface (m)		0.76
Date Completed		24 <sup>th</sup> January 2011



### Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Bore located close to the James Bridge (north side), between the State Observation Bore (B83230) and the Goulburn-Murray Water observation bore. The borehole is finished in the alluvial deposits of the Ovens Valley.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with InSitu Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:

Dr Harald Hofmann

Contact Details:

Checked by: Prof Ian Cartwright

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)

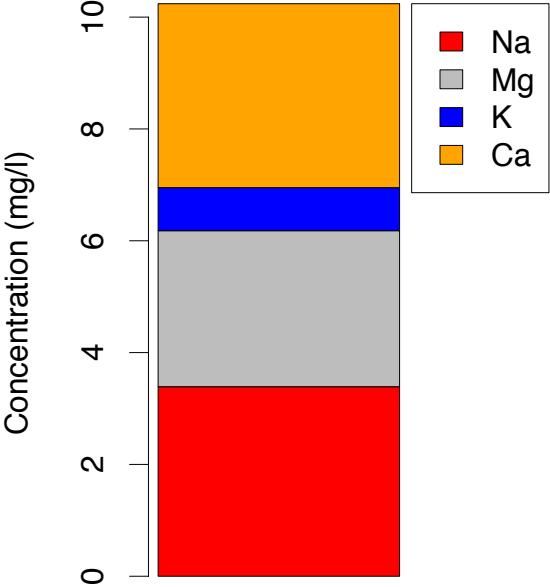
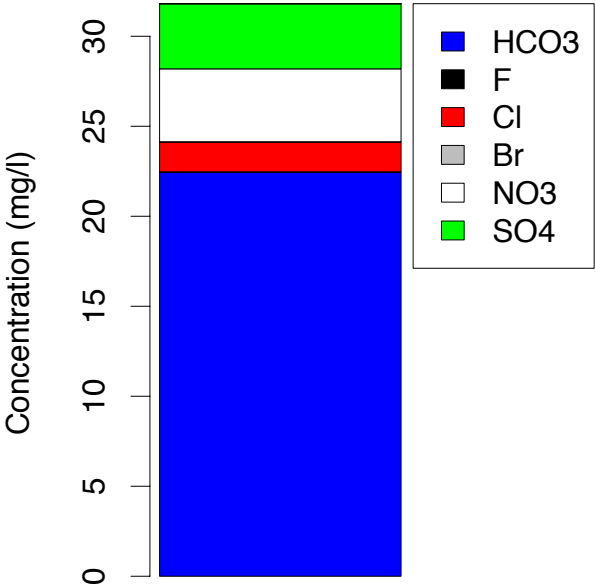
# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	4.152
Reduced Water Level (m)	
EC (µS/cm)	65.10
pH	5.8
DO (mg/l)	--

## Stratigraphy:

0- 7 m   Gravels and sand

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	22.45	Li (µg/L)	1.55	Radon (Bq/m <sup>3</sup> )	18479
F (mg/L)	0.01	Na (mg/L)	3.39	δ <sup>18</sup> O (‰)	-6.5
Cl (mg/L)	1.66	Mg (mg/L)	2.79	δ <sup>2</sup> H (‰)	-40
Br (mg/L)	0.01	K (mg/L)	0.77	δ <sup>13</sup> C (‰)	-29.3
NO <sub>3</sub> (mg/L)	4.05	Ca (mg/L)	3.29	<sup>14</sup> C pMC	100.27
SO <sub>4</sub> (mg/L)	3.62	Mn (µg/L)	1.70	Tritium (TU)	2.403
		Fe (µg/L)	BDN		
		Sr (µg/L)	31.11		
		Ba (µg/L)	13.21		
				BDL=Below detection limit	



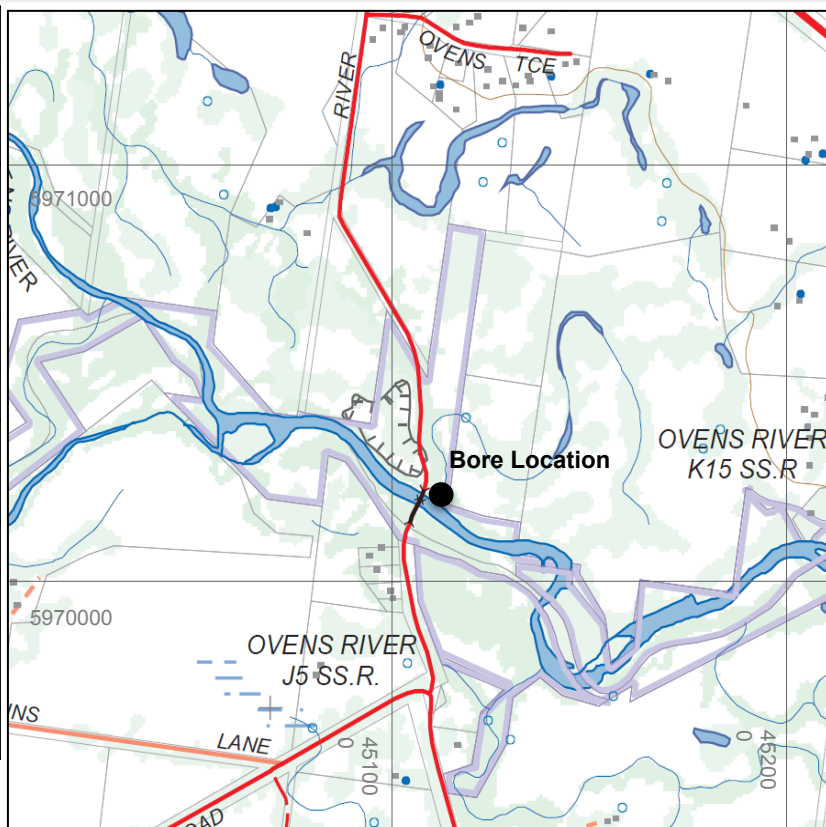




## Borehole Infrastructure Report

### Site Data

Site Code	Monash T1	
Site Name	Tarrawingee	
Region	Ovens River, VIC	
Easting	GDA94 Zone 55	451112
Northing		5970209
Elevation (m AHD)		
Bore Depth (m)	8	
Screen Length (m)	2	
Screen Top (m)	5	
Screen Bottom (m)	7	
Bore Top	Monument	
Top of Pipe to surface (m)	0.94	
Date Completed	17 <sup>th</sup> December 2010	



### Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Bore located close to the bridge (north side) on River Road. The borehole is finished in the alluvial deposits of the floodplain.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with InSitu Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:

Dr Harald Hofmann

Contact Details:

Checked by: Prof Ian Cartwright

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)

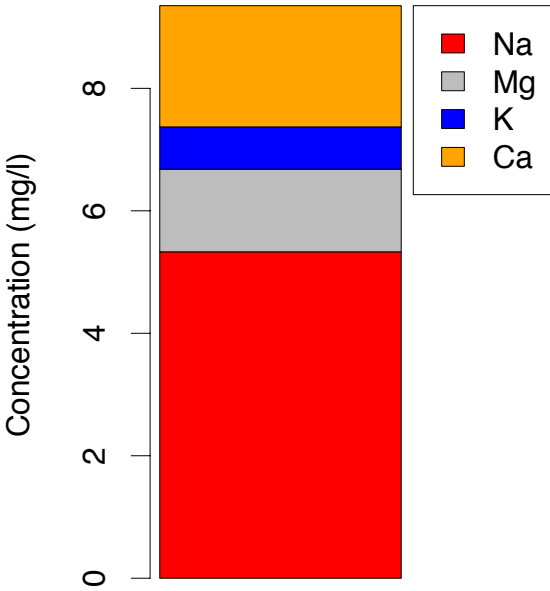
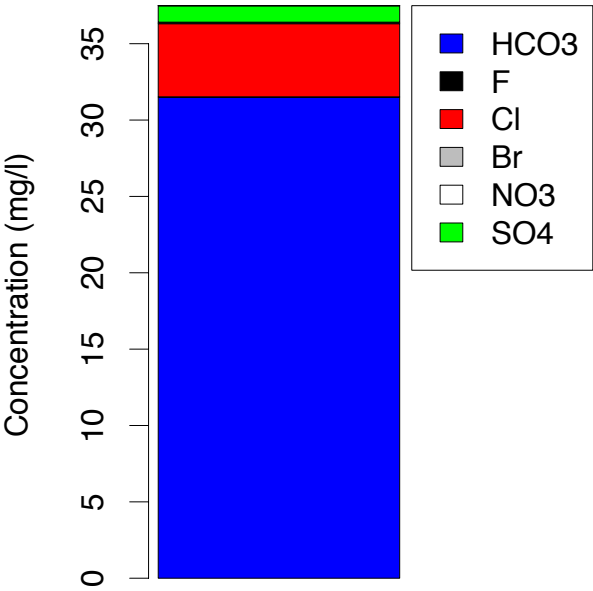
# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	3.416
Reduced Water Level (m)	
EC (µS/cm)	74.20
pH	6.20
DO (mg/l)	--

## Stratigraphy:

0- 8 m    Sand

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	31.48	Li (µg/L)	0.31	Radon (Bq/m <sup>3</sup> )	16675
F (mg/L)	0.04	Na (mg/L)	5.33	δ <sup>18</sup> O (‰)	-6.3
Cl (mg/L)	4.79	Mg (mg/L)	1.35	δ <sup>2</sup> H (‰)	-37
Br (mg/L)	0.04	K (mg/L)	0.69	δ <sup>13</sup> C (‰)	-20.8
NO <sub>3</sub> (mg/L)	0.06	Ca (mg/L)	1.98	<sup>14</sup> C pMC	105.03
SO <sub>4</sub> (mg/L)	1.08	Mn (µg/L)	198.40	Tritium (TU)	2.289
		Fe (µg/L)	29.40		
		Sr (µg/L)	17.53		
		Ba (µg/L)	12.32		

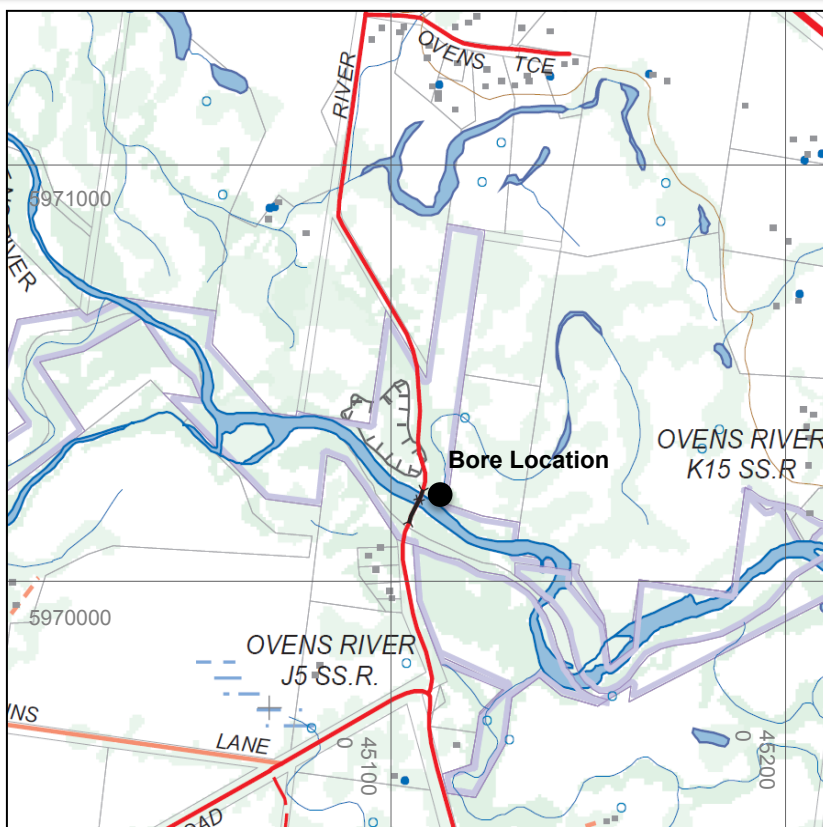




## Borehole Infrastructure Report

### Site Data

Site Code	Monash T2	
Site Name	Tarrawingee	
Region	Ovens River, VIC	
Easting	GDA94 Zone 55	451120
Northing		5970212
Elevation (m AHD)		
Bore Depth (m)	8	
Screen Length (m)	2	
Screen Top (m)	5	
Screen Bottom (m)	7	
Bore Top	Monument	
Top of Pipe (m)	0.90	
Date Completed	17 <sup>th</sup> December 2010	



### Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Bore located close to the bridge (north side), next to the Goulburn-Murray Water observation bore (WRK056982) on River Road. The borehole is finished in the alluvial deposits of the floodplain.

**Continuous Data:** Continuous water depth and EC data are available for this site, measured with InSitu Aquatroll 200 at 30 minute intervals.

Infrastructure Report by:

Dr Harald Hofmann

Contact Details:

Checked by: Prof Ian Cartwright

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)



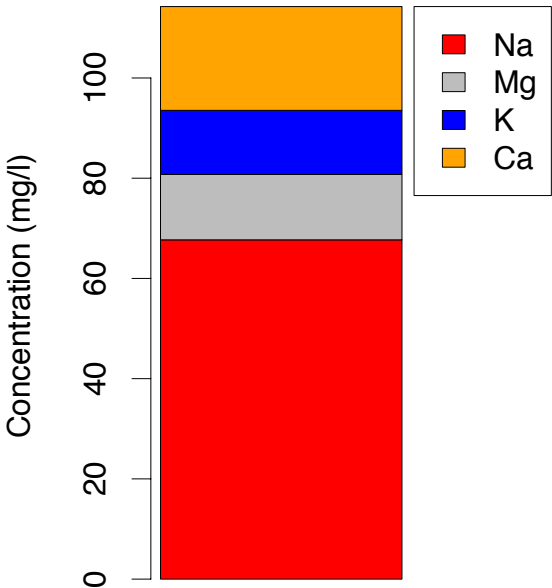
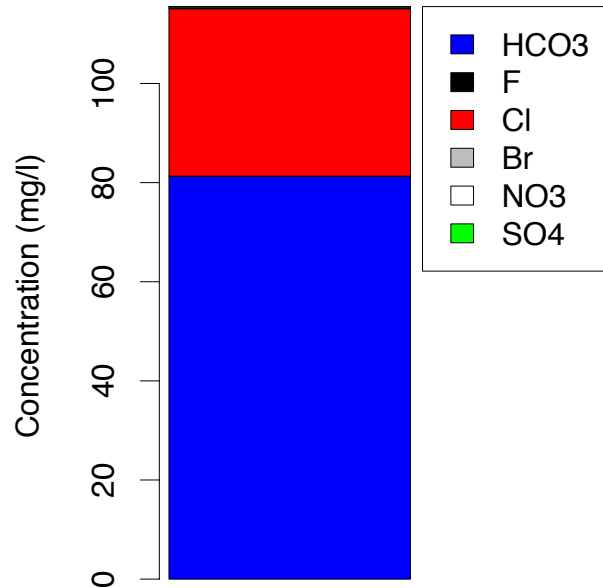
# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	3.396
Reduced Water Level (m)	
EC (µS/cm)	253
pH	6.20
DO (mg/l)	--

## Stratigraphy:

0- 8 m    Sand

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	81.25	Li (µg/L)	1.96	Radon (Bq/m <sup>3</sup> )	18021
F (mg/L)	0.05	Na (mg/L)	67.70	δ <sup>18</sup> O (‰)	-5.7
Cl (mg/L)	33.79	Mg (mg/L)	13.05	δ <sup>2</sup> H (‰)	-37
Br (mg/L)	0.09	K (mg/L)	12.79	δ <sup>13</sup> C (‰)	-19.2
NO <sub>3</sub> (mg/L)	0.07	Ca (mg/L)	20.71	<sup>14</sup> C pMC	103.67
SO <sub>4</sub> (mg/L)	0.27	Mn (µg/L)	2140	Tritium (TU)	2.260
		Fe (µg/L)	3476		
		Sr (µg/L)	156.50		
		Ba (µg/L)	235.00		

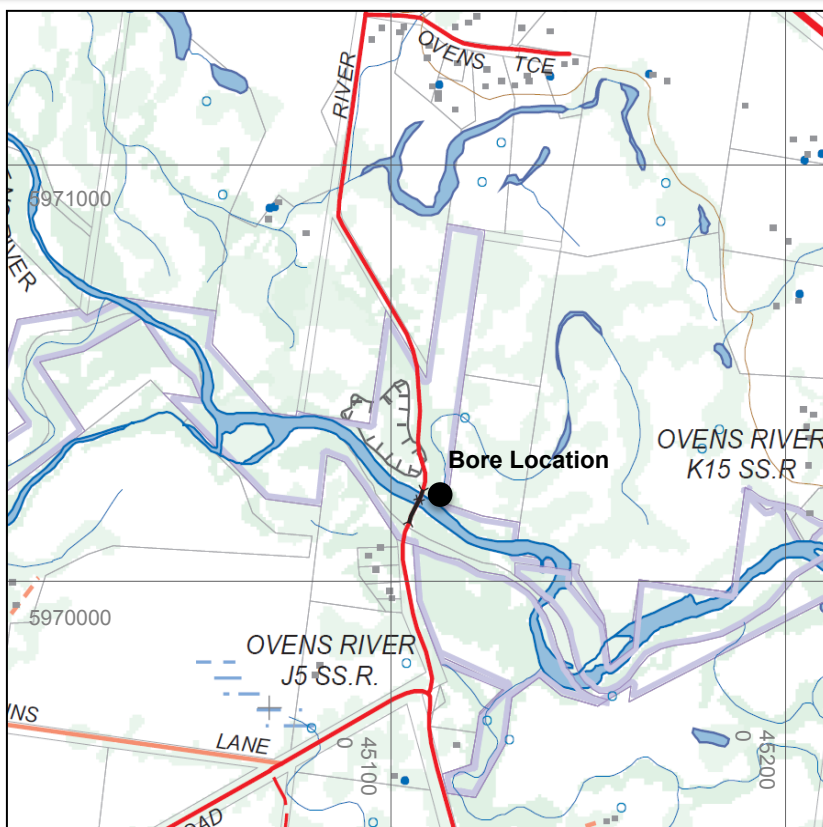




## Borehole Infrastructure Report

### Site Data

Site Code	Monash T3	
Site Name	Tarrawingee	
Region	Ovens River, VIC	
Easting	GDA94 Zone 55	451136
Northing		5970245
Elevation (m AHD)		
Bore Depth (m)	9	
Screen Length (m)	2	
Screen Top (m)	6	
Screen Bottom (m)	8	
Bore Top	Monument	
Top of Pipe (m)	0.96	
Date Completed	17 <sup>th</sup> December 2010	



### Construction details

Borehole Type	Monitoring Bore
Installed by	Monash University
Drilled by	Alpine Drilling Pty Ltd
Drilling Method	Advanced Casing
Screen Type	Slotted PVC
Casing size / Type	80mm Class A PVC
Development Details	



**Description and Comments:** Bore located close to the bridge (north side) on River Road. The borehole is finished in the alluvial deposits of the floodplain.

**Continuous Data:** Continuous water depth data are available for this site, measured with InSitu Rugged TROLL 100 at 30 minute intervals.

Infrastructure Report by:

Dr Harald Hofmann

Contact Details:

Checked by: Prof Ian Cartwright

[Ian.Cartwright@monash.edu](mailto:Ian.Cartwright@monash.edu)

# Groundwater Chemistry

Field Data	
Date of Sampling	28.05.2012
Depth Below Natural Surface (m)	3.460
Reduced Water Level (m)	
EC (µS/cm)	464
pH	6.43
DO (mg/l)	--

## Stratigraphy:

0- 9 m Sand

Anions		Cations		Isotopes	
HCO <sub>3</sub> (mg/L)	127.49	Li (µg/L)	0.99	Radon (Bq/m <sup>3</sup> )	14892
F (mg/L)	0.06	Na (mg/L)	40.64	δ <sup>18</sup> O (‰)	-4.6
Cl (mg/L)	77.07	Mg (mg/L)	6.39	δ <sup>2</sup> H (‰)	-31
Br (mg/L)	0.21	K (mg/L)	1.95	δ <sup>13</sup> C (‰)	-17.4
NO <sub>3</sub> (mg/L)	0.04	Ca (mg/L)	6.65	<sup>14</sup> C pMC	102.32
SO <sub>4</sub> (mg/L)	0.14	Mn (µg/L)	1121	Tritium (TU)	2.317
		Fe (µg/L)	4897		
		Sr (µg/L)	79.61		
		Ba (µg/L)	73.32		

