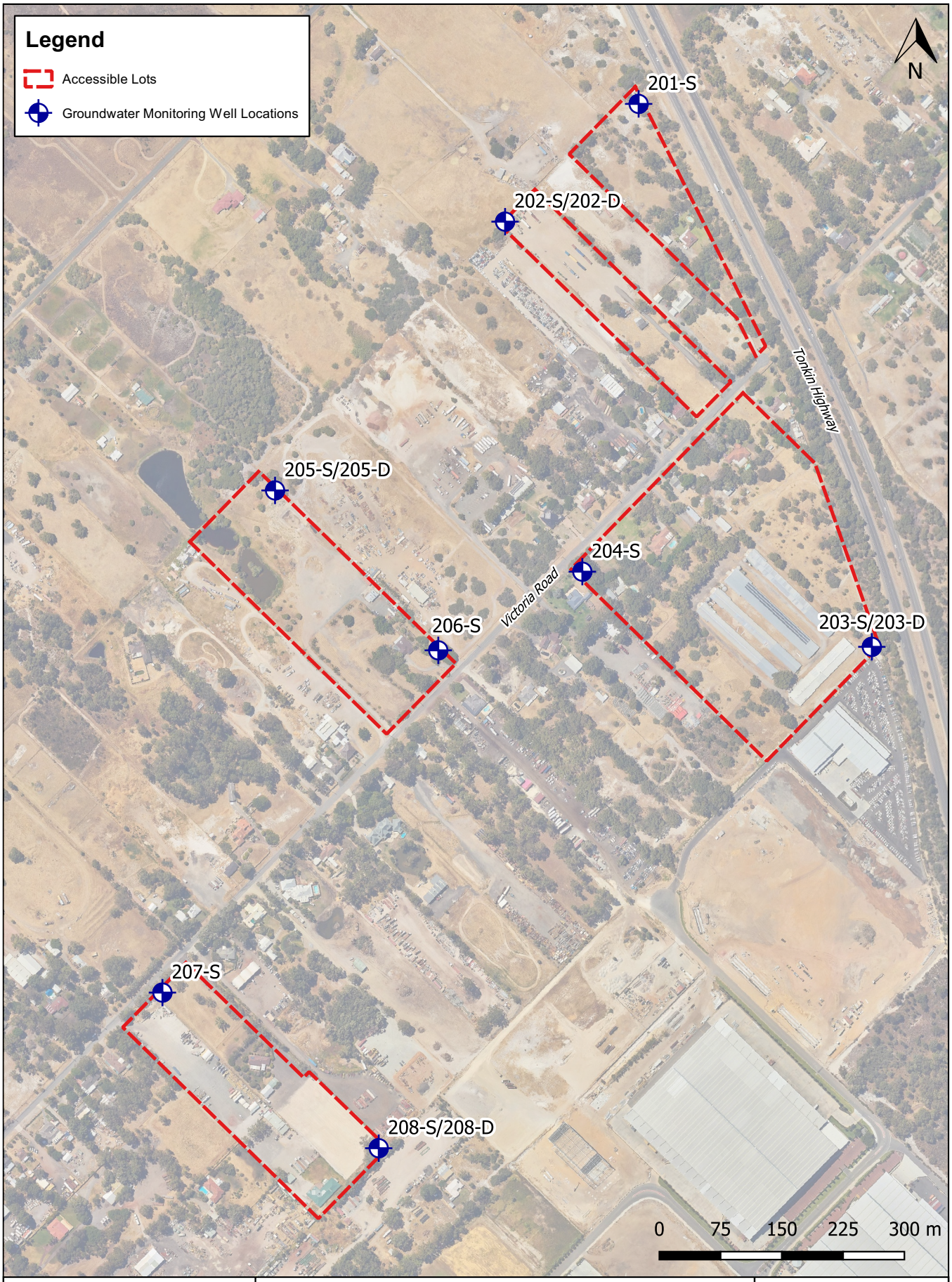


Douglas Partners Geotechnics / Environment / Groundwater	**Test Location Plan - Groundwater Monitoring Wells** **Proposed Industrial Development** **Victoria Road, Kenwick, WA**	PROJECT: 202795.02 Drawing No: 2 REV: 0
	CLIENT: Hesperia Property Pty Ltd	DATE: 19/11/2022

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 23.2 m AHD*
EASTING: 405483
NORTHING: 6457148
DIP/AZIMUTH: 90°/--

BORE No: MW201-S
PROJECT No: 202795.02
DATE: 12/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
23	0	SAND SP: fine to medium grained, grey, trace silt, moist.							Top Cap
22	1								Backfill
21	2								
20	3								Bentonite Seal
19	4	- becoming brown from 4 m depth.						12-10-22	
18	5	- becoming wet from 4.5 m depth. - becoming grey from 5 m depth.							Gravel Pack 50 mm class 18 Slotted PVC Pipe
17	6								
16	7	7.0 Bore discontinued at 7.0m (Target Depth)							End Cap
15	8								
14	9								
13	10								
12	11								
11	12								
10	13								
9	14								

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 4.2 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 20.7 m AHD*
EASTING: 405320
NORTHING: 6457004
DIP/AZIMUTH: 90°/--

BORE No: MW202-D
PROJECT No: 202795.02
DATE: 13/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
20.5	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
		SAND SP: fine to medium grained, grey, trace silt, moist.							
		- becoming brown with silt (SP-SM) from 2 m depth.							Backfill
17.2	3.5	Clayey SAND SC: fine to medium grained, grey, low to medium plasticity, wet.							Bentonite Seal
11.7	9.0	Sandy CLAY CL-CI: low to meduim plasticity, brown-black, fine to medium grained, wet.						13-10-22	Gravel Pack
									50 mm class 18 Slotted PVC Pipe
10.2	10.5	Bore discontinued at 10.5m (Target Depth)							End Cap

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 9.1 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 20.7 m AHD*
EASTING: 405319
NORTHING: 6457002
DIP/AZIMUTH: 90°/--

BORE No: MW202-S
PROJECT No: 202795.02
DATE: 13/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
20	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
		SAND SP: fine to medium grained, grey, trace silt, moist.							Backfill
19	1								Bentonite Seal
	2	- becoming brown with silt (SP-SM) from 2 m depth.						13-10-22	
18	3								Gravel Pack
17	3.5	Clayey SAND SC: fine to medium grained, grey, low to medium plasticity, wet.							50 mm class 18 Slotted PVC Pipe
	4								
16	5	5.0 Bore discontinued at 5.0m (Target Depth)							End Cap
15	6								
14	7								
13	8								
12	9								
11	10								
10	11								
9	12								
8	13								
7	14								

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 1.9 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 26.9 m AHD*
EASTING: 405763
NORTHING: 6456481
DIP/AZIMUTH: 90°/--

BORE No: MW203-D
PROJECT No: 202795.02
DATE: 12/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
26.7	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
		SAND SP: fine to medium grained, grey, trace silt, moist. - becoming yellow-brown from 1 m depth.							
23.9	3.0	Clayey SAND SC: fine to medium grained, grey mottled orange brown, trace gravel, low to medium plasticity, moist.							
22.9	4.0	Gravelly Sandy CLAY CL-CI: low to medium plasticity, red-brown, fine to medium grained, fine to coarse sized, moist.							Backfill
20.9	6.0	Sandy CLAY CL-CI: low to medium plasticity, red-brown, fine to medium grained, trace gravel, moist.						12-10-22	
15.4	11.5	Clayey SAND SC: fine to medium grained, grey, low to medium plasticity, wet.							Bentonite Seal Gravel Pack 50 mm class 18 Slotted PVC Pipe
12.9	14.0	Bore discontinued at 14.0m (Target Depth)							End Cap

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 8.3 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 26.9 m AHD*
EASTING: 405765
NORTHING: 6456480
DIP/AZIMUTH: 90°/--

BORE No: MW203-S
PROJECT No: 202795.02
DATE: 12/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
26	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
	1	SAND SP: fine to medium grained, grey, trace silt, moist. - becoming yellow-brown from 1 m depth.							Backfill Bentonite Seal
25	2								
24	3	3.0 Clayey SAND SC: fine to medium grained, grey mottled orange brown, trace gravel, low to medium plasticity, moist.							Gravel Pack
23	4	4.0 Gravelly Sandy CLAY CL-CI: low to medium plasticity, red-brown, fine to medium grained, fine to coarse sized, moist.							50 mm class 18 Slotted PVC Pipe
22	5	5.0 Bore discontinued at 5.0m (Target Depth)							End Cap
21	6								
20	7								
19	8								
18	9								
17	10								
16	11								
15	12								
14	13								
13	14								

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater not observed. Observation at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 24.0 m AHD*
EASTING: 405408
NORTHING: 6456579
DIP/AZIMUTH: 90°/--

BORE No: MW204-S
PROJECT No: 202795.02
DATE: 12/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
24	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap; Bentonite Seal
23	1	SAND SP: fine to medium grained, grey, trace silt, moist. - becoming pale grey from 0.5 m depth.							
22	2								
21	3								Gravel Pack
20	4	- becoming yellow-brown from 3.5 m depth.							50 mm class 18 Slotted PVC Pipe
19	4.5	Clayey SAND SC: fine to medium grained, grey mottled orange brown, trace gravel, low to medium plasticity, moist.							
18	5								
17	6	- becoming red-brown with iron cemented gravel zones from 5.5 m depth.							
16	7	7.0 Bore discontinued at 7.0m (Target Depth)							End Cap
15	8								
14	9								
13	10								
12	11								
11	12								
10	13								
	14								

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater not observed. Observation undertaken at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 16.5 m AHD*
EASTING: 405033
NORTHING: 6456675
DIP/AZIMUTH: 90°/--

BORE No: MW205-D
PROJECT No: 202795.02
DATE: 13/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
		SAND SP: fine to medium grained, grey, trace silt, moist.							
	2.5	Clayey SAND SC: fine to medium grained, grey, low to medium plasticity, moist.							Backfill
		- becoming brown from 6.5 m depth.						13-10-22	
		- becoming wet from 7 m depth.							Bentonite Seal
									Gravel Pack
									50 mm class 18 Slotted PVC Pipe
	10.0	Bore discontinued at 10.0m (Target Depth)							End Cap

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 4.2 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 16.5 m AHD*
EASTING: 405034
NORTHING: 6456674
DIP/AZIMUTH: 90°/--

BORE No: MW205-S
PROJECT No: 202795.02
DATE: 14/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
16	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
		SAND SP: fine to medium grained, grey, trace silt, moist.							Bentonite Seal
15	1	- becoming wet from 1 m depth.						14-10-22	
14	2								Gravel Pack
	2.5	Clayey SAND SC: fine to medium grained, grey, low to medium plasticity, moist.							50 mm class 18 Slotted PVC Pipe
13	3								
12	4	4.0 Bore discontinued at 4.0m (Target Depth)							End Cap
11	5								
10	6								
9	7								
8	8								
7	9								
6	10								
5	11								
4	12								
3	13								
	14								

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 1.1 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 20.0 m AHD*
EASTING: 405237
NORTHING: 6456474
DIP/AZIMUTH: 90°/--

BORE No: MW206-S
PROJECT No: 202795.02
DATE: 12/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
20	0.3	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
19	1	SAND SP: fine to medium grained, grey, trace silt, moist.							Backfill
18	2.0	Gravelly SAND SP-SM: fine to medium grained, brown, fine to coarse sized, with silt, moist.							Bentonite Seal
17	3.0	SAND SP: fine to medium grained, yellow-brown, trace silt, wet.						12-10-22	Gravel Pack
16	4.0	Clayey SAND SC: fine to medium grained, grey, low to medium plasticity, wet.							50 mm class 18 Slotted PVC Pipe
15	5.0	Bore discontinued at 5.0m (Target Depth)							End Cap
14	6								
13	7								
12	8								
11	9								
10	10								
9	11								
8	12								
7	13								
6	14								

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 2.7 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.1 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 13.0 m AHD*
EASTING: 404905
NORTHING: 6456053
DIP/AZIMUTH: 90°/--

BORE No: MW207-S
PROJECT No: 202795.02
DATE: 13/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
13	0.4	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap Bentonite Seal
12	1	SAND SP: fine to medium grained, yellow-brown, trace silt, moist. - becoming wet from 1 m depth.							
11	1.5	Clayey SAND SC: fine to medium grained, grey, low to medium plasticity, wet.							Gravel Pack
10	2.5	Gravelly Sandy CLAY CL-CI: low to medium plasticity, grey mottled orange-red-brown, fine to medium grained, fine to coarse sized, moist.							50 mm class 18 Slotted PVC Pipe
9	3.0	Sandy CLAY CL-CI: low to medium plasticity, grey, fine to medium grained, moist.							
8	4.0	Bore discontinued at 4.0m (Target Depth)							End Cap
7	5								
6	6								
5	7								
4	8								
3	9								
2	10								
1	11								
0	12								
-1	13								
-2	14								

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater not observed. Observation undertaken at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.5 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

Douglas Partners
Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 15.2 m AHD*
EASTING: 405158
NORTHING: 6455878
DIP/AZIMUTH: 90°/--

BORE No: MW208-D
PROJECT No: 202795.02
DATE: 13/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
15	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
		SAND SP: fine to medium grained, grey, trace silt, moist.							
14	1.0	- becoming wet from 0.5 m depth.							
		Gravelly SAND SP-SM: fine to medium grained, brown, fine to coarse sized, with silt, wet.							
13	2.0	Clayey SAND SC: fine to medium grained, grey-brown, low to medium plasticity, wet.						13-10-22	Backfill
12									
11									
10	5.0	Sandy CLAY CI: medium plasticity, grey, fine to medium grained, wet.							Bentonite Seal
9									
8	7.0	Clayey SAND SC: fine to medium grained, yellow-brown, low to medium plasticity, wet.							Gravel Pack
									50 mm class 18 Slotted PVC Pipe
7	9.0	Bore discontinued at 9.0m (Target Depth)							End Cap
6									
5									
4									
3									
2									
1									

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

WATER OBSERVATIONS: Groundwater observed at 2.5 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.5 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

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Geotechnics / Environment / Groundwater

BOREHOLE LOG

CLIENT: Hesperia Property Pty Ltd
PROJECT: Proposed Industrial Development
LOCATION: Victoria Road, Kenwick, WA

SURFACE LEVEL: 15.2 m AHD*
EASTING: 405159
NORTHING: 6455878
DIP/AZIMUTH: 90°/--

BORE No: MW208-S
PROJECT No: 202795.02
DATE: 13/10/2022
SHEET 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing: Type	Depth	Sample	Results & Comments	Water	Well Construction Details
15	0.2	TOPSOIL/SAND SP: fine to medium grained, brown, trace silt, trace rootlets, moist.							Top Cap
		SAND SP: fine to medium grained, grey, trace silt, moist.							Bentonite Seal
14	1.0	- becoming wet from 0.5 m depth.						13-10-22	
		Gravelly SAND SP-SM: fine to medium grained, brown, fine to coarse sized, with silt, wet.							
13	2.0	Clayey SAND SC: fine to medium grained, grey-brown, low to medium plasticity, wet.							Gravel Pack
									50 mm class 18 Slotted PVC Pipe
12	4.0	Bore discontinued at 4.0m (Target Depth)							End Cap
11									
10									
9									
8									
7									
6									
5									
4									
3									
2									
1									

RIG: Geoprobe 7822DT **DRILLER:** DPP **LOGGED:** HM **CASING:**

TYPE OF BORING: Solid Flight Auger/Direct Push Probe

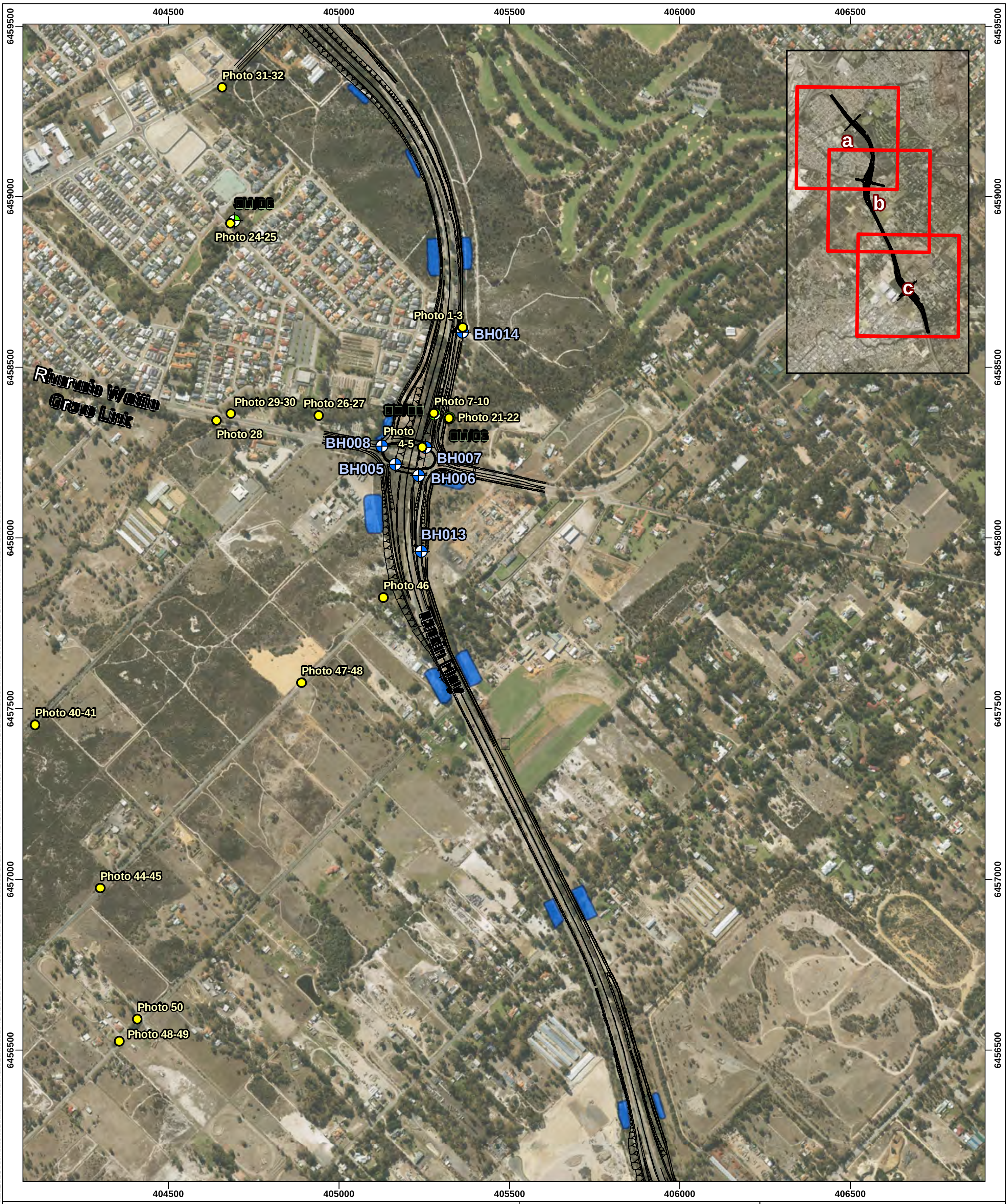
WATER OBSERVATIONS: Groundwater observed at 0.6 m depth. Observed at time of drilling and should be considered with caution.

REMARKS: Location coordinates are in MGA94 Zone 50 H. Surface level measured using a differential GPS with a reported accuracy of 0.5 m.

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U_x	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	▷	Water seep	S	Standard penetration test
E	Environmental sample	▼	Water level	V	Shear vane (kPa)

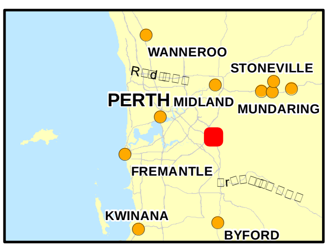
Douglas Partners
Geotechnics / Environment / Groundwater



Legend

0 160 320 480
Meters
1:15,000 @ A4
N

LOCALITY MAP



Powered By SLIP ENABLER

PROJECT ID	DATE

HORIZONTAL DATUM AND PROJECTION

CREATED	CHECKED	APPROVED	REVISION

Arup

Tonkin Highway

Tonkin Highway Monitoring Report

Figure 7b

Monitoring Locations

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GROUNDWATER MONITORING STANDPIPE DETAILS

BH005_PZ

SHEET 1 OF 1

CLIENT	Main Roads WA	LOGGED BY	AI
PROJECT	Tonkin Highway Upgrade - Grade Separations	CHECKED BY	
		DRILLED DATE	03-Oct-19
CONTRACTOR	Edge Drilling	ANGLE	
DRILL MODEL		BEARING	-
DRILLER	MP, SS	HOLE DIAMETER	
LOCATION	Main,	GROUND LEVEL	RL 20.40mAHD
		LOCATION	66937.00 E 257229.00 N
		ELEVATION DATUM	Australian Height Datum (AHD)
		COORDINATE SYSTEM	Perth Coastal Grid 1994 (PCG94)

AQUIFER	STRATA				MATERIAL DESCRIPTION	WELL CONSTRUCTION	
						WELL CONSTRUCTION DETAIL	
Testing	R.L.	DEPTH	GROUP SYMBOL	LEGEND	SOIL OR ROCK TYPE	WATER LEVEL	BACKFILL MATERIAL / DESCRIPTION
	mAHD	m					
	18.90	1.50	CH		Sandy CLAY (CH)		Concrete plug from 0 to 0.3m 60mm PVC from 0 to 13.95m Gravel pack (1.2mm to 3.6mm size) from 0.3 to 12.95m
	17.40	3.00	SP		SAND (SP)		
	15.90	4.50	SP		SAND (SP)		
		5					
		10					
	9.90	10.50	SP		SAND (SP)		
	6.90	13.50	SP		SAND (SP)		Bentonite pellet plug from 12.95m to 13.45m Gravel pack (1.2mm to 3.6mm size) from 13.45 to 19.95m 60mm PVC (slotted) from 13.95 to 19.95m
		15					
	0.83	19.57	SP		Gravelly SAND (SP)		End of borehole
	0.45	19.95					
		20					

NOTES

End of borehole completed at 19.95m

See explanatory notes for details of abbreviations and basis of descriptions

JOB 266665

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GROUNDWATER MONITORING STANDPIPE DETAILS

BH006_PZ

SHEET 1 OF 1

CLIENT	Main Roads WA	LOGGED BY	AI
PROJECT	Tonkin Highway Upgrade - Grade Separations	CHECKED BY	
		DRILLED DATE	04-Oct-19
CONTRACTOR	Edge Drilling	ANGLE	
DRILL MODEL		BEARING	-
DRILLER	MP, SS	HOLE DIAMETER	
LOCATION	Main,	GROUND LEVEL	RL 20.81mAHD
		LOCATION	67005.00 E 257195.00 N
		ELEVATION DATUM	Australian Height Datum (AHD)
		COORDINATE SYSTEM	Perth Coastal Grid 1994 (PCG94)

AQUIFER	STRATA				MATERIAL DESCRIPTION	WELL CONSTRUCTION	
Testing	R.L. mAHD	DEPTH m	GROUP SYMBOL	LEGEND	SOIL OR ROCK TYPE	WATER LEVEL	WELL CONSTRUCTION DETAIL: BACKFILL MATERIAL / DESCRIPTION
	19.31	1.50	SP		SAND (SP)		Concrete plug from 0 to 0.3m 60mm PVC from 0 to 13.95m Gravel pack (1.2mm to 3.6mm size) from 0.3 to 12.95m
	17.52	3.29	SM		Silty SAND (SM)		
	16.31	4.50	SC		Clayey SAND (SC)		
	14.81	6.00	SP		SAND (SP)		
	8.81	12.00	SP		SAND (SP)		Bentonite pellet plug from 12.95m to 13.45m Gravel pack (1.2mm to 3.6mm size) from 13.45 to 19.95m 60mm PVC (slotted) from 13.95 to 19.95m
	4.31	16.50	SP		SAND (SP)		
	0.86	19.95			End of borehole completed at 19.95m		End of borehole

NOTES

See explanatory notes for details of abbreviations and basis of descriptions

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GROUNDWATER MONITORING STANDPIPE DETAILS

BH007_PZ

SHEET 1 OF 1

CLIENT	Main Roads WA	LOGGED BY	AI
PROJECT	Tonkin Highway Upgrade - Grade Separations	CHECKED BY	
		DRILLED DATE	08-Oct-19
CONTRACTOR	Edge Drilling	ANGLE	
DRILL MODEL	Landcruiser rig	BEARING	-
DRILLER	TC, MM	HOLE DIAMETER	
LOCATION	Main,	GROUND LEVEL	RL 21.42mAHD
		LOCATION	67026.00 E 257277.00 N
		ELEVATION DATUM	Australian Height Datum (AHD)
		COORDINATE SYSTEM	Perth Coastal Grid 1994 (PCG94)

AQUIFER	STRATA				MATERIAL DESCRIPTION	WELL CONSTRUCTION	
						WELL CONSTRUCTION DETAIL	
Testing	R.L.	DEPTH	GROUP SYMBOL	LEGEND	SOIL OR ROCK TYPE	WATER LEVEL	BACKFILL MATERIAL / DESCRIPTION
	mAHD	m					
	19.92	1.50	SP		SAND (SP)		Concrete plug from 0 to 0.3m 60mm PVC from 0 to 13.95m Gravel pack (1.2mm to 3.6mm size) from 0.3 to 12.95m
	18.42	3.00	SC		Clayey SAND (SC)		
	16.92	4.50	SP		SAND (SP)		
	15.42	6.00	SC		Clayey SAND (SC)		
	13.92	7.50	SP		SAND (SP)		
	12.42	9.00	SC		Clayey SAND (SC)		
	10.92	10.50	SP		SAND (SP)		Bentonite pellet plug from 12.95m to 13.45m Gravel pack (1.2mm to 3.6mm size) from 13.45 to 19.95m 60mm PVC (slotted) from 13.95 to 19.95m
	6.42	15.00	SP		SAND (SP)		
	1.47	19.95			End of borehole completed at 19.95m		End of borehole

NOTES

See explanatory notes for details of abbreviations and basis of descriptions

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GROUNDWATER MONITORING STANDPIPE DETAILS

BH008_PZ | SHEET 1 OF 1

CLIENT	Main Roads WA	LOGGED BY	AI
PROJECT	Tonkin Highway Upgrade - Grade Separations	CHECKED BY	
		DRILLED DATE	07-Nov-19
CONTRACTOR	Edge Drilling	ANGLE	
DRILL MODEL	Landcruiser rig	BEARING	-
DRILLER	MP, CK, TC	HOLE DIAMETER	
LOCATION	Main,	GROUND LEVEL	RL 20.43mAHD
		LOCATION	66898.00 E 257282.00 N
		ELEVATION DATUM	Australian Height Datum (AHD)
		COORDINATE SYSTEM	Perth Coastal Grid 1994 (PCG94)

AQUIFER	R.L. (mAHD)	DEPTH (m)	GROUP SYMBOL	LEGEND	MATERIAL DESCRIPTION	WATER LEVEL	WELL CONSTRUCTION DETAIL: BACKFILL MATERIAL	WELL CONSTRUCTION DETAIL: DESCRIPTION
Testing	20.23	0.20	SP		Fill: SAND (SP)			Concrete plug from 0 to 0.3m
			SP		SAND (SP)			60mm PVC from 0 to 13.95m
								Gravel pack (1.2mm to 3.6mm size) from 0.3 to 12.95m
	18.93	1.50	SC		Sandy CLAY (SC)			
	17.43	3.00	SP		SAND (SP)			
		5						
		10						
	5.43	15 15.00	SM		Silty SAND (SM)			Bentonite pellet plug from 12.95m to 13.45m
								Gravel pack (1.2mm to 3.6mm size) from 13.45 to 19.95m
								60mm PVC (slotted) from 13.95 to 19.95m
	0.48	20 19.95			End of borehole			End of borehole

NOTES

End of borehole completed at 19.95m

See explanatory notes for details of abbreviations and basis of descriptions

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GROUNDWATER MONITORING STANDPIPE DETAILS

BH013_PZ

SHEET 1 OF 1

CLIENT	Main Roads WA	LOGGED BY	AI
PROJECT	Tonkin Highway Upgrade - Grade Separations	CHECKED BY	
		DRILLED DATE	11-Oct-19
CONTRACTOR	Edge Drilling	ANGLE	
DRILL MODEL		BEARING	-
DRILLER	JA, TC	HOLE DIAMETER	
LOCATION	Main,	GROUND LEVEL	RL 20.00mAHD
		LOCATION	67010.00 E 256973.00 N
		ELEVATION DATUM	Australian Height Datum (AHD)
		COORDINATE SYSTEM	Perth Coastal Grid 1994 (PCG94)

AQUIFER	STRATA				MATERIAL DESCRIPTION	WELL CONSTRUCTION		
							WELL CONSTRUCTION DETAIL	
Testing	R.L.	DEPTH	GROUP SYMBOL	LEGEND	SOIL OR ROCK TYPE	WATER LEVEL	BACKFILL MATERIAL	DESCRIPTION
	mAHD	m						
	18.50	1.50	CL		Sandy CLAY (CL)			Concrete plug from 0 to 0.3m 60mm PVC from 0 to 9.45m Gravel pack (1.2mm to 3.6mm size) from 0.3 to 8.45m
	17.00	3.00	SP		SAND (SP)			
		5						
	12.50	7.50	SC		Clayey SAND (SC)			Bentonite pellet plug from 8.45m to 8.95m Gravel pack (1.2mm to 3.6mm size) from 8.95m to 15.45m
		10						60mm PVC (slotted) from 9.45m to 15.45m
	9.50	10.50	SP		SAND (SP)			
	6.50	13.50	SP		SAND (SP)			
		15						
	4.55	15.45			End of borehole completed at 15.45m			End of borehole
		20						

NOTES UPDATE GROUND LEVEL

See explanatory notes for details of abbreviations and basis of descriptions

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GROUNDWATER MONITORING STANDPIPE DETAILS

BH014_PZ

SHEET 1 OF 1

CLIENT	Main Roads WA	LOGGED BY	AI
PROJECT	Tonkin Highway Upgrade - Grade Separations	CHECKED BY	
		DRILLED DATE	15-Oct-19
CONTRACTOR	Edge Drilling	ANGLE	
DRILL MODEL		BEARING	-
DRILLER	JA, TC	HOLE DIAMETER	
LOCATION	Main,	GROUND LEVEL	RL 20.00mAHD
		LOCATION	67137.00 E 257614.00 N
		ELEVATION DATUM	Australian Height Datum (AHD)
		COORDINATE SYSTEM	Perth Coastal Grid 1994 (PCG94)

AQUIFER	STRATA				MATERIAL DESCRIPTION	WELL CONSTRUCTION	
						WELL CONSTRUCTION DETAIL	
Testing	R.L.	DEPTH	GROUP SYMBOL	LEGEND	SOIL OR ROCK TYPE	WATER LEVEL	BACKFILL MATERIAL / DESCRIPTION
	mAHD	m					
	18.50	1.50	SP		SAND (SP)		
	17.00	3.00	SC		Clayey SAND (SC)		
	12.50	7.50	SP		SAND (SP)		
	6.50	13.50					
	6.29	13.72	SP		SAND (SP)		
			CH		CLAY (CH)		
	4.55	15.45			End of borehole completed at 15m		

Concrete plug from 0 to 0.3m
60mm PVC from 0 to 9m
Gravel pack (1.2mm to 3.6mm size) from 0.3 to 8m
Bentonite pellet plug from 8m to 8.5m
Gravel pack (1.2mm to 3.6mm size) from 8.5m to 15m
60mm PVC (slotted) from 9m to 15m
End of borehole

NOTES UPDATE GROUND LEVEL

See explanatory notes for details of abbreviations and basis of descriptions

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APPENDIX D
Hyd2o Permeability Testing

Borehole Permeameter : Field Result Analysis

hyd2o HYDROLOGY

Project/Site	H21003 : Wattle Grove HTS1	
Location	406116	mE
	6457802	mN

TEST 1

r	7.5	cm
H	6.0	cm
time step	5	secs
H/r	0.80	
C	0.45	

Time (sec)	Level (cm)	Diff (cm)
0	**5.0**	
5	**15.0**	10.0
10	**15.0**	0.0
15	**25.9**	10.9
20	**25.9**	0.0
25	**38.6**	12.7
30	**38.6**	0.0
35	**38.6**	0.0
40	**47.0**	8.4
	Avg Diff (cm)	5.3
	q (cm^3/s)	9.8

TEST 2

r	7.5	cm
H	9.0	cm
time step	5	secs
H/r	1.20	
C	0.56	

Time (sec)	Level (cm)	Diff (cm)
0	**2.6**	
5	**14.0**	11.4
10	**27.5**	13.5
15	**27.5**	0.0
20	**38.7**	11.2
25	**38.7**	0.0
30	**47.0**	8.3
	Avg Diff (cm)	7.4
	q (cm^3/s)	13.8

TEST 3

r	7.5	cm
H	12.0	cm
time step	5	secs
H/r	1.60	
C	0.75	

Time (sec)	Level (cm)	Diff (cm)
0	**8.5**	
5	**20.5**	12.0
10	**31.5**	11.0
15	**42.7**	11.2
	Avg Diff (cm)	11.4
	q (cm^3/s)	21.3

METHOD 1 : Elrick and Reynolds (1992)

Ks (cm/s)	0.0145	Ks (cm/s)	0.0127	Ks (cm/s)	0.0153
Ks (m/day)	12.54	Ks (m/day)	10.98	Ks (m/day)	13.24
Average (m/day)	**12.25**				

METHOD 2 : Talsma and Hallam Method (recommended for low Ks only <2.9)

q (cm3/min)	588.4		829.4	cm3/min	1277.7	cm3/min
r (cm)	7.5		7.5	cm	7.5	cm
H (cm)	6.0		9.0	cm	12.0	cm
$0.5\sinh^{-1}(H/2r)$	0.20		0.28		0.37	
-sqrt((r/H)^2+0.25)	-1.35		-0.97		-0.80	
r/H	1.25		0.83		0.63	
Sum	0.10		0.15		0.19	
Sum*4.4*q	255.61		532.51		1073.47	
$2*pi*H^2$	226.19		508.94		904.78	
Ksat (cm/min)	1.1		1.0		1.2	
Ksat (m/day)	16.27		15.07		17.08	
Average (m/day)	**16.14**					

Borehole Permeameter : Field Result Analysis

hyd2o HYDROLOGY

Project/Site	H21003 : Wattle Grove HTS2	
Location	405413	mE
	6457705	mN

TEST 1

r	7.5	cm
H	10.0	cm
time step	5	secs
H/r	1.33	
C	0.66	

Time (sec)	Level (cm)	Diff (cm)
0	**4.9**	
5	**35.5**	30.6
10	**47.0**	11.5
		21.1
q (cm^3/s)		39.3

TEST 2

r	7.5	cm
H	8.0	cm
time step	5	secs
H/r	1.07	
C	0.56	

Time (sec)	Level (cm)	Diff (cm)
0	**6.5**	
5	**25.5**	19.0
10	**36.5**	11.0
Avg Diff (cm)		15.0
q (cm^3/s)		28.0

TEST 3

r	7.5	cm
H	9.0	cm
time step	5	secs
H/r	1.20	
C	0.56	

Time (sec)	Level (cm)	Diff (cm)
0	**5.1**	
5	**31.0**	25.9
10	**45.0**	14.0
Avg Diff (cm)		20.0
q (cm^3/s)		37.3

METHOD 1 : Elrick and Reynolds (1992)

Ks (cm/s)	0.0346	Ks (cm/s)	0.0312	Ks (cm/s)	0.0343
Ks (m/day)	29.93	Ks (m/day)	27.00	Ks (m/day)	29.59

Average (m/day) **28.84**

METHOD 2 : Talsma and Hallam Method (recommended for low Ks only <2.9)

q (cm3/min)	2359.3		1681.2	cm3/min	2236.0	cm3/min
r (cm)	7.5		7.5	cm	7.5	cm
H (cm)	10.0		8.0	cm	9.0	cm
$0.5\sinh^{-1}(H/2r)$	0.31		0.26		0.28	
-sqrt((r/H)^2+0.25)	-0.90		-1.06		-0.97	
r/H	0.75		0.94		0.83	
Sum	0.16		0.13		0.15	
Sum*4.4*q	1673.23		964.70		1435.62	
$2*pi*H^2$	628.32		402.12		508.94	
Ksat (cm/min)	2.7		2.4		2.8	
Ksat (m/day)	38.35		34.55		40.62	

Average (m/day) **37.84**

Borehole Permeameter : Field Result Analysis

hyd2o HYDROLOGY

Project/Site	H21003 : Wattle Grove HTS3	
Location	405368	mE
	6458072	mN

TEST 1

r	7.5	cm
H	6.0	cm
time step	5	secs
H/r	0.80	
C	0.45	

Time (sec)	Level (cm)	Diff (cm)
0	**6.8**	
5	**22.0**	15.2
10	**33.9**	11.9
15	**45.4**	11.5
20	**45.4**	0.0
25	**47.0**	1.6
		8.0
	q (cm^3/s)	15.0

TEST 2

r	7.5	cm
H	8.0	cm
time step	5	secs
H/r	1.07	
C	0.56	

Time (sec)	Level (cm)	Diff (cm)
0	**4.0**	
5	**17.0**	13.0
10	**30.0**	13.0
15	**46.0**	16.0
	Avg Diff (cm)	14.0
	q (cm^3/s)	26.2

TEST 3

r	7.5	cm
H	8.0	cm
time step	5	secs
H/r	1.07	
C	0.56	

Time (sec)	Level (cm)	Diff (cm)
0	**5.2**	
5	**18.0**	12.8
10	**31.5**	13.5
15	**44.6**	13.1
20	**47.0**	2.4
	Avg Diff (cm)	10.5
	q (cm^3/s)	19.5

METHOD 1 : Elrick and Reynolds (1992)

Ks (cm/s)	0.0222	Ks (cm/s)	0.0292	Ks (cm/s)	0.0218
Ks (m/day)	19.20	Ks (m/day)	25.20	Ks (m/day)	18.81
Average (m/day)	**21.07**				

METHOD 2 : Talsma and Hallam Method (recommended for low Ks only <2.9)

q (cm3/min)	901.1		1569.1 cm3/min		1171.2 cm3/min
r (cm)	7.5		7.5 cm		7.5 cm
H (cm)	6.0		8.0 cm		8.0 cm
$0.5\sinh^{-1}(H/2r)$	0.20		0.26		0.26
-sqrt((r/H)^2+0.25)	-1.35		-1.06		-1.06
r/H	1.25		0.94		0.94
Sum	0.10		0.13		0.13
Sum*4.4*q	391.44		900.39		672.07
$2*pi*H^2$	226.19		402.12		402.12
Ksat (cm/min)	1.7		2.2		1.7
Ksat (m/day)	24.92		32.24		24.07
Average (m/day)	**27.08**				

APPENDIX E

Tabulated Monitoring Program Data

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
1	Surface Water Site 7	30/06/2009	SW7	Endemic				12.80	1.300	6.45		3.10	1.800	1.300	0.048	1.300		0.28	0.180																
2	Surface Water Site 7	11/08/2009	SW7	Endemic				14.40	1.900	7.36		3.60	3.400	0.226	0.019	0.220		0.30	0.170																
3	Surface Water Site 2	11/08/2009	SW2	Endemic				16.40	1.334	7.30		5.20	1.900	3.389	0.013	3.400		0.17	0.025																
4	Surface Water Site 7	18/08/2009	SW7	Endemic					0.560	7.00		2.10	1.900	0.203	0.009	0.210		0.18	0.023	0.0040	0.0001	0.0010	0.0020	0.0010	0.0001	0.0050	0.0120								
5	Surface Water Site 2	18/08/2009	SW2	Endemic					0.440	7.30		3.30	2.400	0.881	0.015	0.900		0.63	0.510	0.0030	0.0001	0.0010	0.0020	0.0010	0.0001	0.0050	0.0300								
6	Endemic Bore 3	1/09/2009	GW3	Endemic		1.17	8.48																												
7	Endemic Bore 5	1/09/2009	GW5	Endemic		0.87	18.54																												
8	Endemic Bore 8	1/09/2009	GW8	Endemic		3.11	21.50																												
9	Endemic Bore 12	1/09/2009	GW12	Endemic		0.49	8.90																												
10	Endemic Bore 3	9/09/2009	GW3	Endemic				15.90	0.525	7.11		0.76	0.750	0.010	0.011	0.015		0.07	0.005	0.0500	0.0010	0.0020	0.0020	0.0170	0.0003	0.0050	0.0050								
11	Endemic Bore 5	9/09/2009	GW5	Endemic				16.40	0.653	7.23		3.80	3.800	0.010	0.005	0.015		0.07	0.005	0.0500	0.0010	0.0430	0.0170	0.0170	0.0005	0.0140	0.0050								
12	Endemic Bore 8	10/09/2009	GW8	Endemic				18.30	0.240	7.30		2.30	2.000	0.361	0.018	0.380		0.22	0.005	0.0500	0.0034	0.7400	0.1800	0.0680	0.0006	0.0890	0.3600								
13	Endemic Bore 12	9/09/2009	GW12	Endemic				15.50	8.830	7.39		3.90	3.900	0.010	0.005	0.005		0.99	0.680	0.0500	0.0010	0.0150	0.0130	0.0100	0.0004	0.0020	0.1400								
14	Surface Water Site 7	11/09/2009	SW7	Endemic				15.00	1.050	7.45		1.90	1.800	0.068	0.005	0.066		0.18	0.037	0.0020	0.0001	0.0060	0.0130	0.0010	0.0001	0.0140	0.0440								
15	Surface Water Site 2	11/09/2009	SW2	Endemic				17.00	0.796	7.87		2.30	1.600	0.768	0.005	0.770		0.27	0.150	0.0030	0.0001	0.0060	0.0160	0.0010	0.0001	0.0050	0.0540								
16	Surface Water Site 7	16/09/2009	SW7	Endemic				20.10	1.264	7.90		2.20	2.200	0.113	0.006			0.18	0.088																
17	Surface Water Site 2	16/09/2009	SW2	Endemic				16.80	1.058	7.81		4.00	4.000	2.431	0.007			0.14	0.090																
18	Endemic Bore 3	1/10/2009	GW3	Endemic		1.17	8.48																												
19	Endemic Bore 5	1/10/2009	GW5	Endemic		1.07	18.34																												
20	Endemic Bore 8	1/10/2009	GW8	Endemic		3.26	21.35																												
21	Endemic Bore 12	1/10/2009	GW12	Endemic		0.74	8.65																												
22	Endemic Bore 3	1/11/2009	GW3	Endemic		1.57	8.08																												
23	Endemic Bore 5	1/11/2009	GW5	Endemic		1.47	17.94																												
24	Endemic Bore 8	1/11/2009	GW8	Endemic		3.56	21.05																												
25	Endemic Bore 12	1/11/2009	GW12	Endemic		1.29	8.10																												
26	Surface Water Site 7	19/11/2009	SW7	Endemic				26.20	3.480	7.83		3.00	1.900	1.175	0.026	1.200		0.10	0.016																
27	Endemic Bore 3	25/11/2009	GW3	Endemic				20.60	2.258	7.25		1.20	1.200	0.045	0.100			0.17	0.081	0.0010	0.0001	0.0060	0.0070	0.0440	0.0001	0.0090	0.0850								
28	Endemic Bore 5	25/11/2009	GW5	Endemic				22.00	0.421	7.79		3.10	3.000	0.045	0.100			0.05	0.005	0.0130	0.0006	1.2000	0.4100	0.1900	0.0001	0.4200	1.1000								
29	Endemic Bore 8	25/11/2009	GW8	Endemic				21.60	0.148	7.55		2.80	2.400	0.248	0.100			0.09	0.160	0.0050	0.0001	1.0000	0.3800	0.0360	0.0001	0.9800	0.6100								
30	Endemic Bore 12	25/11/2009	GW12	Endemic				19.90	26.600	7.68		2.70	2.600	0.010	0.100			1.40	0.005	0.0190	0.0001	1.7000	0.4800	0.0880	0.0001	0.2000	1.9000								
31	Surface Water Site 7	14/06/2010	SW7	Endemic				11.80	1.534	7.79		1.20	1.200	0.010	0.010	0.010		0.19	0.120																
32	Endemic Bore 3	24/06/2010	GW3	Endemic				16.30	0.824	7.73			9.000	7.550	0.010	7.550		0.05	0.010	0.0002	0.0001	0.0010	0.0030	0.0001	0.0001	0.0040	0.0010								
33	Endemic Bore 5	24/06/2010	GW5	Endemic				15.50	0.783	7.27			2.800	0.580	0.010	0.580		0.10	0.010	0.0010	0.0001	0.0020	0.0050	0.0001	0.0001	0.0170	0.0010								
34	Endemic Bore 12	24/06/2010	GW12	Endemic				16.90	7.230	8.18			2.600	0.540	0.010	0.540		0.52	0.070	0.0050	0.0001	0.0020	0.0180	0.0010	0.0001	0.0260	0.0100								
35	Endemic Bore 3	1/07/2010	GW3	Endemic		1.87	7.78																												
36	Endemic Bore 5	1/07/2010	GW5	Endemic		1.57	17.84																												
37	Endemic Bore 8	1/07/2010	GW8	Endemic		4.05	20.56																												
38	Endemic Bore 12	1/07/2010	GW12	Endemic		2.64	6.75																												
39	Surface Water Site 7	9/07/2010	SW7	Endemic				12.00	0.477	7.01		1.50	1.300	0.220	0.010	0.220		0.12	0.090	0.0010	0.0001	0.0010	0.0030	0.0010	0.0001	0.0010	0.0120								
40	Surface Water Site 2	9/07/2010	SW2	Endemic				13.00	0.036	6.81		0.40	0.300	0.110	0.020	0.130		0.07	0.020	0.0010	0.0001	0.0020	0.0080	0.0050	0.0001	0.0010	0.0310								
41	Surface Water Site 7	13/07/2010	SW7	Endemic				12.60	0.750	7.89		1.90	1.700	0.160	0.010	0.160		0.13	0.030																
42	Surface Water Site 2	13/07/2010	SW2	Endemic				15.80	1.279	7.64		2.40	0.900	1.520	0.020	1.540		0.06	0.020																
43	Endemic Bore 3	1/08/2010	GW3	Endemic		1.42	8.23																												
44	Endemic Bore 5	1/08/2010	GW5	Endemic		1.27	18.14																												
45	Endemic Bore 8	1/08/2010	GW8	Endemic		3.73	20.88																												
46	Endemic Bore 12	1/08/2010	GW12	Endemic		1.79	7.60																												
47	Endemic Bore 3	1/09/2010	GW3	Endemic		1.47	8.18																												
48	Endemic Bore 5	1/09/2010	GW5	Endemic		1.37	18.04																												
49	Endemic Bore 8	1/09/2010	GW8	Endemic		3.90	20.71																												
50	Endemic Bore 12	1/09/2010	GW12	Endemic		1.74	7.65																												
51	Surface Water Site 7	1/09/2010	SW7	Endemic				18.70	2.815	7.37		1.40	1.400	0.010	0.010	0.010		0.14	0.150																
52	Surface Water Site 2	1/09/2010	SW2	Endemic				16.20	0.316	7.90		0.90	0.900	0.040	0.010	0.040		0.05	0.020																
53	Endemic Bore 3	23/09/2010	GW3	Endemic				18.20	5.530	7.38		1.20	1.100	0.060	0.010	0.060		0.08	0.010	0.0010	0.0001	0.0050	0.0050	0.0030	0.0001	0.0030	0.0340								
54	Endemic Bore 5	23/09/2010	GW5	Endemic				18.20	4.900	7.16		6.20	1.700	4.500	0.010	4.500		0.12	0.010	0.0020	0.0001	0.0140	0.0070	0.0080	0.0001	0.0050	0.2990								
55	Endemic Bore 12	23/09/2010	GW12	Endemic				16.70	2.076	7.24																									
56	Endemic Bore 3	1/10/2010	GW3	Endemic		1.67	7.98																												
57	Endemic Bore 5	1/10/2010	GW5	Endemic		1.57	17.84																												
58	Endemic Bore 8	1/10/2010	GW8	Endemic		4.21	20.40																												

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
59	Endemic Bore 12	1/10/2010	GW12	Endemic		1.79	7.60																										
60	Endemic Bore 3	1/11/2010	GW3	Endemic		1.92	7.73																										
61	Endemic Bore 5	1/11/2010	GW5	Endemic		1.77	17.64																										
62	Endemic Bore 8	1/11/2010	GW8	Endemic		4.46	20.15																										
63	Endemic Bore 12	1/11/2010	GW12	Endemic		2.09	7.30																										
64	Endemic Bore 3	1/12/2010	GW3	Endemic		2.07	7.58																										
65	Endemic Bore 5	1/12/2010	GW5	Endemic		1.77	17.64																										
66	Endemic Bore 8	1/12/2010	GW8	Endemic		4.65	19.96																										
67	Endemic Bore 12	1/12/2010	GW12	Endemic		2.49	6.90																										
68	Endemic Bore 3	15/12/2010	GW3	Endemic				26.00	20.100	8.17																							
69	Endemic Bore 12	15/12/2010	GW12	Endemic				25.00	20.980	6.98		8.40	8.300	0.050	0.020	0.080		1.50	0.090														
70	Endemic Bore 3	1/06/2011	GW3	Endemic		1.22	8.43																										
71	Endemic Bore 5	1/06/2011	GW5	Endemic		1.42	17.99																										
72	Endemic Bore 8	1/06/2011	GW8	Endemic		4.36	20.25																										
73	Endemic Bore 12	1/06/2011	GW12	Endemic		0.64	8.75																										
74	Endemic Bore 3	1/07/2011	GW3	Endemic		1.17	8.48																										
75	Endemic Bore 5	1/07/2011	GW5	Endemic		0.72	18.69																										
76	Endemic Bore 8	1/07/2011	GW8	Endemic		3.26	21.35																										
77	Endemic Bore 12	1/07/2011	GW12	Endemic		0.59	8.80																										
78	Endemic Bore 3	1/08/2011	GW3	Endemic		0.87	8.78																										
79	Endemic Bore 5	1/08/2011	GW5	Endemic		0.67	18.74																										
80	Endemic Bore 8	1/08/2011	GW8	Endemic		3.11	21.50																										
81	Endemic Bore 12	1/08/2011	GW12	Endemic		0.49	8.90																										
82	Endemic Bore 3	1/09/2011	GW3	Endemic		1.02	8.63																										
83	Endemic Bore 5	1/09/2011	GW5	Endemic		0.67	18.74																										
84	Endemic Bore 8	1/09/2011	GW8	Endemic		3.41	21.20																										
85	Endemic Bore 12	1/09/2011	GW12	Endemic		0.49	8.90																										
86	Endemic Bore 3	1/10/2011	GW3	Endemic		1.07	8.58																										
87	Endemic Bore 5	1/10/2011	GW5	Endemic		0.82	18.59																										
88	Endemic Bore 8	1/10/2011	GW8	Endemic		3.48	21.13																										
89	Endemic Bore 12	1/10/2011	GW12	Endemic		0.59	8.80																										
90	Endemic Bore 3	1/11/2011	GW3	Endemic		1.37	8.28																										
91	Endemic Bore 5	1/11/2011	GW5	Endemic		0.92	18.49																										
92	Endemic Bore 8	1/11/2011	GW8	Endemic		3.76	20.85																										
93	Endemic Bore 12	1/11/2011	GW12	Endemic		1.09	8.30																										
94	Surface Water Site 2	20/08/2019	SW2	Urbaqua				18.50	1.542	8.41	122.0	1.70	0.700	0.940	0.030	0.970		0.16	0.020														
95	Surface Water Site 2	3/09/2019	SW2	Urbaqua				17.60	1.130	7.86	82.0	1.60	0.800	0.840	0.010	0.840		0.18	0.030														
96	Surface Water Site 2	17/09/2019	SW2	Urbaqua				22.10	1.405	9.01	152.0	2.30	1.400	0.970	0.010	0.980		0.09	0.010														
97	Surface Water Site 2	1/10/2019	SW2	Urbaqua				24.30	1.325	8.11	148.0	2.10	0.600	1.500	0.030	1.500		0.15	0.010														
98	Surface Water Site 2	10/07/2020	SW2	Urbaqua				17.50	1.438	8.08	137.0	2.90	1.200	1.700	0.010	1.700		0.08	0.010														
99	Surface Water Site 2	24/07/2020	SW2	Urbaqua				17.50	1.684	7.35	113.0	3.90	0.400	3.500	0.030	3.500		0.16	0.010														
100	Surface Water Site 2	7/08/2020	SW2	Urbaqua				14.10	1.617	7.04	82.0	2.80	0.600	2.200	0.030	2.200		0.21	0.010														
101	Surface Water Site 2	21/08/2020	SW2	Urbaqua				16.90	1.743	7.60	132.0	3.30	0.400	2.900	0.010	2.900		0.13	0.020														
102	Surface Water Site 2	4/09/2020	SW2	Urbaqua				18.60	1.812	7.46	107.0	2.20	0.700	1.500	0.010	1.500		0.05	0.010														
103	Surface Water Site 2	25/09/2020	SW2	Urbaqua				18.20	1.575	7.37	107.0	2.00	1.200	0.810	0.010	0.820		0.06	0.010														
104	Surface Water Site 2	6/05/2021	SW2	ASM and SO					0.240	6.80		1.20	0.800	0.310	0.013	0.320	0.042	0.05	0.022	0.0010	0.0001	0.0010	0.0060	0.0010	0.0001	0.0010	0.0470						
105	Surface Water Site 4	6/05/2021	SW4	ASM and SO					0.033	6.40		1.20	1.200	0.014	0.005	0.014	0.012	0.15	0.078	0.0010	0.0001	0.0010	0.1000	0.0030	0.0001	0.0060	0.0780						
106	Hyd2o Bore Wattle Grove 1	28/05/2021	WG1	GR and SO		16.40	15.70	21.00	0.289	5.46	73.4	5.50	0.700	4.700	0.005	4.800	0.005	0.12	0.005	0.0010	0.0001	0.0010	0.0050	0.0010	0.0001	0.0050	0.0190						
107	Hyd2o Bore Wattle Grove 2 (Deep)	28/05/2021	WG2	GR and SO		10.01	16.11	21.10	1.279	5.45	61.2	5.20	0.900	4.300	0.005	4.300	0.017	0.09	0.005	0.0010	0.0001	0.0010	0.0100	0.0010	0.0001	0.0120	0.0310						
108	Hyd2o Bore Wattle Grove 3	28/05/2021	WG3	GR and SO		7.98	14.99	21.70	5.233	5.55	32.8	1.70	1.500	0.210	0.005	0.210	0.110	0.20	0.047	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0190	0.0300						
109	Unknown Origin Bore	28/05/2021	Mba	GR and SO	dry	4.51	16.10																										
110	Douglas Partners Bore 1	28/05/2021	MBb	GR and SO	dry	15.70	16.20																										
111	Urbaqua Bore 1	28/05/2021	GW1	GR and SO	dry	8.73	14.76																										
112	Endemic Bore 5	28/05/2021	GW5	GR and SO	dry	1.70	17.71																										
113	Hyd2o Bore Wattle Grove 1	5/07/2021	WG1	GR and SO		16.14	15.96																										
114	Hyd2o Bore Wattle Grove 2 (Deep)	5/07/2021	WG2	GR and SO		9.66	16.46																										
115	Hyd2o Bore Wattle Grove 3	5/07/2021	WG3	GR and SO		7.65	15.32																										
116	Unknown Origin Bore	5/07/2021	MBa	GR and SO		2.42	18.19																										

FieldDAE
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below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
117	Urbaqua Bore 1	5/07/2021	GW1	GR and SO		8.28	15.21																										
118	Endemic Bore 5	5/07/2021	GW5	GR and SO		0.86	18.55																										
119	DWER Bore 1	5/07/2021	SCC 05/08	GR and SO		19.68	22.10																										
120	DWER Bore 2	5/07/2021	SCC 06/08	GR and SO		1.56	5.91																										
121	DWER Bore 3	5/07/2021	SCC 09/08	GR and SO		4.78	8.43																										
122	Surface Water Site 1	5/07/2021	SW1	GR and SO				13.30	0.167	8.19	72.5	0.30	0.300	0.012	0.005	0.017	0.016	0.05	0.005	0.0010	0.0001	0.0010	0.0030	0.0010	0.0001	0.0010	0.0100							
123	Surface Water Site 2	5/07/2021	SW2	GR and SO				15.30	0.844	7.18	70.7	5.40	1.300	4.100	0.010	4.100	0.022	0.17	0.140	0.0010	0.0001	0.0010	0.0060	0.0010	0.0001	0.0010	0.0190							
124	Surface Water Site 4	5/07/2021	SW4	GR and SO				13.60	0.123	7.74	72.6	0.60	0.500	0.022	0.005	0.025	0.011	0.06	0.026	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0040							
125	Surface Water Site 6	5/07/2021	SW6	GR and SO				14.80	0.215	7.34	73.0	1.30	1.100	0.240	0.005	0.240	0.006	0.05	0.005	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0010	0.0080							
126	Surface Water Site 7	5/07/2021	SW7	GR and SO				14.00	0.278	7.48	69.7	1.60	1.400	0.200	0.005	0.200	0.007	0.08	0.065	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0010	0.0120							
127	Surface Water Site 5	5/07/2021	SW5	GR and SO				13.40	0.188	7.43	85.5	1.20	1.200	0.005	0.005	0.005	0.007	0.05	0.005	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0010	0.0080							
128	Surface Water Site 9	5/07/2021	SW9	GR and SO				13.90	0.452	7.27	69.0	2.60	1.600	1.100	0.011	1.100	0.009	0.32	0.320	0.0030	0.0001	0.0010	0.0040	0.0010	0.0001	0.0010	0.0130							
129	Surface Water Site 1	27/07/2021	SW1	GR and SO				14.10	0.352	7.60	75.6	0.90	0.800	0.017	0.005	0.017	0.011	0.05	0.005	0.0020	0.0001	0.0010	0.0040	0.0010	0.0001	0.0010	0.0170							
130	Surface Water Site 2	27/07/2021	SW2	GR and SO				14.20	0.690	7.09	68.2	18.00	13.000	5.400	0.007	5.400	0.032	0.43	0.310	0.0030	0.0001	0.0010	0.0060	0.0010	0.0001	0.0010	0.0360							
131	Surface Water Site 3	27/07/2021	SW3	GR and SO				14.80	0.227	7.38	59.4	2.80	2.100	0.640	0.076	0.720	0.770	5.60	0.170	0.0020	0.0001	0.0010	0.0050	0.0010	0.0001	0.0010	0.0150							
132	Surface Water Site 4	27/07/2021	SW4	GR and SO				14.20	0.213	7.50	62.9	0.30	0.300	0.005	0.005	0.005	0.005	0.09	0.021	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0060							
133	Surface Water Site 5	27/07/2021	SW5	GR and SO				13.90	0.211	6.83	61.7	1.50	1.500	0.005	0.005	0.005	0.011	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0020	0.0250							
134	Surface Water Site 6	27/07/2021	SW6	GR and SO				14.10	0.736	5.67	57.5	1.20	1.000	0.210	0.005	0.210	0.500	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0060	0.0410							
135	Surface Water Site 7	27/07/2021	SW7	GR and SO				13.80	0.319	7.13	60.0	1.80	1.700	0.050	0.005	0.051	0.020	0.16	0.073	0.0020	0.0001	0.0010	0.0030	0.0010	0.0001	0.0020	0.0190							
136	Surface Water Site 8	27/07/2021	SW8	GR and SO				13.80	0.349	7.26	56.0	2.00	1.900	0.120	0.005	0.120	0.027	0.19	0.093	0.0020	0.0001	0.0010	0.0020	0.0010	0.0001	0.0020	0.0150							
137	Surface Water Site 9	27/07/2021	SW9	GR and SO				13.90	0.483	7.18	54.2	2.00	1.700	0.320	0.010	0.330	0.031	0.23	0.150	0.0020	0.0001	0.0010	0.0030	0.0010	0.0001	0.0020	0.0170							
138	Hyd2o Bore Wattle Grove 1	5/08/2021	WG1	GR		15.80	16.30																										
139	Hyd2o Bore Wattle Grove 2 (Deep)	5/08/2021	WG2	GR		8.90	17.22																										
140	Hyd2o Bore Wattle Grove 3	5/08/2021	WG3	GR		6.88	16.09																										
141	Unknown Origin Bore	5/08/2021	MBa	GR		1.66	18.95																										
142	Douglas Partners Bore 1	5/08/2021	MBb	GR		14.78	17.12																										
143	Urbaqua Bore 1	5/08/2021	GW1	GR		5.01	18.48																										
144	Endemic Bore 5	5/08/2021	GW5	GR		0.95	18.46																										
145	DWER Bore 1	5/08/2021	SCC 05/08	GR		19.56	22.22																										
146	DWER Bore 3	5/08/2021	SCC 09/08	GR		2.25	10.96																										
147	Hyd2o Bore Wattle Grove 1	23/08/2021	WG1	SO and GR		15.59	16.51	19.10	0.638	6.08	89.5	3.60	0.800	2.800	0.005	2.800	0.009	0.40	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0030	0.0070							
148	Hyd2o Bore Wattle Grove 2 (Deep)	23/08/2021	WG2	SO and GR		8.63	17.49	19.10	1.643	6.19	83.8	4.40	0.500	4.000	0.005	4.000	0.026	0.10	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0100	0.0250							
149	Hyd2o Bore Wattle Grove 3	23/08/2021	WG3	SO and GR		5.60	17.37	18.10	2.524	5.79	60.1	0.70	0.700	0.007	0.005	0.008	0.032	0.36	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0100	0.0120							
150	Unknown Origin Bore	23/08/2021	MBa	SO and GR		1.71	18.90																										
151	Douglas Partners Bore 1	23/08/2021	MBb	SO and GR		14.87	17.03	20.00	0.682	6.75	73.0	0.50	0.500	0.005	0.005	0.005	0.110	0.06	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0130	0.0170							
152	Urbaqua Bore 1	23/08/2021	GW1	SO and GR		5.71	17.78	19.50	0.327	6.68	76.0	2.90	0.300	2.500	0.005	2.500	0.005	0.06	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0040							
153	Endemic Bore 5	23/08/2021	GW5	SO and GR		1.14	18.27	17.50	0.679	6.69	44.9	1.30	1.300	0.029	0.005	0.029	0.041	0.15	0.007	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0110	0.0030							
154	Endemic Bore 3	23/08/2021	GW3	SO and GR		1.12	8.53	18.00	0.277	7.44	46.8	1.40	1.400	0.034	0.005	0.039	0.062	0.23	0.042	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0020	0.0170							
155	DWER Bore 1	23/08/2021	SCC 05/08	SO and GR		19.35	22.43																										
156	DWER Bore 3	23/08/2021	SCC 09/08	SO and GR		1.92	11.29																										
157	Surface Water Site 2	9/09/2021	SW2	GR				16.20	1.143	7.93	102.4	1.90	1.100	0.750	0.011	0.760	0.089	0.26	0.048	0.0010	0.0001	0.0010	0.0040	0.0010	0.0001	0.0010	0.0170							
158	Surface Water Site 3	9/09/2021	SW3	GR				13.90	0.309	7.55	70.4	1.10	1.000	0.073	0.024	0.097	0.200	2.90	0.100	0.0010	0.0001	0.0010	0.0050	0.0010	0.0001	0.0010	0.0110							
159	Surface Water Site 4	9/09/2021	SW4	GR				14.10	0.312	7.77	56.3	0.30	0.300	0.005	0.005	0.005	0.005	0.05	0.025	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0010	0.0110							
160	Surface Water Site 5	9/09/2021	SW5	GR				14.30	0.245	7.89	70.7	1.40	1.400	0.005	0.005	0.005	0.016	0.13	0.007	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0010	0.0050							
161	Surface Water Site 6	9/09/2021	SW6	GR				12.60	0.543	7.46	54.4	1.40	1.400	0.035	0.005	0.036	0.450	0.05	0.005	0.0010	0.0001	0.0010	0.0030	0.0010	0.0001	0.0020	0.0320							
162	Surface Water Site 7	9/09/2021	SW7	GR				12.30	5.200	4.40	56.8	3.50	3.500	0.028	0.005	0.031	2.700	0.05	0.005	0.0010	0.0003	0.0020	0.0040	0.0010	0.0001	0.0190	0.3600							
163	Surface Water Site 8	9/09/2021	SW8	GR				13.60	0.923	7.61	56.4	3.10	3.100	0.005	0.005	0.005	0.015	0.27	0.180	0.0020	0.0001	0.0010	0.0030	0.0010	0.0001	0.0020	0.0099							
164	Surface Water Site 9	9/09/2021	SW9	GR				13.30	1.112	7.20	55.9	3.40	3.400	0.005	0.005	0.005	0.015	0.31	0.200	0.0030	0.0001	0.0010	0.0020	0.0010	0.0001	0.0030	0.0110							
165	Hyd2o Bore Wattle Grove 1	24/09/2021	WG1	GR		15.63	16.47																										
166	Hyd2o Bore Wattle Grove 2 (Deep)	24/09/2021	WG2	GR		8.36	17.76																										
167	Hyd2o Bore Wattle Grove 3	24/09/2021	WG3	GR		5.43	17.54																										
168	Unknown Origin Bore	24/09/2021	MBa	GR		1.78	18.83																										
169	Douglas Partners Bore 1	24/09/2021	MBb	GR		14.72	17.18																										
170	Urbaqua Bore 1	24/09/2021	GW1	GR		5.70	17.79																										
171	Endemic Bore 5	24/09/2021	GW5	GR		1.36	18.05																										
172	DWER Bore 1	24/09/2021	SCC 05/08	GR		19.08	22.70																										
173	DWER Bore 3	24/09/2021	SCC 09/08	GR		2.05	11.16																										
174	Endemic Bore 3	24/09/2021	GW3	GR		1.29	8.36																										

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
175	Hyd2o Bore Wattle Grove 1	28/10/2021	WG1	GR&SO		15.49	16.61																										
176	Hyd2o Bore Wattle Grove 2 (Deep)	28/10/2021	WG2	GR&SO		8.26	17.86																										
177	Hyd2o Bore Wattle Grove 3	28/10/2021	WG3	GR&SO		5.31	17.66																										
178	Unknown Origin Bore	28/10/2021	MBa	GR&SO		1.65	18.96																										
179	Douglas Partners Bore 1	28/10/2021	MBb	GR&SO		14.53	17.37																										
180	Urbaqua Bore 1	28/10/2021	GW1	GR&SO		5.89	17.60																										
181	Endemic Bore 3	28/10/2021	GW3	GR&SO		1.25	8.40																										
182	Endemic Bore 5	28/10/2021	GW5	GR&SO		1.20	18.21																										
183	DWER Bore 1	28/10/2021	SCC 05/08	GR&SO		18.93	22.85																										
184	Hyd2o Bore Wattle Grove 1	18/11/2021	WG1	GR&SO		15.44	16.66	21.10	0.660	5.84	53.0	4.50	0.500	4.000	0.005	4.000	0.018	0.30	0.005	0.0010	0.0001	0.0010	0.0060	0.0010	0.0001	0.0020	0.0260							
185	Hyd2o Bore Wattle Grove 2 (Deep)	18/11/2021	WG2	GR&SO		8.34	17.78	20.50	1.300	6.10	28.5	2.70	0.700	2.000	0.006	2.000	0.079	0.15	0.018	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0050	0.0440							
186	Hyd2o Bore Wattle Grove 3	18/11/2021	WG3	GR&SO		5.48	17.49	19.00	1.990	6.41	61.8	0.90	0.900	0.025	0.005	0.026	0.011	0.05	0.006	0.0010	0.0001	0.0010	0.0040	0.0010	0.0001	0.0080	0.0380							
187	Unknown Origin Bore	18/11/2021	MBa	GR&SO		1.88	18.73																										
188	Douglas Partners Bore 1	18/11/2021	MBb	GR&SO		14.43	17.47	21.70	0.491	6.19	20.1	0.70	0.700	0.027	0.005	0.028	0.200	0.12	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0050	0.0160							
189	Urbaqua Bore 1	18/11/2021	GW1	GR&SO		5.65	17.84	20.40	0.272	2.28	27.2	2.80	0.800	1.900	0.005	1.900	0.012	0.08	0.013	0.0010	0.0001	0.0010	0.0040	0.0010	0.0001	0.0010	0.0160							
190	Endemic Bore 3	18/11/2021	GW3	GR&SO		1.37	8.28	21.10	4.920	7.13	23.6	1.40	1.400	0.024	0.005	0.027	0.089	0.30	0.062	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0020	0.0190							
191	Endemic Bore 5	18/11/2021	GW5	GR&SO		1.53	17.88	20.60	1.630	7.04	12.8	1.80	1.800	0.005	0.005	0.005	0.075	0.72	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0060	0.0040							
192	Endemic Bore 12	18/11/2021	GW12	GR&SO		1.10	8.29																										
193	DWER Bore 1	18/11/2021	SCC 05/08	GR&SO		18.88	22.90																										
194	Hyd2o Bore Wattle Grove 1	10/12/2021	WG1	GR		15.48	16.62																										
195	Hyd2o Bore Wattle Grove 2 (Deep)	10/12/2021	WG2	GR		8.28	17.84																										
196	Hyd2o Bore Wattle Grove 3	10/12/2021	WG3	GR		5.76	17.21																										
197	Unknown Origin Bore	10/12/2021	MBa	GR		2.38	18.23																										
198	Douglas Partners Bore 1	10/12/2021	MBb	GR		14.36	17.54																										
199	Urbaqua Bore 1	10/12/2021	GW1	GR		6.62	16.87																										
200	Endemic Bore 3	10/12/2021	GW3	GR		1.60	8.05																										
201	Endemic Bore 5	10/12/2021	GW5	GR		1.75	17.66																										
202	Endemic Bore 12	10/12/2021	GW12	GR		1.50	7.89																										
203	DWER Bore 1	14/12/2021	SCC 05/08	GR&SO		18.89	22.89																										
204	DWER Bore 3	14/12/2021	SCC 09/08	GR&SO		2.90	10.31																										
205	Hyd2o Bore Wattle Grove 1	2/02/2022	WG1	GR		15.77	16.33																										
206	Hyd2o Bore Wattle Grove 2 (Deep)	2/02/2022	WG2	GR		9.52	16.60																										
207	Hyd2o Bore Wattle Grove 3	2/02/2022	WG3	GR		6.73	16.24																										
208	Unknown Origin Bore	2/02/2022	MBa	GR		4.11	16.50																										
209	Douglas Partners Bore 1	2/02/2022	MBb	GR		14.61	17.29																										
210	Urbaqua Bore 1	2/02/2022	GW1	GR		8.41	15.08																										
211	Endemic Bore 3	2/02/2022	GW3	GR		1.80	7.85																										
212	Endemic Bore 5	2/02/2022	GW5	GR		1.86	17.55																										
213	DWER Bore 1	2/02/2022	SCC 05/08	GR		19.12	22.66																										
214	DWER Bore 3	2/02/2022	SCC 09/08	GR		4.58	8.63																										
215	Hyd2o Bore Wattle Grove 1	1/03/2022	WG1	SO&SS		15.94	16.16	25.80	0.382	6.02	57.4	5.30	1.600	3.700	0.007	3.700	0.025	0.36	0.018	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0020							
216	Hyd2o Bore Wattle Grove 2 (Deep)	1/03/2022	WG2	SO&SS																													
217	Hyd2o Bore Wattle Grove 3	1/03/2022	WG3	SO&SS		7.45	15.52	22.20	8.413	6.01	43.6	0.90	0.900	0.005	0.005	0.050	0.031	0.18	0.005	0.0020	0.0001	0.0010	0.0010	0.0010	0.0001	0.0100	0.0160	0.20						
218	Unknown Origin Bore	1/03/2022	MBa	SO&SS		4.58	16.03																										
219	Douglas Partners Bore 1	1/03/2022	MBb	SO&SS		14.75	17.15	24.20	0.971	6.75	75.2	0.80	0.800	0.026	0.005	0.027	0.380	0.05	0.006	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0040	0.0100	0.10						
220	Urbaqua Bore 1	1/03/2022	GW1	SO&SS	Dry	8.80	14.69																										
221	Endemic Bore 3	1/03/2022	GW3	SO&SS	Dry	1.80	7.85																										
222	Endemic Bore 5	1/03/2022	GW5	SO&SS	Dry	1.76	17.65																										
223	Endemic Bore 12	1/03/2022	GW12	SO&SS	Dry	2.67	6.72																										
224	DWER Bore 1	1/03/2022	SCC 05/08	SO&SS		19.24	22.54																										
225	DWER Bore 2	1/03/2022	SCC 06/08	SO&SS		2.87	4.60																										
226	DWER Bore 3	1/03/2022	SCC 09/08	SO&SS		4.97	8.24																										
227	Hyd2o Bore Wattle Grove 1	31/03/2022	WG1	GR		16.06	16.04																										
228	Hyd2o Bore Wattle Grove 2 (Deep)	31/03/2022	WG2	GR		9.49	16.63		2.500	5.40		4.10	1.900	2.200	0.005	2.200	0.020	0.35	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0030	0.0150	0.10						
229	Hyd2o Bore Wattle Grove 3	31/03/2022	WG3	GR		7.67	15.30																										
230	Unknown Origin Bore	31/03/2022	MBa	GR		4.58	16.03																										
231	Douglas Partners Bore 1	31/03/2022	MBb	GR		14.91	16.99																										
232	Urbaqua Bore 1	31/03/2022	GW1	GR	Dry	8.80	14.69																										

FieldDAE
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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
233	Endemic Bore 3	31/03/2022	GW3	GR	Dry	1.80	7.85																											
234	Endemic Bore 5	31/03/2022	GW5	GR	Dry	1.76	17.65																											
235	Endemic Bore 12	31/03/2022	GW12	GR	Dry	2.84	6.55																											
236	DWER Bore 1	31/03/2022	SCC 05/08	GR		19.32	22.46																											
237	DWER Bore 2	31/03/2022	SCC 06/08	GR		2.93	4.54																											
238	DWER Bore 3	31/03/2022	SCC 09/08	GR		5.22	7.99																											
239	Hyd2o Bore Wattle Grove 1	29/04/2022	WG1	GR		16.13	15.97																											
240	Hyd2o Bore Wattle Grove 2 (Deep)	29/04/2022	WG2	GR		9.50	16.62																											
241	Hyd2o Bore Wattle Grove 3	29/04/2022	WG3	GR		7.70	15.27																											
242	Unknown Origin Bore	29/04/2022	MBa	GR		4.48	16.13																											
243	Douglas Partners Bore 1	29/04/2022	MBb	GR		15.04	16.86																											
244	Urbaqua Bore 1	29/04/2022	GW1	GR	Dry	8.80	14.69																											
245	Endemic Bore 3	29/04/2022	GW3	GR	Dry	1.80	7.85																											
246	Endemic Bore 5	29/04/2022	GW5	GR	Dry	1.76	17.65																											
247	Endemic Bore 12	29/04/2022	GW12	GR	Dry	2.84	6.55																											
248	DWER Bore 1	29/04/2022	SCC 05/08	GR		19.40	22.38																											
249	DWER Bore 2	29/04/2022	SCC 06/08	GR	Construction - new grass near bore	2.75	4.72																											
250	DWER Bore 3	29/04/2022	SCC 09/08	GR		5.40	7.10																											
251	Hyd2o Bore Wattle Grove 1	30/05/2022	WG1	GR & SO		16.06	16.04	18.40	0.570	6.02	38.2	4.70	0.700	4.000	0.005	4.000	0.033	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0040							
252	Hyd2o Bore Wattle Grove 2 (Deep)	30/05/2022	WG2	GR & SO		9.36	16.76	16.30	2.197	6.37	22.4	5.20	3.000	2.200	0.013	2.200	0.059	0.60	0.005	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0100	0.0330	0.10						
253	Hyd2o Bore Wattle Grove 3	30/05/2022	WG3	GR & SO		7.48	15.49	18.60	4.840	5.69	14.9	1.10	0.900	0.210	0.005	0.210	0.048	0.06	0.020	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0150	0.0080	0.10						
254	Unknown Origin Bore	30/05/2022	MBa	GR & SO		2.62	17.99																											
255	Douglas Partners Bore 1	30/05/2022	MBb	GR & SO		15.13	16.77	18.10	1.645	6.15	8.8	4.60	4.600	0.005	0.005	0.005	3.400	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0120	0.0130	0.10						
256	Urbaqua Bore 1	30/05/2022	GW1	GR & SO		8.80	14.69																											
257	Endemic Bore 3	30/05/2022	GW3	GR & SO		1.80	7.85																											
258	Endemic Bore 5	30/05/2022	GW5	GR & SO		1.55	17.86	19.60	1.506	6.52	55.3	3.40	2.500	0.930	0.005	0.930	0.012	0.05	0.005	0.0010	0.0001	0.0010	0.0040	0.0010	0.0001	0.0100	0.0040	0.10						
259	Endemic Bore 12	30/05/2022	GW12	GR & SO		1.88	7.51																											
260	DWER Bore 1	30/05/2022	SCC 05/08	GR & SO		19.43	22.35																											
261	DWER Bore 2	30/05/2022	SCC 06/08	GR & SO		2.21	5.26																											
262	DWER Bore 3	30/05/2022	SCC 09/08	GR & SO		4.97	8.24																											
263	Hyd2o Bore Wattle Grove 1	30/06/2022	WG1	GR		15.92	16.18																											
264	Hyd2o Bore Wattle Grove 2 (Deep)	30/06/2022	WG2	GR		9.25	16.87																											
265	Hyd2o Bore Wattle Grove 3	30/06/2022	WG3	GR		7.23	15.74																											
266	Unknown Origin Bore	30/06/2022	MBa	GR		2.70	17.91																											
267	Douglas Partners Bore 1	30/06/2022	MBb	GR		15.11	16.79																											
268	Urbaqua Bore 1	30/06/2022	GW1	GR		8.80	14.69																											
269	Endemic Bore 3	30/06/2022	GW3	GR		1.79	7.86																											
270	Endemic Bore 5	30/06/2022	GW5	GR		1.44	17.97																											
271	Endemic Bore 12	30/06/2022	GW12	GR		1.79	7.60																											
272	DWER Bore 1	30/06/2022	SCC 05/08	GR		19.37	22.41																											
273	DWER Bore 2	30/06/2022	SCC 06/08	GR		2.02	5.45																											
274	DWER Bore 3	30/06/2022	SCC 09/08	GR		4.60	8.61																											
275	Hyd2o Bore Wattle Grove 1	26/08/2022	WG1	ASM & SO		15.70	16.40																											
276	Hyd2o Bore Wattle Grove 2 Shallow	26/08/2022	WG2S	ASM & SO	Dry	3.51	22.50																											
277	Hyd2o Bore Wattle Grove 2 (Deep)	26/08/2022	WG2	ASM & SO		8.57	17.55																											
278	Hyd2o Bore Wattle Grove 3	26/08/2022	WG3	ASM & SO		5.84	17.13																											
279	Hyd2o Bore Wattle Grove 4 Shallow	26/08/2022	WG4S	ASM & SO		1.16	24.50																											
280	Hyd2o Bore Wattle Grove 4 Deep	26/08/2022	WG4D	ASM & SO		9.82	15.91																											
281	Hyd2o Bore Wattle Grove 5 Shallow	26/08/2022	WG5S	ASM & SO	Dry	5.81	29.33																											
282	Hyd2o Bore Wattle Grove 5 Deep	26/08/2022	WG5D	ASM & SO		18.78	16.35																											
283	Hyd2o Bore Wattle Grove 6	26/08/2022	WG6	ASM & SO		6.94	18.40																											
284	Hyd2o Bore Wattle Grove 7 Shallow	26/08/2022	WG7S	ASM & SO	Dry	3.68	19.82																											
285	Hyd2o Bore Wattle Grove 7 Deep	26/08/2022	WG7D	ASM & SO		5.67	17.77																											
286	Unknown Origin Bore	26/08/2022	Mba	ASM & SO		1.85	18.76																											
287	Douglas Partners Bore 1	26/08/2022	MBb	ASM & SO		14.70	17.20																											
288	Urbaqua Bore 1	26/08/2022	Gw1	ASM & SO		3.38	20.11																											
289	Endemic Bore 3	26/08/2022	GW3	ASM & SO		1.09	8.56																											
290	Endemic Bore 5	26/08/2022	GW5	ASM & SO		1.12	18.29																											

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
291	Hyd2o Deep Bore next to Endemic 5	26/08/2022	GW5D	ASM & SO		2.32	17.05																										
292	Endemic Bore 8	26/08/2022	GW8	ASM & SO		3.55	21.06																										
293	Hyd2o Deep Bore next to Endemic 8	26/08/2022	GW8D	ASM & SO		6.78	17.74																										
294	Hyd2o Bore Wetlands 9 Shallow	26/08/2022	GW9S	ASM & SO		2.11	19.70																										
295	Hyd2o Bore Wetlands 9 Deep	26/08/2022	GW9D	ASM & SO		2.35	19.43																										
296	Endemic Bore 12	26/08/2022	GW12	ASM & SO		0.60	8.79																										
297	DWER Bore 1	26/08/2022	SCC 05/08	ASM & SO		19.15	22.63																										
298	DWER Bore 2	26/08/2022	SCC 06/08	ASM & SO		1.43	6.55																										
299	DWER Bore 3	26/08/2022	SCC 09/08	ASM & SO		1.76	11.45																										
300	Hyd2o Bore Wattle Grove 1	10/10/2022	WG1	SO & BL		15.39	16.71			5.90		4.40	1.000	3.300	0.005	3.300	0.010	0.16	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0058		1.0	3.7	1.6	43	18	
301	Hyd2o Bore Wattle Grove 2 Shallow	6/10/2022	WG2S	SO & BL	Dry	3.53	22.48																										
302	Hyd2o Bore Wattle Grove 2 (Deep)	6/10/2022	WG2	SO & BL		8.18	17.94	21.20	1.964	5.46	27.3	0.89	0.260	0.620	0.005	0.620	0.005	0.06	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0044	0.0041		3.3	80.0	9.0	310	340	
303	Hyd2o Bore Wattle Grove 3	6/10/2022	WG3	SO & BL		5.13	17.84	20.20	2.843	5.76	17.6	0.65	0.650	0.005	0.005	0.005	0.005	0.05	0.005	0.0019	0.0001	0.0016	0.0010	0.0010	0.0001	0.0061	0.0053		30.0	54.0	20.0	520	300	
304	Hyd2o Bore Wattle Grove 4 Shallow	6/10/2022	WG4S	SO & BL		1.28	24.38	19.00	1.711	5.94	17.4	1.30	0.290	0.960	0.005	0.960	0.014	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0015	0.0024		35.0	54.0	10.0	260	310	
305	Hyd2o Bore Wattle Grove 4 Deep	6/10/2022	WG4D	SO & BL		9.50	16.23	19.30	0.786	6.29	33.6	1.60	0.480	1.200	0.005	1.200	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0017	0.0010	0.0001	0.0018	0.0089		59.0	21.0	7.8	64	230	
306	Hyd2o Bore Wattle Grove 5 Shallow	6/10/2022	WG5S	SO & BL	Dry	5.81	29.33																										
307	Hyd2o Bore Wattle Grove 5 Deep	6/10/2022	WG5D	SO & BL		18.56	16.57	19.50	0.799	6.02	74.1	15.00	2.700	13.000	0.005	13.000	0.005	0.06	0.005	0.0010	0.0001	0.0010	0.0016	0.0010	0.0001	0.0053	0.0300		5.6	17.0	4.4	120	83	
308	Hyd2o Bore Wattle Grove 6	6/10/2022	WG6	SO & BL		6.61	18.73	19.10	1.574	5.48	53.0	4.50	1.200	3.400	0.005	3.400	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0290	0.0001	0.0020	0.0022		9.6	42.0	9.2	240	200	
309	Hyd2o Bore Wattle Grove 7 Shallow	6/10/2022	WG7S	SO & BL	Dry	3.70	19.80																										
310	Hyd2o Bore Wattle Grove 7 Deep	6/10/2022	WG7D	SO & BL		5.83	17.61	21.50	0.249	5.42	17.5	1.70	0.720	1.000	0.005	1.000	0.005	0.05	0.034	0.0010	0.0001	0.0014	0.0021	0.0011	0.0001	0.0035	0.0010		3.8	6.7	3.8	29	37	
311	Unknown Origin Bore	6/10/2022	Mba	SO & BL		1.77	18.84																										
312	Douglas Partners Bore 1	6/10/2022	MBb	SO & BL		14.43	17.47	19.10	0.583	5.88	10.8	0.30	0.290	0.009	0.005	0.011	0.057	0.05	0.005	0.0012	0.0001	0.0010	0.0010	0.0010	0.0001	0.0055	0.0610		3.6	22.0	7.4	76	100	
313	Urbaqua Bore 1	6/10/2022	GW1	SO & BL		5.43	18.06	21.40	0.254	6.20	60.9	3.20	0.630	2.600	0.005	2.600	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0011		3.3	4.2	8.0	15	26	
314	Endemic Bore 3	6/10/2022	GW3	SO & BL		1.29	8.36	19.00	0.499	6.68	21.4	5.80	1.600	4.000	0.250	4.300	0.180	0.05	0.013	0.0010	0.0001	0.0010	0.0027	0.0010	0.0001	0.0010	0.0038		86.0	3.8	6.9	26	230	
315	Endemic Bore 5	6/10/2022	GW5	SO & BL		1.34	18.07	19.40	0.682	7.00	20.2	1.00	1.000	0.010	0.005	0.011	0.015	0.05	0.006	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0095	0.0010		97.0	6.9	8.5	46	270	
316	Hyd2o Deep Bore next to Endemic 5	6/10/2022	GW5D	SO & BL		2.35	17.02	18.90	0.636	4.84	13.0	0.44	0.440	0.005	0.005	0.005	0.130	0.05	0.005	0.0020	0.0001	0.0010	0.0010	0.0013	0.0001	0.0190	0.0041		18.0	14.0	8.0	82	100	
317	Endemic Bore 8	6/10/2022	GW8	SO & BL		3.95	20.66	19.40	0.198	6.45	19.8																						
318	Hyd2o Deep Bore next to Endemic 8	6/10/2022	GW8D	SO & BL		6.59	17.93	21.10	0.258	5.94	26.3	0.10	0.100	0.005	0.005	0.005	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0022	0.0035		1.7	4.4	1.3	37	23	
319	Hyd2o Bore Wetlands 9 Shallow	6/10/2022	GW9S	SO & BL		2.31	19.50	19.90	0.706	6.36	21.5	8.20	2.300	5.800	0.056	5.900	0.005	0.15	0.150	0.0056	0.0001	0.0010	0.0060	0.0010	0.0001	0.0091	0.0120		51.0	9.7	17.0	53	170	
320	Hyd2o Bore Wetlands 9 Deep	10/10/2022	GW9D	SO & BL		2.60	19.18			6.50		3.70	3.700	0.005	0.006	0.005	0.089	0.23	0.007	0.0013	0.0001	0.0010	0.0064	0.0010	0.0001	0.0260	0.0230		32.0	40.0	16.0	130	240	
321	Endemic Bore 12	6/10/2022	GW12	SO & BL		0.96	8.43																										
322	DWER Bore 1	6/10/2022	SCC 05/08	SO & BL		18.84	22.94																										
323	DWER Bore 2	6/10/2022	SCC 06/08	SO & BL		1.69	6.29																										
324	DWER Bore 3	6/10/2022	SCC 09/08	SO & BL		1.86	11.35																										
325	Hyd2o Bore Wattle Grove 1	27/10/2022	WG1	SO & BL		15.29	16.81																										
326	Hyd2o Bore Wattle Grove 2 Shallow	27/10/2022	WG2S	SO & BL	Dry	3.51	22.50																										
327	Hyd2o Bore Wattle Grove 2 (Deep)	27/10/2022	WG2	SO & BL		8.14	17.98																										
328	Hyd2o Bore Wattle Grove 3	27/10/2022	WG3	SO & BL		5.21	17.76																										
329	Hyd2o Bore Wattle Grove 4 Shallow	27/10/2022	WG4S	SO & BL		1.34	24.32																										
330	Hyd2o Bore Wattle Grove 4 Deep	27/10/2022	WG4D	SO & BL		9.36	16.37																										
331	Hyd2o Bore Wattle Grove 5 Shallow	27/10/2022	WG5S	SO & BL	Dry	5.81	29.33																										
332	Hyd2o Bore Wattle Grove 5 Deep	27/10/2022	WG5D	SO & BL		18.52	16.61																										
333	Hyd2o Bore Wattle Grove 6	27/10/2022	WG6	SO & BL		6.54	18.80																										
334	Hyd2o Bore Wattle Grove 7 Shallow	27/10/2022	WG7S	SO & BL	Dry	3.72	19.78																										
335	Hyd2o Bore Wattle Grove 7 Deep	27/10/2022	WG7D	SO & BL		6.01	17.43																										
336	Hyd2o Bore Wattle Grove 8	27/10/2022	WG8	SO & BL		25.13	16.64																										
337	Hyd2o Bore Wattle Grove 9	27/10/2022	WG9	SO & BL		4.35	19.51																										
338	Hyd2o Bore Wattle Grove 10 Shallow	27/10/2022	WG10S	SO & BL		3.13	20.47																										
339	Hyd2o Bore Wattle Grove 10 Deep	27/10/2022	WG10D	SO & BL		5.49	18.13																										
340	Unknown Origin Bore	27/10/2022	Mba	SO & BL		1.81	18.80																										
341	Douglas Partners Bore 1	27/10/2022	MBb	SO & BL		14.29	17.61																										
342	Urbaqua Bore 1	27/10/2022	GW1	SO & BL		5.59	17.90																										
343	Endemic Bore 3	27/10/2022	GW3	SO & BL		1.43	8.22																										
344	Endemic Bore 5	27/10/2022	GW5	SO & BL		1.51	17.90																										
345	Hyd2o Deep Bore next to Endemic 5	27/10/2022	GW5D	SO & BL		2.65	16.72																										
346	Endemic Bore 8	27/10/2022	GW8	SO & BL		4.10	20.51																										
347	Hyd2o Deep Bore next to Endemic 8	27/10/2022	GW8D	SO & BL		6.43	18.09																										
348	Hyd2o Bore Wetlands 9 Shallow	27/10/2022	GW9S	SO & BL		2.43	19.38																										

FieldDAE
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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
349	Hyd2o Bore Wetlands 9 Deep	27/10/2022	GW9D	SO & BL		2.68	19.10																										
350	Endemic Bore 12	27/10/2022	GW12	SO & BL		1.16	8.23																										
351	DWER Bore 1	27/10/2022	SCC 05/08	SO & BL		18.69	23.09																										
352	DWER Bore 2	27/10/2022	SCC 06/08	SO & BL		1.78	6.20																										
353	DWER Bore 3	27/10/2022	SCC 09/08	SO & BL		2.01	11.20																										
354	Hyd2o Bore Wattle Grove 1	23/11/2022	WG1	AFR & SO		15.31	16.79	25.80	0.380	5.51	46.9	4.10	1.100	3.000	0.005	3.000	0.030	0.11	0.005	0.0010	0.0001	0.0010	0.0027	0.0010	0.0001	0.0010	0.0079		2.0	6.4	3.7	71	32	
355	Hyd2o Bore Wattle Grove 2 Shallow	23/11/2022	WG2S	AFR & SO	Dry	3.51	22.50																										
356	Hyd2o Bore Wattle Grove 2 (Deep)	23/11/2022	WG2	AFR & SO		8.29	17.83	29.80	3.679	5.37	65.6	1.50	1.000	0.460	0.005	0.460	0.008	0.09	0.005	0.0010	0.0001	0.0010	0.0026	0.0010	0.0001	0.0063	0.0330		9.6	120.0	8.9	420	500	
357	Hyd2o Bore Wattle Grove 3	23/11/2022	WG3	AFR & SO		5.49	17.48	21.30	5.037	5.64	11.8	0.61	0.600	0.010	0.005	0.011	0.005	0.05	0.015	0.0018	0.0001	0.0010	0.0010	0.0010	0.0001	0.0041	0.0067		79.0	92.0	26.0	820	580	
358	Hyd2o Bore Wattle Grove 4 Shallow	23/11/2022	WG4S	AFR & SO		1.42	24.24	24.30	2.096	5.96	24.7	1.50	0.240	1.300	0.005	1.300	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0027	0.0160		35.0	53.0	9.7	270	300	
359	Hyd2o Bore Wattle Grove 4 Deep	23/11/2022	WG4D	AFR & SO		9.47	16.26	23.40	1.273	6.65	79.4	3.80	3.400	0.450	0.005	0.450	0.034	0.15	0.005	0.0010	0.0001	0.0088	0.0023	0.0011	0.0001	0.0032	0.0060		70.0	31.0	9.4	120	300	
360	Hyd2o Bore Wattle Grove 5 Shallow	23/11/2022	WG5S	AFR & SO	Dry	5.80	29.34																										
361	Hyd2o Bore Wattle Grove 5 Deep	23/11/2022	WG5D	AFR & SO		18.50	16.63	24.40	0.829	5.68	78.5	14.00	1.300	12.000	0.005	12.000	0.011	0.22	0.005	0.0010	0.0001	0.0025	0.0022	0.0010	0.0001	0.0017	0.0110		4.1	11.0	3.5	100	56	
362	Hyd2o Bore Wattle Grove 6	23/11/2022	WG6	AFR & SO		6.63	18.71	20.40	1.408	5.23	45.3	3.70	0.470	3.200	0.005	3.200	0.005	0.05	0.007	0.0010	0.0001	0.0010	0.0013	0.0300	0.0001	0.0010	0.0013		12.0	32.0	10.0	220	160	
363	Hyd2o Bore Wattle Grove 7 Shallow	23/11/2022	WG7S	AFR & SO	Dry	3.68	19.82																										
364	Hyd2o Bore Wattle Grove 7 Deep	23/11/2022	WG7D	AFR & SO		6.39	17.05	23.00	0.392	6.09	13.3	4.00	0.590	3.400	0.005	3.400	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0019	0.0010	0.0001	0.0018	0.0019		12.0	13.0	6.3	39	82	
365	Hyd2o Bore Wattle Grove 8	23/11/2022	WG8	AFR & SO		25.13	16.64	21.90	0.869	5.70	46.6	3.90	2.800	1.000	0.006	1.100	0.022	1.60	0.007	0.0010	0.0001	0.0058	0.0075	0.0056	0.0001	0.0044	0.0180		12.0	14.0	4.6	120	85	
366	Hyd2o Bore Wattle Grove 9	23/11/2022	WG9	AFR & SO		4.21	19.65	22.50	1.291	6.02	23.8	52.00	8.100	44.000	0.005	44.000	0.006	2.40	2.100	0.0010	0.0001	0.0020	0.0086	0.0052	0.0003	0.0045	0.0078		45.0	44.0	24.0	200	290	
367	Hyd2o Bore Wattle Grove 10 Shallow	23/11/2022	WG10S	AFR & SO	Dry	3.20	20.40																										
368	Hyd2o Bore Wattle Grove 10 Deep	23/11/2022	WG10D	AFR & SO		5.73	17.89	22.90	0.130	6.29	52.1	1.40	0.320	1.100	0.005	1.100	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0010		1.5	1.5	2.9	22	10	
369	Unknown Origin Bore	23/11/2022	Mba	AFR & SO		2.13	18.48																										
370	Douglas Partners Bore 1	23/11/2022	MBb	AFR & SO		14.24	17.66	30.20	2.199	5.93	54.4	1.20	1.200	0.016	0.005	0.018	0.160	0.06	0.005	0.0014	0.0001	0.0027	0.0047	0.0014	0.0001	0.0032	0.0140		3.0	29.0	6.9	100	130	
371	Urbaqua Bore 1	23/11/2022	Gw1	AFR & SO																													
372	Endemic Bore 3	23/11/2022	GW3	AFR & SO	Dry	1.53	8.12																										
373	Endemic Bore 5	23/11/2022	GW5	AFR & SO		1.56	17.85	23.20	0.632	6.89	31.8	1.00	0.980	0.020	0.005	0.020	0.039	0.05	0.009	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0041	0.0029		27.0	7.0	6.0	79	95	
374	Hyd2o Deep Bore next to Endemic 5	23/11/2022	GW5D	AFR & SO		3.22	16.15	22.40	0.582	4.46	11.0	0.58	0.580	0.005	0.005	0.005	0.160	0.05	0.005	0.0016	0.0001	0.0010	0.0010	0.0010	0.0001	0.0066	0.0025		13.0	11.0	6.8	74	78	
375	Endemic Bore 8	23/11/2022	GW8	AFR & SO	Water sitting at bottom	4.10	20.51																										
376	Hyd2o Deep Bore next to Endemic 8	23/11/2022	GW8D	AFR & SO		7.13	17.39	22.90	0.245	6.22	20.7	0.10	0.100	0.008	0.005	0.009	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0020	0.0018		4.0	4.0	2.8	37	27	
377	Hyd2o Bore Wetlands 9 Shallow	23/11/2022	GW9S	AFR & SO		2.55	19.26	23.10	0.631	6.58	18.6	3.80	1.500	2.300	0.023	2.300	0.016	0.16	0.078	0.0033	0.0001	0.0018	0.0041	0.0010	0.0001	0.0096	0.0110		51.0	14.0	18.0	52	190	
378	Hyd2o Bore Wetlands 9 Deep	23/11/2022	GW9D	AFR & SO		2.85	18.93	23.90	1.208	6.39	11.2	2.90	2.900	0.005	0.005	0.005	0.120	0.05	0.020	0.0015	0.0001	0.0011	0.0037	0.0010	0.0001	0.0280	0.0040		41.0	34.0	21.0	130	240	
379	Endemic Bore 12	23/11/2022	GW12	AFR & SO		1.28	8.11																										
380	DWER Bore 1	23/11/2022	SCC 05/08	AFR & SO		18.65	23.13																										
381	DWER Bore 2	23/11/2022	SCC 06/08	AFR & SO		1.96	6.02																										
382	DWER Bore 3	23/11/2022	SCC 09/08	AFR & SO		2.54	10.67																										
383	Hyd2o Bore Wattle Grove 1	20/12/2022	WG1	AFR		15.42	16.68																										
384	Hyd2o Bore Wattle Grove 2 Shallow	20/12/2022	WG2S	AFR	Dry	3.51	22.50																										
385	Hyd2o Bore Wattle Grove 2 (Deep)	20/12/2022	WG2	AFR		8.53	17.59																										
386	Hyd2o Bore Wattle Grove 3	20/12/2022	WG3	AFR		5.85	17.12																										
387	Hyd2o Bore Wattle Grove 4 Shallow	20/12/2022	WG4S	AFR		1.68	23.98																										
388	Hyd2o Bore Wattle Grove 4 Deep	20/12/2022	WG4D	AFR		9.60	16.13																										
389	Hyd2o Bore Wattle Grove 5 Shallow	20/12/2022	WG5S	AFR	Dry	5.80	29.34																										
390	Hyd2o Bore Wattle Grove 5 Deep	20/12/2022	WG5D	AFR		18.62	16.51																										
391	Hyd2o Bore Wattle Grove 6	20/12/2022	WG6	AFR		6.53	18.81																										
392	Hyd2o Bore Wattle Grove 7 Shallow	20/12/2022	WG7S	AFR	Dry	3.68	19.82																										
393	Hyd2o Bore Wattle Grove 7 Deep	20/12/2022	WG7D	AFR		6.89	16.55																										
394	Hyd2o Bore Wattle Grove 8	20/12/2022	WG8	AFR		25.18	16.59																										
395	Hyd2o Bore Wattle Grove 9	20/12/2022	WG9	AFR		4.28	19.58																										
396	Hyd2o Bore Wattle Grove 10 Shallow	20/12/2022	WG10S	AFR	Mud	3.21	20.39																										
397	Hyd2o Bore Wattle Grove 10 Deep	20/12/2022	WG10D	AFR		6.20	17.42																										
398	Unknown Origin Bore	20/12/2022	Mba	AFR		2.97	17.64																										
399	Douglas Partners Bore 1	20/12/2022	MBb	AFR		14.30	17.60																										
400	Urbaqua Bore 1	20/12/2022	GW1	AFR																													
401	Endemic Bore 3	20/12/2022	GW3	AFR	Dry	1.57	8.08																										
402	Endemic Bore 5	20/12/2022	GW5	AFR	Water sitting at bottom	1.75	17.66																										
403	Hyd2o Deep Bore next to Endemic 5	20/12/2022	GW5D	AFR		3.81	15.56																										
404	Endemic Bore 8	20/12/2022	GW8	AFR	Water sitting at bottom	4.14	20.47																										
405	Hyd2o Deep Bore next to Endemic 8	20/12/2022	GW8D	AFR		7.48	17.04																										
406	Hyd2o Bore Wetlands 9 Shallow	20/12/2022	GW9S	AFR		2.72	19.09																										

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC	GWL mAHD	T	EC	pH	DO	TN	TKN	NO3	NO2	Nox	NH3	TP	FRP	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn	Cl	Ca	Mg	K	Na	H as CaCO3	SiO2
						mBToC	mAHD	°C	mS/cm	pH	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
407	Hyd2o Bore Wetlands 9 Deep	20/12/2022	GW9D	AFR		3.08	18.70																											
408	Endemic Bore 12	20/12/2022	GW12	AFR		1.66	7.73																											
409	DWER Bore 1	20/12/2022	SCC 05/08	AFR		18.72	23.06																											
410	DWER Bore 2	20/12/2022	SCC 06/08	AFR		2.31	5.67																											
411	DWER Bore 3	20/12/2022	SCC 09/08	AFR		3.60	9.61																											
412	Hyd2o Bore Wattle Grove 1	23/01/2023	WG1	AFR		15.65	16.45	24.60	0.468	5.96	47.2	3.80	0.320	3.500	0.005	3.500	0.005	0.05	0.006	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0012	0.0036		1.0	4.1	1.6	39	19	
413	Hyd2o Bore Wattle Grove 2 Shallow	23/01/2023	WG2S	AFR	Dry	3.51	22.50																											
414	Hyd2o Bore Wattle Grove 2 (Deep)	23/01/2023	WG2	AFR		8.92	17.20	24.80	6.483	5.93	25.4	1.10	0.410	0.730	0.005	0.730	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0053	0.0140		6.2	140.0	11.0	500	580	
415	Hyd2o Bore Wattle Grove 3	23/01/2023	WG3	AFR		6.65	16.32	28.30	8.508	5.53	23.9	0.43	0.420	0.005	0.005	0.005	0.005	0.05	0.008	0.0011	0.0001	0.0011	0.0023	0.0010	0.0001	0.0053	0.0130		55.0	88.0	25.0	770	500	
416	Hyd2o Bore Wattle Grove 4 Shallow	23/01/2023	WG4S	AFR		1.96	23.70	36.30	3.622	6.95	-0.2	14.00	14.000	0.005	0.005	0.005	0.320	0.25	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0021	0.0038		27.0	53.0	7.5	300	280	
417	Hyd2o Bore Wattle Grove 4 Deep	23/01/2023	WG4D	AFR		9.82	15.91	22.70	0.356	6.63	23.1	0.34	0.330	0.005	0.005	0.005	0.021	0.05	0.005	0.0010	0.0001	0.0010	0.0014	0.0010	0.0001	0.0026	0.0087		65.0	39.0	12.0	250	320	
418	Hyd2o Bore Wattle Grove 5 Shallow	23/01/2023	WG5S	AFR	Dry	5.91	29.23																											
419	Hyd2o Bore Wattle Grove 5 Deep	23/01/2023	WG5D	AFR		18.79	16.34	24.20	1.564	5.74	35.1	15.00	1.700	13.000	0.005	13.000	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0063	0.0074		4.5	14.0	4.2	120	68	
420	Hyd2o Bore Wattle Grove 6	23/01/2023	WG6	AFR		6.90	18.44	28.90	2.677	5.75	42.7	3.70	0.280	3.400	0.005	3.400	0.005	0.05	0.014	0.0010	0.0001	0.0010	0.0021	0.0200	0.0001	0.0014	0.0024		14.0	32.0	11.0	210	170	
421	Hyd2o Bore Wattle Grove 7 Shallow	23/01/2023	WG7S	AFR	Dry	3.68	19.82																											
422	Hyd2o Bore Wattle Grove 7 Deep	23/01/2023	WG7D	AFR		7.61	15.83	30.80	0.820	6.18	16.5	1.10	0.100	1.100	0.005	1.100	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0014	0.0010	0.0001	0.0027	0.0012		6.6	8.9	4.4	51	53	
423	Hyd2o Bore Wattle Grove 8	23/01/2023	WG8	AFR		25.33	16.44	24.90	1.599	5.48	41.5	2.30	1.400	0.840	0.006	0.840	0.041	0.28	0.008	0.0010	0.0001	0.0010	0.0042	0.0010	0.0001	0.0075	0.0210		4.9	14.0	3.7	120	71	
424	Hyd2o Bore Wattle Grove 9	23/01/2023	WG9	AFR		4.27	19.59	27.50	2.056	6.65	16.2	42.00	4.700	38.000	0.011	38.000	0.005	3.70	2.900	0.0021	0.0001	0.0010	0.0120	0.0010	0.0001	0.0042	0.0040		26.0	33.0	16.0	110	200	
425	Hyd2o Bore Wattle Grove 10 Shallow	23/01/2023	WG10S	AFR	Mud	3.20	20.40																											
426	Hyd2o Bore Wattle Grove 10 Deep	23/01/2023	WG10D	AFR		7.78	15.84	29.30	0.567	6.31	55.2	2.50	0.340	2.200	0.005	2.200	0.005	0.05	0.006	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0013	0.0013		3.2	4.7	3.6	22	27	
427	Unknown Origin Bore	23/01/2023	Mba	AFR		4.08	16.53																											
428	Douglas Partners Bore 1	23/01/2023	MBb	AFR		14.40	17.50	31.80	1.311	6.11	23.8	0.45	0.440	0.010	0.005	0.010	0.480	0.09	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0077	0.0100		9.1	31.0	7.5	110	150	
429	Urbaqua Bore 1	23/01/2023	GW1	AFR																														
430	Endemic Bore 3	23/01/2023	GW3	AFR	Dry	1.57	8.08																											
431	Endemic Bore 5	23/01/2023	GW5	AFR	Dry	1.75	17.66																											
432	Hyd2o Deep Bore next to Endemic 5	23/01/2023	GW5D	AFR		4.40	14.97	30.20	1.136	4.58	15.6	5.50	5.500	0.005	0.005	0.005	0.180	0.42	0.008	0.0013	0.0001	0.0010	0.0010	0.0010	0.0001	0.0054	0.0036		11.0	13.0	6.4	73	79	
433	Endemic Bore 8	23/01/2023	GW8	AFR	Water sitting at bottom	4.14	20.47																											
434	Hyd2o Deep Bore next to Endemic 8	23/01/2023	GW8D	AFR		8.00	16.52	28.60	0.580	6.43	24.9	0.12	0.110	0.005	0.005	0.005	0.010	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0033	0.0031		1.7	3.5	2.9	38	18	
435	Hyd2o Bore Wetlands 9 Shallow	23/01/2023	GW9S	AFR		2.91	18.90	29.40	1.282	6.50	27.5	3.90	1.600	2.300	0.014	2.300	0.110	0.46	0.055	0.0057	0.0001	0.0010	0.0038	0.0010	0.0001	0.0230	0.0120		35.0	14.0	18.0	61		
436	Hyd2o Bore Wetlands 9 Deep	23/01/2023	GW9D	AFR		3.31	18.47	27.20	1.496	6.54	12.0	1.50	1.500	0.005	0.005	0.005	0.056	0.05	0.014	0.0010	0.0001	0.0010	0.0054	0.0010	0.0001	0.0270	0.0039		26.0	21.0	23.0	79		
437	Endemic Bore 12	23/01/2023	GW12	AFR		2.18	7.21																											
438	DWER Bore 1	23/01/2023	SCC 05/08	AFR		18.85	22.93																											
439	DWER Bore 2	23/01/2023	SCC 06/08	AFR		2.55	5.43																											
440	DWER Bore 3	23/01/2023	SCC 09/08	AFR		4.52	8.69																											
441	Hyd2o Bore Wattle Grove 1	23/02/2023	WG1	AFR		15.85	16.25	25.60	0.341	5.34	61.8			3.500			0.005		0.005	0.0010									40	0.5	4.1	1.3	34	18	
442	Hyd2o Bore Wattle Grove 2 Shallow	23/02/2023	WG2S	AFR	Dry	3.51	22.50																											
443	Hyd2o Bore Wattle Grove 2 (Deep)	23/02/2023	WG2	AFR		9.20	16.92	22.10	3.627	5.12	32.4			0.810			0.005		0.005	0.0010									1200	4.2	140.0	11.0	490	570	
444	Hyd2o Bore Wattle Grove 3	23/02/2023	WG3	AFR		7.29	15.68	26.10	9.532	5.70	18.9			0.005			0.007		0.025	0.0019									3100	110.0	200.0	40.0	1500	1100	
445	Hyd2o Bore Wattle Grove 4 Shallow	23/02/2023	WG4S	AFR		2.24	23.42	29.00	2.251	5.59	15.3			0.005			0.055		0.005	0.0010									480	39.0	59.0	13.0	310	340	
446	Hyd2o Bore Wattle Grove 4 Deep	23/02/2023	WG4D	AFR		9.91	15.82	31.20	0.423	5.88	55.4			0.400			0.005		0.005	0.0010									320	43.0	37.0	11.0	220	260	
447	Hyd2o Bore Wattle Grove 5 Shallow	23/02/2023	WG5S	AFR	Dry	5.91	29.23																											
448	Hyd2o Bore Wattle Grove 5 Deep	23/02/2023	WG5D	AFR		18.95	16.18	26.00	0.918	6.55	70.8			12.000			0.019		0.005	0.0010									200	3.7	14.0	3.6	120	67	
449	Hyd2o Bore Wattle Grove 6	23/02/2023	WG6	AFR		7.28	18.06	21.20	1.354	5.21	57.6			3.300			0.005		0.034	0.0010									390	8.5	31.0	9.7	200	150	
450	Hyd2o Bore Wattle Grove 7 Shallow	23/02/2023	WG7S	AFR	Dry	3.68	19.82																											
451	Hyd2o Bore Wattle Grove 7 Deep	23/02/2023	WG7D	AFR		8.07	15.37	24.80	0.938	5.97	21.8			4.400			0.005		0.005	0.0010									190	17.0	18.0	5.1	130	120	
452	Hyd2o Bore Wattle Grove 8	23/02/2023	WG8	AFR		25.47	16.30	21.40	0.795	5.36	39.7			0.910			0.005		0.007	0.0010									230	4.2	14.0	3.6	120	69	
453	Hyd2o Bore Wattle Grove 9	23/02/2023	WG9	AFR		4.38	19.48	24.80	0.948	5.89	16.8			26.000			0.005		2.200	0.0011									180	31.0	32.0	34.0	97	210	
454	Hyd2o Bore Wattle Grove 10 Shallow	23/02/2023	WG10S	AFR	Dry	3.21	20.39																											
455	Hyd2o Bore Wattle Grove 10 Deep	23/02/2023	WG10D	AFR	Mud	9.02	14.60																											
456	Unknown Origin Bore	23/02/2023	Mba	AFR		4.67	15.94																											
457	Douglas Partners Bore 1	23/02/2023	MBb	AFR		14.64	17.26	27.00	0.968	6.03	10.6			0.050			0.300		0.005	0.0010									130	8.9	33.0	8.2	100	160	
458	Urbaqua Bore 1	23/02/2023	GW1	AFR																														
459	Endemic Bore 3	23/02/2023	GW3	AFR	Dry	1.57	8.08																											
460	Endemic Bore 5	23/02/2023	GW5	AFR	Dry	1.75	17.66																											
461	Hyd2o Deep Bore next to Endemic 5	23/02/2023	GW5D	AFR		4.61	14.76	25.30	0.626	4.49	11.9			0.005			0.160		0.005	0.0010									66	11.0	10.0	6.6	73	68	
462	Endemic Bore 8	23/02/2023	GW8	AFR	Dry	4.18	20.43																											
463	Hyd2o Deep Bore next to Endemic 8	23/02/2023	GW8D	AFR		8.17	16.35	28.10	0.323	6.33	22.5			0.005			0.010		0.005	0.0010									59	3.2	4.5	3.0	36	26	
464	Hyd2o Bore Wetlands 9 Shallow	23/02/2023	GW9S	AFR		3.06	18.75	27.90	0.893	6.40	13.0			2.100			0.110		0.180	0.0054									110	31.0	9.5	18.0	53	120	

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
465	Hyd2o Bore Wetlands 9 Deep	23/02/2023	GW9D	AFR		3.46	18.32	27.10	0.633	6.37	10.7			0.050			0.046		0.009	0.0012								100	20.0	14.0	19.0	62	110	
466	Endemic Bore 12	23/02/2023	GW12	AFR		2.62	6.77																											
467	DWER Bore 1	23/02/2023	SCC 05/08	AFR		19.00	22.78																											
468	DWER Bore 2	23/02/2023	SCC 06/08	AFR		2.75	5.23																											
469	DWER Bore 3	23/02/2023	SCC 09/08	AFR		5.21	8.00																											
470	Hyd2o Bore Wattle Grove 1	22/03/2023	WG1	AFR		16.00	16.10	22.90	0.198	5.20	51.6	4.90	1.700	3.100	0.005	3.100	0.010	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0025	0.0001	0.0010	0.0029		0.9	5.4	1.7	40	24	
471	Hyd2o Bore Wattle Grove 2 Shallow	22/03/2023	WG2S	AFR	Dry	3.51	22.50																											
472	Hyd2o Bore Wattle Grove 2 (Deep)	22/03/2023	WG2	AFR		9.36	16.76	23.90	4.195	5.01	15.4	1.60	1.200	0.400	0.005	0.400	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0037	0.0150		6.2	160.0	12.0	590	680	
473	Hyd2o Bore Wattle Grove 3	22/03/2023	WG3	AFR		7.70	15.27	28.10	9.528	5.83	26.3	1.30	1.300	0.015	0.005	0.012	0.011	0.05	0.005	0.0012	0.0001	0.0010	0.0010	0.0013	0.0001	0.0082	0.0014		130.0	210.0	43.0	1600	1200	
474	Hyd2o Bore Wattle Grove 4 Shallow	22/03/2023	WG4S	AFR		2.37	23.29	31.60	2.396	5.75	30.3																							
475	Hyd2o Bore Wattle Grove 4 Deep	22/03/2023	WG4D	AFR		10.44	15.29	24.90	1.636	5.56	35.2	1.10	0.780	0.300	0.005	0.300	0.008	0.06	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0015	0.0080		46.0	49.0	13.0	280	320	
476	Hyd2o Bore Wattle Grove 5 Shallow	22/03/2023	WG5S	AFR	Dry	5.91	29.23																											
477	Hyd2o Bore Wattle Grove 5 Deep	22/03/2023	WG5D	AFR		19.07	16.06	23.30	0.766	5.37	50.8	16.00	1.800	14.000	0.005	14.000	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0036	0.0001	0.0024	0.0056		2.5	13.0	3.2	110	59	
478	Hyd2o Bore Wattle Grove 6	22/03/2023	WG6	AFR		7.33	18.01	26.80	1.359	5.36	53.4	4.40	1.100	3.300	0.005	3.300	0.005	0.05	0.028	0.0010	0.0001	0.0010	0.0014	0.0200	0.0001	0.0017	0.0015		7.2	31.0	9.3	190	150	
479	Hyd2o Bore Wattle Grove 7 Shallow	22/03/2023	WG7S	AFR	Dry	3.68	19.82																											
480	Hyd2o Bore Wattle Grove 7 Deep	22/03/2023	WG7D	AFR		8.50	14.94	28.10	1.021	6.01	36.6	5.50	1.200	4.300	0.005	4.300	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0014	0.0010	0.0001	0.0018	0.0016		16.0	21.0	4.8	130	130	
481	Hyd2o Bore Wattle Grove 8	22/03/2023	WG8	AFR		25.57	16.20	22.70	0.839	5.13	22.8	1.50	0.510	0.990	0.005	0.990	0.005	0.79	0.007	0.0010	0.0001	0.0010	0.0033	0.0010	0.0001	0.0120	0.0230		2.7	16.0	3.6	120	74	
482	Hyd2o Bore Wattle Grove 9	22/03/2023	WG9	AFR		4.23	19.63	26.50	0.777	5.88	15.4	43.00	11.000	32.000	0.050	32.000	0.050	2.40	2.300	0.0014	0.0001	0.0032	0.0190	0.0010	0.0001	0.0080	0.0036		30.0	26.0	35.0	81	180	
483	Hyd2o Bore Wattle Grove 10 Shallow	22/03/2023	WG10S	AFR	Dry	3.21	20.39																											
484	Hyd2o Bore Wattle Grove 10 Deep	22/03/2023	WG10D	AFR	Mud	9.02	14.60																											
485	Unknown Origin Bore	22/03/2023	Mba	AFR		5.30	15.31																											
486	Douglas Partners Bore 1	22/03/2023	MBb	AFR		14.78	17.12	22.80	0.848	6.17	16.6	3.10	3.100	0.008	0.005	0.009	1.900	0.05	0.005	0.0011	0.0001	0.0010	0.0010	0.0010	0.0001	0.0048	0.0110		22.0	42.0	9.2	85	230	
487	Urbaqua Bore 1	22/03/2023	GW1	AFR																														
488	Endemic Bore 3	22/03/2023	GW3	AFR	Dry	1.57	8.08																											
489	Endemic Bore 5	22/03/2023	GW5	AFR	Dry	1.75	17.66																											
490	Hyd2o Deep Bore next to Endemic 5	22/03/2023	GW5D	AFR		4.81	14.56	28.00	0.653	4.39	18.3	1.10	1.100	0.005	0.005	0.005	0.150	0.06	0.005	0.0010	0.0001	0.0010	0.0010	0.0021	0.0001	0.0100	0.0062		13.0	12.0	7.0	82	83	
491	Endemic Bore 8	22/03/2023	GW8	AFR	Dry	4.18	20.43																											
492	Hyd2o Deep Bore next to Endemic 8	22/03/2023	GW8D	AFR		8.50	16.02	25.60	0.236	5.92	34.3	0.38	0.380	0.006	0.005	0.006	0.008	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0042	0.0048		2.9	3.9	2.8	37	23	
493	Hyd2o Bore Wetlands 9 Shallow	22/03/2023	GW9S	AFR		3.16	18.65	31.30	0.845	6.44	24.7	3.40	2.200	1.100	0.080	1.200	0.084	0.27	0.200	0.0059	0.0001	0.0010	0.0030	0.0010	0.0001	0.0140	0.0075		38.0	12.0	19.0	71	140	
494	Hyd2o Bore Wetlands 9 Deep	22/03/2023	GW9D	AFR		3.58	18.20	29.30	0.646	6.56	17.6	2.00	2.000	0.050	0.050	0.050	0.082	0.07	0.056	0.0062	0.0001	0.0023	0.0017	0.0010	0.0001	0.0350	0.0140		21.0	15.0	19.0	64	120	
495	Endemic Bore 12	22/03/2023	GW12	AFR	Dry	2.82	6.57																											
496	DWER Bore 1	22/03/2023	SCC 05/08	AFR		19.12	22.66																											
497	DWER Bore 2	22/03/2023	SCC 06/08	AFR		2.96	5.02																											
498	DWER Bore 3	22/03/2023	SCC 09/08	AFR		5.49	7.72																											
499	Hyd2o Bore Wattle Grove 1	19/04/2023	WG1	AFR		15.99	16.11																											
500	Hyd2o Bore Wattle Grove 2 Shallow	19/04/2023	WG2S	AFR	Dry	3.51	22.50																											
501	Hyd2o Bore Wattle Grove 2 (Deep)	19/04/2023	WG2	AFR		9.26	16.86																											
502	Hyd2o Bore Wattle Grove 3	19/04/2023	WG3	AFR		7.50	15.47																											
503	Hyd2o Bore Wattle Grove 4 Shallow	19/04/2023	WG4S	AFR		2.20	23.46																											
504	Hyd2o Bore Wattle Grove 4 Deep	19/04/2023	WG4D	AFR		9.89	15.84																											
505	Hyd2o Bore Wattle Grove 5 Shallow	19/04/2023	WG5S	AFR	Dry	5.91	29.23																											
506	Hyd2o Bore Wattle Grove 5 Deep	19/04/2023	WG5D	AFR		19.05	16.08																											
507	Hyd2o Bore Wattle Grove 6	19/04/2023	WG6	AFR		7.12	18.22																											
508	Hyd2o Bore Wattle Grove 7 Shallow	19/04/2023	WG7S	AFR	Dry	3.68	19.82																											
509	Hyd2o Bore Wattle Grove 7 Deep	19/04/2023	WG7D	AFR		8.41	15.03																											
510	Hyd2o Bore Wattle Grove 8	19/04/2023	WG8	AFR		25.56	16.21																											
511	Hyd2o Bore Wattle Grove 9	19/04/2023	WG9	AFR		4.18	19.68																											
512	Hyd2o Bore Wattle Grove 10 Shallow	19/04/2023	WG10S	AFR	Dry	3.21	20.39																											
513	Hyd2o Bore Wattle Grove 10 Deep	19/04/2023	WG10D	AFR	Dry	8.99	14.63																											
514	Unknown Origin Bore	19/04/2023	Mba	AFR	Blocked																													
515	Douglas Partners Bore 1	19/04/2023	MBb	AFR		14.92	16.98																											
516	Urbaqua Bore 1	19/04/2023	GW1	AFR																														
517	Endemic Bore 3	19/04/2023	GW3	AFR	Dry	1.57	8.08																											
518	Endemic Bore 5	19/04/2023	GW5	AFR	Dry	1.75	17.66																											
519	Hyd2o Deep Bore next to Endemic 5	19/04/2023	GW5D	AFR		4.92	14.45																											
520	Endemic Bore 8	19/04/2023	GW8	AFR	Dry	4.18	20.43																											
521	Hyd2o Deep Bore next to Endemic 8	19/04/2023	GW8D	AFR		8.31	16.21																											
522	Hyd2o Bore Wetlands 9 Shallow	19/04/2023	GW9S	AFR		3.07	18.74																											

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
523	Hyd2o Bore Wetlands 9 Deep	19/04/2023	GW9D	AFR		3.44	18.34																											
524	Endemic Bore 12	19/04/2023	GW12	AFR		2.41	6.98																											
525	DWER Bore 1	19/04/2023	SCC 05/08	AFR		19.19	22.59																											
526	DWER Bore 2	19/04/2023	SCC 06/08	AFR		2.52	5.46																											
527	DWER Bore 3	19/04/2023	SCC 09/08	AFR		5.34	7.87																											
528	Hyd2o Bore Wattle Grove 1	17/05/2023	WG1	AFR		15.96	16.14																											
529	Hyd2o Bore Wattle Grove 2 Shallow	17/05/2023	WG2S	AFR	Dry	3.51	22.50																											
530	Hyd2o Bore Wattle Grove 2 (Deep)	17/05/2023	WG2	AFR		9.20	16.92																											
531	Hyd2o Bore Wattle Grove 3	17/05/2023	WG3	AFR		7.47	15.50																											
532	Hyd2o Bore Wattle Grove 4 Shallow	17/05/2023	WG4S	AFR		2.28	23.38																											
533	Hyd2o Bore Wattle Grove 4 Deep	17/05/2023	WG4D	AFR		9.87	15.86																											
534	Hyd2o Bore Wattle Grove 5 Shallow	17/05/2023	WG5S	AFR	Dry	5.91	29.23																											
535	Hyd2o Bore Wattle Grove 5 Deep	17/05/2023	WG5D	AFR		18.99	16.14																											
536	Hyd2o Bore Wattle Grove 6	17/05/2023	WG6	AFR		7.49	17.85																											
537	Hyd2o Bore Wattle Grove 7 Shallow	17/05/2023	WG7S	AFR	Dry	3.68	19.82																											
538	Hyd2o Bore Wattle Grove 7 Deep	17/05/2023	WG7D	AFR		8.23	15.21																											
539	Hyd2o Bore Wattle Grove 8	17/05/2023	WG8	AFR		25.53	16.24																											
540	Hyd2o Bore Wattle Grove 9	17/05/2023	WG9	AFR		4.64	19.22																											
541	Hyd2o Bore Wattle Grove 10 Shallow	17/05/2023	WG10S	AFR	Dry	3.21	20.39																											
542	Hyd2o Bore Wattle Grove 10 Deep	17/05/2023	WG10D	AFR	Mud	8.99	14.63																											
543	Unknown Origin Bore	17/05/2023	Mba	AFR	Blocked																													
544	Douglas Partners Bore 1	17/05/2023	MBb	AFR		14.90	17.00																											
545	Urbaqua Bore 1	17/05/2023	GW1	AFR																														
546	Endemic Bore 3	17/05/2023	GW3	AFR	Dry	1.57	8.08																											
547	Endemic Bore 5	17/05/2023	GW5	AFR	Dry	1.75	17.66																											
548	Hyd2o Deep Bore next to Endemic 5	17/05/2023	GW5D	AFR		5.01	14.36																											
549	Endemic Bore 8	17/05/2023	GW8	AFR	Dry	4.18	20.43																											
550	Hyd2o Deep Bore next to Endemic 8	17/05/2023	GW8D	AFR		8.23	16.29																											
551	Hyd2o Bore Wetlands 9 Shallow	17/05/2023	GW9S	AFR		3.10	18.71																											
552	Hyd2o Bore Wetlands 9 Deep	17/05/2023	GW9D	AFR		3.45	18.33																											
553	Endemic Bore 12	17/05/2023	GW12	AFR		2.72	6.67																											
554	DWER Bore 1	17/05/2023	SCC 05/08	AFR		19.21	22.57																											
555	DWER Bore 2	17/05/2023	SCC 06/08	AFR		2.45	5.53																											
556	DWER Bore 3	17/05/2023	SCC 09/08	AFR		5.33	7.88																											
557	Hyd2o Bore Wattle Grove 1	15/06/2023	WG1	AFR		15.91	16.19	18.30	0.352	5.32	35.0	4.20	0.790	3.400	0.005	3.400	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0023	0.0001	0.0010	0.0058		0.8	4.5	1.6	52	21	
558	Hyd2o Bore Wattle Grove 2 Shallow	15/06/2023	WG2S	AFR	Dry	3.51	22.50																											
559	Hyd2o Bore Wattle Grove 2 (Deep)	15/06/2023	WG2	AFR		9.06	17.06	19.40	3.176	5.17	29.9	2.20	0.200	2.000	0.006	2.100	0.013	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0025	0.0024		5.4	100.0	10.0	340	440	
560	Hyd2o Bore Wattle Grove 3	15/06/2023	WG3	AFR		7.14	15.83	18.80	8.698	6.06	19.0	1.30	1.300	0.005	0.005	0.005	0.200	0.08	0.005	0.0016	0.0001	0.0010	0.0010	0.0021	0.0001	0.0012	0.0026		93.0	150.0	33.0	1200	860	
561	Hyd2o Bore Wattle Grove 4 Shallow	15/06/2023	WG4S	AFR		1.37	24.29	18.20	2.247	5.61	22.7	0.37	0.160	0.200	0.005	0.210	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0012	0.0030		42.0	62.0	11.0	270	360	
562	Hyd2o Bore Wattle Grove 4 Deep	15/06/2023	WG4D	AFR		9.37	16.36	18.40	1.909	5.82	29.7	9.20	1.200	8.100	0.005	8.100	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0055	0.0061		67.0	47.0	11.0	240	360	
563	Hyd2o Bore Wattle Grove 5 Shallow	15/06/2023	WG5S	AFR	Dry	5.91	29.23																											
564	Hyd2o Bore Wattle Grove 5 Deep	15/06/2023	WG5D	AFR		18.94	16.19	18.60	0.680	5.29	57.7	17.00	2.700	14.000	0.005	14.000	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0026	0.0001	0.0028	0.0130		3.6	15.0	3.5	120	70	
565	Hyd2o Bore Wattle Grove 6	15/06/2023	WG6	AFR		7.49	17.85	18.70	1.614	5.40	39.2	3.40	0.690	2.700	0.005	2.700	0.005	0.05	0.007	0.0010	0.0001	0.0010	0.0012	0.0420	0.0001	0.0016	0.0015		7.8	33.0	9.0	200	150	
566	Hyd2o Bore Wattle Grove 7 Shallow	15/06/2023	WG7S	AFR	Dry	3.68	19.82																											
567	Hyd2o Bore Wattle Grove 7 Deep	15/06/2023	WG7D	AFR		7.56	15.88	19.10	0.742	5.90	19.9	2.60	0.200	2.400	0.005	2.400	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0020	0.0010	0.0001	0.0021	0.0045		6.1	13.0	4.1	82	68	
568	Hyd2o Bore Wattle Grove 8	15/06/2023	WG8	AFR		25.48	16.29	18.20	0.884	5.27	37.7	0.54	0.170	0.360	0.005	0.360	0.007	0.18	0.006	0.0010	0.0001	0.0010	0.0069	0.0010	0.0001	0.0056	0.0590		2.7	15.0	3.4	120	70	
569	Hyd2o Bore Wattle Grove 9	15/06/2023	WG9	AFR		4.61	19.25	19.20	1.941	5.77	13.6	12.00	0.750	11.000	0.005	11.000	0.005	1.80	1.700	0.0011	0.0001	0.0012	0.0095	0.0010	0.0001	0.0040	0.0028		44.0	46.0	33.0	210	300	
570	Hyd2o Bore Wattle Grove 10 Shallow	15/06/2023	WG10S	AFR		3.00	20.60																											
571	Hyd2o Bore Wattle Grove 10 Deep	15/06/2023	WG10D	AFR		7.07	16.55	18.10	0.428	6.01	42.1	5.80	0.700	5.100	0.005	5.100	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0021		8.0	6.7	5.1	31	48	
572	Unknown Origin Bore	15/06/2023	Mba	AFR	Blocked																													
573	Douglas Partners Bore 1	15/06/2023	MBb	AFR		14.97	16.93	18.10	0.847	6.12	15.2	1.10	1.000	0.019	0.005	0.023	0.730	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0029	0.0140		15.0	36.0	7.8	77	190	
574	Urbaqua Bore 1	15/06/2023	GW1	AFR																														
575	Endemic Bore 3	15/06/2023	GW3	AFR		1.56	8.09																											
576	Endemic Bore 5	15/06/2023	GW5	AFR		1.05	18.36	16.20	0.430	7.33	53.7	0.73	0.710	0.016	0.005	0.020	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0030	0.0010	0.0001	0.0048	0.0021		60.0	4.3	5.1	18	170	
577	Hyd2o Deep Bore next to Endemic 5	15/06/2023	GW5D	AFR		5.00	14.37	17.50	0.679	4.77	18.5	0.61	0.620	0.005	0.005	0.005	0.180	0.05	0.005	0.0011	0.0001	0.0011	0.0011	0.0024	0.0001	0.0120	0.0130		17.0	10.0	6.9	72	84	
578	Endemic Bore 8	15/06/2023	GW8	AFR		3.70	20.91	16.90	0.192	6.04	53.0	2.50	0.630	1.900	0.005	1.900	0.013	0.36	0.093	0.0010	0.0001	0.0010	0.0059	0.0010	0.0001	0.0018	0.0180		5.0	3.7	3.1	14	28	
579	Hyd2o Deep Bore next to Endemic 8	15/06/2023	GW8D	AFR		7.57	16.95	21.00	0.229	6.14	25.8	0.10	0.100	0.007	0.005	0.012	0.010	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0023	0.0190		1.3	3.1	1.1	33	16	
580	Hyd2o Bore Wetlands 9 Shallow	15/06/2023	GW9S	AFR		2.47	19.34	17.70	0.363	6.67	32.2	7.00	0.530	6.500	0.005	6.500	0.005	1.40	0.085	0.0049	0.0001	0.0010	0.0029	0.0010	0.0001	0.0045	0.0110		32.0	4.4	5.5	21	98	

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
581	Hyd2o Bore Wetlands 9 Deep	15/06/2023	GW9D	AFR		2.89	18.89	18.30	0.413	6.44	16.2	1.20	0.830	0.400	0.005	0.400	0.005	0.05	0.016	0.0012	0.0001	0.0010	0.0099	0.0010	0.0001	0.0140	0.0078		10.0	7.8	11.0	45	58	
582	Endemic Bore 12	15/06/2023	GW12	AFR		1.26	8.13																											
583	DWER Bore 1	15/06/2023	SCC 05/08	AFR		19.21	22.57																											
584	DWER Bore 2	15/06/2023	SCC 06/08	AFR		1.68	6.30																											
585	DWER Bore 3	15/06/2023	SCC 09/08	AFR		3.87	9.34																											
586	Hyd2o Bore Wattle Grove 1	14/07/2023	WG1	AFR		15.78	16.32																											
587	Hyd2o Bore Wattle Grove 2 Shallow	14/07/2023	WG2S	AFR	Dry	3.51	22.50																											
588	Hyd2o Bore Wattle Grove 2 (Deep)	14/07/2023	WG2	AFR		8.88	17.24																											
589	Hyd2o Bore Wattle Grove 3	14/07/2023	WG3	AFR		6.24	16.73																											
590	Hyd2o Bore Wattle Grove 4 Shallow	14/07/2023	WG4S	AFR		1.23	24.43																											
591	Hyd2o Bore Wattle Grove 4 Deep	14/07/2023	WG4D	AFR		9.45	16.28																											
592	Hyd2o Bore Wattle Grove 5 Shallow	14/07/2023	WG5S	AFR	Dry	5.91	29.23																											
593	Hyd2o Bore Wattle Grove 5 Deep	14/07/2023	WG5D	AFR		18.82	16.31																											
594	Hyd2o Bore Wattle Grove 6	14/07/2023	WG6	AFR		7.39	17.95																											
595	Hyd2o Bore Wattle Grove 7 Shallow	14/07/2023	WG7S	AFR	Dry	3.68	19.82																											
596	Hyd2o Bore Wattle Grove 7 Deep	14/07/2023	WG7D	AFR		7.10	16.34																											
597	Hyd2o Bore Wattle Grove 8	14/07/2023	WG8	AFR		25.38	16.39																											
598	Hyd2o Bore Wattle Grove 9	14/07/2023	WG9	AFR		4.64	19.22																											
599	Hyd2o Bore Wattle Grove 10 Shallow	14/07/2023	WG10S	AFR		3.07	20.53																											
600	Hyd2o Bore Wattle Grove 10 Deep	14/07/2023	WG10D	AFR		7.55	16.07																											
601	Unknown Origin Bore	14/07/2023	Mba	AFR	Blocked																													
602	Douglas Partners Bore 1	14/07/2023	MBb	AFR		14.91	16.99																											
603	Urbaqua Bore 1	14/07/2023	GW1	AFR																														
604	Endemic Bore 3	14/07/2023	GW3	AFR		1.44	8.21																											
605	Endemic Bore 5	14/07/2023	GW5	AFR		1.16	18.25																											
606	Hyd2o Deep Bore next to Endemic 5	14/07/2023	GW5D	AFR		5.54	13.83																											
607	Endemic Bore 8	14/07/2023	GW8	AFR		3.85	20.76																											
608	Hyd2o Deep Bore next to Endemic 8	14/07/2023	GW8D	AFR		7.54	16.98																											
609	Hyd2o Bore Wetlands 9 Shallow	14/07/2023	GW9S	AFR		2.44	19.37																											
610	Hyd2o Bore Wetlands 9 Deep	14/07/2023	GW9D	AFR		2.72	19.06																											
611	Endemic Bore 12	14/07/2023	GW12	AFR		1.11	8.28																											
612	DWER Bore 1	14/07/2023	SCC 05/08	AFR		19.13	22.65																											
613	DWER Bore 2	14/07/2023	SCC 06/08	AFR		1.70	6.28																											
614	DWER Bore 3	14/07/2023	SCC 09/08	AFR		3.31	9.90																											
615	Hyd2o Bore Wattle Grove 1	16/08/2023	WG1	AFR		15.61	16.49																											
616	Hyd2o Bore Wattle Grove 2 Shallow	16/08/2023	WG2S	AFR	Dry	3.51	22.50																											
617	Hyd2o Bore Wattle Grove 2 (Deep)	16/08/2023	WG2	AFR		8.68	17.44																											
618	Hyd2o Bore Wattle Grove 3	16/08/2023	WG3	AFR		6.20	16.77																											
619	Hyd2o Bore Wattle Grove 4 Shallow	16/08/2023	WG4S	AFR		0.88	24.78																											
620	Hyd2o Bore Wattle Grove 4 Deep	16/08/2023	WG4D	AFR		8.88	16.85																											
621	Hyd2o Bore Wattle Grove 5 Shallow	16/08/2023	WG5S	AFR	Dry	5.91	29.23																											
622	Hyd2o Bore Wattle Grove 5 Deep	16/08/2023	WG5D	AFR		18.68	16.45																											
623	Hyd2o Bore Wattle Grove 6	16/08/2023	WG6	AFR		7.34	18.00																											
624	Hyd2o Bore Wattle Grove 7 Shallow	16/08/2023	WG7S	AFR	Dry	3.68	19.82																											
625	Hyd2o Bore Wattle Grove 7 Deep	16/08/2023	WG7D	AFR		6.66	16.78																											
626	Hyd2o Bore Wattle Grove 8	16/08/2023	WG8	AFR		25.25	16.52																											
627	Hyd2o Bore Wattle Grove 9	16/08/2023	WG9	AFR		4.64	19.22																											
628	Hyd2o Bore Wattle Grove 10 Shallow	16/08/2023	WG10S	AFR		3.08	20.52																											
629	Hyd2o Bore Wattle Grove 10 Deep	16/08/2023	WG10D	AFR		7.08	16.54																											
630	Unknown Origin Bore	16/08/2023	Mba	AFR	Blocked	2.60	18.01																											
631	Douglas Partners Bore 1	16/08/2023	MBb	AFR		14.68	17.22																											
632	Urbaqua Bore 1	16/08/2023	GW1	AFR																														
633	Endemic Bore 3	16/08/2023	GW3	AFR		1.06	8.59																											
634	Endemic Bore 5	16/08/2023	GW5	AFR		0.77	18.64																											
635	Hyd2o Deep Bore next to Endemic 5	16/08/2023	GW5D	AFR		4.03	15.34																											
636	Endemic Bore 8	16/08/2023	GW8	AFR		3.80	20.81																											
637	Hyd2o Deep Bore next to Endemic 8	16/08/2023	GW8D	AFR		7.07	17.45																											
638	Hyd2o Bore Wetlands 9 Shallow	16/08/2023	GW9S	AFR		2.12	19.69																											

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
639	Hyd2o Bore Wetlands 9 Deep	16/08/2023	GW9D	AFR		2.50	19.28																											
640	Endemic Bore 12	16/08/2023	GW12	AFR		0.58	8.81																											
641	DWER Bore 1	16/08/2023	SCC 05/08	AFR		18.99	22.79																											
642	DWER Bore 2	16/08/2023	SCC 06/08	AFR		1.27	6.71																											
643	DWER Bore 3	16/08/2023	SCC 09/08	AFR		2.35	10.86																											
644	Surface Water Site 10	16/08/2023	SW10	AFR	SW1 at H21003 COC18			17.70	0.125	7.19	64.7	0.29	0.290	0.005	0.005	0.005	0.005	0.05	0.021	0.0010	0.0001	0.0010	0.0011	0.0010	0.0001	0.0010	0.0025		8.2	0.9	1.7	2.1	24	
645	Surface Water Site 3	16/08/2023	SW3	AFR	SW2 at H21003 COC18			15.20	0.149	6.65	53.7	1.80	0.550	1.200	0.012	1.200	0.051	0.27	0.260	0.0047	0.0001	0.0010	0.0110	0.0010	0.0001	0.0010	0.0290		14.0	1.9	2.8	5	43	
646	Surface Water Site 2	16/08/2023	SW2	AFR	SW3 at H21003 COC18			15.50	1.113	7.49	72.0	3.50	1.300	2.100	0.017	2.100	0.110	0.13	0.065	0.0010	0.0001	0.0010	0.0049	0.0014	0.0001	0.0010	0.0120		59.0	25.0	9.1	120	250	
647	Surface Water Site 6	16/08/2023	SW6	AFR	SW4 at H21003 COC18			16.10	0.293	6.76	68.1	1.10	1.100	0.005	0.005	0.005	0.021	0.05	0.005	0.0010	0.0001	0.0010	0.0027	0.0010	0.0001	0.0015	0.0100		13.0	6.1	3.9	28	58	
648	Surface Water Site 7	16/08/2023	SW7	AFR	SW5 at H21003 COC18			15.50	0.280	7.17	54.4	1.50	1.500	0.005	0.005	0.005	0.005	0.08	0.061	0.0011	0.0001	0.0010	0.0025	0.0010	0.0001	0.0011	0.0088		18.0	4.8	4.7	25	65	
649	Hyd2o Bore Wattle Grove 1	14/09/2023	WG1	AFR		15.50	16.60	19.60	0.325	5.52	37.8	3.80	0.540	3.200	0.005	3.200	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0030	0.0001	0.0010	0.0017		2.4	7.0	2.9	71	35	
650	Hyd2o Bore Wattle Grove 2 Shallow	14/09/2023	WG2S	AFR	Dry	3.51	22.50																											
651	Hyd2o Bore Wattle Grove 2 (Deep)	14/09/2023	WG2	AFR		8.48	17.64	20.10	2.984	5.26	21.3	0.44	0.270	0.160	0.006	0.170	0.005	0.05	0.005	0.0051	0.0001	0.0010	0.0010	0.0010	0.0001	0.0045	0.0073		6.0	120.0	11.0	420	510	
652	Hyd2o Bore Wattle Grove 3	14/09/2023	WG3	AFR		5.87	17.10	19.20	4.605	5.98	16.9	1.00	1.000	0.005	0.005	0.005	0.064	0.05	0.005	0.0027	0.0001	0.0013	0.0010	0.0010	0.0001	0.0010	0.0025		46.0	83.0	27.0	780	460	
653	Hyd2o Bore Wattle Grove 4 Shallow	14/09/2023	WG4S	AFR		0.99	24.67	18.60	1.813	5.79	16.3	0.33	0.330	0.005	0.005	0.005	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0013		38.0	56.0	9.8	280	330	
654	Hyd2o Bore Wattle Grove 4 Deep	14/09/2023	WG4D	AFR		8.44	17.29	19.50	1.291	6.58	28.3	0.75	0.650	0.099	0.005	0.100	0.060	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0010		86.0	29.0	8.0	150	330	
655	Hyd2o Bore Wattle Grove 5 Shallow	14/09/2023	WG5S	AFR	Dry	5.91	29.23																											
656	Hyd2o Bore Wattle Grove 5 Deep	14/09/2023	WG5D	AFR		18.60	16.53	20.40	0.744	5.32	31.2	17.00	3.400	14.000	0.005	14.000	0.005	0.06	0.005	0.0010	0.0001	0.0010	0.0010	0.0045	0.0001	0.0016	0.0044		4.0	14.0	3.7	120	66	
657	Hyd2o Bore Wattle Grove 6	14/09/2023	WG6	AFR		7.21	18.13	18.90	1.427	5.27	37.9	4.20	0.720	3.500	0.005	3.500	0.005	0.05	0.006	0.0010	0.0001	0.0010	0.0010	0.0280	0.0001	0.0014	0.0021		8.0	37.0	9.7	230	170	
658	Hyd2o Bore Wattle Grove 7 Shallow	14/09/2023	WG7S	AFR	Dry	3.68	19.82																											
659	Hyd2o Bore Wattle Grove 7 Deep	14/09/2023	WG7D	AFR		6.33	17.11	20.90	0.437	6.47	21.1	4.90	0.680	4.200	0.005	4.200	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0032	0.0010	0.0001	0.0023	0.0019		20.0	16.0	5.9	58	120	
660	Hyd2o Bore Wattle Grove 8	14/09/2023	WG8	AFR		25.18	16.59	18.70	0.679	5.30	16.2	0.48	0.400	0.075	0.005	0.076	0.005	0.21	0.006	0.0010	0.0001	0.0010	0.0017	0.0010	0.0001	0.0019	0.0056		1.7	13.0	3.3	110	57	
661	Hyd2o Bore Wattle Grove 9	14/09/2023	WG9	AFR		4.62	19.24	19.30	1.715	5.99	32.1	15.00	4.500	11.000	0.005	11.000	0.006	2.00	1.600	0.0015	0.0001	0.0016	0.0110	0.0010	0.0001	0.0048	0.0034		48.0	41.0	39.0	230	290	
662	Hyd2o Bore Wattle Grove 10 Shallow	14/09/2023	WG10S	AFR	Dry	3.21	20.39																											
663	Hyd2o Bore Wattle Grove 10 Deep	14/09/2023	WG10D	AFR		6.46	17.16	20.70	0.112	6.34	63.4	3.30	0.860	2.400	0.005	2.400	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0010		5.4	3.3	4.0	22	27	
664	Unknown Origin Bore	14/09/2023	Mba	AFR	Blocked	2.60	18.01																											
665	Douglas Partners Bore 1	14/09/2023	MBb	AFR		14.66	17.24	18.50	0.795	6.95	72.1	2.30	2.300	0.016	0.005	0.017	1.700	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0064	0.0150		25.0	47.0	9.2	80	260	
666	Endemic Bore 3	14/09/2023	GW3	AFR		1.24	8.41																											
667	Endemic Bore 5	14/09/2023	GW5	AFR		1.10	18.31	17.80	0.541	7.33	40.7	1.30	1.300	0.024	0.005	0.024	0.031	0.06	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0056	0.0010		110.0	5.7	5.9	21	290	
668	Hyd2o Deep Bore next to Endemic 5	14/09/2023	GW5D	AFR		3.19	16.18	19.10	0.715	5.13	13.6	0.70	0.710	0.005	0.005	0.005	0.140	0.05	0.005	0.0026	0.0001	0.0010	0.0010	0.0010	0.0001	0.0170	0.0044		29.0	15.0	8.6	91	130	
669	Endemic Bore 8	14/09/2023	GW8	AFR		3.93	20.68																											
670	Hyd2o Deep Bore next to Endemic 8	14/09/2023	GW8D	AFR		6.73	17.79	20.30	0.169	5.50	23.4	0.23	0.220	0.010	0.005	0.011	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0011	0.0012		0.7	1.7	1.0	32	8.7	
671	Hyd2o Bore Wetlands 9 Shallow	14/09/2023	GW9S	AFR		2.27	19.54	18.30	0.149	7.04	34.9	1.50	0.590	0.870	0.005	0.870	0.005	0.12	0.089	0.0071	0.0001	0.0010	0.0018	0.0010	0.0001	0.0019	0.0043		21.0	2.5	5.1	13	62	
672	Hyd2o Bore Wetlands 9 Deep	14/09/2023	GW9D	AFR		2.56	19.22	18.30	0.325	6.56	14.4	0.76	0.620	0.140	0.005	0.140	0.005	0.05	0.009	0.0010	0.0001	0.0010	0.0034	0.0010	0.0001	0.0070	0.0023		11.0	9.7	8.4	41	67	
673	Endemic Bore 12	14/09/2023	GW12	AFR		0.72	8.67																											
674	DWER Bore 1	14/09/2023	SCC 05/08	AFR		18.86	22.92																											
675	DWER Bore 2	14/09/2023	SCC 06/08	AFR		1.30	6.68																											
676	DWER Bore 3	14/09/2023	SCC 09/08	AFR		2.14	11.07																											
677	Surface Water Site 10	14/09/2023	SW10	AFR	SW1 at H21003 COC19C			20.20	0.137	6.84	31.5	0.92	0.930	0.005	0.005	0.005	0.005	0.37	0.320	0.0010	0.0001	0.0010	0.0025	0.0010	0.0001	0.0012	0.0080		12.0	6.0	7.8	20	54	
678	Surface Water Site 2	14/09/2023	SW2	AFR	SW2 at H21003 COC19C			17.80	1.434	8.01	60.4	2.30	1.100	1.200	0.023	1.200	0.055	0.07	0.016	0.0010	0.0001	0.0010	0.0024	0.0011	0.0001	0.0011	0.0043		68.0	33.0	12.0	170	300	
679	Surface Water Site 6	14/09/2023	SW6	AFR	SW3 at H21003 COC19C			17.40	0.450	6.74	37.2	0.96	0.940	0.015	0.005	0.015	0.008	0.05	0.005	0.0010	0.0001	0.0010	0.0025	0.0010	0.0001	0.0015	0.0061		27.0	12.0	6.9	53	110	
680	Surface Water Site 7	14/09/2023	SW7	AFR	SW4 at H21003 COC19C			17.70	0.647	7.65	52.2	1.80	1.800	0.005	0.005	0.005	0.008	0.17	0.088	0.0015	0.0001	0.0010	0.0019	0.0010	0.0001	0.0017	0.0060		44.0	14.0	11.0	70	170	
681	Surface Water Site 9	14/09/2023	SW9	AFR	SW5 at H21003 COC19C			18.60	0.708	7.85	61.3	1.90	1.800	0.033	0.005	0.031	0.005	0.18	0.099	0.0017	0.0001	0.0010	0.0019	0.0010	0.0001	0.0027	0.0036		65.0	15.0	12.0	64	220	
682	Hyd2o Bore Wattle Grove 1	13/10/2023	WG1	AFR		15.42	16.68																											
683	Hyd2o Bore Wattle Grove 2 Shallow	13/10/2023	WG2S	AFR	Dry	3.51	22.50																											
684	Hyd2o Bore Wattle Grove 2 (Deep)	13/10/2023	WG2	AFR		8.45	17.67																											
685	Hyd2o Bore Wattle Grove 3	13/10/2023	WG3	AFR		5.87	17.10																											
686	Hyd2o Bore Wattle Grove 4 Shallow	13/10/2023	WG4S	AFR		1.43	24.23																											
687	Hyd2o Bore Wattle Grove 4 Deep	13/10/2023	WG4D	AFR		8.41	17.32																											
688	Hyd2o Bore Wattle Grove 5 Shallow	13/10/2023	WG5S	AFR	Dry	5.91	29.23																											
689	Hyd2o Bore Wattle Grove 5 Deep	13/10/2023	WG5D	AFR		18.54	16.59																											
690	Hyd2o Bore Wattle Grove 6	13/10/2023	WG6	AFR		7.38	17.96																											
691	Hyd2o Bore Wattle Grove 7 Shallow	13/10/2023	WG7S	AFR		3.68	19.82																											
692	Hyd2o Bore Wattle Grove 7 Deep	13/10/2023	WG7D	AFR		6.46	16.98																											
693	Hyd2o Bore Wattle Grove 8	13/10/2023	WG8	AFR		25.11	16.66																											
694	Hyd2o Bore Wattle Grove 9	13/10/2023	WG9	AFR		4.75	19.11																											
695	Hyd2o Bore Wattle Grove 10 Shallow	13/10/2023	WG10S	AFR	Dry	3.21	20.39																											
696	Hyd2o Bore Wattle Grove 10 Deep	13/10/2023	WG10D	AFR		6.25	17.37																											

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
697	Unknown Origin Bore	13/10/2023	Mba	AFR	Blocked	2.60	18.01																											
698	Douglas Partners Bore 1	13/10/2023	MBb	AFR		14.55	17.35																											
699	Endemic Bore 3	13/10/2023	GW3	AFR		1.53	8.12																											
700	Endemic Bore 5	13/10/2023	GW5	AFR		1.56	17.85																											
701	Hyd2o Deep Bore next to Endemic 5	13/10/2023	GW5D	AFR		3.34	16.03																											
702	Endemic Bore 8	13/10/2023	GW8	AFR		4.03	20.58																											
703	Hyd2o Deep Bore next to Endemic 8	13/10/2023	GW8D	AFR		6.84	17.68																											
704	Hyd2o Bore Wetlands 9 Shallow	13/10/2023	GW9S	AFR		2.58	19.23																											
705	Hyd2o Bore Wetlands 9 Deep	13/10/2023	GW9D	AFR		2.83	18.95																											
706	Endemic Bore 12	13/10/2023	GW12	AFR		1.22	8.17																											
707	DWER Bore 1	13/10/2023	SCC 05/08	AFR		18.78	23.00																											
708	DWER Bore 2	13/10/2023	SCC 06/08	AFR		1.90	6.08																											
709	DWER Bore 3	13/10/2023	SCC 09/08	AFR		2.41	10.80																											
710	Hyd2o Bore Wattle Grove 1	15/11/2023	WG1	AFR & TD		15.63	16.47																											
711	Hyd2o Bore Wattle Grove 2 Shallow	15/11/2023	WG2S	AFR & TD	Dry	3.51	22.50																											
712	Hyd2o Bore Wattle Grove 2 (Deep)	15/11/2023	WG2	AFR & TD		8.73	17.39																											
713	Hyd2o Bore Wattle Grove 3	15/11/2023	WG3	AFR & TD		6.18	16.79																											
714	Hyd2o Bore Wattle Grove 4 Shallow	15/11/2023	WG4S	AFR & TD		1.67	23.99																											
715	Hyd2o Bore Wattle Grove 4 Deep	15/11/2023	WG4D	AFR & TD		8.71	17.02																											
716	Hyd2o Bore Wattle Grove 5 Shallow	15/11/2023	WG5S	AFR & TD	Dry	5.91	29.23																											
717	Hyd2o Bore Wattle Grove 5 Deep	15/11/2023	WG5D	AFR & TD		18.72	16.41																											
718	Hyd2o Bore Wattle Grove 6	15/11/2023	WG6	AFR & TD		7.79	17.55																											
719	Hyd2o Bore Wattle Grove 7 Shallow	15/11/2023	WG7S	AFR & TD	Dry	3.68	19.82																											
720	Hyd2o Bore Wattle Grove 7 Deep	15/11/2023	WG7D	AFR & TD		6.86	16.58																											
721	Hyd2o Bore Wattle Grove 8	15/11/2023	WG8	AFR & TD		25.20	16.57																											
722	Hyd2o Bore Wattle Grove 9	15/11/2023	WG9	AFR & TD		4.93	18.93																											
723	Hyd2o Bore Wattle Grove 10 Shallow	15/11/2023	WG10S	AFR & TD	Dry	3.21	20.39																											
724	Hyd2o Bore Wattle Grove 10 Deep	15/11/2023	WG10D	AFR & TD		6.31	17.31																											
725	Unknown Origin Bore	15/11/2023	Mba	AFR & TD	Blocked	2.60	18.01																											
726	Douglas Partners Bore 1	15/11/2023	MBb	AFR & TD		14.58	17.32																											
727	Endemic Bore 3	15/11/2023	GW3	AFR & TD	Dry	1.57	8.08																											
728	Endemic Bore 5	15/11/2023	GW5	AFR & TD	Dry	1.75	17.66																											
729	Hyd2o Deep Bore next to Endemic 5	15/11/2023	GW5D	AFR & TD		3.96	15.41																											
730	Endemic Bore 8	15/11/2023	GW8	AFR & TD		4.04	20.57																											
731	Hyd2o Deep Bore next to Endemic 8	15/11/2023	GW8D	AFR & TD		7.31	17.21																											
732	Hyd2o Bore Wetlands 9 Shallow	15/11/2023	GW9S	AFR & TD		2.82	18.99																											
733	Hyd2o Bore Wetlands 9 Deep	15/11/2023	GW9D	AFR & TD		3.08	18.70																											
734	Endemic Bore 12	15/11/2023	GW12	AFR & TD		1.68	7.71																											
735	DWER Bore 1	15/11/2023	SCC 05/08	AFR & TD		18.85	22.93																											
736	DWER Bore 2	15/11/2023	SCC 06/08	AFR & TD		2.19	5.79																											
737	DWER Bore 3	15/11/2023	SCC 09/08	AFR & TD		3.64	9.57																											
738	Hyd2o Bore Wattle Grove 1	19/12/2023	WG1	AFR & TD		15.69	16.41	22.60	2.758	5.39	44.7	4.00	1.100	2.900	0.005	2.900	0.005	0.18	0.005	0.0010	0.0005	0.0010	0.0015	0.0043	0.0001	0.0010	0.0230		2.1	8.3	2.1	59	39	
739	Hyd2o Bore Wattle Grove 2 Shallow	19/12/2023	WG2S	AFR & TD	Dry	3.51	22.50																											
740	Hyd2o Bore Wattle Grove 2 (Deep)	19/12/2023	WG2	AFR & TD		8.89	17.23	24.70	3.851	5.86	41.4	0.23	0.220	0.005	0.005	0.005	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0030	0.0073		4.3	120.0	9.7	470	520	
741	Hyd2o Bore Wattle Grove 3	19/12/2023	WG3	AFR & TD		6.54	16.43	23.40	6.275	5.55	24.3	0.64	0.650	0.005	0.005	0.005	0.005	0.05	0.005	0.0022	0.0001	0.0018	0.0010	0.0010	0.0001	0.0050	0.0097		68.0	120.0	24.0	900	650	
742	Hyd2o Bore Wattle Grove 4 Shallow	19/12/2023	WG4S	AFR & TD		1.76	23.90	27.50	2.513	5.93	31.7	0.29	0.160	0.120	0.005	0.120	0.005	0.05	0.005	0.0011	0.0008	0.0010	0.0010	0.0010	0.0001	0.0016	0.0470		36.0	55.0	8.3	270	320	
743	Hyd2o Bore Wattle Grove 4 Deep	19/12/2023	WG4D	AFR & TD		8.97	16.76	24.50	2.340	6.10	23.5	0.83	0.780	0.047	0.005	0.050	0.063	0.08	0.005	0.0010	0.0002	0.0010	0.0010	0.0010	0.0001	0.0010	0.0110		88.0	45.0	10.0	260	410	
744	Hyd2o Bore Wattle Grove 5 Shallow	19/12/2023	WG5S	AFR & TD	Dry	5.91	29.23																											
745	Hyd2o Bore Wattle Grove 5 Deep	19/12/2023	WG5D	AFR & TD		18.74	16.39	24.00	0.897	5.37	40.6	14.00	4.300	10.000	0.005	10.000	0.005	0.11	0.005	0.0010	0.0001	0.0010	0.0010	0.0036	0.0001	0.0021	0.0076		2.8	11.0	2.9	120	51	
746	Hyd2o Bore Wattle Grove 6	19/12/2023	WG6	AFR & TD		8.02	17.32	23.10	1.846	5.39	52.4	4.80	0.630	4.200	0.005	4.200	0.005	0.05	0.007	0.0010	0.0001	0.0010	0.0010	0.0410	0.0001	0.0016	0.0100		7.0	42.0	7.5	240	190	
747	Hyd2o Bore Wattle Grove 7 Shallow	19/12/2023	WG7S	AFR & TD	Dry	3.68	19.82																											
748	Hyd2o Bore Wattle Grove 7 Deep	19/12/2023	WG7D	AFR & TD		7.10	16.34	26.30	0.954	6.23	31.6	4.60	0.640	4.000	0.005	4.000	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0019	0.0010	0.0001	0.0023	0.0018		16.0	15.0	4.9	110	100	
749	Hyd2o Bore Wattle Grove 8	19/12/2023	WG8	AFR & TD	Clogged at 25.45																													
750	Hyd2o Bore Wattle Grove 9	19/12/2023	WG9	AFR & TD		4.94	18.92	23.60	1.291	6.29	17.8	24.00	5.500	18.000	0.005	18.000	0.007	3.20	2.700	0.0011	0.0001	0.0010	0.0083	0.0010	0.0001	0.0042	0.0045		27.0	26.0	12.0	160	170	
751	Hyd2o Bore Wattle Grove 10 Shallow	19/12/2023	WG10S	AFR & TD	Dry	3.21	20.39								0.005																			
752	Hyd2o Bore Wattle Grove 10 Deep	19/12/2023	WG10D	AFR & TD		7.13	16.49	27.20	0.325	6.30	50.6	2.80	0.720	2.100	0.005	2.100	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0010		6.9	4.3	3.6	25	35	
753	Unknown Origin Bore	19/12/2023	Mba	AFR & TD	Damaged/blocked	2.60	18.01								0.005																			
754	Douglas Partners Bore 1	19/12/2023	MBb	AFR & TD		14.57	17.33	24.60	1.128	6.33	23.5	3.90	3.900	0.005	0.005	0.008	1.700	0.19	0.005	0.0015	0.0001	0.0010	0.0010	0.0010	0.0001	0.0036	0.0110		20.0	47.0	8.8	100	240	

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
755	Endemic Bore 3	19/12/2023	GW3	AFR & TD	Dry	1.57	8.08																											
756	Endemic Bore 5	19/12/2023	GW5	AFR & TD	Dry	1.75	17.66																											
757	Hyd2o Deep Bore next to Endemic 5	19/12/2023	GW5D	AFR & TD		4.28	15.09	25.30	0.833	4.51	18.2	0.62	0.630	0.005	0.005	0.005	0.110	0.05	0.005	0.0018	0.0001	0.0010	0.0010	0.0042	0.0001	0.0094	0.0022		17.0	12.0	6.6	82	93	
758	Endemic Bore 8	19/12/2023	GW8	AFR & TD	Not enough water for sampling	3.90	20.71	29.00	0.309	6.97	37.0																							
759	Hyd2o Deep Bore next to Endemic 8	19/12/2023	GW8D	AFR & TD		7.64	16.88	26.50	0.253	5.48	19.4	0.10	0.100	0.005	0.005	0.005	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0014	0.0015		1.5	1.9	1.2	29	12	
760	Hyd2o Bore Wetlands 9 Shallow	19/12/2023	GW9S	AFR & TD		2.91	18.90	27.70	1.005	6.64	13.0	6.00	1.400	4.500	0.089	4.600	0.007	0.42	0.310	0.0160	0.0001	0.0010	0.0050	0.0010	0.0001	0.0033	0.0100		44.0	6.3	14.0	99	140	
761	Hyd2o Bore Wetlands 9 Deep	19/12/2023	GW9D	AFR & TD		3.23	18.55	25.40	0.598	6.60	25.7	0.71	0.550	0.150	0.005	0.160	0.005	0.05	0.010	0.0010	0.0001	0.0010	0.0029	0.0010	0.0001	0.0085	0.0093		15.0	13.0	8.2	51	90	
762	Endemic Bore 12	19/12/2023	GW12	AFR & TD		1.94	7.45																											
763	DWER Bore 1	19/12/2023	SCC 05/08	AFR & TD		18.81	22.97																											
764	DWER Bore 2	19/12/2023	SCC 06/08	AFR & TD		2.36	5.62																											
765	DWER Bore 3	19/12/2023	SCC 09/08	AFR & TD		4.42	8.79																											
766	Hyd2o Bore Wattle Grove 1	19/01/2024	WG1	TD		16.03	16.07																											
767	Hyd2o Bore Wattle Grove 2 Shallow	19/01/2024	WG2S	TD	Dry	3.51	22.50																											
768	Hyd2o Bore Wattle Grove 2 (Deep)	19/01/2024	WG2	TD		9.34	16.78																											
769	Hyd2o Bore Wattle Grove 3	19/01/2024	WG3	TD		7.23	15.74																											
770	Hyd2o Bore Wattle Grove 4 Shallow	19/01/2024	WG4S	TD		2.03	23.63																											
771	Hyd2o Bore Wattle Grove 4 Deep	19/01/2024	WG4D	TD		9.48	16.25																											
772	Hyd2o Bore Wattle Grove 5 Shallow	19/01/2024	WG5S	TD	Dry	5.91	29.23																											
773	Hyd2o Bore Wattle Grove 5 Deep	19/01/2024	WG5D	TD		19.06	16.07																											
774	Hyd2o Bore Wattle Grove 6	19/01/2024	WG6	TD		8.49	16.85																											
775	Hyd2o Bore Wattle Grove 7 Shallow	19/01/2024	WG7S	TD	Dry	3.68	19.82																											
776	Hyd2o Bore Wattle Grove 7 Deep	19/01/2024	WG7D	TD		7.53	15.91																											
777	Hyd2o Bore Wattle Grove 8	19/01/2024	WG8	TD	Clogged at 25.45																													
778	Hyd2o Bore Wattle Grove 9	19/01/2024	WG9	TD		5.38	18.48																											
779	Hyd2o Bore Wattle Grove 10 Shallow	19/01/2024	WG10S	TD	Dry	3.21	20.39																											
780	Hyd2o Bore Wattle Grove 10 Deep	19/01/2024	WG10D	TD		9.02	14.60																											
781	Unknown Origin Bore	19/01/2024	Mba	TD	Damaged/blocked	2.60	18.01																											
782	Douglas Partners Bore 1	19/01/2024	MBb	TD		14.86	17.04																											
783	Endemic Bore 3	19/01/2024	GW3	TD	Dry	1.57	8.08																											
784	Endemic Bore 5	19/01/2024	GW5	TD	Dry	1.75	17.66																											
785	Hyd2o Deep Bore next to Endemic 5	19/01/2024	GW5D	TD		4.64	14.73																											
786	Endemic Bore 8	19/01/2024	GW8	TD	Dry	4.13	20.48																											
787	Hyd2o Deep Bore next to Endemic 8	19/01/2024	GW8D	TD		8.14	16.38																											
788	Hyd2o Bore Wetlands 9 Shallow	19/01/2024	GW9S	TD		3.26	18.55																											
789	Hyd2o Bore Wetlands 9 Deep	19/01/2024	GW9D	TD		3.58	18.20																											
790	Endemic Bore 12	19/01/2024	GW12	TD		2.51	6.88																											
791	DWER Bore 1	19/01/2024	SCC 05/08	TD		19.09	22.69																											
792	DWER Bore 2	19/01/2024	SCC 06/08	TD		2.75	5.23																											
793	DWER Bore 3	19/01/2024	SCC 09/08	TD		5.18	8.03																											
794	Hyd2o Bore Wattle Grove 1	19/02/2024	WG1	TD		16.23	15.87																											
795	Hyd2o Bore Wattle Grove 2 Shallow	19/02/2024	WG2S	TD	Dry	3.51	22.50																											
796	Hyd2o Bore Wattle Grove 2 (Deep)	19/02/2024	WG2	TD	Clogged at 8.72																													
797	Hyd2o Bore Wattle Grove 3	19/02/2024	WG3	TD		7.38	15.59																											
798	Hyd2o Bore Wattle Grove 4 Shallow	19/02/2024	WG4S	TD		2.10	23.56																											
799	Hyd2o Bore Wattle Grove 4 Deep	19/02/2024	WG4D	TD		9.89	15.84																											
800	Hyd2o Bore Wattle Grove 5 Shallow	19/02/2024	WG5S	TD	Dry	5.91	29.23																											
801	Hyd2o Bore Wattle Grove 5 Deep	19/02/2024	WG5D	TD		19.24	15.89																											
802	Hyd2o Bore Wattle Grove 6	19/02/2024	WG6	TD		8.71	16.63																											
803	Hyd2o Bore Wattle Grove 7 Shallow	19/02/2024	WG7S	TD	Dry	3.68	19.82																											
804	Hyd2o Bore Wattle Grove 7 Deep	19/02/2024	WG7D	TD		7.90	15.54																											
805	Hyd2o Bore Wattle Grove 8	19/02/2024	WG8	TD	Clogged/dry at 25.90																													
806	Hyd2o Bore Wattle Grove 9	19/02/2024	WG9	TD		5.65	18.21																											
807	Hyd2o Bore Wattle Grove 10 Shallow	19/02/2024	WG10S	TD	Dry	3.21	20.39																											
808	Hyd2o Bore Wattle Grove 10 Deep	19/02/2024	WG10D	TD	Wet soil	9.07	14.55																											
809	Unknown Origin Bore	19/02/2024	Mba	TD	Damaged/blocked	2.60	18.01																											
810	Douglas Partners Bore 1	19/02/2024	MBb	TD		14.94	16.96																											
811	Endemic Bore 3	19/02/2024	GW3	TD	Dry	1.57	8.08																											
812	Endemic Bore 5	19/02/2024	GW5	TD	Dry	1.75	17.66																											

FieldDAE
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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
813	Hyd2o Deep Bore next to Endemic 5	19/02/2024	GW5D	TD		4.93	14.44																										
814	Endemic Bore 8	19/02/2024	GW8	TD	Dry	4.13	20.48																										
815	Hyd2o Deep Bore next to Endemic 8	19/02/2024	GW8D	TD	Clogged at 1.45																												
816	Hyd2o Bore Wetlands 9 Shallow	19/02/2024	GW9S	TD		3.43	18.38																										
817	Hyd2o Bore Wetlands 9 Deep	19/02/2024	GW9D	TD		3.79	17.99																										
818	Endemic Bore 12	19/02/2024	GW12	TD		2.80	6.59																										
819	DWER Bore 1	19/02/2024	SCC 05/08	TD		19.25	22.53																										
820	DWER Bore 2	19/02/2024	SCC 06/08	TD		2.93	5.05																										
821	DWER Bore 3	19/02/2024	SCC 09/08	TD		5.57	7.64																										
822	Hyd2o Bore Wattle Grove 1	20/03/2024	WG1	AFR & TD		16.35	15.75	21.60	0.175	5.16		4.30	1.100	3.200	0.005	3.200	0.130	0.08	0.005	0.0010	0.0001	0.0010	0.0012	0.0055	0.0001	0.0010	0.0051		1.9	3.8	1.6	34	21	
823	Hyd2o Bore Wattle Grove 2 Shallow	20/03/2024	WG2S	AFR & TD	Dry	3.51	22.50																										
824	Hyd2o Bore Wattle Grove 2 (Deep)	20/03/2024	WG2	AFR & TD	Clogged	9.42	16.70																										
825	Hyd2o Bore Wattle Grove 3	20/03/2024	WG3	AFR & TD		8.04	14.93	20.90	7.588	5.61		8.80	8.800	0.007	0.005	0.006	0.180	0.85	0.009	0.0039	0.0001	0.0010	0.0010	0.0011	0.0001	0.0070	0.0160		98.0	180.0	39.0	1300	990	
826	Hyd2o Bore Wattle Grove 4 Shallow	20/03/2024	WG4S	AFR & TD		2.21	23.45	26.40	2.471	5.52		0.32	0.170	0.150	0.005	0.150	0.160	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0017	0.0051		54.0	61.0	13.0	290	390	
827	Hyd2o Bore Wattle Grove 4 Deep	20/03/2024	WG4D	AFR & TD		10.56	15.17	23.40	2.266	5.28		0.34	0.340	0.005	0.005	0.005	0.160	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0011	0.0023		75.0	65.0	15.0	290	460	
828	Hyd2o Bore Wattle Grove 5 Shallow	20/03/2024	WG5S	AFR & TD	Dry	5.91	29.23																										
829	Hyd2o Bore Wattle Grove 5 Deep	20/03/2024	WG5D	AFR & TD		19.37	15.76	21.50	0.756	5.10		14.00	0.820	14.000	0.005	14.000	0.130	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0057	0.0001	0.0017	0.0051		4.6	13.0	3.4	120	66	
830	Hyd2o Bore Wattle Grove 6	20/03/2024	WG6	AFR & TD		8.99	16.35	20.60	1.583	5.32		3.50	0.570	2.900	0.005	2.900	0.160	0.05	0.009	0.0010	0.0001	0.0010	0.0013	0.0600	0.0001	0.0020	0.0043		11.0	45.0	8.9	240	210	
831	Hyd2o Bore Wattle Grove 7 Shallow	20/03/2024	WG7S	AFR & TD	Dry	3.68	19.82																										
832	Hyd2o Bore Wattle Grove 7 Deep	20/03/2024	WG7D	AFR & TD		8.03	15.41	22.50	0.588	5.59		0.66	0.360	0.300	0.005	0.300	0.140	0.05	0.005	0.0010	0.0001	0.0010	0.0036	0.0010	0.0001	0.0027	0.0059		7.5	12.0	4.8	80	68	
833	Hyd2o Bore Wattle Grove 8	20/03/2024	WG8	AFR & TD	Clogged at 26.20																												
834	Hyd2o Bore Wattle Grove 9	20/03/2024	WG9	AFR & TD	Not enough water for sampling	5.87	17.99																										
835	Hyd2o Bore Wattle Grove 10 Shallow	20/03/2024	WG10S	AFR & TD	Dry	3.21	20.39																										
836	Hyd2o Bore Wattle Grove 10 Deep	20/03/2024	WG10D	AFR & TD	Mud	9.07	14.55																										
837	Unknown Origin Bore	20/03/2024	Mba	AFR & TD	Damaged/blocked	2.60	18.01																										
838	Douglas Partners Bore 1	20/03/2024	MBb	AFR & TD		15.14	16.76	25.00	1.116	6.07		2.60	2.500	0.023	0.005	0.021	1.800	0.08	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0062	0.0280		29.0	55.0	11.0	97	300	
839	Endemic Bore 3	20/03/2024	GW3	AFR & TD	Dry	1.57	8.08																										
840	Endemic Bore 5	20/03/2024	GW5	AFR & TD	Dry	1.75	17.66																										
841	Hyd2o Deep Bore next to Endemic 5	20/03/2024	GW5D	AFR & TD		5.12	14.25	23.90	0.702	3.99		0.53	0.530	0.005	0.005	0.005	0.270	0.05	0.005	0.0018	0.0001	0.0010	0.0010	0.0010	0.0001	0.0110	0.0140		22.0	14.0	7.6	85	110	
842	Endemic Bore 8	20/03/2024	GW8	AFR & TD	Dry	4.13	20.48																										
843	Hyd2o Deep Bore next to Endemic 8	20/03/2024	GW8D	AFR & TD		8.57	15.95	23.80	0.189	5.31		0.50	0.380	0.009	0.005	0.009	0.140	0.05	0.005	0.0010	0.0001	0.0010	0.0026	0.0010	0.0001	0.0022	0.0030		2.9	2.4	2.1	34	17	
844	Hyd2o Bore Wetlands 9 Shallow	20/03/2024	GW9S	AFR & TD	Not enough water for sampling	3.55	18.26																										
845	Hyd2o Bore Wetlands 9 Deep	20/03/2024	GW9D	AFR & TD		3.95	17.83	25.90	0.536	6.45		1.40	1.100	0.320	0.005	0.320	0.190	0.10	0.066	0.0035	0.0001	0.0012	0.0180	0.0010	0.0001	0.0150	0.0130		16.0	10.0	11.0	70	82	
846	Endemic Bore 12	20/03/2024	GW12	AFR & TD	Dry	2.84	6.55																										
847	DWER Bore 1	20/03/2024	SCC 05/08	AFR & TD		19.38	22.40																										
848	DWER Bore 2	20/03/2024	SCC 06/08	AFR & TD		3.10	4.88																										
849	DWER Bore 3	20/03/2024	SCC 09/08	AFR & TD		5.84	7.37																										
850	Hyd2o Bore Wattle Grove 1	17/04/2024	WG1	TD		16.47	15.63																										
851	Hyd2o Bore Wattle Grove 2 Shallow	17/04/2024	WG2S	TD	Dry	3.51	22.50																										
852	Hyd2o Bore Wattle Grove 2 (Deep)	17/04/2024	WG2	TD	Clogged	9.42	16.70																										
853	Hyd2o Bore Wattle Grove 3	17/04/2024	WG3	TD		8.32	14.65																										
854	Hyd2o Bore Wattle Grove 4 Shallow	17/04/2024	WG4S	TD		2.28	23.38																										
855	Hyd2o Bore Wattle Grove 4 Deep	17/04/2024	WG4D	TD		10.82	14.91																										
856	Hyd2o Bore Wattle Grove 5 Shallow	17/04/2024	WG5S	TD	Dry	5.91	29.23																										
857	Hyd2o Bore Wattle Grove 5 Deep	17/04/2024	WG5D	TD		19.47	15.66																										
858	Hyd2o Bore Wattle Grove 6	17/04/2024	WG6	TD		9.19	16.15																										
859	Hyd2o Bore Wattle Grove 7 Shallow	17/04/2024	WG7S	TD	Dry	3.68	19.82																										
860	Hyd2o Bore Wattle Grove 7 Deep	17/04/2024	WG7D	TD		8.35	15.09																										
861	Hyd2o Bore Wattle Grove 8	17/04/2024	WG8	TD	Clogged - roots	25.20	16.57																										
862	Hyd2o Bore Wattle Grove 9	17/04/2024	WG9	TD	Dry - wet clay	6.13	17.73																										
863	Hyd2o Bore Wattle Grove 10 Shallow	17/04/2024	WG10S	TD	Dry	3.21	20.39																										
864	Hyd2o Bore Wattle Grove 10 Deep	17/04/2024	WG10D	TD	Dry - wet clay	9.03	14.59																										
865	Unknown Origin Bore	17/04/2024	Mba	TD	Damaged/blocked	2.60	18.01																										
866	Douglas Partners Bore 1	17/04/2024	MBb	TD		15.25	16.65																										
867	Endemic Bore 3	17/04/2024	GW3	TD	Dry	1.81	7.84																										
868	Endemic Bore 5	17/04/2024	GW5	TD	Dry	1.75	17.66																										
869	Hyd2o Deep Bore next to Endemic 5	17/04/2024	GW5D	TD		5.24	14.13																										
870	Endemic Bore 8	17/04/2024	GW8	TD	Dry - wet mud	4.14	20.47																										

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
871	Hyd2o Deep Bore next to Endemic 8	17/04/2024	GW8D	TD		8.72	15.80																										
872	Hyd2o Bore Wetlands 9 Shallow	17/04/2024	GW9S	TD		3.63	18.18																										
873	Hyd2o Bore Wetlands 9 Deep	17/04/2024	GW9D	TD		4.09	17.69																										
874	Endemic Bore 12	17/04/2024	GW12	TD	Dry - wet mud	2.84	6.55																										
875	DWER Bore 1	17/04/2024	SCC 05/08	TD		19.49	22.29																										
876	DWER Bore 2	17/04/2024	SCC 06/08	TD		3.21	4.77																										
877	DWER Bore 3	17/04/2024	SCC 09/08	TD		5.89	7.32																										
878	Hyd2o Bore Wattle Grove 1	23/05/2024	WG1	AFR		16.55	15.55																										
879	Hyd2o Bore Wattle Grove 2 Shallow	23/05/2024	WG2S	AFR	Dry	3.51	22.50																										
880	Hyd2o Bore Wattle Grove 2 (Deep)	23/05/2024	WG2	AFR		9.99	16.13																										
881	Hyd2o Bore Wattle Grove 3	23/05/2024	WG3	AFR		8.47	14.50																										
882	Hyd2o Bore Wattle Grove 4 Shallow	23/05/2024	WG4S	AFR		2.49	23.17																										
883	Hyd2o Bore Wattle Grove 4 Deep	23/05/2024	WG4D	AFR		11.09	14.64																										
884	Hyd2o Bore Wattle Grove 5 Shallow	23/05/2024	WG5S	AFR	Dry	5.91	29.23																										
885	Hyd2o Bore Wattle Grove 5 Deep	23/05/2024	WG5D	AFR		19.53	15.60																										
886	Hyd2o Bore Wattle Grove 6	23/05/2024	WG6	AFR		9.33	16.01																										
887	Hyd2o Bore Wattle Grove 7 Shallow	23/05/2024	WG7S	AFR	Dry	3.68	19.82																										
888	Hyd2o Bore Wattle Grove 7 Deep	23/05/2024	WG7D	AFR		8.77	14.67																										
889	Hyd2o Bore Wattle Grove 8	23/05/2024	WG8	AFR	Clogged	25.20	16.57																										
890	Hyd2o Bore Wattle Grove 9	23/05/2024	WG9	AFR	Dry - wet clay	6.13	17.73																										
891	Hyd2o Bore Wattle Grove 10 Shallow	23/05/2024	WG10S	AFR	Dry	3.21	20.39																										
892	Hyd2o Bore Wattle Grove 10 Deep	23/05/2024	WG10D	AFR	Dry - wet clay	9.03	14.59																										
893	Unknown Origin Bore	23/05/2024	Mba	AFR	Damaged/blocked	2.60	18.01																										
894	Douglas Partners Bore 1	23/05/2024	MBb	AFR		15.38	16.52																										
895	Endemic Bore 3	23/05/2024	GW3	AFR	Dry	1.57	8.08																										
896	Endemic Bore 5	23/05/2024	GW5	AFR	Dry	1.75	17.66																										
897	Hyd2o Deep Bore next to Endemic 5	23/05/2024	GW5D	AFR		5.39	13.98																										
898	Endemic Bore 8	23/05/2024	GW8	AFR	Dry	4.13	20.48																										
899	Hyd2o Deep Bore next to Endemic 8	23/05/2024	GW8D	AFR		8.81	15.71																										
900	Hyd2o Bore Wetlands 9 Shallow	23/05/2024	GW9S	AFR		3.68	18.13																										
901	Hyd2o Bore Wetlands 9 Deep	23/05/2024	GW9D	AFR		4.18	17.60																										
902	Endemic Bore 12	23/05/2024	GW12	AFR	Dry - wet mud	2.84	6.55																										
903	DWER Bore 1	23/05/2024	SCC 05/08	AFR		19.59	22.19																										
904	DWER Bore 2	23/05/2024	SCC 06/08	AFR		3.42	4.56																										
905	DWER Bore 3	23/05/2024	SCC 09/08	AFR		5.98	7.23																										
906	Hyd2o Bore Wattle Grove 1	20/06/2024	WG1	AFR		16.48	15.62	18.30	0.358	5.13	59.8	3.00	0.220	2.800	0.005	2.800	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0010	0.0065		0.5	3.0	1.3	33	13	
907	Hyd2o Bore Wattle Grove 2 Shallow	20/06/2024	WG2S	AFR	Dry	3.51	22.50																										
908	Hyd2o Bore Wattle Grove 2 (Deep)	20/06/2024	WG2	AFR		9.74	16.38	15.30	2.309	5.58	70.8	11.00	11.000	0.210	0.005	0.210	0.180	2.20	0.073	0.0010	0.0001	0.0010	0.0017	0.0010	0.0001	0.0076	0.0370		3.7	68.0	19.0	280	290	
909	Hyd2o Bore Wattle Grove 3	20/06/2024	WG3	AFR		7.75	15.22	18.80	12.939	5.05	42.6	1.90	1.900	0.005	0.005	0.005	0.005	0.09	0.005	0.0030	0.0001	0.0041	0.0018	0.0010	0.0001	0.0960	0.0330		190.0	330.0	56.0	2200	1800	
910	Hyd2o Bore Wattle Grove 4 Shallow	20/06/2024	WG4S	AFR		1.68	23.98	20.80	2.115	5.20	35.4	0.19	0.170	0.016	0.005	0.016	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0038	0.0029		40.0	60.0	11.0	310	350	
911	Hyd2o Bore Wattle Grove 4 Deep	20/06/2024	WG4D	AFR		10.42	15.31	21.80	2.645	5.30	18.2	6.00	0.160	5.900	0.005	5.900	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0036	0.0059		86.0	73.0	14.0	330	520	
912	Hyd2o Bore Wattle Grove 5 Shallow	20/06/2024	WG5S	AFR	Dry	5.91	29.23																										
913	Hyd2o Bore Wattle Grove 5 Deep	20/06/2024	WG5D	AFR		19.42	15.71	19.80	0.764	4.85	60.6	15.00	1.000	14.000	0.005	14.000	0.005	0.08	0.005	0.0010	0.0001	0.0010	0.0042	0.0013	0.0001	0.0029	0.0240		3.0	14.0	3.2	120	67	
914	Hyd2o Bore Wattle Grove 6	20/06/2024	WG6	AFR		9.00	16.34	16.70	2.067	4.94	38.2	3.40	1.500	1.900	0.005	1.900	0.014	0.60	0.007	0.0010	0.0001	0.0010	0.0010	0.0031	0.0001	0.0042	0.0130		9.0	60.0	8.0	290	270	
915	Hyd2o Bore Wattle Grove 7 Shallow	20/06/2024	WG7S	AFR	Dry	3.68	19.82																										
916	Hyd2o Bore Wattle Grove 7 Deep	20/06/2024	WG7D	AFR		8.13	15.31	20.70	0.788	5.64	24.6	4.60	0.360	4.200	0.005	4.200	0.005	0.05	0.010	0.0010	0.0001	0.0010	0.0025	0.0010	0.0001	0.0017	0.0026		11.0	17.0	3.6	120	97	
917	Hyd2o Bore Wattle Grove 8	20/06/2024	WG8	AFR	Clogged	25.63	16.14																										
918	Hyd2o Bore Wattle Grove 9	20/06/2024	WG9	AFR	Dry	6.13	17.73																										
919	Hyd2o Bore Wattle Grove 10 Shallow	20/06/2024	WG10S	AFR	Dry	3.21	20.39																										
920	Hyd2o Bore Wattle Grove 10 Deep	20/06/2024	WG10D	AFR		7.12	16.50	21.10	0.165	5.63	56.9	6.50	1.100	0.005	0.005	5.400	0.005	0.05	0.008	0.0010	0.0001	0.0010	0.0045	0.0010	0.0001	0.0010	0.0130		7.5	5.1	3.7	36	40	
921	Unknown Origin Bore	20/06/2024	Mba	AFR	Damaged/blocked	2.60	18.01																										
922	Douglas Partners Bore 1	20/06/2024	MBb	AFR		15.45	16.45	18.20	1.154	5.85	55.0	3.10	3.100	0.005	0.005	0.005	2.200	0.50	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0040	0.0079		34.0	71.0	11.0	93	380	
923	Endemic Bore 3	20/06/2024	GW3	AFR	Dry	1.57	8.08																										
924	Endemic Bore 5	20/06/2024	GW5	AFR	Not enough water for sampling	1.42	17.99																										
925	Hyd2o Deep Bore next to Endemic 5	20/06/2024	GW5D	AFR		5.23	14.14	21.90	0.724	4.36	30.6	0.52	0.520	0.005	0.005	0.005	0.120	0.05	0.005	0.0014	0.0001	0.0010	0.0043	0.0023	0.0001	0.0100	0.0210		21.0	15.0	6.9	82	110	
926	Endemic Bore 8	20/06/2024	GW8	AFR	Not enough water for sampling	4.10	20.51																										
927	Hyd2o Deep Bore next to Endemic 8	20/06/2024	GW8D	AFR		8.06	16.46	21.00	0.174	5.45	39.1	0.19	0.190	0.005	0.005	0.006	0.005	0.05	0.005	0.0010	0.0001	0.0010	0.0010	0.0010	0.0001	0.0016	0.0049		1.6	1.6	1.6	26	10	
928	Hyd2o Bore Wetlands 9 Shallow	20/06/2024	GW9S	AFR		3.11	18.70	19.90	0.245	6.20	29.4	5.30	0.710	4.600	0.005	4.600	0.005	1.30	0.200	0.0074	0.0001	0.0010	0.0043	0.0010	0.0001	0.0032	0.0055		16.0	4.6	5.5	14	59	

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC	GWL mAHD	T	EC	pH	DO	TN	TKN	NO3	NO2	Nox	NH3	TP	FRP	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn	Cl	Ca	Mg	K	Na	H as CaCO3	SiO2
						mBToC	mAHD	°C	mS/cm	pH	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
929	Hyd2o Bore Wetlands 9 Deep	20/06/2024	GW9D	AFR		3.37	18.41	20.40	0.395	6.02	15.4	2.10	0.770	1.400	0.005	1.400	0.005	0.10	0.078	0.0022	0.0001	0.0010	0.0081	0.0010	0.0001	0.0069	0.0085		13.0	7.4	8.4	43	63	
930	Endemic Bore 12	20/06/2024	GW12	AFR		2.08	7.31																											
931	DWER Bore 1	20/06/2024	SCC 05/08	AFR		19.62	22.16																											
932	DWER Bore 2	20/06/2024	SCC 06/08	AFR		2.29	5.69																											
933	DWER Bore 3	20/06/2024	SCC 09/08	AFR		5.60	7.61																											
934	Hyd2o Bore Wattle Grove 1	5/07/2024	WG1	AFR		16.43	15.67																											
935	Hyd2o Bore Wattle Grove 2 Shallow	5/07/2024	WG2S	AFR	Dry	3.51	22.50																											
936	Hyd2o Bore Wattle Grove 2 (Deep)	5/07/2024	WG2	AFR		9.67	16.45																											
937	Hyd2o Bore Wattle Grove 3	5/07/2024	WG3	AFR		7.56	15.41																											
938	Hyd2o Bore Wattle Grove 4 Shallow	5/07/2024	WG4S	AFR		1.66	24.00																											
939	Hyd2o Bore Wattle Grove 4 Deep	5/07/2024	WG4D	AFR		10.35	15.38																											
940	Hyd2o Bore Wattle Grove 5 Shallow	5/07/2024	WG5S	AFR	Dry	5.91	29.23																											
941	Hyd2o Bore Wattle Grove 5 Deep	5/07/2024	WG5D	AFR		19.36	15.77																											
942	Hyd2o Bore Wattle Grove 6	5/07/2024	WG6	AFR		8.87	16.47																											
943	Hyd2o Bore Wattle Grove 7 Shallow	5/07/2024	WG7S	AFR	Dry	3.68	19.82																											
944	Hyd2o Bore Wattle Grove 7 Deep	5/07/2024	WG7D	AFR		8.01	15.43																											
945	Hyd2o Bore Wattle Grove 8	5/07/2024	WG8	AFR		25.84	15.93																											
946	Hyd2o Bore Wattle Grove 9	5/07/2024	WG9	AFR	Mud	6.12	17.74																											
947	Hyd2o Bore Wattle Grove 10 Shallow	5/07/2024	WG10S	AFR	Dry	3.21	20.39																											
948	Hyd2o Bore Wattle Grove 10 Deep	5/07/2024	WG10D	AFR		7.66	15.96																											
949	Unknown Origin Bore	5/07/2024	Mba	AFR	Damaged/blocked	2.60	18.01																											
950	Douglas Partners Bore 1	5/07/2024	MBb	AFR		15.44	16.46																											
951	Endemic Bore 3	5/07/2024	GW3	AFR	Dry	1.57	8.08																											
952	Endemic Bore 5	5/07/2024	GW5	AFR		1.40	18.01																											
953	Hyd2o Deep Bore next to Endemic 5	5/07/2024	GW5D	AFR		5.15	14.22																											
954	Endemic Bore 8	5/07/2024	GW8	AFR		4.10	20.51																											
955	Hyd2o Deep Bore next to Endemic 8	5/07/2024	GW8D	AFR		8.37	16.15																											
956	Hyd2o Bore Wetlands 9 Shallow	5/07/2024	GW9S	AFR		3.05	18.76																											
957	Hyd2o Bore Wetlands 9 Deep	5/07/2024	GW9D	AFR		3.21	18.57																											
958	Endemic Bore 12	5/07/2024	GW12	AFR		2.68	6.71																											
959	DWER Bore 1	5/07/2024	SCC 05/08	AFR		19.58	22.20																											
960	DWER Bore 2	5/07/2024	SCC 06/08	AFR		2.22	5.76																											
961	DWER Bore 3	5/07/2024	SCC 09/08	AFR		5.42	7.79																											
962	Hyd2o Bore Wattle Grove 1	17/07/2024	WG1	AFR		16.39	15.71																											
963	Hyd2o Bore Wattle Grove 2 Shallow	17/07/2024	WG2S	AFR	Dry	3.51	22.50																											
964	Hyd2o Bore Wattle Grove 2 (Deep)	17/07/2024	WG2	AFR		9.61	16.51																											
965	Hyd2o Bore Wattle Grove 3	17/07/2024	WG3	AFR		7.41	15.56																											
966	Hyd2o Bore Wattle Grove 4 Shallow	17/07/2024	WG4S	AFR		1.44	24.22																											
967	Hyd2o Bore Wattle Grove 4 Deep	17/07/2024	WG4D	AFR		10.24	15.49																											
968	Hyd2o Bore Wattle Grove 5 Shallow	17/07/2024	WG5S	AFR	Dry	5.91	29.23																											
969	Hyd2o Bore Wattle Grove 5 Deep	17/07/2024	WG5D	AFR		19.33	15.80																											
970	Hyd2o Bore Wattle Grove 6	17/07/2024	WG6	AFR		8.85	16.49																											
971	Hyd2o Bore Wattle Grove 7 Shallow	17/07/2024	WG7S	AFR	Dry	3.68	19.82																											
972	Hyd2o Bore Wattle Grove 7 Deep	17/07/2024	WG7D	AFR		8.04	15.40																											
973	Hyd2o Bore Wattle Grove 8	17/07/2024	WG8	AFR		25.81	15.96																											
974	Hyd2o Bore Wattle Grove 9	17/07/2024	WG9	AFR	Mud	6.12	17.74																											
975	Hyd2o Bore Wattle Grove 10 Shallow	17/07/2024	WG10S	AFR	Dry	3.21	20.39																											
976	Hyd2o Bore Wattle Grove 10 Deep	17/07/2024	WG10D	AFR		7.62	16.00																											
977	Unknown Origin Bore	17/07/2024	Mba	AFR	Damaged/blocked	2.60	18.01																											
978	Douglas Partners Bore 1	17/07/2024	MBb	AFR		15.43	16.47																											
979	Endemic Bore 3	17/07/2024	GW3	AFR	Dry	1.57	8.08																											
980	Endemic Bore 5	17/07/2024	GW5	AFR		1.27	18.14																											
981	Hyd2o Deep Bore next to Endemic 5	17/07/2024	GW5D	AFR		5.10	14.27																											
982	Endemic Bore 8	17/07/2024	GW8	AFR		3.87	20.74																											
983	Hyd2o Deep Bore next to Endemic 8	17/07/2024	GW8D	AFR		8.23	16.29																											
984	Hyd2o Bore Wetlands 9 Shallow	17/07/2024	GW9S	AFR		2.88	18.93																											
985	Hyd2o Bore Wetlands 9 Deep	17/07/2024	GW9D	AFR		3.04	18.74																											
986	Endemic Bore 12	17/07/2024	GW12	AFR		1.54	7.85																											

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below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
987	DWER Bore 1	17/07/2024	SCC 05/08	AFR		19.55	22.23																										
988	DWER Bore 2	17/07/2024	SCC 06/08	AFR		1.98	6.00																										
989	DWER Bore 3	17/07/2024	SCC 09/08	AFR		3.86	9.35																										
990	Surface Water Site 2	17/07/2024	SW2	AFR	SW1 at H21003 CoC23			16.60	1.872	8.21	64.7																						
991	Surface Water Site 7	17/07/2024	SW7	AFR	SW2 at H21003 CoC23			16.40	0.755	7.06	8.3																						
992	Surface Water Site 9	17/07/2024	SW9	AFR	SW3 at H21003 CoC23			15.60	1.346	7.19	27.4																						
993	Hyd2o Bore Wattle Grove 1	21/08/2024	WG1	AFR & TD		16.23	15.87																										
994	Hyd2o Bore Wattle Grove 2 Shallow	21/08/2024	WG2S	AFR & TD	dry	3.51	22.50																										
995	Hyd2o Bore Wattle Grove 2 (Deep)	21/08/2024	WG2	AFR & TD		9.24	16.88																										
996	Hyd2o Bore Wattle Grove 3	21/08/2024	WG3	AFR & TD		5.89	17.08																										
997	Hyd2o Bore Wattle Grove 4 Shallow	21/08/2024	WG4S	AFR & TD		0.96	24.70																										
998	Hyd2o Bore Wattle Grove 4 Deep	21/08/2024	WG4D	AFR & TD		9.79	15.94																										
999	Hyd2o Bore Wattle Grove 5 Shallow	21/08/2024	WG5S	AFR & TD	dry	5.91	29.23																										
1000	Hyd2o Bore Wattle Grove 5 Deep	21/08/2024	WG5D	AFR & TD		19.20	15.93																										
1001	Hyd2o Bore Wattle Grove 6	21/08/2024	WG6	AFR & TD		8.24	17.10																										
1002	Hyd2o Bore Wattle Grove 7 Shallow	21/08/2024	WG7S	AFR & TD	dry	3.68	19.82																										
1003	Hyd2o Bore Wattle Grove 7 Deep	21/08/2024	WG7D	AFR & TD		6.61	16.83																										
1004	Hyd2o Bore Wattle Grove 8	21/08/2024	WG8	AFR & TD		25.68	16.09																										
1005	Hyd2o Bore Wattle Grove 9	21/08/2024	WG9	AFR & TD		5.79	18.07																										
1006	Hyd2o Bore Wattle Grove 10 Shallow	21/08/2024	WG10S	AFR & TD		2.54	21.06																										
1007	Hyd2o Bore Wattle Grove 10 Deep	21/08/2024	WG10D	AFR & TD		6.26	17.36																										
1008	Unknown Origin Bore	21/08/2024	Mba	AFR & TD	Damaged/blocked	2.60	18.01																										
1009	Douglas Partners Bore 1	21/08/2024	MBb	AFR & TD		15.24	16.66																										
1010	Endemic Bore 3	21/08/2024	GW3	AFR & TD		1.05	8.60																										
1011	Endemic Bore 5	21/08/2024	GW5	AFR & TD		0.88	18.53																										
1012	Hyd2o Deep Bore next to Endemic 5	21/08/2024	GW5D	AFR & TD		3.94	15.43																										
1013	Endemic Bore 8	21/08/2024	GW8	AFR & TD		3.51	21.10																										
1014	Hyd2o Deep Bore next to Endemic 8	21/08/2024	GW8D	AFR & TD		7.25	17.27																										
1015	Hyd2o Bore Wetlands 9 Shallow	21/08/2024	GW9S	AFR & TD		1.93	19.88																										
1016	Hyd2o Bore Wetlands 9 Deep	21/08/2024	GW9D	AFR & TD		2.12	19.66																										
1017	Endemic Bore 12	21/08/2024	GW12	AFR & TD		0.52	8.87																										
1018	DWER Bore 1	21/08/2024	SCC 05/08	AFR & TD	Locked																												
1019	DWER Bore 2	21/08/2024	SCC 06/08	AFR & TD		1.26	6.72																										
1020	DWER Bore 3	21/08/2024	SCC 09/08	AFR & TD	locked																												
1021	Surface Water Site 2	21/08/2024	SW2	AFR & TD	SW3 at H21003 COC24			17.10	1.332	7.69	217	3.70	1.100	2.6000	0.030	2.600	0.035	0.15	0.082	0.0014	0.0001	0.001	0.0049	0.0015	0.00005	0.0012	0.014		77	29	12	160	310	
1022	Surface Water Site 6	21/08/2024	SW6	AFR & TD	SW4 at H21003 COC25			17.90	0.578	6.79	195	1.40	1.200	0.2100	0.050	0.250	0.058	0.050	0.0058	0.001	0.0001	0.001	0.0029	0.001	0.00005	0.0024	0.013		34	15	7.1	62	150	
1023	Surface Water Site 7	21/08/2024	SW7	AFR & TD	SW5 at H21003 COC26			16.90	0.588	7.30	184	2.00	1.900	0.0660	0.050	0.070	0.0082	0.20	0.120	0.002	0.0001	0.001	0.0022	0.001	0.00005	0.0019	0.0097		45	14	8.8	65	170	
1024	Surface Water Site 9	21/08/2024	SW9	AFR & TD	SW6 at H21003 COC27			18.70	0.792	7.33	243	2.20	2.000	0.1900	0.050	0.200	0.010	0.24	0.170	0.002	0.0001	0.001	0.002	0.001	0.00005	0.0019	0.0094		60	18	13	80	230	
1025	Hyd2o Bore Wattle Grove 1	19/09/2024	WG1	AFR & TD		16.07	16.03	22.90	0.333	5.72	44	4.3	0.76	3.6	0.0057	3.6	0.0092	0.05	0.01	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.011							
1026	Hyd2o Bore Wattle Grove 2 Shallow	19/09/2024	WG2S	AFR & TD	dry	3.51	22.50																										
1027	Hyd2o Bore Wattle Grove 2 (Deep)	19/09/2024	WG2	AFR & TD		8.90	17.22	21.90	1.839	5.36	19	3.2	0.6	2.6	0.005	2.6	0.032	0.066	0.01	0.001	0.0001	0.001	0.001	0.001	0.00005	0.0021	0.0035							
1028	Hyd2o Bore Wattle Grove 3	19/09/2024	WG3	AFR & TD		4.57	18.40	20.30	3.649	5.14	17	1.9	1.9	0.0050	0.005	0.005	0.0054	0.05	0.0086	0.0016	0.0001	0.0026	0.0049	0.012	0.00005	0.0042	0.005							
1029	Hyd2o Bore Wattle Grove 4 Shallow	19/09/2024	WG4S	AFR & TD		1.26	24.40	20.30	2.133	5.57	12	0.24	0.21	0.025	0.0064	0.031	0.009	0.05	0.01	0.001	0.0001	0.001	0.001	0.0016	0.00005	0.0012	0.0017							
1030	Hyd2o Bore Wattle Grove 4 Deep	19/09/2024	WG4D	AFR & TD		9.49	16.24	24.60	1.566	6.17	18	4.3	0.61	3.7	0.021	3.7	0.018	0.05	0.01	0.001	0.0001	0.001	0.0045	0.001	0.00005	0.0014	0.011							
1031	Hyd2o Bore Wattle Grove 5 Shallow	19/09/2024	WG5S	AFR & TD	dry	5.91	29.23																										
1032	Hyd2o Bore Wattle Grove 5 Deep	19/09/2024	WG5D	AFR & TD		19.06	16.07	22.30	0.579	5.65	87	18	2.6	15	0.017	15	0.4	0.1	0.055	0.001	0.0001	0.0015	0.0024	0.0026	0.00005	0.0028	0.018							
1033	Hyd2o Bore Wattle Grove 6	19/09/2024	WG6	AFR & TD		7.80	17.54	20.60	1.821	5.70	23	0.86	0.3	0.56	0.0056	0.57	0.0084	0.05	0.01	0.001	0.0001	0.001	0.001	0.011	0.00005	0.003	0.0023							
1034	Hyd2o Bore Wattle Grove 7 Shallow	19/09/2024	WG7S	AFR & TD	dry	3.68	19.82																										
1035	Hyd2o Bore Wattle Grove 7 Deep	19/09/2024	WG7D	AFR & TD		5.84	17.60	22.60	0.174	5.60	46	5.5	2.1	3.4	0.0093	3.4	0.02	0.05	0.01	0.001	0.0001	0.007	0.0056	0.0046	0.00005	0.0045	0.0023							
1036	Hyd2o Bore Wattle Grove 8	19/09/2024	WG8	AFR & TD	Not enough water for sampling	25.59	16.18																										
1037	Hyd2o Bore Wattle Grove 9	19/09/2024	WG9	AFR & TD		5.36	18.50	22.00	0.940	6.33	60	22	4.3	18	0.005	18	0.0054	2.5	2.2	0.0012	0.0001	0.013	0.0076	0.0066	0.00024	0.0078	0.0035							
1038	Hyd2o Bore Wattle Grove 10 Shallow	19/09/2024	WG10S	AFR & TD		2.77	20.83	24.20	0.208	6.64	22	4.7	1.3	3.3	0.0057	3.3	0.0059	0.05	0.01	0.001	0.0001	0.0042	0.002	0.0018	0.00005	0.0012	0.002							
1039	Hyd2o Bore Wattle Grove 10 Deep	19/09/2024	WG10D	AFR & TD		5.60	18.02	22.70	0.136	6.12	61	5.6	1.1	4.6	0.005	4.6	0.005	0.05	0.01	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.0023							
1040	Unknown Origin Bore	19/09/2024	Mba	AFR & TD	Damaged/blocked	2.60	18.01																										
1041	Douglas Partners Bore 1	19/09/2024	MBb	AFR & TD		15.07	16.83	24.20	1.211	6.42	40	3.9	3.8	0.18	0.005	0.18	3.1	0.05	0.01	0.0014	0.0001	0.001	0.001	0.001	0.00005	0.0055	0.019							
1042	Endemic Bore 3	19/09/2024	GW3	AFR & TD		1.27	8.38																										
1043	Endemic Bore 5	19/09/2024	GW5	AFR & TD		1.28	18.13	20.20	0.755	7.00	19	1.5	1.5	0.0089	0.0081	0.017	0.017	0.05	0.0064	0.001	0.0001	0.001	0.001	0.001	0.00005	0.0092	0.001							
1044	Hyd2o Deep Bore next to Endemic 5	19/09/2024	GW5D	AFR & TD		2.48	16.89	21.20	1.051	3.85	15	0.67	0.66	0.0055	0.0054	0.011	0.2	0.05	0.01	0.0027	0.0001	0.0017	0.0014	0.01	0.00005	0.039	0.0072							

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
1045	Endemic Bore 8	19/09/2024	GW8	AFR & TD	Not enough water for sampling	3.93	20.68																											
1046	Hyd2o Deep Bore next to Endemic 8	19/09/2024	GW8D	AFR & TD		6.65	17.87	23.10	0.176	5.51	30	0.28	0.18	0.094	0.005	0.099	0.005	0.05	0.0056	0.001	0.0001	0.001	0.001	0.001	0.00005	0.0012	0.001							
1047	Hyd2o Bore Wetlands 9 Shallow	19/09/2024	GW9S	AFR & TD		1.99	19.82	21.50	0.381	6.82	55	5.7	1.5	4.3	0.0075	4.3	0.005	0.05	0.028	0.0025	0.0001	0.001	0.001	0.001	0.00005	0.0013	0.0077							
1048	Hyd2o Bore Wetlands 9 Deep	19/09/2024	GW9D	AFR & TD		2.13	19.65	20.60	1.245	6.25	22	1.9	1.8	0.094	0.0075	0.1	0.005	0.05	0.025	0.001	0.0001	0.001	0.0046	0.001	0.00005	0.017	0.0027							
1049	Endemic Bore 12	19/09/2024	GW12	AFR & TD		0.92	8.47																											
1050	DWER Bore 1	19/09/2024	SCC 05/08	AFR & TD		19.26	22.52																											
1051	DWER Bore 2	19/09/2024	SCC 06/08	AFR & TD		1.57	6.41																											
1052	DWER Bore 3	19/09/2024	SCC 09/08	AFR & TD		1.96	11.25																											
1053	Surface Water Site 2	19/09/2024	SW2	AFR & TD	minor flow			18.90	1.565	8.29	67	3.2	1.4	1.7	0.01	1.7	0.011	0.093	0.035	0.001	0.0001	0.001	0.003	0.002	0.00005	0.001	0.0054							
1054	Surface Water Site 7	19/09/2024	SW7	AFR & TD	minor flow			21.00	1.138	7.34	28	2.8	2.7	0.0050	0.023	0.021	0.047	0.25	0.18	0.002	0.0001	0.001	0.001	0.001	0.00005	0.0021	0.0047							
1055	Surface Water Site 9	19/09/2024	SW9	AFR & TD	minor flow			22.90	1.515	7.68	59	2.7	2.7	0.0050	0.0091	0.005	0.021	0.28	0.16	0.003	0.0001	0.001	0.001	0.001	0.00005	0.0019	0.0029							
1056	Hyd2o Bore Wattle Grove 1	16/10/2024	WG1	TD		15.93	16.17																											
1057	Hyd2o Bore Wattle Grove 2 Shallow	16/10/2024	WG2S	TD	dry	3.51	22.50																											
1058	Hyd2o Bore Wattle Grove 2 (Deep)	16/10/2024	WG2	TD		8.77	17.35																											
1059	Hyd2o Bore Wattle Grove 3	16/10/2024	WG3	TD		3.94	19.03																											
1060	Hyd2o Bore Wattle Grove 4 Shallow	16/10/2024	WG4S	TD		1.27	24.39																											
1061	Hyd2o Bore Wattle Grove 4 Deep	16/10/2024	WG4D	TD		9.29	16.44																											
1062	Hyd2o Bore Wattle Grove 5 Shallow	16/10/2024	WG5S	TD	dry	5.91	29.23																											
1063	Hyd2o Bore Wattle Grove 5 Deep	16/10/2024	WG5D	TD		19.03	16.10																											
1064	Hyd2o Bore Wattle Grove 6	16/10/2024	WG6	TD		7.68	17.66																											
1065	Hyd2o Bore Wattle Grove 7 Shallow	16/10/2024	WG7S	TD	dry	3.68	19.82																											
1066	Hyd2o Bore Wattle Grove 7 Deep	16/10/2024	WG7D	TD		5.34	18.10																											
1067	Hyd2o Bore Wattle Grove 8	16/10/2024	WG8	TD		25.54	16.23																											
1068	Hyd2o Bore Wattle Grove 9	16/10/2024	WG9	TD		5.14	18.72																											
1069	Hyd2o Bore Wattle Grove 10 Shallow	16/10/2024	WG10S	TD		3.04	20.56																											
1070	Hyd2o Bore Wattle Grove 10 Deep	16/10/2024	WG10D	TD		5.27	18.35																											
1071	Unknown Origin Bore	16/10/2024	Mba	TD	Damaged/blocked	2.60	18.01																											
1072	Douglas Partners Bore 1	16/10/2024	MBb	TD		14.91	16.99																											
1073	Endemic Bore 3	16/10/2024	GW3	TD		1.41	8.24																											
1074	Endemic Bore 5	16/10/2024	GW5	TD		1.40	18.01																											
1075	Hyd2o Deep Bore next to Endemic 5	16/10/2024	GW5D	TD		2.55	16.82																											
1076	Endemic Bore 8	16/10/2024	GW8	TD		4.04	20.57																											
1077	Hyd2o Deep Bore next to Endemic 8	16/10/2024	GW8D	TD		6.45	18.07																											
1078	Hyd2o Bore Wetlands 9 Shallow	16/10/2024	GW9S	TD		2.06	19.75																											
1079	Hyd2o Bore Wetlands 9 Deep	16/10/2024	GW9D	TD		2.15	19.63																											
1080	Endemic Bore 12	16/10/2024	GW12	TD		1.07	8.32																											
1081	DWER Bore 1	16/10/2024	SCC 05/08	TD		19.11	22.67																											
1082	DWER Bore 2	16/10/2024	SCC 06/08	TD		1.71	6.27																											
1083	DWER Bore 3	16/10/2024	SCC 09/08	TD		2.06	11.15																											
1084	Hyd2o Bore Wattle Grove 1	20/11/2024	WG1	TD		15.90	16.20																											
1085	Hyd2o Bore Wattle Grove 2 Shallow	20/11/2024	WG2S	TD	dry	3.51	22.50																											
1086	Hyd2o Bore Wattle Grove 2 (Deep)	20/11/2024	WG2	TD		8.89	17.23																											
1087	Hyd2o Bore Wattle Grove 3	20/11/2024	WG3	TD		4.11	18.86																											
1088	Hyd2o Bore Wattle Grove 4 Shallow	20/11/2024	WG4S	TD		1.45	24.21																											
1089	Hyd2o Bore Wattle Grove 4 Deep	20/11/2024	WG4D	TD		9.34	16.39																											
1090	Hyd2o Bore Wattle Grove 5 Shallow	20/11/2024	WG5S	TD	dry	5.91	29.23																											
1091	Hyd2o Bore Wattle Grove 5 Deep	20/11/2024	WG5D	TD		19.03	16.10																											
1092	Hyd2o Bore Wattle Grove 6	20/11/2024	WG6	TD		7.94	17.40																											
1093	Hyd2o Bore Wattle Grove 7 Shallow	20/11/2024	WG7S	TD	dry	3.68	19.82																											
1094	Hyd2o Bore Wattle Grove 7 Deep	20/11/2024	WG7D	TD		5.55	17.89																											
1095	Hyd2o Bore Wattle Grove 8	20/11/2024	WG8	TD	dry	25.65	16.12																											
1096	Hyd2o Bore Wattle Grove 9	20/11/2024	WG9	TD		5.31	18.55																											
1097	Hyd2o Bore Wattle Grove 10 Shallow	20/11/2024	WG10S	TD	dry	3.24	20.36																											
1098	Hyd2o Bore Wattle Grove 10 Deep	20/11/2024	WG10D	TD		5.22	18.40																											
1099	Unknown Origin Bore	20/11/2024	Mba	TD	Damaged/blocked	2.60	18.01																											
1100	Douglas Partners Bore 1	20/11/2024	MBb	TD		14.82	17.08																											
1101	Endemic Bore 3	20/11/2024	GW3	TD		1.75	7.90																											
1102	Endemic Bore 5	20/11/2024	GW5	TD		1.77	17.64																											

FieldDAE
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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
1103	Hyd2o Deep Bore next to Endemic 5	20/11/2024	GW5D	TD		3.18	16.19																										
1104	Endemic Bore 8	20/11/2024	GW8	TD	dry	4.12	20.49																										
1105	Hyd2o Deep Bore next to Endemic 8	20/11/2024	GW8D	TD		6.78	17.74																										
1106	Hyd2o Bore Wetlands 9 Shallow	20/11/2024	GW9S	TD		2.29	19.52																										
1107	Hyd2o Bore Wetlands 9 Deep	20/11/2024	GW9D	TD		2.46	19.32																										
1108	Endemic Bore 12	20/11/2024	GW12	TD		2.03	7.36																										
1109	DWER Bore 1	20/11/2024	SCC 05/08	TD		19.04	22.74																										
1110	DWER Bore 2	20/11/2024	SCC 06/08	TD		2.08	5.90																										
1111	DWER Bore 3	20/11/2024	SCC 09/08	TD		2.48	10.73																										
1112	Hyd2o Bore Wattle Grove 1	17/12/2024	WG1	AFR & TD		15.99	16.11	32.0	0.190	5.45	20.5	1.20	0.180	1.0000	0.031	1.100	0.019	0.01	0.27	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.012		0.05	3.3	1.5	31	14	
1113	Hyd2o Bore Wattle Grove 2 Shallow	17/12/2024	WG2S	AFR & TD	dry	3.51	22.50																										
1114	Hyd2o Bore Wattle Grove 2 (Deep)	17/12/2024	WG2	AFR & TD		9.12	17.00	26.0	3.065	5.57	32.9	0.36	0.360	0.0050	0.005	0.005	0.006	0.01	0.29	0.002	0.0001	0.001	0.001	0.001	0.00005	0.0034	0.0061		2.8	110	15	490	470	
1115	Hyd2o Bore Wattle Grove 3	17/12/2024	WG3	AFR & TD		4.80	18.17	26.2	1.359	5.22	21.1	1.70	1.700	0.0500	0.050	0.050	0.024	0.02	0.08	0.002	0.0001	0.005	0.001	0.001	0.00005	0.0065	0.0021		9.2	25	22	230	130	
1116	Hyd2o Bore Wattle Grove 4 Shallow	17/12/2024	WG4S	AFR & TD		1.68	23.98	27.3	1.878	5.49	38.8	0.19	0.160	0.0250	0.005	0.027	0.019	0.01	0.07	0.001	0.0001	0.001	0.001	0.001	0.00005	0.0013	0.0031		37	55	12	290	320	
1117	Hyd2o Bore Wattle Grove 4 Deep	17/12/2024	WG4D	AFR & TD		9.63	16.10	33.3	1.531	5.72	20.1	1.20	0.380	0.7700	0.010	0.780	0.026	0.01	0.13	0.001	0.0001	0.001	0.005	0.001	0.00005	0.0014	0.014		68	48	14	210	370	
1118	Hyd2o Bore Wattle Grove 5 Shallow	17/12/2024	WG5S	AFR & TD	dry	5.91	29.23																										
1119	Hyd2o Bore Wattle Grove 5 Deep	17/12/2024	WG5D	AFR & TD		19.14	15.99	30.7	0.662	5.18	70.2	13.00	0.100	14.0000	0.005	14.000	0.023	0.01	0.11	0.001	0.0001	0.001	0.002	0.001	0.00005	0.0023	0.02		2.8	14	5.8	120	64	
1120	Hyd2o Bore Wattle Grove 6	17/12/2024	WG6	AFR & TD		8.24	17.10	24.2	1.771	5.65	26.8	1.80	0.150	1.6000	0.005	1.600	0.025	0.01	0.05	0.001	0.0001	0.001	0.001	0.004	0.00005	0.0042	0.0023		7.2	54	11	280	240	
1121	Hyd2o Bore Wattle Grove 7 Shallow	17/12/2024	WG7S	AFR & TD	dry	3.68	19.82																										
1122	Hyd2o Bore Wattle Grove 7 Deep	17/12/2024	WG7D	AFR & TD		6.01	17.43	27.3	0.743	6.03	30.1	5.80	0.520	5.3000	0.005	5.300	0.029	0.01	0.06	0.001	0.0001	0.001	0.002	0.001	0.00005	0.0013	0.0017		20	18	6.9	110	120	
1123	Hyd2o Bore Wattle Grove 8	17/12/2024	WG8	AFR & TD		25.65	16.12																										
1124	Hyd2o Bore Wattle Grove 9	17/12/2024	WG9	AFR & TD		5.45	18.41	26.3	0.565	6.19	67.1	11.00	3.800	7.3000	0.050	7.400	0.280	4.00	4.60	0.002	0.0001	0.008	0.013	0.008	0.0007	0.0074	0.006		17	13	9.9	95	96	
1125	Hyd2o Bore Wattle Grove 10 Shallow	17/12/2024	WG10S	AFR & TD	dry	3.21	20.39																										
1126	Hyd2o Bore Wattle Grove 10 Deep	17/12/2024	WG10D	AFR & TD		5.18	18.44	25.1	0.102	6.09	79.5	3.10	0.200	2.8000	0.005	2.800	0.031	0.01	0.05	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.0014		4.2	2.6	5.6	12	21	
1127	Unknown Origin Bore	17/12/2024	Mba	AFR & TD	Damaged/blocked	2.60	18.01																										
1128	Douglas Partners Bore 1	17/12/2024	MBb	AFR & TD		14.85	17.05	31.9	0.695	5.96	17.5	0.33	0.250	0.0070	0.005	0.008	0.078	0.01	0.07	0.006	0.0001	0.001	0.001	0.001	0.00005	0.0037	0.021		7.2	31	8.3	98	140	
1129	Endemic Bore 3	17/12/2024	GW3	AFR & TD	dry	1.67	7.98																										
1130	Endemic Bore 5	17/12/2024	GW5	AFR & TD	dry	1.75	17.66																										
1131	Hyd2o Deep Bore next to Endemic 5	17/12/2024	GW5D	AFR & TD		3.75	15.62	25.1	0.518	3.92	18.3	0.53	0.280	0.0085	0.005	0.011	0.240	0.01	0.05	0.001	0.0001	0.001	0.002	0.002	0.00005	0.0098	0.0041		16	11	8.6	69	84	
1132	Endemic Bore 8	17/12/2024	GW8	AFR & TD	dry	4.12	20.49																										
1133	Hyd2o Deep Bore next to Endemic 8	17/12/2024	GW8D	AFR & TD		7.20	17.32	26.0	0.154	5.33	34.6	0.17	0.100	0.0740	0.005	0.078	0.034	0.01	0.05	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.0012		0.74	1.4	0.97	29	7.7	
1134	Hyd2o Bore Wetlands 9 Shallow	17/12/2024	GW9S	AFR & TD		2.55	19.26	29.0	0.409	6.39	21.6	4.80	0.150	4.6000	0.047	4.600	0.029	0.05	0.11	0.004	0.0001	0.001	0.002	0.001	0.00005	0.0017	0.0071		65	5.4	8	37	180	
1135	Hyd2o Bore Wetlands 9 Deep	17/12/2024	GW9D	AFR & TD		2.73	19.05	27.8	0.636	6.19	18.6	0.92	0.720	0.0870	0.005	0.090	0.110	0.03	0.09	0.001	0.0001	0.001	0.003	0.001	0.00005	0.011	0.0054		19	17	13	94	120	
1136	Endemic Bore 12	17/12/2024	GW12	AFR & TD		1.88	7.51																										
1137	DWER Bore 1	17/12/2024	SCC 05/08	AFR & TD		19.08	22.70																										
1138	DWER Bore 2	17/12/2024	SCC 06/08	AFR & TD		2.32	5.66																										
1139	DWER Bore 3	17/12/2024	SCC 09/08	AFR & TD		3.81	9.40																										
1140	Hyd2o Bore Wattle Grove 1	21/01/2025	WG1	TD		16.18	15.92																										
1141	Hyd2o Bore Wattle Grove 2 Shallow	21/01/2025	WG2S	TD	dry	3.51	22.50																										
1142	Hyd2o Bore Wattle Grove 2 (Deep)	21/01/2025	WG2	TD		9.42	16.70																										
1143	Hyd2o Bore Wattle Grove 3	21/01/2025	WG3	TD		5.56	17.41																										
1144	Hyd2o Bore Wattle Grove 4 Shallow	21/01/2025	WG4S	TD		1.93	23.73																										
1145	Hyd2o Bore Wattle Grove 4 Deep	21/01/2025	WG4D	TD		9.74	15.99																										
1146	Hyd2o Bore Wattle Grove 5 Shallow	21/01/2025	WG5S	TD	dry	5.91	29.23																										
1147	Hyd2o Bore Wattle Grove 5 Deep	21/01/2025	WG5D	TD		19.30	15.83																										
1148	Hyd2o Bore Wattle Grove 6	21/01/2025	WG6	TD		8.67	16.67																										
1149	Hyd2o Bore Wattle Grove 7 Shallow	21/01/2025	WG7S	TD	dry	3.68	19.82																										
1150	Hyd2o Bore Wattle Grove 7 Deep	21/01/2025	WG7D	TD		6.70	16.74																										
1151	Hyd2o Bore Wattle Grove 8	21/01/2025	WG8	TD	dry	25.65	16.12																										
1152	Hyd2o Bore Wattle Grove 9	21/01/2025	WG9	TD		5.66	18.20																										
1153	Hyd2o Bore Wattle Grove 10 Shallow	21/01/2025	WG10S	TD	dry	3.21	20.39																										
1154	Hyd2o Bore Wattle Grove 10 Deep	21/01/2025	WG10D	TD		6.04	17.58																										
1155	Unknown Origin Bore	21/01/2025	Mba	TD	Damaged/blocked	2.60	18.01																										
1156	Douglas Partners Bore 1	21/01/2025	MBb	TD		14.97	16.93																										
1157	Endemic Bore 3	21/01/2025	GW3	TD	dry	1.67	7.98																										
1158	Endemic Bore 5	21/01/2025	GW5	TD	dry	1.75	17.66																										
1159	Hyd2o Deep Bore next to Endemic 5	21/01/2025	GW5D	TD		4.25	15.12																										
1160	Endemic Bore 8	21/01/2025	GW8	TD	dry	4.12	20.49																										

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
1161	Hyd2o Deep Bore next to Endemic 8	21/01/2025	GW8D	TD		7.67	16.85																										
1162	Hyd2o Bore Wetlands 9 Shallow	21/01/2025	GW9S	TD		2.87	18.94																										
1163	Hyd2o Bore Wetlands 9 Deep	21/01/2025	GW9D	TD		3.09	18.69																										
1164	Endemic Bore 12	21/01/2025	GW12	TD		2.33	7.06																										
1165	DWER Bore 1	21/01/2025	SCC 05/08	TD		19.21	22.57																										
1166	DWER Bore 2	21/01/2025	SCC 06/08	TD		2.62	5.36																										
1167	DWER Bore 3	21/01/2025	SCC 09/08	TD		4.78	8.43																										
1168	Hyd2o Bore Wattle Grove 1	20/02/2025	WG1	AFR		16.35	15.75																										
1169	Hyd2o Bore Wattle Grove 2 Shallow	20/02/2025	WG2S	AFR	dry	3.51	22.50																										
1170	Hyd2o Bore Wattle Grove 2 (Deep)	20/02/2025	WG2	AFR		9.75	16.37																										
1171	Hyd2o Bore Wattle Grove 3	20/02/2025	WG3	AFR		6.23	16.74																										
1172	Hyd2o Bore Wattle Grove 4 Shallow	20/02/2025	WG4S	AFR		2.16	23.50																										
1173	Hyd2o Bore Wattle Grove 4 Deep	20/02/2025	WG4D	AFR		9.99	15.74																										
1174	Hyd2o Bore Wattle Grove 5 Shallow	20/02/2025	WG5S	AFR	dry	5.91	29.23																										
1175	Hyd2o Bore Wattle Grove 5 Deep	20/02/2025	WG5D	AFR		19.47	15.66																										
1176	Hyd2o Bore Wattle Grove 6	20/02/2025	WG6	AFR		8.97	16.37																										
1177	Hyd2o Bore Wattle Grove 7 Shallow	20/02/2025	WG7S	AFR	dry	3.68	19.82																										
1178	Hyd2o Bore Wattle Grove 7 Deep	20/02/2025	WG7D	AFR		7.24	16.20																										
1179	Hyd2o Bore Wattle Grove 8	20/02/2025	WG8	AFR	dry	25.65	16.12																										
1180	Hyd2o Bore Wattle Grove 9	20/02/2025	WG9	AFR		5.89	17.97																										
1181	Hyd2o Bore Wattle Grove 10 Shallow	20/02/2025	WG10S	AFR	dry	3.21	20.39																										
1182	Hyd2o Bore Wattle Grove 10 Deep	20/02/2025	WG10D	AFR	milky water	8.87	14.75																										
1183	Unknown Origin Bore	20/02/2025	Mba	AFR	Damaged/blocked	2.60	18.01																										
1184	Douglas Partners Bore 1	20/02/2025	MBb	AFR		15.14	16.76																										
1185	Endemic Bore 3	20/02/2025	GW3	AFR	dry	1.67	7.98																										
1186	Endemic Bore 5	20/02/2025	GW5	AFR	dry	1.75	17.66																										
1187	Hyd2o Deep Bore next to Endemic 5	20/02/2025	GW5D	AFR		4.55	14.82																										
1188	Endemic Bore 8	20/02/2025	GW8	AFR	dry	4.12	20.49																										
1189	Hyd2o Deep Bore next to Endemic 8	20/02/2025	GW8D	AFR		7.98	16.54																										
1190	Hyd2o Bore Wetlands 9 Shallow	20/02/2025	GW9S	AFR		3.12	18.69																										
1191	Hyd2o Bore Wetlands 9 Deep	20/02/2025	GW9D	AFR		3.32	18.46																										
1192	Endemic Bore 12	20/02/2025	GW12	AFR		2.71	6.68																										
1193	DWER Bore 1	20/02/2025	SCC 05/08	AFR		19.35	22.43																										
1194	DWER Bore 2	20/02/2025	SCC 06/08	AFR		2.80	5.18																										
1195	DWER Bore 3	20/02/2025	SCC 09/08	AFR		5.27	7.98																										
1196	Emerge Bore GW23 Shallow	20/02/2025	GW23S	AFR	dry	4.69	11.91																										
1197	Emerge Bore GW23 Deep	20/02/2025	GW23D	AFR		4.70	11.90																										
1198	Hyd2o Bore Wattle Grove 1	19/03/2025	WG1	AFR		16.47	15.63	24.20	0.173	4.90	16.1	3.50	0.610	2.9000	0.0054	2.900	0.012	0.05	0.0050	0.0010	0.0001	0.001	0.0010	0.001	0.00005	0.001	0.0082	21	0.67	5.4	1.4	32	24	19
1199	Hyd2o Bore Wattle Grove 2 Shallow	19/03/2025	WG2S	AFR	dry	3.51	22.50																										
1200	Hyd2o Bore Wattle Grove 2 (Deep)	19/03/2025	WG2	AFR		9.82	16.30	27.90	3.812	5.23	23.4	1.60	1.600	0.0220	0.005	0.023	0.005	0.18	0.0079	0.0010	0.0001	0.001	0.0010	0.001	0.00005	0.0058	0.012	1300	8.4	140	14	580	580	43
1201	Hyd2o Bore Wattle Grove 3	19/03/2025	WG3	AFR		6.63	16.34	22.30	3.400	5.15	17.9	1.50	1.500	0.05	0.05	0.05	0.005	0.05	0.0200	0.0035	######	0.0034	0.0012	0.001	0.00005	0.0079	0.0097	1200	43	82	25	580	440	54
1202	Hyd2o Bore Wattle Grove 4 Shallow	19/03/2025	WG4S	AFR		2.19	23.47	27.10	1.902	5.49	38.5	0.31	0.300	0.0074	0.005	0.0074	0.005	0.05	0.005	0.0010	0.0001	0.001	0.0010	0.001	0.00005	0.001	0.007	540	45	53	11	270	330	7
1203	Hyd2o Bore Wattle Grove 4 Deep	19/03/2025	WG4D	AFR		10.04	15.69	25.80	2.166	5.49	21.6	0.52	0.480	0.0380	0.005	0.038	0.014	0.05	0.005	0.0010	0.0001	0.001	0.0029	0.001	0.00005	0.0015	0.025	610	91	64	14	300	490	11
1204	Hyd2o Bore Wattle Grove 5 Shallow	19/03/2025	WG5S	AFR	dry	5.91	29.23																										
1205	Hyd2o Bore Wattle Grove 5 Deep	19/03/2025	WG5D	AFR		19.55	15.58	25.40	0.674	5.11	40.9	14.00	1.300	13.0000	0.005	13.000	0.005	0.05	0.005	0.0010	0.0001	0.001	0.001	0.001	0.00005	0.0018	0.018	210	3.4	15	3.8	120	70	20
1206	Hyd2o Bore Wattle Grove 6	19/03/2025	WG6	AFR		9.16	16.18	22.70	2.993	5.66	45.7	2.90	0.520	2.4000	0.0170	2.400	0.005	0.05	0.0054	0.0010	0.0001	0.001	0.001	0.001	0.00005	0.0041	0.011	1100	15	120	10	480	520	30
1207	Hyd2o Bore Wattle Grove 7 Shallow	19/03/2025	WG7S	AFR	dry	3.68	19.82																										
1208	Hyd2o Bore Wattle Grove 7 Deep	19/03/2025	WG7D	AFR		7.59	15.85	24.40	0.572	5.68	29.9	2.40	0.430	1.9000	0.005	1.900	0.005	0.05	0.0052	0.0010	0.0001	0.001	0.0019	0.001	0.00005	0.0019	0.002	120	11	14	5	83	86	19
1209	Hyd2o Bore Wattle Grove 8	19/03/2025	WG8	AFR	dry	25.65	16.12																										
1210	Hyd2o Bore Wattle Grove 9	19/03/2025	WG9	AFR	mud	6.10	17.76																										
1211	Hyd2o Bore Wattle Grove 10 Shallow	19/03/2025	WG10S	AFR	dry	3.21	20.39																										
1212	Hyd2o Bore Wattle Grove 10 Deep	19/03/2025	WG10D	AFR		7.87	15.75	23.90	0.127	5.50	56.1	5.10	0.850	4.2000	0.005	4.200	0.005	0.05	0.0180	0.0010	0.0001	0.001	0.001	0.001	0.00005	0.001	0.0038	14	3.8	3.2	4.6	12	23	13
1213	Unknown Origin Bore	19/03/2025	Mba	AFR	Damaged/blocked	2.60	18.01																										
1214	Douglas Partners Bore 1	19/03/2025	MBb	AFR		15.24	16.66	24.90	1.376	6.03	27.4	2.10	2.000	0.05	0.05	0.061	1.300	0.05	0.005	0.0016	0.0001	0.001	0.001	0.001	0.00005	0.0041	0.018	220	38	82	12	160	430	12
1215	Endemic Bore 3	19/03/2025	GW3	AFR	dry	1.67	7.98																										
1216	Endemic Bore 5	19/03/2025	GW5	AFR	dry	1.75	17.66																										
1217	Hyd2o Deep Bore next to Endemic 5	19/03/2025	GW5D	AFR		4.74	14.63	24.10	0.649	3.75	15.1	0.73	0.720	0.0053	0.005	0.0062	0.170	0.05	0.005	0.0010	0.0001	0.001	0.001	0.0034	0.00005	0.016	0.0043	55	20	16	8.1	76	110	46
1218	Endemic Bore 8	19/03/2025	GW8	AFR	dry	4.12	20.49																										

FieldDAE
Field Data Analysis & Evaluation System

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Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC	GWL mAHD	T	EC	pH	DO	TN	TKN	NO3	NO2	Nox	NH3	TP	FRP	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn	Cl	Ca	Mg	K	Na	H as CaCO3	SiO2
						mBToC	mAHD	°C	mS/cm	pH	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1219	Hyd2o Deep Bore next to Endemic 8	19/03/2025	GW8D	AFR		8.09	16.43	25.00	0.158	5.01	22.0	0.17	0.130	0.0450	0.005	0.045	0.005	0.05	0.0087	0.0010	0.0001	0.001	0.001	0.001	0.00005	0.001	0.001	28	0.5	1.3	0.76	26	5.7	22
1220	Hyd2o Bore Wetlands 9 Shallow	19/03/2025	GW9S	AFR		3.22	18.59	27.80	0.442	6.26	19.8	1.10	0.690	0.4100	0.005	0.410	0.010	0.23	0.1700	0.0073	0.0001	0.001	0.0027	0.001	0.00005	0.0023	0.004	51	46	10	9.5	32	160	14
1221	Hyd2o Bore Wetlands 9 Deep	19/03/2025	GW9D	AFR		3.47	18.31	27.80	0.539	6.13	24.0	0.73	0.690	0.0450	0.005	0.047	0.010	0.06	0.0550	0.0013	0.0001	0.001	0.0022	0.001	0.00005	0.0053	0.0034	100	18	14	9.9	72	100	19
1222	Endemic Bore 12	19/03/2025	GW12	AFR		1.79	7.60																											
1223	DWER Bore 1	19/03/2025	SCC 05/08	AFR		19.42	22.36																											
1224	DWER Bore 2	19/03/2025	SCC 06/08	AFR		2.83	5.15																											
1225	DWER Bore 3	19/03/2025	SCC 09/08	AFR		5.47	7.74																											
1226	Emerge Bore GW23 Shallow	19/03/2025	GW23S	AFR	dry	4.69	11.91																											
1227	Emerge Bore GW23 Deep	19/03/2025	GW23D	AFR		4.79	11.81																											
1228	Hyd2o Bore Wattle Grove 1	16/04/2025	WG1	AFR		16.60	15.50																											
1229	Hyd2o Bore Wattle Grove 2 Shallow	16/04/2025	WG2S	AFR	dry	3.51	22.50																											
1230	Hyd2o Bore Wattle Grove 2 (Deep)	16/04/2025	WG2	AFR		9.95	16.17																											
1231	Hyd2o Bore Wattle Grove 3	16/04/2025	WG3	AFR		7.31	15.66																											
1232	Hyd2o Bore Wattle Grove 4 Shallow	16/04/2025	WG4S	AFR		2.41	23.25																											
1233	Hyd2o Bore Wattle Grove 4 Deep	16/04/2025	WG4D	AFR		11.00	14.73																											
1234	Hyd2o Bore Wattle Grove 5 Shallow	16/04/2025	WG5S	AFR	dry	5.91	29.23																											
1235	Hyd2o Bore Wattle Grove 5 Deep	16/04/2025	WG5D	AFR		19.65	15.48																											
1236	Hyd2o Bore Wattle Grove 6	16/04/2025	WG6	AFR		9.39	15.95																											
1237	Hyd2o Bore Wattle Grove 7 Shallow	16/04/2025	WG7S	AFR	dry	3.68	19.82																											
1238	Hyd2o Bore Wattle Grove 7 Deep	16/04/2025	WG7D	AFR		7.88	15.56																											
1239	Hyd2o Bore Wattle Grove 8	16/04/2025	WG8	AFR	dry	25.65	16.12																											
1240	Hyd2o Bore Wattle Grove 9	16/04/2025	WG9	AFR	mud	6.10	17.76																											
1241	Hyd2o Bore Wattle Grove 10 Shallow	16/04/2025	WG10S	AFR	dry	3.21	20.39																											
1242	Hyd2o Bore Wattle Grove 10 Deep	16/04/2025	WG10D	AFR	mud	9.01	14.61																											
1243	Unknown Origin Bore	16/04/2025	Mba	AFR	Damaged/blocked	2.60	18.01																											
1244	Douglas Partners Bore 1	16/04/2025	MBb	AFR		15.37	16.53																											
1245	Endemic Bore 3	16/04/2025	GW3	AFR	dry	1.67	7.98																											
1246	Endemic Bore 5	16/04/2025	GW5	AFR	dry	1.75	17.66																											
1247	Hyd2o Deep Bore next to Endemic 5	16/04/2025	GW5D	AFR		4.86	14.51																											
1248	Endemic Bore 8	16/04/2025	GW8	AFR		4.09	20.52																											
1249	Hyd2o Deep Bore next to Endemic 8	16/04/2025	GW8D	AFR		8.30	16.22																											
1250	Hyd2o Bore Wetlands 9 Shallow	16/04/2025	GW9S	AFR		3.41	18.40																											
1251	Hyd2o Bore Wetlands 9 Deep	16/04/2025	GW9D	AFR		3.64	18.14																											
1252	Endemic Bore 12	16/04/2025	GW12	AFR		2.83	6.56																											
1253	DWER Bore 1	16/04/2025	SCC 05/08	AFR		19.53	22.25																											
1254	DWER Bore 2	16/04/2025	SCC 06/08	AFR		2.89	5.09																											
1255	DWER Bore 3	16/04/2025	SCC 09/08	AFR		5.68	7.53																											
1256	Emerge Bore GW23 Shallow	16/04/2025	GW23S	AFR	dry	4.70	11.90																											
1257	Emerge Bore GW23 Deep	16/04/2025	GW23D	AFR		4.86	11.74																											
1258	Hyd2o Bore Wattle Grove 1	21/05/2025	WG1	AFR		16.68	15.42																											
1259	Hyd2o Bore Wattle Grove 2 Shallow	21/05/2025	WG2S	AFR	dry	3.51	22.50																											
1260	Hyd2o Bore Wattle Grove 2 (Deep)	21/05/2025	WG2	AFR		10.04	16.08																											
1261	Hyd2o Bore Wattle Grove 3	21/05/2025	WG3	AFR		7.79	15.18																											
1262	Hyd2o Bore Wattle Grove 4 Shallow	21/05/2025	WG4S	AFR		2.40	23.26																											
1263	Hyd2o Bore Wattle Grove 4 Deep	21/05/2025	WG4D	AFR		11.09	14.64																											
1264	Hyd2o Bore Wattle Grove 5 Shallow	21/05/2025	WG5S	AFR	dry	5.91	29.23																											
1265	Hyd2o Bore Wattle Grove 5 Deep	21/05/2025	WG5D	AFR		19.70	15.43																											
1266	Hyd2o Bore Wattle Grove 6	21/05/2025	WG6	AFR		9.50	15.84																											
1267	Hyd2o Bore Wattle Grove 7 Shallow	21/05/2025	WG7S	AFR	dry	3.68	19.82																											
1268	Hyd2o Bore Wattle Grove 7 Deep	21/05/2025	WG7D	AFR		8.07	15.37																											
1269	Hyd2o Bore Wattle Grove 8	21/05/2025	WG8	AFR	dry	25.65	16.12																											
1270	Hyd2o Bore Wattle Grove 9	21/05/2025	WG9	AFR	dry	6.10	17.76																											
1271	Hyd2o Bore Wattle Grove 10 Shallow	21/05/2025	WG10S	AFR	dry	3.21	20.39																											
1272	Hyd2o Bore Wattle Grove 10 Deep	21/05/2025	WG10D	AFR	mud	9.01	14.61																											
1273	Unknown Origin Bore	21/05/2025	Mba	AFR	Damaged/blocked	2.60	18.01																											
1274	Douglas Partners Bore 1	21/05/2025	MBb	AFR		15.49	16.41																											
1275	Endemic Bore 3	21/05/2025	GW3	AFR	dry	1.67	7.98																											
1276	Endemic Bore 5	21/05/2025	GW5	AFR	dry	1.75	17.66																											

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
1277	Hyd2o Deep Bore next to Endemic 5	21/05/2025	GW5D	AFR		5.03	14.34																											
1278	Endemic Bore 8	21/05/2025	GW8	AFR		4.10	20.51																											
1279	Hyd2o Deep Bore next to Endemic 8	21/05/2025	GW8D	AFR		8.42	16.10																											
1280	Hyd2o Bore Wetlands 9 Shallow	21/05/2025	GW9S	AFR		3.55	18.26																											
1281	Hyd2o Bore Wetlands 9 Deep	21/05/2025	GW9D	AFR		3.85	17.93																											
1282	Endemic Bore 12	21/05/2025	GW12	AFR		2.83	6.56																											
1283	DWER Bore 1	21/05/2025	SCC 05/08	AFR		19.62	22.16																											
1284	DWER Bore 2	21/05/2025	SCC 06/08	AFR		2.94	5.04																											
1285	DWER Bore 3	21/05/2025	SCC 09/08	AFR		5.78	7.43																											
1286	Emerge Bore GW23 Shallow	21/05/2025	GW23S	AFR		4.70	11.90																											
1287	Emerge Bore GW23 Deep	21/05/2025	GW23D	AFR		5.03	11.57																											
1288	Hyd2o Bore Wattle Grove 1	18/06/2025	WG1	AFR		16.59	15.51	19.00	0.210	5.47	28.6	3.10	2.500	0.6500	0.0091	0.62	0.046	0.14	0.005	0.001	0.0001	0.001	0.0013	0.001	0.00005	0.001	0.0069	32	0.5	1.2	3.9	29	6	28
1289	Hyd2o Bore Wattle Grove 2 Shallow	18/06/2025	WG2S	AFR	dry	3.51	22.50																											
1290	Hyd2o Bore Wattle Grove 2 (Deep)	18/06/2025	WG2	AFR		9.84	16.28	19.30	2.077	5.85	1.3	13.00	13.000	0.5000	0.05	0.5	0.150	0.20	0.05	0.0022	0.0001	0.001	0.001	0.001	0.00005	0.0012	0.001	730	9.5	63	13	260	280	31
1291	Hyd2o Bore Wattle Grove 3	18/06/2025	WG3	AFR		7.65	15.32	19.50	7.835	5.77	17.1	3.50	3.400	0.1400	0.05	0.15	0.072	0.093	0.037	0.0054	0.0001	0.0038	0.001	0.001	0.00005	0.0044	0.012	3000	89	170	43	1300	930	52
1292	Hyd2o Bore Wattle Grove 4 Shallow	18/06/2025	WG4S	AFR		1.73	23.93	20.50	2.325	5.39	18.5	0.38	0.340	0.0390	0.005	0.043	0.063	0.05	0.005	0.001	0.0001	0.001	0.001	0.001	0.00005	0.0013	0.002	700	58	67	10	290	420	9
1293	Hyd2o Bore Wattle Grove 4 Deep	18/06/2025	WG4D	AFR		10.43	15.30	21.80	2.530	5.56	13.3	0.39	0.350	0.0310	0.005	0.035	0.032	0.05	0.005	0.002	0.0001	0.001	0.0011	0.001	0.00005	0.0014	0.0058	750	100	76	16	340	580	15
1294	Hyd2o Bore Wattle Grove 5 Shallow	18/06/2025	WG5S	AFR	dry	5.91	29.23																											
1295	Hyd2o Bore Wattle Grove 5 Deep	18/06/2025	WG5D	AFR		19.56	15.57	19.90	0.770	5.26	24.9	15.00	4.500	11.0000	0.1000	11.0	0.045	0.05	0.005	0.001	0.0001	0.0012	0.0022	0.001	0.00005	0.0013	0.0064	230	3.3	14	3.9	110	67	44
1296	Hyd2o Bore Wattle Grove 6	18/06/2025	WG6	AFR		9.43	15.91	18.40	2.731	5.21	15.0	5.40	1.200	4.2000	0.0065	4.2	0.026	0.19	0.005	0.001	0.0001	0.001	0.0011	0.020	0.00005	0.0038	0.0054	1100	19	140	9.3	400	640	29
1297	Hyd2o Bore Wattle Grove 7 Shallow	18/06/2025	WG7S	AFR	dry	3.68	19.82																											
1298	Hyd2o Bore Wattle Grove 7 Deep	18/06/2025	WG7D	AFR		7.94	15.50	20.10	0.648	5.87	23.3	0.75	0.280	0.4600	0.0062	0.47	0.04	0.0500	0.005	0.001	0.0001	0.001	0.0012	0.001	0.00005	0.0019	0.002	130	13	20	5.5	110	110	23
1299	Hyd2o Bore Wattle Grove 8	18/06/2025	WG8	AFR	dry	25.65	16.12																											
1300	Hyd2o Bore Wattle Grove 9	18/06/2025	WG9	AFR	dry	6.10	17.76																											
1301	Hyd2o Bore Wattle Grove 10 Shallow	18/06/2025	WG10S	AFR	dry	3.21	20.39																											
1302	Hyd2o Bore Wattle Grove 10 Deep	18/06/2025	WG10D	AFR		7.28	16.34	20.40	0.177	5.87	42.9	8.60	0.920	7.7000	0.005	7.7	0.037	0.05	0.005	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.0037	27	6.9	4.3	4.6	16	35	11
1303	Unknown Origin Bore	18/06/2025	Mba	AFR	Damaged/blocked	2.60	18.01																											
1304	Douglas Partners Bore 1	18/06/2025	MBb	AFR		15.52	16.38	19.20	1.557	5.98	21.9	3.60	3.500	0.0980	0.05	0.1	2.40	0.058	0.05	0.0018	0.0001	0.0019	0.0033	0.001	0.00005	0.0031	0.01	270	50	77	13	130	440	28
1305	Endemic Bore 3	18/06/2025	GW3	AFR	dry	1.67	7.98																											
1306	Endemic Bore 5	18/06/2025	GW5	AFR		1.36	18.05	18.00	0.559	7.08	56.0	1.90	1.600	0.2900	0.005	0.3	0.031	0.05	0.0062	0.001	0.0001	0.001	0.0043	0.001	0.00005	0.0092	0.0017	84	76	4.8	6.7	44	210	15
1307	Hyd2o Deep Bore next to Endemic 5	18/06/2025	GW5D	AFR		5.00	14.37	20.60	0.677	4.01	11.6	0.47	0.460	0.005	0.005	0.005	0.13	0.05	0.0062	0.001	0.0001	0.001	0.001	0.0022	0.00005	0.015	0.0076	62	26	14	7.4	72	120	39
1308	Endemic Bore 8	18/06/2025	GW8	AFR	not enough water for sampling	3.89	20.72																											
1309	Hyd2o Deep Bore next to Endemic 8	18/06/2025	GW8D	AFR		8.00	16.52	21.50	0.158	5.45	26.9	0.13	0.100	0.0660	0.005	0.067	0.005	0.05	0.0079	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.0012	29	1.8	1.7	1.5	25	11	34
1310	Hyd2o Bore Wetlands 9 Shallow	18/06/2025	GW9S	AFR		3.13	18.68	20.00	0.216	6.71	29.0	4.10	0.440	3.7000	0.005	3.7	0.005	0.26	0.15	0.007	0.0001	0.001	0.0037	0.001	0.00005	0.0019	0.0029	14	25	3.1	4.4	20	75	8.9
1311	Hyd2o Bore Wetlands 9 Deep	18/06/2025	GW9D	AFR		3.56	18.22	20.70	0.241	6.41	20.9	1.10	0.490	0.5700	0.005	0.57	0.0097	0.076	0.039	0.0016	0.0001	0.001	0.0045	0.001	0.00005	0.0046	0.002	32	8	5.1	5.3	27	41	15
1312	Endemic Bore 12	18/06/2025	GW12	AFR		2.27	7.12																											
1313	DWER Bore 1	18/06/2025	SCC 05/08	AFR		19.58	22.20																											
1314	DWER Bore 2	18/06/2025	SCC 06/08	AFR		2.21	5.77																											
1315	DWER Bore 3	18/06/2025	SCC 09/08	AFR		5.41	7.80																											
1316	Emerge Bore GW23 Shallow	18/06/2025	GW23S	AFR		3.70	12.90																											
1317	Emerge Bore GW23 Deep	18/06/2025	GW23D	AFR		4.93	11.67																											
1318	Surface Water Site 2	18/062025	SW2	AFR	minor flow			17.60	0.345	6.80	70.7	1.40	0.350	1.1000	0.005	1.10	0.006	0.11	0.021	0.001	0.0001	0.001	0.0026	0.0016	0.00005	0.001	0.0084	79	21	7.2	2.4	38	82	5.9
1319	Surface Water Site 9	18/06/2025	SW9	AFR	minor flow - water had different colors, coming from different drains			17.70	0.660	6.74	33.1	1.70	1.300	0.3200	0.05	0.37	0.028	0.21	0.11	0.002	0.0001	0.0012	0.0042	0.001	0.00005	0.0025	0.011	104	47	10	9	73	160	16
1320	Hyd2o Bore Wattle Grove 1	15/07/2025	WG1	AFR & DT		16.50	15.60																											
1321	Hyd2o Bore Wattle Grove 2 Shallow	15/07/2025	WG2S	AFR & DT	dry	3.51	22.50																											
1322	Hyd2o Bore Wattle Grove 2 (Deep)	15/07/2025	WG2	AFR & DT		9.66	16.46																											
1323	Hyd2o Bore Wattle Grove 3	15/07/2025	WG3	AFR & DT		7.21	15.76																											
1324	Hyd2o Bore Wattle Grove 4 Shallow	15/07/2025	WG4S	AFR & DT		1.10	24.56																											
1325	Hyd2o Bore Wattle Grove 4 Deep	15/07/2025	WG4D	AFR & DT		10.31	15.42																											
1326	Hyd2o Bore Wattle Grove 5 Shallow	15/07/2025	WG5S	AFR & DT	dry	5.91	29.23																											
1327	Hyd2o Bore Wattle Grove 5 Deep	15/07/2025	WG5D	AFR & DT		19.47	15.66																											
1328	Hyd2o Bore Wattle Grove 6	15/07/2025	WG6	AFR & DT		9.10	16.24																											
1329	Hyd2o Bore Wattle Grove 7 Shallow	15/07/2025	WG7S	AFR & DT	dry	3.68	19.82																											
1330	Hyd2o Bore Wattle Grove 7 Deep	15/07/2025	WG7D	AFR & DT		7.44	16.00																											
1331	Hyd2o Bore Wattle Grove 8	15/07/2025	WG8	AFR & DT	dry	25.65	16.12																											
1332	Hyd2o Bore Wattle Grove 9	15/07/2025	WG9	AFR & DT	dry	6.10	17.76																											
1333	Hyd2o Bore Wattle Grove 10 Shallow	15/07/2025	WG10S	AFR & DT		3.07	20.53																											
1334	Hyd2o Bore Wattle Grove 10 Deep	15/07/2025	WG10D	AFR & DT		7.35	16.27																											

FieldDAE
Field Data Analysis & Evaluation System

below limt of detection

Water Quality Monitoring Data

	Site Name/Type	Date	Site	Monitored By	Monitoring Comment	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	pH pH	DO %	TN mg/L	TKN mg/L	NO3 mg/L	NO2 mg/L	Nox mg/L	NH3 mg/L	TP mg/L	FRP mg/L	As mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Hg mg/L	Ni mg/L	Zn mg/L	Cl mg/L	Ca mg/L	Mg mg/L	K mg/L	Na mg/L	H as CaCO3 mg/L	SiO2 mg/L
1335	Unknown Origin Bore	15/07/2025	Mba	AFR & DT	damaged	2.60	18.01																											
1336	Douglas Partners Bore 1	15/07/2025	MBb	AFR & DT		15.50	16.40																											
1337	Endemic Bore 3	15/07/2025	GW3	AFR & DT	dry	1.37	8.28																											
1338	Endemic Bore 5	15/07/2025	GW5	AFR & DT		1.11	18.30																											
1339	Hyd2o Deep Bore next to Endemic 5	15/07/2025	GW5D	AFR & DT		4.56	14.81																											
1340	Endemic Bore 8	15/07/2025	GW8	AFR & DT		3.90	20.71																											
1341	Hyd2o Deep Bore next to Endemic 8	15/07/2025	GW8D	AFR & DT		7.22	17.30																											
1342	Hyd2o Bore Wetlands 9 Shallow	15/07/2025	GW9S	AFR & DT		3.02	18.79																											
1343	Hyd2o Bore Wetlands 9 Deep	15/07/2025	GW9D	AFR & DT		3.35	18.43																											
1344	Endemic Bore 12	15/07/2025	GW12	AFR & DT		0.98	8.41																											
1345	DWER Bore 1	15/07/2025	SCC 05/08	AFR & DT		19.51	22.27																											
1346	DWER Bore 2	15/07/2025	SCC 06/08	AFR & DT		1.65	6.33																											
1347	DWER Bore 3	15/07/2025	SCC 09/08	AFR & DT		4.77	8.44																											
1348	Emerge Bore GW23 Shallow	15/07/2025	GW23S	AFR & DT		3.69	12.91																											
1349	Emerge Bore GW23 Deep	15/07/2025	GW23D	AFR & DT		4.82	11.78																											

Job: H21003 Wattle Grove Monitoring	DWER Monitoring Requirements (Sampling on 23/02/2023)																
	Field Results								Lab Results								
Bore ID	Temp (°C)	EC (mS/cm)	pH	DO (%)	DO (mg/L)	TDS (mg/L)	ORP (mV)	Water Level (mBTOC)	Total Anions (mg/L)	Total Cations (mg/L)	Ammonia as N (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Phosphate as P (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	Total Alkalinity as CaCO3 (mg/L)
WG1	25.6	0.341	5.34	61.8	5.06	219.70	170.2	15.85	66	1.8	0.005	0.5	40	0.005	3.5	15	11
WG2D	22.1	3.627	5.12	32.4	2.77	2489.50	36.6	9.20	1400	33	0.005	2.0	1200	0.005	0.81	120	11
WG3	26.1	9.532	5.70	18.9	1.48	6071.00	-157.5	7.29	3500	87	0.0071	6.7	3100	0.025	0.005	310	43
WG4S	29.0	2.251	5.59	15.3	1.17	1358.50	-0.3	2.24	780	20	0.055	1.6	480	0.005	0.005	270	30
WG4D	31.2	0.423	5.88	55.4	4.12	246.35	-17.9	9.91	630	15	0.005	1.2	320	0.005	0.4	280	24
WG5D	26.0	0.918	6.55	70.8	5.73	585.00	-38.1	18.95	240	140	0.019	0.5	200	0.005	12	23	25
WG6	21.2	1.354	5.21	57.6	5.05	949.00	75.9	7.28	460	12	0.005	1.0	390	0.005	3.3	63	5.2
WG7D	24.8	0.938	5.97	21.8	1.80	611.00	2.9	8.07	330	8	0.005	0.5	190	0.005	4.4	110	28
WG8	21.4	0.795	5.36	39.7	3.49	552.50	99.7	25.47	270	6.6	0.005	0.76	230	0.005	0.91	29	18
WG9	24.8	0.948	5.89	16.8	1.33	617.50	41.8	4.38	260	9.3	0.005	0.5	180	0.005	26	60	26
MBb	27.0	0.968	6.03	10.6	0.86	604.50	-117.1	14.64	400	150	0.3	0.5	130	0.005	0.05	120	150
GW5D	25.3	0.626	4.49	11.9	0.98	403.00	161.1	4.61	250	4.7	0.16	0.5	66	0.16	0.005	190	5
GW8D	28.1	0.323	6.33	22.5	1.75	198.90	-13.8	8.17	150	47	0.0095	0.9	59	0.005	0.005	49	47
GW9S	27.9	0.893	6.40	13.0	1.20	552.50	-8.7	3.06	280	110	0.11	0.5	110	0.18	2.1	56	110
GW9D	27.1	0.633	6.37	10.7	0.85	396.50	26.4	3.46	240	110	0.046	0.5	100	0.085	0.05	52	89
	Below limit of detection																

Job: H21003 Wattle Grove Monitoring	DWER Monitoring Requirements (Sampling on 23/02/2023)									
	Lab Results									
Bore ID	Aluminium (µg/L)	Arsenic (µg/L)	Iron (µg/L)	Manganese (µg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Silica (mg/L)	Hardness as CaCO3 (mg/L)
WG1	10	1.0	13	5.9	0.5	4.1	1.3	34	15	18
WG2D	14	1.0	250	100	4.2	140	11	490	28	570
WG3	10	1.9	9300	220	110	200	40	1500	60	1100
WG4S	10	1.0	1100	34	39	59	13	310	9.9	340
WG4D	10	1.0	39	19	43	37	11	220	5.2	260
WG5D	10	1.0	370	86	3.7	14	3.6	120	17	67
WG6	10	1.0	10	59	8.5	31	9.7	200	25	150
WG7D	15	1.0	47	5.2	17	18	5.1	130	19	120
WG8	10	1.0	10	510	4.2	14	3.6	120	33	69
WG9	100	1.1	19	13	31	32	34	97	21	210
MBb	10	1.0	6700	280	8.9	33	8.2	100	13	160
GW5D	870	1.0	6800	120	11	10	6.6	73	33	68
GW8D	10	1.0	3400	350	3.2	4.5	3.0	36	19	26
GW9S	110	5.4	1600	26	31	9.5	18	53	15	120
GW9D	32	1.2	380	14	20	14	19	62	19	110
	Below limit of detection									

Job: H21003	DWER Monitoring Requirements (Sampling on 18/09/2024)																
	Field Results								Lab Results								
Bore ID	Temp (°C)	EC (mS/cm)	pH	DO (%)	DO (mg/L)	TDS (mg/L)	ORP (mV)	Water Level (mBTOC)	Total Anions (mg/L)	Total Cations (mg/L)	Ammonia as N (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Phosphate as P (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	Total Alkalinity as CaCO3 (mg/L)
WG1	22.90	0.333	5.72	44		210		16.07	96	49	0.0092		63	<0.0050	3.6	17	16
WG2	21.90	1.839	5.36	19		970		8.90	630	310	0.032		550	<0.0050	2.6	67	14
WG3	20.30	3.649	5.14	17		2000		4.57	1300	670	0.0054		1100	0.0086	<0.0050	200	12
WG4S	20.30	2.133	5.57	12		1200		1.26	820	380	0.0090		560	<0.0050	0.031	250	16
WG4D	24.60	1.566	6.17	18		850		9.49	630	280	0.018		280	<0.0050	3.7	250	100
WG5D	22.30	0.579	5.65	87		410		19.06	230	140	0.40		200	0.055	15	15	11
WG6	20.60	1.821	5.70	23		1000		7.80	630	310	0.0084		540	<0.0050	0.57	69	21
WG7D	22.60	0.174	5.60	46		350		5.84	39	31	0.020		16	<0.0050	3.4	13	9.8
WG9	22.00	0.940	6.33	60		580		5.36	260	160	0.0054		200	2.2	18	36	31
WG10S	24.20	0.208	6.64	22		200		2.77	62	34	0.0059		14	<0.0050	3.3	9.9	38
WG10D	22.70	0.136	6.12	61		120		5.60	32	22	<0.0050		16	<0.0050	4.6	6.4	8.8
MBb	24.20	1.211	6.42	40		640		15.07	620	210	3.1		140	<0.0050	0.18	130	350
GW5	20.20	0.755	7.00	19		500		1.28	380	160	0.017		51	0.0064	0.017	33	290
GW5D	21.20	1.051	3.85	15		710		2.48	490	170	0.20		57	<0.0050	0.011	430	<5.0
GW8D	23.10	0.176	5.51	30		120		6.65	58	34	<0.0050		29	0.0056	0.099	18	11
GW9S	21.50	0.381	6.82	55		290		1.99	170	85	0.0050		21	0.028	4.3	19	130
GW9D	20.60	1.245	6.25	22		720		2.13	490	220	<0.0050		250	0.025	0.10	180	68
	Below limit of detection																

Job: H21003	DWER Monitoring Requirements (Sampling on 18/09/2024)									
	Lab Results									
Bore ID	Aluminium (µg/L)	Arsenic (µg/L)	Iron (µg/L)	Manganese (µg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Silica (mg/L)	Hardness as CaCO3 (mg/L)
WG1		<1.0			<0.50	3.0	1.3	45	21	14
WG2D		<1.0			4.3	56	8.7	240	24	240
WG3		1.6			48	74	30	520	41	420
WG4S		<1.0			35	53	9.3	290	9.2	310
WG4D		<1.0			65	41	9.1	160	5.8	330
WG5D		<1.0			3.4	15	3.5	120	18	71
WG6		<1.0			6.8	49	8.8	250	22	220
WG7D		<1.0			6.1	4.9	3.4	16	11	35
WG9		1.2			29	16	8.5	110	27	140
WG10S		<1.0			6.8	2.8	3.5	21	12	28
WG10D		<1.0			4.6	2.4	3.6	11	9.8	21
MBb		1.4			38	68	11	96	8.0	380
GW5S		<1.0			110	7.4	7.4	32	26	310
GW5D		2.7			44	23	8.8	93	48	200
GW8D		<1.0			1.6	2.2	1.2	29	20	13
GW9S		2.5			63	4.3	3.5	14	13	170
GW9D		<1.0			45	34	18	120	17	250
	Below limit of detection									

Job: H21003 Wattle Grove Monitoring	DWER Monitoring Requirements (Sampling on 19/03/2025)																
	Field Results								Lab Results								
Bore ID	Temp (°C)	EC (mS/cm)	pH	DO (%)	DO (mg/L)	TDS (mg/L)	ORP (mV)	Water Level (mBTOC)	Total Anions (mg/L)	Total Cations (mg/L)	Ammonia as N (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Phosphate as P (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	Total Alkalinity as CaCO3 (mg/L)
WG1	24.20	0.173	4.90	16.1		87		16.47	51	40	0.012		21	<0.0050	13	15	15
WG2	27.90	3.812	5.23	23.4		2300		9.82	1500	740	<0.0050		1300	0.0079	0.099	150	29
WG3	22.30	3.400	5.15	17.9		2200		6.63	1400	730	<0.0050		1200	0.020	<0.20	200	17
WG4S	27.10	1.902	5.49	38.5		1100		2.19	800	380	<0.0050		540	<0.0050	0.033	250	15
WG4D	25.80	2.166	5.49	21.6		1400		10.04	960	470	0.014		610	<0.0050	0.17	310	40
WG5D	25.40	0.674	5.11	40.9		440		19.55	240	150	<0.0050		210	<0.0050	57	15	14
WG6	22.70	2.993	5.66	45.7		2000		9.16	1300	630	<0.0050		1100	0.0054	10	170	28
WG7D	24.40	0.572	5.68	29.9		400		7.59	230	110	<0.0050		120	0.0052	8.5	83	27
WG10D	23.90	0.127	5.50	56.1		110		7.87	33	24	<0.0050		14	0.018	19	6.6	13
MBb	24.90	1.376	6.03	27.4		860		15.24	720	290	1.3		220	<0.0050	<0.20	180	320
GW5D	24.10	0.649	3.75	15.1		490		4.74	310	120	0.17		55	<0.0050	0.023	260	<5.0
GW8D	25.00	0.158	5.01	22.0		120		8.09	56	28	<0.0050		28	0.0087	0.20	18	10
GW9S	27.80	0.442	6.26	19.8		290		3.22	210	97	0.010		51	0.17	1.8	26	130
GW9D	27.80	0.539	6.13	24.0		320		3.47	240	110	0.010		100	0.055	0.20	47	88
	Below limit of detection																

Job: H21003 Wattle Grove Monitoring	DWER Monitoring Requirements (Sampling on 19/03/2025)									
	Lab Results									
Bore ID	Aluminium (µg/L)	Arsenic (µg/L)	Iron (µg/L)	Manganese (µg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Silica (mg/L)	Hardness as CaCO3 (mg/L)
WG1		<1.0			0.67	5.4	1.4	32	19	24
WG2D		1.0			8.4	140	14	580	43	580
WG3		3.5			43	82	25	580	54	440
WG4S		<1.0			45	53	11	270	7.0	330
WG4D		<1.0			91	64	14	300	11	490
WG5D		<1.0			3.4	15	3.8	120	20	70
WG6		<1.0			15	120	10	480	30	520
WG7D		<1.0			11	14	5.0	83	19	86
WG10D		<1.0			3.8	3.2	4.6	12	13	23
MBb		1.6			38	82	12	160	12	430
GW5D		<1.0			20	16	8.1	76	46	110
GW8D		<1.0			<0.50	1.3	0.72	26	22	5.7
GW9S		7.3			46	10	9.5	32	14	160
GW9D		1.3			18	14	9.9	72	19	100
	Below limit of detection									

Job: H21003 Wattle Grove Monitoring	DWER Monitoring Requirements (Sampling on 19/06/2025)																
	Field Results								Lab Results								
Bore ID	Temp (°C)	EC (mS/cm)	pH	DO (%)	DO (mg/L)	TDS (mg/L)	ORP (mV)	Water Level (mBTOC)	Total Anions (mg/L)	Total Cations (mg/L)	Ammonia as N (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Phosphate as P (mg/L)	Nitrate as N (mg/L)	Sulfate (mg/L)	Total Alkalinity as CaCO3 (mg/L)
WG1	19.00	0.210	5.47	28.6		120		16.59	77	34	0.046		32	<0.0050	0.65	14	30
WG2	19.30	2.077	5.85	1.3		1100		9.84	850	350	0.15		730	<0.050	0.50	54	64
WG3	19.50	7.835	5.77	17.1		5200		7.65	3400	1600	0.072		3000	0.037	0.14	230	110
WG4S	20.50	2.325	5.39	18.5		1500		1.73	1000	430	0.063		700	<0.0050	0.039	300	22
WG4D	21.80	2.530	5.56	13.3		1700		10.43	1200	530	0.032		750	<0.0050	0.031	380	39
WG5D	19.90	0.770	5.26	24.9		460		19.56	260	130	0.045		230	<0.0050	11	15	12
WG6	18.40	2.731	5.21	15.0		2000		9.43	1300	570	0.026		1100	<0.0050	4.2	180	20
WG7D	20.10	0.648	5.87	23.3		370		7.94	240	150	0.040		130	<0.0050	0.46	88	24
WG10D	20.40	0.177	5.87	42.9		130		7.28	43	32	0.037		27	<0.0050	7.7	6.8	9.6
MBb	19.20	1.557	5.98	21.9		890		15.52	740	270	2.4		270	<0.050	0.098	160	320
GW5	18.00	0.559	7.08	56.0		360		1.36	300	130	0.031		84	0.0062	0.29	56	160
GW5D	20.60	0.677	4.01	11.6		480		5.00	330	120	0.13		62	0.0062	<0.0050	270	<5.0
GW8D	21.50	0.158	5.45	26.9		110		8.00	59	30	<0.0050		29	0.0079	0.066	20	10
GW9S	20.00	0.216	6.71	29.0		170		3.13	86	53	<0.0050		14	0.15	3.7	13	59
GW9D	20.70	0.241	6.41	20.9		180		3.56	100	46	0.0097		32	0.039	0.57	30	42
	Below limit of detection																

Job: H21003 Wattle Grove Monitoring	DWER Monitoring Requirements (Sampling on 19/06/2025)									
	Lab Results									
Bore ID	Aluminium (µg/L)	Arsenic (µg/L)	Iron (µg/L)	Manganese (µg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Na (mg/L)	Silica (mg/L)	Hardness as CaCO3 (mg/L)
WG1		<1.0			<0.50	1.2	3.9	29	28	6.0
WG2D		2.2			9.5	63	13	260	31	280
WG3		5.4			89	170	43	1300	52	930
WG4S		<1.0			58	67	10	290	9.0	420
WG4D		2.0			100	76	16	340	15	580
WG5D		<1.0			3.3	14	3.9	110	44	67
WG6		<1.0			19	140	9.3	400	29	640
WG7D		<1.0			13	20	5.5	110	23	110
WG10D		<1.0			6.9	4.3	4.6	16	11	35
MBb		1.8			50	77	13	130	28	440
GW5S		<1.0			76	4.8	6.7	44	15	210
GW5D		<1.0			26	14	7.4	72	39	120
GW8D		<1.0			1.8	1.7	1.5	25	34	11
GW9S		7.0			25	3.1	4.4	20	8.9	75
GW9D		1.6			8.0	5.1	5.3	27	15	41
	Below limit of detection									

APPENDIX F

Monitoring Protocols & Laboratory Reports

HYD2O FIELD SAMPLING METHODS

Water samples are collected consistent with AS/NZS 5667.1:1998.

While in the field collected samples are stored in an esky (with ice bricks) to maintain sample integrity. Collected samples are usually delivered to MPL Laboratory same day following field work. In cases where this is not possible, they are stored in a fridge overnight and delivered to the laboratory the following morning.

Relevant information is collected during the sampling event such as date of sampling, method of sampling, time of sampling, name of sampler and general environmental and climatic conditions.

Surface water sampling is conducted using a telescopic sampling arm and jar. For sampling within a stormwater drain this comprises of capturing a flowing sample or a sample captured shortly after a rainfall event. Stagnant or stationary water is not sampled.

For groundwater monitoring each borehole is sufficiently pumped prior to sampling to ensure that the water drawn is representative of a screened flow from the associated aquifer. Sample pumping occurs within the bore screen and off the base to ensure sediment sitting at the bottom of the bore is not pumped. When possible, sample pumping is taken approximately 1 m below the present groundwater level.

After every sample, the equipment is triple rinsed to avoid cross contamination prior to use.

Where sample filtering is required, this occurs via a Waterra FHT-45 High Turbidity 0.45-micron GW filter.

The following equipment is employed during the water quality monitoring:

- Geotech Interface Meter 60m
- YSI Pro Plus Water Quality Meter
- Geotech Geopump Series 2 Peristaltic Pump (used for bores with < 8m of depth)
- Geotech Geocontrol Low Flow Bladder Pump (used for bores with > 8m of depth)

SAMPLE ANALYSIS

Sample containers are provided from and delivered to MPL Laboratories (a NATA-accredited) consistent with the specifications of each respective water quality monitoring program.

Typical analytes and containers selected for the current monitoring program are:

<u>Analytes:</u>

- Nutrients: Total Nitrogen (TN), Total Kjeldahl Nitrogen (TKN), Total Phosphorus (TP), Filterable Reactive Phosphorus (FRP), Nitrate, Nitrite, and Ammonia.
- Dissolved Metals: Arsenic (As), Cadmium (Cd), Calcium (Ca), Chromium (Cr), Copper (Cu), Lead (Pb), Mercury (Hg), Magnesium (Mg), Nickel (Ni), Potassium (K), Sodium (Na) and Zinc (Zn).
- pH and Electrical Conductivity (EC).

<u>Containers:</u>

- Nutrients, pH and EC: 500mL polythene bottle, green labelled, filled to exclude air.
- Dissolved Metals: 125mL polythene bottle, red labelled

pH and EC are tested in-situ, as well as other physical parameters such as Dissolved Oxygen % (DO), Total Dissolved Solids (TDS), Temperature, and Oxygen Reduction Potential (ORP).

For the purposes of stabilising certain chemical constituents (generally dissolved metals), red labelled 125 mL polythene containers provided from the laboratory contain residual nitric acid wash.

A method summary for MPL lab testing for various analytes is provided in the table below.

MPL ANALYSIS METHODOLOGY

Method ID	Methodology Summary
Calc	Calculation
Calc - TKN	TKN determined by calculation (Total Nitrogen - NOx).
INORG-001	pH - Measured using pH meter and electrode. Please note that the results for water analyses are indicative only, as analysis can be completed outside of the recommended holding times. Solids are reported from a 1:5 water extract unless otherwise specified. Alternatively, pH is determined in a 1:5 extract using 0.01M calcium chloride or a solid is extracted at a ratio of 1:2.5 (AS1289.4.3.1), pH is measured in the extract.
INORG-002	Conductivity and Salinity - measured using a conductivity cell at 25°C. Soil results reported from a 1:5 Soil:Water extract unless otherwise specified. Please note Resistivity is estimated by calculation and may not correlate with results otherwise obtained using the Resistivity current method (based on AS 1289.4.4.1), depending on the nature of the soil being analysed.
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-060	Phosphate - determined colourimetrically using APHA latest edition 4500 P E. Water samples are filtered on receipt prior to analysis. Soils are analysed from a water extract.
INORG-127	Total Nitrogen by high temperature catalytic combustion with chemiluminescence detection. Organic Carbon forms (inorganic, organic, total) determined using a TOC/NDIR analyser via combustion. Dissolved forms require filtering prior to determination.
METALS-020	Determination of various metals by ICP-OES.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS.Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.Salt forms and/or anion/cation forms (e.g. FeO, PbO, ZnO, BO3) are determined stoichiometrically from the base metal concentration.

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CERTIFICATE OF ANALYSIS 261595

Client Details

Client	Hyd2O
Attention	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, Subiaco, WA, 6008

Sample Details

Your Reference	**H21003**
Number of Samples	2 Water
Date samples received	07/05/2021
Date completed instructions received	10/05/2021
Location	Wattle Grove Predev Monitoring

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	17/05/2021
Date of Issue	17/05/2021

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Results Approved By
Michael Mowle, Metals/Inorganics Supervisor

Authorised By



Michael Kubiak, Laboratory Manager

Miscellaneous Inorganics				
Our Reference	UNITS	PQL	261595-1	261595-2
Your Reference			SW2	SW4
Date Sampled			06/05/2021	06/05/2021
Type of sample			Surface Water	Surface Water
Date prepared	-		10/05/2021	10/05/2021
Date analysed	-		10/05/2021	10/05/2021
pH	pH Units		6.8	6.4
Electrical Conductivity (EC)	µS/cm	1	240	33

Nutrients in Water				
Our Reference	UNITS	PQL	261595-1	261595-2
Your Reference			SW2	SW4
Date Sampled			06/05/2021	06/05/2021
Type of sample			Surface Water	Surface Water
Date prepared	-		10/05/2021	10/05/2021
Date analysed	-		10/05/2021	10/05/2021
Total Nitrogen	mg/L	0.1	1.2	1.2
Total Kjeldahl Nitrogen	mg/L	0.1	0.8	1.2
NOx as N	mg/L	0.005	0.32	0.014
Nitrate as N	mg/L	0.005	0.31	0.014
Nitrite as N	mg/L	0.005	0.013	<0.005
Ammonia as N	mg/L	0.005	0.042	0.012
Total Phosphorus	mg/L	0.05	<0.05	0.15
Phosphate as P	mg/L	0.005	0.022	0.078

Metals in Water - Low Level				
Our Reference	UNITS	PQL	261595-1	261595-2
Your Reference			SW2	SW4
Date Sampled			06/05/2021	06/05/2021
Type of sample			Surface Water	Surface Water
Date prepared	-		12/05/2021	12/05/2021
Date analysed	-		12/05/2021	12/05/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.006	0.10
Lead-Dissolved	mg/L	0.001	0.001	0.003
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.001	0.006
Zinc-Dissolved	mg/L	0.001	0.047	0.078

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CERTIFICATE OF ANALYSIS 262773

Client Details

Client	Hyd2O
Attention	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, Subiaco, WA, 6008

Sample Details

Your Reference	**H21003 - Wattle Grove Monitoring**
Number of Samples	3 Water
Date samples received	31/05/2021
Date completed instructions received	31/05/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	04/06/2021
Date of Issue	04/06/2021

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Results Approved By
Heram Halim, Operations Manager

Authorised By



Michael Kubiak, Laboratory Manager

Nutrients in Water					
Our Reference	UNITS	PQL	262773-1	262773-2	262773-3
Your Reference			WG1	WG2	WG3
Date Sampled			28/05/2021	28/05/2021	28/05/2021
Type of sample			Groundwater	Groundwater	Groundwater
Date prepared	-		01/06/2021	01/06/2021	01/06/2021
Date analysed	-		01/06/2021	01/06/2021	01/06/2021
Total Nitrogen	mg/L	0.1	5.5	5.2	1.7
Total Kjeldahl Nitrogen	mg/L	0.1	0.7	0.9	1.5
NOx as N	mg/L	0.005	4.8	4.3	0.21
Ammonia as N	mg/L	0.005	<0.005	0.017	0.11
Nitrate as N	mg/L	0.005	4.7	4.3	0.21
Nitrite as N	mg/L	0.005	<0.005	0.005	<0.005
Total Phosphorus	mg/L	0.05	0.12	0.09	0.20
Phosphate as P	mg/L	0.005	<0.005	<0.005	0.047

Metals in Water - Low Level					
Our Reference	UNITS	PQL	262773-1	262773-2	262773-3
Your Reference			WG1	WG2	WG3
Date Sampled			28/05/2021	28/05/2021	28/05/2021
Type of sample			Groundwater	Groundwater	Groundwater
Date prepared	-		04/06/2021	04/06/2021	04/06/2021
Date analysed	-		04/06/2021	04/06/2021	04/06/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.005	0.01	<0.001
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.005	0.012	0.019
Zinc-Dissolved	mg/L	0.001	0.019	0.031	0.030

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CERTIFICATE OF ANALYSIS 264798

Client Details

Client	Hyd2O
Attention	Georgia Ross
Address	Suite 6B, 103 Rokeby Rd, Subiaco, WA, 6008

Sample Details

Your Reference	**H21003 - Wattle Grove Predev Monitoring**
Number of Samples	7 Water
Date samples received	05/07/2021
Date completed instructions received	05/07/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	12/07/2021
Date of Issue	12/07/2021

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Results Approved By
Heram Halim, Operations Manager

Authorised By



Michael Kubiak, Laboratory Manager

Miscellaneous Inorganics							
Our Reference			264798-1	264798-2	264798-3	264798-4	264798-5
Your Reference	UNITS	PQL	SW1	SW2	SW4	SW6	SW7
Date Sampled			05/07/2021	05/07/2021	05/07/2021	05/07/2021	05/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		06/07/2021	06/07/2021	06/07/2021	06/07/2021	06/07/2021
Date analysed	-		06/07/2021	06/07/2021	06/07/2021	06/07/2021	06/07/2021
pH	pH Units		5.9	6.3	6.2	6.2	6.2
Electrical Conductivity (EC)	µS/cm	1	94	810	110	190	230

Miscellaneous Inorganics				
Our Reference			264798-6	264798-7
Your Reference	UNITS	PQL	~~SW8~~ SW5	SW9
Date Sampled			05/07/2021	05/07/2021
Type of sample			Surface Water	Surface Water
Date prepared	-		06/07/2021	06/07/2021
Date analysed	-		06/07/2021	06/07/2021
pH	pH Units		5.9	6.2
Electrical Conductivity (EC)	µS/cm	1	160	410

Nutrients in Water							
Our Reference			264798-1	264798-2	264798-3	264798-4	264798-5
Your Reference	UNITS	PQL	SW1	SW2	SW4	SW6	SW7
Date Sampled			05/07/2021	05/07/2021	05/07/2021	05/07/2021	05/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		06/07/2021	06/07/2021	06/07/2021	06/07/2021	06/07/2021
Date analysed	-		06/07/2021	06/07/2021	06/07/2021	06/07/2021	06/07/2021
Total Nitrogen	mg/L	0.1	0.3	5.4	0.6	1.3	1.6
Total Kjeldahl Nitrogen	mg/L	0.1	0.3	1.3	0.5	1.1	1.4
Nitrate as N	mg/L	0.005	0.012	4.1	0.022	0.24	0.20
Nitrite as N	mg/L	0.005	<0.005	0.010	<0.005	<0.005	<0.005
NOx as N	mg/L	0.005	0.017	4.1	0.025	0.24	0.20
Ammonia as N	mg/L	0.005	0.016	0.022	0.011	0.006	0.007
Total Phosphorus	mg/L	0.05	<0.05	0.17	0.06	<0.05	0.08
Phosphate as P	mg/L	0.005	0.005	0.14	0.026	<0.005	0.065

Nutrients in Water				
Our Reference			264798-6	264798-7
Your Reference	UNITS	PQL	~~SW8~~ SW5	SW9
Date Sampled			05/07/2021	05/07/2021
Type of sample			Surface Water	Surface Water
Date prepared	-		06/07/2021	06/07/2021
Date analysed	-		06/07/2021	06/07/2021
Total Nitrogen	mg/L	0.1	1.2	2.6
Total Kjeldahl Nitrogen	mg/L	0.1	1.2	1.6
Nitrate as N	mg/L	0.005	<0.005	1.1
Nitrite as N	mg/L	0.005	<0.005	0.011
NOx as N	mg/L	0.005	<0.005	1.1
Ammonia as N	mg/L	0.005	0.007	0.009
Total Phosphorus	mg/L	0.05	<0.05	0.32
Phosphate as P	mg/L	0.005	<0.005	0.32

Dissolved Metals in Water							
Our Reference	UNITS	PQL	264798-1	264798-2	264798-3	264798-4	264798-5
Your Reference			SW1	SW2	SW4	SW6	SW7
Date Sampled			05/07/2021	05/07/2021	05/07/2021	05/07/2021	05/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		09/07/2021	09/07/2021	09/07/2021	09/07/2021	09/07/2021
Date analysed	-		09/07/2021	09/07/2021	09/07/2021	09/07/2021	09/07/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.003	0.006	<0.001	0.002	0.002
Lead-Dissolved	mg/L	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc-Dissolved	mg/L	0.001	0.010	0.019	0.004	0.008	0.012

Dissolved Metals in Water				
Our Reference	UNITS	PQL	264798-6	264798-7
Your Reference			~~SW8~~ SW5	SW9
Date Sampled			05/07/2021	05/07/2021
Type of sample			Surface Water	Surface Water
Date prepared	-		09/07/2021	09/07/2021
Date analysed	-		09/07/2021	09/07/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	0.003
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.002	0.004
Lead-Dissolved	mg/L	0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	<0.001	<0.001
Zinc-Dissolved	mg/L	0.001	0.008	0.013

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CERTIFICATE OF ANALYSIS 266006

Client Details

Client	Hyd2O
Attention	Georgia Ross
Address	Suite 6B, 103 Rokeby Rd, Subiaco, WA, 6008

Sample Details

Your Reference	**H21003**
Number of Samples	9 Water
Date samples received	28/07/2021
Date completed instructions received	28/07/2021
Location	Wattle Grove Predev Monitoring

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	03/08/2021
Date of Issue	03/08/2021

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Results Approved By
Heram Halim, Operations Manager

Authorised By



Michael Kubiak, Laboratory Manager

Miscellaneous Inorganics							
Our Reference	UNITS	PQL	266006-1	266006-2	266006-3	266006-4	266006-5
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			27/07/2021	27/07/2021	27/07/2021	27/07/2021	27/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		28/07/2021	28/07/2021	28/07/2021	28/07/2021	28/07/2021
Date analysed	-		28/07/2021	28/07/2021	28/07/2021	28/07/2021	28/07/2021
pH	pH Units		7.2	7.1	7.1	7.3	6.9
Electrical Conductivity (EC)	µS/cm	1	320	700	230	200	200

Miscellaneous Inorganics						
Our Reference	UNITS	PQL	266006-6	266006-7	266006-8	266006-9
Your Reference			SW6	SW7	SW8	SW9
Date Sampled			27/07/2021	27/07/2021	27/07/2021	27/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		28/07/2021	28/07/2021	28/07/2021	28/07/2021
Date analysed	-		28/07/2021	28/07/2021	28/07/2021	28/07/2021
pH	pH Units		5.8	7.3	7.4	7.6
Electrical Conductivity (EC)	µS/cm	1	720	310	340	470

Nutrients in Water							
Our Reference	UNITS	PQL	266006-1	266006-2	266006-3	266006-4	266006-5
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			27/07/2021	27/07/2021	27/07/2021	27/07/2021	27/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		29/07/2021	29/07/2021	29/07/2021	29/07/2021	29/07/2021
Date analysed	-		29/07/2021	29/07/2021	29/07/2021	29/07/2021	29/07/2021
Total Nitrogen	mg/L	0.1	0.9	18	2.8	0.3	1.5
Total Kjeldahl Nitrogen	mg/L	0.1	0.8	13	2.1	0.3	1.5
NOx as N	mg/L	0.005	0.017	5.4	0.72	<0.005	<0.005
Ammonia as N	mg/L	0.005	0.011	0.032	0.77	<0.005	0.011
Nitrate as N	mg/L	0.005	0.017	5.4	0.64	<0.005	<0.005
Nitrite as N	mg/L	0.005	<0.005	0.007	0.076	<0.005	<0.005
Total Phosphorus	mg/L	0.05	<0.05	0.43	5.6	0.09	<0.05
Phosphate as P	mg/L	0.005	0.005	0.31	0.17	0.021	<0.005

Nutrients in Water						
Our Reference	UNITS	PQL	266006-6	266006-7	266006-8	266006-9
Your Reference			SW6	SW7	SW8	SW9
Date Sampled			27/07/2021	27/07/2021	27/07/2021	27/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		29/07/2021	29/07/2021	29/07/2021	29/07/2021
Date analysed	-		29/07/2021	29/07/2021	29/07/2021	29/07/2021
Total Nitrogen	mg/L	0.1	1.2	1.8	2.0	2.0
Total Kjeldahl Nitrogen	mg/L	0.1	1.0	1.7	1.9	1.7
NOx as N	mg/L	0.005	0.21	0.051	0.12	0.33
Ammonia as N	mg/L	0.005	0.50	0.020	0.027	0.031
Nitrate as N	mg/L	0.005	0.21	0.050	0.12	0.32
Nitrite as N	mg/L	0.005	<0.005	<0.005	<0.005	0.010
Total Phosphorus	mg/L	0.05	<0.05	0.16	0.19	0.23
Phosphate as P	mg/L	0.005	<0.005	0.073	0.093	0.15

Metals in Water - Low Level							
Our Reference	UNITS	PQL	266006-1	266006-2	266006-3	266006-4	266006-5
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			27/07/2021	27/07/2021	27/07/2021	27/07/2021	27/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		30/07/2021	30/07/2021	30/07/2021	30/07/2021	30/07/2021
Date analysed	-		30/07/2021	30/07/2021	30/07/2021	30/07/2021	30/07/2021
Arsenic-Dissolved	mg/L	0.001	0.002	0.003	0.002	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	0.001
Copper-Dissolved	mg/L	0.001	0.004	0.006	0.005	0.001	0.001
Lead-Dissolved	mg/L	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	<0.001	0.001	<0.001	<0.001	0.002
Zinc-Dissolved	mg/L	0.001	0.017	0.036	0.015	0.006	0.025

Metals in Water - Low Level						
Our Reference	UNITS	PQL	266006-6	266006-7	266006-8	266006-9
Your Reference			SW6	SW7	SW8	SW9
Date Sampled			27/07/2021	27/07/2021	27/07/2021	27/07/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		30/07/2021	30/07/2021	30/07/2021	30/07/2021
Date analysed	-		30/07/2021	30/07/2021	30/07/2021	30/07/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	0.002	0.002	0.002
Cadmium-Dissolved	mg/L	0.0001	0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.001	0.003	0.002	0.003
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.006	0.002	0.002	0.002
Zinc-Dissolved	mg/L	0.001	0.041	0.019	0.015	0.017

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CERTIFICATE OF ANALYSIS 267547

Client Details

Client	Hyd2O
Attention	Georgia Ross
Address	Suite 6B, 103 Rokeby Rd, Subiaco, WA, 6008

Sample Details

Your Reference	**H21003 Wattle Grove Monitoring**
Number of Samples	7 Water
Date samples received	23/08/2021
Date completed instructions received	24/08/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	30/08/2021
Date of Issue	30/08/2021

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Results Approved By
Michael Mowle, Metals/Inorganics Supervisor

Authorised By



Michael Kubiak, Laboratory Manager

Nutrients in Water							
Our Reference	UNITS	PQL	267547-1	267547-2	267547-3	267547-4	267547-5
Your Reference			WG1	WG2	WG3	MBb	GW1
Date Sampled			23/08/2021	23/08/2021	23/08/2021	23/08/2021	23/08/2021
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Date prepared	-		25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Date analysed	-		25/08/2021	25/08/2021	25/08/2021	25/08/2021	25/08/2021
Total Nitrogen	mg/L	0.1	3.6	4.4	0.7	0.5	2.9
Total Kjeldahl Nitrogen	mg/L	0.1	0.8	0.5	0.7	0.5	0.3
Nitrate as N	mg/L	0.005	2.8	4.0	0.007	<0.005	2.5
Nitrite as N	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
NOx as N	mg/L	0.005	2.8	4.0	0.008	<0.005	2.5
Ammonia as N	mg/L	0.005	0.009	0.026	0.032	0.11	<0.005
Total Phosphorus	mg/L	0.05	0.40	0.10	0.36	0.06	0.06
Phosphate as P	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Nutrients in Water				
Our Reference	UNITS	PQL	267547-6	267547-7
Your Reference			GW5	GW6
Date Sampled			23/08/2021	23/08/2021
Type of sample			Groundwater	Groundwater
Date prepared	-		25/08/2021	25/08/2021
Date analysed	-		25/08/2021	25/08/2021
Total Nitrogen	mg/L	0.1	1.3	1.4
Total Kjeldahl Nitrogen	mg/L	0.1	1.3	1.4
Nitrate as N	mg/L	0.005	0.029	0.034
Nitrite as N	mg/L	0.005	<0.005	0.005
NOx as N	mg/L	0.005	0.029	0.039
Ammonia as N	mg/L	0.005	0.041	0.062
Total Phosphorus	mg/L	0.05	0.15	0.23
Phosphate as P	mg/L	0.005	0.007	0.042

Metals in Water - Low Level							
Our Reference	UNITS	PQL	267547-1	267547-2	267547-3	267547-4	267547-5
Your Reference			WG1	WG2	WG3	MBb	GW1
Date Sampled			23/08/2021	23/08/2021	23/08/2021	23/08/2021	23/08/2021
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Date prepared	-		26/08/2021	26/08/2021	26/08/2021	26/08/2021	26/08/2021
Date analysed	-		26/08/2021	26/08/2021	26/08/2021	26/08/2021	26/08/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.003	0.010	0.01	0.013	0.001
Zinc-Dissolved	mg/L	0.001	0.007	0.025	0.012	0.017	0.004

Metals in Water - Low Level				
Our Reference	UNITS	PQL	267547-6	267547-7
Your Reference			GW5	GW6
Date Sampled			23/08/2021	23/08/2021
Type of sample			Groundwater	Groundwater
Date prepared	-		26/08/2021	26/08/2021
Date analysed	-		26/08/2021	26/08/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	<0.001	0.002
Lead-Dissolved	mg/L	0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.011	0.002
Zinc-Dissolved	mg/L	0.001	0.003	0.017

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CERTIFICATE OF ANALYSIS 268352

Client Details

Client	Hyd2O
Attention	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, Subiaco, WA, 6008

Sample Details

Your Reference	**H21003 - Wattle Grove Predev Monitoring**
Number of Samples	8 Water
Date samples received	06/09/2021
Date completed instructions received	07/09/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	13/09/2021
Date of Issue	13/09/2021

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Results Approved By
Michael Mowle, Metals/Inorganics Supervisor

Authorised By



Michael Kubiak, Laboratory Manager

Miscellaneous Inorganics			
Our Reference	UNITS	PQL	268352-6
Your Reference			SW7
Date Sampled			01/09/2021
Type of sample			Surface Water
Date prepared	-		07/09/2021
Date analysed	-		07/09/2021
pH	pH Units		4.4
Electrical Conductivity (EC)	µS/cm	1	5,200

Nutrients in Water							
Our Reference	UNITS	PQL	268352-1	268352-2	268352-3	268352-4	268352-5
Your Reference			SW2	SW3	SW4	SW5	SW6
Date Sampled			01/09/2021	01/09/2021	01/09/2021	01/09/2021	01/09/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		08/09/2021	08/09/2021	08/09/2021	08/09/2021	08/09/2021
Date analysed	-		08/09/2021	08/09/2021	08/09/2021	08/09/2021	08/09/2021
Total Nitrogen	mg/L	0.1	1.9	1.1	0.3	1.4	1.4
Total Kjeldahl Nitrogen	mg/L	0.1	1.1	1	0.3	1.4	1.4
NOx as N	mg/L	0.005	0.76	0.097	<0.005	<0.005	0.036
Ammonia as N	mg/L	0.005	0.089	0.20	<0.005	0.016	0.45
Nitrate as N	mg/L	0.005	0.75	0.073	<0.005	<0.005	0.035
Nitrite as N	mg/L	0.005	0.011	0.024	<0.005	<0.005	<0.005
Total Phosphorus	mg/L	0.05	0.26	2.9	0.05	0.13	<0.05
Phosphate as P	mg/L	0.005	0.048	0.10	0.025	0.007	<0.005

Nutrients in Water					
Our Reference	UNITS	PQL	268352-6	268352-7	268352-8
Your Reference			SW7	SW8	SW9
Date Sampled			01/09/2021	01/09/2021	01/09/2021
Type of sample			Surface Water	Surface Water	Surface Water
Date prepared	-		08/09/2021	08/09/2021	08/09/2021
Date analysed	-		08/09/2021	08/09/2021	08/09/2021
Total Nitrogen	mg/L	0.1	3.5	3.1	3.4
Total Kjeldahl Nitrogen	mg/L	0.1	3.5	3.1	3.4
NOx as N	mg/L	0.005	0.031	<0.005	<0.005
Ammonia as N	mg/L	0.005	2.7	0.015	0.015
Nitrate as N	mg/L	0.005	0.028	<0.005	<0.005
Nitrite as N	mg/L	0.005	<0.005	<0.005	<0.005
Total Phosphorus	mg/L	0.05	<0.05	0.27	0.31
Phosphate as P	mg/L	0.005	<0.005	0.18	0.20

Metals in Water - Low Level							
Our Reference	UNITS	PQL	268352-1	268352-2	268352-3	268352-4	268352-5
Your Reference			SW2	SW3	SW4	SW5	SW6
Date Sampled			01/09/2021	01/09/2021	01/09/2021	01/09/2021	01/09/2021
Type of sample			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Date prepared	-		09/09/2021	09/09/2021	09/09/2021	09/09/2021	09/09/2021
Date analysed	-		09/09/2021	09/09/2021	09/09/2021	09/09/2021	09/09/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.004	0.005	0.002	0.002	0.003
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	0.002
Zinc-Dissolved	mg/L	0.001	0.017	0.011	0.011	0.005	0.032

Metals in Water - Low Level					
Our Reference	UNITS	PQL	268352-6	268352-7	268352-8
Your Reference			SW7	SW8	SW9
Date Sampled			01/09/2021	01/09/2021	01/09/2021
Type of sample			Surface Water	Surface Water	Surface Water
Date prepared	-		09/09/2021	09/09/2021	09/09/2021
Date analysed	-		09/09/2021	09/09/2021	09/09/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	0.002	0.003
Cadmium-Dissolved	mg/L	0.0001	0.0003	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	0.002	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.004	0.003	0.002
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.019	0.002	0.003
Zinc-Dissolved	mg/L	0.001	0.36	0.0099	0.011

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CERTIFICATE OF ANALYSIS 272540

Client Details

Client	Hyd2O
Attention	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, Subiaco, WA, 6008

Sample Details

Your Reference	**H21003 - Wattle Grove Monitoring**
Number of Samples	7 Water
Date samples received	19/11/2021
Date completed instructions received	19/11/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	25/11/2021
Date of Issue	25/11/2021

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Results Approved By
Michael Mowle, Metals/Inorganics Supervisor

Authorised By



Michael Kubiak, Laboratory Manager

Nutrients in Water							
Our Reference			272540-1	272540-2	272540-3	272540-4	272540-5
Your Reference	UNITS	PQL	WG1	WG2	WG3	MBb	GW1
Date Sampled			18/11/2021	18/11/2021	18/11/2021	18/11/2021	18/11/2021
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Date prepared	-		22/11/2021	22/11/2021	22/11/2021	22/11/2021	22/11/2021
Date analysed	-		22/11/2021	22/11/2021	22/11/2021	22/11/2021	22/11/2021
Total Nitrogen	mg/L	0.1	4.5	2.7	0.9	0.7	2.8
Total Kjeldahl Nitrogen	mg/L	0.1	0.5	0.7	0.9	0.7	0.8
NOx as N	mg/L	0.005	4.0	2.0	0.026	0.028	1.9
Ammonia as N	mg/L	0.005	0.018	0.079	0.011	0.20	0.012
Nitrate as N	mg/L	0.005	4.0	2.0	0.025	0.027	1.9
Nitrite as N	mg/L	0.005	<0.005	0.006	<0.005	<0.005	<0.005
Total Phosphorus	mg/L	0.05	0.30	0.15	<0.05	0.12	0.08
Phosphate as P	mg/L	0.005	<0.005	0.018	0.006	<0.005	0.013

Nutrients in Water				
Our Reference			272540-6	272540-7
Your Reference	UNITS	PQL	GW3	GW5
Date Sampled			18/11/2021	18/11/2021
Type of sample			Groundwater	Groundwater
Date prepared	-		22/11/2021	22/11/2021
Date analysed	-		22/11/2021	22/11/2021
Total Nitrogen	mg/L	0.1	1.4	1.8
Total Kjeldahl Nitrogen	mg/L	0.1	1.4	1.8
NOx as N	mg/L	0.005	0.027	<0.005
Ammonia as N	mg/L	0.005	0.089	0.075
Nitrate as N	mg/L	0.005	0.024	<0.005
Nitrite as N	mg/L	0.005	<0.005	<0.005
Total Phosphorus	mg/L	0.05	0.30	0.72
Phosphate as P	mg/L	0.005	0.062	<0.005

Dissolved Metals in Water							
Our Reference	UNITS	PQL	272540-1	272540-2	272540-3	272540-4	272540-5
Your Reference			WG1	WG2	WG3	MBb	GW1
Date Sampled			18/11/2021	18/11/2021	18/11/2021	18/11/2021	18/11/2021
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Date prepared	-		24/11/2021	24/11/2021	24/11/2021	24/11/2021	24/11/2021
Date analysed	-		24/11/2021	24/11/2021	24/11/2021	24/11/2021	24/11/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.006	0.002	0.004	<0.001	0.004
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.002	0.005	0.008	0.005	<0.001
Zinc-Dissolved	mg/L	0.001	0.026	0.044	0.038	0.016	0.016

Dissolved Metals in Water				
Our Reference	UNITS	PQL	272540-6	272540-7
Your Reference			GW3	GW5
Date Sampled			18/11/2021	18/11/2021
Type of sample			Groundwater	Groundwater
Date prepared	-		24/11/2021	24/11/2021
Date analysed	-		24/11/2021	24/11/2021
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.002	<0.001
Lead-Dissolved	mg/L	0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.002	0.006
Zinc-Dissolved	mg/L	0.001	0.019	0.004

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CERTIFICATE OF ANALYSIS 277742

Client Details

Client	Hyd2O
Attention	Georgia Ross
Address	Suite 1, 387 Hay St, PERTH, WA, 6008

Sample Details

Your Reference	**H21003 Wattle Grove Monitoring**
Number of Samples	3 Water
Date samples received	02/03/2022
Date completed instructions received	02/03/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	09/03/2022
Date of Issue	09/03/2022

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Results Approved By
Heram Halim, Operations Manager
Travis Carey, Organics - Team Leader

Authorised By

Michael Kubiak, Laboratory Manager

Miscellaneous Inorganics				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date prepared	-		02/03/2022	02/03/2022
Date analysed	-		02/03/2022	02/03/2022
Free Chlorine	mg/L	0.1	0.2	<0.1

Nutrients in Water					
Our Reference	UNITS	PQL	277742-1	277742-2	277742-3
Your Reference			WG1	WG3	MBb
Date Sampled			01/03/2022	01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater	Groundwater
Date prepared	-		02/03/2022	02/03/2022	02/03/2022
Date analysed	-		02/03/2022	02/03/2022	02/03/2022
Total Nitrogen	mg/L	0.1	5.3	0.9	0.8
Total Kjeldahl Nitrogen	mg/L	0.1	1.6	0.9	0.8
NOx as N	mg/L	0.005	3.7	<0.05	0.027
Nitrate as N	mg/L	0.005	3.7	<0.05	0.026
Nitrite as N	mg/L	0.005	0.007	<0.05	<0.005
Ammonia as N	mg/L	0.005	0.025	0.031	0.38
Total Phosphorus	mg/L	0.05	0.36	0.18	<0.05
Phosphate as P	mg/L	0.005	0.018	<0.05	0.006

Dissolved Metals in Water					
Our Reference	UNITS	PQL	277742-1	277742-2	277742-3
Your Reference			WG1	WG3	MBb
Date Sampled			01/03/2022	01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater	Groundwater
Date prepared	-		08/03/2022	08/03/2022	08/03/2022
Date analysed	-		08/03/2022	08/03/2022	08/03/2022
Arsenic-Dissolved	mg/L	0.001	<0.001	0.002	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	0.001	<0.001	0.002
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	<0.001	0.010	0.004
Zinc-Dissolved	mg/L	0.001	0.002	0.016	0.010

Glyphosate in water				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date Extracted	-		03/03/2022	03/03/2022
Date Analysed	-		04/03/2022	04/03/2022
Glyphosate	mg/L	0.01	<0.01	<0.01
Surrogate: L-Cysteic Acid	%		109	110

Acid Herbicides in Water				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date extracted	-		03/03/2022	03/03/2022
Date analysed	-		08/03/2022	08/03/2022
Clopyralid	µg/L	0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	µg/L	0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	µg/L	0.5	<0.5	<0.5
4-CPA	µg/L	0.5	<0.5	<0.5
Dicamba	µg/L	0.5	<0.5	<0.5
Mecoprop (MCPP)	µg/L	0.5	<0.5	<0.5
MCPA	µg/L	0.5	<0.5	<0.5
Dichlorprop (2,4-DP)	µg/L	0.5	<0.5	<0.5
2,4-D	µg/L	0.5	<0.5	<0.5
Bromoxynil	µg/L	0.5	<0.5	<0.5
Triclopyr	µg/L	0.5	<0.5	<0.5
2,4,5-TP (Silvex)	µg/L	0.5	<0.5	<0.5
2,4,5-T	µg/L	0.5	<0.5	<0.5
MCPB	µg/L	0.5	<0.5	<0.5
Dinoseb	µg/L	1	<1	<1
2,4-DB	µg/L	0.5	<0.5	<0.5
Ioxynil	µg/L	1	<1	<1
Picloram	µg/L	1	<1	<1
Acifluorfen	µg/L	2	<2	<2
2,4,6-T	µg/L	0.5	<0.5	<0.5
2,6-D	µg/L	0.5	<0.5	<0.5
Surrogate: 2,4-DCPA	%		82	84

Triazine Herbicides in water				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date extracted	-		03/03/2022	03/03/2022
Date analysed	-		08/03/2022	08/03/2022
Ametryn	µg/L	2	<2	<2
Atrazine	µg/L	2	<2	<2
Cyanazine	µg/L	2	<2	<2
Hexazinone	µg/L	2	<2	<2
Prometryn	µg/L	2	<2	<2
Simazine	µg/L	2	<2	<2
Terbutryn	µg/L	2	<2	<2
Propazine	µg/L	2	<2	<2
Irgarol	µg/L	2	<2	<2
Metribuzin	µg/L	2	<2	<2
Terbuthylazine	µg/L	2	<2	<2
Surrogate p-Terphenyl-D_{14}	%		68	62

Carbamates in water				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date extracted	-		03/03/2022	03/03/2022
Date analysed	-		08/03/2022	08/03/2022
Carbaryl	µg/L	0.5	<0.5	<0.5
Carbofuran	µg/L	0.5	<0.5	<0.5
Molinate	µg/L	0.5	<0.5	<0.5
Surrogate p-Terphenyl-D_{14}	%		68	62

OCP in water				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date extracted	-		03/03/2022	03/03/2022
Date analysed	-		08/03/2022	08/03/2022
Hexachlorobenzene (HCB)	µg/L	0.2	<0.2	<0.2
a-BHC	µg/L	0.2	<0.2	<0.2
b-BHC	µg/L	0.2	<0.2	<0.2
Lindane (g-BHC)	µg/L	0.2	<0.2	<0.2
d-BHC	µg/L	0.2	<0.2	<0.2
Heptachlor	µg/L	0.2	<0.2	<0.2
Aldrin	µg/L	0.2	<0.2	<0.2
Heptachlor Epoxide	µg/L	0.2	<0.2	<0.2
g-Chlordane	µg/L	0.2	<0.2	<0.2
a-Chlordane	µg/L	0.2	<0.2	<0.2
a-Endosulphan	µg/L	0.2	<0.2	<0.2
p,p'-DDE	µg/L	0.2	<0.2	<0.2
Dieldrin	µg/L	0.2	<0.2	<0.2
Endrin	µg/L	0.2	<0.2	<0.2
p,p'-DDD	µg/L	0.2	<0.2	<0.2
b-Endosulphan	µg/L	0.2	<0.2	<0.2
Endrin Aldehyde	µg/L	0.2	<0.2	<0.2
Endosulfan Sulphate	µg/L	0.2	<0.2	<0.2
p,p'-DDT	µg/L	0.2	<0.2	<0.2
Endrin Ketone	µg/L	0.2	<0.2	<0.2
Methoxychlor	µg/L	0.2	<0.2	<0.2
Surrogate 2-chlorophenol-d4	%		102	105

OPP in water				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date extracted	-		03/03/2022	03/03/2022
Date analysed	-		08/03/2022	08/03/2022
Diazinon (Dimpylate)	µg/L	0.2	<0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.2	<0.2	<0.2
Ronnel	µg/L	0.2	<0.2	<0.2
Fenitrothion	µg/L	0.2	<0.2	<0.2
Malathion (Maldison)	µg/L	0.2	<0.2	<0.2
Chlorpyrifos (ethyl)	µg/L	0.2	<0.2	<0.2
Parathion (ethyl)	µg/L	0.2	<0.2	<0.2
Ethion	µg/L	0.2	<0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2	<0.2
Dimethoate	µg/L	0.2	<0.2	<0.2
Dichlorvos	µg/L	0.2	<0.2	<0.2
Azinphos methyl (Guthion)	µg/L	0.2	<0.2	<0.2
Surrogate 2-chlorophenol-d4	%		102	105

Miscellaneous Organics - Water				
Our Reference	UNITS	PQL	277742-2	277742-3
Your Reference			WG3	MBb
Date Sampled			01/03/2022	01/03/2022
Type of sample			Groundwater	Groundwater
Date Extracted	-		03/03/2022	03/03/2022
Date Analysed	-		08/03/2022	08/03/2022
Toxaphene	mg/L	0.002	<0.002	<0.002

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CERTIFICATE OF ANALYSIS 279395

Client Details

Client	Hyd2O
Attention	Sean O'Sillivan
Address	Suite 1, 387 Hay St, PERTH, WA, 6008

Sample Details

Your Reference	**H21003 - Wattle Grove Monitoring**
Number of Samples	1 Water
Date samples received	31/03/2022
Date completed instructions received	31/03/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	07/04/2022
Date of Issue	07/04/2022

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Results Approved By
Michael Mowle, Metals/Inorganics Supervisor
Travis Carey, Organics - Team Leader

Authorised By



Michael Kubiak, Laboratory Manager

Miscellaneous Inorganics			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date prepared	-		31/03/2022
Date analysed	-		31/03/2022
Free Chlorine	mg/L	0.1	<0.1
pH	pH Units		5.4
Electrical Conductivity (EC)	µS/cm	1	2,500

Nutrients in Water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date prepared	-		01/04/2022
Date analysed	-		01/04/2022
Total Nitrogen	mg/L	0.1	4.1
Total Kjeldahl Nitrogen	mg/L	0.1	1.9
NOx as N	mg/L	0.005	2.2
Ammonia as N	mg/L	0.005	0.020
Nitrate as N	mg/L	0.005	2.2
Nitrite as N	mg/L	0.005	<0.005
Total Phosphorus	mg/L	0.05	0.35
Phosphate as P	mg/L	0.005	<0.005

Dissolved Metals in Water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date prepared	-		05/04/2022
Date analysed	-		05/04/2022
Arsenic-Dissolved	mg/L	0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001
Copper-Dissolved	mg/L	0.001	<0.001
Lead-Dissolved	mg/L	0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.003
Zinc-Dissolved	mg/L	0.001	0.015

Glyphosate in water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date Extracted	-		05/04/2022
Date Analysed	-		06/04/2022
Glyphosate	mg/L	0.01	<0.01
Surrogate: L-Cysteic Acid	%		97

Acid Herbicides in Water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date extracted	-		05/04/2022
Date analysed	-		06/04/2022
Clopyralid	µg/L	0.5	<0.5
3,5-Dichlorobenzoic acid	µg/L	0.5	<0.5
o-chlorophenoxy acetic acid	µg/L	0.5	<0.5
4-CPA	µg/L	0.5	<0.5
Dicamba	µg/L	0.5	<0.5
Mecoprop (MCPP)	µg/L	0.5	<0.5
MCPA	µg/L	0.5	<0.5
Dichlorprop (2,4-DP)	µg/L	0.5	<0.5
2,4-D	µg/L	0.5	<0.5
Bromoxynil	µg/L	0.5	<0.5
Triclopyr	µg/L	0.5	<0.5
2,4,5-TP (Silvex)	µg/L	0.5	<0.5
2,4,5-T	µg/L	0.5	<0.5
MCPB	µg/L	0.5	<0.5
Dinoseb	µg/L	1	<1
2,4-DB	µg/L	0.5	<0.5
Ioxynil	µg/L	1	<1
Picloram	µg/L	1	<1
Acifluorfen	µg/L	2	<2
2,4,6-T	µg/L	0.5	<0.5
2,6-D	µg/L	0.5	<0.5
Surrogate: 2,4-DCPA	%		90

Triazine Herbicides in water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date extracted	-		05/04/2022
Date analysed	-		06/04/2022
Ametryn	µg/L	2	<2
Atrazine	µg/L	2	<2
Cyanazine	µg/L	2	<2
Hexazinone	µg/L	2	<2
Prometryn	µg/L	2	<2
Simazine	µg/L	2	<2
Terbutryn	µg/L	2	<2
Propazine	µg/L	2	<2
Irgarol	µg/L	2	<2
Metribuzin	µg/L	2	<2
Terbuthylazine	µg/L	2	<2
Surrogate p-Terphenyl-D_{14}	%		35

Carbamates in water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date extracted	-		05/04/2022
Date analysed	-		06/04/2022
Carbaryl	µg/L	0.5	<0.5
Carbofuran	µg/L	0.5	<0.5
Molinate	µg/L	0.5	<0.5
Surrogate p-Terphenyl-D_{14}	%		35

OCP in water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date extracted	-		05/04/2022
Date analysed	-		06/04/2022
Hexachlorobenzene (HCB)	µg/L	0.2	<0.2
a-BHC	µg/L	0.2	<0.2
b-BHC	µg/L	0.2	<0.2
Lindane (g-BHC)	µg/L	0.2	<0.2
d-BHC	µg/L	0.2	<0.2
Heptachlor	µg/L	0.2	<0.2
Aldrin	µg/L	0.2	<0.2
Heptachlor Epoxide	µg/L	0.2	<0.2
g-Chlordane	µg/L	0.2	<0.2
a-Chlordane	µg/L	0.2	<0.2
a-Endosulphan	µg/L	0.2	<0.2
p,p'-DDE	µg/L	0.2	<0.2
Dieldrin	µg/L	0.2	<0.2
Endrin	µg/L	0.2	<0.2
p,p'-DDD	µg/L	0.2	<0.2
b-Endosulphan	µg/L	0.2	<0.2
Endrin Aldehyde	µg/L	0.2	<0.2
Endosulfan Sulphate	µg/L	0.2	<0.2
p,p'-DDT	µg/L	0.2	<0.2
Endrin Ketone	µg/L	0.2	<0.2
Methoxychlor	µg/L	0.2	<0.2
Surrogate 2-chlorophenol-d4	%		85

OPP in water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date extracted	-		05/04/2022
Date analysed	-		06/04/2022
Diazinon (Dimpylate)	µg/L	0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.2	<0.2
Ronnel	µg/L	0.2	<0.2
Fenitrothion	µg/L	0.2	<0.2
Malathion (Maldison)	µg/L	0.2	<0.2
Chlorpyrifos (ethyl)	µg/L	0.2	<0.2
Parathion (ethyl)	µg/L	0.2	<0.2
Ethion	µg/L	0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2
Dimethoate	µg/L	0.2	<0.2
Dichlorvos	µg/L	0.2	<0.2
Azinphos methyl (Guthion)	µg/L	0.2	<0.2
Surrogate 2-chlorophenol-d4	%		85

Miscellaneous Organics - Water			
Our Reference	UNITS	PQL	279395-1
Your Reference			WG2
Date Sampled			31/03/2022
Type of sample			Groundwater
Date Extracted	-		05/04/2022
Date Analysed	-		06/04/2022
Toxaphene	mg/L	0.001	<0.001

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CERTIFICATE OF ANALYSIS 282509

Client Details

Client	Hyd2O
Attention	Georgia Ross
Address	Suite 1, 387 Hay St, PERTH, WA, 6008

Sample Details

Your Reference	**H21003 Wattle Grove Monitoring**
Number of Samples	5 Water
Date samples received	30/05/2022
Date completed instructions received	30/05/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	08/06/2022
Date of Issue	08/06/2022

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Results Approved By
Lien Tang, Assistant Operations Manager
Michael Kubiak, Laboratory Manager
Travis Carey, Organics - Team Leader

Authorised By

Michael Kubiak, Laboratory Manager

Miscellaneous Inorganics						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date prepared	-		31/05/2022	31/05/2022	31/05/2022	31/05/2022
Date analysed	-		31/05/2022	31/05/2022	31/05/2022	31/05/2022
Free Chlorine	mg/L	0.1	<0.1	<0.1	<0.1	<0.1

Nutrients in Water							
Our Reference	UNITS	PQL	282509-1	282509-2	282509-3	282509-4	282509-5
Your Reference			WG1	WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Date prepared	-		31/05/2022	31/05/2022	31/05/2022	31/05/2022	31/05/2022
Date analysed	-		31/05/2022	31/05/2022	31/05/2022	31/05/2022	31/05/2022
Total Nitrogen	mg/L	0.1	4.7	5.2	1.1	4.6	3.4
Total Kjeldahl Nitrogen	mg/L	0.1	0.7	3.0	0.9	4.6	2.5
NOx as N	mg/L	0.005	4.0	2.2	0.21	<0.005	0.93
Ammonia as N	mg/L	0.005	0.033	0.059	0.048	3.4	0.012
Nitrate as N	mg/L	0.005	4.0	2.2	0.21	<0.005	0.93
Nitrite as N	mg/L	0.005	<0.005	0.013	<0.005	<0.005	<0.005
Total Phosphorus	mg/L	0.05	<0.05	0.60	0.06	<0.05	<0.05
Phosphate as P	mg/L	0.005	<0.005	<0.005	0.020	<0.005	<0.005

Dissolved Metals in Water							
Our Reference	UNITS	PQL	282509-1	282509-2	282509-3	282509-4	282509-5
Your Reference			WG1	WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Date prepared	-		02/06/2022	02/06/2022	02/06/2022	02/06/2022	02/06/2022
Date analysed	-		02/06/2022	02/06/2022	02/06/2022	02/06/2022	02/06/2022
Arsenic-Dissolved	mg/L	0.001	<0.001	<0.001	0.001	<0.001	<0.001
Cadmium-Dissolved	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper-Dissolved	mg/L	0.001	<0.001	0.002	<0.001	<0.001	0.004
Lead-Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury-Dissolved	mg/L	0.00005	<0.00005	<0.0005	<0.00005	<0.00005	<0.00005
Nickel-Dissolved	mg/L	0.001	0.001	0.010	0.015	0.012	0.01
Zinc-Dissolved	mg/L	0.001	0.004	0.033	0.008	0.013	0.004

Glyphosate in water						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date Extracted	-		01/06/2022	01/06/2022	01/06/2022	01/06/2022
Date Analysed	-		02/06/2022	02/06/2022	02/06/2022	02/06/2022
Glyphosate	mg/L	0.01	<0.01	<0.01	<0.01	<0.01
Surrogate: L-Cysteic Acid	%		99	102	88	96

Acid Herbicides in Water						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date extracted	-		01/06/2022	01/06/2022	01/06/2022	01/06/2022
Date analysed	-		08/06/2022	08/06/2022	08/06/2022	08/06/2022
Clopyralid	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
3,5-Dichlorobenzoic acid	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
o-chlorophenoxy acetic acid	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
4-CPA	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Dicamba	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Mecoprop (MCPP)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
MCPA	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Dichlorprop (2,4-DP)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2,4-D	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Bromoxynil	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Triclopyr	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-TP (Silvex)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-T	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
MCPB	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Dinoseb	µg/L	1	<1	<1	<1	<1
2,4-DB	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Ioxynil	µg/L	1	<1	<1	<1	<1
Picloram	µg/L	1	<1	<1	<1	<1
Acifluorfen	µg/L	2	<2	<2	<2	<2
2,4,6-T	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2,6-D	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Surrogate: 2,4-DCPA	%		130	97	100	120

Triazine Herbicides in water						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date extracted	-		01/06/2022	01/06/2022	01/06/2022	01/06/2022
Date analysed	-		08/06/2022	08/06/2022	08/06/2022	08/06/2022
Ametryn	µg/L	2	<2	<2	<2	<2
Atrazine	µg/L	2	<2	<2	<2	<2
Cyanazine	µg/L	2	<2	<2	<2	<2
Hexazinone	µg/L	2	<2	<2	<2	<2
Prometryn	µg/L	2	<2	<2	<2	<2
Simazine	µg/L	2	<2	<2	<2	<2
Terbutryn	µg/L	2	<2	<2	<2	<2
Propazine	µg/L	2	<2	<2	<2	<2
Irgarol	µg/L	2	<2	<2	<2	<2
Metribuzin	µg/L	2	<2	<2	<2	<2
Terbuthylazine	µg/L	2	<2	<2	<2	<2
Surrogate p-Terphenyl-D_{14}	%		38	87	121	85

Carbamates in water						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date extracted	-		01/06/2022	01/06/2022	01/06/2022	01/06/2022
Date analysed	-		08/06/2022	08/06/2022	08/06/2022	08/06/2022
Carbaryl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Molinate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-D_{14}	%		38	87	121	85

OCP in water						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date extracted	-		01/06/2022	01/06/2022	01/06/2022	01/06/2022
Date analysed	-		08/06/2022	08/06/2022	08/06/2022	08/06/2022
Hexachlorobenzene (HCB)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
a-BHC	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
b-BHC	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Lindane (g-BHC)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
d-BHC	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Aldrin	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor Epoxide	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
g-Chlordane	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
a-Chlordane	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
a-Endosulphan	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDE	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Dieldrin	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Endrin	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
b-Endosulphan	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Endrin Aldehyde	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan Sulphate	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDT	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Endrin Ketone	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Methoxychlor	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Surrogate 2-chlorophenol-d4	%		115	119	121	94

OPP in water						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date extracted	-		01/06/2022	01/06/2022	01/06/2022	01/06/2022
Date analysed	-		08/06/2022	08/06/2022	08/06/2022	08/06/2022
Diazinon (Dimpylate)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Ronnel	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Malathion (Maldison)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (ethyl)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Parathion (ethyl)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Ethion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Dichlorvos	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos methyl (Guthion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Surrogate 2-chlorophenol-d4	%		115	119	121	94

Miscellaneous Organics - Water						
Our Reference	UNITS	PQL	282509-2	282509-3	282509-4	282509-5
Your Reference			WG2	WG3	MBb	GW5
Date Sampled			30/05/2022	30/05/2022	30/05/2022	30/05/2022
Type of sample			Groundwater	Groundwater	Groundwater	Groundwater
Date Extracted	-		01/06/2022	01/06/2022	01/06/2022	01/06/2022
Date Analysed	-		08/06/2022	08/06/2022	08/06/2022	08/06/2022
Toxaphene*	µg/L	2	<2	<2	<2	<2

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Certificate of Analysis PDJ0379

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	14 Groundwater
Date Samples Received	07/10/2022
Date Samples Registered	07/10/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	17/10/2022
Date of Issue	17/10/2022

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

Certificate of Analysis PDJ0379

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PDJ0379-01	WG2D	Groundwater	06/10/2022	07/10/2022
PDJ0379-02	WG3	Groundwater	06/10/2022	07/10/2022
PDJ0379-03	WG4S	Groundwater	06/10/2022	07/10/2022
PDJ0379-04	WG4D	Groundwater	06/10/2022	07/10/2022
PDJ0379-05	WG5D	Groundwater	06/10/2022	07/10/2022
PDJ0379-06	WG6	Groundwater	06/10/2022	07/10/2022
PDJ0379-07	WG7D	Groundwater	06/10/2022	07/10/2022
PDJ0379-08	MBb	Groundwater	06/10/2022	07/10/2022
PDJ0379-09	GW1	Groundwater	06/10/2022	07/10/2022
PDJ0379-10	GW3	Groundwater	06/10/2022	07/10/2022
PDJ0379-11	GW5S	Groundwater	06/10/2022	07/10/2022
PDJ0379-12	GW5D	Groundwater	06/10/2022	07/10/2022
PDJ0379-13	GW8D	Groundwater	06/10/2022	07/10/2022
PDJ0379-14	GW9S	Groundwater	06/10/2022	07/10/2022

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ0379-01	PDJ0379-02	PDJ0379-03	PDJ0379-04	PDJ0379-05
Your Reference			WG2D	WG3	WG4S	WG4D	WG5D
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Phosphorus	mg/L	0.050	0.057	<0.050	<0.050	<0.050	0.062

Envirolab ID	Units	PQL	PDJ0379-06	PDJ0379-07	PDJ0379-08	PDJ0379-09	PDJ0379-10
Your Reference			WG6	WG7D	MBb	GW1	GW3
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050

Envirolab ID	Units	PQL	PDJ0379-11	PDJ0379-12	PDJ0379-13	PDJ0379-14
Your Reference			GW5S	GW5D	GW8D	GW9S
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	0.15

Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ0379-01	PDJ0379-02	PDJ0379-03	PDJ0379-04	PDJ0379-05
Your Reference			WG2D	WG3	WG4S	WG4D	WG5D
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Calcium	mg/L	0.50	3.3	30	35	59	5.6
Magnesium	mg/L	0.50	80	54	54	21	17
Potassium	mg/L	0.50	9.0	20	10	7.8	4.4
Sodium	mg/L	0.50	310	520	260	64	120
Hardness as CaCO3	mg/L	3.0	340	300	310	230	83

Envirolab ID	Units	PQL	PDJ0379-06	PDJ0379-07	PDJ0379-08	PDJ0379-09	PDJ0379-10
Your Reference			WG6	WG7D	MBb	GW1	GW3
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Calcium	mg/L	0.50	9.6	3.8	3.6	3.3	86
Magnesium	mg/L	0.50	42	6.7	22	4.2	3.8
Potassium	mg/L	0.50	9.2	3.8	7.4	8.0	6.9
Sodium	mg/L	0.50	240	29	76	15	26
Hardness as CaCO3	mg/L	3.0	200	37	100	26	230

Envirolab ID	Units	PQL	PDJ0379-11	PDJ0379-12	PDJ0379-13	PDJ0379-14
Your Reference			GW5S	GW5D	GW8D	GW9S
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022
Calcium	mg/L	0.50	97	18	1.7	51
Magnesium	mg/L	0.50	6.9	14	4.4	9.7
Potassium	mg/L	0.50	8.5	8.0	1.3	17
Sodium	mg/L	0.50	46	82	37	53
Hardness as CaCO3	mg/L	3.0	270	100	23	170

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Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ0379-01	PDJ0379-02	PDJ0379-03	PDJ0379-04	PDJ0379-05
Your Reference			WG2D	WG3	WG4S	WG4D	WG5D
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Arsenic	µg/L	1.0	<1.0	1.9	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	1.6	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	1.7	1.6
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	4.4	6.1	1.5	1.8	5.3
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	4.1	5.3	2.4	8.9	30

Envirolab ID	Units	PQL	PDJ0379-06	PDJ0379-07	PDJ0379-08	PDJ0379-09	PDJ0379-10
Your Reference			WG6	WG7D	MBb	GW1	GW3
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Arsenic	µg/L	1.0	<1.0	<1.0	1.2	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	1.4	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	2.1	<1.0	<1.0	2.7
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	2.0	3.5	5.5	<1.0	<1.0
Lead	µg/L	1.0	29	1.1	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	2.2	<1.0	61	1.1	3.8

Envirolab ID	Units	PQL	PDJ0379-11	PDJ0379-12	PDJ0379-13	PDJ0379-14
Your Reference			GW5S	GW5D	GW8D	GW9S
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022
Arsenic	µg/L	1.0	<1.0	2.0	<1.0	5.6
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	6.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	9.5	19	2.2	9.1
Lead	µg/L	1.0	<1.0	1.3	<1.0	<1.0
Zinc	µg/L	1.0	<1.0	4.1	3.5	12

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PDJ0379-01	PDJ0379-02	PDJ0379-03	PDJ0379-04	PDJ0379-05
Your Reference			WG2D	WG3	WG4S	WG4D	WG5D
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	0.014	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	0.62	<0.0050	0.96	1.2	13
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0051	<0.0050
Total Nitrogen	mg/L	0.10	0.89	0.65	1.3	1.6	15
NOx as N	mg/L	0.0050	0.62	<0.0050	0.96	1.2	13
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Organic Nitrogen by calc.	mg/L	0.10	0.26	0.65	0.27	0.47	2.7
TKN as N by calculation	mg/L	0.10	0.26	0.65	0.29	0.48	2.7
Nitrate as NO3 by calculation	mg/L	0.020	2.7	<0.020	4.3	5.1	56
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Envirolab ID	Units	PQL	PDJ0379-06	PDJ0379-07	PDJ0379-08	PDJ0379-09	PDJ0379-10
Your Reference			WG6	WG7D	MBb	GW1	GW3
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022	06/10/2022
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	0.057	<0.0050	0.18
Nitrate as N	mg/L	0.0050	3.4	1.0	0.0089	2.6	4.0
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.25
Total Nitrogen	mg/L	0.10	4.5	1.7	0.30	3.2	5.8
NOx as N	mg/L	0.0050	3.4	1.0	0.011	2.6	4.3
Phosphate as P	mg/L	0.0050	<0.0050	0.034	<0.0050	<0.0050	0.013
Organic Nitrogen by calc.	mg/L	0.10	1.2	0.72	0.24	0.63	1.4
TKN as N by calculation	mg/L	0.10	1.2	0.72	0.29	0.63	1.6
Nitrate as NO3 by calculation	mg/L	0.020	15	4.5	0.040	11	18
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	0.81

Envirolab ID	Units	PQL	PDJ0379-11	PDJ0379-12	PDJ0379-13	PDJ0379-14
Your Reference			GW5S	GW5D	GW8D	GW9S
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022
Ammonia as N	mg/L	0.0050	0.015	0.13	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	0.0095	<0.0050	<0.0050	5.8
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.056
Total Nitrogen	mg/L	0.10	1.0	0.44	<0.10	8.2
NOx as N	mg/L	0.0050	0.011	<0.0050	<0.0050	5.9
Phosphate as P	mg/L	0.0050	0.0057	<0.0050	<0.0050	0.15
Organic Nitrogen by calc.	mg/L	0.10	0.99	0.31	<0.10	2.3
TKN as N by calculation	mg/L	0.10	1.0	0.44	<0.10	2.3

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PDJ0379-11	PDJ0379-12	PDJ0379-13	PDJ0379-14
Your Reference			GW5S	GW5D	GW8D	GW9S
Date Sampled			06/10/2022	06/10/2022	06/10/2022	06/10/2022
Nitrate as NO3 by calculation	mg/L	0.020	0.042	<0.020	<0.020	26
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	0.18

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Certificate of Analysis PDJ0584

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 Wattle Grove Monitoring
Number of Samples	2 Groundwater
Date Samples Received	11/10/2022
Date Samples Registered	11/10/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	19/10/2022
Date of Issue	19/10/2022

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

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Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PDJ0584-01	WG1	Groundwater	10/10/2022	11/10/2022
PDJ0584-02	GW9D	Groundwater	10/10/2022	11/10/2022

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ0584-01	PDJ0584-02
Your Reference			WG1	GW9D
Date Sampled			10/10/2022	10/10/2022
Phosphorus	mg/L	0.050	0.16	0.23

Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ0584-01	PDJ0584-02
Your Reference			WG1	GW9D
Date Sampled			10/10/2022	10/10/2022
Calcium	mg/L	0.50	1.0	32
Magnesium	mg/L	0.50	3.7	40
Potassium	mg/L	0.50	1.6	16
Sodium	mg/L	0.50	43	130
Hardness as CaCO3	mg/L	3.0	18	240

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ0584-01	PDJ0584-02
Your Reference			WG1	GW9D
Date Sampled			10/10/2022	10/10/2022
Arsenic	µg/L	1.0	<1.0	1.3
Cadmium	µg/L	0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0
Copper	µg/L	1.0	1.0	6.4
Mercury	µg/L	0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	26
Lead	µg/L	1.0	<1.0	<1.0
Zinc	µg/L	1.0	5.8	23

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PDJ0584-01	PDJ0584-02
Your Reference			WG1	GW9D
Date Sampled			10/10/2022	10/10/2022
Ammonia as N	mg/L	0.0050	0.0098	0.089
Electrical Conductivity	µS/cm	2.0	300	1300
Nitrate as N	mg/L	0.0050	3.3	<0.0050
Nitrite as N	mg/L	0.0050	<0.0050	0.0063
Total Nitrogen	mg/L	0.10	4.4	3.7
NOx as N	mg/L	0.0050	3.3	<0.0050
pH	pH units		5.9	6.5
Phosphate as P	mg/L	0.0050	<0.0050	0.0067
Organic Nitrogen by calc.	mg/L	0.10	1.0	3.6
TKN as N by calculation	mg/L	0.10	1.0	3.7
Nitrate as NO3 by calculation	mg/L	0.020	15	<0.020
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	0.021

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Certificate of Analysis PDK1523

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	5 Groundwater
Date Samples Received	24/11/2022
Date Samples Registered	24/11/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	01/12/2022
Date of Issue	03/12/2022

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Michael Mowle, Inorganics Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PDK1523-01	GW5S	Groundwater	23/11/2022	24/11/2022
PDK1523-02	GW5D	Groundwater	23/11/2022	24/11/2022
PDK1523-03	GW8D	Groundwater	23/11/2022	24/11/2022
PDK1523-04	GW9S	Groundwater	23/11/2022	24/11/2022
PDK1523-05	GW9D	Groundwater	23/11/2022	24/11/2022

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PDK1523-01	PDK1523-02	PDK1523-03	PDK1523-04	PDK1523-05
Your Reference			GW5S	GW5D	GW8D	GW9S	GW9D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	0.16	<0.050

Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PDK1523-01	PDK1523-02	PDK1523-03	PDK1523-04	PDK1523-05
Your Reference			GW5S	GW5D	GW8D	GW9S	GW9D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Calcium	mg/L	0.50	27	13	4.0	51	41
Magnesium	mg/L	0.50	7.0	11	4.0	14	34
Potassium	mg/L	0.50	6.0	6.8	2.8	18	21
Sodium	mg/L	0.50	79	74	37	52	130
Hardness as CaCO3	mg/L	3.0	95	78	27	190	240

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PDK1523-01	PDK1523-02	PDK1523-03	PDK1523-04	PDK1523-05
Your Reference			GW5S	GW5D	GW8D	GW9S	GW9D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Arsenic	µg/L	1.0	<1.0	1.6	<1.0	3.3	1.5
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	1.8	1.1
Copper	µg/L	1.0	<1.0	<1.0	<1.0	4.1	3.7
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	4.1	6.6	2.0	9.6	28
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	2.9	2.5	1.8	11	4.0

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Inorganics (Groundwater)

Envirolab ID	Units	PQL	PDK1523-01	PDK1523-02	PDK1523-03	PDK1523-04	PDK1523-05
Your Reference			GW5S	GW5D	GW8D	GW9S	GW9D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Ammonia as N	mg/L	0.0050	0.039	0.16	<0.0050	0.016	0.12
Electrical Conductivity	µS/cm	2.0	530	530	210	570	1100
Nitrate as N	mg/L	0.0050	0.020	<0.0050	0.0084	2.3	<0.0050
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.023	<0.0050
Total Nitrogen	mg/L	0.10	1.0	0.58	<0.10	3.8	2.9
NOx as N	mg/L	0.0050	0.020	<0.0050	0.0086	2.3	<0.0050
pH	pH units		7.4	4.3	6.5	7.0	6.7
Phosphate as P	mg/L	0.0050	0.0091	<0.0050	<0.0050	0.078	0.020
Organic Nitrogen by calc.	mg/L	0.10	0.94	0.42	<0.10	1.4	2.8
TKN as N by calculation	mg/L	0.10	0.98	0.58	<0.10	1.5	2.9
Nitrate as NO3 by calculation	mg/L	0.020	0.088	<0.020	0.037	10	<0.020
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	0.075	<0.020

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Certificate of Analysis PDK1525

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	12 Groundwater
Date Samples Received	24/11/2022
Date Samples Registered	24/11/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	01/12/2022
Date of Issue	03/12/2022

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Michael Mowle, Inorganics Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PDK1525-01	WG1	Groundwater	23/11/2022	24/11/2022
PDK1525-02	WG2D	Groundwater	23/11/2022	24/11/2022
PDK1525-03	WG3	Groundwater	23/11/2022	24/11/2022
PDK1525-04	WG4S	Groundwater	23/11/2022	24/11/2022
PDK1525-05	WG4D	Groundwater	23/11/2022	24/11/2022
PDK1525-06	WG5D	Groundwater	23/11/2022	24/11/2022
PDK1525-07	WG6	Groundwater	23/11/2022	24/11/2022
PDK1525-08	WG7D	Groundwater	23/11/2022	24/11/2022
PDK1525-09	WG8	Groundwater	23/11/2022	24/11/2022
PDK1525-10	WG9	Groundwater	23/11/2022	24/11/2022
PDK1525-11	WG10D	Groundwater	23/11/2022	24/11/2022
PDK1525-12	MBb	Groundwater	23/11/2022	24/11/2022

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PDK1525-01	PDK1525-02	PDK1525-03	PDK1525-04	PDK1525-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Phosphorus	mg/L	0.050	0.11	0.089	<0.050	<0.050	0.15

Envirolab ID	Units	PQL	PDK1525-06	PDK1525-07	PDK1525-08	PDK1525-09	PDK1525-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Phosphorus	mg/L	0.050	0.22	<0.050	<0.050	1.6	2.4

Envirolab ID	Units	PQL	PDK1525-11	PDK1525-12
Your Reference			WG10D	MBb
Date Sampled			23/11/2022	23/11/2022
Phosphorus	mg/L	0.050	<0.050	0.063

Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PDK1525-01	PDK1525-02	PDK1525-03	PDK1525-04	PDK1525-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Calcium	mg/L	0.50	2.0	9.6	79	35	70
Magnesium	mg/L	0.50	6.4	120	92	53	31
Potassium	mg/L	0.50	3.7	8.9	26	9.7	9.4
Sodium	mg/L	0.50	71	420	820	270	120
Hardness as CaCO3	mg/L	3.0	32	500	580	300	300

Envirolab ID	Units	PQL	PDK1525-06	PDK1525-07	PDK1525-08	PDK1525-09	PDK1525-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Calcium	mg/L	0.50	4.1	12	12	12	45
Magnesium	mg/L	0.50	11	32	13	14	44
Potassium	mg/L	0.50	3.5	10	6.3	4.6	24
Sodium	mg/L	0.50	100	220	39	120	200
Hardness as CaCO3	mg/L	3.0	56	160	82	85	290

Envirolab ID	Units	PQL	PDK1525-11	PDK1525-12
Your Reference			WG10D	MBb
Date Sampled			23/11/2022	23/11/2022
Calcium	mg/L	0.50	1.5	3.0
Magnesium	mg/L	0.50	1.5	29
Potassium	mg/L	0.50	2.9	6.9
Sodium	mg/L	0.50	22	100
Hardness as CaCO3	mg/L	3.0	10	130

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PDK1525-01	PDK1525-02	PDK1525-03	PDK1525-04	PDK1525-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Arsenic	µg/L	1.0	<1.0	<1.0	1.8	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	8.8
Copper	µg/L	1.0	2.7	2.6	<1.0	<1.0	2.3
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	6.3	4.1	2.7	3.2
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.1
Zinc	µg/L	1.0	7.9	33	6.7	16	6.0

Envirolab ID	Units	PQL	PDK1525-06	PDK1525-07	PDK1525-08	PDK1525-09	PDK1525-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	2.5	<1.0	<1.0	5.8	2.0
Copper	µg/L	1.0	2.2	1.3	1.9	7.5	8.6
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	0.31
Nickel	µg/L	1.0	1.7	<1.0	1.8	4.4	4.5
Lead	µg/L	1.0	<1.0	30	<1.0	5.6	5.2
Zinc	µg/L	1.0	11	1.3	1.9	18	7.8

Envirolab ID	Units	PQL	PDK1525-11	PDK1525-12
Your Reference			WG10D	MBb
Date Sampled			23/11/2022	23/11/2022
Arsenic	µg/L	1.0	<1.0	1.4
Cadmium	µg/L	0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	2.7
Copper	µg/L	1.0	<1.0	4.7
Mercury	µg/L	0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	3.2
Lead	µg/L	1.0	<1.0	1.4
Zinc	µg/L	1.0	<1.0	14

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PDK1525-01	PDK1525-02	PDK1525-03	PDK1525-04	PDK1525-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Ammonia as N	mg/L	0.0050	0.030	0.0079	<0.0050	<0.0050	0.034
Electrical Conductivity	µS/cm	2.0	330	2900	4700	1800	1100
Nitrate as N	mg/L	0.0050	3.0	0.46	0.0095	1.3	0.45
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Nitrogen	mg/L	0.10	4.1	1.5	0.61	1.5	3.8
NOx as N	mg/L	0.0050	3.0	0.46	0.011	1.3	0.45
pH	pH units		6.0	5.7	6.0	6.3	6.8
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.015	<0.0050	<0.0050
Organic Nitrogen by calc.	mg/L	0.10	1.1	1.0	0.60	0.24	3.3
TKN as N by calculation	mg/L	0.10	1.1	1.0	0.60	0.24	3.4
Nitrate as NO3 by calculation	mg/L	0.020	13	2.0	0.042	5.8	2.0
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Envirolab ID	Units	PQL	PDK1525-06	PDK1525-07	PDK1525-08	PDK1525-09	PDK1525-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/11/2022	23/11/2022	23/11/2022	23/11/2022	23/11/2022
Ammonia as N	mg/L	0.0050	0.011	<0.0050	<0.0050	0.022	0.0055
Electrical Conductivity	µS/cm	2.0	690	1300	340	750	1400
Nitrate as N	mg/L	0.0050	12	3.2	3.4	1.0	44
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0062	<0.0050
Total Nitrogen	mg/L	0.10	14	3.7	4.0	3.9	52
NOx as N	mg/L	0.0050	12	3.2	3.4	1.1	44
pH	pH units		6.2	5.7	6.5	6.0	6.3
Phosphate as P	mg/L	0.0050	<0.0050	0.0068	<0.0050	0.0071	2.1
Organic Nitrogen by calc.	mg/L	0.10	1.3	0.46	0.59	2.8	8.1
TKN as N by calculation	mg/L	0.10	1.3	0.47	0.59	2.8	8.1
Nitrate as NO3 by calculation	mg/L	0.020	55	14	15	4.6	200
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	0.020	<0.020

Envirolab ID	Units	PQL	PDK1525-11	PDK1525-12
Your Reference			WG10D	MBb
Date Sampled			23/11/2022	23/11/2022
Ammonia as N	mg/L	0.0050	<0.0050	0.16
Electrical Conductivity	µS/cm	2.0	110	560
Nitrate as N	mg/L	0.0050	1.1	0.016
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050
Total Nitrogen	mg/L	0.10	1.4	1.2
NOx as N	mg/L	0.0050	1.1	0.018
pH	pH units		6.5	6.3
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050
Organic Nitrogen by calc.	mg/L	0.10	0.32	1.0
TKN as N by calculation	mg/L	0.10	0.32	1.2
Nitrate as NO3 by calculation	mg/L	0.020	4.9	0.072
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020

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Certificate of Analysis PEA1020

Client Details

Client	Hyd2O
Contact	Andre Righetti
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 Wattle Grove Monitoring
Number of Samples	16 Groundwater
Date Samples Received	24/01/2023
Date Samples Registered	24/01/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	02/02/2023
Date of Issue	14/02/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEA1020-01	WG1	Groundwater	23/01/2023	24/01/2023
PEA1020-02	WG2D	Groundwater	23/01/2023	24/01/2023
PEA1020-03	WG3	Groundwater	23/01/2023	24/01/2023
PEA1020-04	WG4S	Groundwater	23/01/2023	24/01/2023
PEA1020-05	WG4D	Groundwater	23/01/2023	24/01/2023
PEA1020-06	WG5D	Groundwater	23/01/2023	24/01/2023
PEA1020-07	WG6	Groundwater	23/01/2023	24/01/2023
PEA1020-08	WG7D	Groundwater	23/01/2023	24/01/2023
PEA1020-09	WG8	Groundwater	23/01/2023	24/01/2023
PEA1020-10	WG9	Groundwater	23/01/2023	24/01/2023
PEA1020-11	WG10D	Groundwater	23/01/2023	24/01/2023
PEA1020-12	MBb	Groundwater	23/01/2023	24/01/2023
PEA1020-13	GW5D	Groundwater	23/01/2023	24/01/2023
PEA1020-14	GW8D	Groundwater	23/01/2023	24/01/2023
PEA1020-15	GW9S	Groundwater	23/01/2023	24/01/2023
PEA1020-16	GW9D	Groundwater	23/01/2023	24/01/2023

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEA1020-01	PEA1020-02	PEA1020-03	PEA1020-04	PEA1020-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	0.25	<0.050

Envirolab ID	Units	PQL	PEA1020-06	PEA1020-07	PEA1020-08	PEA1020-09	PEA1020-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	0.28	3.7

Envirolab ID	Units	PQL	PEA1020-11	PEA1020-12	PEA1020-13	PEA1020-14	PEA1020-15
Your Reference			WG10D	MBb	GW5D	GW8D	GW9S
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Phosphorus	mg/L	0.050	<0.050	0.085	0.42	<0.050	0.46

Envirolab ID	Units	PQL	PEA1020-16
Your Reference			GW9D
Date Sampled			23/01/2023
Phosphorus	mg/L	0.050	<0.050

Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PEA1020-01	PEA1020-02	PEA1020-03	PEA1020-04	PEA1020-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Calcium	mg/L	0.50	0.95	6.2	55	27	65
Magnesium	mg/L	0.50	4.1	140	88	53	39
Potassium	mg/L	0.50	1.6	11	25	7.5	12
Sodium	mg/L	0.50	39	500	770	300	250
Hardness as CaCO3	mg/L	3.0	19	580	500	280	320

Envirolab ID	Units	PQL	PEA1020-06	PEA1020-07	PEA1020-08	PEA1020-09	PEA1020-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Calcium	mg/L	0.50	4.5	14	6.6	4.9	26
Magnesium	mg/L	0.50	14	32	8.9	14	33
Potassium	mg/L	0.50	4.2	11	4.4	3.7	16
Sodium	mg/L	0.50	120	210	51	120	110
Hardness as CaCO3	mg/L	3.0	68	170	53	71	200

Envirolab ID	Units	PQL	PEA1020-11	PEA1020-12	PEA1020-13	PEA1020-14	PEA1020-15
Your Reference			WG10D	MBb	GW5D	GW8D	GW9S
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Calcium	mg/L	0.50	3.2	9.1	11	1.7	35
Magnesium	mg/L	0.50	4.7	31	13	3.5	14
Potassium	mg/L	0.50	3.6	7.5	6.4	2.9	18
Sodium	mg/L	0.50	22	110	73	38	61
Hardness as CaCO3	mg/L	3.0	27	150	79	18	140

Envirolab ID	Units	PQL	PEA1020-16
Your Reference			GW9D
Date Sampled			23/01/2023
Calcium	mg/L	0.50	26
Magnesium	mg/L	0.50	21
Potassium	mg/L	0.50	23
Sodium	mg/L	0.50	79
Hardness as CaCO3	mg/L	3.0	150

Certificate of Analysis PEA1020

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEA1020-01	PEA1020-02	PEA1020-03	PEA1020-04	PEA1020-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Arsenic	µg/L	1.0	<1.0	<1.0	1.1	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	0.11	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	1.1	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	2.3	<1.0	1.4
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.2	5.3	5.3	2.1	2.6
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	3.6	14	13	3.8	8.7

Envirolab ID	Units	PQL	PEA1020-06	PEA1020-07	PEA1020-08	PEA1020-09	PEA1020-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	2.1
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	1.0	2.1	1.4	4.2	12
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	6.3	1.4	2.7	7.5	4.2
Lead	µg/L	1.0	<1.0	20	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	7.4	2.4	1.2	21	4.4

Envirolab ID	Units	PQL	PEA1020-11	PEA1020-12	PEA1020-13	PEA1020-14	PEA1020-15
Your Reference			WG10D	MBb	GW5D	GW8D	GW9S
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Arsenic	µg/L	1.0	<1.0	<1.0	1.3	<1.0	5.7
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	3.8
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.3	7.7	5.4	3.3	23
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	1.3	10	3.6	3.1	12

Envirolab ID	Units	PQL	PEA1020-16
Your Reference			GW9D
Date Sampled			23/01/2023
Arsenic	µg/L	1.0	1.0
Cadmium	µg/L	0.10	<0.10
Chromium	µg/L	1.0	<1.0
Copper	µg/L	1.0	5.4
Mercury	µg/L	0.050	<0.050
Nickel	µg/L	1.0	27
Lead	µg/L	1.0	<1.0
Zinc	µg/L	1.0	3.9

Certificate of Analysis PEA1020

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PEA1020-01	PEA1020-02	PEA1020-03	PEA1020-04	PEA1020-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.32	0.021
Electrical Conductivity	µS/cm	2.0	190	3400	4700	2200	1700
Nitrate as N	mg/L	0.0050	3.5	0.73	<0.0050	<0.0050	<0.0050
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Nitrogen	mg/L	0.10	3.8	1.1	0.43	14	0.34
NOx as N	mg/L	0.0050	3.5	0.73	<0.0050	<0.0050	<0.0050
pH	pH units		5.7	5.4	5.3	6.9	6.3
Phosphate as P	mg/L	0.0050	0.0055	0.0054	0.0076	<0.0050	<0.0050
Organic Nitrogen by calc.	mg/L	0.10	0.32	0.41	0.42	13	0.31
TKN as N by calculation	mg/L	0.10	0.32	0.41	0.42	14	0.33
Nitrate as NO3 by calculation	mg/L	0.020	15	3.2	<0.020	<0.020	<0.020
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Envirolab ID	Units	PQL	PEA1020-06	PEA1020-07	PEA1020-08	PEA1020-09	PEA1020-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.041	<0.0050
Electrical Conductivity	µS/cm	2.0	770	1400	390	800	930
Nitrate as N	mg/L	0.0050	13	3.4	1.1	0.84	38
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0055	0.011
Total Nitrogen	mg/L	0.10	15	3.7	1.1	2.3	42
NOx as N	mg/L	0.0050	13	3.4	1.1	0.84	38
pH	pH units		5.8	5.5	6.2	5.9	6.3
Phosphate as P	mg/L	0.0050	<0.0050	0.014	<0.0050	0.0075	2.9
Organic Nitrogen by calc.	mg/L	0.10	1.7	0.28	<0.10	1.4	4.7
TKN as N by calculation	mg/L	0.10	1.7	0.28	<0.10	1.4	4.7
Nitrate as NO3 by calculation	mg/L	0.020	57	15	4.9	3.7	170
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	0.038

Envirolab ID	Units	PQL	PEA1020-11	PEA1020-12	PEA1020-13	PEA1020-14	PEA1020-15
Your Reference			WG10D	MBb	GW5D	GW8D	GW9S
Date Sampled			23/01/2023	23/01/2023	23/01/2023	23/01/2023	23/01/2023
Ammonia as N	mg/L	0.0050	<0.0050	0.48	0.18	0.0099	0.11
Electrical Conductivity	µS/cm	2.0	150	800	560	210	610
Nitrate as N	mg/L	0.0050	2.2	0.0098	<0.0050	<0.0050	2.3
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.014
Total Nitrogen	mg/L	0.10	2.5	0.45	5.5	0.12	3.9
NOx as N	mg/L	0.0050	2.2	0.010	<0.0050	<0.0050	2.3
pH	pH units		6.3	6.3	4.5	6.4	6.9
Phosphate as P	mg/L	0.0050	0.0064	<0.0050	0.0081	<0.0050	0.055
Organic Nitrogen by calc.	mg/L	0.10	0.33	<0.10	5.3	0.10	1.5
TKN as N by calculation	mg/L	0.10	0.34	0.44	5.5	0.11	1.6
Nitrate as NO3 by calculation	mg/L	0.020	9.6	0.043	<0.020	<0.020	10
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	0.047

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PEA1020-16
Your Reference			GW9D
Date Sampled			23/01/2023
Ammonia as N	mg/L	0.0050	0.056
Electrical Conductivity	µS/cm	2.0	730
Nitrate as N	mg/L	0.0050	<0.0050
Nitrite as N	mg/L	0.0050	<0.0050
Total Nitrogen	mg/L	0.10	1.5
NOx as N	mg/L	0.0050	<0.0050
pH	pH units		6.7
Phosphate as P	mg/L	0.0050	0.014
Organic Nitrogen by calc.	mg/L	0.10	1.4
TKN as N by calculation	mg/L	0.10	1.5
Nitrate as NO3 by calculation	mg/L	0.020	<0.020
Nitrite as NO2 by calculation	mg/L	0.020	<0.020

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Certificate of Analysis PEB1634

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	15 Groundwater
Date Samples Received	24/02/2023
Date Samples Registered	24/02/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	27/02/2023
Date of Issue	01/03/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Lien Tang, Assistant Operations Manager Michael Hall, Inorganics & Metals Supervisor Michael Mowle, Inorganics Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEB1634-01	WG1	Groundwater	23/02/2023	24/02/2023
PEB1634-02	WG2D	Groundwater	23/02/2023	24/02/2023
PEB1634-03	WG3	Groundwater	23/02/2023	24/02/2023
PEB1634-04	WG4S	Groundwater	23/02/2023	24/02/2023
PEB1634-05	WG4D	Groundwater	23/02/2023	24/02/2023
PEB1634-06	GW5D	Groundwater	23/02/2023	24/02/2023
PEB1634-07	WG6	Groundwater	23/02/2023	24/02/2023
PEB1634-08	WG7D	Groundwater	23/02/2023	24/02/2023
PEB1634-09	WG8	Groundwater	23/02/2023	24/02/2023
PEB1634-10	WG9	Groundwater	23/02/2023	24/02/2023
PEB1634-11	MBb	Groundwater	23/02/2023	24/02/2023
PEB1634-12	WG5D	Groundwater	23/02/2023	24/02/2023
PEB1634-13	GW8D	Groundwater	23/02/2023	24/02/2023
PEB1634-14	GW9S	Groundwater	23/02/2023	24/02/2023
PEB1634-15	GW9D	Groundwater	23/02/2023	24/02/2023

Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PEB1634-01	PEB1634-02	PEB1634-03	PEB1634-04	PEB1634-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Calcium	mg/L	0.50	<0.50	4.2	110	39	43
Magnesium	mg/L	0.50	4.1	140	200	59	37
Potassium	mg/L	0.50	1.3	11	40	13	11
Sodium	mg/L	0.50	34	490	1500	310	220
Silica*	mg/L	0.20	15	28	60	9.9	5.2
Hardness as CaCO3	mg/L	3.0	18	570	1100	340	260

Envirolab ID	Units	PQL	PEB1634-06	PEB1634-07	PEB1634-08	PEB1634-09	PEB1634-10
Your Reference			GW5D	WG6	WG7D	WG8	WG9
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Calcium	mg/L	0.50	11	8.5	17	4.2	31
Magnesium	mg/L	0.50	10	31	18	14	32
Potassium	mg/L	0.50	6.6	9.7	5.1	3.6	34
Sodium	mg/L	0.50	73	200	130	120	97
Silica*	mg/L	0.20	33	25	19	33	21
Hardness as CaCO3	mg/L	3.0	68	150	120	69	210

Envirolab ID	Units	PQL	PEB1634-11	PEB1634-12	PEB1634-13	PEB1634-14	PEB1634-15
Your Reference			MBb	WG5D	GW8D	GW9S	GW9D
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Calcium	mg/L	0.50	8.9	3.7	3.2	31	20
Magnesium	mg/L	0.50	33	14	4.5	9.5	14
Potassium	mg/L	0.50	8.2	3.6	3.0	18	19
Sodium	mg/L	0.50	100	120	36	53	62
Silica*	mg/L	0.20	13	17	19	15	19
Hardness as CaCO3	mg/L	3.0	160	67	26	120	110

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEB1634-01	PEB1634-02	PEB1634-03	PEB1634-04	PEB1634-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Aluminium	µg/L	10	<10	14	<10	<10	<10
Arsenic	µg/L	1.0	<1.0	<1.0	1.9	<1.0	<1.0
Iron	µg/L	10	13	250	9300	1100	39
Manganese	µg/L	1.0	5.9	100	220	34	19

Envirolab ID	Units	PQL	PEB1634-06	PEB1634-07	PEB1634-08	PEB1634-09	PEB1634-10
Your Reference			GW5D	WG6	WG7D	WG8	WG9
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Aluminium	µg/L	10	870	10	15	<10	100
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.1
Iron	µg/L	10	6800	<10	47	<10	19
Manganese	µg/L	1.0	120	59	5.2	510	13

Envirolab ID	Units	PQL	PEB1634-11	PEB1634-12	PEB1634-13	PEB1634-14	PEB1634-15
Your Reference			MBb	WG5D	GW8D	GW9S	GW9D
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Aluminium	µg/L	10	<10	<10	10	110	32
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	5.4	1.2
Iron	µg/L	10	6700	370	3400	1600	380
Manganese	µg/L	1.0	280	86	350	26	14

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Inorganics (Groundwater)

Envirolab ID	Units	PQL	PEB1634-01	PEB1634-02	PEB1634-03	PEB1634-04	PEB1634-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Anions as meq	meq/L	0.59	1.6	37	95	20	15
Cations as meq	meq/L	0.10	1.8	33	87	20	15
Total Anions	mg/L	7.0	66	1400	3500	780	630
Total Cations	mg/L	2.0	39	640	1800	420	310
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	0.0071	0.055	<0.0050
Bromide	mg/L	0.50	<0.50	2.0	6.7	1.6	1.2
Chloride	mg/L	1.0	40	1200	3100	480	320
Electrical Conductivity	µS/cm	2.0	230	3900	9700	2100	1600
Nitrate as N	mg/L	0.0050	3.5	0.81	<0.0050	<0.0050	0.40
pH	pH units		5.5	5.4	6.1	6.0	5.9
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.025	<0.0050	<0.0050
Sulfate	mg/L	1.0	15	120	310	270	280
Total Dissolved Solids	mg/L	5.0	160	2400	6100	1300	980
Nitrate as NO3 by calculation	mg/L	0.020	15	3.6	0.020	<0.020	1.8
Ionic Balance	%		-13 [1]	-6.3	-4.6	1.6	-2.2
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	11	11	43	30	24
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	11	11	43	30	24

Envirolab ID	Units	PQL	PEB1634-06	PEB1634-07	PEB1634-08	PEB1634-09	PEB1634-10
Your Reference			GW5D	WG6	WG7D	WG8	WG9
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Anions as meq	meq/L	0.59	5.8	12	8.3	7.3	6.6
Cations as meq	meq/L	0.10	4.7	12	8.0	6.6	9.3
Total Anions	mg/L	7.0	250	460	330	270	260
Total Cations	mg/L	2.0	100	240	170	140	190
Ammonia as N	mg/L	0.0050	0.16	<0.0050	<0.0050	<0.0050	<0.0050
Bromide	mg/L	0.50	<0.50	1.0	<0.50	0.76	<0.50
Chloride	mg/L	1.0	66	390	190	230	180
Electrical Conductivity	µS/cm	2.0	650	1400	920	830	950
Nitrate as N	mg/L	0.0050	<0.0050	3.3	4.4	0.91	26
pH	pH units		3.7	5.4	6.3	5.6	6.1
Phosphate as P	mg/L	0.0050	<0.0050	0.034	<0.0050	0.0066	2.2
Sulfate	mg/L	1.0	190	63	110	29	60
Total Dissolved Solids	mg/L	5.0	390	860	550	470	680
Nitrate as NO3 by calculation	mg/L	0.020	<0.020	14	20	4.0	110
Ionic Balance	%		-10	-4.5	-5.9	-6.6	-5.7
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	5.2	28	18	26
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	5.2	28	18	26

Envirolab ID	Units	PQL	PEB1634-11	PEB1634-12	PEB1634-13	PEB1634-14	PEB1634-15
Your Reference			MBb	WG5D	GW8D	GW9S	GW9D
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Anions as meq	meq/L	0.59	8.7	6.4	3.4	6.1	5.4

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PEB1634-11	PEB1634-12	PEB1634-13	PEB1634-14	PEB1634-15
Your Reference			MBb	WG5D	GW8D	GW9S	GW9D
Date Sampled			23/02/2023	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Cations as meq	meq/L	0.10	7.9	6.5	2.2	5.1	5.3
Total Anions	mg/L	7.0	400	240	150	280	240
Total Cations	mg/L	2.0	150	140	47	110	110
Ammonia as N	mg/L	0.0050	0.30	0.019	0.0095	0.11	0.046
Bromide	mg/L	0.50	<0.50	<0.50	0.90	<0.50	<0.50
Chloride	mg/L	1.0	130	200	59	110	100
Electrical Conductivity	µS/cm	2.0	890	820	240	660	560
Nitrate as N	mg/L	0.0050	<0.050 [3]	12	<0.0050	2.1	<0.050 [3]
pH	pH units		6.3	6.0	6.6	6.7	6.6
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.18	0.0085
Sulfate	mg/L	1.0	120	23	49	56	52
Total Dissolved Solids	mg/L	5.0	480	460	140	410	370
Nitrate as NO3 by calculation	mg/L	0.020	<0.20 [3]	53	<0.020	9.4	<0.20 [3]
Ionic Balance	%		-7.9	-12 [1]	-25 [1]	-14 [1]	-3.7
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	150	25	47	110	89
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	150	25	47	110	89

Result Comments

Identifier	Description
[1]	The mass inbalance may be caused by other ions that have not been measured.
[3]	PQL(s) has/have been raised due to matrix interference.

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Certificate of Analysis PEC1714

Client Details

Client	Hyd2O
Contact	Andre Righetti
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	4 Groundwater
Date Samples Received	23/03/2023
Date Samples Registered	23/03/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	03/04/2023
Date of Issue	11/04/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEC1714-01	GW5D	Groundwater	22/03/2023	23/03/2023
PEC1714-02	GW8D	Groundwater	22/03/2023	23/03/2023
PEC1714-03	GW9S	Groundwater	22/03/2023	23/03/2023
PEC1714-04	GW9D	Groundwater	22/03/2023	23/03/2023

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEC1714-01	PEC1714-02	PEC1714-03	PEC1714-04
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023
Phosphorus	mg/L	0.050	0.064	<0.050	0.27	0.067

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEC1714-01	PEC1714-02	PEC1714-03	PEC1714-04
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023
Arsenic	µg/L	1.0	<1.0	<1.0	5.9	6.2
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	2.3
Copper	µg/L	1.0	<1.0	<1.0	3.0	1.7
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	10	4.2	14	35
Lead	µg/L	1.0	2.1	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	6.2	4.8	7.5	14

Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PEC1714-01	PEC1714-02	PEC1714-03	PEC1714-04
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023
pH	pH units		3.9	6.3	6.9	6.9
Electrical Conductivity	µS/cm	2.0	610	210	720	570

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PEC1714-01	PEC1714-02	PEC1714-03	PEC1714-04
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023
Calcium	mg/L	0.50	13	2.9	38	21
Magnesium	mg/L	0.50	12	3.9	12	15
Potassium	mg/L	0.50	7.0	2.8	19	19
Sodium	mg/L	0.50	82	37	71	64
Hardness as CaCO3	mg/L	3.0	83	23	140	120

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEC1714-01	PEC1714-02	PEC1714-03	PEC1714-04
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023
Ammonia as N	mg/L	0.0050	0.15	0.0075	0.084	0.082 [1]
Nitrate as N	mg/L	0.0050	<0.0050	0.0055	1.1	<0.050 [1]
Nitrate as NO3 by calculation	mg/L	0.020	<0.020	0.024	5.0	<0.20 [1]
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	0.080	<0.050 [1]
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	0.26	<0.20 [1]
NOx as N	mg/L	0.0050	<0.0050	0.0056	1.2	<0.050 [1]
TKN as N by calculation	mg/L	0.10	1.1	0.38	2.2	2.0
Organic Nitrogen by calc.	mg/L	0.10	0.93	0.37	2.2	1.9
Total Nitrogen	mg/L	0.10	1.1	0.38	3.4	2.0
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.20	0.056 [1]

Result Comments

Identifier	Description
[1]	Matrix interference - sample was highly coloured.

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Certificate of Analysis PEC1715

Client Details

Client	Hyd2O
Contact	Andre Righetti
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	10 Groundwater
Date Samples Received	23/03/2023
Date Samples Registered	23/03/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	03/04/2023
Date of Issue	11/04/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Michael Hall, Inorganics & Metals Supervisor Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEC1715-01	WG1	Groundwater	22/03/2023	23/03/2023
PEC1715-02	WG2D	Groundwater	22/03/2023	23/03/2023
PEC1715-03	WG3	Groundwater	22/03/2023	23/03/2023
PEC1715-04	WG4D	Groundwater	22/03/2023	23/03/2023
PEC1715-05	WG5D	Groundwater	22/03/2023	23/03/2023
PEC1715-06	WG6	Groundwater	22/03/2023	23/03/2023
PEC1715-07	WG7D	Groundwater	22/03/2023	23/03/2023
PEC1715-08	WG8	Groundwater	22/03/2023	23/03/2023
PEC1715-09	WG9	Groundwater	22/03/2023	23/03/2023
PEC1715-10	MBb	Groundwater	22/03/2023	23/03/2023

Certificate of Analysis PEC1715

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEC1715-01	PEC1715-02	PEC1715-03	PEC1715-04	PEC1715-05
Your Reference			WG1	WG2D	WG3	WG4D	WG5D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	0.057	<0.050

Envirolab ID	Units	PQL	PEC1715-06	PEC1715-07	PEC1715-08	PEC1715-09	PEC1715-10
Your Reference			WG6	WG7D	WG8	WG9	MBb
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	0.79	2.4	<0.050

Certificate of Analysis PEC1715

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEC1715-01	PEC1715-02	PEC1715-03	PEC1715-04	PEC1715-05
Your Reference			WG1	WG2D	WG3	WG4D	WG5D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Arsenic	µg/L	1.0	<1.0	<1.0	1.2	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	3.7	8.2	1.5	2.4
Lead	µg/L	1.0	2.5	<1.0	1.3	<1.0	3.6
Zinc	µg/L	1.0	2.9	15	1.4	8.0	5.6

Envirolab ID	Units	PQL	PEC1715-06	PEC1715-07	PEC1715-08	PEC1715-09	PEC1715-10
Your Reference			WG6	WG7D	WG8	WG9	MBb
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	1.4	1.1
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	3.2	<1.0
Copper	µg/L	1.0	1.4	1.4	3.3	19	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	0.075	<0.050
Nickel	µg/L	1.0	1.7	1.8	12	8.0	4.8
Lead	µg/L	1.0	20	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	1.5	1.6	23	3.6	11

Certificate of Analysis PEC1715

Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PEC1715-01	PEC1715-02	PEC1715-03	PEC1715-04	PEC1715-05
Your Reference			WG1	WG2D	WG3	WG4D	WG5D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
pH	pH units		5.8	5.4	6.2	6.1	5.9
Electrical Conductivity	µS/cm	2.0	200	4300	10000	1600	770

Envirolab ID	Units	PQL	PEC1715-06	PEC1715-07	PEC1715-08	PEC1715-09	PEC1715-10
Your Reference			WG6	WG7D	WG8	WG9	MBb
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
pH	pH units		5.6	8.4	8.4	7.5	7.2
Electrical Conductivity	µS/cm	2.0	1400	900	820	810	940

Certificate of Analysis PEC1715

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PEC1715-01	PEC1715-02	PEC1715-03	PEC1715-04	PEC1715-05
Your Reference			WG1	WG2D	WG3	WG4D	WG5D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Calcium	mg/L	0.50	0.90	6.2	130	46	2.5
Magnesium	mg/L	0.50	5.4	160	210	49	13
Potassium	mg/L	0.50	1.7	12	43	13	3.2
Sodium	mg/L	0.50	40	590	1600	280	110
Hardness as CaCO3	mg/L	3.0	24	680	1200	320	59

Envirolab ID	Units	PQL	PEC1715-06	PEC1715-07	PEC1715-08	PEC1715-09	PEC1715-10
Your Reference			WG6	WG7D	WG8	WG9	MBb
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Calcium	mg/L	0.50	7.2	16	2.7	30	22
Magnesium	mg/L	0.50	31	21	16	26	42
Potassium	mg/L	0.50	9.3	4.8	3.6	35	9.2
Sodium	mg/L	0.50	190	130	120	81	85
Hardness as CaCO3	mg/L	3.0	150	130	74	180	230

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEC1715-01	PEC1715-02	PEC1715-03	PEC1715-04	PEC1715-05
Your Reference			WG1	WG2D	WG3	WG4D	WG5D
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Ammonia as N	mg/L	0.0050	0.010	<0.0050	0.011	0.0076	<0.0050
Nitrate as N	mg/L	0.0050	3.1	0.40	0.015	0.30	14
Nitrate as NO3 by calculation	mg/L	0.020	14	1.8	0.068	1.3	61
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	3.1	0.40	0.012	0.30	14
TKN as N by calculation	mg/L	0.10	1.7	1.2	1.3	0.78	1.8
Organic Nitrogen by calc.	mg/L	0.10	1.7	1.2	1.3	0.77	1.8
Total Nitrogen	mg/L	0.10	4.9	1.6	1.3	1.1	16
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PEC1715-06	PEC1715-07	PEC1715-08	PEC1715-09	PEC1715-10
Your Reference			WG6	WG7D	WG8	WG9	MBb
Date Sampled			22/03/2023	22/03/2023	22/03/2023	22/03/2023	22/03/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.050 [1]	1.9
Nitrate as N	mg/L	0.0050	3.3	4.3	0.99	32 [1]	0.0076
Nitrate as NO3 by calculation	mg/L	0.020	15	19	4.4	140 [1]	0.034
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.050 [1]	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.20 [1]	<0.020
NOx as N	mg/L	0.0050	3.3	4.3	0.99	32 [1]	0.0091
TKN as N by calculation	mg/L	0.10	1.1	1.2	0.51	11	3.1
Organic Nitrogen by calc.	mg/L	0.10	1.1	1.2	0.51	11	1.2
Total Nitrogen	mg/L	0.10	4.4	5.5	1.5	43	3.1
Phosphate as P	mg/L	0.0050	0.028	<0.0050	0.0073	2.3 [1]	<0.0050

Result Comments

Identifier	Description
[1]	Matrix interference - sample was highly coloured.

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Certificate of Analysis PEF1145

Client Details

Client	Hyd2O
Contact	Andre Righetti
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	18 Groundwater
Date Samples Received	16/06/2023
Date Samples Registered	16/06/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	23/06/2023
Date of Issue	23/06/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Michael Hall, Inorganics & Metals Supervisor Michael Mowle, Inorganics Supervisor
Laboratory Manager	Michael Kubiak

Certificate of Analysis PEF1145

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEF1145-01	WG1	Groundwater	15/06/2023	16/06/2023
PEF1145-02	WG2D	Groundwater	15/06/2023	16/06/2023
PEF1145-03	WG3	Groundwater	15/06/2023	16/06/2023
PEF1145-04	WG4S	Groundwater	15/06/2023	16/06/2023
PEF1145-05	WG4D	Groundwater	15/06/2023	16/06/2023
PEF1145-06	WG5D	Groundwater	15/06/2023	16/06/2023
PEF1145-07	WG6	Groundwater	15/06/2023	16/06/2023
PEF1145-08	WG7D	Groundwater	15/06/2023	16/06/2023
PEF1145-09	WG8	Groundwater	15/06/2023	16/06/2023
PEF1145-10	WG9	Groundwater	15/06/2023	16/06/2023
PEF1145-11	WG10D	Groundwater	15/06/2023	16/06/2023
PEF1145-12	MBb	Groundwater	15/06/2023	16/06/2023
PEF1145-13	GW5S	Groundwater	15/06/2023	16/06/2023
PEF1145-14	GW5D	Groundwater	15/06/2023	16/06/2023
PEF1145-15	GW8S	Groundwater	15/06/2023	16/06/2023
PEF1145-16	GW8D	Groundwater	15/06/2023	16/06/2023
PEF1145-17	GW9S	Groundwater	15/06/2023	16/06/2023
PEF1145-18	GW9D	Groundwater	15/06/2023	16/06/2023

Certificate of Analysis PEF1145

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEF1145-01	PEF1145-02	PEF1145-03	PEF1145-04	PEF1145-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Phosphorus	mg/L	0.050	<0.050	0.051	0.075	<0.050	<0.050

Envirolab ID	Units	PQL	PEF1145-06	PEF1145-07	PEF1145-08	PEF1145-09	PEF1145-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Phosphorus	mg/L	0.050	0.054	<0.050	<0.050	0.18	1.8

Envirolab ID	Units	PQL	PEF1145-11	PEF1145-12	PEF1145-13	PEF1145-14	PEF1145-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8S
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050	0.36

Envirolab ID	Units	PQL	PEF1145-16	PEF1145-17	PEF1145-18
Your Reference			GW8D	GW9S	GW9D
Date Sampled			15/06/2023	15/06/2023	15/06/2023
Phosphorus	mg/L	0.050	<0.050	1.4	<0.050

Certificate of Analysis PEF1145

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEF1145-01	PEF1145-02	PEF1145-03	PEF1145-04	PEF1145-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Arsenic	µg/L	1.0	<1.0	<1.0	1.6	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	2.5	1.2	1.2	1.0
Lead	µg/L	1.0	2.3	<1.0	2.1	<1.0	<1.0
Zinc	µg/L	1.0	5.8	2.4	2.6	3.0	5.5

Envirolab ID	Units	PQL	PEF1145-06	PEF1145-07	PEF1145-08	PEF1145-09	PEF1145-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.1
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.2
Copper	µg/L	1.0	<1.0	1.2	2.0	6.9	9.5
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	2.8	1.6	2.1	5.6	4.0
Lead	µg/L	1.0	2.6	42	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	13	1.5	4.5	59	2.8

Envirolab ID	Units	PQL	PEF1145-11	PEF1145-12	PEF1145-13	PEF1145-14	PEF1145-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8S
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	1.1	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	1.1	<1.0
Copper	µg/L	1.0	<1.0	<1.0	3.0	1.1	5.9
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	2.9	4.8	12	1.8
Lead	µg/L	1.0	<1.0	<1.0	<1.0	2.4	<1.0
Zinc	µg/L	1.0	2.1	14	2.1	13	18

Envirolab ID	Units	PQL	PEF1145-16	PEF1145-17	PEF1145-18
Your Reference			GW8D	GW9S	GW9D
Date Sampled			15/06/2023	15/06/2023	15/06/2023
Arsenic	µg/L	1.0	<1.0	4.9	1.2
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	2.9	9.9
Mercury	µg/L	0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	2.3	4.5	14
Lead	µg/L	1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	19	11	7.8

Certificate of Analysis PEF1145

Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PEF1145-01	PEF1145-02	PEF1145-03	PEF1145-04	PEF1145-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
pH	pH units		5.7	5.3	6.2	5.8	6.1
Electrical Conductivity	µS/cm	2.0	290	2800	7800	1900	1700

Envirolab ID	Units	PQL	PEF1145-06	PEF1145-07	PEF1145-08	PEF1145-09	PEF1145-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
pH	pH units		5.5	5.4	6.1	5.6	6.1
Electrical Conductivity	µS/cm	2.0	790	1400	640	790	1700

Envirolab ID	Units	PQL	PEF1145-11	PEF1145-12	PEF1145-13	PEF1145-14	PEF1145-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8S
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
pH	pH units		6.2	6.4	7.6	3.8	6.1
Electrical Conductivity	µS/cm	2.0	150	750	380	650	120

Envirolab ID	Units	PQL	PEF1145-16	PEF1145-17	PEF1145-18
Your Reference			GW8D	GW9S	GW9D
Date Sampled			15/06/2023	15/06/2023	15/06/2023
pH	pH units		6.3	6.9	6.7
Electrical Conductivity	µS/cm	2.0	200	310	370

Certificate of Analysis PEF1145

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PEF1145-01	PEF1145-02	PEF1145-03	PEF1145-04	PEF1145-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Calcium	mg/L	0.50	0.76	5.4	93	42	67
Magnesium	mg/L	0.50	4.5	100	150	62	47
Potassium	mg/L	0.50	1.6	10	33	11	11
Sodium	mg/L	0.50	52	340	1200	270	240
Hardness as CaCO3	mg/L	3.0	21	440	860	360	360

Envirolab ID	Units	PQL	PEF1145-06	PEF1145-07	PEF1145-08	PEF1145-09	PEF1145-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Calcium	mg/L	0.50	3.6	7.8	6.1	2.7	44
Magnesium	mg/L	0.50	15	33	13	15	46
Potassium	mg/L	0.50	3.5	9.0	4.1	3.4	33
Sodium	mg/L	0.50	120	200	82	120	210
Hardness as CaCO3	mg/L	3.0	70	150	68	70	300

Envirolab ID	Units	PQL	PEF1145-11	PEF1145-12	PEF1145-13	PEF1145-14	PEF1145-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8S
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Calcium	mg/L	0.50	8.0	15	60	17	5.0
Magnesium	mg/L	0.50	6.7	36	4.3	10	3.7
Potassium	mg/L	0.50	5.1	7.8	5.1	6.9	3.1
Sodium	mg/L	0.50	31	77	18	72	14
Hardness as CaCO3	mg/L	3.0	48	190	170	84	28

Envirolab ID	Units	PQL	PEF1145-16	PEF1145-17	PEF1145-18
Your Reference			GW8D	GW9S	GW9D
Date Sampled			15/06/2023	15/06/2023	15/06/2023
Calcium	mg/L	0.50	1.3	32	10
Magnesium	mg/L	0.50	3.1	4.4	7.8
Potassium	mg/L	0.50	1.1	5.5	11
Sodium	mg/L	0.50	33	21	45
Hardness as CaCO3	mg/L	3.0	16	98	58

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEF1145-01	PEF1145-02	PEF1145-03	PEF1145-04	PEF1145-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Ammonia as N	mg/L	0.0050	<0.0050	0.013	0.20	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	3.4	2.0	<0.0050	0.20	8.1
Nitrate as NO3 by calculation	mg/L	0.020	15	9.0	<0.020	0.90	36
Nitrite as N	mg/L	0.0050	<0.0050	0.0064	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	0.021	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	3.4	2.1	<0.0050	0.21	8.1
TKN as N by calculation	mg/L	0.10	0.79	0.20	1.3	0.16	1.2
Organic Nitrogen by calc.	mg/L	0.10	0.79	0.18	1.1	0.16	1.2
Total Nitrogen	mg/L	0.10	4.2	2.2	1.3	0.37	9.2
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PEF1145-06	PEF1145-07	PEF1145-08	PEF1145-09	PEF1145-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0066	<0.0050
Nitrate as N	mg/L	0.0050	14	2.7	2.4	0.36	11
Nitrate as NO3 by calculation	mg/L	0.020	62	12	11	1.6	48
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0054	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	14	2.7	2.4	0.36	11
TKN as N by calculation	mg/L	0.10	2.7	0.69	0.20	0.17	0.75
Organic Nitrogen by calc.	mg/L	0.10	2.7	0.69	0.20	0.16	0.75
Total Nitrogen	mg/L	0.10	17	3.4	2.6	0.54	12
Phosphate as P	mg/L	0.0050	<0.0050	0.0070	<0.0050	0.0058	1.7

Envirolab ID	Units	PQL	PEF1145-11	PEF1145-12	PEF1145-13	PEF1145-14	PEF1145-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8S
Date Sampled			15/06/2023	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Ammonia as N	mg/L	0.0050	<0.0050	0.73	<0.0050	0.18	0.013
Nitrate as N	mg/L	0.0050	5.1	0.019	0.016	<0.0050	1.9
Nitrate as NO3 by calculation	mg/L	0.020	23	0.085	0.071	<0.020	8.4
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0052
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	5.1	0.023	0.020	<0.0050	1.9
TKN as N by calculation	mg/L	0.10	0.70	1.0	0.71	0.62	0.63
Organic Nitrogen by calc.	mg/L	0.10	0.70	0.31	0.71	0.44	0.61
Total Nitrogen	mg/L	0.10	5.8	1.1	0.73	0.61	2.5
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.093

Envirolab ID	Units	PQL	PEF1145-16	PEF1145-17	PEF1145-18
Your Reference			GW8D	GW9S	GW9D
Date Sampled			15/06/2023	15/06/2023	15/06/2023
Ammonia as N	mg/L	0.0050	0.0095	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	0.0072	6.5	0.40
Nitrate as NO3 by calculation	mg/L	0.020	0.032	29	1.8
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	0.012	6.5	0.40

Certificate of Analysis PEF1145

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEF1145-16	PEF1145-17	PEF1145-18
Your Reference			GW8D	GW9S	GW9D
Date Sampled			15/06/2023	15/06/2023	15/06/2023
TKN as N by calculation	mg/L	0.10	<0.10	0.53	0.83
Organic Nitrogen by calc.	mg/L	0.10	<0.10	0.53	0.83
Total Nitrogen	mg/L	0.10	<0.10	7.0	1.2
Phosphate as P	mg/L	0.0050	<0.0050	0.085	0.016

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Certificate of Analysis PEH1140

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 Wattle Grove Monitoring
Number of Samples	5 Surface Water
Date Samples Received	17/08/2023
Date Samples Registered	17/08/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	24/08/2023
Date of Issue	24/08/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Lien Tang, Assistant Operations Manager Michael Mowle, Inorganics Supervisor
Laboratory Manager	Michael Kubiak

Certificate of Analysis PEH1140

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEH1140-01	SW1	Surface Water	16/08/2023	17/08/2023
PEH1140-02	SW2	Surface Water	16/08/2023	17/08/2023
PEH1140-03	SW3	Surface Water	16/08/2023	17/08/2023
PEH1140-04	SW4	Surface Water	16/08/2023	17/08/2023
PEH1140-05	SW5	Surface Water	16/08/2023	17/08/2023

Certificate of Analysis PEH1140

Acid Extractable Metals (Surface Water)

Envirolab ID	Units	PQL	PEH1140-01	PEH1140-02	PEH1140-03	PEH1140-04	PEH1140-05
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			16/08/2023	16/08/2023	16/08/2023	16/08/2023	16/08/2023
Phosphorus	mg/L	0.050	<0.050	0.27	0.13	<0.050	0.076

Certificate of Analysis PEH1140

Dissolved Low Level Metals (Surface Water)

Envirolab ID	Units	PQL	PEH1140-01	PEH1140-02	PEH1140-03	PEH1140-04	PEH1140-05
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			16/08/2023	16/08/2023	16/08/2023	16/08/2023	16/08/2023
Arsenic	µg/L	1.0	<1.0	4.7	<1.0	<1.0	1.1
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	1.1	11	4.9	2.7	2.5
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	<1.0	1.0	1.5	1.1
Lead	µg/L	1.0	<1.0	<1.0	1.4	<1.0	<1.0
Zinc	µg/L	1.0	2.5	29	12	10	8.8

Inorganics - Physical Parameters (Surface Water)

Envirolab ID	Units	PQL	PEH1140-01	PEH1140-02	PEH1140-03	PEH1140-04	PEH1140-05
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			16/08/2023	16/08/2023	16/08/2023	16/08/2023	16/08/2023
pH	pH units		7.4	7.2	7.8	7.0	7.4
Electrical Conductivity	µS/cm	2.0	67	130	1100	290	270

Inorganics - Ionic Balance and Indexes (Surface Water)

Envirolab ID	Units	PQL	PEH1140-01	PEH1140-02	PEH1140-03	PEH1140-04	PEH1140-05
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			16/08/2023	16/08/2023	16/08/2023	16/08/2023	16/08/2023
Calcium	mg/L	0.50	8.2	14	59	13	18
Magnesium	mg/L	0.50	0.91	1.9	25	6.1	4.8
Potassium	mg/L	0.50	1.7	2.8	9.1	3.9	4.7
Sodium	mg/L	0.50	2.1	5.0	120	28	25
Hardness as CaCO3	mg/L	3.0	24	43	250	58	65

Inorganics - Nutrients (Surface Water)

Envirolab ID	Units	PQL	PEH1140-01	PEH1140-02	PEH1140-03	PEH1140-04	PEH1140-05
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			16/08/2023	16/08/2023	16/08/2023	16/08/2023	16/08/2023
Ammonia as N	mg/L	0.0050	<0.0050	0.051	0.11	0.021	<0.0050
Nitrate as N	mg/L	0.0050	<0.0050	1.2	2.1	<0.0050	<0.0050
Nitrate as NO3 by calculation	mg/L	0.020	<0.020	5.4	9.3	<0.020	<0.020
Nitrite as N	mg/L	0.0050	<0.0050	0.012	0.017	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	0.038	0.054	<0.020	<0.020
NOx as N	mg/L	0.0050	<0.0050	1.2	2.1	<0.0050	<0.0050
TKN as N by calculation	mg/L	0.10	0.29	0.55	1.3	1.1	1.5
Organic Nitrogen by calc.	mg/L	0.10	0.29	0.50	1.2	1.1	1.5
Total Nitrogen	mg/L	0.10	0.29	1.8	3.5	1.1	1.5
Phosphate as P	mg/L	0.0050	0.021	0.26	0.065	<0.0050	0.061

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Certificate of Analysis PEI1127

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	17 Groundwater, 5 Surface Water
Date Samples Received	15/09/2023
Date Samples Registered	15/09/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	22/09/2023
Date of Issue	26/09/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Lien Tang, Assistant Operations Manager Michael Hall, Inorganics & Metals Supervisor
Laboratory Manager	Michael Kubiak

Certificate of Analysis PEI1127

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEI1127-01	WG1	Groundwater	14/09/2023	15/09/2023
PEI1127-02	WG2D	Groundwater	14/09/2023	15/09/2023
PEI1127-03	WG3	Groundwater	14/09/2023	15/09/2023
PEI1127-04	WG4S	Groundwater	14/09/2023	15/09/2023
PEI1127-05	WG4D	Groundwater	14/09/2023	15/09/2023
PEI1127-06	WG5D	Groundwater	14/09/2023	15/09/2023
PEI1127-07	WG6	Groundwater	14/09/2023	15/09/2023
PEI1127-08	WG7D	Groundwater	14/09/2023	15/09/2023
PEI1127-09	WG8	Groundwater	14/09/2023	15/09/2023
PEI1127-10	WG9	Groundwater	14/09/2023	15/09/2023
PEI1127-11	WG10D	Groundwater	14/09/2023	15/09/2023
PEI1127-12	MBb	Groundwater	14/09/2023	15/09/2023
PEI1127-13	GW5S	Groundwater	14/09/2023	15/09/2023
PEI1127-14	GW5D	Groundwater	14/09/2023	15/09/2023
PEI1127-15	GW8D	Groundwater	14/09/2023	15/09/2023
PEI1127-16	GW9S	Groundwater	14/09/2023	15/09/2023
PEI1127-17	GW9D	Groundwater	14/09/2023	15/09/2023
PEI1127-18	SW1	Surface Water	14/09/2023	15/09/2023
PEI1127-19	SW2	Surface Water	14/09/2023	15/09/2023
PEI1127-20	SW3	Surface Water	14/09/2023	15/09/2023
PEI1127-21	SW4	Surface Water	14/09/2023	15/09/2023
PEI1127-22	SW5	Surface Water	14/09/2023	15/09/2023

Certificate of Analysis PEI1127

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEI1127-01	PEI1127-02	PEI1127-03	PEI1127-04	PEI1127-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	0.051	<0.050	<0.050

Envirolab ID	Units	PQL	PEI1127-06	PEI1127-07	PEI1127-08	PEI1127-09	PEI1127-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Phosphorus	mg/L	0.050	0.059	<0.050	<0.050	0.21	2.0

Envirolab ID	Units	PQL	PEI1127-11	PEI1127-12	PEI1127-13	PEI1127-14	PEI1127-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	0.058	<0.050	<0.050

Envirolab ID	Units	PQL	PEI1127-16	PEI1127-17
Your Reference			GW9S	GW9D
Date Sampled			14/09/2023	14/09/2023
Phosphorus	mg/L	0.050	0.12	<0.050

Acid Extractable Metals (Surface Water)

Envirolab ID	Units	PQL	PEI1127-18	PEI1127-19	PEI1127-20	PEI1127-21	PEI1127-22
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Phosphorus	mg/L	0.050	0.37	0.065	<0.050	0.17	0.18

Certificate of Analysis PEI1127

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEI1127-01	PEI1127-02	PEI1127-03	PEI1127-04	PEI1127-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Arsenic	µg/L	1.0	<1.0	5.1	2.7	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	1.3	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	4.5	<1.0	<1.0	<1.0
Lead	µg/L	1.0	3.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	1.7	7.3	2.5	1.3	<1.0

Envirolab ID	Units	PQL	PEI1127-06	PEI1127-07	PEI1127-08	PEI1127-09	PEI1127-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.5
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.6
Copper	µg/L	1.0	<1.0	<1.0	3.2	1.7	11
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.6	1.4	2.3	1.9	4.8
Lead	µg/L	1.0	4.5	28	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	4.4	2.1	1.9	5.6	3.4

Envirolab ID	Units	PQL	PEI1127-11	PEI1127-12	PEI1127-13	PEI1127-14	PEI1127-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	2.6	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	1.0	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	6.4	5.6	17	1.1
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	<1.0	15	<1.0	4.4	1.2

Envirolab ID	Units	PQL	PEI1127-16	PEI1127-17
Your Reference			GW9S	GW9D
Date Sampled			14/09/2023	14/09/2023
Arsenic	µg/L	1.0	7.1	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0
Copper	µg/L	1.0	1.8	3.4
Mercury	µg/L	0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.9	7.0
Lead	µg/L	1.0	<1.0	<1.0
Zinc	µg/L	1.0	4.3	2.3

Certificate of Analysis PEI1127

Dissolved Low Level Metals (Surface Water)

Envirolab ID	Units	PQL	PEI1127-18	PEI1127-19	PEI1127-20	PEI1127-21	PEI1127-22
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	1.5	1.7
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	2.5	2.4	2.5	1.9	1.9
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.2	1.1	1.5	1.7	2.7
Lead	µg/L	1.0	<1.0	1.1	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	8.0	4.3	6.1	6.0	3.6

Certificate of Analysis PEI1127

Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PEI1127-01	PEI1127-02	PEI1127-03	PEI1127-04	PEI1127-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
pH	pH units		5.8	5.4	6.2	6.0	6.8
Electrical Conductivity	µS/cm	2.0	350	3200	5000	2000	1400

Envirolab ID	Units	PQL	PEI1127-06	PEI1127-07	PEI1127-08	PEI1127-09	PEI1127-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
pH	pH units		5.7	5.4	6.6	5.7	6.2
Electrical Conductivity	µS/cm	2.0	810	1600	470	730	1900

Envirolab ID	Units	PQL	PEI1127-11	PEI1127-12	PEI1127-13	PEI1127-14	PEI1127-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
pH	pH units		6.5	7.1	7.5	5.0	5.7
Electrical Conductivity	µS/cm	2.0	120	880	600	760	180

Envirolab ID	Units	PQL	PEI1127-16	PEI1127-17
Your Reference			GW9S	GW9D
Date Sampled			14/09/2023	14/09/2023
pH	pH units		7.0	7.0
Electrical Conductivity	µS/cm	2.0	160	360

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Inorganics - Physical Parameters (Surface Water)

Envirolab ID	Units	PQL	PEI1127-18	PEI1127-19	PEI1127-20	PEI1127-21	PEI1127-22
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
pH	pH units		7.2	8.2	7.3	7.8	8.0
Electrical Conductivity	µS/cm	2.0	150	1600	500	720	790

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PEI1127-01	PEI1127-02	PEI1127-03	PEI1127-04	PEI1127-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Calcium	mg/L	0.50	2.4	6.0	46	38	86
Magnesium	mg/L	0.50	7.0	120	83	56	29
Potassium	mg/L	0.50	2.9	11	27	9.8	8.0
Sodium	mg/L	0.50	71	420	780	280	150
Hardness as CaCO3	mg/L	3.0	35	510	460	330	330

Envirolab ID	Units	PQL	PEI1127-06	PEI1127-07	PEI1127-08	PEI1127-09	PEI1127-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Calcium	mg/L	0.50	4.0	8.0	20	1.7	48
Magnesium	mg/L	0.50	14	37	16	13	41
Potassium	mg/L	0.50	3.7	9.7	5.9	3.3	39
Sodium	mg/L	0.50	120	230	58	110	230
Hardness as CaCO3	mg/L	3.0	66	170	120	57	290

Envirolab ID	Units	PQL	PEI1127-11	PEI1127-12	PEI1127-13	PEI1127-14	PEI1127-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Calcium	mg/L	0.50	5.4	25	110	29	0.73
Magnesium	mg/L	0.50	3.3	47	5.7	15	1.7
Potassium	mg/L	0.50	4.0	9.2	5.9	8.6	0.95
Sodium	mg/L	0.50	22	80	21	91	32
Hardness as CaCO3	mg/L	3.0	27	260	290	130	8.7

Envirolab ID	Units	PQL	PEI1127-16	PEI1127-17
Your Reference			GW9S	GW9D
Date Sampled			14/09/2023	14/09/2023
Calcium	mg/L	0.50	21	11
Magnesium	mg/L	0.50	2.5	9.7
Potassium	mg/L	0.50	5.1	8.4
Sodium	mg/L	0.50	13	41
Hardness as CaCO3	mg/L	3.0	62	67

Inorganics - Ionic Balance and Indexes (Surface Water)

Envirolab ID	Units	PQL	PEI1127-18	PEI1127-19	PEI1127-20	PEI1127-21	PEI1127-22
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Calcium	mg/L	0.50	12	68	27	44	65
Magnesium	mg/L	0.50	6.0	33	12	14	15
Potassium	mg/L	0.50	7.8	12	6.9	11	12
Sodium	mg/L	0.50	20	170	53	70	64
Hardness as CaCO3	mg/L	3.0	54	300	110	170	220

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEI1127-01	PEI1127-02	PEI1127-03	PEI1127-04	PEI1127-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	0.064	<0.0050	0.060
Nitrate as N	mg/L	0.0050	3.2	0.16	<0.0050	<0.0050	0.099
Nitrate as NO3 by calculation	mg/L	0.020	14	0.73	<0.020	<0.020	0.44
Nitrite as N	mg/L	0.0050	<0.0050	0.0060	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	3.2	0.17	<0.0050	<0.0050	0.10
TKN as N by calculation	mg/L	0.10	0.54	0.27	1.0	0.33	0.65
Organic Nitrogen by calc.	mg/L	0.10	0.54	0.27	0.95	0.33	0.59
Total Nitrogen	mg/L	0.10	3.8	0.44	1.0	0.33	0.75
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PEI1127-06	PEI1127-07	PEI1127-08	PEI1127-09	PEI1127-10
Your Reference			WG5D	WG6	WG7D	WG8	WG9
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0055
Nitrate as N	mg/L	0.0050	14	3.5	4.2	0.075	11
Nitrate as NO3 by calculation	mg/L	0.020	60	15	19	0.33	47
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	14	3.5	4.2	0.076	11
TKN as N by calculation	mg/L	0.10	3.4	0.72	0.68	0.40	4.5
Organic Nitrogen by calc.	mg/L	0.10	3.4	0.72	0.68	0.40	4.5
Total Nitrogen	mg/L	0.10	17	4.2	4.9	0.48	15
Phosphate as P	mg/L	0.0050	<0.0050	0.0055	<0.0050	0.0061	1.6

Envirolab ID	Units	PQL	PEI1127-11	PEI1127-12	PEI1127-13	PEI1127-14	PEI1127-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Ammonia as N	mg/L	0.0050	<0.0050	1.7	0.031	0.14	<0.0050
Nitrate as N	mg/L	0.0050	2.4	0.016	0.024	<0.0050	0.0096
Nitrate as NO3 by calculation	mg/L	0.020	11	0.070	0.10	<0.020	0.042
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	2.4	0.017	0.024	<0.0050	0.011
TKN as N by calculation	mg/L	0.10	0.86	2.3	1.3	0.71	0.22
Organic Nitrogen by calc.	mg/L	0.10	0.85	0.65	1.2	0.56	0.22
Total Nitrogen	mg/L	0.10	3.3	2.3	1.3	0.70	0.23
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PEI1127-16	PEI1127-17
Your Reference			GW9S	GW9D
Date Sampled			14/09/2023	14/09/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	0.87	0.14
Nitrate as NO3 by calculation	mg/L	0.020	3.9	0.62
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	0.87	0.14

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEI1127-16	PEI1127-17
Your Reference			GW9S	GW9D
Date Sampled			14/09/2023	14/09/2023
TKN as N by calculation	mg/L	0.10	0.59	0.62
Organic Nitrogen by calc.	mg/L	0.10	0.59	0.62
Total Nitrogen	mg/L	0.10	1.5	0.76
Phosphate as P	mg/L	0.0050	0.089	0.0085

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Inorganics - Nutrients (Surface Water)

Envirolab ID	Units	PQL	PEI1127-18	PEI1127-19	PEI1127-20	PEI1127-21	PEI1127-22
Your Reference			SW1	SW2	SW3	SW4	SW5
Date Sampled			14/09/2023	14/09/2023	14/09/2023	14/09/2023	14/09/2023
Ammonia as N	mg/L	0.0050	<0.0050	0.055	0.0079	0.0084	0.0052
Nitrate as N	mg/L	0.0050	<0.0050	1.2	0.015	<0.0050	0.033
Nitrate as NO3 by calculation	mg/L	0.020	<0.020	5.3	0.068	<0.020	0.15
Nitrite as N	mg/L	0.0050	<0.0050	0.023	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	0.075	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	<0.0050	1.2	0.015	<0.0050	0.031
TKN as N by calculation	mg/L	0.10	0.93	1.1	0.94	1.8	1.8
Organic Nitrogen by calc.	mg/L	0.10	0.92	1.1	0.93	1.8	1.8
Total Nitrogen	mg/L	0.10	0.92	2.3	0.96	1.8	1.9
Phosphate as P	mg/L	0.0050	0.32	0.016	<0.0050	0.088	0.099

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Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	15 Groundwater
Date Samples Received	20/12/2023
Date Instructions Received	20/12/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	03/01/2024
Date of Issue	01/03/2024

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Michael Mowle, Inorganics Supervisor
Laboratory Manager	Michael Kubiak

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Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEL1474-01	WG1	Groundwater	19/12/2023	20/12/2023
PEL1474-02	WG2D	Groundwater	19/12/2023	20/12/2023
PEL1474-03	WG3	Groundwater	19/12/2023	20/12/2023
PEL1474-04	WG4S	Groundwater	19/12/2023	20/12/2023
PEL1474-05	WG4D	Groundwater	19/12/2023	20/12/2023
PEL1474-06	WG5D	Groundwater	19/12/2023	20/12/2023
PEL1474-07	WG6	Groundwater	19/12/2023	20/12/2023
PEL1474-08	WG7D	Groundwater	19/12/2023	20/12/2023
PEL1474-09	WG9	Groundwater	19/12/2023	20/12/2023
PEL1474-10	WG10D	Groundwater	19/12/2023	20/12/2023
PEL1474-11	MBb	Groundwater	19/12/2023	20/12/2023
PEL1474-12	GW5D	Groundwater	19/12/2023	20/12/2023
PEL1474-13	GW8D	Groundwater	19/12/2023	20/12/2023
PEL1474-14	GW9S	Groundwater	19/12/2023	20/12/2023
PEL1474-15	GW9D	Groundwater	19/12/2023	20/12/2023

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Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEL1474-01	PEL1474-02	PEL1474-03	PEL1474-04	PEL1474-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Phosphorus	mg/L	0.050	0.18	<0.050	<0.050	<0.050	0.078

Envirolab ID	Units	PQL	PEL1474-06	PEL1474-07	PEL1474-08	PEL1474-09	PEL1474-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Phosphorus	mg/L	0.050	0.11	<0.050	<0.050	3.2	<0.050

Envirolab ID	Units	PQL	PEL1474-11	PEL1474-12	PEL1474-13	PEL1474-14	PEL1474-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Phosphorus	mg/L	0.050	0.19	<0.050	<0.050	0.42	<0.050

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Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEL1474-01	PEL1474-02	PEL1474-03	PEL1474-04	PEL1474-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Arsenic	µg/L	1.0	<1.0	1.0	2.2	1.1	<1.0
Cadmium	µg/L	0.10	0.45	0.14	0.12	0.82	0.16
Chromium	µg/L	1.0	<1.0	<1.0	1.8	<1.0	<1.0
Copper	µg/L	1.0	1.5	<1.0	<1.0	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	3.0	5.0	1.6	<1.0
Lead	µg/L	1.0	4.3	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	23	7.3	9.7	47	11

Envirolab ID	Units	PQL	PEL1474-06	PEL1474-07	PEL1474-08	PEL1474-09	PEL1474-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	1.1	<1.0
Cadmium	µg/L	0.10	<0.10	0.13	0.12	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	1.9	8.3	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	2.1	1.6	2.3	4.2	<1.0
Lead	µg/L	1.0	3.6	41	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	7.6	10	1.8	4.5	<1.0

Envirolab ID	Units	PQL	PEL1474-11	PEL1474-12	PEL1474-13	PEL1474-14	PEL1474-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Arsenic	µg/L	1.0	1.5	1.8	<1.0	16	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	5.0	2.9
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	3.6	9.4	1.4	3.3	8.5
Lead	µg/L	1.0	<1.0	4.2	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	11	2.2	1.5	10	9.3

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Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PEL1474-01	PEL1474-02	PEL1474-03	PEL1474-04	PEL1474-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
pH	pH units		5.7	5.8	5.8	6.5	6.3
Electrical Conductivity	µS/cm	2.0	260	3300	5300	1800	2000

Envirolab ID	Units	PQL	PEL1474-06	PEL1474-07	PEL1474-08	PEL1474-09	PEL1474-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
pH	pH units		5.7	5.6	6.5	6.5	6.6
Electrical Conductivity	µS/cm	2.0	750	1600	760	1100	120

Envirolab ID	Units	PQL	PEL1474-11	PEL1474-12	PEL1474-13	PEL1474-14	PEL1474-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
pH	pH units		6.5	4.5	5.9	7.0	6.9
Electrical Conductivity	µS/cm	2.0	920	650	170	770	480

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Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PEL1474-01	PEL1474-02	PEL1474-03	PEL1474-04	PEL1474-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Calcium	mg/L	0.50	2.1	4.3	68	36	88
Magnesium	mg/L	0.50	8.3	120	120	55	45
Potassium	mg/L	0.50	2.1	9.7	24	8.3	10
Sodium	mg/L	0.50	59	470	900	270	260
Hardness as CaCO3	mg/L	3.0	39	520	650	320	410

Envirolab ID	Units	PQL	PEL1474-06	PEL1474-07	PEL1474-08	PEL1474-09	PEL1474-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Calcium	mg/L	0.50	2.8	7.0	16	27	6.9
Magnesium	mg/L	0.50	11	42	15	26	4.3
Potassium	mg/L	0.50	2.9	7.5	4.9	12	3.6
Sodium	mg/L	0.50	120	240	110	160	25
Hardness as CaCO3	mg/L	3.0	51	190	100	170	35

Envirolab ID	Units	PQL	PEL1474-11	PEL1474-12	PEL1474-13	PEL1474-14	PEL1474-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Calcium	mg/L	0.50	20	17	1.5	44	15
Magnesium	mg/L	0.50	47	12	1.9	6.3	13
Potassium	mg/L	0.50	8.8	6.6	1.2	14	8.2
Sodium	mg/L	0.50	100	82	29	99	51
Hardness as CaCO3	mg/L	3.0	240	93	12	140	90

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Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEL1474-01	PEL1474-02	PEL1474-03	PEL1474-04	PEL1474-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.063
Nitrate as N	mg/L	0.0050	2.9	<0.0050	<0.0050	0.12	0.047
Nitrate as NO3 by calculation	mg/L	0.020	13	<0.020	<0.020	0.52	0.21
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	2.9	0.0053	<0.0050	0.12	0.050
TKN as N by calculation	mg/L	0.10	1.1	0.22	0.65	0.16	0.78
Organic Nitrogen by calc.	mg/L	0.10	1.1	0.22	0.64	0.16	0.72
Total Nitrogen	mg/L	0.10	4.0	0.23	0.64	0.29	0.83
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PEL1474-06	PEL1474-07	PEL1474-08	PEL1474-09	PEL1474-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0071	<0.0050
Nitrate as N	mg/L	0.0050	10	4.2	4.0	18	2.1
Nitrate as NO3 by calculation	mg/L	0.020	44	19	18	81	9.2
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	10	4.2	4.0	18	2.1
TKN as N by calculation	mg/L	0.10	4.3	0.63	0.64	5.5	0.72
Organic Nitrogen by calc.	mg/L	0.10	4.3	0.63	0.64	5.5	0.72
Total Nitrogen	mg/L	0.10	14	4.8	4.6	24	2.8
Phosphate as P	mg/L	0.0050	<0.0050	0.0065	<0.0050	2.7	<0.0050

Envirolab ID	Units	PQL	PEL1474-11	PEL1474-12	PEL1474-13	PEL1474-14	PEL1474-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Ammonia as N	mg/L	0.0050	1.7	0.11	<0.0050	0.0074	<0.0050
Nitrate as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	4.5	0.15
Nitrate as NO3 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	20	0.68
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.089	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	0.29	<0.020
NOx as N	mg/L	0.0050	0.0080	<0.0050	<0.0050	4.6	0.16
TKN as N by calculation	mg/L	0.10	3.9	0.63	<0.10	1.4	0.55
Organic Nitrogen by calc.	mg/L	0.10	2.2	0.52	<0.10	1.4	0.55
Total Nitrogen	mg/L	0.10	3.9	0.62	<0.10	6.0	0.71
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.31	0.010

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Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	11 Groundwater
Date Samples Received	21/03/2024
Date Instructions Received	21/03/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	28/03/2024
Date of Issue	28/03/2024

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Authorisation Details

Results Approved By	Ben Carpenter, Metals Technician Heram Halim, Operations Manager Lien Tang, Assistant Operations Manager
Laboratory Manager	Michael Kubiak

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Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PFC1386-01	WG1	Groundwater	20/03/2024	21/03/2024
PFC1386-02	WG3	Groundwater	20/03/2024	21/03/2024
PFC1386-03	WG4S	Groundwater	20/03/2024	21/03/2024
PFC1386-04	WG4D	Groundwater	20/03/2024	21/03/2024
PFC1386-05	WG5D	Groundwater	20/03/2024	21/03/2024
PFC1386-06	WG6	Groundwater	20/03/2024	21/03/2024
PFC1386-07	WG7D	Groundwater	20/03/2024	21/03/2024
PFC1386-08	MBb	Groundwater	20/03/2024	21/03/2024
PFC1386-09	GW5D	Groundwater	20/03/2024	21/03/2024
PFC1386-10	GW8D	Groundwater	20/03/2024	21/03/2024
PFC1386-11	GW9D	Groundwater	20/03/2024	21/03/2024

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Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PFC1386-01	PFC1386-02	PFC1386-03	PFC1386-04	PFC1386-05
Your Reference			WG1	WG3	WG4S	WG4D	WG5D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Phosphorus	mg/L	0.050	0.082	0.85	<0.050	<0.050	<0.050

Envirolab ID	Units	PQL	PFC1386-06	PFC1386-07	PFC1386-08	PFC1386-09	PFC1386-10
Your Reference			WG6	WG7D	MBb	GW5D	GW8D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Phosphorus	mg/L	0.050	<0.050	<0.050	0.075	<0.050	0.054

Envirolab ID	Units	PQL	PFC1386-11
Your Reference			GW9D
Date Sampled			20/03/2024
Phosphorus	mg/L	0.050	0.10

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Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PFC1386-01	PFC1386-02	PFC1386-03	PFC1386-04	PFC1386-05
Your Reference			WG1	WG3	WG4S	WG4D	WG5D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Arsenic	µg/L	1.0	<1.0	3.9	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	1.2	<1.0	<1.0	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	7.0	1.7	1.1	1.7
Lead	µg/L	1.0	5.5	1.1	<1.0	<1.0	5.7
Zinc	µg/L	1.0	5.1	16	5.1	2.3	5.1

Envirolab ID	Units	PQL	PFC1386-06	PFC1386-07	PFC1386-08	PFC1386-09	PFC1386-10
Your Reference			WG6	WG7D	MBb	GW5D	GW8D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	1.8	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	1.3	3.6	<1.0	<1.0	2.6
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	2.0	2.7	6.2	11	2.2
Lead	µg/L	1.0	60	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	4.3	5.9	28	14	3.0

Envirolab ID	Units	PQL	PFC1386-11
Your Reference			GW9D
Date Sampled			20/03/2024
Arsenic	µg/L	1.0	3.5
Cadmium	µg/L	0.10	<0.10
Chromium	µg/L	1.0	1.2
Copper	µg/L	1.0	18
Mercury	µg/L	0.050	<0.050
Nickel	µg/L	1.0	15
Lead	µg/L	1.0	<1.0
Zinc	µg/L	1.0	13

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Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PFC1386-01	PFC1386-02	PFC1386-03	PFC1386-04	PFC1386-05
Your Reference			WG1	WG3	WG4S	WG4D	WG5D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
pH	pH units		5.8	6.1	6.1	5.8	5.6
Electrical Conductivity	µS/cm	2.0	190	8700	2300	2400	830

Envirolab ID	Units	PQL	PFC1386-06	PFC1386-07	PFC1386-08	PFC1386-09	PFC1386-10
Your Reference			WG6	WG7D	MBb	GW5D	GW8D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
pH	pH units		5.6	6.0	6.5	4.1	6.0
Electrical Conductivity	µS/cm	2.0	1800	510	1100	740	190

Envirolab ID	Units	PQL	PFC1386-11
Your Reference			GW9D
Date Sampled			20/03/2024
pH	pH units		6.8
Electrical Conductivity	µS/cm	2.0	540

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PFC1386-01	PFC1386-02	PFC1386-03	PFC1386-04	PFC1386-05
Your Reference			WG1	WG3	WG4S	WG4D	WG5D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Calcium	mg/L	0.50	1.9	98	54	75	4.6
Magnesium	mg/L	0.50	3.8	180	61	65	13
Potassium	mg/L	0.50	1.6	39	13	15	3.4
Sodium	mg/L	0.50	34	1300	290	290	120
Hardness as CaCO3	mg/L	3.0	21	990	390	460	66

Envirolab ID	Units	PQL	PFC1386-06	PFC1386-07	PFC1386-08	PFC1386-09	PFC1386-10
Your Reference			WG6	WG7D	MBb	GW5D	GW8D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Calcium	mg/L	0.50	11	7.5	29	22	2.9
Magnesium	mg/L	0.50	45	12	55	14	2.4
Potassium	mg/L	0.50	8.9	4.8	11	7.6	2.1
Sodium	mg/L	0.50	240	80	97	85	34
Hardness as CaCO3	mg/L	3.0	210	68	300	110	17

Envirolab ID	Units	PQL	PFC1386-11
Your Reference			GW9D
Date Sampled			20/03/2024
Calcium	mg/L	0.50	16
Magnesium	mg/L	0.50	10
Potassium	mg/L	0.50	11
Sodium	mg/L	0.50	70
Hardness as CaCO3	mg/L	3.0	82

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Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PFC1386-01	PFC1386-02	PFC1386-03	PFC1386-04	PFC1386-05
Your Reference			WG1	WG3	WG4S	WG4D	WG5D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Ammonia as N	mg/L	0.0050	0.13	0.18	0.16	0.16	0.13
Nitrate as N	mg/L	0.0050	3.2	0.0065	0.15	<0.0050	14
Nitrate as NO3 by calculation	mg/L	0.020	14	0.029	0.67	<0.020	60
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	3.2	0.0060	0.15	<0.0050	14
TKN as N by calculation	mg/L	0.10	1.1	8.8	0.17	0.34	0.82
Organic Nitrogen by calc.	mg/L	0.10	0.95	8.6	<0.10	0.18	0.69
Total Nitrogen	mg/L	0.10	4.3	8.8	0.32	0.34	14
Phosphate as P	mg/L	0.0050	<0.0050	0.0090	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PFC1386-06	PFC1386-07	PFC1386-08	PFC1386-09	PFC1386-10
Your Reference			WG6	WG7D	MBb	GW5D	GW8D
Date Sampled			20/03/2024	20/03/2024	20/03/2024	20/03/2024	20/03/2024
Ammonia as N	mg/L	0.0050	0.16	0.14	1.8	0.27	0.14
Nitrate as N	mg/L	0.0050	2.9	0.30	0.023	<0.0050	0.0094
Nitrate as NO3 by calculation	mg/L	0.020	13	1.3	0.10	<0.020	0.042
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	2.9	0.30	0.021	<0.0050	0.0086
TKN as N by calculation	mg/L	0.10	0.57	0.36	2.5	0.53	0.38
Organic Nitrogen by calc.	mg/L	0.10	0.42	0.22	0.77	0.27	0.24
Total Nitrogen	mg/L	0.10	3.5	0.66	2.6	0.53	<0.50 [4]
Phosphate as P	mg/L	0.0050	0.0086	<0.0050	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PFC1386-11
Your Reference			GW9D
Date Sampled			20/03/2024
Ammonia as N	mg/L	0.0050	0.19
Nitrate as N	mg/L	0.0050	0.32
Nitrate as NO3 by calculation	mg/L	0.020	1.4
Nitrite as N	mg/L	0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020
NOx as N	mg/L	0.0050	0.32
TKN as N by calculation	mg/L	0.10	1.1
Organic Nitrogen by calc.	mg/L	0.10	0.94
Total Nitrogen	mg/L	0.10	1.4
Phosphate as P	mg/L	0.0050	0.066

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Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	14 Groundwater
Date Samples Received	21/06/2024
Date Instructions Received	21/06/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	28/06/2024
Date of Issue	28/06/2024

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Authorisation Details

Results Approved By	Ben Carpenter, Metals Technician Heram Halim, Operations Manager Michael Mowle, Inorganics Supervisor Varsha Ho Wing, Inorganics and Metals Supervisor
Laboratory Manager	Michael Kubiak

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Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PFF1338-01	WG1	Groundwater	20/06/2024	21/06/2024
PFF1338-02	WG2D	Groundwater	20/06/2024	21/06/2024
PFF1338-03	WG3	Groundwater	20/06/2024	21/06/2024
PFF1338-04	WG4S	Groundwater	20/06/2024	21/06/2024
PFF1338-05	WG4D	Groundwater	20/06/2024	21/06/2024
PFF1338-06	WG5D	Groundwater	20/06/2024	21/06/2024
PFF1338-07	WG6	Groundwater	20/06/2024	21/06/2024
PFF1338-08	WG7D	Groundwater	20/06/2024	21/06/2024
PFF1338-09	WG10D	Groundwater	20/06/2024	21/06/2024
PFF1338-10	MBb	Groundwater	20/06/2024	21/06/2024
PFF1338-11	GW5D	Groundwater	20/06/2024	21/06/2024
PFF1338-12	GW8D	Groundwater	20/06/2024	21/06/2024
PFF1338-13	GW9S	Groundwater	20/06/2024	21/06/2024
PFF1338-14	GW9D	Groundwater	20/06/2024	21/06/2024

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Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PFF1338-01	PFF1338-02	PFF1338-03	PFF1338-04	PFF1338-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Phosphorus	mg/L	0.050	<0.050	2.2 [2]	0.090	<0.050	<0.050

Envirolab ID	Units	PQL	PFF1338-06	PFF1338-07	PFF1338-08	PFF1338-09	PFF1338-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Phosphorus	mg/L	0.050	0.084	0.60 [2]	<0.050	<0.050	<0.50 [2]

Envirolab ID	Units	PQL	PFF1338-11	PFF1338-12	PFF1338-13	PFF1338-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024
Phosphorus	mg/L	0.050	<0.050	<0.050	1.3	0.10

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Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PFF1338-01	PFF1338-02	PFF1338-03	PFF1338-04	PFF1338-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Arsenic	µg/L	1.0	<1.0	1.0	3.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	4.1	<1.0	<1.0
Copper	µg/L	1.0	<1.0	1.7	1.8	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	7.6	96	3.8	3.6
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	6.5	37	33	2.9	5.9

Envirolab ID	Units	PQL	PFF1338-06	PFF1338-07	PFF1338-08	PFF1338-09	PFF1338-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	4.2	<1.0	2.5	4.5	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	2.9	4.2	1.7	<1.0	4.0
Lead	µg/L	1.0	1.3	3.1	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	24	13	2.6	13	7.9

Envirolab ID	Units	PQL	PFF1338-11	PFF1338-12	PFF1338-13	PFF1338-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024
Arsenic	µg/L	1.0	1.4	<1.0	7.4	2.2
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	4.3	<1.0	4.3	8.1
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	10	1.6	3.2	6.9
Lead	µg/L	1.0	2.3	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	21	4.9	5.5	8.5

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Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PFF1338-01	PFF1338-02	PFF1338-03	PFF1338-04	PFF1338-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
pH	pH units		5.8	5.8	5.8	5.8	6.0
Electrical Conductivity	µS/cm	2.0	220	2300	14000	2200	2700

Envirolab ID	Units	PQL	PFF1338-06	PFF1338-07	PFF1338-08	PFF1338-09	PFF1338-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
pH	pH units		5.6	5.6	6.3	6.2	6.5
Electrical Conductivity	µS/cm	2.0	820	2200	800	160	1200

Envirolab ID	Units	PQL	PFF1338-11	PFF1338-12	PFF1338-13	PFF1338-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024
pH	pH units		4.1	6.1	6.9	6.7
Electrical Conductivity	µS/cm	2.0	750	160	230	400

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PFF1338-01	PFF1338-02	PFF1338-03	PFF1338-04	PFF1338-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Calcium	mg/L	0.50	<0.50	3.7	190	40	86
Magnesium	mg/L	0.50	3.0	68	330	60	73
Potassium	mg/L	0.50	1.3	19	56	11	14
Sodium	mg/L	0.50	33	280	2200	310	330
Hardness (calc) equivalent CaCO3	mg/L	3.0	13	290	1800	350	520

Envirolab ID	Units	PQL	PFF1338-06	PFF1338-07	PFF1338-08	PFF1338-09	PFF1338-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Calcium	mg/L	0.50	3.0	9.0	11	7.5	34
Magnesium	mg/L	0.50	14	60	17	5.1	71
Potassium	mg/L	0.50	3.2	8.0	3.6	3.7	11
Sodium	mg/L	0.50	120	290	120	36	93
Hardness (calc) equivalent CaCO3	mg/L	3.0	67	270	97	40	380

Envirolab ID	Units	PQL	PFF1338-11	PFF1338-12	PFF1338-13	PFF1338-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024
Calcium	mg/L	0.50	21	1.6	16	13
Magnesium	mg/L	0.50	15	1.6	4.6	7.4
Potassium	mg/L	0.50	6.9	1.6	5.5	8.4
Sodium	mg/L	0.50	82	26	14	43
Hardness (calc) equivalent CaCO3	mg/L	3.0	110	10	59	63

Certificate of Analysis PFF1338

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PFF1338-01	PFF1338-02	PFF1338-03	PFF1338-04	PFF1338-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Ammonia as N	mg/L	0.0050	<0.0050	0.18	<0.0050	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	2.8	0.21	<0.0050	0.016	5.9
Nitrate as NO3 by calculation	mg/L	0.020	12	0.91	<0.020	0.071	26
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	2.8	0.21	<0.0050	0.016	5.9
TKN as N by calculation	mg/L	0.10	0.22	11	1.9	0.17	0.16
Organic Nitrogen by calc.	mg/L	0.10	0.22	11	1.9	0.17	0.16
Total Nitrogen	mg/L	0.10	3.0	11	1.9	0.19	6.0
Phosphate as P	mg/L	0.0050	<0.0050	0.073	<0.0050	<0.0050	<0.0050

Envirolab ID	Units	PQL	PFF1338-06	PFF1338-07	PFF1338-08	PFF1338-09	PFF1338-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024	20/06/2024
Ammonia as N	mg/L	0.0050	<0.0050	0.014	<0.0050	<0.0050	2.2
Nitrate as N	mg/L	0.0050	14	1.9	4.2	<0.0050	<0.0050
Nitrate as NO3 by calculation	mg/L	0.020	62	8.4	19	<0.020	<0.020
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	14	1.9	4.2	5.4	<0.0050
TKN as N by calculation	mg/L	0.10	1.0	1.5	0.36	1.1	3.1
Organic Nitrogen by calc.	mg/L	0.10	1.0	1.5	0.36	1.1	0.93
Total Nitrogen	mg/L	0.10	15	3.4	4.6	6.5	3.1
Phosphate as P	mg/L	0.0050	<0.0050	0.0070	0.010	0.0081	<0.0050

Envirolab ID	Units	PQL	PFF1338-11	PFF1338-12	PFF1338-13	PFF1338-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			20/06/2024	20/06/2024	20/06/2024	20/06/2024
Ammonia as N	mg/L	0.0050	0.12	<0.0050	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	<0.0050	<0.0050	4.6	1.4
Nitrate as NO3 by calculation	mg/L	0.020	<0.020	<0.020	20	6.0
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	<0.0050	0.0064	4.6	1.4
TKN as N by calculation	mg/L	0.10	0.52	0.19	0.71	0.77
Organic Nitrogen by calc.	mg/L	0.10	0.41	0.18	0.71	0.76
Total Nitrogen	mg/L	0.10	0.52	0.19	5.3	2.1
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.20	0.078

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Certificate of Analysis PFG1116

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	3 Surface Water
Date Samples Received	17/07/2024
Date Instructions Received	17/07/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	25/07/2024
Date of Issue	25/07/2024

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Authorisation Details

Results Approved By	Ben Carpenter, Metals Technician Lien Tang, Assistant Operations Manager Lucas Yii, Inorganics Team Leader Michael Mowle, Inorganics Supervisor Varsha Ho Wing, Inorganics and Metals Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PFG1116-01	SW1	Surface Water	17/07/2024	17/07/2024
PFG1116-02	SW2	Surface Water	17/07/2024	17/07/2024
PFG1116-03	SW3	Surface Water	17/07/2024	17/07/2024

Acid Extractable Metals (Surface Water)

Envirolab ID	Units	PQL	PFG1116-01	PFG1116-02	PFG1116-03
Your Reference			SW1	SW2	SW3
Date Sampled			17/07/2024	17/07/2024	17/07/2024
Phosphorus	mg/L	0.050	<0.050	0.15	0.23

Dissolved Low Level Metals (Surface Water)

Envirolab ID	Units	PQL	PFG1116-01	PFG1116-02	PFG1116-03
Your Reference			SW1	SW2	SW3
Date Sampled			17/07/2024	17/07/2024	17/07/2024
Arsenic	µg/L	1.0	<1.0	2.7	2.1
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	2.7	3.3	3.5
Mercury	µg/L	0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	1.9	2.0
Lead	µg/L	1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	9.1	14	13

Inorganics - Physical Parameters (Surface Water)

Envirolab ID	Units	PQL	PFG1116-01	PFG1116-02	PFG1116-03
Your Reference			SW1	SW2	SW3
Date Sampled			17/07/2024	17/07/2024	17/07/2024
pH	pH units		8.4	7.6	7.7
Electrical Conductivity	µS/cm	2.0	1800	730	1300

Inorganics - Ionic Balance and Indexes (Surface Water)

Envirolab ID	Units	PQL	PFG1116-01	PFG1116-02	PFG1116-03
Your Reference			SW1	SW2	SW3
Date Sampled			17/07/2024	17/07/2024	17/07/2024
Calcium	mg/L	0.50	95	50	54
Magnesium	mg/L	0.50	39	16	22
Potassium	mg/L	0.50	6.2	12	15
Sodium	mg/L	0.50	250	95	200
Hardness (calc) equivalent CaCO3	mg/L	3.0	400	190	220

Inorganics - Nutrients (Surface Water)

Envirolab ID	Units	PQL	PFG1116-01	PFG1116-02	PFG1116-03
Your Reference			SW1	SW2	SW3
Date Sampled			17/07/2024	17/07/2024	17/07/2024
Ammonia as N	mg/L	0.0050	0.012	0.025	0.12
Nitrate as N	mg/L	0.0050	2.6	<0.050 [2]	0.14
Nitrate as NO3 by calculation	mg/L	0.020	11	<0.20 [2]	0.62
Nitrite as N	mg/L	0.0050	<0.0050 [2]	<0.050 [2]	<0.050 [2]
Nitrite as NO2 by calculation	mg/L	0.020	<0.020 [2]	<0.20 [2]	<0.20 [2]
NOx as N	mg/L	0.0050	2.6	<0.050 [2]	0.19
TKN as N by calculation	mg/L	0.10	1.7	1.7	4.8
Organic Nitrogen by calc.	mg/L	0.10	1.7	1.7	4.6
Total Nitrogen	mg/L	0.10	4.2	1.7	4.9
Phosphate as P	mg/L	0.0050	0.021	0.12	0.12

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Certificate of Analysis PFH1285

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	4 Surface Water
Date Samples Received	21/08/2024
Date Instructions Received	21/08/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Results Requested by	28/08/2024
Date of Issue	28/08/2024

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Authorisation Details

Results Approved By	Lien Tang, Assistant Operations Manager Lucas Yii, Inorganics Team Leader Michael Mowle, Inorganics Supervisor Varsha Ho Wing, Inorganics and Metals Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PFH1285-01	SW3	Surface Water	21/08/2024	21/08/2024
PFH1285-02	SW4	Surface Water	21/08/2024	21/08/2024
PFH1285-03	SW5	Surface Water	21/08/2024	21/08/2024
PFH1285-04	SW6	Surface Water	21/08/2024	21/08/2024

Acid Extractable Metals (Surface Water)

Envirolab ID	Units	PQL	PFH1285-01	PFH1285-02	PFH1285-03	PFH1285-04
Your Reference			SW3	SW4	SW5	SW6
Date Sampled			21/08/2024	21/08/2024	21/08/2024	21/08/2024
Phosphorus	mg/L	0.050	0.15	<0.050	0.20	0.24

Dissolved Low Level Metals (Surface Water)

Envirolab ID	Units	PQL	PFH1285-01	PFH1285-02	PFH1285-03	PFH1285-04
Your Reference			SW3	SW4	SW5	SW6
Date Sampled			21/08/2024	21/08/2024	21/08/2024	21/08/2024
Arsenic	µg/L	1.0	1.4	<1.0	2.0	2.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	4.9	2.9	2.2	2.1
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.2	2.4	1.9	1.9
Lead	µg/L	1.0	1.5	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	14	13	9.7	9.4

Certificate of Analysis PFH1285

Inorganics - Physical Parameters (Surface Water)

Envirolab ID	Units	PQL	PFH1285-01	PFH1285-02	PFH1285-03	PFH1285-04
Your Reference			SW3	SW4	SW5	SW6
Date Sampled			21/08/2024	21/08/2024	21/08/2024	21/08/2024
pH	pH units		7.6	7.3	7.8	7.9
Electrical Conductivity	µS/cm	2.0	2400	370	650	870

Inorganics - Ionic Balance and Indexes (Surface Water)

Envirolab ID	Units	PQL	PFH1285-01	PFH1285-02	PFH1285-03	PFH1285-04
Your Reference			SW3	SW4	SW5	SW6
Date Sampled			21/08/2024	21/08/2024	21/08/2024	21/08/2024
Calcium	mg/L	0.50	77	34	45	60
Magnesium	mg/L	0.50	29	15	14	18
Potassium	mg/L	0.50	12	7.1	8.8	13
Sodium	mg/L	0.50	160	62	65	80
Hardness (calc) equivalent CaCO3	mg/L	3.0	310	150	170	230

Inorganics - Nutrients (Surface Water)

Envirolab ID	Units	PQL	PFH1285-01	PFH1285-02	PFH1285-03	PFH1285-04
Your Reference			SW3	SW4	SW5	SW6
Date Sampled			21/08/2024	21/08/2024	21/08/2024	21/08/2024
Ammonia as N	mg/L	0.0050	0.035	0.058	0.0082	0.010
Nitrate as N	mg/L	0.0050	2.6	0.21	0.066	0.19
Nitrate as NO3 by calculation	mg/L	0.020	11	0.95	0.29	0.85
Nitrite as N	mg/L	0.0050	0.030	<0.050 [2]	<0.050 [2]	<0.050 [2]
Nitrite as NO2 by calculation	mg/L	0.020	0.10	<0.20 [2]	<0.20 [2]	<0.20 [2]
NOx as N	mg/L	0.0050	2.6	0.25	0.070	0.20
TKN as N by calculation	mg/L	0.10	1.1	1.2	1.9	2.0
Organic Nitrogen by calc.	mg/L	0.10	1.1	1.1	1.9	2.0
Total Nitrogen	mg/L	0.10	3.7	1.4	2.0	2.2
Phosphate as P	mg/L	0.0050	0.082	0.0058	0.12	0.17

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Certificate of Analysis PFI1388

Client Details

Client	Hyd2O
Contact	Ted Dann
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 Wattle Grove Monitoring
Number of Samples	20 Water
Date Samples Received	18/09/2024
Date Instructions Received	18/09/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Results Requested by	27/09/2024
Date of Issue	30/09/2024

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Authorisation Details

Results Approved By	Ben Carpenter, Metals Technician Lien Tang, Assistant Operations Manager Lucas Yii, Inorganics Team Leader Michael Mowle, Inorganics Supervisor Varsha Ho Wing, Inorganics and Metals Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PFI1388-01	WG1	Water	18/09/2024	18/09/2024
PFI1388-02	WG2D	Water	18/09/2024	18/09/2024
PFI1388-03	WG3	Water	18/09/2024	18/09/2024
PFI1388-04	WG4S	Water	18/09/2024	18/09/2024
PFI1388-05	WG4D	Water	18/09/2024	18/09/2024
PFI1388-06	WG5D	Water	18/09/2024	18/09/2024
PFI1388-07	WG6	Water	18/09/2024	18/09/2024
PFI1388-08	WG7D	Water	18/09/2024	18/09/2024
PFI1388-09	WG9	Water	18/09/2024	18/09/2024
PFI1388-10	WG10S	Water	18/09/2024	18/09/2024
PFI1388-11	WG10D	Water	18/09/2024	18/09/2024
PFI1388-12	MBb	Water	18/09/2024	18/09/2024
PFI1388-13	GW5S	Water	18/09/2024	18/09/2024
PFI1388-14	GW5D	Water	18/09/2024	18/09/2024
PFI1388-15	GW8D	Water	18/09/2024	18/09/2024
PFI1388-16	GW9S	Water	18/09/2024	18/09/2024
PFI1388-17	GW9D	Water	18/09/2024	18/09/2024
PFI1388-18	SW2	Water	18/09/2024	18/09/2024
PFI1388-19	SW7	Water	18/09/2024	18/09/2024
PFI1388-20	SW9	Water	18/09/2024	18/09/2024

Acid Extractable Metals (Water)

Envirolab ID	Units	PQL	PFI1388-01	PFI1388-02	PFI1388-03	PFI1388-04	PFI1388-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Phosphorus	mg/L	0.050	<0.050	0.066	<0.050	<0.050	<0.050

Envirolab ID	Units	PQL	PFI1388-06	PFI1388-07	PFI1388-08	PFI1388-09	PFI1388-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10S
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Phosphorus	mg/L	0.050	0.10	<0.050	<0.050	2.5	<0.050

Envirolab ID	Units	PQL	PFI1388-11	PFI1388-12	PFI1388-13	PFI1388-14	PFI1388-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050

Envirolab ID	Units	PQL	PFI1388-16	PFI1388-17	PFI1388-18	PFI1388-19	PFI1388-20
Your Reference			GW9S	GW9D	SW2	SW7	SW9
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Phosphorus	mg/L	0.050	<0.050	<0.050	0.093	0.25	0.28

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Dissolved Metals (Water)

Envirolab ID	Units	PQL	PFI1388-01	PFI1388-02	PFI1388-03	PFI1388-04	PFI1388-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Silica*	mg/L	0.20	21	24	41	9.2	5.8

Envirolab ID	Units	PQL	PFI1388-06	PFI1388-07	PFI1388-08	PFI1388-09	PFI1388-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10S
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Silica*	mg/L	0.20	18	22	11	27	12

Envirolab ID	Units	PQL	PFI1388-11	PFI1388-12	PFI1388-13	PFI1388-14	PFI1388-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Silica*	mg/L	0.20	9.8	8.0	26	48	20

Envirolab ID	Units	PQL	PFI1388-16	PFI1388-17	PFI1388-18	PFI1388-19	PFI1388-20
Your Reference			GW9S	GW9D	SW2	SW7	SW9
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Silica*	mg/L	0.20	13	17	13	22	9.2

Dissolved Low Level Metals (Water)

Envirolab ID	Units	PQL	PFI1388-01	PFI1388-02	PFI1388-03	PFI1388-04	PFI1388-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Arsenic	µg/L	1.0	<1.0	<1.0	1.6	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	1.0	2.6	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	4.9	<1.0	4.5
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	2.1	4.2	1.2	1.4
Lead	µg/L	1.0	<1.0	<1.0	12	1.6	<1.0
Zinc	µg/L	1.0	11	3.5	5.0	1.7	11

Envirolab ID	Units	PQL	PFI1388-06	PFI1388-07	PFI1388-08	PFI1388-09	PFI1388-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10S
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	1.2	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	1.5	<1.0	7.0	13	4.2
Copper	µg/L	1.0	2.4	<1.0	5.6	7.6	2.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	0.24 [4]	<0.050
Nickel	µg/L	1.0	2.8	3.0	4.5	7.8	1.2
Lead	µg/L	1.0	2.6	11	4.6	6.6	1.8
Zinc	µg/L	1.0	18	2.3	2.3	3.5	2.0

Envirolab ID	Units	PQL	PFI1388-11	PFI1388-12	PFI1388-13	PFI1388-14	PFI1388-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Arsenic	µg/L	1.0	<1.0	1.4	<1.0	2.7	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	0.11	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	1.7	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	1.4	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	5.5	9.2	39	1.2
Lead	µg/L	1.0	<1.0	<1.0	<1.0	10	<1.0
Zinc	µg/L	1.0	2.3	19	<1.0	7.2	1.0

Envirolab ID	Units	PQL	PFI1388-16	PFI1388-17	PFI1388-18	PFI1388-19	PFI1388-20
Your Reference			GW9S	GW9D	SW2	SW7	SW9
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Arsenic	µg/L	1.0	2.5	<1.0	<1.0	2.2	2.5
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	4.6	2.7	<1.0	1.2
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.3	17	<1.0	2.1	1.9
Lead	µg/L	1.0	<1.0	<1.0	1.5	<1.0	<1.0
Zinc	µg/L	1.0	7.7	2.7	5.4	4.7	2.9

Inorganics - Physical Parameters (Water)

Envirolab ID	Units	PQL	PFI1388-01	PFI1388-02	PFI1388-03	PFI1388-04	PFI1388-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
pH	pH units		5.7	5.6	5.3	5.8	6.4
Electrical Conductivity	µS/cm	2.0	300	1800	3600	2100	1500
Total Dissolved Solids	mg/L	5.0	210	970	2000	1200	850

Envirolab ID	Units	PQL	PFI1388-06	PFI1388-07	PFI1388-08	PFI1388-09	PFI1388-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10S
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
pH	pH units		5.6	5.9	5.8	6.4	6.8
Electrical Conductivity	µS/cm	2.0	800	1800	150	900	180
Total Dissolved Solids	mg/L	5.0	410	1000	350 [1]	580	200 [1]

Envirolab ID	Units	PQL	PFI1388-11	PFI1388-12	PFI1388-13	PFI1388-14	PFI1388-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
pH	pH units		6.2	6.5	7.3	3.7	5.7
Electrical Conductivity	µS/cm	2.0	130	1200	750	1100	160
Total Dissolved Solids	mg/L	5.0	120 [1]	640	500	710	120

Envirolab ID	Units	PQL	PFI1388-16	PFI1388-17	PFI1388-18	PFI1388-19	PFI1388-20
Your Reference			GW9S	GW9D	SW2	SW7	SW9
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
pH	pH units		7.1	6.5	8.4	7.7	8.0
Electrical Conductivity	µS/cm	2.0	390	1200	1500	1100	1500
Total Dissolved Solids	mg/L	5.0	290	720	920	700	890

Inorganics - Ionic Balance and Indexes (Water)

Envirolab ID	Units	PQL	PFI1388-01	PFI1388-02	PFI1388-03	PFI1388-04	PFI1388-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	16	14	12	16	100
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	16	14	12	16	100
Chloride	mg/L	1.0	63	550	1100	560	280
Sulfate	mg/L	1.0	17	67	200	250	250
Calcium	mg/L	0.50	<0.50	4.3	48	35	65
Magnesium	mg/L	0.50	3.0	56	74	53	41
Potassium	mg/L	0.50	1.3	8.7	30	9.3	9.1
Sodium	mg/L	0.50	45	240	520	290	160
Hardness (calc) equivalent CaCO3	mg/L	3.0	14	240	420	310	330
Ionic Balance	%		-9.2	-5.5	-4.6	-5.9	-5.5
Total Anions	mg/L	7.0	96	630	1300	820	630
Anions as meq	meq/L	0.59	2.4	17	35	21	15
Total Cations	mg/L	2.0	49	310	670	380	280
Cations as meq	meq/L	0.10	2.2	16	32	19	14

Envirolab ID	Units	PQL	PFI1388-06	PFI1388-07	PFI1388-08	PFI1388-09	PFI1388-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10S
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	11	21	9.8	31	38
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	11	21	9.8	31	38
Chloride	mg/L	1.0	200	540	16	200	14
Sulfate	mg/L	1.0	15	69	13	36	9.9
Calcium	mg/L	0.50	3.4	6.8	6.1	29	6.8
Magnesium	mg/L	0.50	15	49	4.9	16	2.8
Potassium	mg/L	0.50	3.5	8.8	3.4	8.5	3.5
Sodium	mg/L	0.50	120	250	16	110	21
Hardness (calc) equivalent CaCO3	mg/L	3.0	71	220	35	140	28
Ionic Balance	%		-4.2	-5.5	13	-3.0	-1.0
Total Anions	mg/L	7.0	230	630	39	260	62
Anions as meq	meq/L	0.59	6.1	17	0.89	6.8	1.2
Total Cations	mg/L	2.0	140	310	31	160	34
Cations as meq	meq/L	0.10	6.7	15	1.5	7.7	1.6

Envirolab ID	Units	PQL	PFI1388-11	PFI1388-12	PFI1388-13	PFI1388-14	PFI1388-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	8.8	350	290	<5.0	11
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	8.8	350	290	<5.0	11
Chloride	mg/L	1.0	16	140	51	57	29
Sulfate	mg/L	1.0	6.4	130	33	430	18
Calcium	mg/L	0.50	4.6	38	110	44	1.6

Inorganics - Ionic Balance and Indexes (Water)

Envirolab ID	Units	PQL	PFI1388-11	PFI1388-12	PFI1388-13	PFI1388-14	PFI1388-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Magnesium	mg/L	0.50	2.4	68	7.4	23	2.2
Potassium	mg/L	0.50	3.6	11	7.4	8.8	1.2
Sodium	mg/L	0.50	11	96	32	93	29
Hardness (calc) equivalent CaCO3	mg/L	3.0	21	380	310	200	13
Ionic Balance	%		-4.7	-5.5	-0.97	-12	5.2
Total Anions	mg/L	7.0	32	620	380	490	58
Anions as meq	meq/L	0.59	0.74	12	7.0	11	1.4
Total Cations	mg/L	2.0	22	210	160	170	34
Cations as meq	meq/L	0.10	1.0	12	7.9	8.4	1.6

Envirolab ID	Units	PQL	PFI1388-16	PFI1388-17	PFI1388-18	PFI1388-19	PFI1388-20
Your Reference			GW9S	GW9D	SW2	SW7	SW9
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	130	68	220	250	330
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	5.8	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	130	68	230	250	330
Chloride	mg/L	1.0	21	250	300	190	250
Sulfate	mg/L	1.0	19	180	130	45	94
Calcium	mg/L	0.50	63	45	84	72	90
Magnesium	mg/L	0.50	4.3	34	34	22	33
Potassium	mg/L	0.50	3.5	18	8.2	12	16
Sodium	mg/L	0.50	14	120	180	110	170
Hardness (calc) equivalent CaCO3	mg/L	3.0	170	250	350	270	360
Ionic Balance	%		2.8	-5.0	-3.1	-4.1	-2.2
Total Anions	mg/L	7.0	170	490	660	490	670
Anions as meq	meq/L	0.59	3.2	12	15	10	14
Total Cations	mg/L	2.0	85	220	300	210	310
Cations as meq	meq/L	0.10	4.2	11	15	10	15

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Inorganics - Nutrients (Water)

Envirolab ID	Units	PQL	PFI1388-01	PFI1388-02	PFI1388-03	PFI1388-04	PFI1388-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Ammonia as N	mg/L	0.0050	0.0092	0.032	0.0054	0.0090	0.018
Nitrate as N	mg/L	0.0050	3.6	2.6	<0.0050	0.025	3.7
Nitrate as NO3 by calculation	mg/L	0.020	16	11	<0.020	0.11	16
Nitrite as N	mg/L	0.0050	0.0057	<0.0050	<0.0050	0.0064	0.021
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	0.021	0.068
NOx as N	mg/L	0.0050	3.6	2.6	<0.0050	0.031	3.7
TKN as N by calculation	mg/L	0.10	0.76	0.60	1.9	0.21	0.61
Organic Nitrogen by calc.	mg/L	0.10	0.75	0.57	1.9	0.20	0.59
Total Nitrogen	mg/L	0.10	4.3	3.2	1.9	0.24	4.3
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.0086	<0.0050	<0.0050

Envirolab ID	Units	PQL	PFI1388-06	PFI1388-07	PFI1388-08	PFI1388-09	PFI1388-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10S
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Ammonia as N	mg/L	0.0050	0.40	0.0084	0.020	0.0054	0.0059
Nitrate as N	mg/L	0.0050	15	0.56	3.4	18	3.3
Nitrate as NO3 by calculation	mg/L	0.020	66	2.5	15	80	15
Nitrite as N	mg/L	0.0050	0.017	0.0056	0.0093	<0.0050	0.0057
Nitrite as NO2 by calculation	mg/L	0.020	0.055	<0.020	0.031	<0.020	<0.020
NOx as N	mg/L	0.0050	15	0.57	3.4	18	3.3
TKN as N by calculation	mg/L	0.10	2.6	0.30	2.1	4.3	1.3
Organic Nitrogen by calc.	mg/L	0.10	2.2	0.29	2.1	4.3	1.3
Total Nitrogen	mg/L	0.10	18	0.86	5.5	22	4.7
Phosphate as P	mg/L	0.0050	0.055	<0.0050	<0.0050	2.2	<0.0050

Envirolab ID	Units	PQL	PFI1388-11	PFI1388-12	PFI1388-13	PFI1388-14	PFI1388-15
Your Reference			WG10D	MBb	GW5S	GW5D	GW8D
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Ammonia as N	mg/L	0.0050	<0.0050	3.1	0.017	0.20	<0.0050
Nitrate as N	mg/L	0.0050	4.6	0.18	0.0089	0.0055	0.094
Nitrate as NO3 by calculation	mg/L	0.020	20	0.78	0.039	0.025	0.42
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	0.0081	0.0054	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	0.027	<0.020	<0.020
NOx as N	mg/L	0.0050	4.6	0.18	0.017	0.011	0.099
TKN as N by calculation	mg/L	0.10	1.1	3.8	1.5	0.66	0.18
Organic Nitrogen by calc.	mg/L	0.10	1.1	0.69	1.4	0.46	0.17
Total Nitrogen	mg/L	0.10	5.6	3.9	1.5	0.67	0.28
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.0064	<0.0050	0.0056

Envirolab ID	Units	PQL	PFI1388-16	PFI1388-17	PFI1388-18	PFI1388-19	PFI1388-20
Your Reference			GW9S	GW9D	SW2	SW7	SW9
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
Ammonia as N	mg/L	0.0050	0.0050	<0.0050	0.011	0.047	0.021
Nitrate as N	mg/L	0.0050	4.3	0.094	1.7	<0.0050	<0.0050
Nitrate as NO3 by calculation	mg/L	0.020	19	0.42	7.7	<0.020	<0.020
Nitrite as N	mg/L	0.0050	0.0075	0.0075	0.010	0.023	0.0091
Nitrite as NO2 by calculation	mg/L	0.020	0.025	0.025	0.034	0.075	0.030
NOx as N	mg/L	0.0050	4.3	0.10	1.7	0.021	<0.0050

Inorganics - Nutrients (Water)

Envirolab ID	Units	PQL	PFI1388-16	PFI1388-17	PFI1388-18	PFI1388-19	PFI1388-20
Your Reference			GW9S	GW9D	SW2	SW7	SW9
Date Sampled			18/09/2024	18/09/2024	18/09/2024	18/09/2024	18/09/2024
TKN as N by calculation	mg/L	0.10	1.5	1.8	1.4	2.7	2.7
Organic Nitrogen by calc.	mg/L	0.10	1.5	1.8	1.4	2.7	2.7
Total Nitrogen	mg/L	0.10	5.7	1.9	3.2	2.8	2.7
Phosphate as P	mg/L	0.0050	0.028	0.025	0.035	0.18	0.16

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Certificate of Analysis PFL1466

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	15 Water
Date Samples Received	18/12/2024
Date Instructions Received	18/12/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Results Requested by	07/01/2025
Date of Issue	07/01/2025

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Authorisation Details

Results Approved By	Lien Tang, Assistant Operations Manager Lucas Yii, Inorganics Team Leader Michael Mowle, Inorganics Supervisor Todd Lee, Group Operations Manager Varsha Ho Wing, Inorganics and Metals Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PFL1466-01	WG1	Water	17/12/2024	18/12/2024
PFL1466-02	WG2D	Water	17/12/2024	18/12/2024
PFL1466-03	WG3	Water	17/12/2024	18/12/2024
PFL1466-04	WG4S	Water	17/12/2024	18/12/2024
PFL1466-05	WG4D	Water	17/12/2024	18/12/2024
PFL1466-06	WG5D	Water	17/12/2024	18/12/2024
PFL1466-07	WG6	Water	17/12/2024	18/12/2024
PFL1466-08	WG7D	Water	17/12/2024	18/12/2024
PFL1466-09	WG9	Water	17/12/2024	18/12/2024
PFL1466-10	WG10D	Water	17/12/2024	18/12/2024
PFL1466-11	MBb	Water	17/12/2024	18/12/2024
PFL1466-12	GW5D	Water	17/12/2024	18/12/2024
PFL1466-13	GW8D	Water	17/12/2024	18/12/2024
PFL1466-14	GW9S	Water	17/12/2024	18/12/2024
PFL1466-15	GW9D	Water	17/12/2024	18/12/2024

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Acid Extractable Metals (Water)

Envirolab ID	Units	PQL	PFL1466-01	PFL1466-02	PFL1466-03	PFL1466-04	PFL1466-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Phosphorus	mg/L	0.050	0.27	0.29	0.082	0.065	0.13

Envirolab ID	Units	PQL	PFL1466-06	PFL1466-07	PFL1466-08	PFL1466-09	PFL1466-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Phosphorus	mg/L	0.050	0.11	0.052	0.055	4.6	<0.050

Envirolab ID	Units	PQL	PFL1466-11	PFL1466-12	PFL1466-13	PFL1466-14	PFL1466-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Phosphorus	mg/L	0.050	0.072	0.054	<0.050	0.11	0.090

Dissolved Low Level Metals (Water)

Envirolab ID	Units	PQL	PFL1466-01	PFL1466-02	PFL1466-03	PFL1466-04	PFL1466-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Arsenic	µg/L	1.0	<1.0	2.3	2.4	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	4.7	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	5.1
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	3.4	6.5	1.3	1.4
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	12	6.1	2.1	3.1	14

Envirolab ID	Units	PQL	PFL1466-06	PFL1466-07	PFL1466-08	PFL1466-09	PFL1466-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	2.3	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	8.0	<1.0
Copper	µg/L	1.0	1.7	<1.0	2.1	13	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	0.70	<0.050
Nickel	µg/L	1.0	2.3	4.2	1.3	7.4	<1.0
Lead	µg/L	1.0	<1.0	4.1	<1.0	7.6	<1.0
Zinc	µg/L	1.0	20	2.3	1.7	6.0	1.4

Envirolab ID	Units	PQL	PFL1466-11	PFL1466-12	PFL1466-13	PFL1466-14	PFL1466-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Arsenic	µg/L	1.0	5.8	<1.0	<1.0	4.1	1.4
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	1.5	<1.0	2.3	2.6
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	3.7	9.8	<1.0	1.7	11
Lead	µg/L	1.0	<1.0	2.1	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	21	4.1	1.2	7.1	5.4

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Inorganics - Physical Parameters (Water)

Envirolab ID	Units	PQL	PFL1466-01	PFL1466-02	PFL1466-03	PFL1466-04	PFL1466-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
pH	pH units		5.8	5.8	5.6	6.0	6.2
Electrical Conductivity	µS/cm	2.0	190	3400	1500	2100	1700

Envirolab ID	Units	PQL	PFL1466-06	PFL1466-07	PFL1466-08	PFL1466-09	PFL1466-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
pH	pH units		5.5	6.1	6.5	6.6	6.5
Electrical Conductivity	µS/cm	2.0	830	2000	820	640	120

Envirolab ID	Units	PQL	PFL1466-11	PFL1466-12	PFL1466-13	PFL1466-14	PFL1466-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
pH	pH units		6.3	3.8	5.7	7.0	6.7
Electrical Conductivity	µS/cm	2.0	760	620	170	520	720

Inorganics - Ionic Balance and Indexes (Water)

Envirolab ID	Units	PQL	PFL1466-01	PFL1466-02	PFL1466-03	PFL1466-04	PFL1466-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Calcium	mg/L	0.50	<0.50	2.8	9.2	37	68
Magnesium	mg/L	0.50	3.3	110	25	55	48
Potassium	mg/L	0.50	1.5	15	22	12	14
Sodium	mg/L	0.50	31	490	230	290	210
Hardness (calc) equivalent CaCO3	mg/L	3.0	14	470	130	320	370

Envirolab ID	Units	PQL	PFL1466-06	PFL1466-07	PFL1466-08	PFL1466-09	PFL1466-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Calcium	mg/L	0.50	2.8	7.2	20	17	4.2
Magnesium	mg/L	0.50	14	54	18	13	2.6
Potassium	mg/L	0.50	5.8	11	6.9	9.9	5.6
Sodium	mg/L	0.50	120	280	110	95	12
Hardness (calc) equivalent CaCO3	mg/L	3.0	64	240	120	96	21

Envirolab ID	Units	PQL	PFL1466-11	PFL1466-12	PFL1466-13	PFL1466-14	PFL1466-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Calcium	mg/L	0.50	7.2	16	0.74	65	19
Magnesium	mg/L	0.50	31	11	1.4	5.4	17
Potassium	mg/L	0.50	8.3	8.6	0.97	8.0	13
Sodium	mg/L	0.50	98	69	29	37	94
Hardness (calc) equivalent CaCO3	mg/L	3.0	140	84	7.7	180	120

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Inorganics - Nutrients (Water)

Envirolab ID	Units	PQL	PFL1466-01	PFL1466-02	PFL1466-03	PFL1466-04	PFL1466-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Ammonia as N	mg/L	0.0050	0.019	0.0062	0.024	0.019	0.026
Nitrate as N	mg/L	0.0050	1.0	<0.0050	<0.050	0.025	0.77
Nitrate as NO3 by calculation	mg/L	0.020	4.5	<0.020	<0.20	0.11	3.4
Nitrite as N	mg/L	0.0050	0.031	<0.0050	<0.050	<0.0050	0.0096
Nitrite as NO2 by calculation	mg/L	0.020	0.10	<0.020	<0.20	<0.020	0.032
NOx as N	mg/L	0.0050	1.1	<0.0050	<0.050	0.027	0.78
TKN as N by calculation	mg/L	0.10	0.18	0.36	1.7	0.16	0.38
Organic Nitrogen by calc.	mg/L	0.10	0.16	0.35	1.7	0.14	0.35
Total Nitrogen	mg/L	0.10	1.2	0.36	1.7	0.19	1.2
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.017	<0.0050	<0.0050

Envirolab ID	Units	PQL	PFL1466-06	PFL1466-07	PFL1466-08	PFL1466-09	PFL1466-10
Your Reference			WG5D	WG6	WG7D	WG9	WG10D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Ammonia as N	mg/L	0.0050	0.023	0.025	0.029	0.28	0.031
Nitrate as N	mg/L	0.0050	14	1.6	5.3	7.3	2.8
Nitrate as NO3 by calculation	mg/L	0.020	60	7.0	23	32	13
Nitrite as N	mg/L	0.0050	0.0054	<0.0050	<0.0050	<0.050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.20	<0.020
NOx as N	mg/L	0.0050	14	1.6	5.3	7.4	2.8
TKN as N by calculation	mg/L	0.10	<0.10	0.18	0.55	4.1	0.23
Organic Nitrogen by calc.	mg/L	0.10	<0.10	0.15	0.52	3.8	0.20
Total Nitrogen	mg/L	0.10	13	1.8	5.8	11	3.1
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	0.0051	4.0	<0.0050

Envirolab ID	Units	PQL	PFL1466-11	PFL1466-12	PFL1466-13	PFL1466-14	PFL1466-15
Your Reference			MBb	GW5D	GW8D	GW9S	GW9D
Date Sampled			17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Ammonia as N	mg/L	0.0050	0.078	0.24	0.034	0.029	0.11
Nitrate as N	mg/L	0.0050	0.0070	0.0085	0.074	4.6	0.087
Nitrate as NO3 by calculation	mg/L	0.020	0.031	0.038	0.33	20	0.39
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.047	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	0.16	<0.020
NOx as N	mg/L	0.0050	0.0081	0.011	0.078	4.6	0.090
TKN as N by calculation	mg/L	0.10	0.32	0.52	<0.10	0.18	0.83
Organic Nitrogen by calc.	mg/L	0.10	0.25	0.28	<0.10	0.15	0.72
Total Nitrogen	mg/L	0.10	0.33	0.53	0.17	4.8	0.92
Phosphate as P	mg/L	0.0050	<0.0050	0.0068	0.0054	0.054	0.033

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Certificate of Analysis PGC1284

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	14 Groundwater
Date Samples Received	19/03/2025
Date Instructions Received	19/03/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Results Requested by	27/03/2025
Date of Issue	27/03/2025

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Authorisation Details

Results Approved By	Ben Carpenter, Metals Technician Lien Tang, Assistant Operations Manager Lucas Yii, Inorganics Team Leader Michael Mowle, Development Chemist - Inorganics and Metals
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PGC1284-01	WG1	Groundwater	19/03/2025	19/03/2025
PGC1284-02	WG2D	Groundwater	19/03/2025	19/03/2025
PGC1284-03	WG3	Groundwater	19/03/2025	19/03/2025
PGC1284-04	WG4S	Groundwater	19/03/2025	19/03/2025
PGC1284-05	WG4D	Groundwater	19/03/2025	19/03/2025
PGC1284-06	WG5D	Groundwater	19/03/2025	19/03/2025
PGC1284-07	WG6	Groundwater	19/03/2025	19/03/2025
PGC1284-08	WG7D	Groundwater	19/03/2025	19/03/2025
PGC1284-09	WG10D	Groundwater	19/03/2025	19/03/2025
PGC1284-10	MBb	Groundwater	19/03/2025	19/03/2025
PGC1284-11	GW5D	Groundwater	19/03/2025	19/03/2025
PGC1284-12	GW8D	Groundwater	19/03/2025	19/03/2025
PGC1284-13	GW9S	Groundwater	19/03/2025	19/03/2025
PGC1284-14	GW9D	Groundwater	19/03/2025	19/03/2025

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Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PGC1284-01	PGC1284-02	PGC1284-03	PGC1284-04	PGC1284-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Phosphorus	mg/L	0.050	<0.050	0.18	<0.050	<0.050	<0.050

Envirolab ID	Units	PQL	PGC1284-06	PGC1284-07	PGC1284-08	PGC1284-09	PGC1284-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050

Envirolab ID	Units	PQL	PGC1284-11	PGC1284-12	PGC1284-13	PGC1284-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025
Phosphorus	mg/L	0.050	<0.050	<0.050	0.23	0.055

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Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PGC1284-01	PGC1284-02	PGC1284-03	PGC1284-04	PGC1284-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Silica*	mg/L	0.20	19	43	54	7.0	11

Envirolab ID	Units	PQL	PGC1284-06	PGC1284-07	PGC1284-08	PGC1284-09	PGC1284-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Silica*	mg/L	0.20	20	30	19	13	12

Envirolab ID	Units	PQL	PGC1284-11	PGC1284-12	PGC1284-13	PGC1284-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025
Silica*	mg/L	0.20	46	22	14	19

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PGC1284-01	PGC1284-02	PGC1284-03	PGC1284-04	PGC1284-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Arsenic	µg/L	1.0	<1.0	1.0	3.5	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	0.16	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	3.4	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	1.2	<1.0	2.9
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	5.8	7.9	<1.0	1.5
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	8.2	12	9.7	7.0	25

Envirolab ID	Units	PQL	PGC1284-06	PGC1284-07	PGC1284-08	PGC1284-09	PGC1284-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	1.6
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	1.9	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.8	4.1	1.9	<1.0	4.1
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	18	11	2.0	3.8	16

Envirolab ID	Units	PQL	PGC1284-11	PGC1284-12	PGC1284-13	PGC1284-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025
Arsenic	µg/L	1.0	<1.0	<1.0	7.3	1.3
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	<1.0	2.7	2.2
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	16	<1.0	2.3	5.3
Lead	µg/L	1.0	3.4	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	4.3	1.0	4.0	3.4

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Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PGC1284-01	PGC1284-02	PGC1284-03	PGC1284-04	PGC1284-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Total Dissolved Solids	mg/L	5.0	87	2300	2200	1100	1400

Envirolab ID	Units	PQL	PGC1284-06	PGC1284-07	PGC1284-08	PGC1284-09	PGC1284-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Total Dissolved Solids	mg/L	5.0	440	2000	400	110	860

Envirolab ID	Units	PQL	PGC1284-11	PGC1284-12	PGC1284-13	PGC1284-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025
Total Dissolved Solids	mg/L	5.0	490	120	290	320

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PGC1284-01	PGC1284-02	PGC1284-03	PGC1284-04	PGC1284-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	15	29	17	15	40
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	15	29	17	15	40
Chloride	mg/L	1.0	21	1300	1200	540	610
Sulfate	mg/L	1.0	15	150	200	250	310
Calcium	mg/L	0.50	0.67	8.4	43	45	91
Magnesium	mg/L	0.50	5.4	140	82	53	64
Potassium	mg/L	0.50	1.4	14	25	11	14
Sodium	mg/L	0.50	32	580	580	270	300
Hardness (calc) equivalent CaCO3	mg/L	3.0	24	580	440	330	490
Ionic Balance	%		15	-5.6	-4.3	-4.7	-2.6
Total Anions	mg/L	7.0	51	1500	1400	800	960
Anions as meq	meq/L	0.59	1.2	41	38	21	24
Total Cations	mg/L	2.0	40	740	730	380	470
Cations as meq	meq/L	0.10	1.9	37	35	19	23

Envirolab ID	Units	PQL	PGC1284-06	PGC1284-07	PGC1284-08	PGC1284-09	PGC1284-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	14	28	27	13	320
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	14	28	27	13	320
Chloride	mg/L	1.0	210	1100	120	14	220
Sulfate	mg/L	1.0	15	170	83	6.6	180
Calcium	mg/L	0.50	3.4	15	11	3.8	38
Magnesium	mg/L	0.50	15	120	14	3.2	82
Potassium	mg/L	0.50	3.8	10	5.0	4.6	12
Sodium	mg/L	0.50	120	480	83	12	160
Hardness (calc) equivalent CaCO3	mg/L	3.0	70	520	86	23	430
Ionic Balance	%		-3.4	-3.5	-3.7	1.2	-0.80
Total Anions	mg/L	7.0	240	1300	230	33	720
Anions as meq	meq/L	0.59	6.4	34	5.7	0.74	15
Total Cations	mg/L	2.0	150	630	110	24	290
Cations as meq	meq/L	0.10	6.9	32	5.5	1.1	16

Envirolab ID	Units	PQL	PGC1284-11	PGC1284-12	PGC1284-13	PGC1284-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	10	130	88
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	10	130	88
Chloride	mg/L	1.0	55	28	51	100
Sulfate	mg/L	1.0	260	18	26	47
Calcium	mg/L	0.50	20	<0.50	46	18

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PGC1284-11	PGC1284-12	PGC1284-13	PGC1284-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025
Magnesium	mg/L	0.50	16	1.3	10	14
Potassium	mg/L	0.50	8.1	0.72	9.5	9.9
Sodium	mg/L	0.50	76	26	32	72
Hardness (calc) equivalent CaCO3	mg/L	3.0	110	5.7	160	100
Ionic Balance	%		-8.3	-4.6	1.3	-2.0
Total Anions	mg/L	7.0	310	56	210	240
Anions as meq	meq/L	0.59	6.9	1.3	4.1	5.4
Total Cations	mg/L	2.0	120	28	97	110
Cations as meq	meq/L	0.10	5.8	1.2	4.8	5.5

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PGC1284-01	PGC1284-02	PGC1284-03	PGC1284-04	PGC1284-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Ammonia as N	mg/L	0.0050	0.012	<0.0050	<0.0050	<0.0050	0.014
Nitrate as N	mg/L	0.0050	2.9	0.022	<0.050 [3]	0.0074	0.038
Nitrate as NO3 by calculation	mg/L	0.020	13	0.099	<0.20 [3]	0.033	0.17
Nitrite as N	mg/L	0.0050	0.0054	<0.0050	<0.050 [3]	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.20 [3]	<0.020	<0.020
NOx as N	mg/L	0.0050	2.9	0.023	<0.050 [3]	0.0074	0.038
TKN as N by calculation	mg/L	0.10	0.61	1.6	1.5	0.30	0.48
Organic Nitrogen by calc.	mg/L	0.10	0.59	1.6	1.4	0.30	0.46
Total Nitrogen	mg/L	0.10	3.5	1.6	1.5	0.31	0.52
Phosphate as P	mg/L	0.0050	<0.0050	0.0079	0.020	<0.0050	<0.0050

Envirolab ID	Units	PQL	PGC1284-06	PGC1284-07	PGC1284-08	PGC1284-09	PGC1284-10
Your Reference			WG5D	WG6	WG7D	WG10D	MBb
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025	19/03/2025
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	1.3
Nitrate as N	mg/L	0.0050	13	2.4	1.9	4.2	<0.050 [3]
Nitrate as NO3 by calculation	mg/L	0.020	57	10	8.5	19	<0.20 [3]
Nitrite as N	mg/L	0.0050	<0.0050	0.017	<0.0050	<0.0050	<0.050 [3]
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	0.057	<0.020	<0.020	<0.20 [3]
NOx as N	mg/L	0.0050	13	2.4	1.9	4.2	0.061
TKN as N by calculation	mg/L	0.10	1.3	0.52	0.43	0.85	2.0
Organic Nitrogen by calc.	mg/L	0.10	1.3	0.52	0.43	0.85	0.68
Total Nitrogen	mg/L	0.10	14	2.9	2.4	5.1	2.1
Phosphate as P	mg/L	0.0050	<0.0050	0.0054	0.0052	0.018	<0.0050

Envirolab ID	Units	PQL	PGC1284-11	PGC1284-12	PGC1284-13	PGC1284-14
Your Reference			GW5D	GW8D	GW9S	GW9D
Date Sampled			19/03/2025	19/03/2025	19/03/2025	19/03/2025
Ammonia as N	mg/L	0.0050	0.17	<0.0050	0.010	0.010
Nitrate as N	mg/L	0.0050	0.0053	0.045	0.41	0.045
Nitrate as NO3 by calculation	mg/L	0.020	0.023	0.20	1.8	0.20
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	0.0062	0.045	0.41	0.047
TKN as N by calculation	mg/L	0.10	0.72	0.13	0.69	0.69
Organic Nitrogen by calc.	mg/L	0.10	0.56	0.13	0.68	0.68
Total Nitrogen	mg/L	0.10	0.73	0.17	1.1	0.73
Phosphate as P	mg/L	0.0050	<0.0050	0.0087	0.17	0.055

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Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Unit 1 387 Hay Street, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	9 Groundwater
Date Samples Received	19/06/2025
Date Instructions Received	19/06/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Final Results Expected	26/06/2025
Date of Issue	26/06/2025

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Authorisation Details

Results Approved By	Lien Tang, Assistant Operations Manager Lucas Yii, Inorganics Team Leader Michael Mowle, Development Chemist - Inorganics and Metals Varsha Ho Wing, Inorganics and Metals Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PGF1241-01	WG1	Groundwater	18/06/2025	19/06/2025
PGF1241-02	WG2D	Groundwater	18/06/2025	19/06/2025
PGF1241-03	WG3	Groundwater	18/06/2025	19/06/2025
PGF1241-04	WG4S	Groundwater	18/06/2025	19/06/2025
PGF1241-05	WG4D	Groundwater	18/06/2025	19/06/2025
PGF1241-06	WG5D	Groundwater	18/06/2025	19/06/2025
PGF1241-07	WG6	Groundwater	18/06/2025	19/06/2025
PGF1241-08	WG7D	Groundwater	18/06/2025	19/06/2025
PGF1241-09	WG10D	Groundwater	18/06/2025	19/06/2025

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Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PGF1241-01	PGF1241-02	PGF1241-03	PGF1241-04	PGF1241-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Phosphorus	mg/L	0.050	0.14	0.20	0.093	<0.050	<0.050

Envirolab ID	Units	PQL	PGF1241-06	PGF1241-07	PGF1241-08	PGF1241-09
Your Reference			WG5D	WG6	WG7D	WG10D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025
Phosphorus	mg/L	0.050	<0.050	0.19	<0.050	<0.050

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Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PGF1241-01	PGF1241-02	PGF1241-03	PGF1241-04	PGF1241-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Silica*	mg/L	0.20	28	31	52	9.0	15

Envirolab ID	Units	PQL	PGF1241-06	PGF1241-07	PGF1241-08	PGF1241-09
Your Reference			WG5D	WG6	WG7D	WG10D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025
Silica*	mg/L	0.20	44	29	23	11

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PGF1241-01	PGF1241-02	PGF1241-03	PGF1241-04	PGF1241-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Arsenic	µg/L	1.0	<1.0	2.2	5.4	<1.0	2.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	3.8	<1.0	<1.0
Copper	µg/L	1.0	1.3	<1.0	<1.0	<1.0	1.1
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	1.2	4.4	1.3	1.4
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	6.9	<1.0	12	2.0	5.8

Envirolab ID	Units	PQL	PGF1241-06	PGF1241-07	PGF1241-08	PGF1241-09
Your Reference			WG5D	WG6	WG7D	WG10D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	1.2	<1.0	<1.0	<1.0
Copper	µg/L	1.0	2.2	1.1	1.2	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	1.3	3.8	1.9	<1.0
Lead	µg/L	1.0	<1.0	20	<1.0	<1.0
Zinc	µg/L	1.0	6.4	5.4	2.0	3.7

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Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PGF1241-01	PGF1241-02	PGF1241-03	PGF1241-04	PGF1241-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Total Dissolved Solids	mg/L	5.0	120	1100	5200	1500	1700

Envirolab ID	Units	PQL	PGF1241-06	PGF1241-07	PGF1241-08	PGF1241-09
Your Reference			WG5D	WG6	WG7D	WG10D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025
Total Dissolved Solids	mg/L	5.0	460	2000	370	130

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PGF1241-01	PGF1241-02	PGF1241-03	PGF1241-04	PGF1241-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	30	64	110	22	39
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	30	64	110	22	39
Chloride	mg/L	1.0	32	730	3000	700	750
Sulfate	mg/L	1.0	14	54	230	300	380
Calcium	mg/L	0.50	<0.50	9.5	89	58	100
Magnesium	mg/L	0.50	1.2	63	170	67	76
Potassium	mg/L	0.50	3.9	13	43	10	16
Sodium	mg/L	0.50	29	260	1300	290	340
Hardness (calc) equivalent CaCO3	mg/L	3.0	6.0	280	930	420	580
Ionic Balance	%		-11	-14	-9.9	-11	-5.9
Total Anions	mg/L	7.0	77	850	3400	1000	1200
Anions as meq	meq/L	0.59	1.7	23	92	26	30
Total Cations	mg/L	2.0	34	350	1600	430	530
Cations as meq	meq/L	0.10	1.5	18	76	21	27

Envirolab ID	Units	PQL	PGF1241-06	PGF1241-07	PGF1241-08	PGF1241-09
Your Reference			WG5D	WG6	WG7D	WG10D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	12	20	24	9.6
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	12	20	24	9.6
Chloride	mg/L	1.0	230	1100	130	27
Sulfate	mg/L	1.0	15	180	88	6.8
Calcium	mg/L	0.50	3.3	19	13	6.9
Magnesium	mg/L	0.50	14	140	20	4.3
Potassium	mg/L	0.50	3.9	9.3	5.5	4.6
Sodium	mg/L	0.50	110	400	110	16
Hardness (calc) equivalent CaCO3	mg/L	3.0	67	640	110	35
Ionic Balance	%		-12	-8.7	9.1	-4.0
Total Anions	mg/L	7.0	260	1300	240	43
Anions as meq	meq/L	0.59	7.1	35	5.9	1.1
Total Cations	mg/L	2.0	130	570	150	32
Cations as meq	meq/L	0.10	6.2	30	7.1	1.5

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PGF1241-01	PGF1241-02	PGF1241-03	PGF1241-04	PGF1241-05
Your Reference			WG1	WG2D	WG3	WG4S	WG4D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Ammonia as N	mg/L	0.0050	0.046	0.15	0.072	0.063	0.032
Nitrate as N	mg/L	0.0050	0.65	0.50	0.14	0.039	0.031
Nitrate as NO3 by calculation	mg/L	0.020	2.9	2.2	0.62	0.17	0.14
Nitrite as N	mg/L	0.0050	0.0091	<0.050 [3]	<0.050 [3]	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	0.030	<0.20 [3]	<0.20 [3]	<0.020	<0.020
NOx as N	mg/L	0.0050	0.62	0.50	0.15	0.043	0.035
TKN as N by calculation	mg/L	0.10	2.5	13	3.4	0.34	0.35
Organic Nitrogen by calc.	mg/L	0.10	2.5	13	3.3	0.28	0.32
Total Nitrogen	mg/L	0.10	3.1	13	3.5	0.38	0.39
Phosphate as P	mg/L	0.0050	<0.0050	<0.050 [3]	0.037	<0.0050	<0.0050

Envirolab ID	Units	PQL	PGF1241-06	PGF1241-07	PGF1241-08	PGF1241-09
Your Reference			WG5D	WG6	WG7D	WG10D
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025
Ammonia as N	mg/L	0.0050	0.045	0.026	0.040	0.037
Nitrate as N	mg/L	0.0050	11	4.2	0.46	7.7
Nitrate as NO3 by calculation	mg/L	0.020	48	18	2.0	34
Nitrite as N	mg/L	0.0050	<0.10 [3]	0.0065	0.0062	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.40 [3]	0.021	0.020	<0.020
NOx as N	mg/L	0.0050	11	4.2	0.47	7.7
TKN as N by calculation	mg/L	0.10	4.5	1.2	0.28	0.92
Organic Nitrogen by calc.	mg/L	0.10	4.4	1.2	0.24	0.88
Total Nitrogen	mg/L	0.10	15	5.4	0.75	8.6
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050

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Certificate of Analysis PGF1242

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Unit 1 387 Hay Street, SUBIACO, WA, 6008

Sample Details

Your Reference	H21003 - Wattle Grove Monitoring
Number of Samples	6 Groundwater, 2 Surface Water
Date Samples Received	19/06/2025
Date Instructions Received	19/06/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details

Date Final Results Expected	26/06/2025
Date of Issue	26/06/2025

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Authorisation Details

Results Approved By	Ben Carpenter, Metals Technician Lien Tang, Assistant Operations Manager Lucas Yii, Inorganics Team Leader Michael Mowle, Development Chemist - Inorganics and Metals Varsha Ho Wing, Inorganics and Metals Supervisor
Laboratory Manager	Michael Kubiak

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PGF1242-01	MBb	Groundwater	18/06/2025	19/06/2025
PGF1242-02	GW5S	Groundwater	18/06/2025	19/06/2025
PGF1242-03	GW5D	Groundwater	18/06/2025	19/06/2025
PGF1242-04	GW8D	Groundwater	18/06/2025	19/06/2025
PGF1242-05	GW9S	Groundwater	18/06/2025	19/06/2025
PGF1242-06	GW9D	Groundwater	18/06/2025	19/06/2025
PGF1242-07	SW2	Surface Water	18/06/2025	19/06/2025
PGF1242-08	SW9	Surface Water	18/06/2025	19/06/2025

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PGF1242-01	PGF1242-02	PGF1242-03	PGF1242-04	PGF1242-05
Your Reference			MBb	GW5S	GW5D	GW8D	GW9S
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Phosphorus	mg/L	0.050	0.058	<0.050	<0.050	<0.050	0.26

Envirolab ID	Units	PQL	PGF1242-06
Your Reference			GW9D
Date Sampled			18/06/2025
Phosphorus	mg/L	0.050	0.076

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Acid Extractable Metals (Surface Water)

Envirolab ID	Units	PQL	PGF1242-07	PGF1242-08
Your Reference			SW2	SW9
Date Sampled			18/06/2025	18/06/2025
Phosphorus	mg/L	0.050	0.11	0.21

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Dissolved Metals (Groundwater)

Envirolab ID	Units	PQL	PGF1242-01	PGF1242-02	PGF1242-03	PGF1242-04	PGF1242-05
Your Reference			MBb	GW5S	GW5D	GW8D	GW9S
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Silica*	mg/L	0.20	28	15	39	34	8.9

Envirolab ID	Units	PQL	PGF1242-06
Your Reference			GW9D
Date Sampled			18/06/2025
Silica*	mg/L	0.20	15

Certificate of Analysis PGF1242

Dissolved Metals (Surface Water)

Envirolab ID	Units	PQL	PGF1242-07	PGF1242-08
Your Reference			SW2	SW9
Date Sampled			18/06/2025	18/06/2025
Silica*	mg/L	0.20	5.9	16

Certificate of Analysis PGF1242

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PGF1242-01	PGF1242-02	PGF1242-03	PGF1242-04	PGF1242-05
Your Reference			MBb	GW5S	GW5D	GW8D	GW9S
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Arsenic	µg/L	1.0	1.8	<1.0	<1.0	<1.0	7.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	1.9	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	3.3	4.3	<1.0	<1.0	3.7
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	3.1	9.2	15	<1.0	1.9
Lead	µg/L	1.0	<1.0	<1.0	2.2	<1.0	<1.0
Zinc	µg/L	1.0	10	1.7	7.6	1.2	2.9

Envirolab ID	Units	PQL	PGF1242-06
Your Reference			GW9D
Date Sampled			18/06/2025
Arsenic	µg/L	1.0	1.6
Cadmium	µg/L	0.10	<0.10
Chromium	µg/L	1.0	<1.0
Copper	µg/L	1.0	4.5
Mercury	µg/L	0.050	<0.050
Nickel	µg/L	1.0	4.6
Lead	µg/L	1.0	<1.0
Zinc	µg/L	1.0	2.0

Certificate of Analysis PGF1242

Dissolved Low Level Metals (Surface Water)

Envirolab ID	Units	PQL	PGF1242-07	PGF1242-08
Your Reference			SW2	SW9
Date Sampled			18/06/2025	18/06/2025
Arsenic	µg/L	1.0	<1.0	2.0
Cadmium	µg/L	0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	1.2
Copper	µg/L	1.0	2.6	4.2
Mercury	µg/L	0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	2.5
Lead	µg/L	1.0	1.6	<1.0
Zinc	µg/L	1.0	8.4	11

Certificate of Analysis PGF1242

Inorganics - Physical Parameters (Groundwater)

Envirolab ID	Units	PQL	PGF1242-01	PGF1242-02	PGF1242-03	PGF1242-04	PGF1242-05
Your Reference			MBb	GW5S	GW5D	GW8D	GW9S
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Total Dissolved Solids	mg/L	5.0	890	360	480	110	170

Envirolab ID	Units	PQL	PGF1242-06
Your Reference			GW9D
Date Sampled			18/06/2025
Total Dissolved Solids	mg/L	5.0	180

Inorganics - Physical Parameters (Surface Water)

Envirolab ID	Units	PQL	PGF1242-07	PGF1242-08
Your Reference			SW2	SW9
Date Sampled			18/06/2025	18/06/2025
Total Dissolved Solids	mg/L	5.0	240	460

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PGF1242-01	PGF1242-02	PGF1242-03	PGF1242-04	PGF1242-05
Your Reference			MBb	GW5S	GW5D	GW8D	GW9S
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	320	160	<5.0	10	59
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	320	160	<5.0	10	59
Chloride	mg/L	1.0	270	84	62	29	14
Sulfate	mg/L	1.0	160	56	270	20	13
Calcium	mg/L	0.50	50	76	26	1.8	25
Magnesium	mg/L	0.50	77	4.8	14	1.7	3.1
Potassium	mg/L	0.50	13	6.7	7.4	1.5	4.4
Sodium	mg/L	0.50	130	44	72	25	20
Hardness (calc) equivalent CaCO3	mg/L	3.0	440	210	120	11	75
Ionic Balance	%		-6.7	-3.7	-12	-3.9	8.3
Total Anions	mg/L	7.0	740	300	330	59	86
Anions as meq	meq/L	0.59	16	6.2	7.3	1.4	1.6
Total Cations	mg/L	2.0	270	130	120	30	53
Cations as meq	meq/L	0.10	15	6.3	5.8	1.3	2.5

Envirolab ID	Units	PQL	PGF1242-06
Your Reference			GW9D
Date Sampled			18/06/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	42
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	42
Chloride	mg/L	1.0	32
Sulfate	mg/L	1.0	30
Calcium	mg/L	0.50	8.0
Magnesium	mg/L	0.50	5.1
Potassium	mg/L	0.50	5.3
Sodium	mg/L	0.50	27
Hardness (calc) equivalent CaCO3	mg/L	3.0	41
Ionic Balance	%		-6.4
Total Anions	mg/L	7.0	100
Anions as meq	meq/L	0.59	2.2
Total Cations	mg/L	2.0	46
Cations as meq	meq/L	0.10	2.1

Inorganics - Ionic Balance and Indexes (Surface Water)

Envirolab ID	Units	PQL	PGF1242-07	PGF1242-08
Your Reference			SW2	SW9
Date Sampled			18/06/2025	18/06/2025
Bicarbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	44	110
Carbonate Alkalinity as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0
Hydroxide OH- as CaCO3	mg/L as CaCO3	5.0	<5.0	<5.0
Total Alkalinity as CaCO3	mg/L as CaCO3	5.0	44	110
Chloride	mg/L	1.0	79	140
Sulfate	mg/L	1.0	23	75
Calcium	mg/L	0.50	21	47
Magnesium	mg/L	0.50	7.2	10
Potassium	mg/L	0.50	2.4	9.0
Sodium	mg/L	0.50	38	73
Hardness (calc) equivalent CaCO3	mg/L	3.0	82	160
Ionic Balance	%		-4.8	-7.8
Total Anions	mg/L	7.0	150	320
Anions as meq	meq/L	0.59	3.4	7.3
Total Cations	mg/L	2.0	68	140
Cations as meq	meq/L	0.10	3.3	6.6

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PGF1242-01	PGF1242-02	PGF1242-03	PGF1242-04	PGF1242-05
Your Reference			MBb	GW5S	GW5D	GW8D	GW9S
Date Sampled			18/06/2025	18/06/2025	18/06/2025	18/06/2025	18/06/2025
Ammonia as N	mg/L	0.0050	2.4	0.031	0.13	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	0.098	0.29	<0.0050	0.066	3.7
Nitrate as NO3 by calculation	mg/L	0.020	0.43	1.3	<0.020	0.29	16
Nitrite as N	mg/L	0.0050	<0.050 [3]	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.20 [3]	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	0.10	0.30	<0.0050	0.067	3.7
TKN as N by calculation	mg/L	0.10	3.5	1.6	0.46	<0.10	0.44
Organic Nitrogen by calc.	mg/L	0.10	1.1	1.6	0.33	<0.10	0.44
Total Nitrogen	mg/L	0.10	3.6	1.9	0.47	0.13	4.1
Phosphate as P	mg/L	0.0050	<0.050 [3]	0.0062	0.0062	0.0079	0.15

Envirolab ID	Units	PQL	PGF1242-06
Your Reference			GW9D
Date Sampled			18/06/2025
Ammonia as N	mg/L	0.0050	0.0097
Nitrate as N	mg/L	0.0050	0.57
Nitrate as NO3 by calculation	mg/L	0.020	2.5
Nitrite as N	mg/L	0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020
NOx as N	mg/L	0.0050	0.57
TKN as N by calculation	mg/L	0.10	0.49
Organic Nitrogen by calc.	mg/L	0.10	0.48
Total Nitrogen	mg/L	0.10	1.1
Phosphate as P	mg/L	0.0050	0.039

Inorganics - Nutrients (Surface Water)

Envirolab ID	Units	PQL	PGF1242-07	PGF1242-08
Your Reference			SW2	SW9
Date Sampled			18/06/2025	18/06/2025
Ammonia as N	mg/L	0.0050	0.0060	0.028
Nitrate as N	mg/L	0.0050	1.1	0.32
Nitrate as NO3 by calculation	mg/L	0.020	4.7	1.4
Nitrite as N	mg/L	0.0050	<0.0050	<0.050 [3]
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.20 [3]
NOx as N	mg/L	0.0050	1.1	0.37
TKN as N by calculation	mg/L	0.10	0.35	1.3
Organic Nitrogen by calc.	mg/L	0.10	0.35	1.3
Total Nitrogen	mg/L	0.10	1.4	1.7
Phosphate as P	mg/L	0.0050	0.021	0.11

APPENDIX G

Surface Water and Groundwater Quality Data Summary Sheets

H21003 Wattle Grove South Monitoring

WG1 Hyd2o Bore Wattle Grove 1

Site Bore Victoria Rd North - Rear of Lot (Install : Nov 2020)

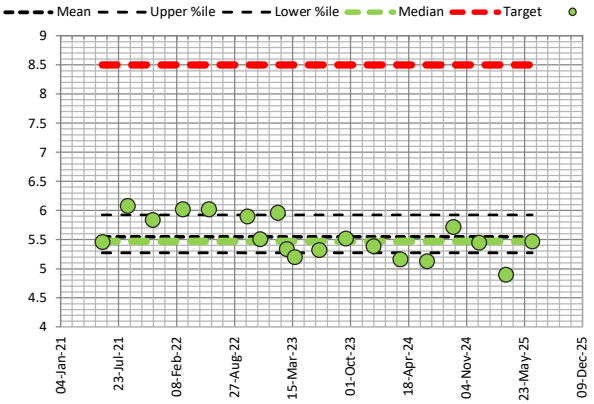
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Northing	6457800	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

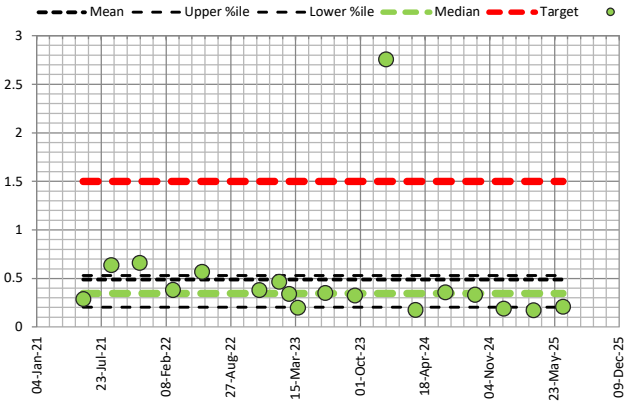
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	51	15.29	15.61	15.97	**15.96**	16.39	16.68		0
GWL mAHD	Groundwater Level	mAHD	51	15.42	15.71	16.13	**16.14**	16.49	16.81		0
T	Temperature	°C	18	18.30	19.040	22.378	**22.10**	25.200	32.000		0
EC	Electrical Conductivity	mS/cm	18	0.173	0.203	0.489	**0.347**	0.529	2.758	1.500	1
pH	pH	pH	19	4.90	5.27	5.55	**5.47**	5.92	6.08	8.50	0
DO	Dissolved Oxygen	%	17	16.10	35.56	47.40	**46.90**	59.31	89.50		0
TN	Total Nitrogen	mg/L	18	1.200	3.540	4.011	**4.150**	4.620	5.500	1.50	17
TKN	Total Kejdhal Nitrogen	mg/L	18	0.180	0.516	0.901	**0.775**	1.100	2.500		0
NO3	Nitrate	mg/L	19	0.650	2.860	3.118	**3.200**	3.640	4.700		0
NO2	Nitrite	mg/L	18	0.005	0.005	0.007	**0.005**	0.006	0.031		0
Nox	Nox	mg/L	18	0.620	2.840	3.107	**3.200**	3.660	4.800	0.10	18
NH3	Ammonia	mg/L	19	0.005	0.005	0.020	**0.010**	0.027	0.130	0.90	0
TP	Total Phosphorous	mg/L	18	0.005	0.050	0.125	**0.066**	0.172	0.400	0.06	9
FRP	Filterable Reactive Phosphrous	mg/L	19	0.005	0.005	0.020	**0.005**	0.005	0.270	0.03	1
As	Arsenic	mg/L	19	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	0
Cd	Cadmium	mg/L	18	0.00010	0.00010	0.00012	**0.00010**	0.00010	0.00045	0.00020	1
Cr	Chromium	mg/L	18	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	0
Cu	Copper	mg/L	18	0.00100	0.00100	0.00165	**0.00100**	0.00142	0.00600	0.00140	4
Pb	Lead	mg/L	18	0.00100	0.00100	0.00170	**0.00100**	0.00242	0.00550	0.00340	2
Hg	Mercury	mg/L	18	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	18	0.00100	0.00100	0.00140	**0.00100**	0.00112	0.00500	0.01100	0
Zn	Zinc	mg/L	18	0.00170	0.00376	0.00880	**0.00670**	0.01160	0.02600	0.00800	6
Cl	Chloride	mg/L	3	21.00	25.40	31.00	**32.00**	36.80	40.00		0
Ca	Calcium	mg/L	13	0.05	0.50	1.09	**0.90**	1.96	2.40		0
Mg	Magnesium	mg/L	13	1.20	3.46	4.63	**4.10**	6.00	8.30		0
K	Potassium	mg/L	13	1.30	1.44	2.02	**1.60**	2.58	3.90		0
Na	Sodium	mg/L	13	29.00	32.40	43.69	**39.00**	56.20	71.00		0
H as CaCO3	Hardness as CaCO3	mg/L	13	6.00	15.60	21.85	**21.00**	28.80	39.00		0
SiO2	Silica	mg/L	2	19.00	20.80000	23.50	**23.50**	26.20000	28.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

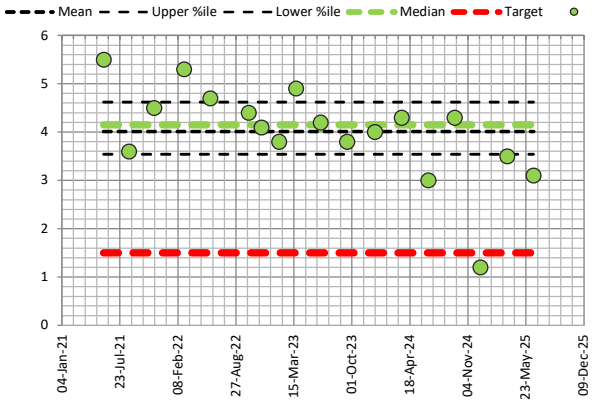
pH



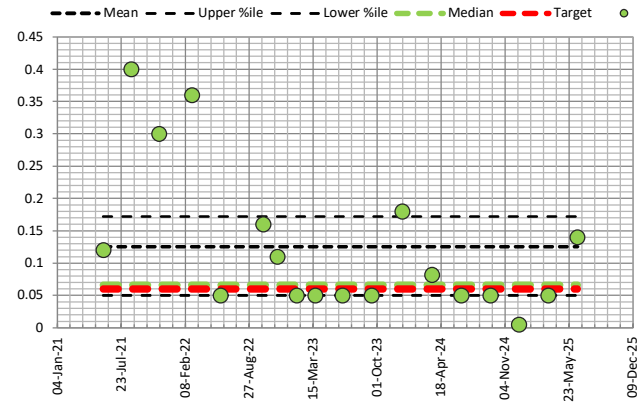
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG2 Hyd2o Bore Wattle Grove 2 (Deep)

Site Bore Victoria Rd South - Front of Lot (Install : Nov 2020)

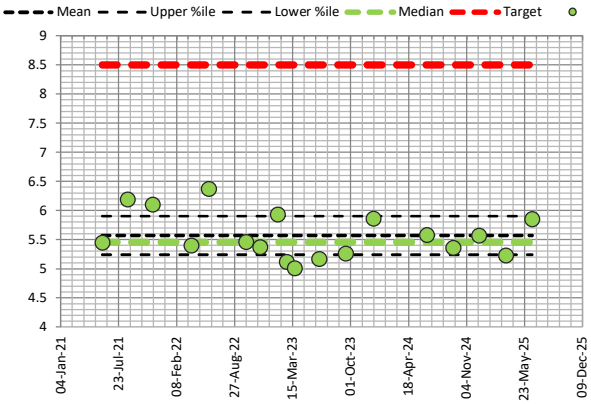
Easting	405780	Data Analysis Period Start Date	1/01/2009
Northing	6457018	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

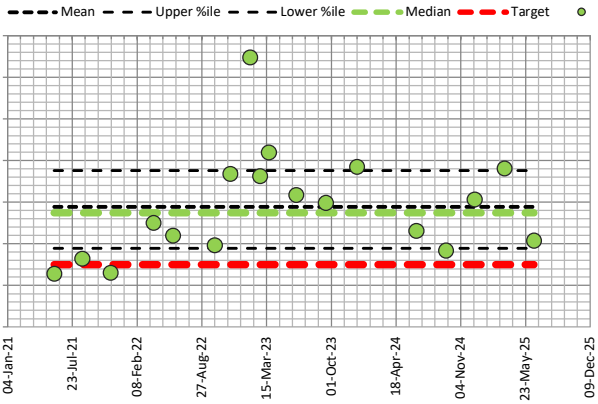
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	49	8.14	8.55	9.12	**9.20**	9.66	10.04		0
GWL mAHD	Groundwater Level	mAHD	49	16.08	16.46	17.00	**16.92**	17.56	17.98		0
T	Temperature	°C	17	15.30	19.320	21.965	**21.20**	24.780	29.800		0
EC	Electrical Conductivity	mS/cm	18	1.279	1.889	2.888	**2.742**	3.759	6.483	1.500	16
pH	pH	pH	18	5.01	5.24	5.57	**5.46**	5.90	6.37	8.50	0
DO	Dissolved Oxygen	%	17	1.30	21.52	35.41	**28.50**	57.24	83.80		0
TN	Total Nitrogen	mg/L	17	0.230	0.932	3.454	**2.200**	5.040	13.000	1.50	11
TKN	Total Kejdhal Nitrogen	mg/L	17	0.200	0.288	2.184	**0.700**	1.840	13.000		0
NO3	Nitrate	mg/L	18	0.005	0.180	1.290	**0.675**	2.200	4.300		0
NO2	Nitrite	mg/L	17	0.005	0.005	0.008	**0.005**	0.006	0.050		0
Nox	Nox	mg/L	17	0.005	0.178	1.325	**0.620**	2.200	4.300	0.10	14
NH3	Ammonia	mg/L	18	0.005	0.005	0.035	**0.010**	0.048	0.180	0.90	0
TP	Total Phosphorous	mg/L	17	0.005	0.050	0.255	**0.089**	0.196	2.200	0.06	10
FRP	Filterable Reactive Phosphrous	mg/L	18	0.005	0.005	0.028	**0.005**	0.014	0.290	0.03	3
As	Arsenic	mg/L	18	0.00100	0.00100	0.00137	**0.00100**	0.00100	0.00510	0.02400	0
Cd	Cadmium	mg/L	17	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00014	0.00020	0
Cr	Chromium	mg/L	17	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	0
Cu	Copper	mg/L	17	0.00100	0.00100	0.00178	**0.00100**	0.00194	0.01000	0.00140	5
Pb	Lead	mg/L	17	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00340	0
Hg	Mercury	mg/L	17	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	17	0.00120	0.00300	0.00528	**0.00450**	0.00734	0.01200	0.01100	1
Zn	Zinc	mg/L	17	0.00100	0.00450	0.01710	**0.01400**	0.03260	0.04400	0.00800	10
Cl	Chloride	mg/L	5	0.10	0.10	646.04	**730.00**	1220.00	1300.00		0
Ca	Calcium	mg/L	12	2.80	3.80	5.80	**5.70**	7.96	9.60		0
Mg	Magnesium	mg/L	12	63.00	84.00	113.42	**120.00**	140.00	160.00		0
K	Potassium	mg/L	12	8.90	9.76	11.97	**11.00**	13.80	19.00		0
Na	Sodium	mg/L	12	260.00	316.00	429.17	**445.00**	498.00	590.00		0
H as CaCO3	Hardness as CaCO3	mg/L	12	280.00	360.00	480.00	**505.00**	578.00	680.00		0
SiO2	Silica	mg/L	2	31.00	33.40000	37.00	**37.00**	40.60000	43.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

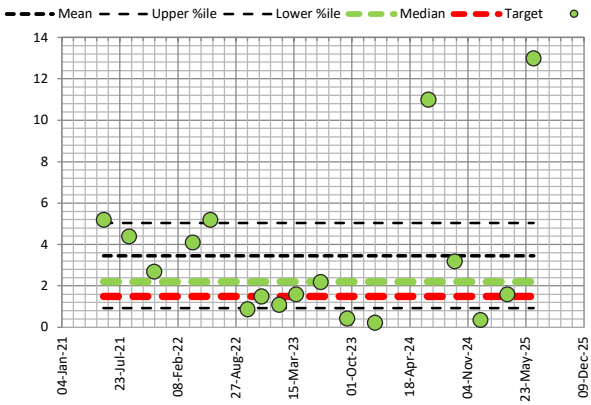
pH



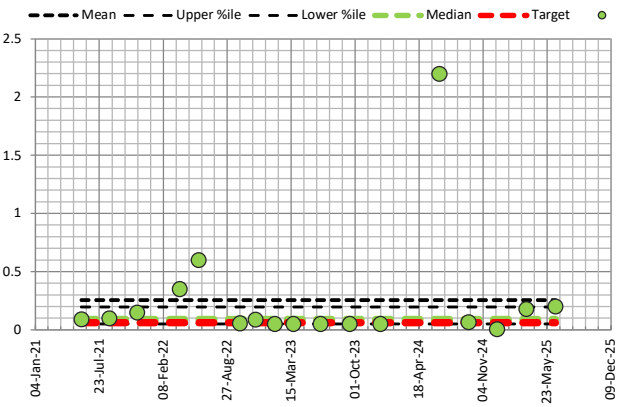
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG2S Hyd2o Bore Wattle Grove 2 Shallow

Site Bore Victoria Rd South - Front of Lot (Install : July 2022)

Easting	405781	Data Analysis Period Start Date	1/01/2009
Northing	6457018	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	3.51	3.51	3.51	**3.51**	3.51	3.53		0
GWL mAHD	Groundwater Level	mAHD	37	22.48	22.50	22.50	**22.50**	22.50	22.50		0
T	Temperature	°C	0	0.00	0.000	0.000	**0.00**	0.000	0.000		0
EC	Electrical Conductivity	mS/cm	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.500	0
pH	pH	pH	0	0.00	0.00	0.00	**0.00**	0.00	0.00	8.50	0
DO	Dissolved Oxygen	%	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
TN	Total Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.50	0
TKN	Total Kejdhal Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO3	Nitrate	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO2	Nitrite	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
Nox	Nox	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.10	0
NH3	Ammonia	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.90	0
TP	Total Phosphorous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.06	0
FRP	Filterable Reactive Phosphrous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.03	0
As	Arsenic	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.02400	0
Cd	Cadmium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00020	0
Cr	Chromium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00100	0
Cu	Copper	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00140	0
Pb	Lead	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00340	0
Hg	Mercury	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00060	0
Ni	Nickel	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.01100	0
Zn	Zinc	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00800	0
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Mg	Magnesium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
K	Potassium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Na	Sodium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
H as CaCO3	Hardness as CaCO3	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

pH

No Data

Electrical Conductivity

No Data

Total Nitrogen

No Data

Total Phosphorous

No Data

H21003 Wattle Grove South Monitoring

WG3 Hyd2o Bore Wattle Grove 3

Site Bore Brentwood Rd South - Front of Lot (Install : Nov 2020)

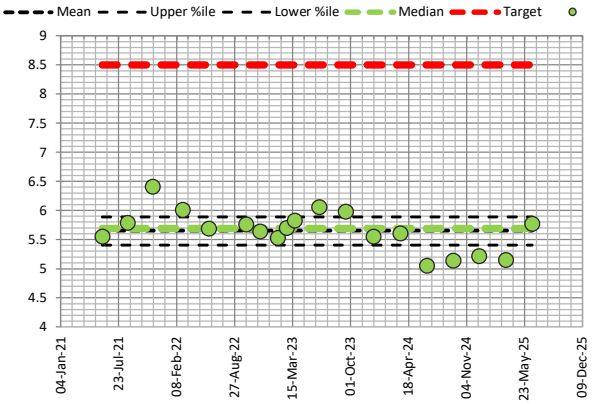
Easting	405419
Northing	6457710
Data Analysis Period Start Date	1/01/2009
Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

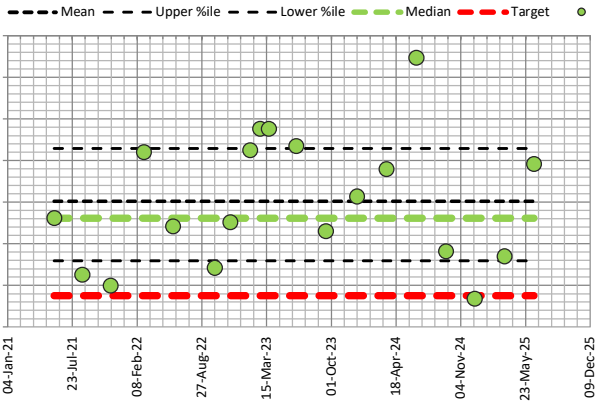
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	51	3.94	5.56	6.60	**6.73**	7.65	8.47		0
GWL mAHD	Groundwater Level	mAHD	51	14.50	15.32	16.38	**16.24**	17.41	19.03		0
T	Temperature	°C	19	18.10	18.920	21.737	**20.90**	24.480	28.300		0
EC	Electrical Conductivity	mS/cm	19	1.359	3.177	6.042	**5.233**	8.584	12.939	1.500	18
pH	pH	pH	19	5.05	5.41	5.65	**5.69**	5.89	6.41	8.50	0
DO	Dissolved Oxygen	%	18	11.80	16.98	27.06	**20.05**	38.68	61.80		0
TN	Total Nitrogen	mg/L	18	0.430	0.670	1.696	**1.200**	1.820	8.800	1.50	6
TKN	Total Kejdhal Nitrogen	mg/L	18	0.420	0.670	1.668	**1.150**	1.820	8.800		0
NO3	Nitrate	mg/L	19	0.005	0.005	0.040	**0.007**	0.050	0.210		0
NO2	Nitrite	mg/L	18	0.005	0.005	0.013	**0.005**	0.005	0.050		0
Nox	Nox	mg/L	18	0.005	0.005	0.045	**0.010**	0.050	0.210	0.10	3
NH3	Ammonia	mg/L	19	0.005	0.005	0.043	**0.011**	0.067	0.200	0.90	0
TP	Total Phosphorous	mg/L	18	0.017	0.050	0.132	**0.051**	0.145	0.850	0.06	7
FRP	Filterable Reactive Phosphrous	mg/L	19	0.005	0.005	0.017	**0.008**	0.022	0.082	0.03	3
As	Arsenic	mg/L	19	0.00100	0.00106	0.00212	**0.00190**	0.00282	0.00540	0.02400	0
Cd	Cadmium	mg/L	18	0.00010	0.00010	0.00011	**0.00010**	0.00010	0.00016	0.00020	0
Cr	Chromium	mg/L	18	0.00100	0.00100	0.00186	**0.00105**	0.00308	0.00470	0.00100	9
Cu	Copper	mg/L	18	0.00100	0.00100	0.00151	**0.00100**	0.00156	0.00490	0.00140	4
Pb	Lead	mg/L	18	0.00100	0.00100	0.00169	**0.00100**	0.00106	0.01200	0.00340	1
Hg	Mercury	mg/L	18	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	18	0.00100	0.00428	0.01216	**0.00675**	0.01000	0.09600	0.01100	3
Zn	Zinc	mg/L	18	0.00140	0.00356	0.01239	**0.00970**	0.01600	0.03800	0.00800	10
Cl	Chloride	mg/L	5	0.10	0.18	1460.06	**1200.00**	3020.00	3100.00		0
Ca	Calcium	mg/L	13	9.20	44.20	80.02	**79.00**	105.20	190.00		0
Mg	Magnesium	mg/L	13	25.00	82.40	137.23	**120.00**	192.00	330.00		0
K	Potassium	mg/L	13	20.00	24.40	32.54	**27.00**	41.80	56.00		0
Na	Sodium	mg/L	13	230.00	656.00	1053.85	**900.00**	1420.00	2200.00		0
H as CaCO3	Hardness as CaCO3	mg/L	13	130.00	448.00	764.62	**650.00**	1056.00	1800.00		0
SiO2	Silica	mg/L	2	52.00	52.40000	53.00	**53.00**	53.60000	54.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

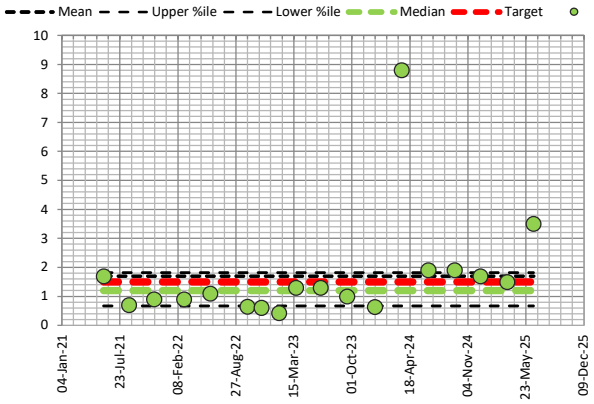
pH



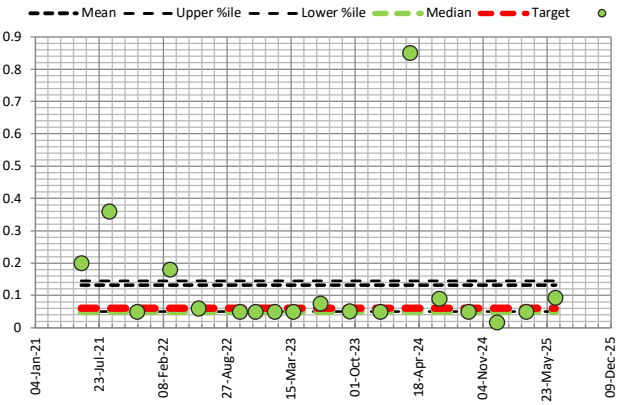
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG4D Hyd2o Bore Wattle Grove 4 Deep

Site Bore Brentwood Rd North - Front of Lot (Install : Jul 2022)

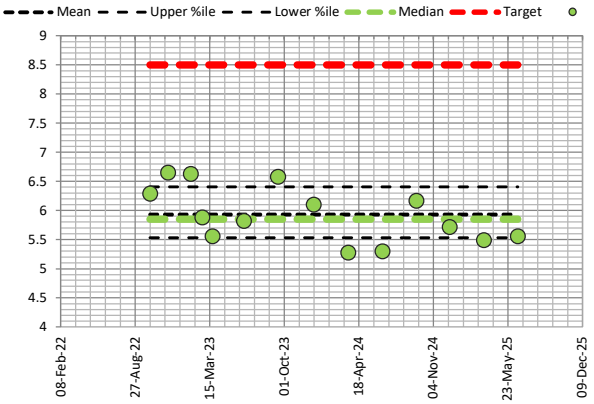
Easting	405736	Data Analysis Period Start Date	1/01/2009
Northing	6458037	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

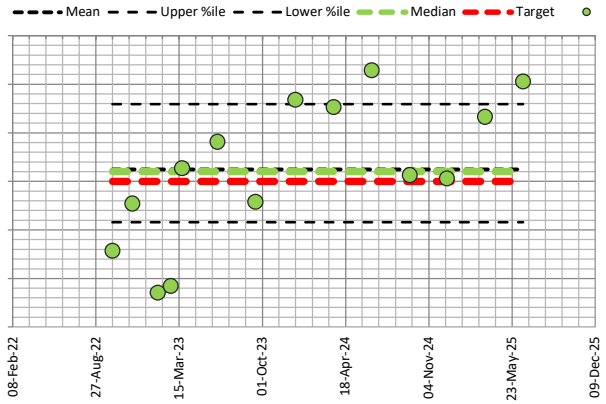
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	8.41	9.36	9.81	**9.82**	10.41	11.09		0
GWL mAHD	Groundwater Level	mAHD	37	14.64	15.32	15.92	**15.91**	16.37	17.32		0
T	Temperature	°C	14	18.40	20.880	23.900	**23.40**	25.260	33.300		0
EC	Electrical Conductivity	mS/cm	14	0.356	1.078	1.623	**1.601**	2.296	2.645	1.500	9
pH	pH	pH	14	5.28	5.53	5.93	**5.85**	6.41	6.65	8.50	0
DO	Dissolved Oxygen	%	13	13.30	18.96	30.71	**23.50**	34.56	79.40		0
TN	Total Nitrogen	mg/L	13	0.340	0.442	2.336	**1.100**	4.100	9.200	1.50	5
TKN	Total Kejdhal Nitrogen	mg/L	13	0.160	0.344	0.765	**0.480**	0.780	3.400		0
NO3	Nitrate	mg/L	14	0.005	0.035	1.503	**0.350**	2.200	8.100		0
NO2	Nitrite	mg/L	13	0.005	0.005	0.007	**0.005**	0.005	0.021		0
Nox	Nox	mg/L	13	0.005	0.036	1.589	**0.300**	2.700	8.100	0.10	7
NH3	Ammonia	mg/L	14	0.005	0.005	0.033	**0.020**	0.044	0.160	0.90	0
TP	Total Phosphorous	mg/L	13	0.005	0.050	0.057	**0.050**	0.054	0.150	0.06	2
FRP	Filterable Reactive Phosphrous	mg/L	14	0.005	0.005	0.014	**0.005**	0.005	0.130	0.03	1
As	Arsenic	mg/L	14	0.00100	0.00100	0.00107	**0.00100**	0.00100	0.00200	0.02400	0
Cd	Cadmium	mg/L	13	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00016	0.00020	0
Cr	Chromium	mg/L	13	0.00100	0.00100	0.00160	**0.00100**	0.00100	0.00880	0.00100	1
Cu	Copper	mg/L	13	0.00100	0.00100	0.00192	**0.00110**	0.00266	0.00510	0.00140	5
Pb	Lead	mg/L	13	0.00100	0.00100	0.00101	**0.00100**	0.00100	0.00110	0.00340	0
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	13	0.00100	0.00122	0.00208	**0.00150**	0.00296	0.00550	0.01100	0
Zn	Zinc	mg/L	13	0.00100	0.00584	0.00875	**0.00800**	0.01100	0.02500	0.00800	6
Cl	Chloride	mg/L	3	320.00	436.00	560.00	**610.00**	694.00	750.00		0
Ca	Calcium	mg/L	13	43.00	61.40	72.62	**70.00**	87.20	100.00		0
Mg	Magnesium	mg/L	13	21.00	33.40	48.00	**47.00**	64.60	76.00		0
K	Potassium	mg/L	13	7.80	9.64	11.94	**12.00**	14.00	16.00		0
Na	Sodium	mg/L	13	64.00	174.00	234.92	**250.00**	296.00	340.00		0
H as CaCO3	Hardness as CaCO3	mg/L	13	230.00	308.00	380.77	**360.00**	478.00	580.00		0
SiO2	Silica	mg/L	2	11.00	11.80000	13.00	**13.00**	14.20000	15.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

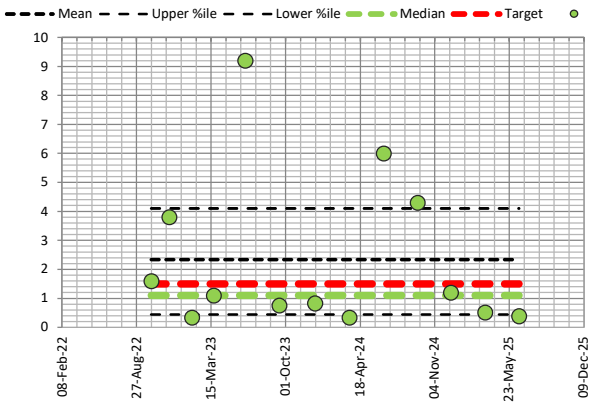
pH



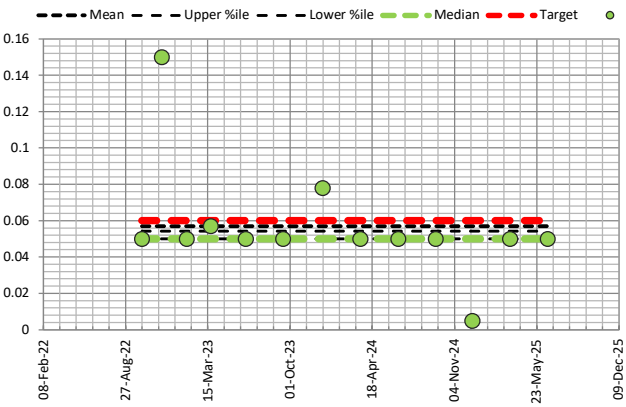
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG4S Hyd2o Bore Wattle Grove 4 Shallow

Site Bore Brentwood Rd North - Front of Lot (Install : Jul 2022)

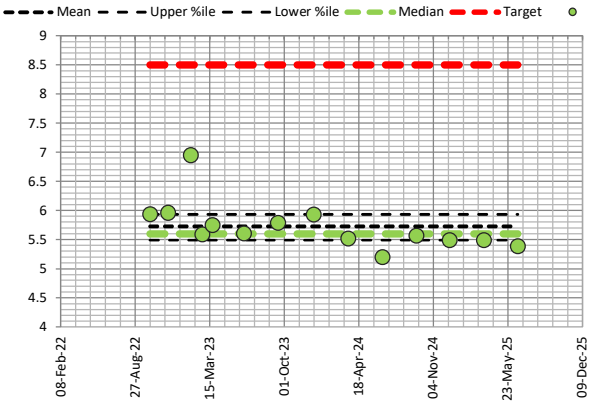
Easting	405735
Northing	6458036
Data Analysis Period Start Date	1/01/2009
Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

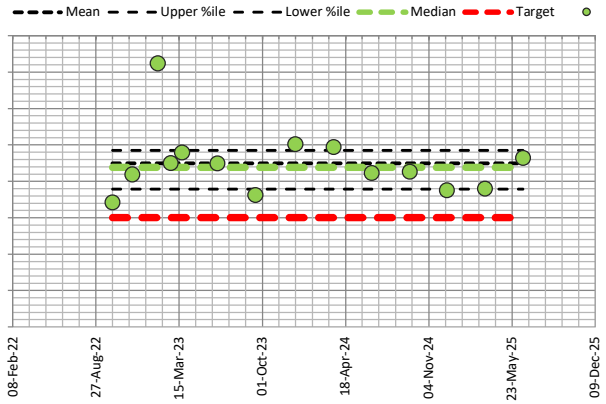
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	0.88	1.27	1.72	**1.68**	2.21	2.49		0
GWL mAHD	Groundwater Level	mAHD	37	23.17	23.45	23.94	**23.98**	24.39	24.78		0
T	Temperature	°C	14	18.20	19.780	24.779	**25.35**	28.100	36.300		0
EC	Electrical Conductivity	mS/cm	14	1.711	1.892	2.248	**2.190**	2.426	3.622	1.500	14
pH	pH	pH	14	5.20	5.49	5.73	**5.60**	5.93	6.95	8.50	0
DO	Dissolved Oxygen	%	13	-0.20	15.70	23.20	**22.70**	33.92	38.80		0
TN	Total Nitrogen	mg/L	12	0.190	0.250	1.618	**0.325**	1.116	14.000	1.50	1
TKN	Total Kejdhal Nitrogen	mg/L	12	0.160	0.162	1.378	**0.225**	0.324	14.000		0
NO3	Nitrate	mg/L	13	0.005	0.006	0.220	**0.025**	0.180	1.300		0
NO2	Nitrite	mg/L	12	0.005	0.005	0.005	**0.005**	0.005	0.006		0
Nox	Nox	mg/L	12	0.005	0.009	0.240	**0.037**	0.198	1.300	0.10	5
NH3	Ammonia	mg/L	13	0.005	0.005	0.052	**0.009**	0.060	0.320	0.90	0
TP	Total Phosphorous	mg/L	12	0.005	0.050	0.063	**0.050**	0.050	0.250	0.06	1
FRP	Filterable Reactive Phosphrous	mg/L	13	0.005	0.005	0.010	**0.005**	0.005	0.065	0.03	1
As	Arsenic	mg/L	13	0.00100	0.00100	0.00101	**0.00100**	0.00100	0.00110	0.02400	0
Cd	Cadmium	mg/L	12	0.00010	0.00010	0.00016	**0.00010**	0.00010	0.00082	0.00020	1
Cr	Chromium	mg/L	12	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	0
Cu	Copper	mg/L	12	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00140	0
Pb	Lead	mg/L	12	0.00100	0.00100	0.00105	**0.00100**	0.00100	0.00160	0.00340	0
Hg	Mercury	mg/L	12	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	12	0.00100	0.00120	0.00170	**0.00140**	0.00202	0.00380	0.01100	0
Zn	Zinc	mg/L	12	0.00130	0.00208	0.00794	**0.00305**	0.00662	0.04700	0.00800	2
Cl	Chloride	mg/L	3	480.00	504.00	573.33	**540.00**	636.00	700.00		0
Ca	Calcium	mg/L	12	27.00	35.20	40.50	**38.50**	44.40	58.00		0
Mg	Magnesium	mg/L	12	53.00	53.20	57.33	**55.50**	60.80	67.00		0
K	Potassium	mg/L	12	7.50	9.72	10.53	**10.50**	11.80	13.00		0
Na	Sodium	mg/L	12	260.00	270.00	284.17	**285.00**	298.00	310.00		0
H as CaCO3	Hardness as CaCO3	mg/L	12	280.00	312.00	337.50	**330.00**	358.00	420.00		0
SiO2	Silica	mg/L	2	7.00	7.40000	8.00	**8.00**	8.60000	9.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

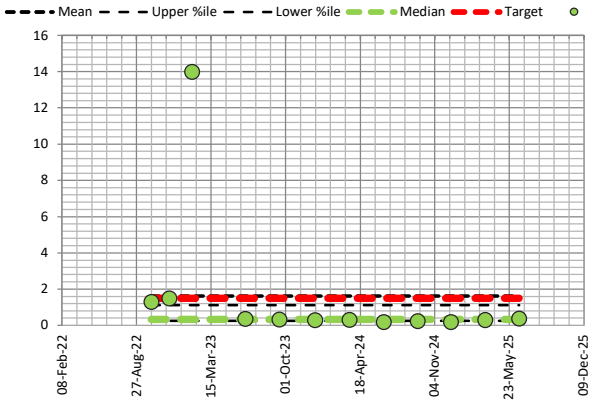
pH



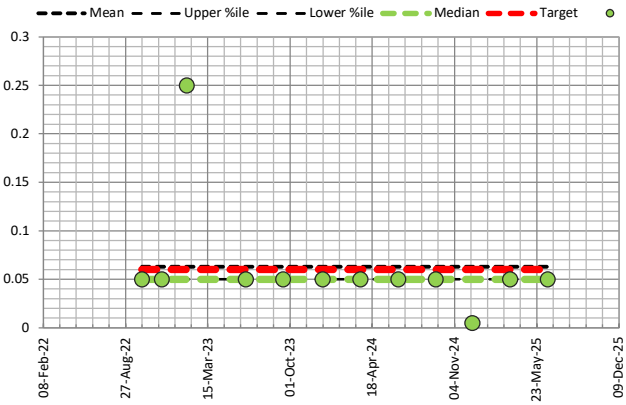
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG5D Hyd2o Bore Wattle Grove 5 Deep

Site Bore Victoria Rd North - Front of Lot (Install : Jul 2022)

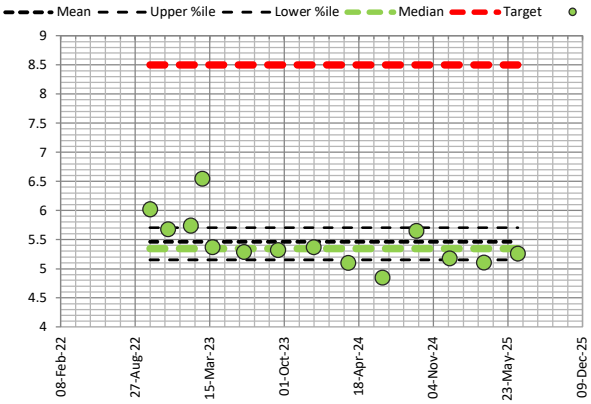
Easting	406304	Data Analysis Period Start Date	1/01/2009
Northing	6457566	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

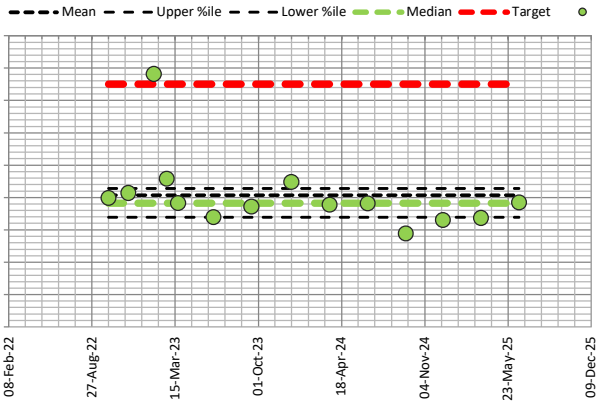
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	18.50	18.72	19.08	**19.06**	19.46	19.70		0
GWL mAHD	Groundwater Level	mAHD	37	15.43	15.67	16.05	**16.07**	16.41	16.63		0
T	Temperature	°C	14	18.60	19.860	22.857	**22.80**	24.800	30.700		0
EC	Electrical Conductivity	mS/cm	14	0.579	0.678	0.814	**0.765**	0.856	1.564	1.500	1
pH	pH	pH	14	4.85	5.15	5.46	**5.35**	5.70	6.55	8.50	0
DO	Dissolved Oxygen	%	13	24.90	37.30	55.53	**57.70**	72.78	86.50		0
TN	Total Nitrogen	mg/L	13	13.000	14.000	15.154	**15.000**	16.600	18.000	1.50	13
TKN	Total Kejdhal Nitrogen	mg/L	13	0.100	1.120	2.171	**1.800**	3.120	4.500		0
NO3	Nitrate	mg/L	14	10.000	12.000	13.071	**13.500**	14.000	15.000		0
NO2	Nitrite	mg/L	13	0.005	0.005	0.013	**0.005**	0.005	0.100		0
Nox	Nox	mg/L	13	10.000	12.400	13.154	**14.000**	14.000	15.000	0.10	13
NH3	Ammonia	mg/L	14	0.005	0.005	0.048	**0.005**	0.032	0.400	0.90	0
TP	Total Phosphorous	mg/L	13	0.005	0.050	0.073	**0.054**	0.094	0.220	0.06	5
FRP	Filterable Reactive Phosphrous	mg/L	14	0.005	0.005	0.016	**0.005**	0.005	0.110	0.03	2
As	Arsenic	mg/L	14	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	0
Cd	Cadmium	mg/L	13	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	13	0.00100	0.00100	0.00117	**0.00100**	0.00112	0.00250	0.00100	3
Cu	Copper	mg/L	13	0.00100	0.00100	0.00164	**0.00100**	0.00220	0.00420	0.00140	6
Pb	Lead	mg/L	13	0.00100	0.00100	0.00230	**0.00130**	0.00360	0.00570	0.00340	4
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	13	0.00130	0.00170	0.00269	**0.00230**	0.00286	0.00630	0.01100	0
Zn	Zinc	mg/L	13	0.00440	0.00592	0.01312	**0.01100**	0.01920	0.03000	0.00800	7
Cl	Chloride	mg/L	3	200.00	204.00	213.33	**210.00**	222.00	230.00		0
Ca	Calcium	mg/L	13	2.50	2.88	3.68	**3.60**	4.34	5.60		0
Mg	Magnesium	mg/L	13	11.00	13.00	13.77	**14.00**	14.60	17.00		0
K	Potassium	mg/L	13	2.90	3.28	3.78	**3.60**	4.08	5.80		0
Na	Sodium	mg/L	13	100.00	114.00	116.92	**120.00**	120.00	120.00		0
H as CaCO3	Hardness as CaCO3	mg/L	13	51.00	61.00	65.69	**67.00**	69.20	83.00		0
SiO2	Silica	mg/L	2	20.00	24.80000	32.00	**32.00**	39.20000	44.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

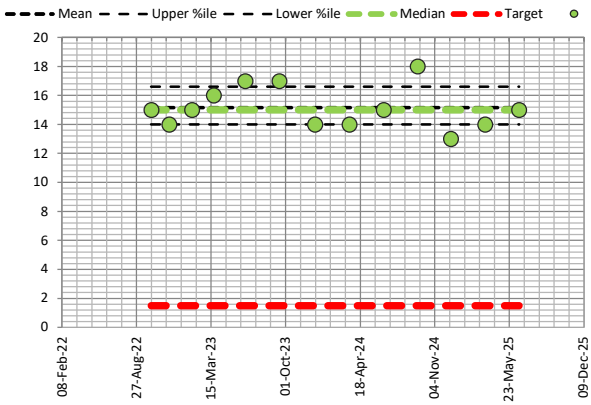
pH



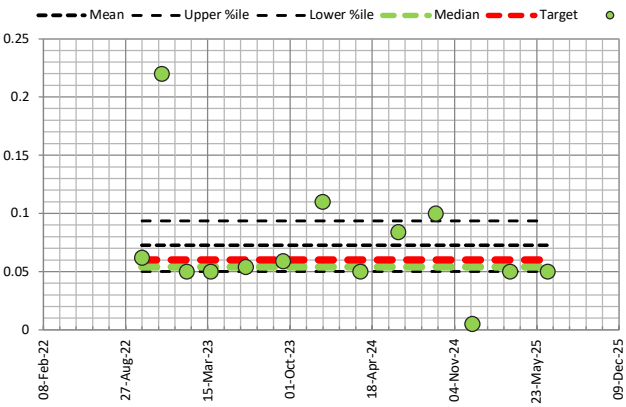
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG5S Hyd2o Bore Wattle Grove 5 Shallow

Site Bore Victoria Rd North - Front of Lot (Install : July 2022)

Easting	406304	Data Analysis Period Start Date	1/01/2009
Northing	6457567	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	5.80	5.91	5.90	**5.91**	5.91	5.91		0
GWL mAHD	Groundwater Level	mAHD	37	29.23	29.23	29.24	**29.23**	29.23	29.34		0
T	Temperature	°C	0	0.00	0.000	0.000	**0.00**	0.000	0.000		0
EC	Electrical Conductivity	mS/cm	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.500	0
pH	pH	pH	0	0.00	0.00	0.00	**0.00**	0.00	0.00	8.50	0
DO	Dissolved Oxygen	%	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
TN	Total Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.50	0
TKN	Total Kejdhal Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO3	Nitrate	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO2	Nitrite	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
Nox	Nox	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.10	0
NH3	Ammonia	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.90	0
TP	Total Phosphorous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.06	0
FRP	Filterable Reactive Phosphrous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.03	0
As	Arsenic	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.02400	0
Cd	Cadmium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00020	0
Cr	Chromium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00100	0
Cu	Copper	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00140	0
Pb	Lead	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00340	0
Hg	Mercury	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00060	0
Ni	Nickel	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.01100	0
Zn	Zinc	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00800	0
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Mg	Magnesium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
K	Potassium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Na	Sodium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
H as CaCO3	Hardness as CaCO3	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

pH

No Data

Electrical Conductivity

No Data

Total Nitrogen

No Data

Total Phosphorous

No Data

H21003 Wattle Grove South Monitoring

WG6 Hyd2o Bore Wattle Grove 6

Site Bore Victoria Rd Turf Farm North - Rear of Lot (Install : Jul 2022)

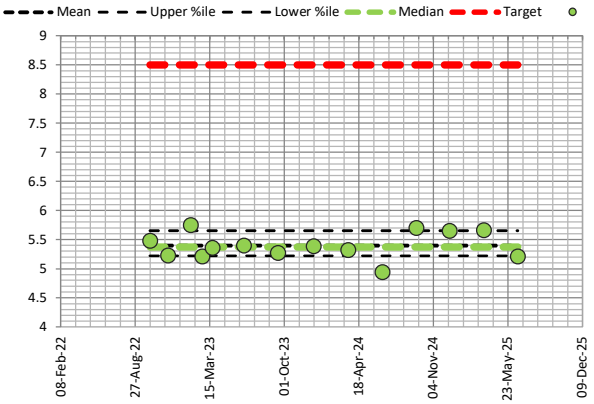
Easting	405790	Data Analysis Period Start Date	1/01/2009
Northing	6457474	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

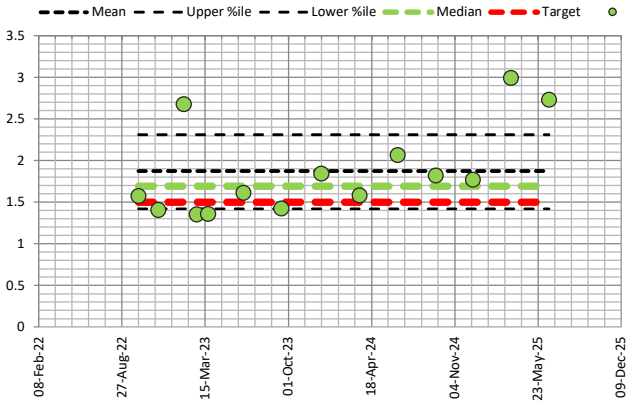
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	6.53	7.22	8.04	**7.94**	9.00	9.50		✓ 0
GWL mAHD	Groundwater Level	mAHD	37	15.84	16.34	17.30	**17.40**	18.12	18.81		✓ 0
T	Temperature	°C	14	16.70	18.820	21.450	**20.60**	23.540	28.900		✓ 0
EC	Electrical Conductivity	mS/cm	14	1.354	1.419	1.873	**1.693**	2.311	2.993	1.500	✗ 10
pH	pH	pH	14	4.94	5.22	5.40	**5.38**	5.65	5.75	8.50	✓ 0
DO	Dissolved Oxygen	%	13	15.00	31.24	40.75	**42.70**	52.76	57.60		✓ 0
TN	Total Nitrogen	mg/L	13	0.860	3.100	3.582	**3.700**	4.460	5.400	1.50	✗ 12
TKN	Total Kejdhal Nitrogen	mg/L	13	0.150	0.368	0.718	**0.630**	1.160	1.500		✓ 0
NO3	Nitrate	mg/L	14	0.560	2.200	2.897	**3.250**	3.440	4.200		✓ 0
NO2	Nitrite	mg/L	13	0.005	0.005	0.006	**0.005**	0.005	0.017		✓ 0
Nox	Nox	mg/L	13	0.570	2.100	2.867	**3.200**	3.460	4.200	0.10	✗ 13
NH3	Ammonia	mg/L	14	0.005	0.005	0.020	**0.005**	0.018	0.160	0.90	✓ 0
TP	Total Phosphorous	mg/L	13	0.005	0.050	0.100	**0.050**	0.050	0.600	0.06	✗ 2
FRP	Filterable Reactive Phosphrous	mg/L	14	0.005	0.005	0.014	**0.007**	0.020	0.052	0.03	✗ 2
As	Arsenic	mg/L	14	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	✓ 0
Cd	Cadmium	mg/L	13	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00013	0.00020	✓ 0
Cr	Chromium	mg/L	13	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	✓ 0
Cu	Copper	mg/L	13	0.00100	0.00100	0.00118	**0.00100**	0.00130	0.00210	0.00140	✗ 1
Pb	Lead	mg/L	13	0.00100	0.00686	0.02378	**0.02000**	0.03660	0.06000	0.00340	✗ 11
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	✓ 0
Ni	Nickel	mg/L	13	0.00100	0.00148	0.00246	**0.00200**	0.00398	0.00420	0.01100	✓ 0
Zn	Zinc	mg/L	13	0.00130	0.00174	0.00456	**0.00230**	0.00816	0.01300	0.00800	✗ 3
Cl	Chloride	mg/L	3	390.00	674.00	863.33	**1100.00**	1100.00	1100.00		✓ 0
Ca	Calcium	mg/L	13	7.00	7.44	10.41	**9.00**	13.20	19.00		✓ 0
Mg	Magnesium	mg/L	13	31.00	32.00	53.77	**42.00**	57.60	140.00		✓ 0
K	Potassium	mg/L	13	7.50	8.94	9.43	**9.30**	10.00	11.00		✓ 0
Na	Sodium	mg/L	13	190.00	204.00	263.08	**240.00**	286.00	480.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	13	150.00	154.00	247.69	**190.00**	258.00	640.00		✓ 0
SiO2	Silica	mg/L	2	29.00	29.20000	29.50	**29.50**	29.80000	30.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

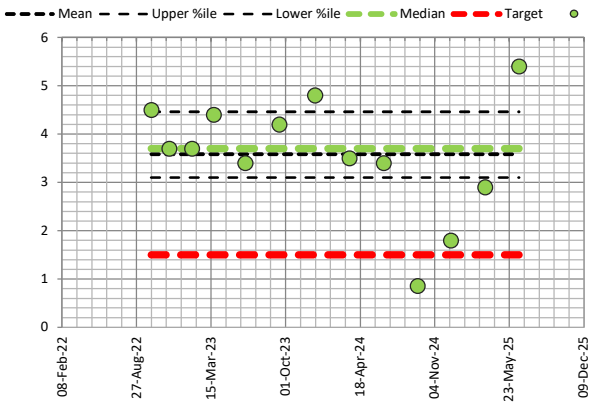
pH



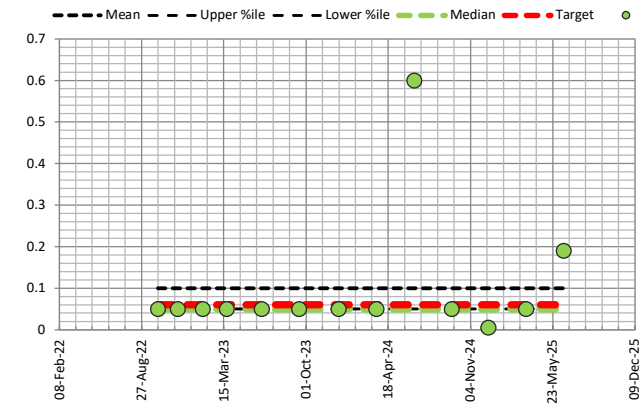
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG7D Hyd2o Bore Wattle Grove 7 Deep

Site Bore Boundary Rd South - Rear of Lot (Install : Jul 2022)

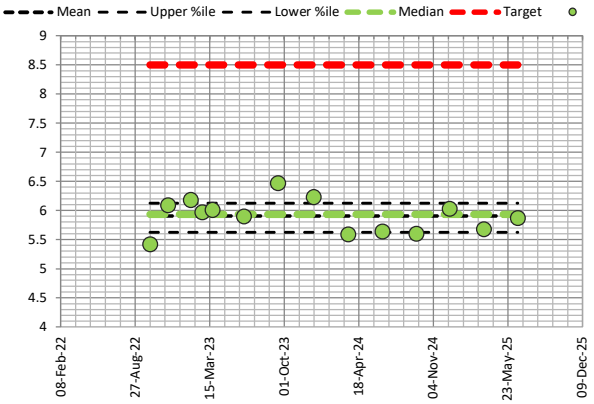
Easting	405352	Data Analysis Period Start Date	1/01/2009
Northing	6457884	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

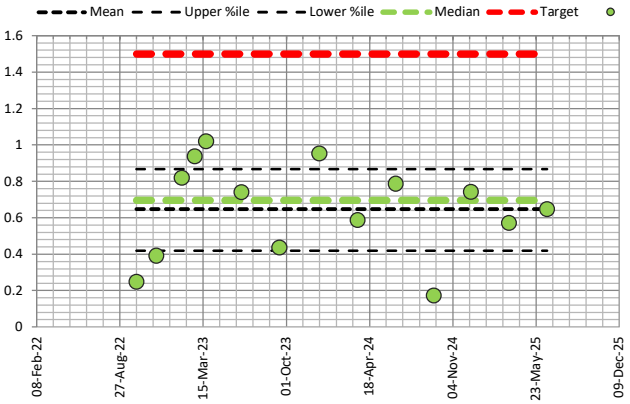
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	5.34	6.34	7.21	**7.44**	8.06	8.77		✓ 0
GWL mAHD	Groundwater Level	mAHD	37	14.67	15.38	16.23	**16.00**	17.10	18.10		✓ 0
T	Temperature	°C	14	19.10	20.820	23.721	**22.80**	26.700	30.800		✓ 0
EC	Electrical Conductivity	mS/cm	14	0.174	0.419	0.648	**0.695**	0.867	1.021	1.500	✓ 0
pH	pH	pH	14	5.42	5.62	5.91	**5.94**	6.13	6.47	8.50	✓ 0
DO	Dissolved Oxygen	%	13	13.30	18.46	25.56	**23.30**	31.00	46.10		✓ 0
TN	Total Nitrogen	mg/L	13	0.660	1.340	3.393	**4.000**	5.260	5.800	1.50	✗ 10
TKN	Total Kejdhal Nitrogen	mg/L	13	0.100	0.312	0.629	**0.520**	0.704	2.100		✓ 0
NO3	Nitrate	mg/L	14	0.300	1.060	2.883	**3.400**	4.240	5.300		✓ 0
NO2	Nitrite	mg/L	13	0.005	0.005	0.005	**0.005**	0.005	0.009		✓ 0
Nox	Nox	mg/L	13	0.300	1.040	2.767	**3.400**	4.200	5.300	0.10	✗ 13
NH3	Ammonia	mg/L	14	0.005	0.005	0.020	**0.005**	0.024	0.140	0.90	✓ 0
TP	Total Phosphorous	mg/L	13	0.005	0.050	0.047	**0.050**	0.050	0.050	0.06	✓ 0
FRP	Filterable Reactive Phosphrous	mg/L	14	0.005	0.005	0.011	**0.005**	0.007	0.055	0.03	✗ 2
As	Arsenic	mg/L	14	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	✓ 0
Cd	Cadmium	mg/L	13	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00012	0.00020	✓ 0
Cr	Chromium	mg/L	13	0.00100	0.00100	0.00149	**0.00100**	0.00100	0.00700	0.00100	✗ 2
Cu	Copper	mg/L	13	0.00120	0.00160	0.00237	**0.00200**	0.00292	0.00560	0.00140	✗ 10
Pb	Lead	mg/L	13	0.00100	0.00100	0.00128	**0.00100**	0.00100	0.00460	0.00340	✗ 1
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	✓ 0
Ni	Nickel	mg/L	13	0.00130	0.00180	0.00235	**0.00210**	0.00270	0.00450	0.01100	✓ 0
Zn	Zinc	mg/L	13	0.00100	0.00164	0.00234	**0.00190**	0.00248	0.00590	0.00800	✓ 0
Cl	Chloride	mg/L	3	120.00	124.00	146.67	**130.00**	166.00	190.00		✓ 0
Ca	Calcium	mg/L	13	3.80	6.96	12.31	**12.00**	16.60	20.00		✓ 0
Mg	Magnesium	mg/L	13	6.70	12.40	14.82	**15.00**	18.00	21.00		✓ 0
K	Potassium	mg/L	13	3.60	4.22	5.01	**4.90**	5.74	6.90		✓ 0
Na	Sodium	mg/L	13	29.00	53.80	87.08	**83.00**	116.00	130.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	13	37.00	68.00	91.62	**97.00**	120.00	130.00		✓ 0
SiO2	Silica	mg/L	2	19.00	19.80000	21.00	**21.00**	22.20000	23.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

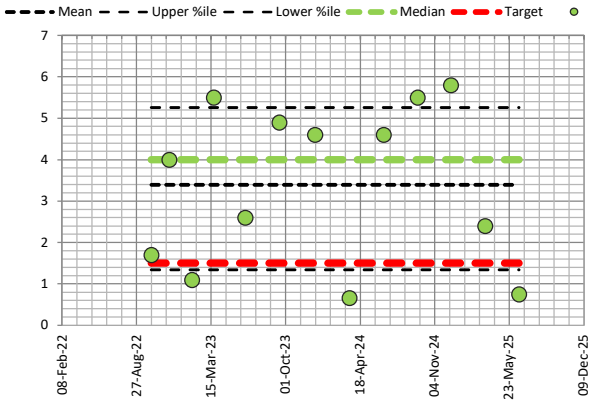
pH



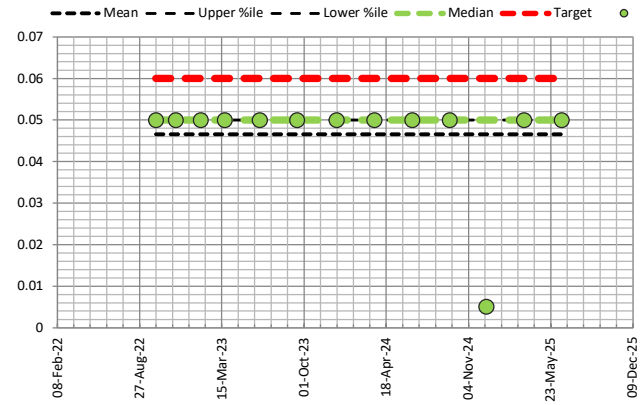
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG7S Hyd2o Bore Wattle Grove 7 Shallow

Site Bore Boundary Rd South - Rear of Lot (Install : Jul 2022)

Easting	405351	Data Analysis Period Start Date	1/01/2009
Northing	6457885	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	3.68	3.68	3.68	**3.68**	3.68	3.72		0
GWL mAHD	Groundwater Level	mAHD	37	19.78	19.82	19.82	**19.82**	19.82	19.82		0
T	Temperature	°C	0	0.00	0.000	0.000	**0.00**	0.000	0.000		0
EC	Electrical Conductivity	mS/cm	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.500	0
pH	pH	pH	0	0.00	0.00	0.00	**0.00**	0.00	0.00	8.50	0
DO	Dissolved Oxygen	%	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
TN	Total Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.50	0
TKN	Total Kejdhal Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO3	Nitrate	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO2	Nitrite	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
Nox	Nox	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.10	0
NH3	Ammonia	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.90	0
TP	Total Phosphorous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.06	0
FRP	Filterable Reactive Phosphrous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.03	0
As	Arsenic	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.02400	0
Cd	Cadmium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00020	0
Cr	Chromium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00100	0
Cu	Copper	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00140	0
Pb	Lead	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00340	0
Hg	Mercury	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00060	0
Ni	Nickel	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.01100	0
Zn	Zinc	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00800	0
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Mg	Magnesium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
K	Potassium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Na	Sodium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
H as CaCO3	Hardness as CaCO3	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

pH

No Data

Electrical Conductivity

No Data

Total Nitrogen

No Data

Total Phosphorous

No Data

H21003 Wattle Grove South Monitoring

WG8 Hyd2o Bore Wattle Grove 8

Upstream Bore Emanuel Crt North - Verge (Install : Oct 2022)

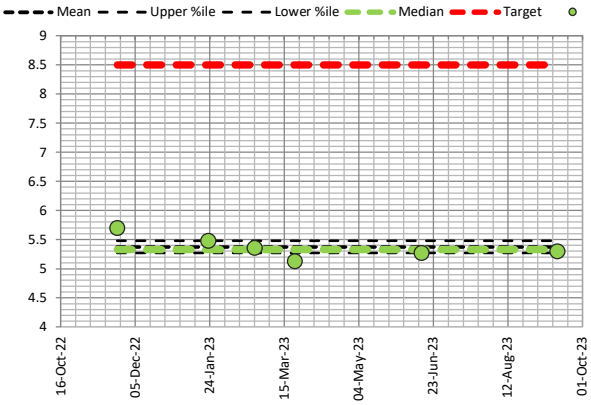
Easting	406959	Data Analysis Period Start Date	1/01/2009
Northing	6457834	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

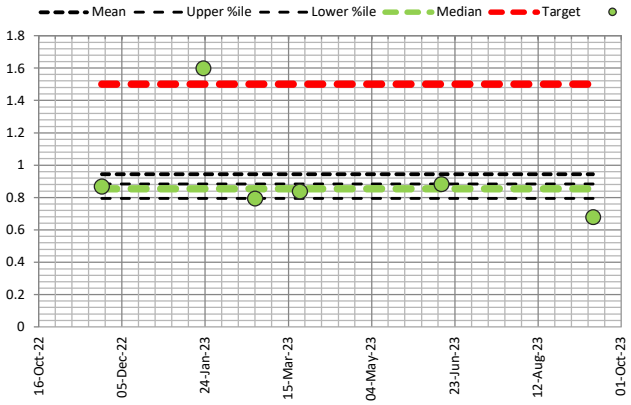
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	31	25.11	25.20	25.48	**25.56**	25.65	25.84		✓ 0
GWL mAHD	Groundwater Level	mAHD	31	15.93	16.12	16.29	**16.21**	16.57	16.66		✓ 0
T	Temperature	°C	6	18.20	18.700	21.300	**21.65**	22.700	24.900		✓ 0
EC	Electrical Conductivity	mS/cm	6	0.679	0.795	0.944	**0.854**	0.884	1.599	1.500	✗ 1
pH	pH	pH	6	5.13	5.27	5.37	**5.33**	5.48	5.70	8.50	✓ 0
DO	Dissolved Oxygen	%	6	16.20	22.80	34.08	**38.70**	41.50	46.60		✓ 0
TN	Total Nitrogen	mg/L	5	0.480	0.528	1.744	**1.500**	2.620	3.900	1.50	✗ 2
TKN	Total Kejdhal Nitrogen	mg/L	5	0.170	0.354	1.056	**0.510**	1.680	2.800		✓ 0
NO3	Nitrate	mg/L	6	0.075	0.360	0.696	**0.875**	0.990	1.000		✓ 0
NO2	Nitrite	mg/L	5	0.005	0.005	0.005	**0.005**	0.006	0.006		✓ 0
Nox	Nox	mg/L	5	0.076	0.303	0.673	**0.840**	1.012	1.100	0.10	✗ 4
NH3	Ammonia	mg/L	6	0.005	0.005	0.014	**0.006**	0.022	0.041	0.90	✓ 0
TP	Total Phosphorous	mg/L	5	0.180	0.204	0.612	**0.280**	0.952	1.600	0.06	✗ 5
FRP	Filterable Reactive Phosphrous	mg/L	6	0.006	0.006	0.007	**0.007**	0.007	0.008	0.03	✓ 0
As	Arsenic	mg/L	6	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	✓ 0
Cd	Cadmium	mg/L	5	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	✓ 0
Cr	Chromium	mg/L	5	0.00100	0.00100	0.00196	**0.00100**	0.00196	0.00580	0.00100	✗ 1
Cu	Copper	mg/L	5	0.00170	0.00298	0.00472	**0.00420**	0.00702	0.00750	0.00140	✗ 5
Pb	Lead	mg/L	5	0.00100	0.00100	0.00192	**0.00100**	0.00192	0.00560	0.00340	✗ 1
Hg	Mercury	mg/L	5	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	✓ 0
Ni	Nickel	mg/L	5	0.00190	0.00390	0.00628	**0.00560**	0.00840	0.01200	0.01100	✗ 1
Zn	Zinc	mg/L	5	0.00560	0.01552	0.02532	**0.02100**	0.03020	0.05900	0.00800	✗ 4
Cl	Chloride	mg/L	1	230.00	230.00	230.00	**230.00**	230.00	230.00		✓ 0
Ca	Calcium	mg/L	6	1.70	2.70	4.70	**3.45**	4.90	12.00		✓ 0
Mg	Magnesium	mg/L	6	13.00	14.00	14.33	**14.00**	15.00	16.00		✓ 0
K	Potassium	mg/L	6	3.30	3.40	3.70	**3.60**	3.70	4.60		✓ 0
Na	Sodium	mg/L	6	110.00	120.00	118.33	**120.00**	120.00	120.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	6	57.00	69.00	71.00	**70.50**	74.00	85.00		✓ 0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

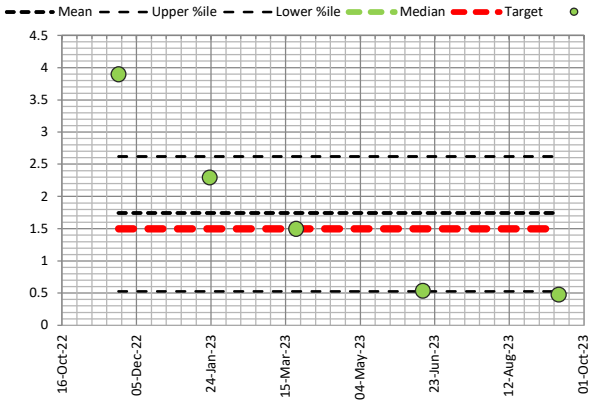
pH



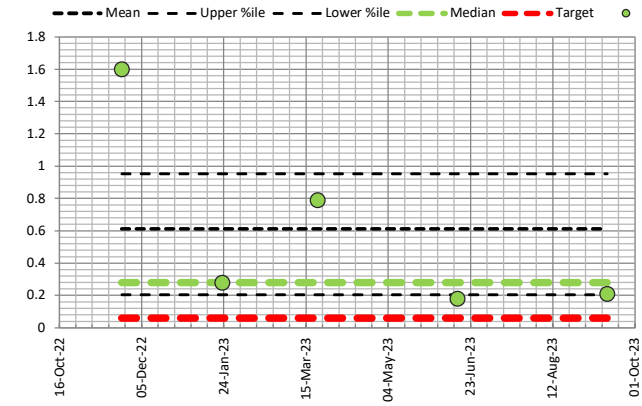
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG9 Hyd2o Bore Wattle Grove 9

Site Bore Victoria Rd Turf Farm South - Rear of Lot (Install : Oct 2022)

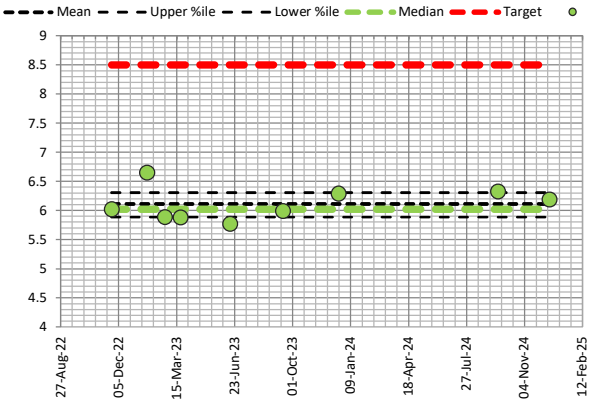
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Northing	6457338	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

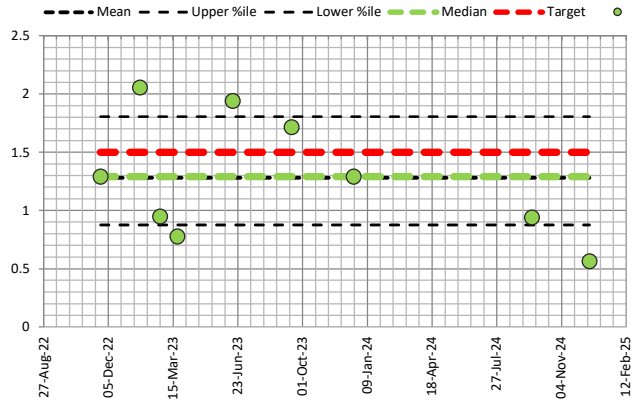
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	35	4.18	4.56	5.27	**5.36**	6.10	6.13		0
GWL mAHD	Groundwater Level	mAHD	35	17.73	17.76	18.59	**18.50**	19.30	19.68		0
T	Temperature	°C	9	19.20	20.920	23.522	**23.60**	26.380	27.500		0
EC	Electrical Conductivity	mS/cm	9	0.565	0.875	1.280	**1.291**	1.805	2.056	1.500	3
pH	pH	pH	9	5.77	5.89	6.11	**6.02**	6.31	6.65	8.50	0
DO	Dissolved Oxygen	%	9	13.60	15.88	29.16	**17.80**	43.10	67.10		0
TN	Total Nitrogen	mg/L	8	11.000	13.200	27.625	**23.000**	42.600	52.000	1.50	8
TKN	Total Kejdhal Nitrogen	mg/L	8	0.750	4.000	5.331	**4.600**	7.060	11.000		0
NO3	Nitrate	mg/L	9	7.300	11.000	22.811	**18.000**	34.400	44.000		0
NO2	Nitrite	mg/L	8	0.005	0.005	0.017	**0.005**	0.034	0.050		0
Nox	Nox	mg/L	8	7.400	11.000	22.425	**18.000**	35.600	44.000	0.10	8
NH3	Ammonia	mg/L	9	0.005	0.005	0.041	**0.006**	0.024	0.280	0.90	0
TP	Total Phosphorous	mg/L	8	1.800	2.160	2.750	**2.450**	3.500	4.000	0.06	8
FRP	Filterable Reactive Phosphrous	mg/L	9	1.600	1.940	2.478	**2.200**	2.780	4.600	0.03	9
As	Arsenic	mg/L	9	0.00100	0.00110	0.00142	**0.00120**	0.00174	0.00230	0.02400	0
Cd	Cadmium	mg/L	8	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	8	0.00100	0.00108	0.00388	**0.00180**	0.00608	0.01300	0.00100	6
Cu	Copper	mg/L	8	0.00760	0.00842	0.01113	**0.01025**	0.01260	0.01900	0.00140	8
Pb	Lead	mg/L	8	0.00100	0.00100	0.00305	**0.00100**	0.00604	0.00760	0.00340	3
Hg	Mercury	mg/L	8	0.00005	0.00005	0.00019	**0.00006**	0.00028	0.00070	0.00060	1
Ni	Nickel	mg/L	8	0.00400	0.00420	0.00561	**0.00465**	0.00764	0.00800	0.01100	0
Zn	Zinc	mg/L	8	0.00280	0.00344	0.00445	**0.00380**	0.00540	0.00780	0.00800	0
Cl	Chloride	mg/L	1	180.00	180.00	180.00	**180.00**	180.00	180.00		0
Ca	Calcium	mg/L	8	17.00	26.40	33.50	**30.50**	44.60	48.00		0
Mg	Magnesium	mg/L	8	13.00	26.00	32.63	**32.50**	42.80	46.00		0
K	Potassium	mg/L	8	9.90	13.60	25.36	**28.50**	34.60	39.00		0
Na	Sodium	mg/L	8	81.00	95.80	147.88	**135.00**	206.00	230.00		0
H as CaCO3	Hardness as CaCO3	mg/L	8	96.00	174.00	217.00	**205.00**	290.00	300.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

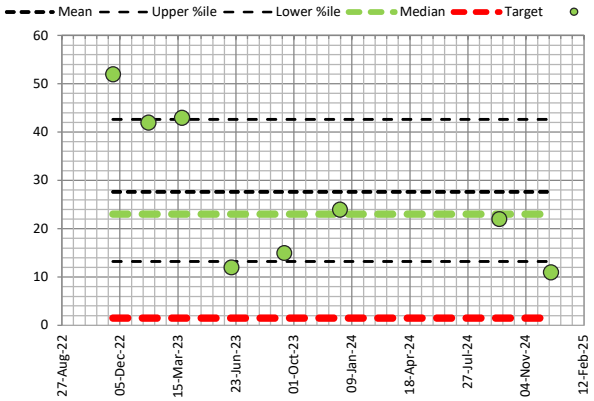
pH



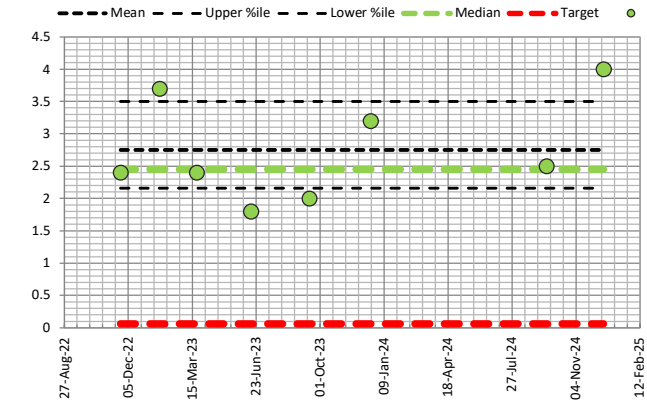
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

WG10D Hyd2o Bore Wattle Grove 10 Deep

Site Bore Boundary Rd North - Verge (Install : Oct 2022)

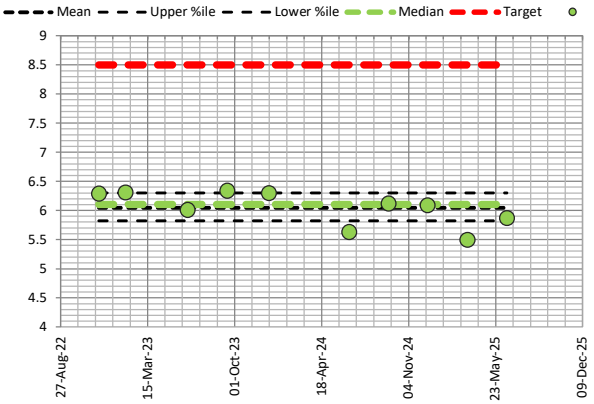
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Northing	6458075	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

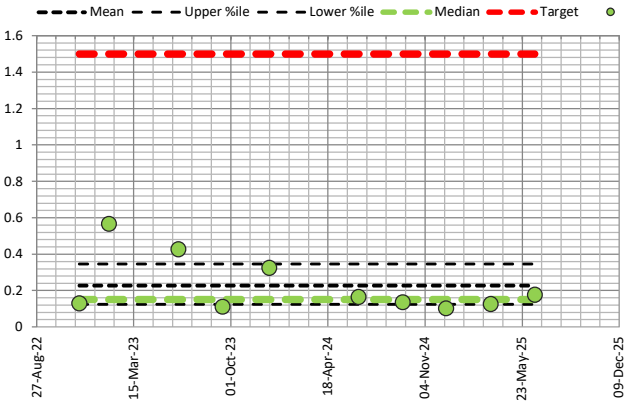
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	35	5.18	6.17	7.42	**7.35**	9.01	9.07		✓ 0
GWL mAHD	Groundwater Level	mAHD	35	14.55	14.61	16.20	**16.27**	17.45	18.44		✓ 0
T	Temperature	°C	10	18.10	20.640	23.140	**22.80**	25.520	29.300		✓ 0
EC	Electrical Conductivity	mS/cm	10	0.102	0.124	0.227	**0.151**	0.346	0.567	1.500	✓ 0
pH	pH	pH	10	5.50	5.82	6.05	**6.11**	6.30	6.34	8.50	✓ 0
DO	Dissolved Oxygen	%	10	42.10	49.06	55.93	**55.65**	61.08	79.50		✓ 0
TN	Total Nitrogen	mg/L	10	1.400	2.740	4.470	**4.200**	5.940	8.600	1.50	✗ 9
TKN	Total Kejdhal Nitrogen	mg/L	10	0.200	0.336	0.711	**0.785**	0.956	1.100		✓ 0
NO3	Nitrate	mg/L	10	0.005	1.900	3.221	**2.600**	4.700	7.700		✓ 0
NO2	Nitrite	mg/L	10	0.005	0.005	0.005	**0.005**	0.005	0.005		✓ 0
Nox	Nox	mg/L	10	1.100	2.180	3.760	**3.500**	5.160	7.700	0.10	✗ 10
NH3	Ammonia	mg/L	10	0.005	0.005	0.011	**0.005**	0.010	0.037	0.90	✓ 0
TP	Total Phosphorous	mg/L	10	0.005	0.050	0.046	**0.050**	0.050	0.050	0.06	✓ 0
FRP	Filterable Reactive Phosphrous	mg/L	10	0.005	0.005	0.011	**0.005**	0.010	0.050	0.03	✗ 1
As	Arsenic	mg/L	10	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	✓ 0
Cd	Cadmium	mg/L	10	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	✓ 0
Cr	Chromium	mg/L	10	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	✓ 0
Cu	Copper	mg/L	10	0.00100	0.00100	0.00135	**0.00100**	0.00100	0.00450	0.00140	✗ 1
Pb	Lead	mg/L	10	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00340	✓ 0
Hg	Mercury	mg/L	10	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	✓ 0
Ni	Nickel	mg/L	10	0.00100	0.00100	0.00103	**0.00100**	0.00100	0.00130	0.01100	✓ 0
Zn	Zinc	mg/L	10	0.00100	0.00100	0.00306	**0.00175**	0.00372	0.01300	0.00800	✗ 1
Cl	Chloride	mg/L	2	14.00	16.60	20.50	**20.50**	24.40	27.00		✓ 0
Ca	Calcium	mg/L	9	1.50	3.56	5.27	**5.40**	7.14	8.00		✓ 0
Mg	Magnesium	mg/L	9	1.50	2.96	3.97	**4.30**	4.86	6.70		✓ 0
K	Potassium	mg/L	9	2.90	3.60	4.19	**4.00**	4.80	5.60		✓ 0
Na	Sodium	mg/L	9	12.00	14.40	22.00	**22.00**	27.40	36.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	9	10.00	22.20	29.56	**27.00**	37.00	48.00		✓ 0
SiO2	Silica	mg/L	2	11.00	11.40000	12.00	**12.00**	12.60000	13.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

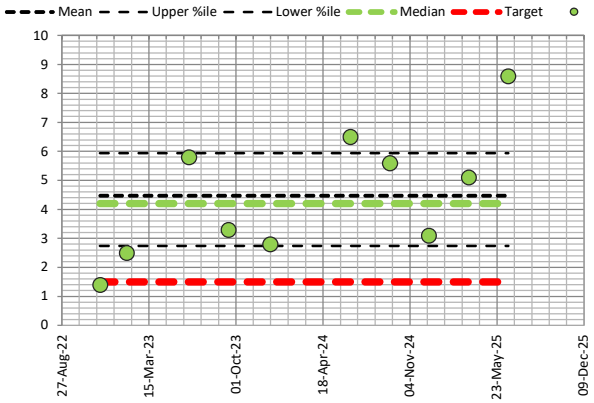
pH



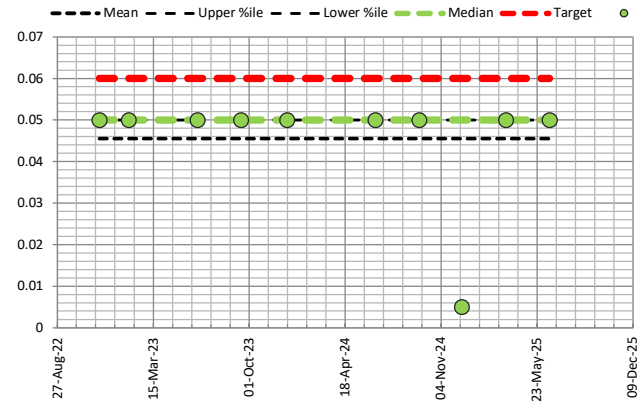
Electrical Conductivity



Total Nitrogen



Total Phosphorous



FieldDAE

Field Data Analysis & Evaluation System

H21003 Wattle Grove South Monitoring

WG10S Hyd2o Bore Wattle Grove 10 Shallow

Site Bore Boundary Rd North - Verge (Install : Oct 2022)

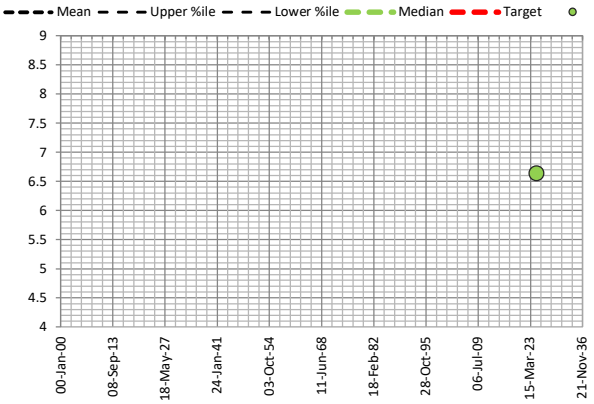
Easting	405364
Northing	6458074
Data Analysis Period Start Date	1/01/2009
Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

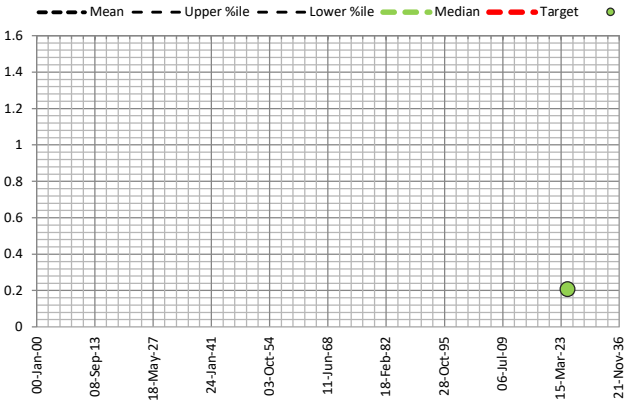
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	35	2.54	3.12	3.15	**3.21**	3.21	3.24		0
GWL mAHD	Groundwater Level	mAHD	35	20.36	20.39	20.45	**20.39**	20.48	21.06		0
T	Temperature	°C	1	24.20	24.200	24.200	**24.20**	24.200	24.200		0
EC	Electrical Conductivity	mS/cm	1	0.208	0.208	0.208	**0.208**	0.208	0.208	1.500	0
pH	pH	pH	1	6.64	6.64	6.64	**6.64**	6.64	6.64	8.50	0
DO	Dissolved Oxygen	%	1	22.20	22.20	22.20	**22.20**	22.20	22.20		0
TN	Total Nitrogen	mg/L	1	4.700	4.700	4.700	**4.700**	4.700	4.700	1.50	1
TKN	Total Kejdhal Nitrogen	mg/L	1	1.300	1.300	1.300	**1.300**	1.300	1.300		0
NO3	Nitrate	mg/L	1	3.300	3.300	3.300	**3.300**	3.300	3.300		0
NO2	Nitrite	mg/L	2	0.005	0.005	0.005	**0.005**	0.006	0.006		0
Nox	Nox	mg/L	1	3.300	3.300	3.300	**3.300**	3.300	3.300	0.10	1
NH3	Ammonia	mg/L	1	0.006	0.006	0.006	**0.006**	0.006	0.006	0.90	0
TP	Total Phosphorous	mg/L	1	0.050	0.050	0.050	**0.050**	0.050	0.050	0.06	0
FRP	Filterable Reactive Phosphrous	mg/L	1	0.005	0.005	0.005	**0.005**	0.005	0.005	0.03	0
As	Arsenic	mg/L	1	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	0
Cd	Cadmium	mg/L	1	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	1	0.00420	0.00420	0.00420	**0.00420**	0.00420	0.00420	0.00100	1
Cu	Copper	mg/L	1	0.00200	0.00200	0.00200	**0.00200**	0.00200	0.00200	0.00140	1
Pb	Lead	mg/L	1	0.00180	0.00180	0.00180	**0.00180**	0.00180	0.00180	0.00340	0
Hg	Mercury	mg/L	1	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	1	0.00120	0.00120	0.00120	**0.00120**	0.00120	0.00120	0.01100	0
Zn	Zinc	mg/L	1	0.00200	0.00200	0.00200	**0.00200**	0.00200	0.00200	0.00800	0
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Mg	Magnesium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
K	Potassium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Na	Sodium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
H as CaCO3	Hardness as CaCO3	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

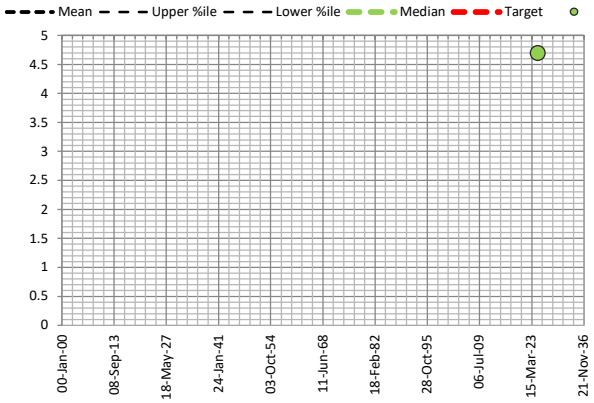
pH



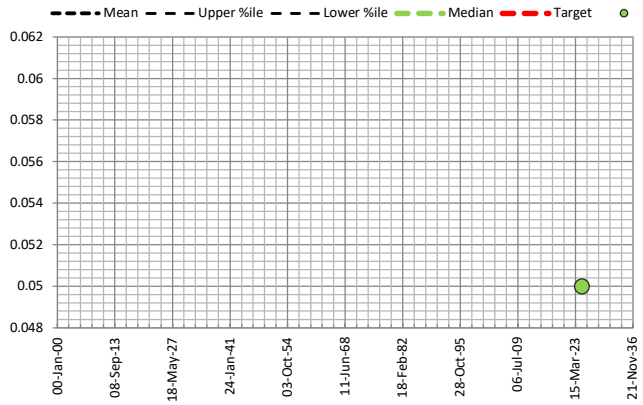
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

MBa Unknown Origin Bore

Downstream Bore Boundary Rd South - Verge (Install : Unknown)

Easting	405245	Data Analysis Period Start Date	1/01/2009
Northing	6457958	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	47	1.65	2.39	2.78	**2.60**	2.68	5.30		0
GWL mAHD	Groundwater Level	mAHD	47	15.31	17.93	17.83	**18.01**	18.22	18.96		0
T	Temperature	°C	0	0.00	0.000	0.000	**0.00**	0.000	0.000		0
EC	Electrical Conductivity	mS/cm	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.500	0
pH	pH	pH	0	0.00	0.00	0.00	**0.00**	0.00	0.00	8.50	0
DO	Dissolved Oxygen	%	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
TN	Total Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	1.50	0
TKN	Total Kejdhal Nitrogen	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO3	Nitrate	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000		0
NO2	Nitrite	mg/L	1	0.005	0.005	0.005	**0.005**	0.005	0.005		0
Nox	Nox	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.10	0
NH3	Ammonia	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.90	0
TP	Total Phosphorous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.06	0
FRP	Filterable Reactive Phosphrous	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.03	0
As	Arsenic	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.02400	0
Cd	Cadmium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00020	0
Cr	Chromium	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00100	0
Cu	Copper	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00140	0
Pb	Lead	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00340	0
Hg	Mercury	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00060	0
Ni	Nickel	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.01100	0
Zn	Zinc	mg/L	0	0.00000	0.00000	0.00000	**0.00000**	0.00000	0.00000	0.00800	0
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Mg	Magnesium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
K	Potassium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Na	Sodium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
H as CaCO3	Hardness as CaCO3	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

pH

No Data

Electrical Conductivity

No Data

Total Nitrogen

No Data

Total Phosphorous

No Data

H21003 Wattle Grove South Monitoring

MBb Douglas Partners Bore 1

Site Bore Chicken Shed South - Rear of Lot (Install : Oct 2020)

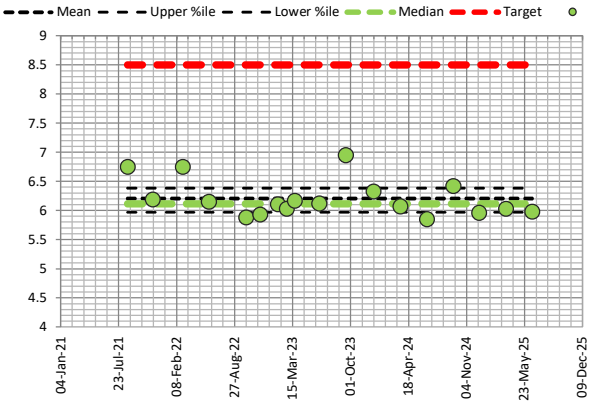
Easting	406067	Data Analysis Period Start Date	1/01/2009
Northing	6456783	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

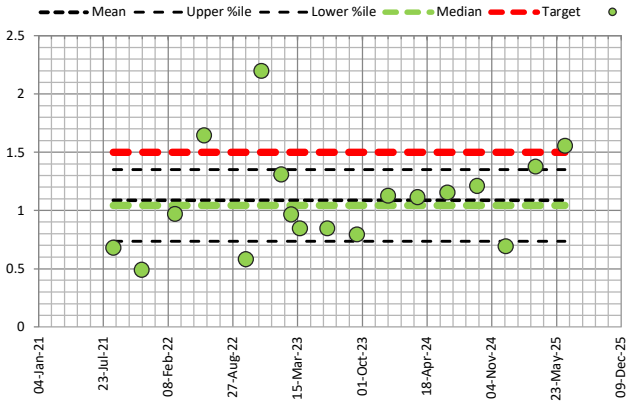
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	50	14.24	14.58	14.91	**14.91**	15.24	15.70		0
GWL mAHD	Groundwater Level	mAHD	50	16.20	16.66	16.99	**17.00**	17.32	17.66		0
T	Temperature	°C	18	18.10	18.740	23.306	**23.50**	26.200	31.900		0
EC	Electrical Conductivity	mS/cm	18	0.491	0.735	1.088	**1.044**	1.350	2.199	1.500	3
pH	pH	pH	18	5.85	5.97	6.20	**6.12**	6.38	6.95	8.50	0
DO	Dissolved Oxygen	%	17	8.80	15.48	33.29	**23.50**	54.88	75.24		0
TN	Total Nitrogen	mg/L	17	0.300	0.540	2.034	**2.100**	3.500	4.600	1.50	9
TKN	Total Kejdhal Nitrogen	mg/L	17	0.250	0.540	1.999	**2.000**	3.420	4.600		0
NO3	Nitrate	mg/L	18	0.005	0.006	0.031	**0.016**	0.041	0.180		0
NO2	Nitrite	mg/L	17	0.005	0.005	0.010	**0.005**	0.005	0.050		0
Nox	Nox	mg/L	17	0.005	0.008	0.032	**0.017**	0.028	0.180	0.10	1
NH3	Ammonia	mg/L	18	0.057	0.176	1.222	**1.015**	2.080	3.400	0.90	9
TP	Total Phosphorous	mg/L	17	0.005	0.050	0.092	**0.050**	0.083	0.500	0.06	6
FRP	Filterable Reactive Phosphrous	mg/L	18	0.005	0.005	0.011	**0.005**	0.005	0.072	0.03	2
As	Arsenic	mg/L	18	0.00100	0.00100	0.00143	**0.00100**	0.00146	0.00580	0.02400	0
Cd	Cadmium	mg/L	17	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	17	0.00100	0.00100	0.00115	**0.00100**	0.00100	0.00270	0.00100	2
Cu	Copper	mg/L	17	0.00100	0.00100	0.00141	**0.00100**	0.00100	0.00470	0.00140	3
Pb	Lead	mg/L	17	0.00100	0.00100	0.00102	**0.00100**	0.00100	0.00140	0.00340	0
Hg	Mercury	mg/L	17	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	17	0.00290	0.00362	0.00557	**0.00480**	0.00636	0.01300	0.01100	2
Zn	Zinc	mg/L	17	0.00790	0.01020	0.01729	**0.01400**	0.01860	0.06100	0.00800	16
Cl	Chloride	mg/L	5	0.10	0.10	124.04	**130.00**	230.00	270.00		0
Ca	Calcium	mg/L	13	3.00	7.88	20.37	**20.00**	32.00	50.00		0
Mg	Magnesium	mg/L	13	22.00	31.00	46.38	**42.00**	64.60	82.00		0
K	Potassium	mg/L	13	6.90	7.62	9.25	**8.80**	11.00	13.00		0
Na	Sodium	mg/L	13	76.00	82.00	100.46	**98.00**	106.00	160.00		0
H as CaCO3	Hardness as CaCO3	mg/L	13	100.00	144.00	242.31	**230.00**	348.00	440.00		0
SiO2	Silica	mg/L	2	12.00	15.20000	20.00	**20.00**	24.80000	28.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

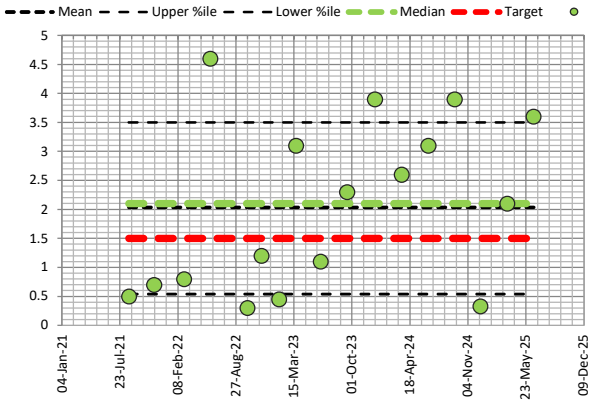
pH



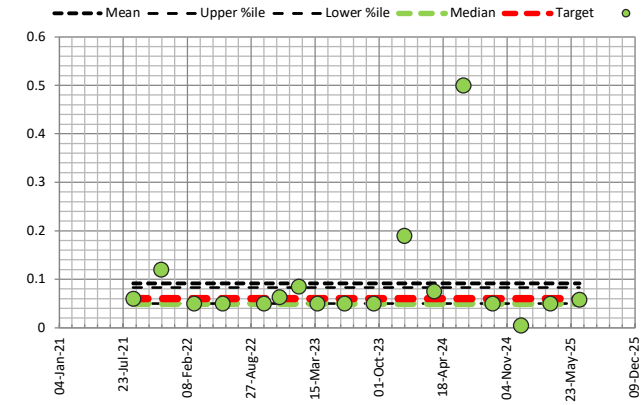
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

GW1 Urbaqua Bore 1

Site Bore Boundary Rd North - Verge (Install : Sep 2019)

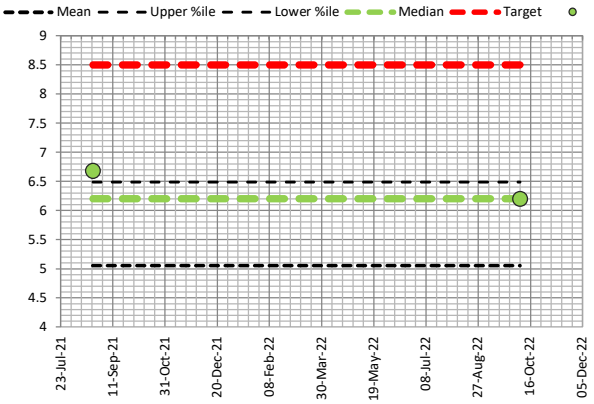
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Northing	6458071	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

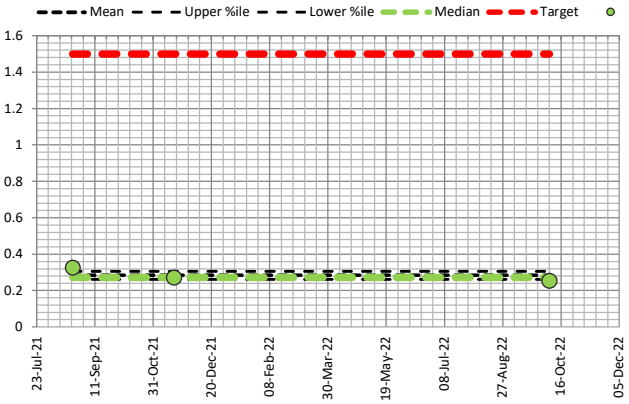
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	17	3.38	5.60	6.96	**6.62**	8.80	8.80		0
GWL mAHD	Groundwater Level	mAHD	17	14.69	14.69	16.52	**16.87**	17.89	20.11		0
T	Temperature	°C	3	19.50	19.860	20.433	**20.40**	21.000	21.400		0
EC	Electrical Conductivity	mS/cm	3	0.254	0.261	0.284	**0.272**	0.305	0.327	1.500	0
pH	pH	pH	3	2.28	3.85	5.05	**6.20**	6.49	6.68	8.50	0
DO	Dissolved Oxygen	%	3	27.20	40.68	54.70	**60.90**	69.96	76.00		0
TN	Total Nitrogen	mg/L	3	2.800	2.840	2.967	**2.900**	3.080	3.200	1.50	3
TKN	Total Kejdhal Nitrogen	mg/L	3	0.300	0.432	0.577	**0.630**	0.732	0.800		0
NO3	Nitrate	mg/L	3	1.900	2.140	2.333	**2.500**	2.560	2.600		0
NO2	Nitrite	mg/L	3	0.005	0.005	0.005	**0.005**	0.005	0.005		0
Nox	Nox	mg/L	3	1.900	2.140	2.333	**2.500**	2.560	2.600	0.10	3
NH3	Ammonia	mg/L	3	0.005	0.005	0.007	**0.005**	0.009	0.012	0.90	0
TP	Total Phosphorous	mg/L	3	0.050	0.054	0.063	**0.060**	0.072	0.080	0.06	1
FRP	Filterable Reactive Phosphrous	mg/L	3	0.005	0.005	0.008	**0.005**	0.010	0.013	0.03	0
As	Arsenic	mg/L	3	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	0
Cd	Cadmium	mg/L	3	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	3	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	0
Cu	Copper	mg/L	3	0.00100	0.00100	0.00200	**0.00100**	0.00280	0.00400	0.00140	1
Pb	Lead	mg/L	3	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00340	0
Hg	Mercury	mg/L	3	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	3	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.01100	0
Zn	Zinc	mg/L	3	0.00110	0.00226	0.00703	**0.00400**	0.01120	0.01600	0.00800	1
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	1	3.30	3.30	3.30	**3.30**	3.30	3.30		0
Mg	Magnesium	mg/L	1	4.20	4.20	4.20	**4.20**	4.20	4.20		0
K	Potassium	mg/L	1	8.00	8.00	8.00	**8.00**	8.00	8.00		0
Na	Sodium	mg/L	1	15.00	15.00	15.00	**15.00**	15.00	15.00		0
H as CaCO3	Hardness as CaCO3	mg/L	1	26.00	26.00	26.00	**26.00**	26.00	26.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

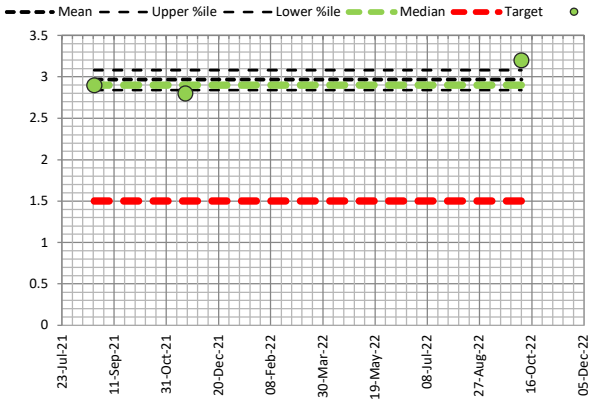
pH



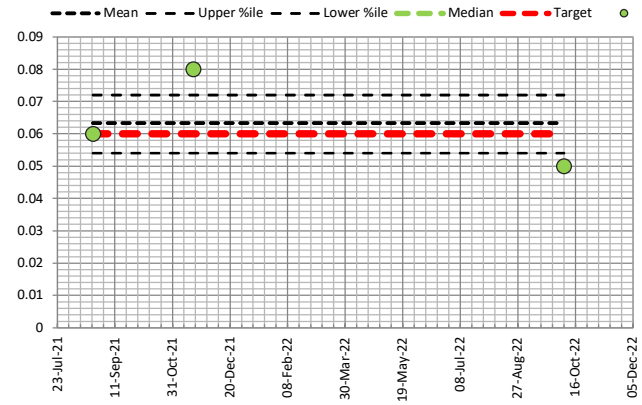
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

GW3 Endemic Bore 3

Downstream Bore Boundary Rd South - GBSWA (Install : Jun 2009)

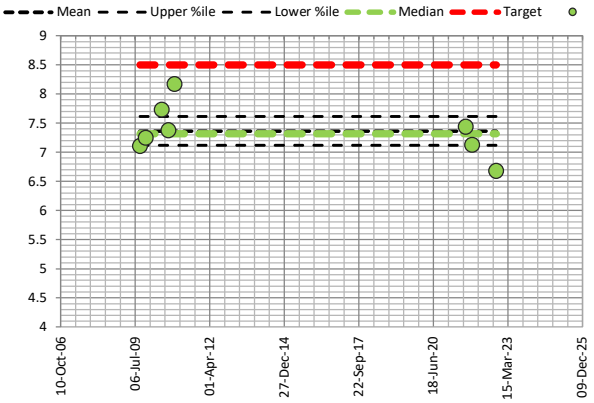
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Northing	6456299	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

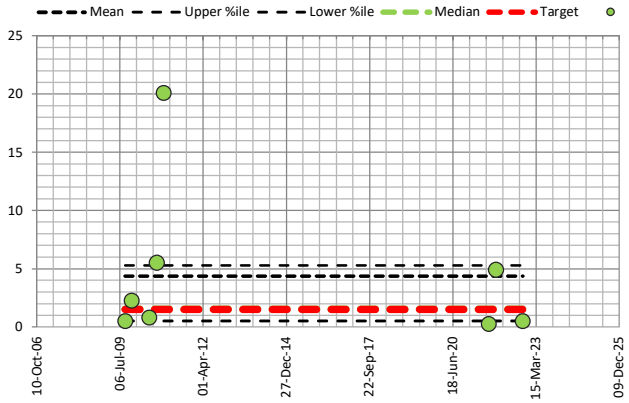
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	63	0.87	1.26	1.50	**1.57**	1.67	2.07		0
GWL mAHD	Groundwater Level	mAHD	63	7.58	7.98	8.15	**8.08**	8.39	8.78		0
T	Temperature	°C	8	15.90	16.980	19.388	**18.60**	20.900	26.000		0
EC	Electrical Conductivity	mS/cm	8	0.277	0.509	4.367	**1.541**	5.286	20.100	1.500	4
pH	pH	pH	8	6.68	7.12	7.36	**7.32**	7.61	8.17	8.50	0
DO	Dissolved Oxygen	%	3	21.40	22.28	30.60	**23.60**	37.52	46.80		0
TN	Total Nitrogen	mg/L	6	0.760	1.200	1.960	**1.300**	1.400	5.800	1.50	1
TKN	Total Kejdhal Nitrogen	mg/L	7	0.750	1.120	2.350	**1.400**	1.560	9.000		0
NO3	Nitrate	mg/L	7	0.010	0.026	1.675	**0.045**	3.212	7.550		0
NO2	Nitrite	mg/L	7	0.005	0.006	0.056	**0.010**	0.082	0.250		0
Nox	Nox	mg/L	6	0.015	0.027	1.999	**0.050**	4.300	7.550	0.10	2
NH3	Ammonia	mg/L	3	0.062	0.073	0.110	**0.089**	0.144	0.180	0.90	0
TP	Total Phosphorous	mg/L	7	0.050	0.054	0.136	**0.080**	0.218	0.300	0.06	5
FRP	Filterable Reactive Phosphrous	mg/L	7	0.005	0.010	0.032	**0.013**	0.058	0.081	0.03	3
As	Arsenic	mg/L	7	0.00020	0.00100	0.00789	**0.00100**	0.00100	0.05000	0.02400	1
Cd	Cadmium	mg/L	7	0.00005	0.00010	0.00022	**0.00010**	0.00010	0.00100	0.00020	1
Cr	Chromium	mg/L	7	0.00100	0.00100	0.00243	**0.00100**	0.00440	0.00600	0.00100	3
Cu	Copper	mg/L	7	0.00200	0.00200	0.00339	**0.00270**	0.00460	0.00700	0.00140	7
Pb	Lead	mg/L	7	0.00010	0.00100	0.00959	**0.00100**	0.01420	0.04400	0.00340	2
Hg	Mercury	mg/L	7	0.00005	0.00005	0.00011	**0.00010**	0.00010	0.00030	0.00060	0
Ni	Nickel	mg/L	7	0.00100	0.00200	0.00371	**0.00300**	0.00480	0.00900	0.01100	0
Zn	Zinc	mg/L	7	0.00100	0.00404	0.02354	**0.01700**	0.03100	0.08500	0.00800	4
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	1	86.00	86.00	86.00	**86.00**	86.00	86.00		0
Mg	Magnesium	mg/L	1	3.80	3.80	3.80	**3.80**	3.80	3.80		0
K	Potassium	mg/L	1	6.90	6.90	6.90	**6.90**	6.90	6.90		0
Na	Sodium	mg/L	1	26.00	26.00	26.00	**26.00**	26.00	26.00		0
H as CaCO3	Hardness as CaCO3	mg/L	1	230.00	230.00	230.00	**230.00**	230.00	230.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

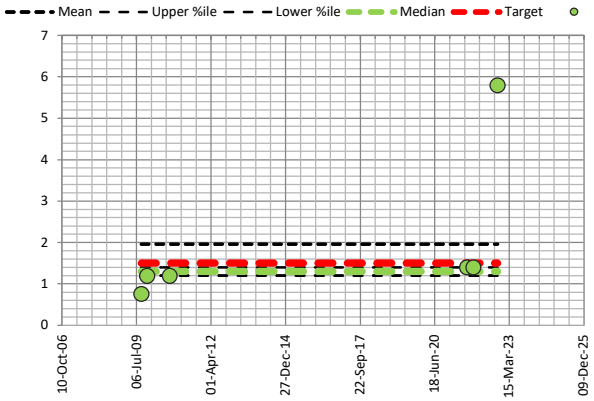
pH



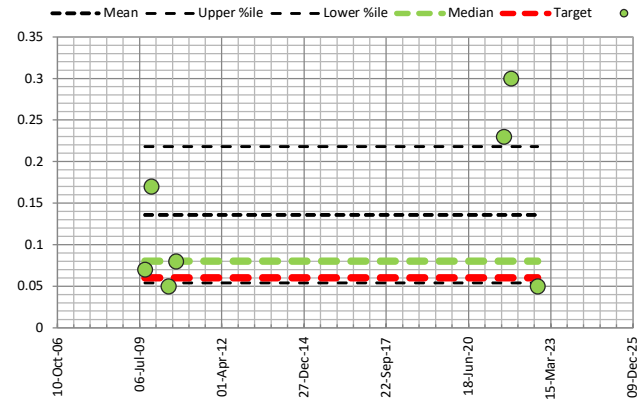
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

GW5 Endemic Bore 5

Downstream Bore Boundary Rd North - GBSWA (Install : Jun 2009)

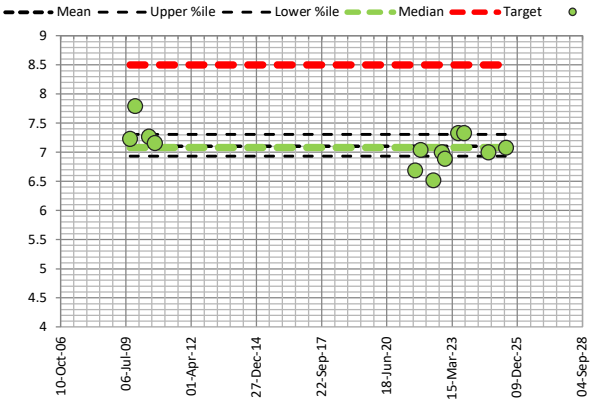
Easting	405055	Data Analysis Period Start Date	1/01/2009
Northing	6457747	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

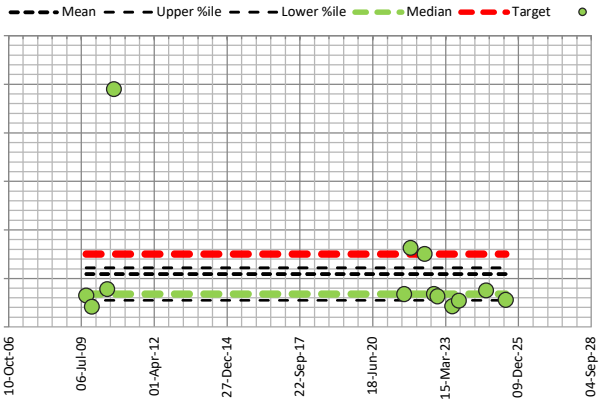
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	66	0.67	1.11	1.44	**1.54**	1.75	1.86		✓ 0
GWL mAHD	Groundwater Level	mAHD	66	17.55	17.66	17.97	**17.87**	18.30	18.74		✓ 0
T	Temperature	°C	13	15.50	16.840	18.815	**18.20**	20.440	23.200		✓ 0
EC	Electrical Conductivity	mS/cm	13	0.421	0.548	1.090	**0.679**	1.217	4.900	1.500	✗ 3
pH	pH	pH	13	6.52	6.93	7.10	**7.08**	7.31	7.79	8.50	✓ 0
DO	Dissolved Oxygen	%	9	12.80	19.64	37.13	**40.70**	54.34	56.00		✓ 0
TN	Total Nitrogen	mg/L	12	0.730	1.060	2.253	**1.650**	3.340	6.200	1.50	✗ 6
TKN	Total Kejdhal Nitrogen	mg/L	13	0.710	1.120	1.845	**1.600**	2.680	3.800		✓ 0
NO3	Nitrate	mg/L	13	0.005	0.010	0.498	**0.024**	0.464	4.500		✓ 0
NO2	Nitrite	mg/L	13	0.005	0.005	0.013	**0.005**	0.009	0.100		✓ 0
Nox	Nox	mg/L	12	0.005	0.015	0.538	**0.022**	0.524	4.500	0.10	✗ 4
NH3	Ammonia	mg/L	9	0.005	0.014	0.030	**0.031**	0.040	0.075	0.90	✓ 0
TP	Total Phosphorous	mg/L	13	0.050	0.050	0.121	**0.050**	0.112	0.720	0.06	✗ 5
FRP	Filterable Reactive Phosphrous	mg/L	13	0.005	0.005	0.006	**0.006**	0.008	0.010	0.03	✓ 0
As	Arsenic	mg/L	13	0.00100	0.00100	0.00577	**0.00100**	0.00160	0.05000	0.02400	✗ 1
Cd	Cadmium	mg/L	13	0.00005	0.00010	0.00020	**0.00010**	0.00010	0.00100	0.00020	✗ 2
Cr	Chromium	mg/L	13	0.00100	0.00100	0.09754	**0.00100**	0.00920	1.20000	0.00100	✗ 4
Cu	Copper	mg/L	13	0.00100	0.00100	0.03510	**0.00300**	0.00620	0.41000	0.00140	✗ 7
Pb	Lead	mg/L	13	0.00010	0.00100	0.01724	**0.00100**	0.00520	0.19000	0.00340	✗ 3
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00010	**0.00005**	0.00010	0.00050	0.00060	✓ 0
Ni	Nickel	mg/L	13	0.00410	0.00524	0.04042	**0.00920**	0.01280	0.42000	0.01100	✗ 3
Zn	Zinc	mg/L	13	0.00100	0.00100	0.10967	**0.00290**	0.00460	1.10000	0.00800	✗ 2
Cl	Chloride	mg/L	2	0.10	16.88	42.05	**42.05**	67.22	84.00		✓ 0
Ca	Calcium	mg/L	5	27.00	53.40	74.00	**76.00**	99.60	110.00		✓ 0
Mg	Magnesium	mg/L	5	4.30	4.70	5.74	**5.70**	6.92	7.00		✓ 0
K	Potassium	mg/L	5	5.10	5.74	6.44	**6.00**	7.06	8.50		✓ 0
Na	Sodium	mg/L	5	18.00	20.40	41.60	**44.00**	52.60	79.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	5	95.00	155.00	207.00	**210.00**	274.00	290.00		✓ 0
SiO2	Silica	mg/L	1	15.00	15.00000	15.00	**15.00**	15.00000	15.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

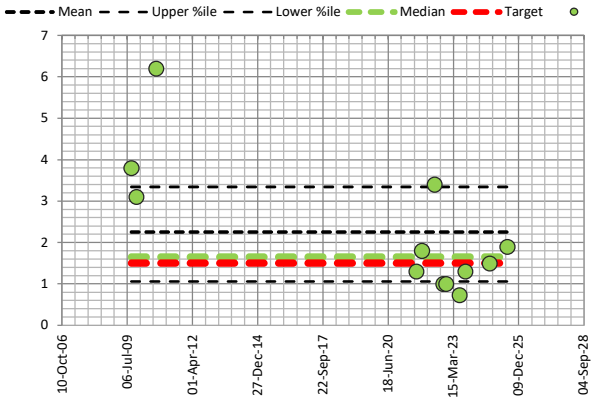
pH



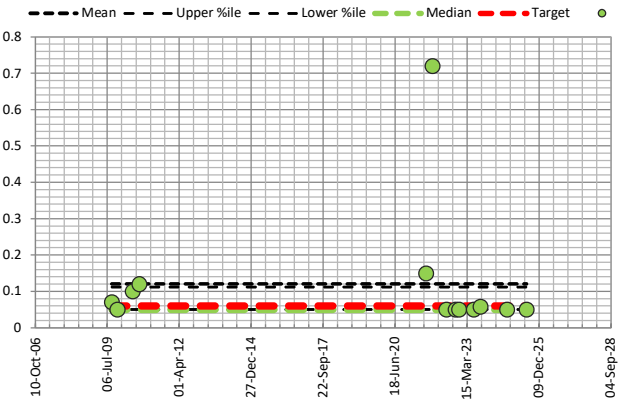
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

GW5D Hyd2o Deep Bore next to Endemic 5

Downstream Bore Boundary Rd North - GBSWA (Install : Jul 2022)

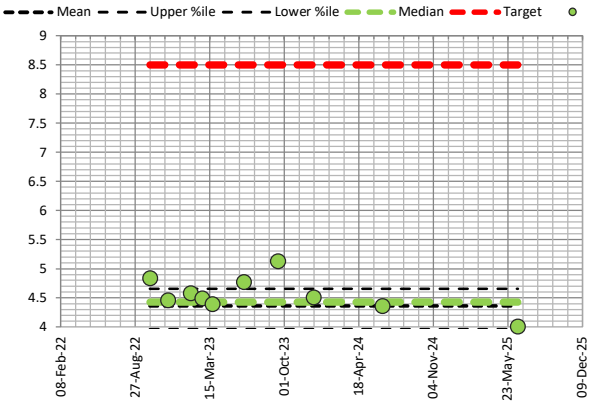
Easting	405053	Data Analysis Period Start Date	1/01/2009
Northing	6457750	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

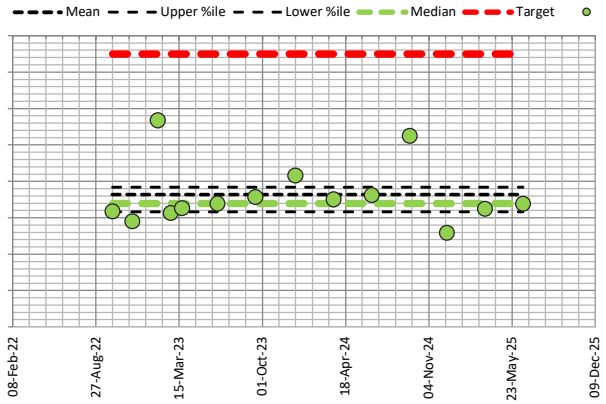
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	2.32	3.24	4.25	**4.56**	5.03	5.54		✓ 0
GWL mAHD	Groundwater Level	mAHD	37	13.83	14.34	15.12	**14.81**	16.13	17.05		✓ 0
T	Temperature	°C	14	17.50	20.000	23.107	**23.15**	25.300	30.200		✓ 0
EC	Electrical Conductivity	mS/cm	14	0.518	0.632	0.727	**0.678**	0.768	1.136	1.500	✓ 0
pH	pH	pH	14	3.75	3.96	4.36	**4.43**	4.66	5.13	8.50	✓ 0
DO	Dissolved Oxygen	%	13	11.00	12.34	16.20	**15.10**	18.30	30.60		✓ 0
TN	Total Nitrogen	mg/L	13	0.440	0.524	1.000	**0.610**	0.718	5.500	1.50	✗ 1
TKN	Total Kejdhal Nitrogen	mg/L	13	0.280	0.484	0.981	**0.620**	0.716	5.500		✓ 0
NO3	Nitrate	mg/L	14	0.005	0.005	0.005	**0.005**	0.005	0.009		✓ 0
NO2	Nitrite	mg/L	13	0.005	0.005	0.005	**0.005**	0.005	0.005		✓ 0
Nox	Nox	mg/L	13	0.005	0.005	0.006	**0.005**	0.006	0.011	0.10	✓ 0
NH3	Ammonia	mg/L	14	0.110	0.130	0.167	**0.160**	0.188	0.270	0.90	✓ 0
TP	Total Phosphorous	mg/L	13	0.007	0.050	0.076	**0.050**	0.050	0.420	0.06	✗ 2
FRP	Filterable Reactive Phosphrous	mg/L	14	0.005	0.005	0.009	**0.005**	0.005	0.054	0.03	✗ 1
As	Arsenic	mg/L	14	0.00100	0.00100	0.00152	**0.00135**	0.00188	0.00270	0.02400	✓ 0
Cd	Cadmium	mg/L	13	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00011	0.00020	✓ 0
Cr	Chromium	mg/L	13	0.00100	0.00100	0.00106	**0.00100**	0.00100	0.00170	0.00100	✗ 2
Cu	Copper	mg/L	13	0.00100	0.00100	0.00133	**0.00100**	0.00128	0.00430	0.00140	✗ 2
Pb	Lead	mg/L	13	0.00100	0.00100	0.00262	**0.00210**	0.00300	0.01000	0.00340	✗ 2
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	✓ 0
Ni	Nickel	mg/L	13	0.00540	0.00956	0.01386	**0.01100**	0.01660	0.03900	0.01100	✗ 6
Zn	Zinc	mg/L	13	0.00220	0.00380	0.00725	**0.00440**	0.01084	0.02100	0.00800	✗ 3
Cl	Chloride	mg/L	3	55.00	57.80	61.00	**62.00**	64.40	66.00		✓ 0
Ca	Calcium	mg/L	13	11.00	13.00	18.00	**17.00**	21.60	29.00		✓ 0
Mg	Magnesium	mg/L	13	10.00	11.00	12.85	**13.00**	14.60	16.00		✓ 0
K	Potassium	mg/L	13	6.40	6.68	7.35	**7.00**	8.06	8.60		✓ 0
Na	Sodium	mg/L	13	69.00	72.40	77.92	**76.00**	82.00	91.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	13	68.00	80.60	96.08	**93.00**	110.00	130.00		✓ 0
SiO2	Silica	mg/L	2	39.00	40.40000	42.50	**42.50**	44.60000	46.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

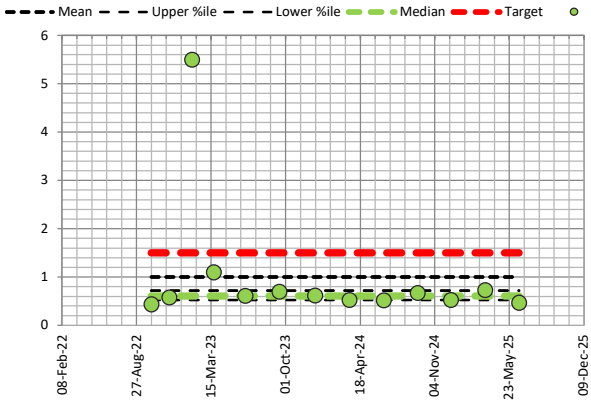
pH



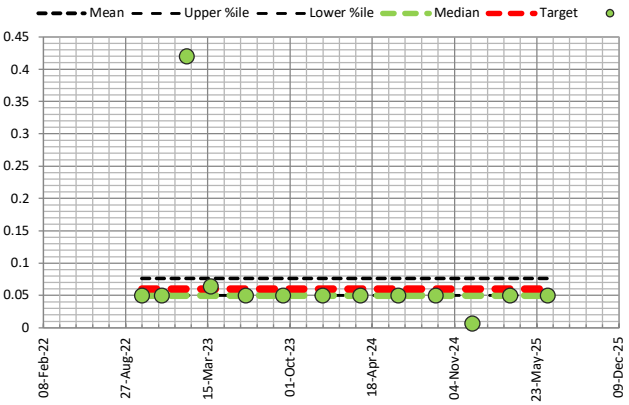
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

GW8 Endemic Bore 8

Downstream Bore Victoria Rd North - Verge (Install : Jun 2009)

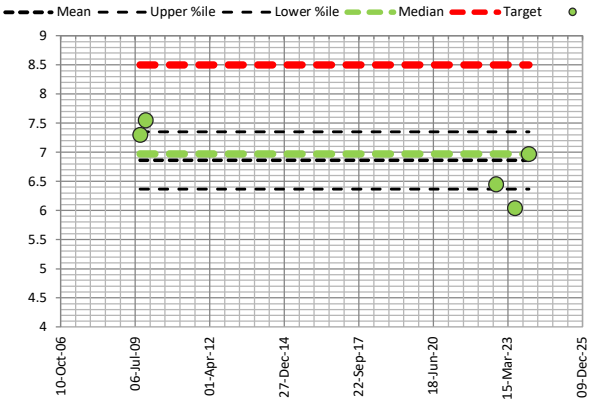
Easting	405590	Data Analysis Period Start Date	1/01/2009
Northing	6456777	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

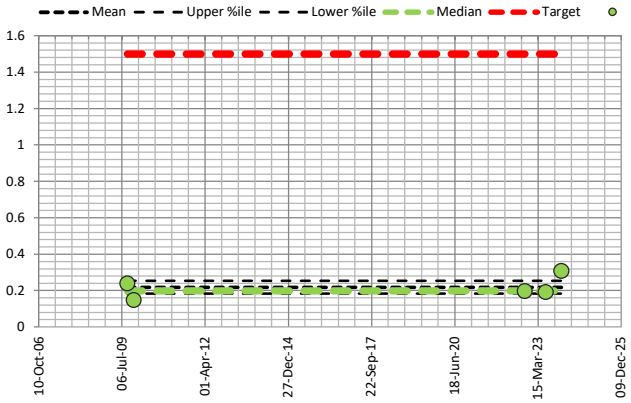
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	52	3.11	3.74	3.94	**4.07**	4.14	4.65		0
GWL mAHD	Groundwater Level	mAHD	52	19.96	20.47	20.67	**20.54**	20.88	21.50		0
T	Temperature	°C	5	16.90	18.020	21.040	**19.40**	23.080	29.000		0
EC	Electrical Conductivity	mS/cm	5	0.148	0.183	0.217	**0.198**	0.254	0.309	1.500	0
pH	pH	pH	5	6.04	6.37	6.86	**6.97**	7.35	7.55	8.50	0
DO	Dissolved Oxygen	%	3	19.80	26.68	36.60	**37.00**	46.60	53.00		0
TN	Total Nitrogen	mg/L	3	2.300	2.380	2.533	**2.500**	2.680	2.800	1.50	3
TKN	Total Kejdhal Nitrogen	mg/L	3	0.630	1.178	1.677	**2.000**	2.240	2.400		0
NO3	Nitrate	mg/L	3	0.248	0.294	0.837	**0.361**	1.285	1.900		0
NO2	Nitrite	mg/L	3	0.005	0.010	0.041	**0.018**	0.067	0.100		0
Nox	Nox	mg/L	2	0.380	0.684	1.140	**1.140**	1.596	1.900	0.10	2
NH3	Ammonia	mg/L	1	0.013	0.013	0.013	**0.013**	0.013	0.013	0.90	0
TP	Total Phosphorous	mg/L	3	0.090	0.142	0.223	**0.220**	0.304	0.360	0.06	3
FRP	Filterable Reactive Phosphrous	mg/L	3	0.005	0.040	0.086	**0.093**	0.133	0.160	0.03	2
As	Arsenic	mg/L	3	0.00100	0.00260	0.01867	**0.00500**	0.03200	0.05000	0.02400	1
Cd	Cadmium	mg/L	3	0.00010	0.00010	0.00120	**0.00010**	0.00208	0.00340	0.00020	1
Cr	Chromium	mg/L	3	0.00100	0.29660	0.58033	**0.74000**	0.89600	1.00000	0.00100	2
Cu	Copper	mg/L	3	0.00590	0.07554	0.18863	**0.18000**	0.30000	0.38000	0.00140	3
Pb	Lead	mg/L	3	0.00100	0.01500	0.03500	**0.03600**	0.05520	0.06800	0.00340	2
Hg	Mercury	mg/L	3	0.00005	0.00007	0.00025	**0.00010**	0.00040	0.00060	0.00060	0
Ni	Nickel	mg/L	3	0.00180	0.03668	0.35693	**0.08900**	0.62360	0.98000	0.01100	2
Zn	Zinc	mg/L	3	0.01800	0.15480	0.32933	**0.36000**	0.51000	0.61000	0.00800	3
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	1	5.00	5.00	5.00	**5.00**	5.00	5.00		0
Mg	Magnesium	mg/L	1	3.70	3.70	3.70	**3.70**	3.70	3.70		0
K	Potassium	mg/L	1	3.10	3.10	3.10	**3.10**	3.10	3.10		0
Na	Sodium	mg/L	1	14.00	14.00	14.00	**14.00**	14.00	14.00		0
H as CaCO3	Hardness as CaCO3	mg/L	1	28.00	28.00	28.00	**28.00**	28.00	28.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

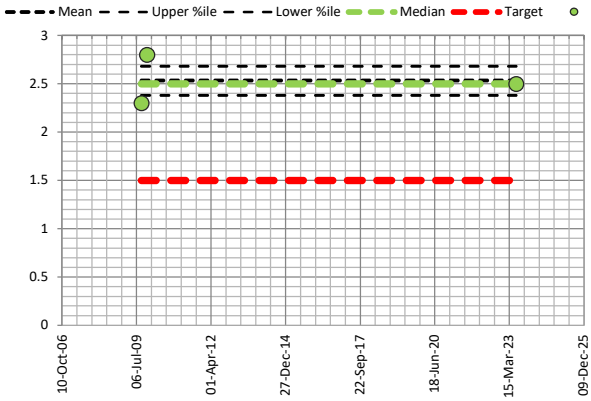
pH



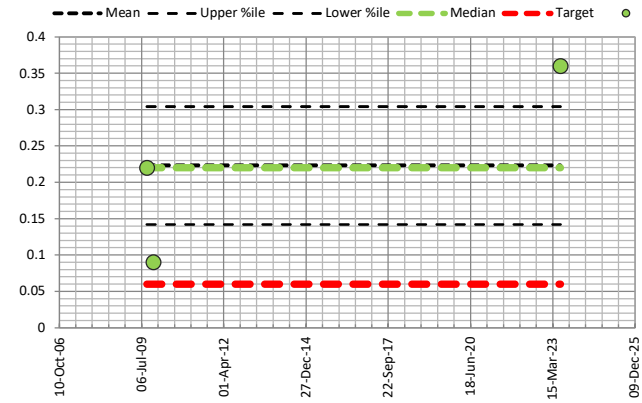
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

GW8D Hyd2o Deep Bore next to Endemic 8

Downstream Bore Victoria Rd North - Verge (Install Jul 2022)

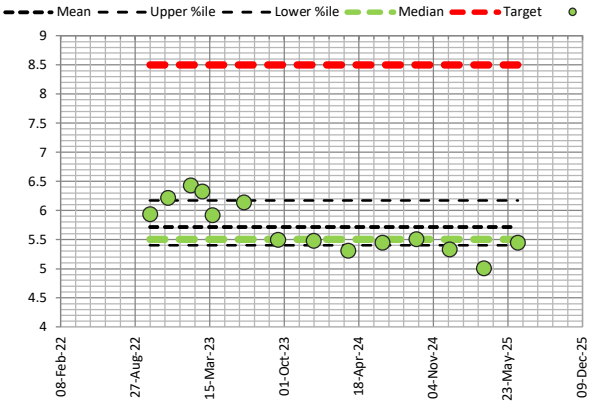
Easting	405590	Data Analysis Period Start Date	1/01/2009
Northing	6456775	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

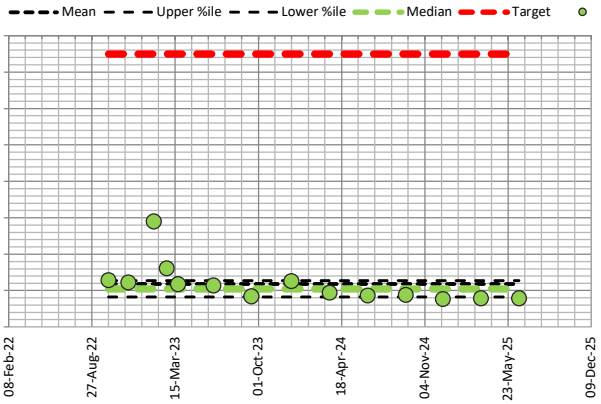
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	36	6.43	6.84	7.65	**7.66**	8.30	8.81		0
GWL mAHD	Groundwater Level	mAHD	36	15.71	16.22	16.87	**16.87**	17.68	18.09		0
T	Temperature	°C	14	20.30	21.060	23.893	**23.45**	26.200	28.600		0
EC	Electrical Conductivity	mS/cm	14	0.154	0.165	0.236	**0.209**	0.255	0.580	1.500	0
pH	pH	pH	14	5.01	5.40	5.72	**5.51**	6.17	6.43	8.50	0
DO	Dissolved Oxygen	%	13	19.40	22.20	26.92	**25.80**	32.58	39.10		0
TN	Total Nitrogen	mg/L	13	0.100	0.100	0.198	**0.170**	0.260	0.500	1.50	0
TKN	Total Kejdhal Nitrogen	mg/L	13	0.100	0.100	0.168	**0.110**	0.208	0.380		0
NO3	Nitrate	mg/L	14	0.005	0.005	0.025	**0.008**	0.053	0.094		0
NO2	Nitrite	mg/L	13	0.005	0.005	0.005	**0.005**	0.005	0.005		0
Nox	Nox	mg/L	13	0.005	0.005	0.027	**0.009**	0.058	0.099	0.10	0
NH3	Ammonia	mg/L	14	0.005	0.005	0.018	**0.005**	0.010	0.140	0.90	0
TP	Total Phosphorous	mg/L	13	0.005	0.050	0.047	**0.050**	0.050	0.054	0.06	0
FRP	Filterable Reactive Phosphrous	mg/L	14	0.005	0.005	0.009	**0.005**	0.007	0.050	0.03	1
As	Arsenic	mg/L	14	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.02400	0
Cd	Cadmium	mg/L	13	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	13	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	0
Cu	Copper	mg/L	13	0.00100	0.00100	0.00112	**0.00100**	0.00100	0.00260	0.00140	1
Pb	Lead	mg/L	13	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00340	0
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	13	0.00100	0.00104	0.00188	**0.00160**	0.00226	0.00420	0.01100	0
Zn	Zinc	mg/L	13	0.00100	0.00120	0.00363	**0.00180**	0.00428	0.01900	0.00800	1
Cl	Chloride	mg/L	3	28.00	28.40	38.67	**29.00**	47.00	59.00		0
Ca	Calcium	mg/L	13	0.50	0.96	1.89	**1.70**	2.90	4.00		0
Mg	Magnesium	mg/L	13	1.30	1.64	2.72	**2.40**	3.96	4.50		0
K	Potassium	mg/L	13	0.76	1.02	1.77	**1.50**	2.80	3.00		0
Na	Sodium	mg/L	13	25.00	27.20	32.23	**33.00**	37.00	38.00		0
H as CaCO3	Hardness as CaCO3	mg/L	13	5.70	9.22	15.78	**16.00**	23.00	27.00		0
SiO2	Silica	mg/L	2	22.00	24.40000	28.00	**28.00**	31.60000	34.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

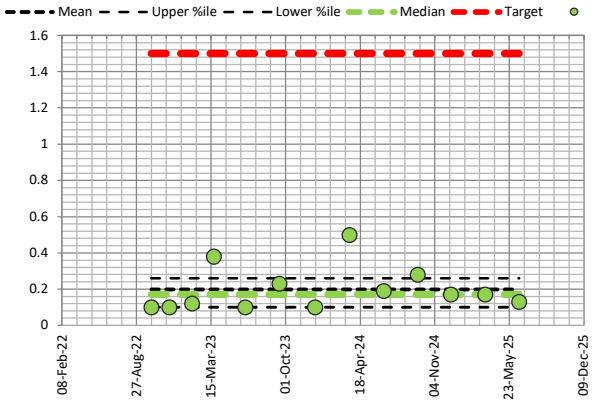
pH



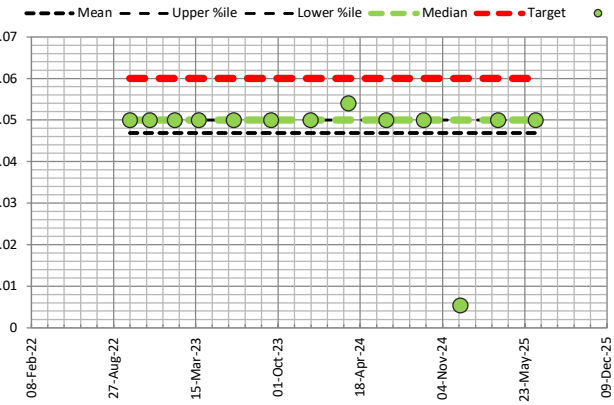
Electrical Conductivity



Total Nitrogen



Total Phosphorous



FieldDAE

Field Data Analysis & Evaluation System

H21003 Wattle Grove South Monitoring

GW9D Hyd2o Bore Wetlands 9 Deep

Downstream Bore Brentwood Rd North - Verge (Install Jul 2022)

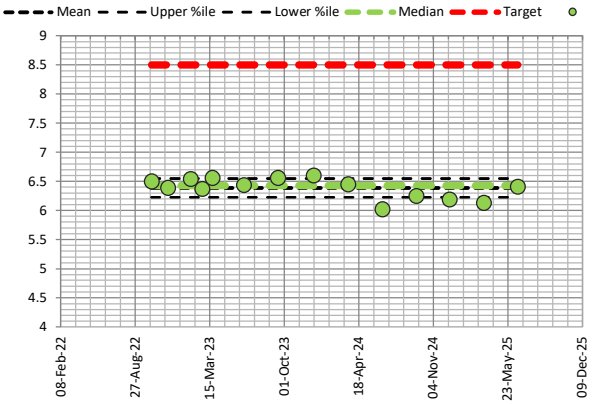
Easting	405329
Northing	6457513
Data Analysis Period Start Date	1/01/2009
Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

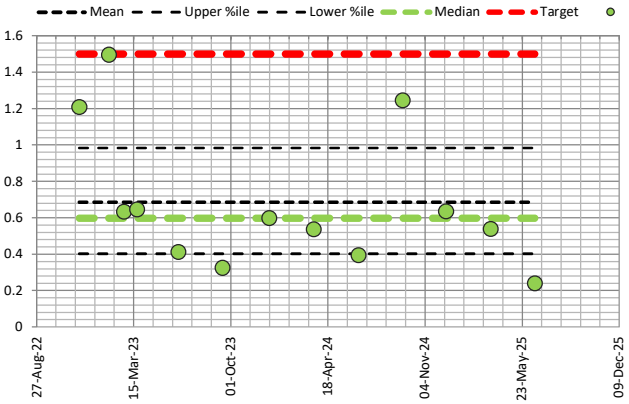
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	2.12	2.62	3.13	**3.21**	3.58	4.18		✓ 0
GWL mAHD	Groundwater Level	mAHD	37	17.60	18.20	18.65	**18.57**	19.16	19.66		✓ 0
T	Temperature	°C	13	18.30	20.480	24.054	**25.40**	27.560	29.300		✓ 0
EC	Electrical Conductivity	mS/cm	13	0.241	0.402	0.685	**0.598**	0.983	1.496	1.500	✓ 0
pH	pH	pH	14	6.02	6.23	6.39	**6.43**	6.55	6.60	8.50	✓ 0
DO	Dissolved Oxygen	%	12	10.70	12.48	17.41	**16.90**	21.94	25.70		✓ 0
TN	Total Nitrogen	mg/L	13	0.710	0.824	1.609	**1.400**	2.060	3.700	1.50	✗ 5
TKN	Total Kejdhal Nitrogen	mg/L	13	0.490	0.648	1.359	**0.830**	1.920	3.700		✓ 0
NO3	Nitrate	mg/L	14	0.005	0.029	0.237	**0.091**	0.352	1.400		✓ 0
NO2	Nitrite	mg/L	13	0.005	0.005	0.009	**0.005**	0.006	0.050		✓ 0
Nox	Nox	mg/L	13	0.005	0.022	0.253	**0.100**	0.368	1.400	0.10	✗ 6
NH3	Ammonia	mg/L	14	0.005	0.005	0.053	**0.028**	0.097	0.190	0.90	✓ 0
TP	Total Phosphorous	mg/L	13	0.033	0.050	0.074	**0.050**	0.090	0.230	0.06	✗ 5
FRP	Filterable Reactive Phosphrous	mg/L	14	0.007	0.009	0.035	**0.023**	0.060	0.090	0.03	✗ 6
As	Arsenic	mg/L	14	0.00100	0.00100	0.00181	**0.00130**	0.00184	0.00620	0.02400	✓ 0
Cd	Cadmium	mg/L	13	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	✓ 0
Cr	Chromium	mg/L	13	0.00100	0.00100	0.00112	**0.00100**	0.00106	0.00230	0.00100	✗ 3
Cu	Copper	mg/L	13	0.00170	0.00272	0.00565	**0.00450**	0.00742	0.01800	0.00140	✗ 13
Pb	Lead	mg/L	13	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00340	✓ 0
Hg	Mercury	mg/L	13	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	✓ 0
Ni	Nickel	mg/L	13	0.00460	0.00694	0.01579	**0.01400**	0.02660	0.03500	0.01100	✗ 7
Zn	Zinc	mg/L	13	0.00200	0.00298	0.00764	**0.00540**	0.01152	0.02300	0.00800	✗ 5
Cl	Chloride	mg/L	3	32.00	59.20	77.33	**100.00**	100.00	100.00		✓ 0
Ca	Calcium	mg/L	13	8.00	11.80	19.23	**18.00**	24.00	41.00		✓ 0
Mg	Magnesium	mg/L	13	5.10	8.56	16.00	**14.00**	19.40	40.00		✓ 0
K	Potassium	mg/L	13	5.30	8.40	13.32	**11.00**	19.00	23.00		✓ 0
Na	Sodium	mg/L	13	27.00	43.80	69.85	**64.00**	88.00	130.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	12	41.00	63.80	110.92	**95.00**	120.00	240.00		✓ 0
SiO2	Silica	mg/L	2	15.00	15.80000	17.00	**17.00**	18.20000	19.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

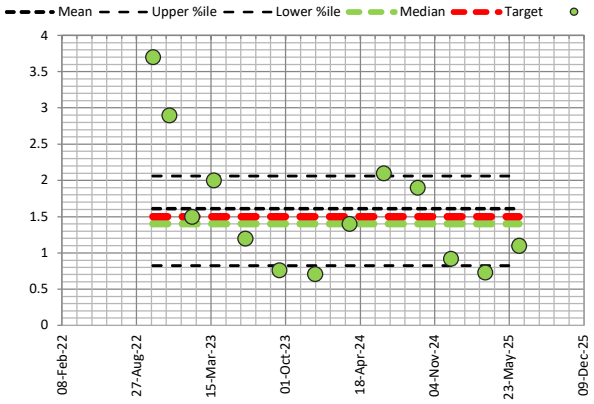
pH



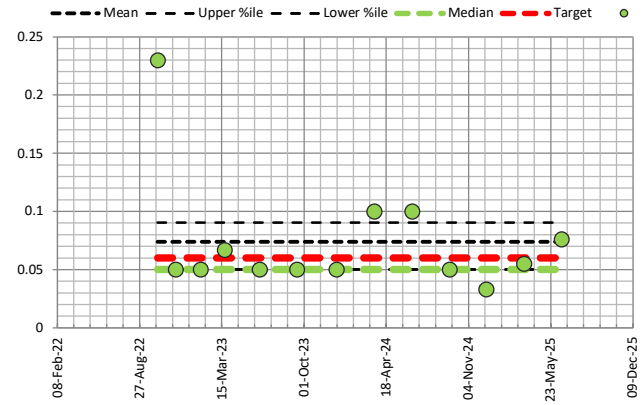
Electrical Conductivity



Total Nitrogen



Total Phosphorous



FieldDAE

Field Data Analysis & Evaluation System

H21003 Wattle Grove South Monitoring

GW9S Hyd2o Bore Wetlands 9 Shallow

Downstream Bore Brentwood Rd North - Verge (Install Jul 2022)

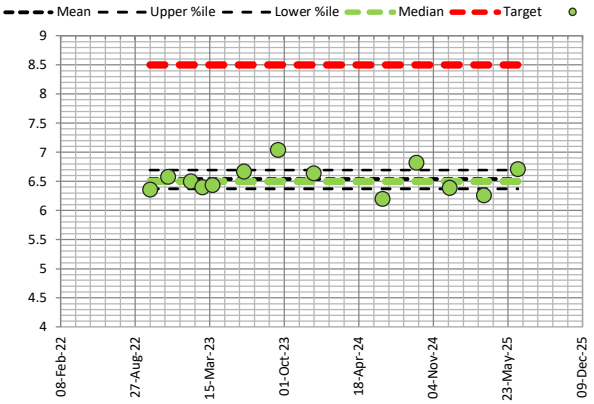
Easting	405329
Northing	6457512
Data Analysis Period Start Date	1/01/2009
Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

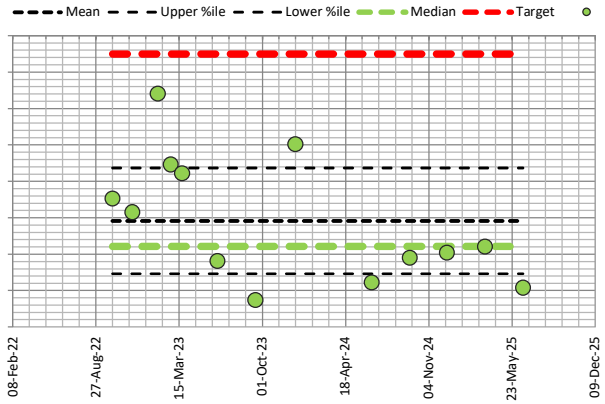
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	37	1.93	2.33	2.83	**2.91**	3.21	3.68		0
GWL mAHD	Groundwater Level	mAHD	37	18.13	18.60	18.98	**18.90**	19.48	19.88		0
T	Temperature	°C	13	17.70	19.900	24.115	**23.10**	28.560	31.300		0
EC	Electrical Conductivity	mS/cm	13	0.149	0.292	0.582	**0.442**	0.874	1.282	1.500	0
pH	pH	pH	13	6.20	6.37	6.54	**6.50**	6.69	7.04	8.50	0
DO	Dissolved Oxygen	%	13	13.00	19.08	26.19	**24.70**	31.08	55.30		0
TN	Total Nitrogen	mg/L	12	1.100	3.480	4.567	**4.450**	5.940	8.200	1.50	10
TKN	Total Kejdhal Nitrogen	mg/L	12	0.150	0.542	1.134	**1.055**	1.580	2.300		0
NO3	Nitrate	mg/L	13	0.410	1.500	3.314	**3.700**	4.600	6.500		0
NO2	Nitrite	mg/L	12	0.005	0.005	0.028	**0.011**	0.054	0.089		0
Nox	Nox	mg/L	12	0.410	1.420	3.440	**4.000**	4.600	6.500	0.10	12
NH3	Ammonia	mg/L	13	0.005	0.005	0.030	**0.007**	0.062	0.110	0.90	0
TP	Total Phosphorous	mg/L	12	0.050	0.126	0.406	**0.245**	0.452	1.400	0.06	10
FRP	Filterable Reactive Phosphrous	mg/L	13	0.028	0.081	0.139	**0.150**	0.192	0.310	0.03	12
As	Arsenic	mg/L	13	0.00250	0.00442	0.00632	**0.00570**	0.00722	0.01600	0.02400	0
Cd	Cadmium	mg/L	12	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	12	0.00100	0.00100	0.00107	**0.00100**	0.00100	0.00180	0.00100	1
Cu	Copper	mg/L	12	0.00100	0.00238	0.00338	**0.00335**	0.00426	0.00600	0.00140	11
Pb	Lead	mg/L	12	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00340	0
Hg	Mercury	mg/L	12	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	12	0.00130	0.00190	0.00632	**0.00325**	0.00950	0.02300	0.01100	2
Zn	Zinc	mg/L	12	0.00290	0.00454	0.00792	**0.00760**	0.01100	0.01200	0.00800	5
Cl	Chloride	mg/L	3	14.00	28.80	58.33	**51.00**	86.40	110.00		0
Ca	Calcium	mg/L	12	16.00	26.20	37.92	**36.50**	50.00	65.00		0
Mg	Magnesium	mg/L	12	2.50	4.44	7.96	**7.90**	11.60	14.00		0
K	Potassium	mg/L	12	4.40	5.50	11.83	**11.75**	18.00	19.00		0
Na	Sodium	mg/L	12	13.00	20.20	43.83	**44.50**	59.40	99.00		0
H as CaCO3	Hardness as CaCO3	mg/L	11	59.00	75.00	126.73	**140.00**	170.00	190.00		0
SiO2	Silica	mg/L	2	8.90	9.92000	11.45	**11.45**	12.98000	14.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

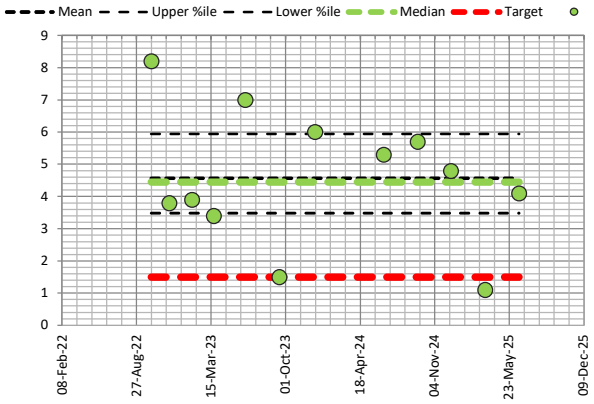
pH



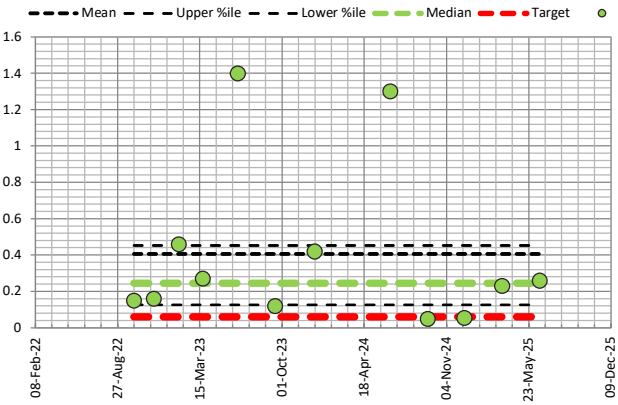
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

GW12 Endemic Bore 12

Downstream Bore Brook Rd South - GBSWA (Install : Jun 2009)

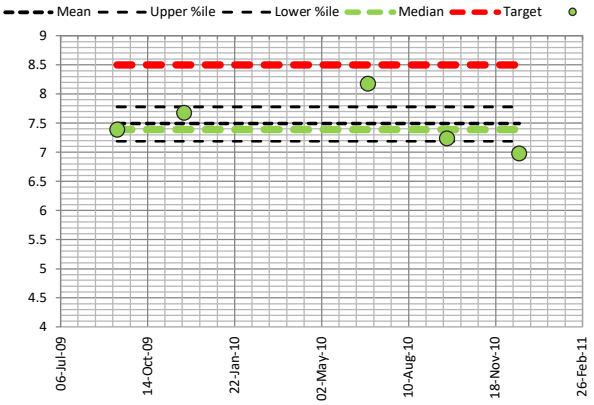
Easting	403440	Data Analysis Period Start Date	1/01/2009
Northing	6456803	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

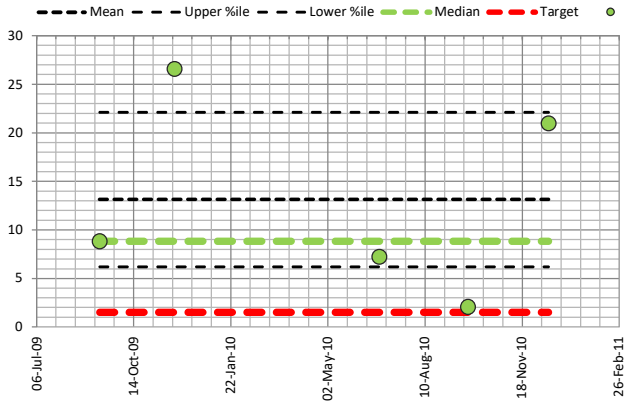
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Wetlands	Times Exceeded
GWL bToC	Groundwater Level	mBToC	59	0.49	0.94	1.74	**1.79**	2.67	2.84		✓ 0
GWL mAHD	Groundwater Level	mAHD	59	6.55	6.72	7.65	**7.60**	8.45	8.90		✓ 0
T	Temperature	°C	5	15.50	16.460	18.800	**16.90**	20.920	25.000		✓ 0
EC	Electrical Conductivity	mS/cm	5	2.076	6.199	13.143	**8.830**	22.104	26.600	1.500	✗ 5
pH	pH	pH	5	6.98	7.19	7.49	**7.39**	7.78	8.18	8.50	✓ 0
DO	Dissolved Oxygen	%	0	0.00	0.00	0.00	**0.00**	0.00	0.00		✓ 0
TN	Total Nitrogen	mg/L	3	2.700	3.180	5.000	**3.900**	6.600	8.400	1.50	✗ 3
TKN	Total Kejdhal Nitrogen	mg/L	4	2.600	2.600	4.350	**3.250**	5.660	8.300		✓ 0
NO3	Nitrate	mg/L	4	0.010	0.010	0.153	**0.030**	0.246	0.540		✓ 0
NO2	Nitrite	mg/L	4	0.005	0.008	0.034	**0.015**	0.052	0.100		✓ 0
Nox	Nox	mg/L	3	0.005	0.035	0.208	**0.080**	0.356	0.540	0.10	✗ 1
NH3	Ammonia	mg/L	0	0.000	0.000	0.000	**0.000**	0.000	0.000	0.90	✓ 0
TP	Total Phosphorous	mg/L	4	0.520	0.802	1.103	**1.195**	1.440	1.500	0.06	✗ 4
FRP	Filterable Reactive Phosphrous	mg/L	4	0.005	0.044	0.211	**0.080**	0.326	0.680	0.03	✗ 3
As	Arsenic	mg/L	3	0.00500	0.01060	0.02467	**0.01900**	0.03760	0.05000	0.02400	✗ 1
Cd	Cadmium	mg/L	3	0.00005	0.00007	0.00038	**0.00010**	0.00064	0.00100	0.00020	✗ 1
Cr	Chromium	mg/L	3	0.00200	0.00720	0.57233	**0.01500**	1.02600	1.70000	0.00100	✗ 3
Cu	Copper	mg/L	3	0.01300	0.01500	0.17033	**0.01800**	0.29520	0.48000	0.00140	✗ 3
Pb	Lead	mg/L	3	0.00100	0.00460	0.03300	**0.01000**	0.05680	0.08800	0.00340	✗ 2
Hg	Mercury	mg/L	3	0.00010	0.00010	0.00020	**0.00010**	0.00028	0.00040	0.00060	✓ 0
Ni	Nickel	mg/L	3	0.00200	0.01160	0.07600	**0.02600**	0.13040	0.20000	0.01100	✗ 2
Zn	Zinc	mg/L	3	0.01000	0.06200	0.68333	**0.14000**	1.19600	1.90000	0.00800	✗ 3
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		✓ 0
Ca	Calcium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		✓ 0
Mg	Magnesium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		✓ 0
K	Potassium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		✓ 0
Na	Sodium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		✓ 0
H as CaCO3	Hardness as CaCO3	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		✓ 0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		✓ 0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

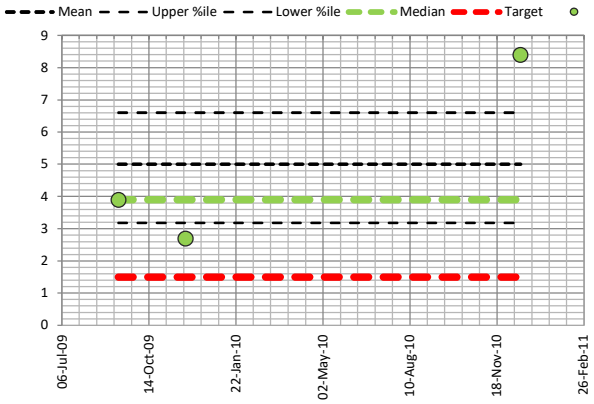
pH



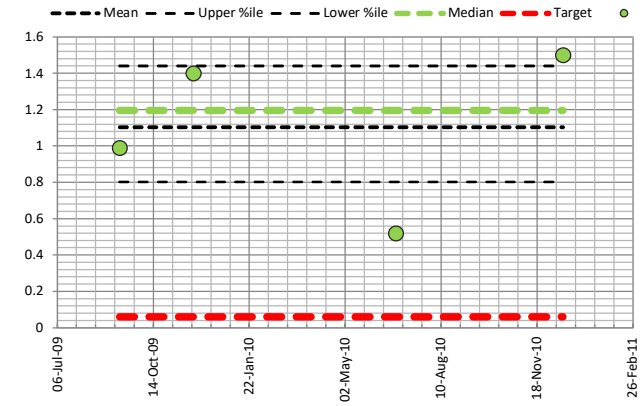
Electrical Conductivity



Total Nitrogen



Total Phosphorous



H21003 Wattle Grove South Monitoring

SW1 Surface Water Site 1

Open Drain Crystal Brook Rd

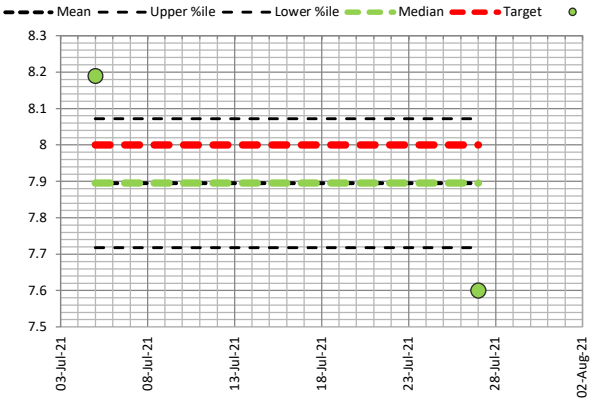
Easting	406176	Data Analysis Period Start Date	1/01/2009
Northing	6458041	Data Analysis Period End Date	15/07/2025

Report Date : 25/07/2025

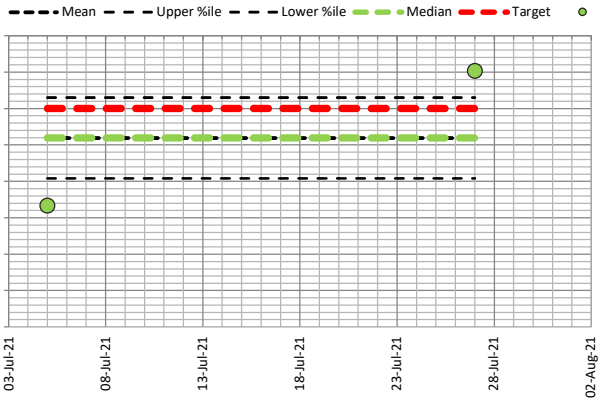
Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95% & Lowland Rivers	Times Exceeded
GWL bToC	Groundwater Level	mBToC	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
GWL mAHD	Groundwater Level	mAHD	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
T	Temperature	°C	2	13.30	13.460	13.700	**13.70**	13.940	14.100		0
EC	Electrical Conductivity	mS/cm	2	0.167	0.204	0.260	**0.260**	0.315	0.352	0.300	1
pH	pH	pH	2	7.60	7.72	7.90	**7.90**	8.07	8.19	8.00	1
DO	Dissolved Oxygen	%	2	72.50	73.12	74.05	**74.05**	74.98	75.60		0
TN	Total Nitrogen	mg/L	2	0.300	0.420	0.600	**0.600**	0.780	0.900	1.20	0
TKN	Total Kejdhal Nitrogen	mg/L	2	0.300	0.400	0.550	**0.550**	0.700	0.800		0
NO3	Nitrate	mg/L	2	0.012	0.013	0.015	**0.015**	0.016	0.017		0
NO2	Nitrite	mg/L	2	0.005	0.005	0.005	**0.005**	0.005	0.005		0
Nox	Nox	mg/L	2	0.017	0.017	0.017	**0.017**	0.017	0.017	0.15	0
NH3	Ammonia	mg/L	2	0.011	0.012	0.014	**0.014**	0.015	0.016	0.90	0
TP	Total Phosphorous	mg/L	2	0.050	0.050	0.050	**0.050**	0.050	0.050	0.07	0
FRP	Filterable Reactive Phosphrous	mg/L	2	0.005	0.005	0.005	**0.005**	0.005	0.005	0.04	0
As	Arsenic	mg/L	2	0.00100	0.00120	0.00150	**0.00150**	0.00180	0.00200	0.02400	0
Cd	Cadmium	mg/L	2	0.00010	0.00010	0.00010	**0.00010**	0.00010	0.00010	0.00020	0
Cr	Chromium	mg/L	2	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00100	0
Cu	Copper	mg/L	2	0.00300	0.00320	0.00350	**0.00350**	0.00380	0.00400	0.00140	2
Pb	Lead	mg/L	2	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.00340	0
Hg	Mercury	mg/L	2	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Ni	Nickel	mg/L	2	0.00100	0.00100	0.00100	**0.00100**	0.00100	0.00100	0.01100	0
Zn	Zinc	mg/L	2	0.01000	0.01140	0.01350	**0.01350**	0.01560	0.01700	0.00800	2
Cl	Chloride	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Ca	Calcium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Mg	Magnesium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
K	Potassium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
Na	Sodium	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
H as CaCO3	Hardness as CaCO3	mg/L	0	0.00	0.00	0.00	**0.00**	0.00	0.00		0
SiO2	Silica	mg/L	0	0.00	0.00000	0.00	**0.00**	0.00000	0.00		0

* For EC, pH, and DO, upper and lower limits apply - exceedences and targets shown in table apply to upper limit values only

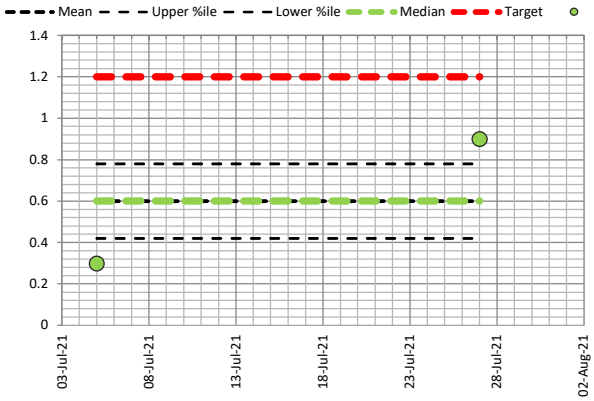
pH



Electrical Conductivity



Total Nitrogen



Total Phosphorous

