Whitehaven Vickery Extension Project
Community Consultative Committee

Date: 11 April 2024, 12 pm – 1pm

Location: Vickery Board Room and Zoom

Attendees	
Community Members	**Whitehaven Coal**
Grant McIlveen (GM) Community Representative	Megan Martin (MM) - Whitehaven Coal
Keith Blanch (KB) - Community Representative	Matt Sparkes (MS) - Whitehaven Coal
	Dean Scott (DS) -Whitehaven Coal
	Jeff Andrews (JA) – Whitehaven Coal
Gunnedah Shire Council	
Wade Hudson (WH) - Gunnedah Shire Council	**Independent Chairperson**
Cr Colleen Fuller (CF) - Gunnedah Shire Council	Professor Roberta Ryan (RR)
Narrabri Shire Council	**Minute taker**
Cr Darrell Tiemens (DT) - Narrabri Shire Council	Isa Crossland Stone (ICS)
Apologies	
Cr Rob Hooke (RH) – Gunnedah Shire Council	
Cr Cathy Redding (CR) - Narrabri Shire Council	
Jabin De Keizer (JDK) - Whitehaven Coal	
Ron Fuller (RF) - Community Representative	
Barry Thomson (BT) - Community Representative	

Item	Description	Action
1	**Welcome, introductions and apologies - RR**	
	RR introduces herself and welcomes new attendees.	
2	**Declarations and Interests - RR**	
	There are no new declarations.	
3	**Vickery Environmental Report - MM**	
	MM's slides are attached to these minutes. RR asks MM if they have received any feedback about the update blasting. MM says they have had some positive feedback and one complaint from someone who did not receive the first text message.Despite having been signed up to the register they had been missed off the list in the SMS broadcast service. Following this complaint, the issue has been rectified and this individual has received subsequent messages. The ongoing communications with local residents seems to be working well at the moment.	
4	**Project Update/Approval Update –MS**	
	MS provides a project update. The Whitehaven monitoring report, which contains the contents of this update, is attached to these minutes.	

5	**Housing Project Update - JA**	
	JA provides an update to the Project Development in Gunnedah Shire Housing Strategy. GM asks how far along they are with the Boggabri Vault project? JA says that this is sitting with the specialist team currently and they are expecting to get DA approval soon. KB asks about the units next to the Vault. Is this short-term accommodation? JA says that they are intended to house people who are seeking accommodation, usually in a short-term way, for workers and people entering the area, visiting contractors, etc..	

	They have made an effort to maintain the existing character of the building/buildings in the area. MM says that a lot of the Vickery drive in drive out workers are living near the Boggabri Vault in the Civeo camp.	
6	**Next Steps - DS**	
	GM asks about the plans for the rail corridor. DS says that when the plans are finalized they will be published on the website. MM says that they are making a small realignment of the rail corridor, and this will be shared in the exhibition period. GM asks if the rail corridor will still be raised as a viaduct as per the EIS recommendations. MM says there has been no final design completed- this work is on going. MM will clarify the details of the rail corridor and the timeframe of its progress.	MM to update on the rail corridor plans and timing.
7	**General Business - RR**	
	CF congratulates Whitehaven on their employment program at Vickery where local people are coming back to their local shire to work and this has been very positive for the community. CF offers her advice on the area as it is black soil and difficult to build on. CF notes that the police housing on this street had to be rebuilt. The police had to be relocated temporarily while the houses were improved. GM notes that there was a grid survey in early March. Was this related to the rail corridor plans? Was this under Whitehaven's organization? MM and DS say they are unaware that it was but can follow up. GM asks about the water bores. MM says that they constructed 2 new bores. They are monitoring them now. There are another 11 existing bores that will be included in the monitoring program. 2 or 3 of the total cannot be monitored due to	MM to clarify whether the grid survey that occurred in March was related to Whitehaven's activity around the rail corridor works.

	issues with the construction or they are still in use, and Whitehaven may look at replacing some of these as necessary based on expert advice. GM asks about the noise management plan for the EIS. Is this complete. MM says that everything is still in place for the noise monitoring plan. It has not been significantly updated and is complete for now. Coming into Winter, they are still conducting monitoring to ensure that they stay under maximum noise levels. GM asks about the status of the pipeline from Tarrawonga to Vickery and out to Maules Creek. MM says that she doesn't know where the pipeline development is up to but this is still planned for construction. KB expresses serious concern to DT about the Rangari-road, which is unsafe. He is concerned that it will cause fatalities. DT agrees that it is an issue, Tamworth and the Gunnedah Shire were both funded for works on their sections of the road and Narrabri Shire is pursuing funding from the State Government to do works on this section. DT says that the Council does not have the capacity to fund the necessary works. DT is consistently working on this case and is also very concerned about the state of it. It should be an easy journey between Narrabri and Tamworth. DT asks KB to send him an email expressing his concerns. Community complaints provide a helpful pressure to apply to the State Government. DT can also provide KB the details of the local member to contact. *Following this meeting, the below response was provided by the Council, on behalf of DT, via email:* ***"Narrabri Shire Council (Council) does not have the funding to upgrade Rangari Road, which is estimated to be over $10 Million. However, Council has performed advocacy on this matter to both State and Federal Ministers urging them to allocate funding to this project.***	DT to seek clarification on behalf of Narrabri Shire Council in relation to the $850,000 that was pledged and not paid by the Council to the Glentarkie facility in Boggabri. RR to follow up again with Narrabri Shire in relation to GM's query.

	Council will continue to inspect and perform maintenance works as required along the length of Rangari Road. This is currently occurring on a frequent basis. ***Please note Council will continue to appeal to funding bodies for an upgrade on this road to align it with the condition in Gunnedah Shire and Tamworth Shires. Please note their upgrades were both funded by NSW Government grants and delivered by Transport for NSW (TfNSW)."*** GM asks DT about the $850,000 that was guaranteed to go to the Boggabri Glentarkie centre. Why have they not paid these funds? Narrabri Council has received plenty of funds from Whitehaven. DT is unable to provide much information at this time. However, he agrees to follow up at the Council and to discuss this matter with RR offline. *Following the meeting, RR and DT met offline to discuss this matter, aiming to provide some resolution to the group.* *Following up that meeting, the below response was provided by the Council, on behalf of DT, via email:* ***"As detailed in Narrabri Shire Council's (Council) previous response to the Committee in relation to this matter dated Monday, 7 August 2023, Council has not financially contributed to the Glentarkie project. Council has, however, worked closely with the Glentarkie Committee and Boggabri Idemitsu Coal in relation to upgrades and improvements to the Glentarkie Retirement facility under DA2024/0044. Further information in relation to this project is available from:*** ***https://narrabricourier.com.au/2023/06/07/more-aged-units-to-be-built-in-boggabri/*** ***The inference that Council 'pledged and not paid' $850,000 is incorrect. The amount as described originally formed part of a draft Voluntary Planning Agreement (VPA) which was ultimately not executed by Council and Whitehaven. Notwithstanding, in accordance with the condition A21 of the Vickery Extension Development Consent, Whitehaven Coal paid Narrabri Shire Council a financial contribution of $3.2m in early 2023. It should be noted that the expenditure of this contribution is legally***	

	required to be in accordance with the provisions of the Environmental Planning and Assessment Act 1979, specifically under section 7.12 of that Act. A copy of the relevant plan which guides and authorises this expenditure is provided as background as follows: ***https://www.narrabri.nsw.gov.au/files/assets/public/v/1/4.-planning-amp-development/planning-and-environment/strategic-planning-documents/strategic-documents/7.12-fixed-development-consent-levies-contribution-plan-adopted-23aug2022.pdf*** ***The Committee's attention is also drawn to item 37 on page 20 of this document. "***	
8	**Next Meeting - RR**	
	RR and MM will arrange the next meeting date offline.	

Vickery Coal Mine
Community Consultative Committee
Meeting #18

Quarterly Environmental Monitoring Report
Jan, 2024 – Mar, 2024

Vickery Project

This report has been prepared for the Community Consultative Committee (CCC) meeting to show Environmental monitoring performance at Vickery Coal Mine (VCM) for the reporting period from Jan 2024 to Mar 2024.

Noise Monitoring

Attended noise was conducted during this period.

Attended noise monitoring was conducted at "Lanreef" (N-AT2) and "Broadwater" (N-AT1) properties once a month during this reporting period. Noise criteria for the mine is 40dB(A) Leq (15 min) during day time and 35dB(A) Leq (15 min) during evening/night time.

Results below show that noise emissions from the mine did not exceed operational criteria at "Lanreef" or "Broadwater" monitoring locations during the monitoring period.

Table 1 January 2024 Attended Noise Monitoring

Table 4
VCM Operational Noise Monitoring Results Leq(15min) – 25th January 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)[1]
N-AT1 / 7	4:25pm	41	IA	40	2.9 / 244	B	Birds (41), insects (28), **VCM (IA)**	No
N-AT2 / 8	2:02pm	38	IA	40	2.2 / 186	B	Birds (37), traffic (29), insects (25), **VCM (IA)**	No

Table 5
VCM Operational Noise Monitoring Results Leq(15min) – 25th January 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)[1]
N-AT1 / 7	6:00pm	40	IA	35	3.5 / 261	D	Birds (40), insects (23), **VCM (IA)**	NA
N-AT2 / 8	9:30pm	48	IA	37	2.1 / 330	E	Insects (48), traffic (30), frogs (28), **VCM (IA)**	No

Table 6
VCM Operational Noise Monitoring Results Leq(15min) – 25th January 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)[1]
N-AT1 / 7	11:33pm	46	25	35	2.8 / 040	E	Insects (46), **VCM (25)**, frogs (24	No
N-AT2 / 8	10:00pm	46	IA	37	2.7 / 222	E	Insects (46), traffic (28), frogs (21), **VCM (IA)**	No

Table 7
VCM Operational Noise Monitoring Results LA_{max} – 25th January 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)[1]
N-AT1 / 7	11:33pm	61	29	52	2.8 / 040	E	Insects	No
N-AT2 / 8	10:00pm	58	IA	52	2.7 / 222	E	Insects	No

Table 2 February 2024 Attended Noise Monitoring

Table 4

VCM Operational Noise Monitoring Results Leq(15min) – 26th & 27th February 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)[1]
N-AT1 / 7	11:47am (27/02/24)	42	IA	40	4.0 / 261	B	Birds (42), aeroplane (27), insects (26), **VCM (IA)**	NA
N-AT2 / 8	4:30pm (26/02/24)	40	IA	40	2.8 / 247	B	Birds (40), traffic (26), insects (22), **VCM (IA)**	No

Table 5

VCM Operational Noise Monitoring Results Leq(15min) – 26th February 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)[1]
N-AT1 / 7	9:30pm	44	24	35	2.8 / 147	D	Insects (43), birds (35), **VCM (24)**	No
N-AT2 / 8	6:00pm	52	IA	37	3.9 / 134	D	Residential (51), birds (45), traffic (29), frogs (28), **VCM (IA)**	NA

Table 6

VCM Operational Noise Monitoring Results Leq(15min) – 26th February 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)[1]
N-AT1 / 7	10:00pm	42	22	35	4.5 / 127	D	Insects (42), **VCM (22)**	NA
N-AT2 / 8	12:06am	44	29	37	5.5 / 141	D	Insects (46), traffic (28), frogs (21), **VCM (29)**	NA

Table 7

VCM Operational Noise Monitoring Results LA_{max} – 26th February 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)[1]
N-AT1 / 7	10:00pm	57	25	52	4.5 / 127	D	Insects	NA
N-AT2 / 8	12:06am	64	33	52	5.5 / 141	D	Insects	NA

Table 3 March 2024 Attended Noise Monitoring

Table 4

VCM Operational Noise Monitoring Results Leq(15min) – 11th March 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	4:27pm	40	IA	45[1]	4.2 / 098	C	Birds (40), insects (26), **VCM (IA)**	No
N-AT2 / 8	2:12pm	48	IA	45[1]	4.5 / 097	C	Birds (48), insects (33), traffic (28), **VCM (IA)**	No

Table 5

VCM Operational Noise Monitoring Results Leq(15min) – 11th March 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	9:30pm	39	30	35	2.1 / 116	E	Insects (38), **VCM (30)**, frogs (28)	No
N-AT2 / 8	8:18pm	36	29	42[1]	4.9 / 068	D	Insects (34), **VCM (29)**, aeroplane (28), traffic (23)	No

Table 6

VCM Operational Noise Monitoring Results Leq(15min) – 11th March 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	10:00pm	36	23	35	2.8 / 149	E	Insects (35), frogs (28), **VCM (23)**	No
N-AT2 / 8	11:53pm	38	25	42[1]	3.5 / 123	D	Insects (37), frogs (26), **VCM (25)**, traffic (22)	No

Table 7

VCM Operational Noise Monitoring Results LA_{max} – 11th March 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)
N-AT1 / 7	10:00pm	58	29	52	2.8 / 149	E	Insects	No
N-AT2 / 8	11:53pm	61	33	57[1]	3.5 / 123	D	Insects	No

The real time noise monitor located on the “Long Way Round” property remains a management tool so the noise criteria are not applicable at that site. Levels of noise recorded at that location are managed according to the noise management plan and trigger action response plan.

Blast Monitoring

Blasting Results

Since 2024, there have been 8 blasts (until 31/03/2024) at VCM.

The highest result for Overpressure last quarter was 113dB recorded at B-02 compliance monitor on the 28/03/2024.

The highest result for ground vibration last quarter was 1.21mm/s at B-02 recorded on the 28/03/2024.

VCM overpressure and ground vibration for the quarter was compliant and did not exceed the blasting criteria declared in the project approval and Blast Management Plan (BMP).

Table 4 Max Peak Overpressure and Ground Pressure for the Quarter

Monitor Location	Date	Max. Peak Overpressure (dB)	Criterion (dB)	Date	Max. Peak Ground Pressure (mm/s)	Criterion (mm/s)
B-01	28/03/24	108.8	**133**	28/03/24	0.62	**10**
B-02	28/03/24	113	**N/A**	28/03/24	1.21	**80**
B-03	28/03/24	104.6	**120**	12/02/24	0.29	**10**

Air Quality Monitoring

Real-time Air Monitoring ($PM_{2.5}$ and PM_{10})

Two real-time air quality monitoring units are located on private property adjacent to the Vickery Coal Mine. PM1 is located at Lanreef and PM2 at Mirrabinda to the south and south-west of the operations. These are used as both a compliance and an operational management tool. Dust levels nearing or reaching the nominated criteria will trigger actions onsite to assess the source of dust and modify operations if it is determined to be related to Vickery operations. Additional air quality monitoring units are located at Wil-gai and Roseberry and these are used for additional information and operational management. These units are associated with other regional operations at Tarrawonga and Rocglen.

Figure 1: TEOM and blast monitor installed at Lanreef

Water Monitoring

Groundwater

Routine groundwater monitoring has been conducted 6 monthly since 2021. In October 2023, Hydra-sleeve monitoring was introduced to Vickery's groundwater bores.

Table 5 Groundwater results summary

Site	Date	SWL (mbgl)	pH (units)	Elect. Conductivity (µS/cm)
GW01	October 23	8.53	7.37	1010
	January 24	9.19	7.68	1280
	April 24			
	July 24			
	December 24			
GW02	October 23	8.48	7.53	886
	January 24	8.78	7.99	974
	April 24			
	July 24			
	December 24			
GW-11	October 23	16.70	6.7	4390
	January 24	16.64	7.05	4400
	April 24			

Site	Date	SWL (mbgl)	pH (units)	Elect. Conductivity (µS/cm)
	July 24			
	December 24			
GW-9	October 23	17.76	7.63	5840
	January 24	18.4	6.2	3110
	April 24			
	July 24			
	December 24			
SB01	October 23	7.19	7.52	1610
	January 24	7.38	7.9	1720
	April 24			
	July 24			
	December 24			
SB02	October 23	9.46	7.29	7210
	January 24	9.74	7.68	7480
	April 24			
	July 24			
	December 24			
SB04	October 23	7.33	7.50	2570
	January 24	7.64	7.97	3390
	April 24			
	July 24			
	December 24			
SB05	October 23	7.73	7.77	3820
	January 24	8.11	8.14	3610
	April 24			
	July 24			
	December 24			
SB06	October 23	8.87	7.71	3370
	January 24	8.98	8.01	3280
	April 24			
	July 24			
	December 24			
SB07	October 23	8.79	7.49	886
	January 24	8.83	7.96	946
	April 24			

Site	Date	SWL (mbgl)	pH (units)	Elect. Conductivity (µS/cm)
	July 24			
	December 24			
SB08	October 23	7.70	7.33	986
	January 24	7.63	7.67	1090
	April 24			
	July 24			
	December 24			
SB09	October 23	7.22	7.68	934
	January 24	7.49	8.05	993
	April 24			
	July 24			
	December 24			
SB10	October 23	8.15	7.57	1830
	January 24	8.21	7.98	2000
	April 24			
	July 24			
	December 24			
SB11	October 23	8.6	7.68	1030
	January 24	9.19	8.13	1120
	April 24			
	July 24			
	December 24			
SB15	October 23	9.12	7.34	974
	January 24	9.57	7.76	1040
	April 24			
	July 24			
	December 24			
VNW223	October 23	22.01	-	-
	January 24	21.9	-	-
	April 24			
	July 24			
	December 24			
VNW394	October 23	6.49	7.27	5590
	January 24	6.53	7.43	5340
	April 24			

Site	Date	SWL (mbgl)	pH (units)	Elect. Conductivity (µS/cm)
	July 24			
	December 24			
VNW395	October 23	7.26	7.59	470
	January 24	7.3	8.07	1130
	April 24			
	July 24			
	December 24			
GW03	October 23	7.23	7.32	839
	January 24	7.27	7.64	882
	April 24			
	July 24			
	December 24			
GW-7	October 23	27.86	8.85	4330
	January 24	27.8	8.84	4220
	April 24			
	July 24			
	December 24			
GW-8	October 23	21.74	7.42	3900
	January 24	21.69	7.59	4000
	April 24			
	July 24			
	December 24			
MD01	October 23	27.68	11.8	1690
	January 24	27.57	11.3	1470
	April 24			
	July 24			
	December 24			
MD02	October 23	40.30	6.89	1160
	January 24	40.03	7.41	1310
	April 24			
	July 24			
	December 24			
TR18	October 23	12.92	6.94	13000
	January 24	13.17	7.48	13800
	April 24			

Site	Date	SWL (mbgl)	pH (units)	Elect. Conductivity (µS/cm)
	July 24			
	December 24			
TR26	October 23	12.24	7.32	6100
	January 24	12.21	7.59	8440
	April 24			
	July 24			
	December 24			
TR35	October 23	18.04	7	14900
	January 24	11.23	7.46	17400
	April 24			
	July 24			
	December 24			
TR7	October 23	9.75	6.99	14800
	January 24	9.69	7.67	15900
	April 24			
	July 24			
	December 24			
VKY034C	October 23	39.61	7.31	3500
	January 24	40.27	7.78	3120
	April 24			
	July 24			
	December 24			
VKY035C	October 23	42.01	7.20	3200
	January 24	42.04	7.86	3120
	April 24			
	July 24			
	December 24			
VKY036C	October 23	49.17	7.17	5500
	January 24	49.88	7.63	5980
	April 24			
	July 24			
	December 24			
VKY042C	October 23	42.56	6.89	5540
	January 24	42.8	7.58	5940
	April 24			

Site	Date	SWL (mbgl)	pH (units)	Elect. Conductivity (µS/cm)
	July 24			
	December 24			
VKY043C	October 23	15.7	7.84	2950
	January 24	15.82	8.35	2900
	April 24			
	July 24			
	December 24			
VNW390	October 23	9.36	7.22	2310
	January 24	9.37	7.59	2300
	April 24			
	July 24			
	December 24			
VNW391	October 23	7.76	7.34	2420
	January 24	7.79	7.73	2330
	April 24			
	July 24			
	December 24			
VNW392	October 23	6.21	7.08	3380
	January 24	6.24	7.21	3350
	April 24			
	July 24			
	December 24			
VNW393	October 23	10.48	7.91	2690
	January 24	10.57	7.74	2840
	April 24			
	July 24			
	December 24			

Surface Water

Water storage onsite is expected to be sufficient for at least 12 months. VCM has not undertaken any discharges during the period.

Table 6 Surface Water Results for January, February & March

January	Namoi DS 1	Namoi DS 2	Namoi DS 3	Namoi US
pH	8.3	8.1	8.4	8.2
Temperature	27.2	26.8	27.6	27
Electrical Conductivity	437	428	427	423
TSS	278	289	286	279
Oil & Grease	<5	<5	<5	<5
February	Namoi DS 1	Namoi DS 2	Namoi DS 3	Namoi US
pH	8.18	8.41	8.54	8.41
Temperature	26.4	26.3	27.3	26.4
Electrical Conductivity	423	421	421	418
TSS	394	370	363	368
Oil & Grease	<5	<5	<5	<5
March	Namoi DS 1	Namoi DS 2	Namoi DS 3	Namoi US
pH	8.07	7.93	8.28	8.37
Temperature	23.1	22.8	24	21.4
Electrical Conductivity	560	544	584	564
TSS	318	294	304	296
Oil & Grease	<5	<5	6	<5

VCM has recorded 69 mm of rain for 2024, so far.

Table 7 Annual Rainfall

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Monthly Rain (mm)	29.6	34.4	5										69
Cumula-tive (mm)	29.6	64	69										

Clearing

Clearing is currently ongoing at Vickery. Topsoil and Subsoil is being stored separately in designated stockpiles areas. The stockpiles will be ripped and seeded to maintain viability for rehabilitation.

Figure 2: Topsoil and Subsoil Stockpiles

Complaints

One complaint received during the reporting period.

Complainant advised Environmental Superintendent that they did not receive the blast notification text. The online SMS messaging portal was updated to include landholder and complainant advised.

Approvals

The Environmental Protection Licence (EPL) Variation was received on the 18th August 2023.

Environmental Management Plans

Approvals

The Water Management Plan was updated and approved by the DPE.

The Social Impact Management Plan was approved by the DPE.

All the approved Management Plans are available on the WHC website.

The Blast Management Plan has be updated to include a Road Closure Protocol.

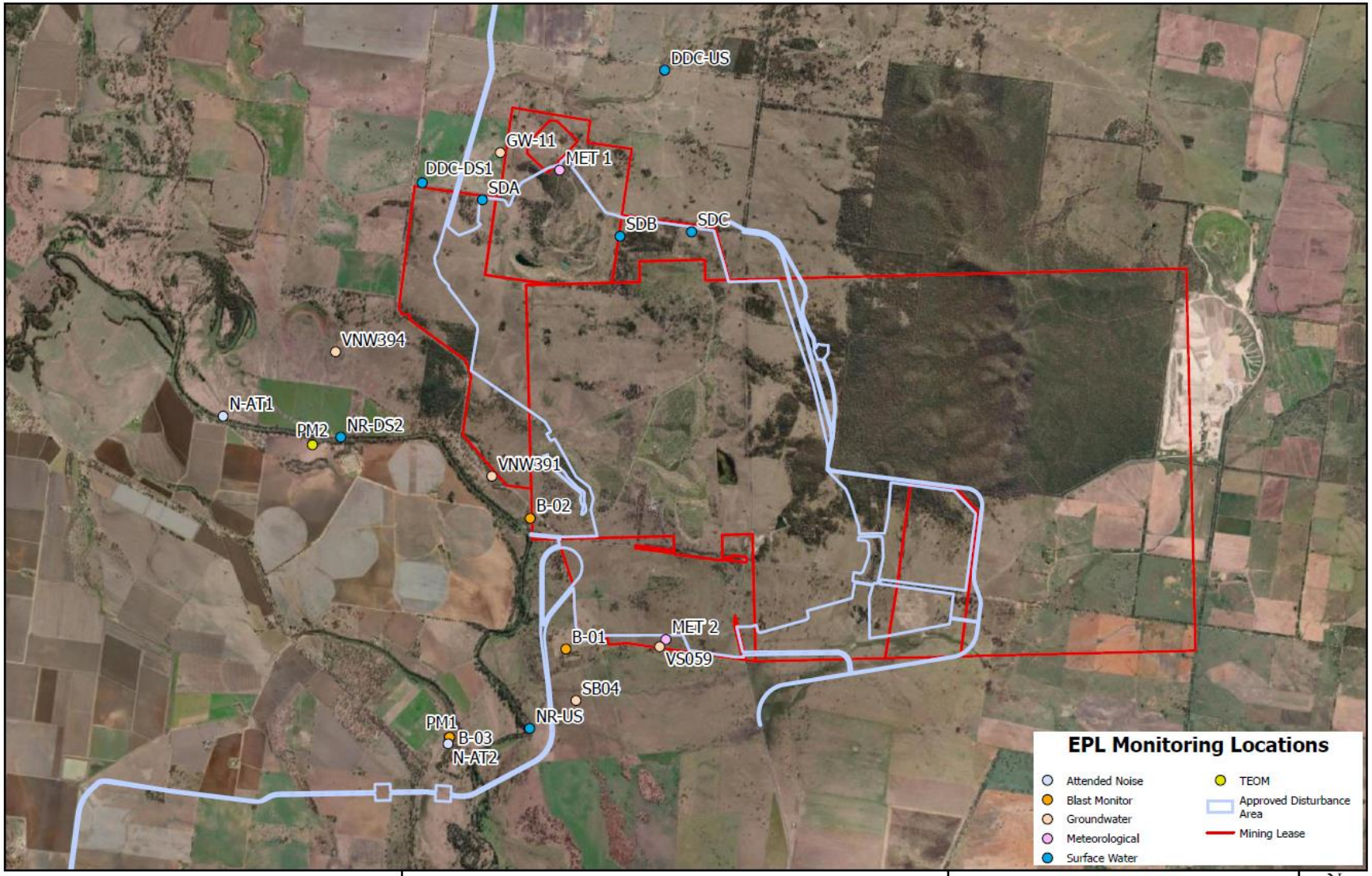
Proposed amendments

The Noise Management Plan will be updated to reflect the amended monitoring locations and incorporate road noise monitoring conducted by Tarrawonga Coal Mine on the haulage route.

The Traffic Management Plan will be updated to include amended haulage hours following Tarrawonga Coal Mine's approval of MOD8 to MP11_0047.

Other management plans may be updated with administrative amendments to reflect the early mining project scope.

Appendix A



WHITEHAVEN COAL

Vickery Coal Mine
EPL Monitoring Locations

Date: Sept 2023
MGA Zone 56
Scale: 1:68,000
Author: A. Quiroz

N

Whitehaven Vickery Extension Project

Community Consultative Committee

Date: 25 July 2024

Venue: WHC Boardroom, Gunnedah Conadilly Street, Gunnedah, 2380 and Zoom

Attendees	
Gunnedah Shire Council Wade Hudson (WH), Manager Development Assessment Cr Colleen Fuller (CF), Councillor and community member representative Rob Hooke (RH) Deputy Mayor Councillor	**Whitehaven Coal** Megan Martin, Environmental Superintendent (MM) Jabin De Keizer, Manager Community Relations (JDK) Matthew Sparkes, Manager Operations (MS) **Independent Chairperson** Professor Roberta Ryan (RR) **Minute taker** Kate Robinson
Apologies Barry Thompson, Community Representative Grant McIlveen, Community Representative Keith Blanch, Community Representative Ron Fuller, Community Representative Donna Ausling, Narrabri Shire Council Michelle Henry, Narrabri Shire Council Cr Cathy Redding, Narrabri Shire Council Cr Darrell Tiemens, Narrabri Shire Council	

Item	Description	Action
1	**Welcome, agenda, apologies, declarations - RR**	
	No new interests declared. Minutes from previous meeting approved.	
2	**Actions arising**	
	1. Update on rail corridor plans and timing. To the question from the previous CCC meeting regarding the design of the rail, MM says it is as per the EIS. The next round of plans puts detail to that design. By way of update more broadly, MM says that related information on the traffic management plan and water management plan reported earlier in the meeting in the project update are relevant to the construction of the rail corridor. Mod 1 has changes that pertain to next steps including a batch plant so that concrete can be made onsite. MM says TfNSW has issued a design certificate for the Kamilaroi Highway bridge, which is the rail over the road. There has also been negotiations with the local land services and Crown Lands about the alternative travelling stock route, which needs to be in place before closing Braymont Road. An ARTC major works licence agreement has been executed, and the ARTC connection to the mainline is being finalised in the coming weeks. The 32KV line elevation above the rail spurs is a Transgrid asset and Vickery has to negotiate with them to raise the line above the rails. Additional power lines will also need to be moved. The designs are complete and with Essential Energy for review. The modification plan presented at the last CCC meeting is being submitted to DPHI mid-August before going on exhibition. MM will advise RR when it goes on exhibition. Vickery has completed the flood study, and it will be available shortly on the website. The study determined that they meet the flood planning criteria with the design including the rail spurs. MM says the report provides more detail.	MM to advise RR when modification plan is on exhibition and the flood study is available on the website. RR to share information with stakeholders.

	RR asks about whether the grid survey conducted in March was related to Whitehaven's activity around the corridor works. MM responds that it was not part of this work. 2. Clarification on behalf of Gunnedah and Narrabri Shire Councils regarding the Glentarkie facility in Boggabri. RR says she followed up on the query, and that CCC members will have read the information that was shared. She has also spoken to Grant.	
3	**Environmental report - MM**	
	MM presents the Environmental Report (see attached report). <u>Noise</u> MM says they have installed a new real time noise monitor located to the west of the mine to help ensure that the real time noise protocol is effective. WH asks if there is any obligation about proximity of the monitor to the operating area. MM replies that there is no obligation. She adds that this is their internal monitoring. Each month they have an acoustic engineer who undertakes the compliance monitoring. The real time monitoring is additional to requirements and designed to provide indicative monitoring so that any necessary adjustments can be made if operations are at risk of exceedance. RH asks if the additional monitoring was on the designated sites or if they moved around. MM says they are moved around explaining noise is not linear. She adds that operations are currently well inside the noise criteria. <u>Dust</u> MM provides a briefing on dust monitoring noting that levels from deposited dust gauge results are from Canyon and SSD-5000 project approval conditions. Levels under 4 grams/m^2 per month (rolling annual average) is considered compliant dust, and that the operation has achieved that.	

	WH queries that there is one point where it reaches 6.3. Is this monitor closer to the site? MM replies that the rolling annual average is 3.3. The higher level is due to agricultural impacts especially given the dry winter last year. <u>Water</u> MM provides a briefing on water monitoring noting stable ground water levels. She says that in the last quarter Vickery has been mining close to the water table and from this point on they will be monitoring within the water table. MM says the water quality is variable. They drilled two additional bores in January/February between the mine and the Namoi in the north-west, and monitoring has found that salt levels are very high – approximately 20,000. RH asks what depth the bores are. MM replies that it varies but they generally hit water at 15-18m depending on the location. WH asks if it is known why the saline levels are so high. MM replies that high levels are known in the area. Water quality around Braymont Road is known to be low. She explains that many of the original triggers are being surpassed by a lot of the bores, and after investigation, they have found these are the natural levels. The triggers will be reconfigured in the next 12-18 months to be specific to each bore. RH asks for clarity on what they are looking for in the monitoring ie. water quality and / or variability in its depth? MM confirms they are looking for both at each quarterly monitoring event.	
4	**Project / approvals update and next steps**	
	MS presents a project update (see attached report). 10.9M bcm of overburden and 143kt ROM coal mined in FY24, total workforce now at 142 people including 103 operators. Safety performance strong with a TRIFR reflective of that.	
5	**Community update**	
	JDK presents a community update (see attached report). RH asks if there is a set budget for a certain period which you then distribute?	

	JDK says that funding is derived from different channels including $200,000 overseen by the Community Investment Committee. Whitehaven Coal also has long-term partnerships in place e.g. Westpac Rescue Helicopter, Country Education Fund. Additionally, they also have discretionary funds available and are approached by community organisations for support. These are considered on a case-by-case basis. RH asks if the funding requests from community organisations go to the board. JDK confirms that this occurs sometimes, but that most items do not go to the board and are made on a discretionary basis. CF asks how the Little Wings project is going. JDK says that it is progressing very well, and that people are accessing the service. RR asks about the community funding process. JDK says for the Community Investment Committee the process is approximately 2-3 months from submission to evaluation. Applications are always open for discretionary funding. He says that Whitehaven is about to release financial year sustainability report, which will include community support which totals more than $1.3m. This is similar to the previous year and they are aiming to maintain this level. They are currently putting together the 2025-2026 budget.	
6	**General Business**	
	MM raises the CCC meeting location. Vickery is happy to provide the town office boardroom but wanted to see if anyone had other preferences. General discussion among meeting attendees who are happy to stay at the current location noting the importance of having an online option for people who can't attend in person. MM also raises whether there is a need for additional / proactive recruitment of community CCC members. CF notes that everyone is time poor. The local Probus and Senior Citizens have closed because they were not able to get volunteers. RH concerned by the lack of community representation at this meeting. He encourages MM to try to get more members. MM queries the limits under the DPHI CCC guidelines.	

	RR says there is a process, and that the guidelines have recently been updated. She shares the latest update here. RR says the main issue is sourcing people. She agrees that an ad in the paper is a good idea. She emphasises that contacts and relationships are the best ways to recruit community members, and encourages current CCC members to tap into their networks. MM says that the meeting works best with more community members. RH says Whitehaven is at an exciting pinnacle stage in redevelopment and expansion, and that this could be used to generate interest in joining. RR says she will follow up with MM regarding recruitment of community members. MM raises that under the new CCC guidelines, a list of members is needed on the website. The list on their website had members' mobiles which she wasn't sure was appropriate. RR says it is up to members. It is important that people can contact members and either mobile or email is fine. She says some create an email address for this purpose. However, not everyone uses email and mobile is better for some. CF says she has no issue having her mobile number available. She says it is good for transparency. RH reports he is also happy to have his mobile number publicly available. RR says that the minutes need to go up promptly for the community and other stakeholders. MM says she doesn't publish the minutes on the website until they have been accepted. She is happy to publish when issued following the meeting with a non-endorsed or draft caveat. RR says any amendments can be noted and made at the next meeting. RH says it was helpful to have Vickery's reports circulated before the meeting. **Next meeting date: October 24**	RR to meet with MM to discuss community member recruitment. RR to follow up with community members regarding having their mobile number available on the CCC webpage.

Vickery Coal Mine
Community Consultative Committee
Meeting #19

Quarterly Environmental Monitoring Report
Apr, 2024 – Jun, 2024

Vickery Project

This report has been prepared for the Community Consultative Committee (CCC) meeting to show Environmental monitoring performance at Vickery Coal Mine (VCM) for the reporting period from April 2024 to June 2024.

Noise Monitoring

Attended noise was conducted during this period.

Attended noise monitoring was conducted at "Lanreef" (N-AT2) and "Broadwater" (N-AT1) properties once a month during this reporting period. Noise criteria for the mine is 40dB(A) Leq (15 min) during day time and 35dB(A) Leq (15 min) during evening/night time. Please refer to EPL Monitoring locations map in Appendix B for the location of these monitoring points.

Results below show that noise emissions from the mine did not exceed operational criteria at "Lanreef" or "Broadwater" monitoring locations during the monitoring period.

Table 1 April 2024 Attended Noise Monitoring

Table 4

VCM Operational Noise Monitoring Results Leq(15min) – 22nd & 23rd April 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	3:21pm	34	31	45[1]	3.5 / 124	C	**VCM (31)**, traffic (31), insects (21)	No
N-AT2 / 8	9:21am	40	IA	40	1.6 / 141	B	Traffic (40), birds (26), **VCM (IA)**	No

Table 5

VCM Operational Noise Monitoring Results Leq(15min) – 22nd April 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	7:07pm	36	34	35	2.3 / 121	E	**VCM (34)**, insects (32)	No
N-AT2 / 8	9:27pm	44	22	37	2.3 / 132	E	Traffic (44), **VCM (22)**, insects (22)	No

Table 6

VCM Operational Noise Monitoring Results Leq(15min) – 22nd & 23rd April 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	12:10am	35	33	35	2.6 / 125	D	**VCM (33)**, frogs (29), insects (26)	No
N-AT2 / 8	10:00pm	43	25	37	1.9 / 141	E	Traffic (43), **VCM (25)**, frogs (20)	No

Table 7

VCM Operational Noise Monitoring Results LA_{max} – 22nd & 23rd April 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)
N-AT1 / 7	12:10am	62	38	52	2.6 / 125	D	Insects	No
N-AT2 / 8	10:00pm	57	30	52	1.9 / 141	E	Car	No

Table 2 May 2024 Attended Noise Monitoring

Table 4

VCM Operational Noise Monitoring Results Leq(15min) – 18th May 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	10:02am	33	21	45[1]	3.6 / 165	C	Birds (33), **VCM (21)**	No
N-AT2 / 8	12:11pm	51	IA	45[1]	6.3 / 171	D	Traffic (51), wind in trees (33), birds (26), **VCM (IA)**	No

Table 5

VCM Operational Noise Monitoring Results Leq(15min) – 17th May 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	9:26pm	32	28	35	0.6 / 112	E	Traffic (29), **VCM (28)**, insects (22)	No
N-AT2 / 8	8:19pm	47	IA	37	1.9 / 307	D	Traffic (47), insects (23), **VCM (IA)**	No

Table 6

VCM Operational Noise Monitoring Results Leq(15min) – 17th & 18th May 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	12:20am	28	23	35	2.5 / 308	E	Birds (26), **VCM (23)**	No
N-AT2 / 8	10:40pm	46	IA	37	1.8 / 316	E	Traffic (46), **VCM (IA)**	No

Table 7

VCM Operational Noise Monitoring Results LA_{max} – 17th & 18th May 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)
N-AT1 / 7	12:20am	55	27	52	2.5 / 308	E	Bird	No
N-AT2 / 8	10:40pm	62	IA	52	1.8 / 316	E	Car	No

Table 3 June 2024 Attended Noise Monitoring

Table 4

VCM Operational Noise Monitoring Results Leq(15min) – 17th & 18th June 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	10:05am	32	IA	40	1.9 / 274	B	Traffic (30), aeroplane (25), birds (23), **VCM (IA)**	No
N-AT2 / 8	2:45pm	45	IA	40	.8 / 242	C	Traffic (44), residential (38), birds (24), **VCM (IA)**	No

Table 5

VCM Operational Noise Monitoring Results Leq(15min) – 17th June 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	8:16pm	29	IA	35	1.8 / 281	E	Traffic (28), insects (21), **VCM (IA)**	No
N-AT2 / 8	9:23pm	42	IA	37	2.5 / 325	E	Traffic (42), dog (22), **VCM (IA)**	No

Table 6

VCM Operational Noise Monitoring Results Leq(15min) – 17th June 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	11:41pm	26	IA	40[1]	3.3 / 298	E	Traffic (25), birds (20), **VCM (IA)**	No
N-AT2 / 8	10:00pm	34	IA	42[1]	3.1 / 268	E	Traffic (34), horses (24), **VCM (IA)**	No

Table 7

VCM Operational Noise Monitoring Results LA_{max} – 17th June 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)
N-AT1 / 7	11:41pm	43	IA	57[1]	3.3 / 298	E	Traffic	No
N-AT2 / 8	10:00pm	50	IA	57[1]	3.1 / 268	E	Traffic	No

The real time noise monitor located on the “Long Way Round” property remains a management tool so the noise criteria are not applicable at that site. Levels of noise recorded at that location are managed according to the noise management plan and trigger action response plan.

Blast Monitoring

Blasting Results

There has been 8 Blasts at VCM from 1st April to 30th June.

The highest recorded overpressure for the reporting period was 107.90dBL recorded at B-02 compliance monitor on the 07/05/2024.

The highest recorded ground vibration for the reporting period was 0.81mm/s at B-02 recorded on the 26/04/2024.

VCM overpressure and ground vibration for the quarter was compliant and did not exceed the blasting criteria declared in the project approval and Blast Management Plan (BMP). Please refer to EPL Monitoring locations map in Appendix B for the location of these monitoring points.

Table 4 Max Peak Overpressure and Ground Pressure for the Quarter

Monitor Location	Date	Max. Peak Overpressure (dB)	Criterion (dB)	Date	Max. Peak Ground Pressure (mm/s)	Criterion (mm/s)
B-01	10/05/2024	102.9	**133**	26/04/2024	0.35	**10**
B-02	07/05/2024	107.9	**N/A**	26/04/2024	0.81	**80**
B-03	10/05/2024	95.6	**120**	13/05/2024	0.32	**10**

Air Quality Monitoring

Dust Deposition Results

Standard Australia AS/NZS 3580.10.1:2016, "Methods for sampling and analysis of ambient air – Determination of particulate matter – Deposited matter – Gravimetric Method," classifies deposited dust as insoluble solids. Therefore, VCM tests air quality monthly at mine-owned sites for indicative purposes, to infer compliance, against the limit of 4 g/m^2/month.

Table 5 shows deposited dust gauge results over 12 months. All dust monitors that are located on project related or WHC owned land; as such compliance criteria (4g/m^2/month) do not apply. While deposited dust trends remain steady during the reporting period (refer graph in *Appendix A*), some monitors are displaying non-mine related particulate matter deposition more regularly than others. Non-mine related particulate matter could be attributed to organic matter (such as leaves, mice, frogs, insects or bird faeces that fall in to the bottles), or they may be in farming locations, so during some months dust levels may be higher due to harvesting. Please refer to Dust Deposition Gauges Monitoring locations map in Appendix B for the location of these monitoring points.

Table 5 Deposited Gauge Results [g/m2/month]

Month	D1	D2	D12	D13B	DG1	DG2	V1	V2	V3	V4	V5
Jul-23	1.4	1.2	3.4	0.8	3.7	1.7	0.8	6.3	3.3	1.5	1.5
Aug-23	1.6	1.3	3.4	0.9	3.7	1.7	0.9	6.2	3.1	1.4	1.6
Sep-23	1.5	1.3	3.3	0.8	3.7	1.4	0.8	4.6	2.9	1.3	1.5
Oct-23	1.6	1.3	3.3	0.9	2.5	1.5	1.3	4.5	2.8	1.5	1.6
Nov-23	1.7	1.5	2.6	1.0	1.4	1.6	1.3	4.4	2.6	1.4	1.5
Dec-23	2.0	1.5	2.5	1.1	1.6	1.5	1.3	4.3	2.2	1.6	1.4
Jan-24	2.1	1.4	2.7	1.2	2.5	2.1	1.4	4.4	1.4	1.9	1.5
Feb-24	2.4	1.7	1.8	1.2	2.8	2.6	1.4	0.8	1.3	1.9	1.7
Mar-24	2.5	1.7	1.7	1.4	2.9	2.5	1.4	1.0	1.4	2.2	1.9
Apr-24	2.7	1.6	1.8	1.5	3.0	2.6	1.5	1.0	1.3	2.2	1.9
May-24	2.5	1.5	2.0	1.5	3.0	2.7	1.5	1.0	1.4	2.3	2.0
Jun-24	2.4	1.4	1.9	1.6	2.8	2.5	1.3	0.9	1.3	2.2	2.0
Average	2.0	1.5	2.5	1.2	2.8	2.0	1.2	3.3	2.1	1.8	1.7

Real-time Air Monitoring ($PM_{2.5}$ and PM_{10})

Two real-time air quality monitoring units are located on private property adjacent to the Vickery Coal Mine. PM1 is located at Lanreef and PM2 at Mirrabinda to the south and south-west of the operations. These are used as both a compliance and an operational management tool. Dust levels nearing or reaching the nominated criteria will trigger actions onsite to assess the source of dust and modify operations if it is determined to be related to Vickery operations. Additional air quality monitoring units are located at Wil-gai and Roseberry and these are used for additional information and operational management in accordance with the Vickery Air Quality Management Plan. These units are also associated with other regional operations at Tarrawonga and Rocglen. Please refer to Air Quality Monitoring locations map in Appendix B for the location of these monitoring points.

Figure 1: TEOM and blast monitor installed at Lanreef

Water Monitoring

Groundwater

Routine groundwater monitoring has been conducted 6 monthly since 2021. In October 2023, Hydra-sleeve monitoring was introduced to Vickery's groundwater bores. Appendix C contains the Hydrographs for Vickery's GW bores. Monitoring indicates stable GW levels. Water quality data in a few bores is showing a departure from the interim trigger levels. This will assist to inform the development of the final trigger levels for GW monitoring as described in the Water MP. As mining below the water table has only just begun to occur any triggers of the interim TARP are due to the background levels naturally being different to the generic triggers sourced from external benchmarks. Please refer to Groundwater Monitoring locations map in Appendix B for the location of these monitoring points.

Surface Water

Water storage onsite is expected to be sufficient for at least 12 months. VCM has not undertaken any discharges during the period. Please refer to EPL Monitoring locations map in Appendix B for the location of these monitoring points.

Table 6 Surface Water Results for April, May & June

April	Namoi DS 1	Namoi DS 2	Namoi DS 3	Namoi US
pH	8.24	8.25	8.55	8.60
Temperature (°C)	18.5	18.7	20.6	20.0

Electrical Conductivity (µS/cm)	581	593	564	557
Turbidity (NTU)	21.6	13.6	28.1	21.5
Oil & Grease (mg/L)	<5	<5	<5	<5
May	**Namoi DS 1**	**Namoi DS 2**	**Namoi DS 3**	**Namoi US**
pH	8.22	8.24	8.25	8.24
Temperature (°C)	13.8	14.2	14.8	13.0
Electrical Conductivity (µS/cm)	980	950	968	964
Turbidity (NTU)	7.5	5.5	6.5	9.3
Oil & Grease (mg/L)	<5	<5	<5	<5
June	**Namoi DS 1**	**Namoi DS 2**	**Namoi DS 3**	**Namoi US**
pH	7.91	7.72	7.85	7.86
Temperature (°C)	10.4	11.1	11.8	11.3
Electrical Conductivity (µS/cm)	732	714	755	737
Turbidity (NTU)	56.9	47.1	27.4	16.2
Oil & Grease (mg/L)	<5	6	<5	<5

April	SD1	Canyon Void	Vickery Void
pH	8.28	8.66	8.7
Electrical Conductivity (µS/cm)	478	4620	1830
TSS	34	8	24
Oil & Grease (mg/L)	<5	<5	<5

VCM has recorded 243 mm of rain for 2024, so far.

Table 7 Annual Rainfall

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Monthly Rain (mm)	29.6	34.4	5	80.4	29.8	63.8							243
Cumulative (mm)	29.6	64	69	149.4	179.2	243							

Clearing

Clearing is currently ongoing at Vickery, approximately 500ha have been cleared during FY24. Topsoil and Subsoil is being stored separately in designated stockpiles areas. The stockpiles will be ripped and seeded to maintain viability for rehabilitation.

Figure 2: Updated Image of Topsoil and Subsoil Stockpiles

Complaints

One complaint received during the reporting period.

Complainant advised Environmental Superintendent that their car windscreen had been damaged by material from road haulage and that they found a piece of coal on the road surface.

Approvals

The last Environmental Protection Licence (EPL) Variation was received on the 7th December 2023.

An application to transfer this licence to another WHC owned entity will be submitted in the following quarter. This is for internal WHC administrative purposes. The new holding entity will be named 'Vickery Coal Operations Pty Ltd'.

Environmental Management Plans

Approvals

All the approved Management Plans are available on the WHC website.

The Traffic Management Plan has been updated to include amended haulage hours following Tarrawonga Coal Mine's approval of MOD10 to MP11_0047. This was submitted in June and is with the DPHI for review.

MOD1 is planned to be submitted in August 2024. As described in April 2024 at the last CCC meeting this Modification is to:

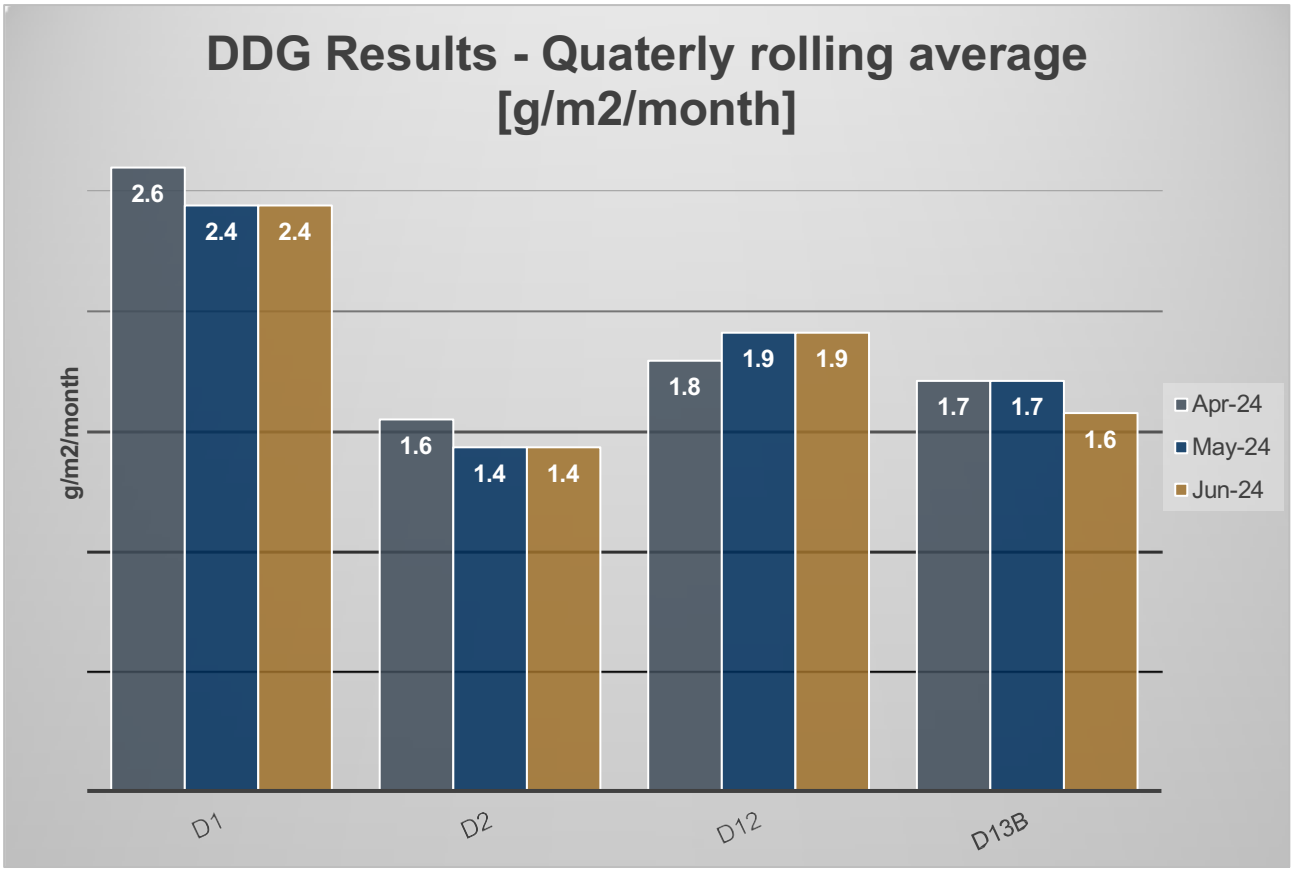
- amend the Blue Vale Road realignment to a lesser impact;
- to allow the export of gravel from the VEP in line with existing approvals at Tarrawonga and the original Vickery Coal Project (SSD-5000);
- Construction and use of water pipelines from additional existing groundwater bores and to the Rocglen Coal Mine;
- Potential relinquishment of the secondary infrastructure area;
- A temporary access road and additional soil stockpile area;
- Temporary concrete batching plant;
- Disposal of waste heavy vehicle tyres;
- Reduction to the open cut extent and improved waste rock emplacement and landform design;
- Extended ROM coal road haulage hours to align with the Tarrawonga Modification 10; and
- Schedule of Lands update.

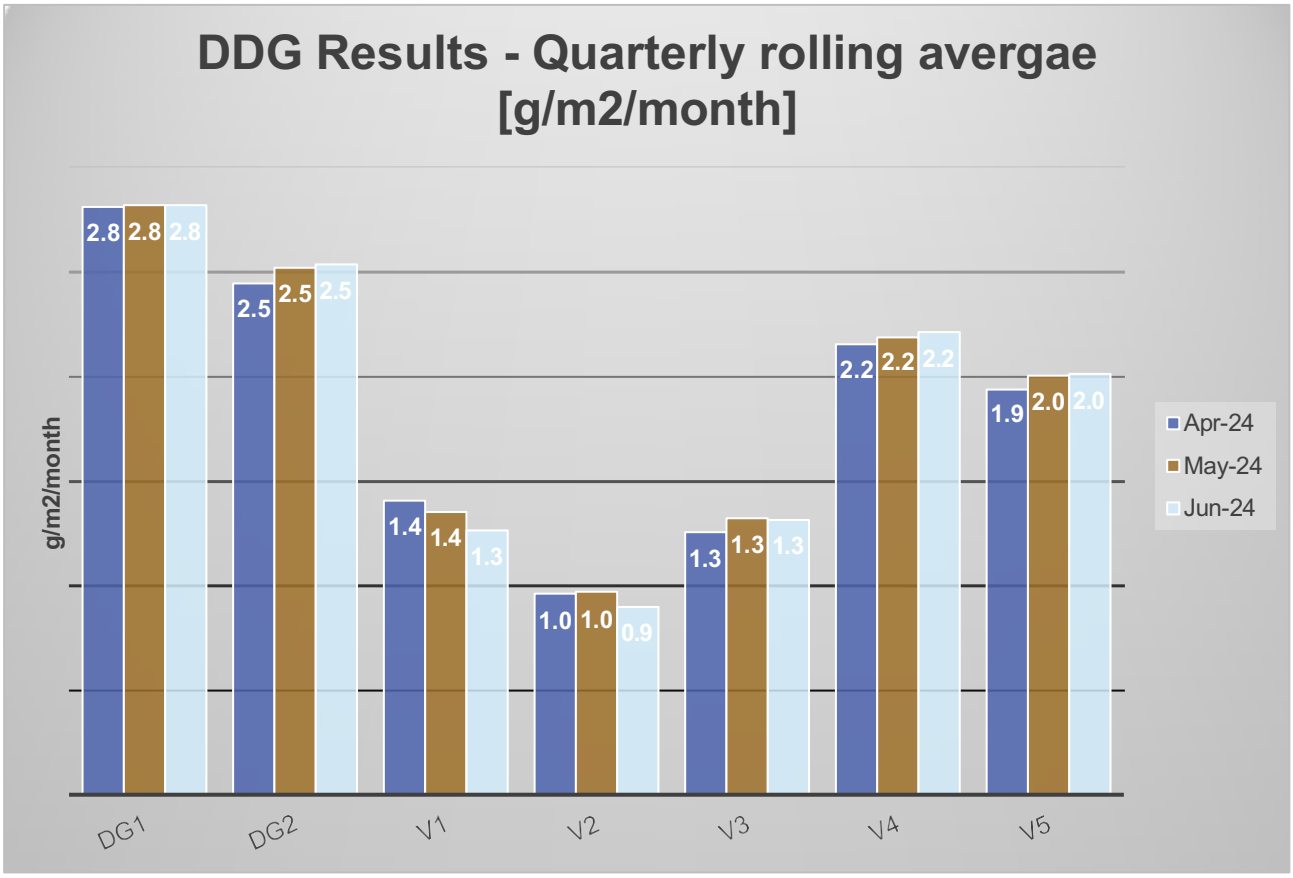
Proposed amendments

The Noise Management Plan will be updated to reflect the amended monitoring locations and incorporate road noise monitoring conducted by Tarrawonga Coal Mine on the haulage route.

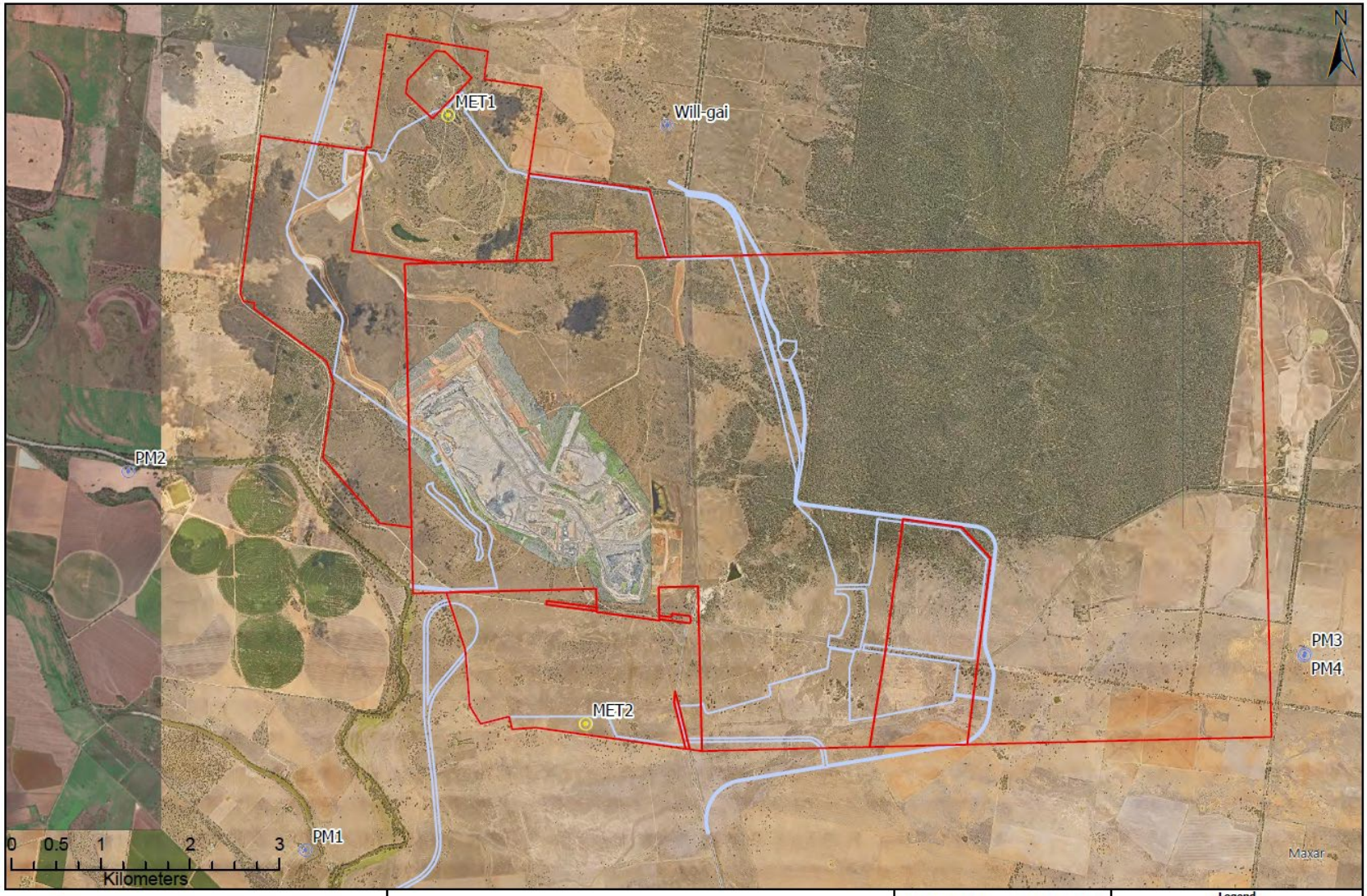
The Water Management Plan will be reviewed and updated to document the implemented groundwater monitoring regime and also to describe the construction of the rail spur and CHPP.

Appendix A


DDG Results - Quaterly rolling average [g/m2/month]
g/m2/month
2.6
2.4
2.4
1.6
1.4
1.4
1.8
1.9
1.9
1.7
1.7
1.6
D1
D2
D12
D13B
Apr-24
May-24
Jun-24


DDG Results - Quarterly rolling avergae [g/m2/month]
g/m2/month
2.8 2.8 2.8
2.5 2.5 2.5
1.4 1.4 1.3
1.0 1.0 0.9
1.3 1.3 1.3
2.2 2.2 2.2
1.9 2.0 2.0
DG1
DG2
V1
V2
V3
V4
V5
Apr-24
May-24
Jun-24

Appendix B

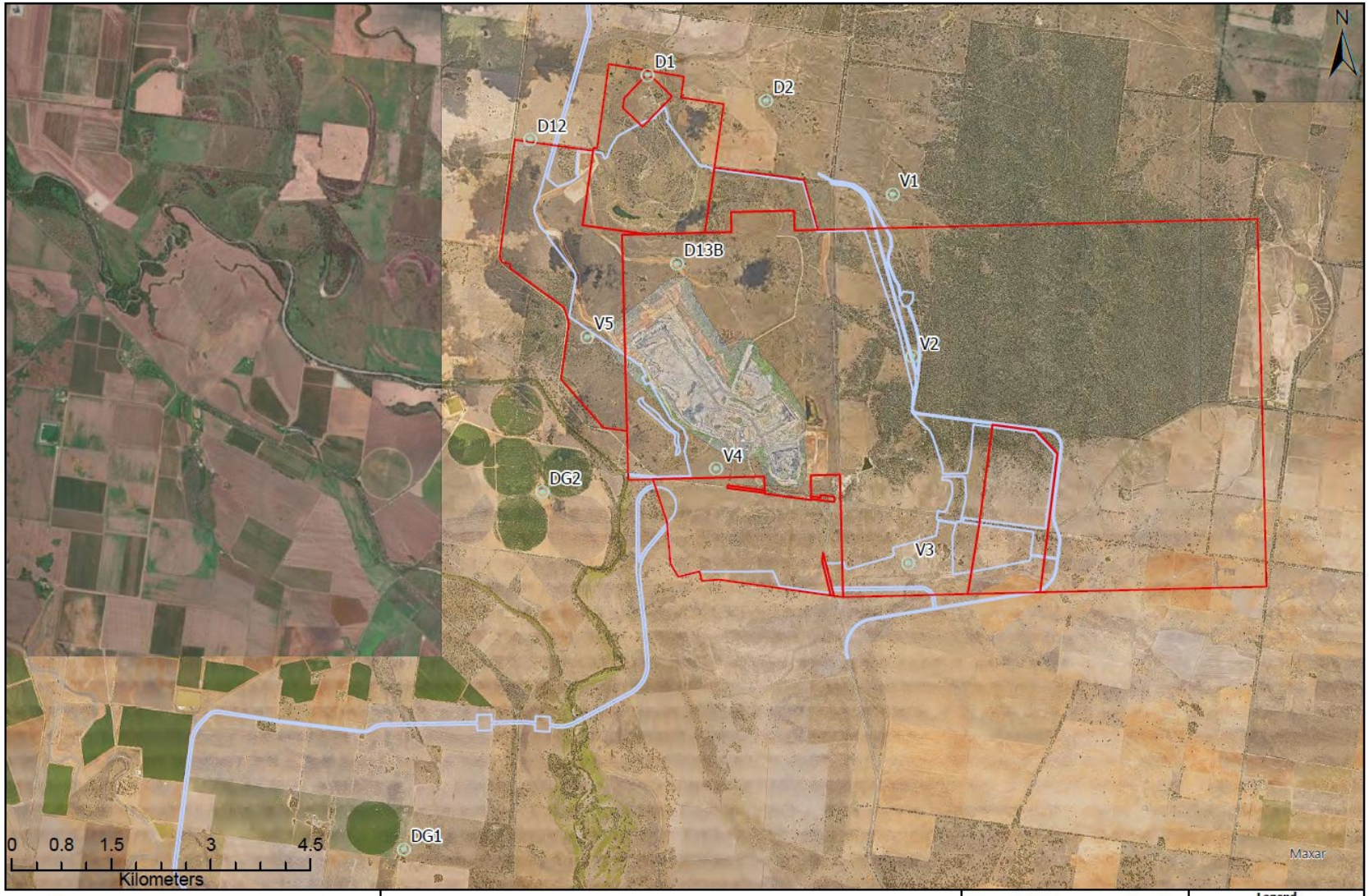


WHITEHAVEN COAL

Air Quality Monitoring Locations

Date: May 2024 Scale: 1:52,000
MGA Zone 56 Author: A. Quiroz

Legend
MET Station
Air Quality Monitoring
Approved Disturbance Area
Mining Lease

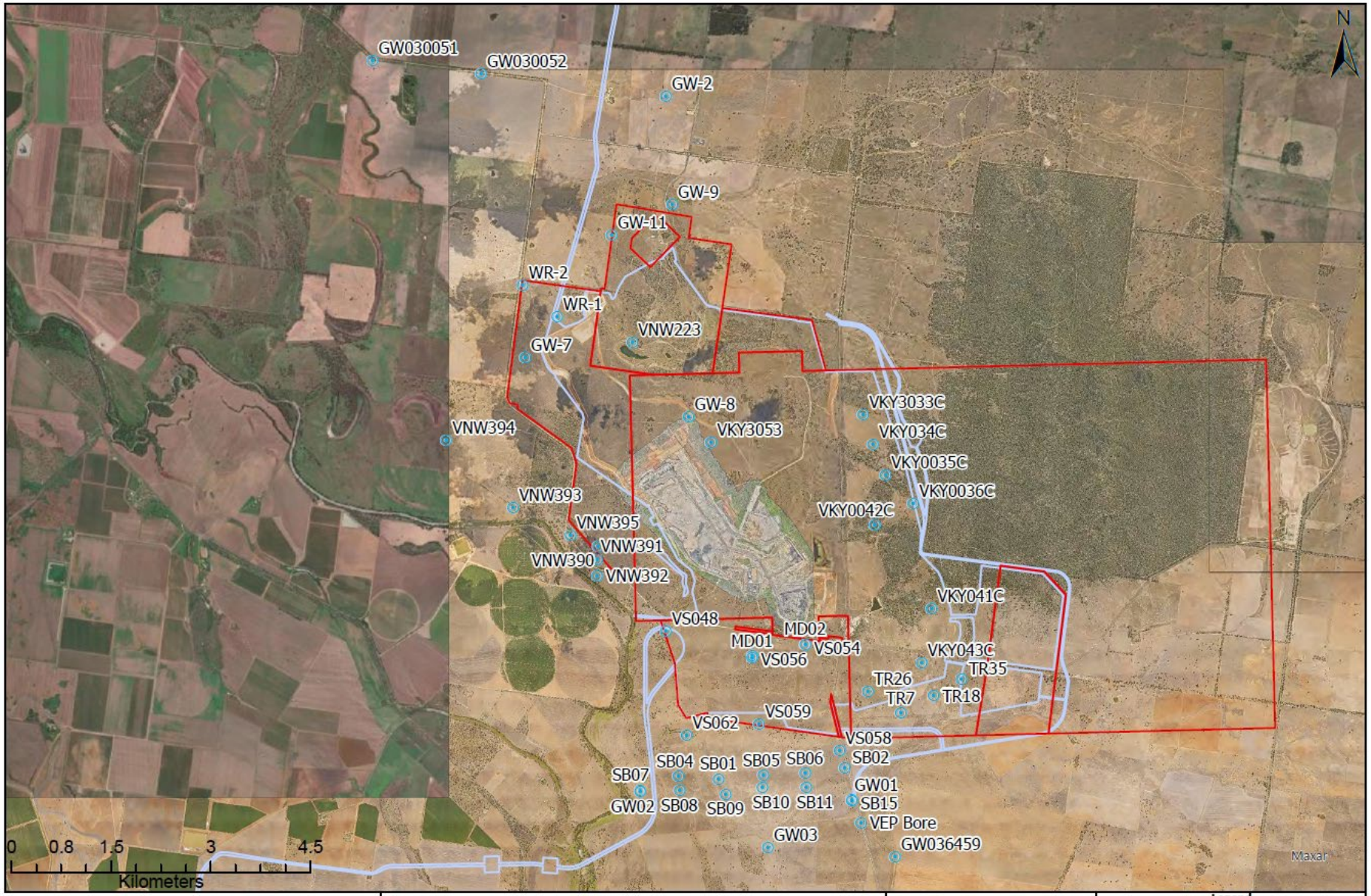


WHITEHAVEN COAL

Dust Deposition Gauges Monitoring Locations

Date: Jun 2024 Scale: 1:70,000
MGA Zone 56 Author: A. Quiroz

Legend
DDGs
Mining Lease
Approved Disturbance Area

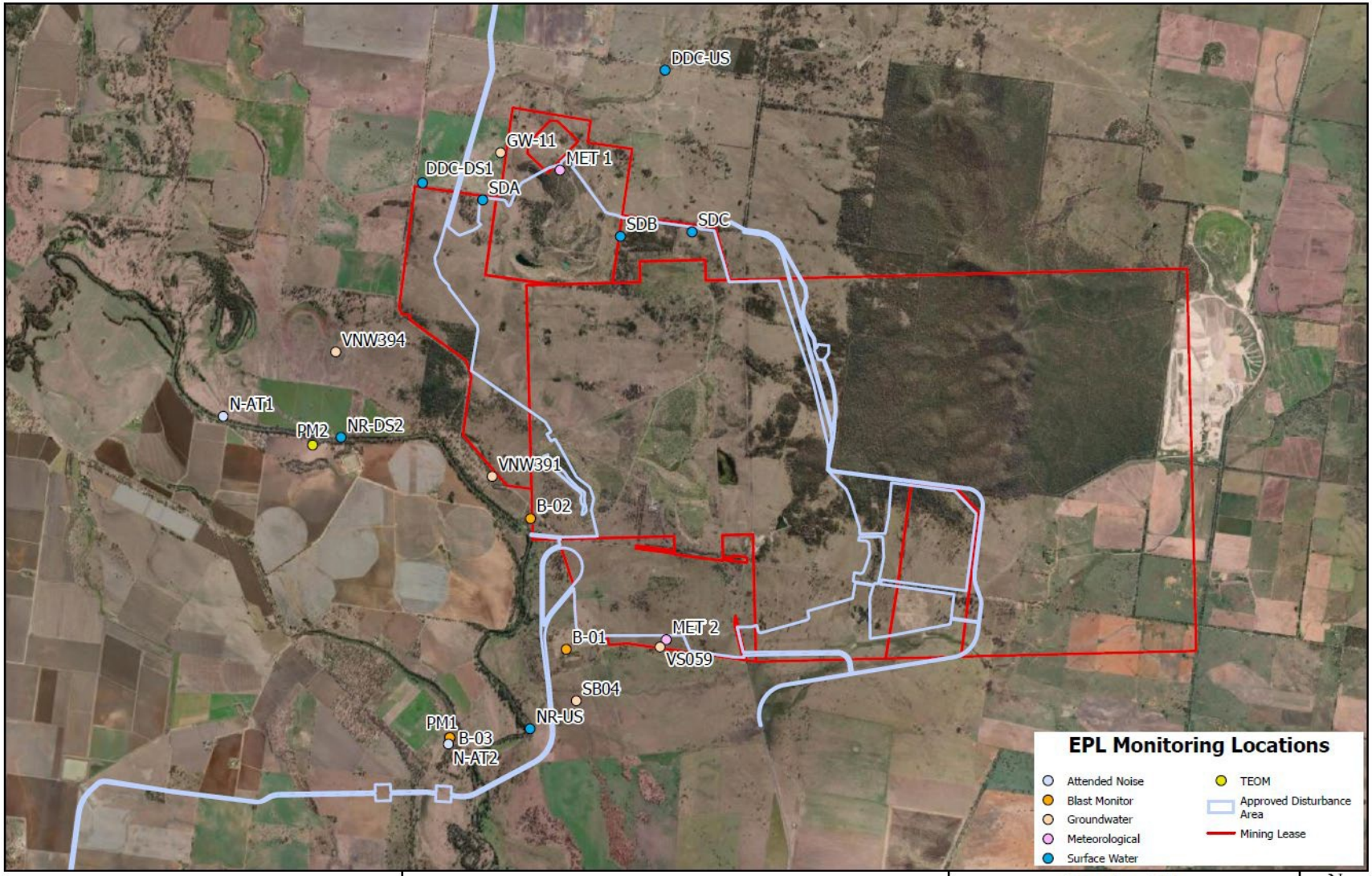


WHITEHAVEN COAL

Ground Water Monitoring Locations

Date: May 2024 Scale: 1:70,000
MGA Zone 56 Author: A. Quiroz

Legend
Groundwater Bores
Mining Lease
Approved Disturbance Area



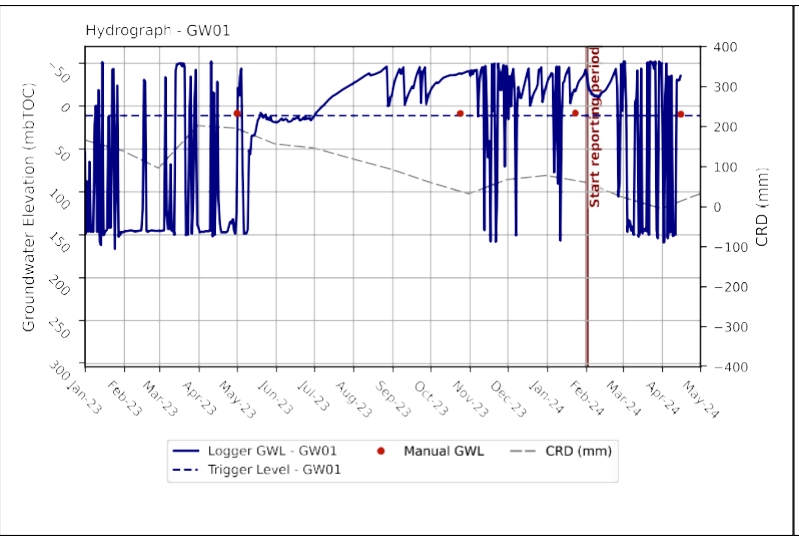
WHITEHAVEN COAL

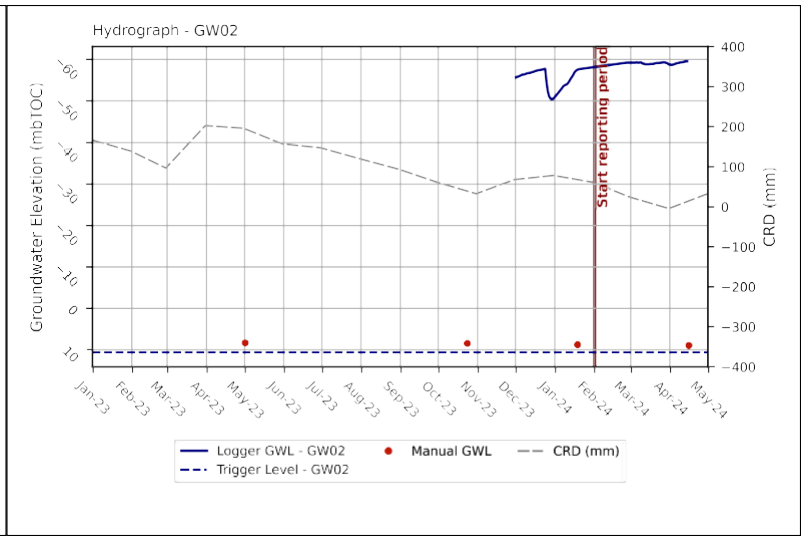
Vickery Coal Mine
EPL Monitoring Locations

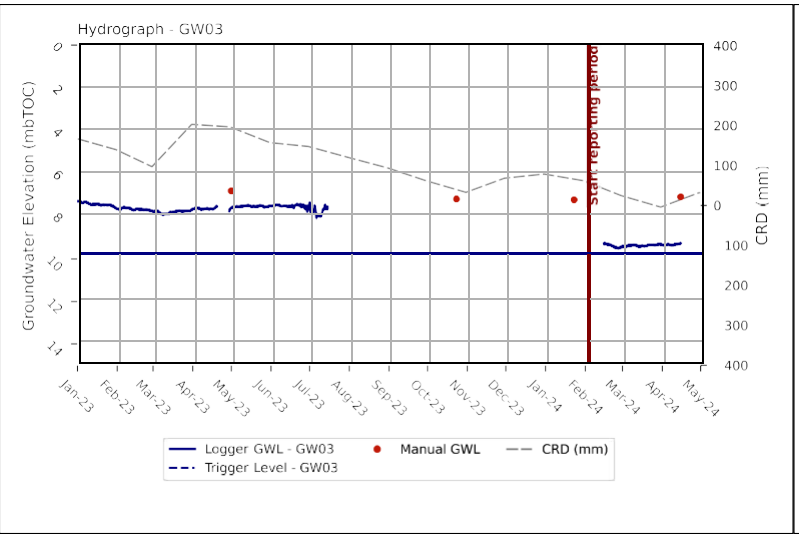
Date: Sept 2023
MGA Zone 56
Scale: 1:68,000
Author: A. Quiroz

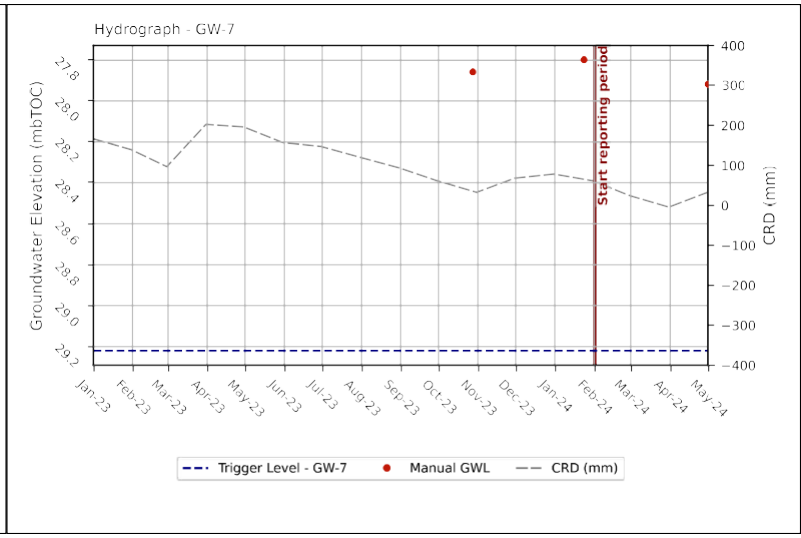
N

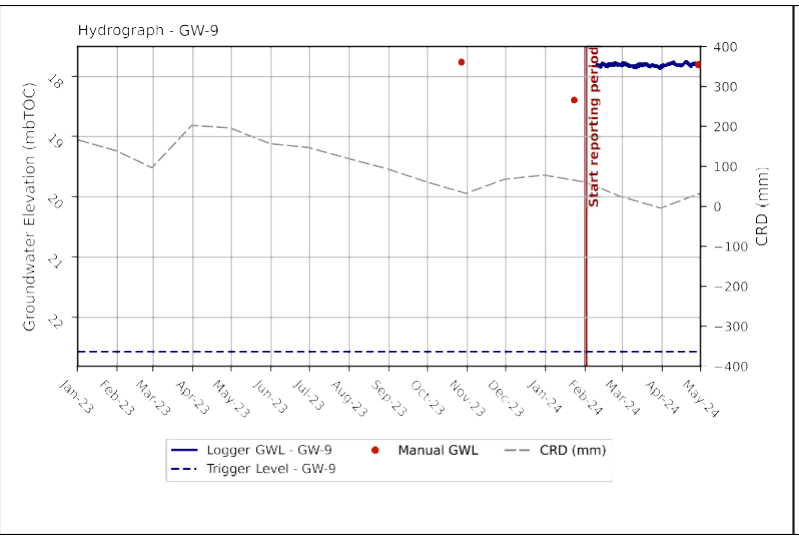
Appendix C

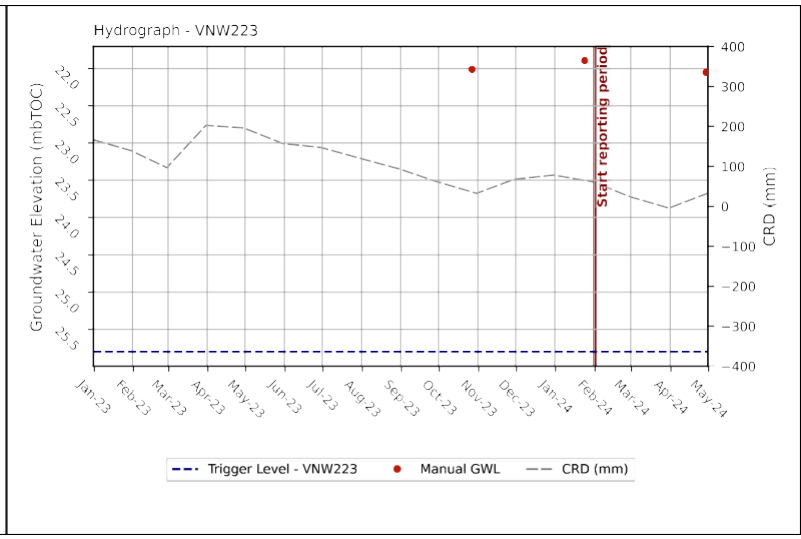

Hydrograph - GW01
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - GW01
Manual GWL
CRD (mm)
Trigger Level - GW01

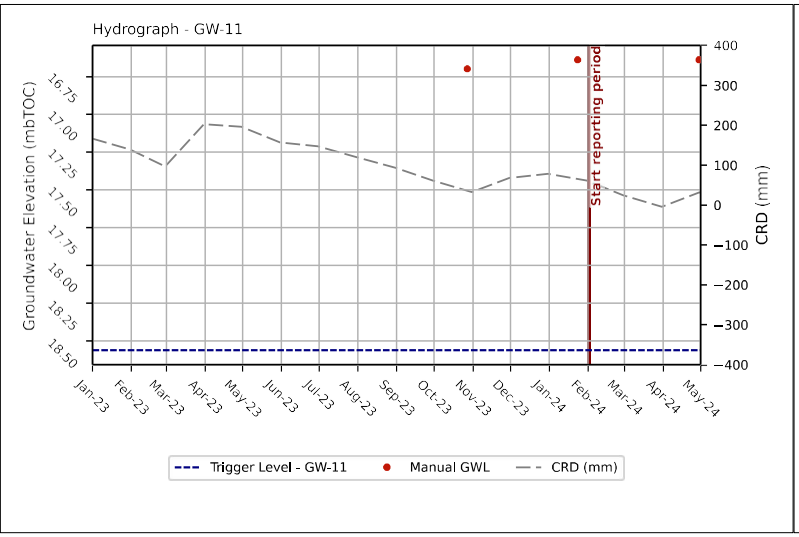

Hydrograph - GW02
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - GW02
Manual GWL
CRD (mm)
Trigger Level - GW02

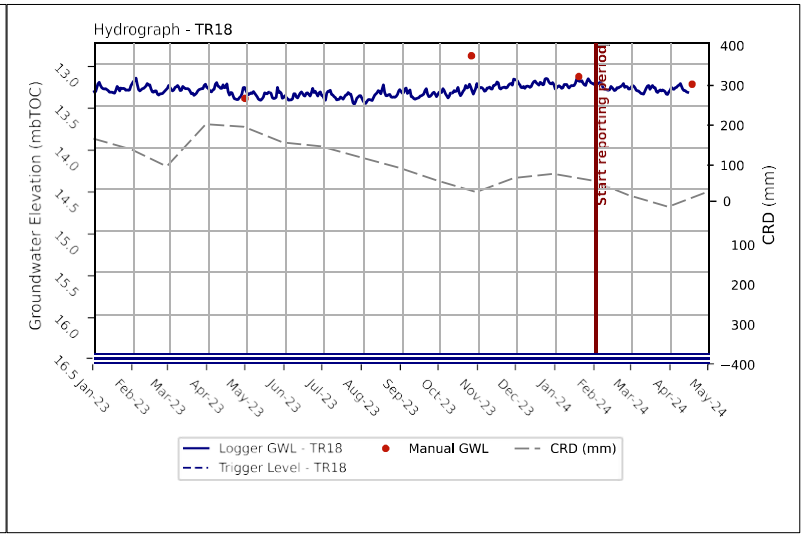

Hydrograph - GW03
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - GW03
Manual GWL
CRD (mm)
Trigger Level - GW03

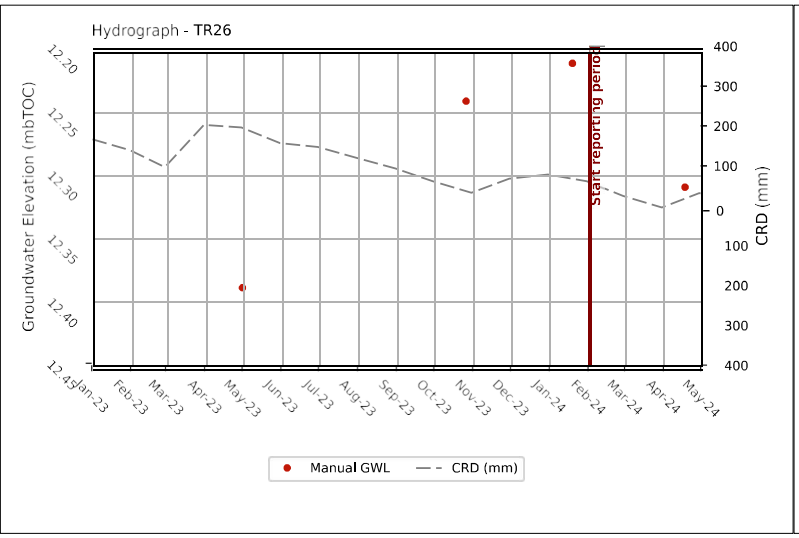

Hydrograph - GW-7
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - GW-7
Manual GWL
CRD (mm)

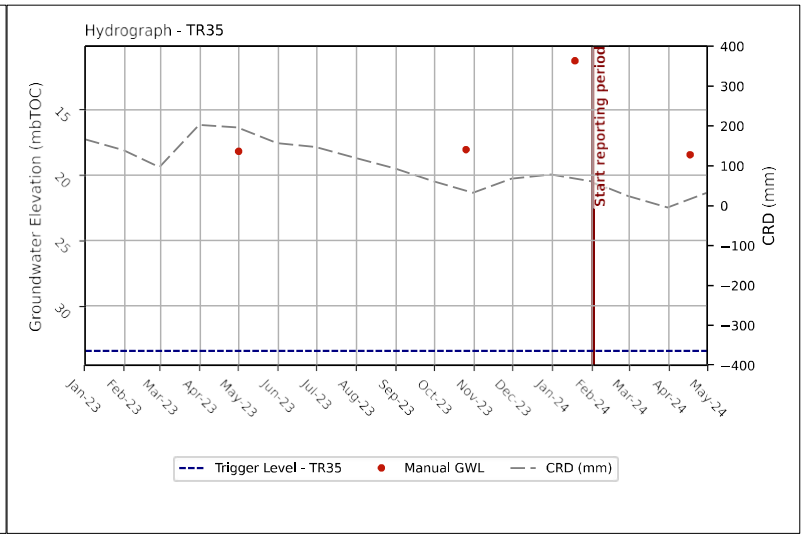

Hydrograph - GW-9
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - GW-9
Manual GWL
CRD (mm)
Trigger Level - GW-9

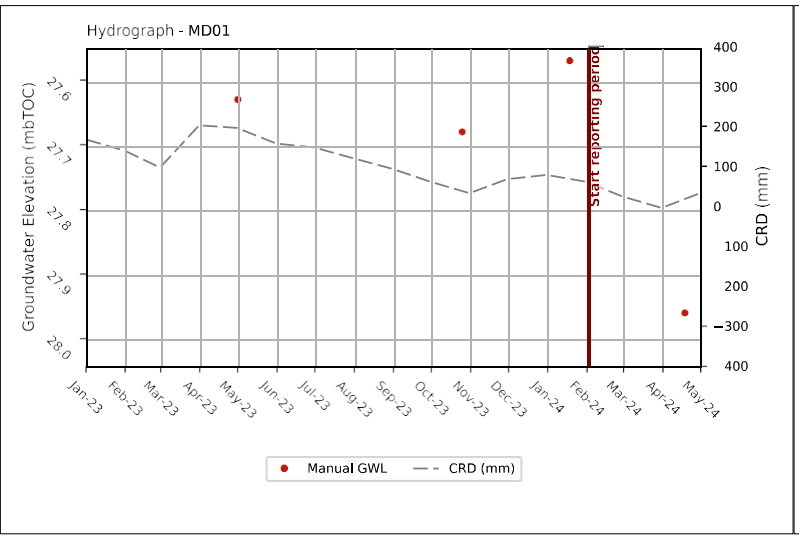

Hydrograph - VNW223
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - VNW223
Manual GWL
CRD (mm)

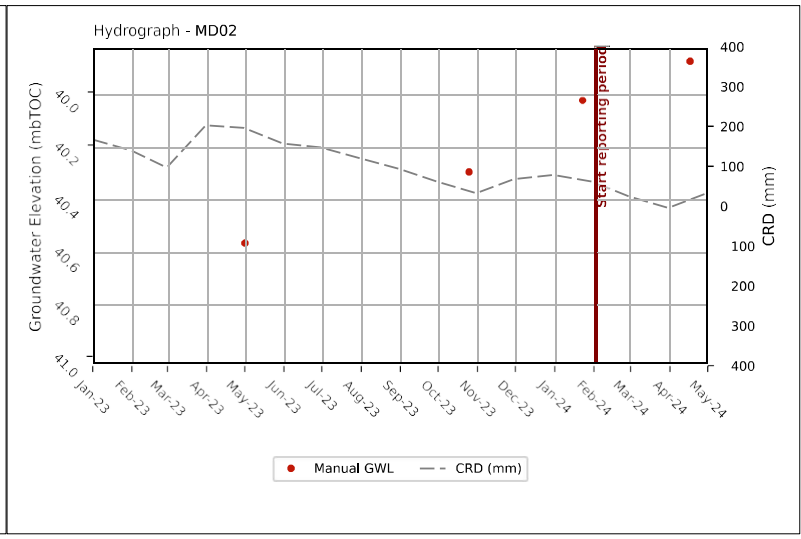

Hydrograph - GW-11
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - GW-11
Manual GWL
CRD (mm)

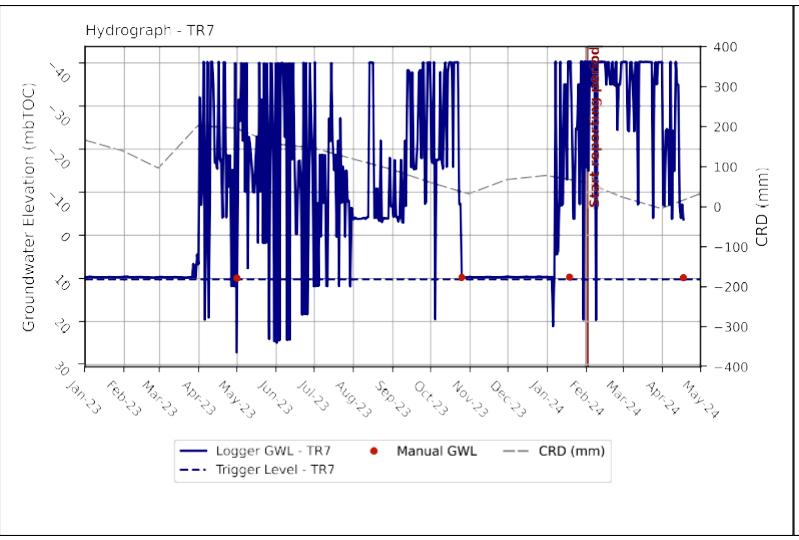

Hydrograph - TR18
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - TR18
Manual GWL
CRD (mm)
Trigger Level - TR18

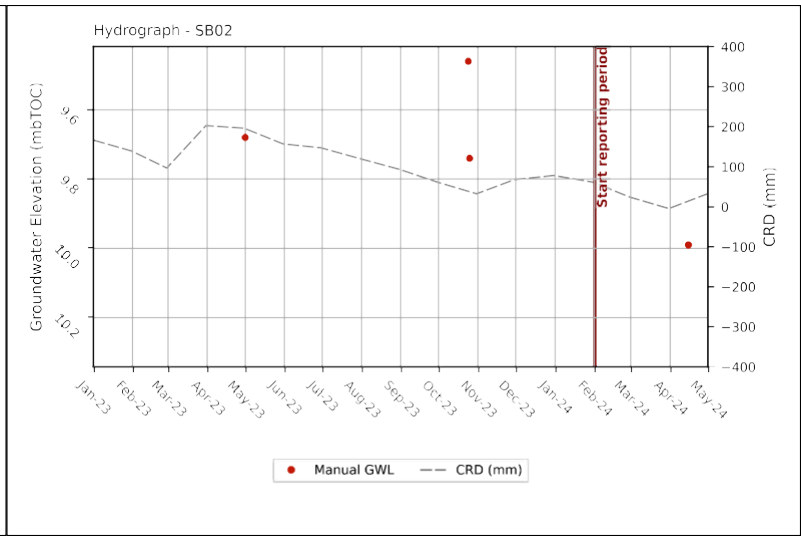

Hydrograph - TR26
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

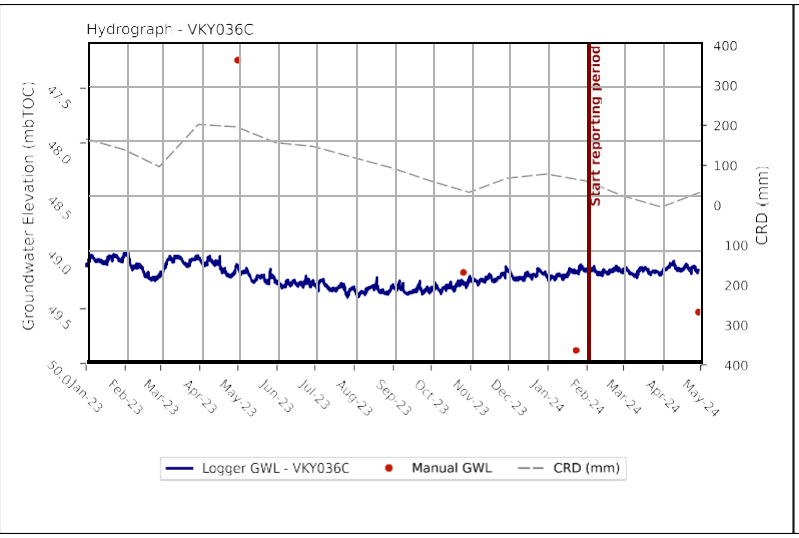

Hydrograph - TR35
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - TR35
Manual GWL
CRD (mm)

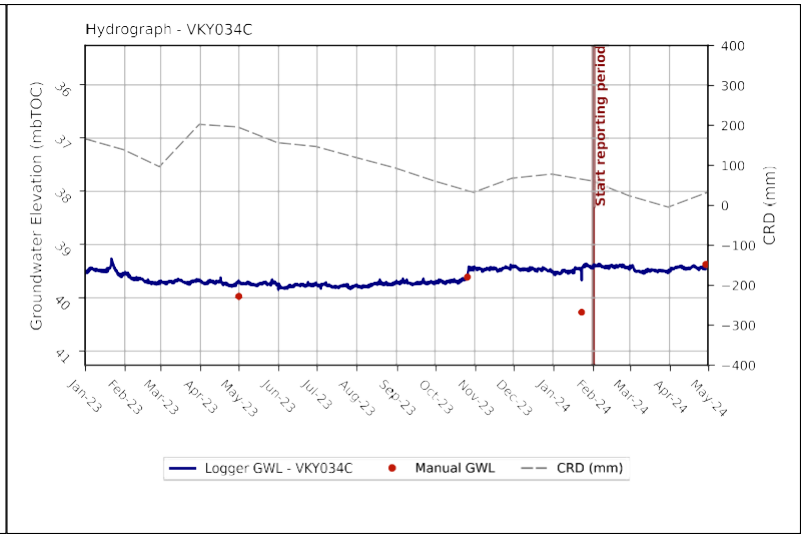

Hydrograph - MD01
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

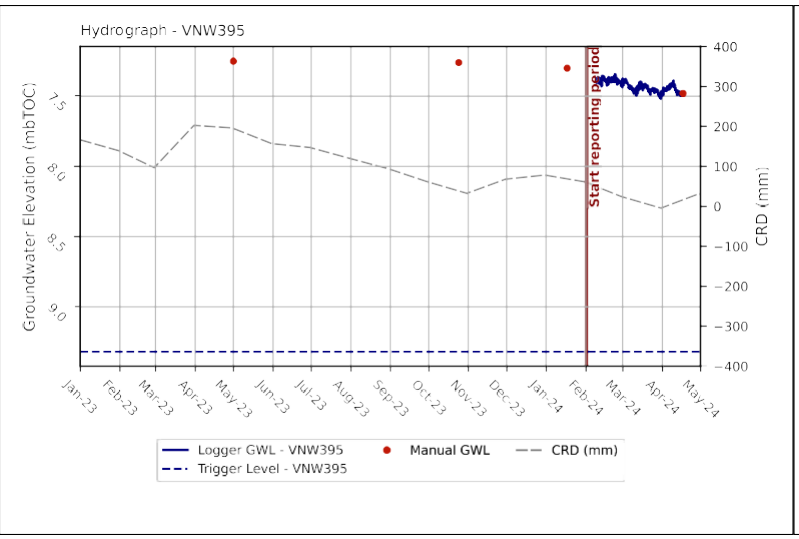

Hydrograph - MD02
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

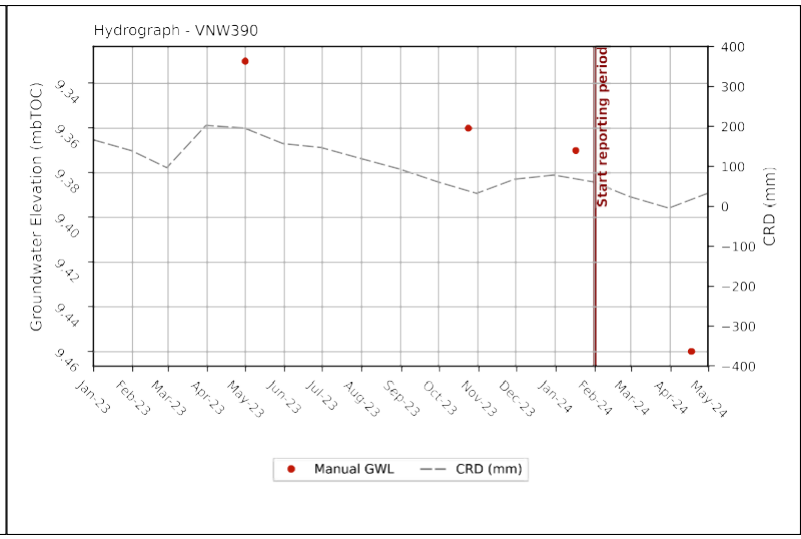

Hydrograph - TR7
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - TR7
Manual GWL
CRD (mm)
Trigger Level - TR7

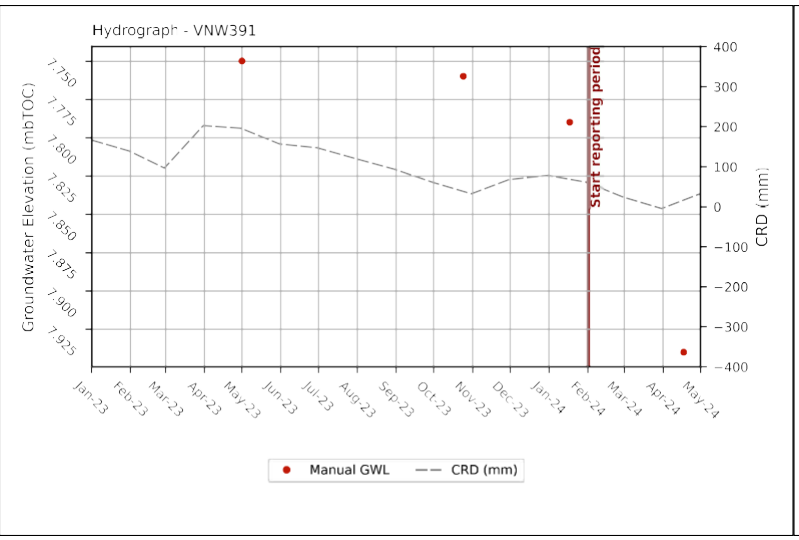

Hydrograph - SB02
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

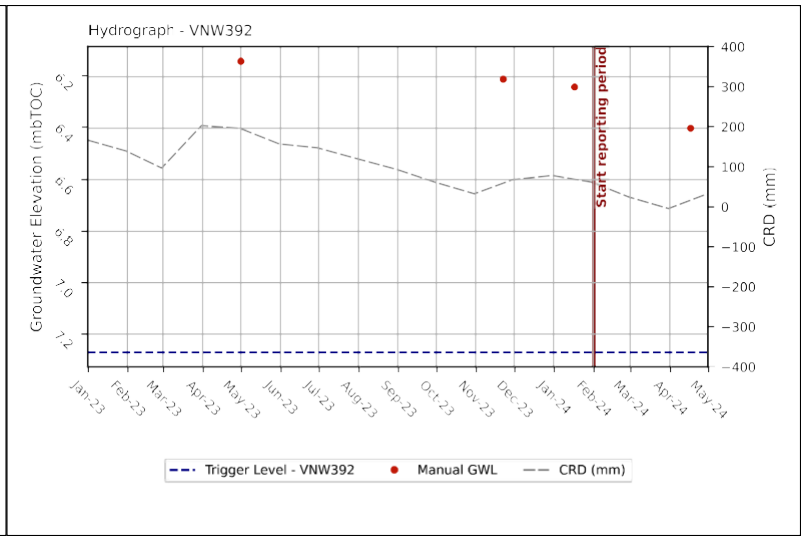

Hydrograph - VKY036C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY036C
Manual GWL
CRD (mm)

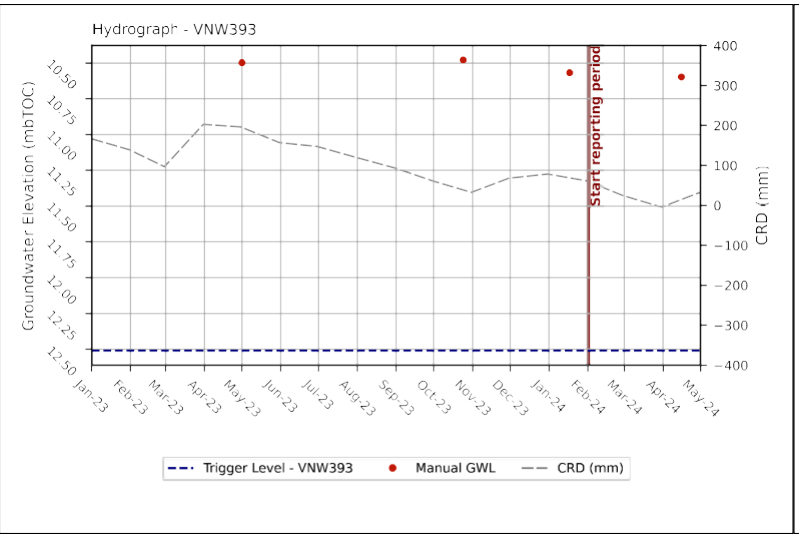

Hydrograph - VKY034C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY034C
Manual GWL
CRD (mm)

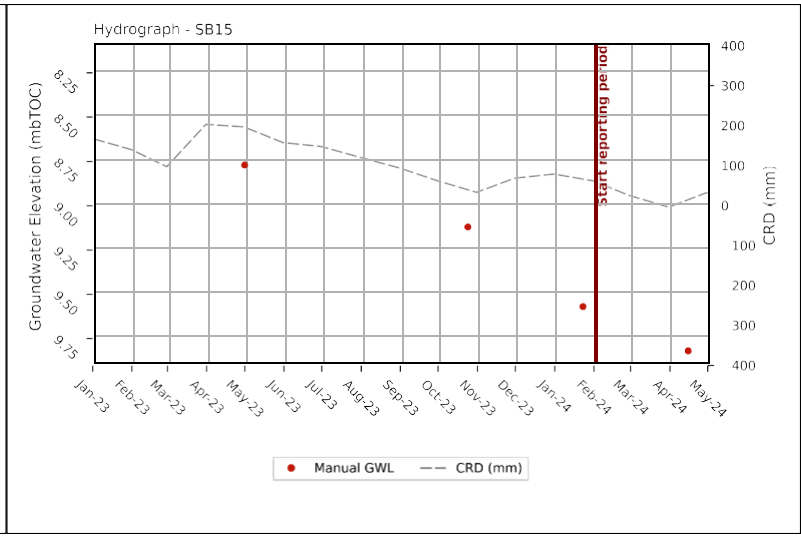

Hydrograph - VNW395
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VNW395
Manual GWL
CRD (mm)
Trigger Level - VNW395

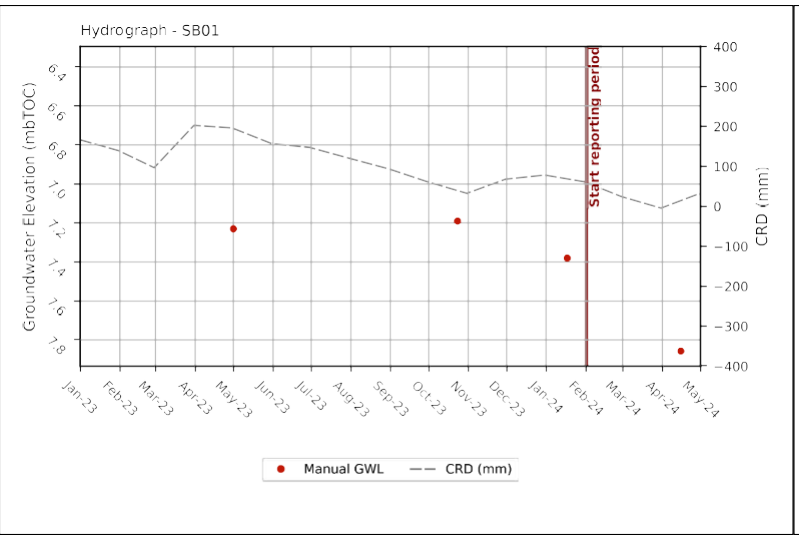

Hydrograph - VNW390
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

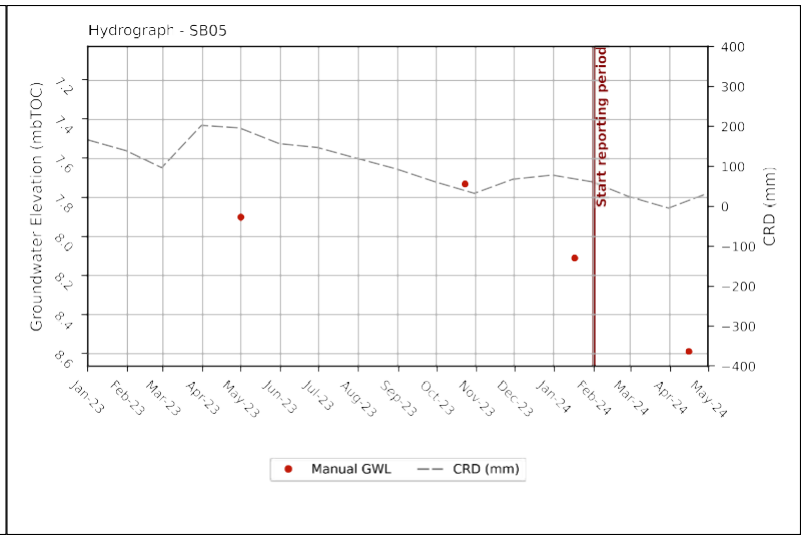

Hydrograph - VNW391
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

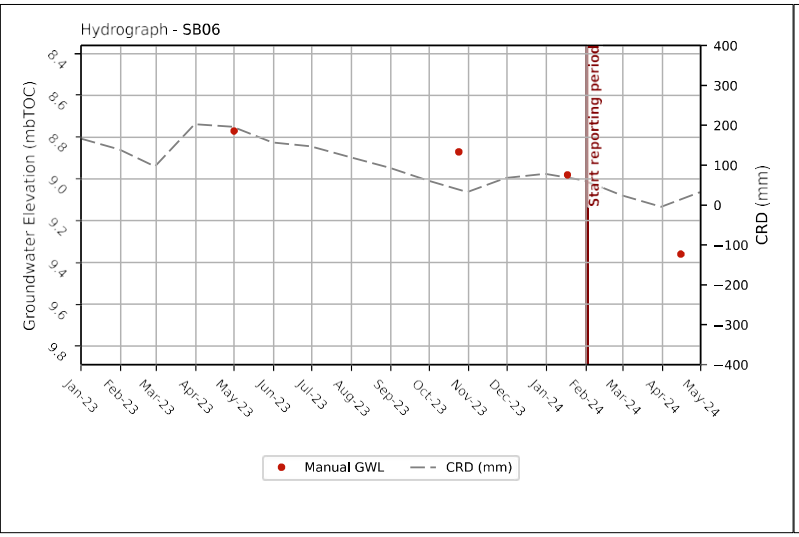

Hydrograph - VNW392
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - VNW392
Manual GWL
CRD (mm)

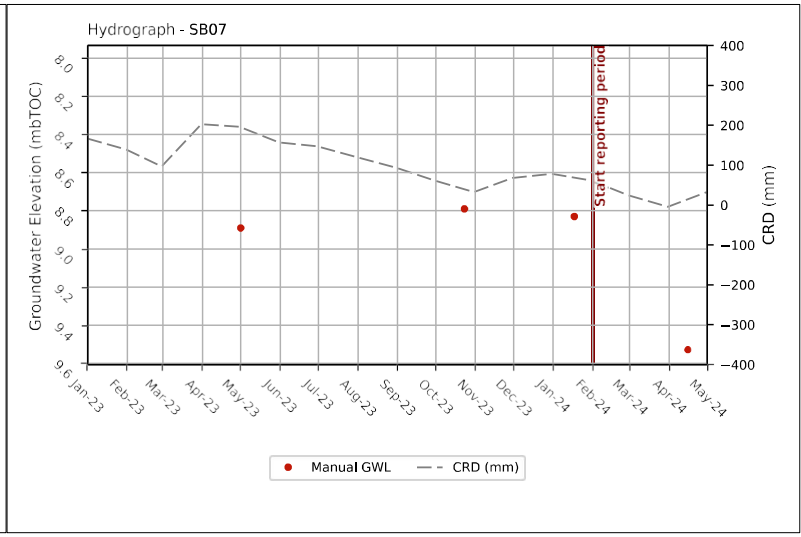

Hydrograph - VNW393
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - VNW393
Manual GWL
CRD (mm)

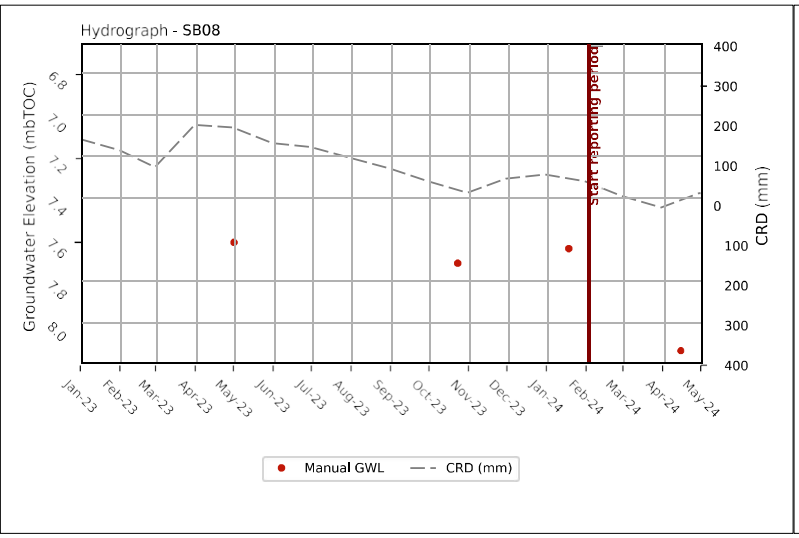

Hydrograph - SB15
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

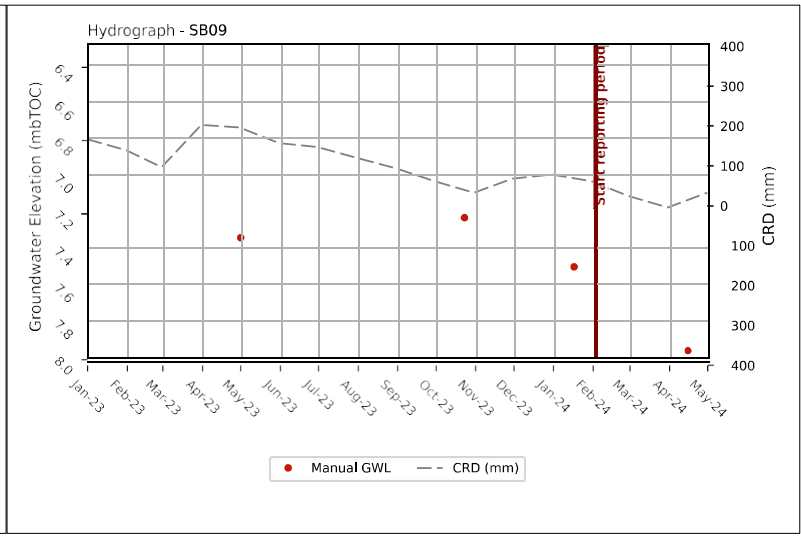

Hydrograph - SB01
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

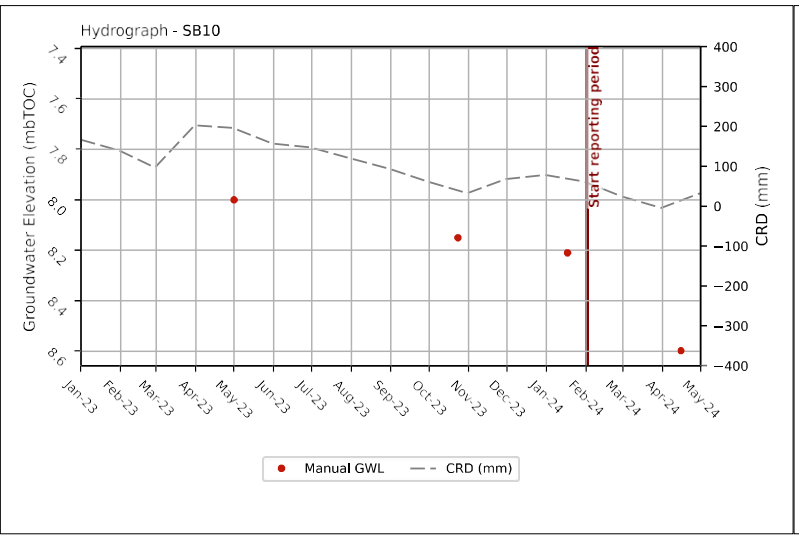

Hydrograph - SB05
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

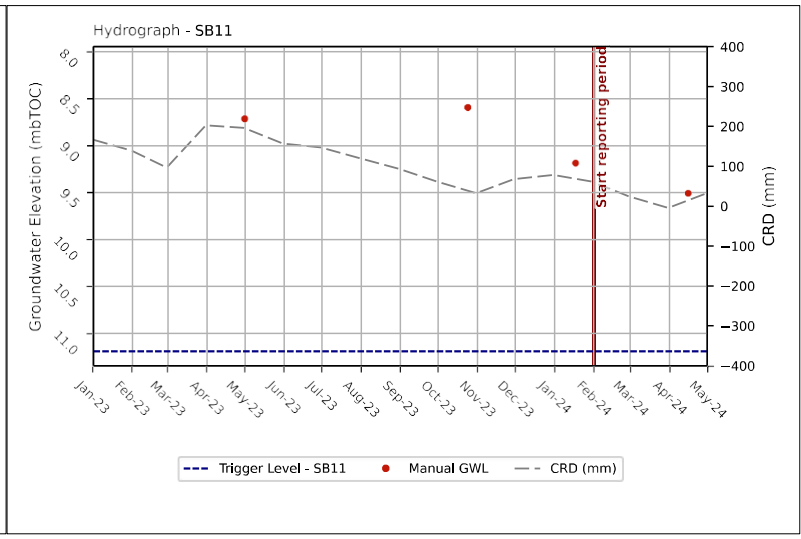

Hydrograph - SB06
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

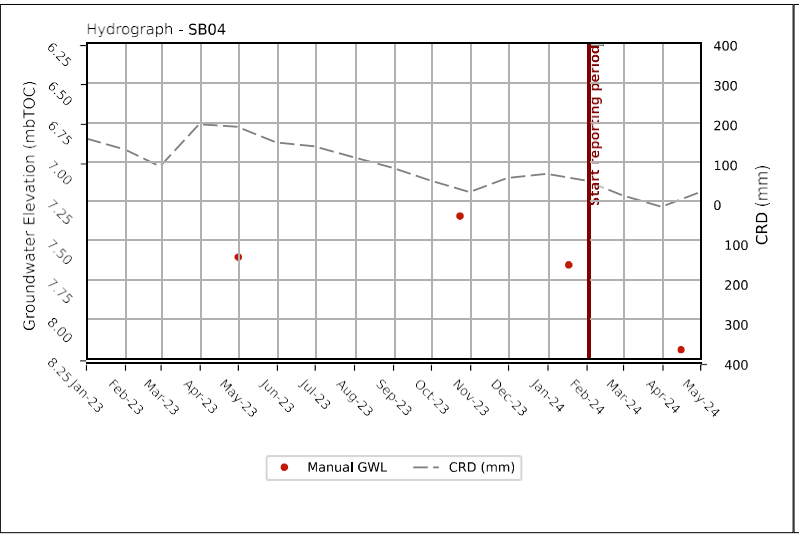

Hydrograph - SB07
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

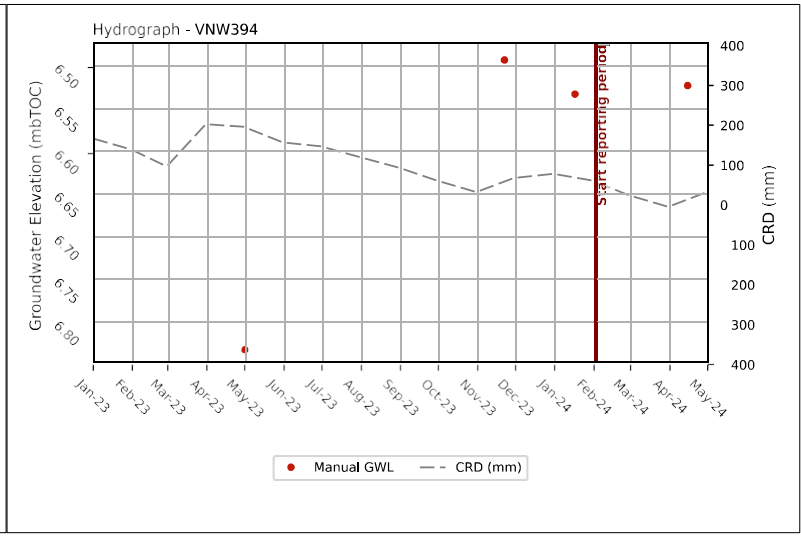

Hydrograph - SB08
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

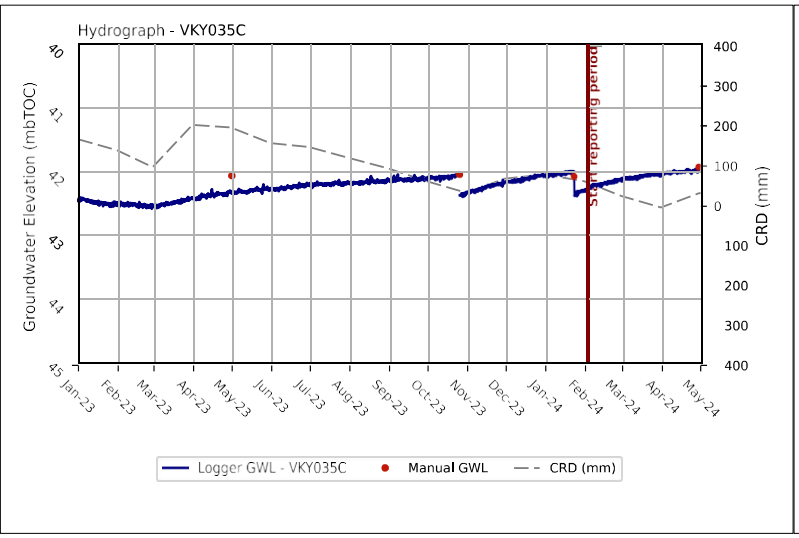

Hydrograph - SB09
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

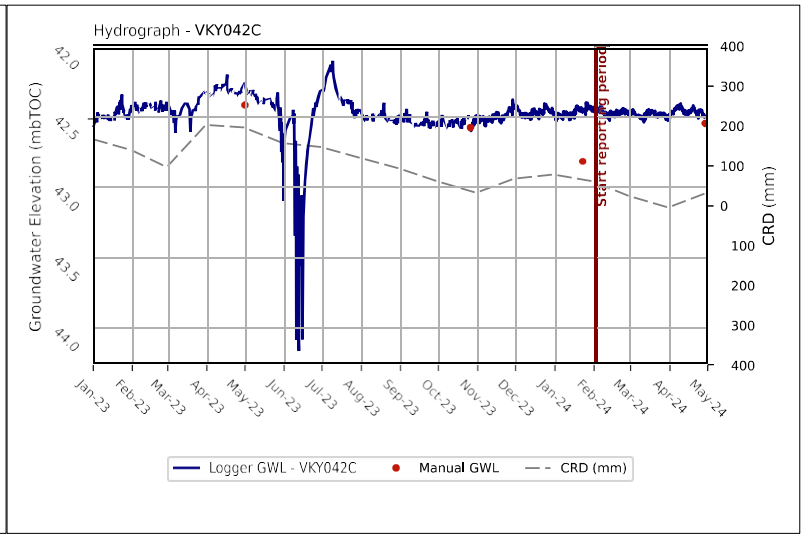

Hydrograph - SB10
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

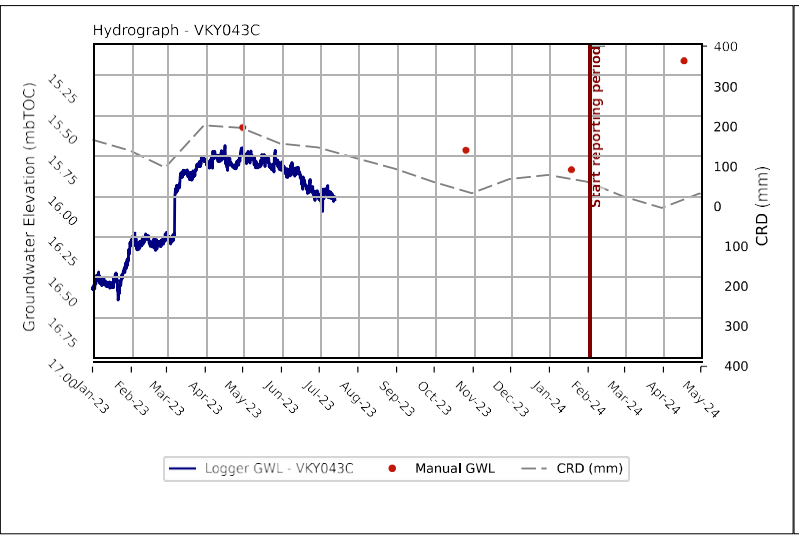

Hydrograph - SB11
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - SB11
Manual GWL
CRD (mm)

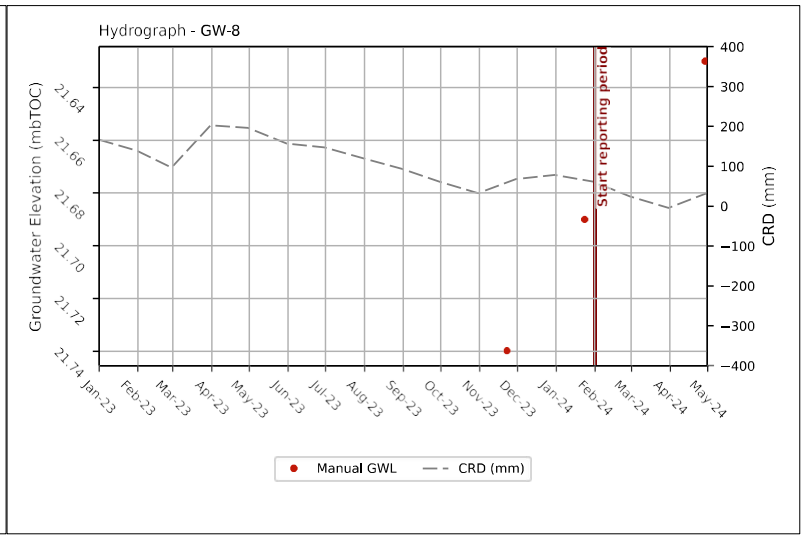

Hydrograph - SB04
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

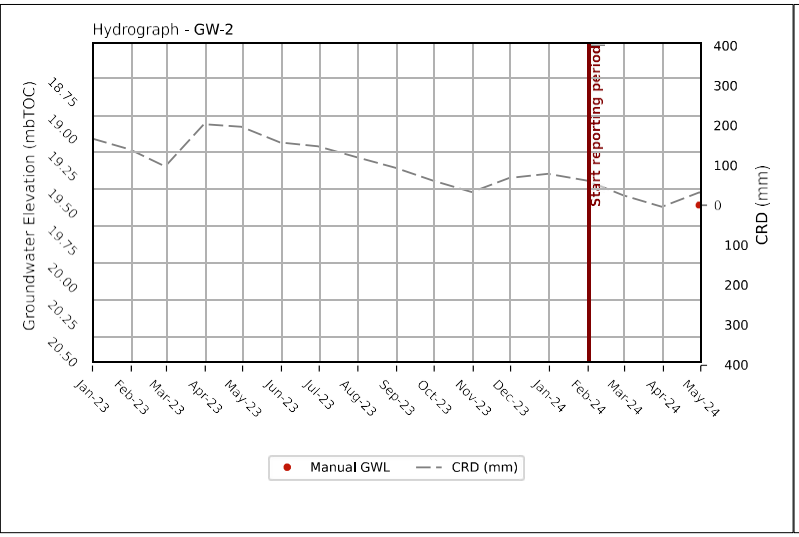

Hydrograph - VNW394
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

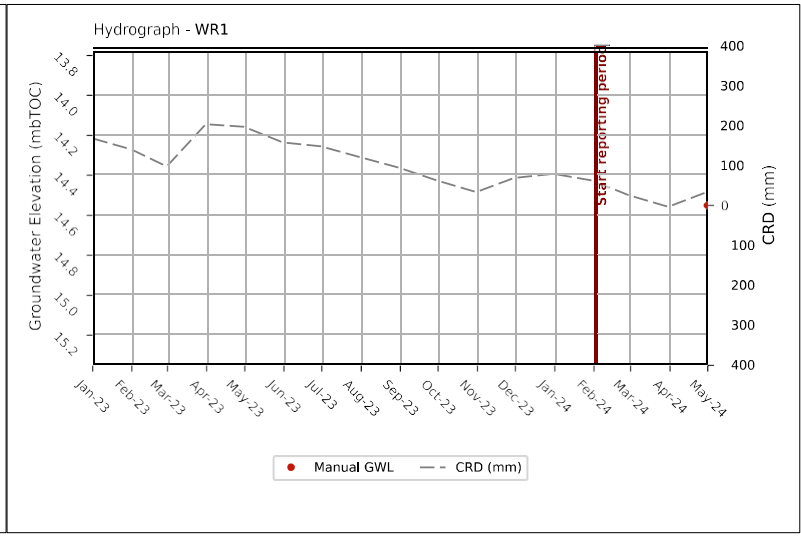

Hydrograph - VKY035C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY035C
Manual GWL
CRD (mm)

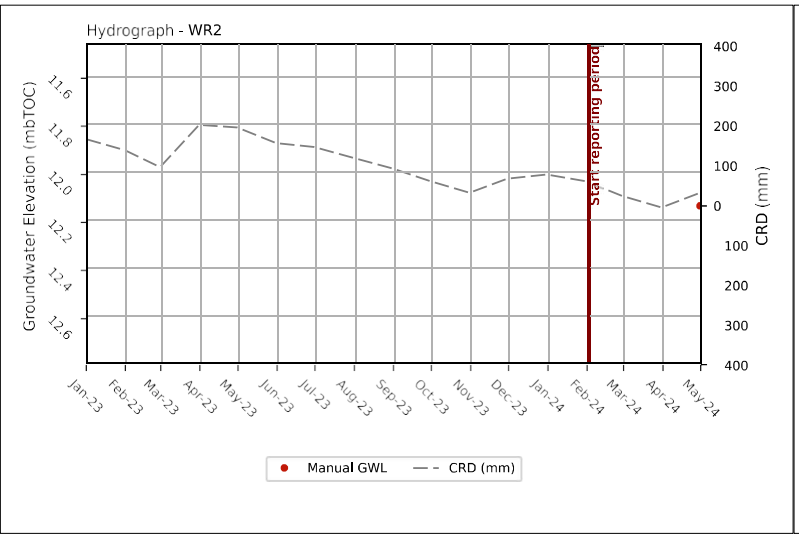

Hydrograph - VKY042C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY042C
Manual GWL
CRD (mm)

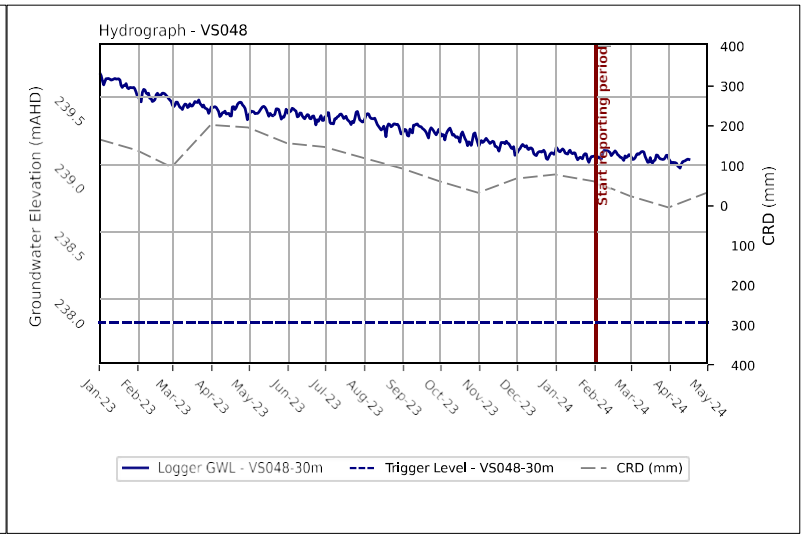

Hydrograph - VKY043C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY043C
Manual GWL
CRD (mm)

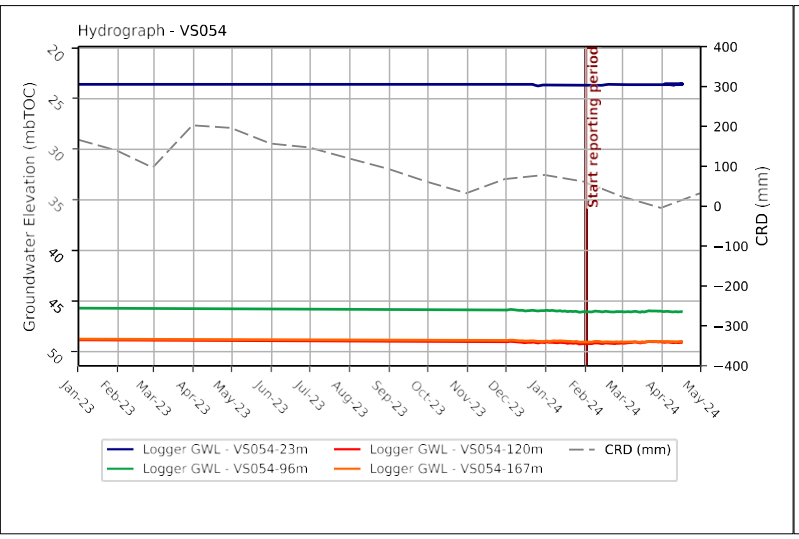

Hydrograph - GW-8
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

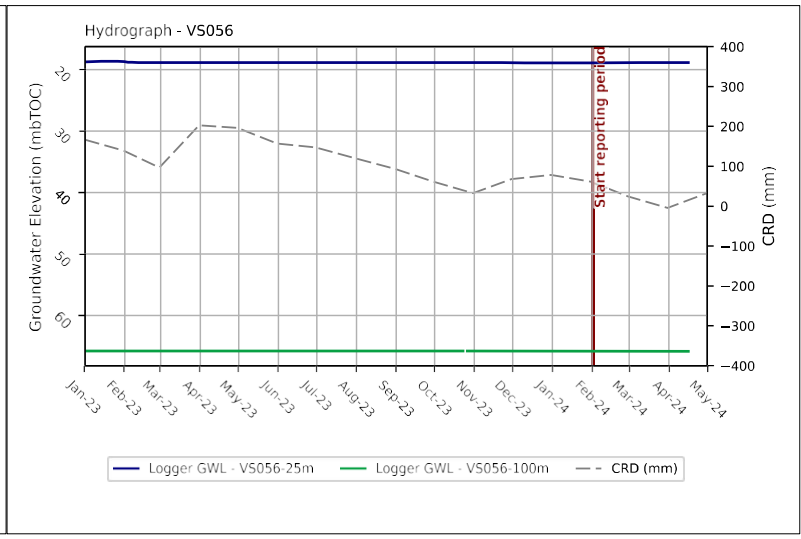

Hydrograph - GW-2
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)


Hydrograph - WR1
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)


Hydrograph - WR2
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)


Hydrograph - VS048
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Logger GWL - VS048-30m
Trigger Level - VS048-30m
CRD (mm)


Hydrograph - VS054
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VS054-23m
Logger GWL - VS054-120m
CRD (mm)
Logger GWL - VS054-96m
Logger GWL - VS054-167m


Hydrograph - VS056
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VS056-25m
Logger GWL - VS056-100m
CRD (mm)

Whitehaven Vickery Extension Project

Community Consultative Committee

FINAL MINUTES

Meeting Date: 24 October 2024

Venue: WHC Boardroom, Gunnedah Conadilly Street, Gunnedah, 2380 and Zoom

Invitees	
Community Representatives **Gunnedah Shire Council** Wade Hudson, Manager Development Assessment Gunnedah Shire Council (WH)	**Whitehaven Coal** Megan Martin, Environmental Superintendent (MM) Matthew Sparkes, Manager Operations (MS) **Independent Chairperson** Professor Roberta Ryan (RR) **Minute taker** Isa Crossland Stone (ICS)
Apologies Darren Swain – Whitehaven Coal (DS) Barry Thompson, Community Representative (BT) Keith Blanch, Community Representative (KB) *Narrabri Shire Council Representatives*	

Item	Description	Action
1	**Welcome, agenda, apologies, declarations - RR**	
	There are no declarations. WH confirms the previous minutes.	
2	**Actions arising**	
	1. Group to touch on community member recruitment for 2025. RR says that the committee has previously been assembled primarily by word of mouth and existing social connections. Newspaper notices have not been particularly successful to date. WH suggests that future advertisement should note that meetings can be attended virtually; this may be a point of encouragement for some community members. RR says this is a good idea. She asks MM if Whitehaven distributes regular newsletters. Perhaps a CCC recruitment piece could be included in that? MM says that they are soon going to deliver a project update letter to the community, but otherwise they do not tend or intend to make regular letterbox distributions. WH suggests that the Councils can include links on the Council Facebook pages and websites, as the group agrees that recruitment is likely to be most successful through Council and direct community connections. WH asks of there is an upper limit for community members on a committee. RR says that there is not a specific number. Generally, 5-7 community members is the standard amount. Community member attendance on this committee has not historically been an issue, so she will follow up with community members about how best to proceed with community presence and participation on the committee. The group agrees that Whitehaven should issue a newspaper notice for recruitment in both the Gunnedah Shire Times and the Narrabri Shire Times. WH will also follow up about the Council's use of social media to get the word out.	RR to follow up with community members about how best to proceed with increased community presence and participation on the committee.

	All of these recruitment notices will specify the option for virtual attendance via Zoom in order to widen the possible network of community input. MM and JdK will draft up this advert and share it with RR and then distribute it. RR notes that there are no current Terms of Reference for this committee – many committees do not have them. However, one can easily be drafted if people would like one. In the meantime, RR can discuss the key terms of the CCC (which are included in the Department Guidelines) with any potential committee members. The question of whether a ToR document should be drafted will be brought forward at the next meeting to the community members.	MM/JdK to draft up a CCC recruitment advert and share it with RR before distributing it. Group to discuss whether a ToR document should be drafted for the CCC.
3	**Environmental report - MM**	
	MM shares the Whitehaven Vickery Environmental report and notes that the dust gauges are a requirement of SSD-5000 which we still comply with. This presentation slides are attached to these minutes. WH asks if the original approval is less onerous than the original project approval. MM says it is, the VEP consent has more monitoring conditions. MM will let RR know when the MOD1 response to submissions is available, early next calendar year. RR will share it with the group. RR asks what the water-related concerns in the submissions (identified in MM's slides) relate to specifically. MM says that mostly they have arisen from questions about how much water will be pumped and how the project will be managed. These concerns and questions will all be addressed in the Response to Submissions and supported with technical evidence/reporting.	MM to be in touch with RR when the MOD1 response to submissions is available, early next calendar year. RR will share it with the group.
4	**Community update - MM**	
	MM presents the Whitehaven Vickery Community Update on behalf of JDK, who was not able to attend today. MM's presentation slides, which include outlines of community investment strategy, are attached to these minutes.	

	WH asks about the 'discretionary sources' of funding. Is this distinct from investment commitments? MM confirms that it is additional and does not take away from any other community investment. This additional funding is allocated in response to funding applications, so MM encourages community members to apply.	
5	**Project / approvals update and next steps - MS**	
	MS presents the Whitehaven Vickery Project update. The presentation slides are attached to these minutes. RR asks where the workforce is being sourced from. Are they local candidates? MS says that they are favoring local candidates (partially in order to manage fatigue levels, relating to safety compliance concerns). MS notes that there were no recordable injuries in the first quarter of this year. There are comprehensive safety education and management strategies, and these appear to have been very successful. WH asks if workers from Werris Creek are tending to transfer to Vickery. MS says yes, there is a high level of transfer. There have also been several new local recruitments for the project.	
6	**General Business**	
	The group discusses future meeting dates. Given that there are not many key issues anticipated in the coming months, the group agrees on dates for the four upcoming meetings. ICS will send hold notification to the group for each of the following dates in 2025: • **February 6th** • **May 1st** • **July 24th** • **October 23rd** RR thanks the attendees for their presence and discussion at the meeting today and wishes them well.	

Vickery Coal Mine
Community Consultative Committee
Meeting #20

Quarterly Environmental Monitoring Report
Jul, 2024 – Sept, 2024

Vickery Project

This report has been prepared for the Community Consultative Committee (CCC) meeting to show environmental monitoring performance at Vickery Coal Mine (VCM) for the reporting period from July 2024 to September 2024.

Noise Monitoring

Attended noise was conducted during this period.

Attended noise monitoring was conducted at "Lanreef" (N-AT2) and "Broadwater" (N-AT1) properties once a month during this reporting period. Noise criteria for the mine is 40dB(A) Leq (15 min) during day time and 35dB(A) Leq (15 min) during evening/night time and 52 LA_{max} for instantaneous night readings. Please refer to EPL Monitoring locations map in Appendix B for the location of these monitoring points.

Results below show that noise emissions from the mine did not exceed operational criteria at "Lanreef" or "Broadwater" monitoring locations during the monitoring period.

Table 1 July 2024 Attended Noise Monitoring

Table 4
VCM Operational Noise Monitoring Results Leq(15min) – 30th July 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	1:28pm	46	IA	45[1]	5.2 / 169	C	Birds (45), traffic (37), wind in trees (35), **VCM (IA)**	No
N-AT2 / 8	3:46pm	47	IA	45[1]	4.7 / 164	D	Traffic (46), birds (38), **VCM (IA)**	No

Table 5
VCM Operational Noise Monitoring Results Leq(15min) – 30th July 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	9:23pm	30	28	35	0.7 / 126	E	**VCM (28)**, frogs (26)	No
N-AT2 / 8	8:16pm	39	25	37	1.4 / 165	F	Traffic (39), **VCM (25)**, frogs (22)	No

Table 6
VCM Operational Noise Monitoring Results Leq(15min) – 30th July 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	10:00pm	33	21	35	1.6 / 110	E	Cows (31), frogs (28), **VCM (21)**	No
N-AT2 / 8	11:50pm	41	IA	37	2.1 / 099	D	Horses (39), traffic (37), **VCM (IA)**	No

Table 7
VCM Operational Noise Monitoring Results LA_{max} – 30th July 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)
N-AT1 / 7	10:00pm	55	24	52	1.6 / 110	E	Cow	No
N-AT2 / 8	11:50pm	68	IA	52	2.1 / 099	D	Horse	No

Table 2 August 2024 Attended Noise Monitoring

Table 4

VCM Operational Noise Monitoring Results Leq(15min) – 15th August 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	1:57pm	45	IA	40	1.4 / 216	C	Birds (43), frogs (38), traffic (35), **VCM (IA)**	No
N-AT2 / 8	4:12pm	48	IA	40	1.4 / 173	C	Traffic (45), frogs (43), **VCM (IA)**	No

Table 5

VCM Operational Noise Monitoring Results Leq(15min) – 15th August 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	9:28pm	32	IA	35	1.7 / 155	D	Traffic (30), wind (26), **VCM (IA)**	No
N-AT2 / 8	8:19pm	43	IA	37	2.3 / 88	E	Frogs (41), Traffic (37), **VCM (IA)**	No

Table 6

VCM Operational Noise Monitoring Results Leq(15min) – 15th August 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	10:01pm	33	22	35	0.9 / 158	D	Traffic (30), cattle (30), **VCM (22)**	No
N-AT2 / 8	11:48pm	39	IA	37	1.2 / 165	D	Traffic (37), frogs (34), **VCM (IA)**	No

Table 7

VCM Operational Noise Monitoring Results LA_{max} – 15th August 2024

Location	Time	dB(A), LA_{max}	VCM Contribution dB(A), LA_{max}	Criterion dB(A), LA_{max}	Wind speed (m/s),dir	Stability Class	LA_{max} Noise Source	Exceedance (Yes/No)
N-AT1 / 7	10:01pm	55	26	52	0.9 / 158	D	Bird	No
N-AT2 / 8	11:48pm	61	IA	52	1.2 / 165	D	Horse	No

Table 3 September 2024 Attended Noise Monitoring

Table 4

VCM Operational Noise Monitoring Results Leq(15min) – 24th September 2024 (Day)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	1:40pm	37	IA	40	2.7 / 300	C	Birds (37), wind (25), aeroplanes (21), VCM (IA)	No
N-AT2 / 8	3:53pm	46	IA	451	3.2 / 301	D	Birds (44), wind (41), VCM (IA)	No

Table 5

VCM Operational Noise Monitoring Results Leq(15min) – 24th September 2024 (Evening)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	9:20pm	32	IA	401	3.6 / 028	E	Wind (28), dogs (26), traffic (25), VCM (IA)	No
N-AT2 / 8	8:18pm	38	IA	421	3.6 / 026	E	Traffic (35), wind (34), VCM (IA)	No

Table 6

VCM Operational Noise Monitoring Results Leq(15min) – 24th September 2024 (Night)

Location	Time	dB(A), Leq	VCM Contribution dB(A),Leq	Criterion dB(A),Leq	Wind speed (m/s),dir	Stability Class	Identified Noise Sources dB(A),Leq	Exceedance (Yes/No)
N-AT1 / 7	10:02pm	36	IA	35	1.3 / 129	E	Insects (36), VCM (IA)	No
N-AT2 / 8	11:40pm	41	IA	37	0.8 / 200	E	Birds (39), traffic (33), insects (33), VCM (IA)	No

Table 7

VCM Operational Noise Monitoring Results LAmax – 24th September 2024

Location	Time	dB(A), LAmax	VCM Contribution dB(A), LAmax	Criterion dB(A), LAmax	Wind speed (m/s),dir	Stability Class	LAmax Noise Source	Exceedance (Yes/No)
N-AT1 / 7	10:02pm	66	IA	52	1.3 / 129	E	Insects	No
N-AT2 / 8	11:40pm	63	IA	52	0.8 / 200	E	Birds	No

The real time noise monitor located on the "Long Way Round" property remains a management tool, so the noise criteria are not applicable at that site. Levels of noise recorded at that location are managed according to the noise management plan and trigger action response plan.

An additional real time noise monitor has been installed closer to the mine site, at Broadwater property.

Blast Monitoring

Blasting Results

There has been 11 Blasts at VCM from 1st July to 30th September.

The highest recorded overpressure for the reporting period was 115.20dBL recorded at B-02 compliance monitor on the 14/08/2024.

The highest recorded ground vibration for the reporting period was 2.29mm/s at B-01 recorded on the 25/09/2024.

VCM overpressure and ground vibration for the quarter was compliant and did not exceed the blasting criteria declared in the project approval and Blast Management Plan (BMP). Please refer to EPL Monitoring locations map in Appendix B for the location of these monitoring points.

Table 4 Max Peak Overpressure and Ground Pressure for the Quarter

Monitor Location	Date	Max. Peak Overpressure (dB)	Criterion (dB)	Date	Max. Peak Ground Pressure (mm/s)	Criterion (mm/s)
B-01	25/09/2024	110.2	**133**	25/09/2024	2.29	**10**
B-02	14/08/2024	115.2	**N/A**	05/08/2024	1.86	**80**
B-03	14/08/2024	105.1	**120**	05/08/2024	0.93	**10**

Air Quality Monitoring

Dust Deposition Results

Standard Australia AS/NZS 3580.10.1:2016, "Methods for sampling and analysis of ambient air – Determination of particulate matter – Deposited matter – Gravimetric Method," classifies deposited dust as insoluble solids. Therefore, VCM tests air quality monthly at mine-owned sites for indicative purposes, to infer compliance, against the limit of 4 g/m^2/month.

Error! Reference source not found. Table 5 shows deposited dust gauge results over 12 months. All dust monitors that are located on project related or WHC owned land; as such compliance criteria (4g/m^2/month) do not apply. While deposited dust trends remain steady during the reporting period (refer graph in *Appendix A*), some monitors are displaying non-mine related particulate matter deposition more regularly than others.

Non-mine related particulate matter could be attributed to organic matter (such as leaves, mice, frogs, insects or bird faeces that fall in to the bottles), or they may be in farming locations, so during some months dust levels may be higher due to harvesting. Please refer to Dust Deposition Gauges Monitoring locations map in Appendix B for the location of these monitoring points.

Table 5 Deposited Gauge Results [g/m2/month]

Month	D1	D2	D12	D13B	DG1	DG2	V1	V2	V3	V4	V5
Oct-23	1.6	1.3	3.3	0.9	2.5	1.5	1.3	4.5	2.8	1.5	1.6
Nov-23	1.7	1.5	2.6	1	1.4	1.6	1.3	4.4	2.6	1.4	1.5
Dec-23	2	1.5	2.5	1.1	1.6	1.5	1.3	4.3	2.2	1.6	1.4
Jan-24	2.1	1.4	2.7	1.2	2.5	2.1	1.4	4.4	1.4	1.9	1.5
Feb-24	2.4	1.7	1.8	1.2	2.8	2.6	1.4	0.8	1.3	1.9	1.7
Mar-24	2.5	1.7	1.7	1.4	2.9	2.5	1.4	1	1.4	2.2	1.9
Apr-24	2.7	1.6	1.8	1.5	3	2.6	1.5	1	1.3	2.2	1.9
May-24	2.5	1.5	2	1.5	3	2.7	1.5	1	1.4	2.3	2
Jun-24	2.4	1.4	1.9	1.6	2.8	2.5	1.3	0.9	1.3	2.2	2.0
Jul-24	0.4	0.7	0.3	0.4	0.9	0.6	0.6	0.3	1.8	1.0	0.6
Aug-24	0.5	0.2	0.2	0.2	1.4	0.4	0.9	0.3	6.7	0.5	0.4
Sep-24	1.7	0.5	0.4	0.3	3.1	0.5	0.5	0.5	0.5	0.6	0.4
Average	1.9	1.3	1.8	1.0	2.3	1.8	1.2	2.0	2.1	1.6	1.4

Real-time Air Monitoring ($PM_{2.5}$ and PM_{10})

Two real-time air quality monitoring units are located on private property adjacent to the Vickery Coal Mine. PM1 is located at Lanreef and PM2 at Mirrabinda to the south and south-west of the operations. These are used as both a compliance and an operational management tool. Dust levels nearing or reaching the nominated criteria will trigger actions onsite to assess the source of dust and modify operations if it is determined to be related to Vickery operations. Additional air quality monitoring units are located at Wil-gai and Roseberry and these are used for additional information and operational management in accordance with the Vickery Air Quality Management Plan. These units are also associated with other regional operations at Tarrawonga and Rocglen. Please refer to Air Quality Monitoring locations map in Appendix B for the location of these monitoring points.

Figure 1: TEOM installed at Lanreef

Water Monitoring

Groundwater

Routine groundwater monitoring has been conducted 6 monthly since 2021. In October 2023, Hydra-sleeve monitoring was introduced to Vickery's groundwater bores. Appendix C contains the Hydrographs for Vickery's GW bores. Monitoring indicates stable GW levels. Water quality data in a few bores is showing a departure from the interim trigger levels. This will assist to inform the development of the final trigger levels for GW monitoring as described in the Water MP. As mining below the water table has only just begun to occur any triggers of the interim TARP are due to the background levels naturally being different to the generic triggers sourced from external benchmarks. Please refer to Groundwater Monitoring locations map in Appendix B for the location of these monitoring points.

Surface Water

Water storage onsite is expected to be sufficient for at least 12 months. VCM has not undertaken any discharges during the period. Please refer to EPL Monitoring locations map in Appendix B for the location of these monitoring points.

Table 6 Surface Water Results for July, August and September

July	Namoi DS 1	Namoi DS 2	Namoi DS 3	Namoi US
pH	7.29	7.77	7.33	7.39
Electrical Conductivity (µS/cm)	648	672	583	608
TSS	50	56	53	55
Oil & Grease (mg/L)	<5	6	<5	<5
August	**Namoi DS 1**	**Namoi DS 2**	**Namoi DS 3**	**Namoi US**
pH	8.04	8.06	No Access	8.05
Electrical Conductivity (µS/cm)	570	555	No Access	570
TSS	77	63	No Access	71
Oil & Grease (mg/L)	<5	<5	No Access	<5
September	**Namoi DS 1**	**Namoi DS 2**	**Namoi DS 3**	**Namoi US**
pH	8.25	8.33	8.3	8.33
Electrical Conductivity (µS/cm)	735	713	698	762
TSS	19	16	28	19
Oil & Grease (mg/L)	<5	6	<5	<5

April	MWD2
pH	8.15
Electrical Conductivity (µS/cm)	3510
Turbidity	1.7
Oil & Grease (mg/L)	<5

VCM has recorded 420 mm of rain for 2024, so far.

Table 7 Annual Rainfall

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Monthly Rain (mm)	29.6	34.4	5	80.4	29.8	63.8	54	58.4	64.6				420
Cumulative (mm)	29.6	64	69	149.4	179.2	243	297	355.4	420				

Clearing

Clearing is currently ongoing at Vickery, approximately 560ha have been cleared during FY24. Topsoil and Subsoil is being stored separately in designated stockpiles areas. The stockpiles will be ripped and seeded to maintain viability for rehabilitation.

Figure 2: Updated Image of Topsoil and Subsoil Stockpiles

Complaints

Six complaints were received during the reporting period.

Five of these complaints were related to blast activities and one related to lighting. All matters have been resolved satisfactorily.

Approvals

The last Environmental Protection Licence (EPL) Variation was received on the 7th December 2023.

An application to transfer this licence to another WHC owned entity has been submitted. This is for internal WHC administrative purposes. The new holding entity will be named 'Vickery Coal Operations Pty Ltd'.

Environmental Management Plans

Approvals

All the approved Management Plans are available on the WHC website.

The Traffic Management Plan has been updated to include amended haulage hours following Tarrawonga Coal Mine's approval of MOD10 to MP11_0047. This was submitted in June and is with the DPHI for review.

MOD1 was submitted in August 2024. As described in April 2024 at the last CCC meeting this Modification is to:

- amend the Blue Vale Road realignment to a lesser impact;
- to allow the export of gravel from the VEP in line with existing approvals at Tarrawonga and the original Vickery Coal Project (SSD-5000);
- Construction and use of water pipelines from additional existing groundwater bores and to the Rocglen Coal Mine;
- Potential relinquishment of the secondary infrastructure area;
- A temporary access road and additional soil stockpile area;
- Temporary concrete batching plant;
- Disposal of waste heavy vehicle tyres;
- Reduction to the open cut extent and improved waste rock emplacement and landform design;
- Extended ROM coal road haulage hours to align with the Tarrawonga Modification 10; and
- Schedule of Lands update.

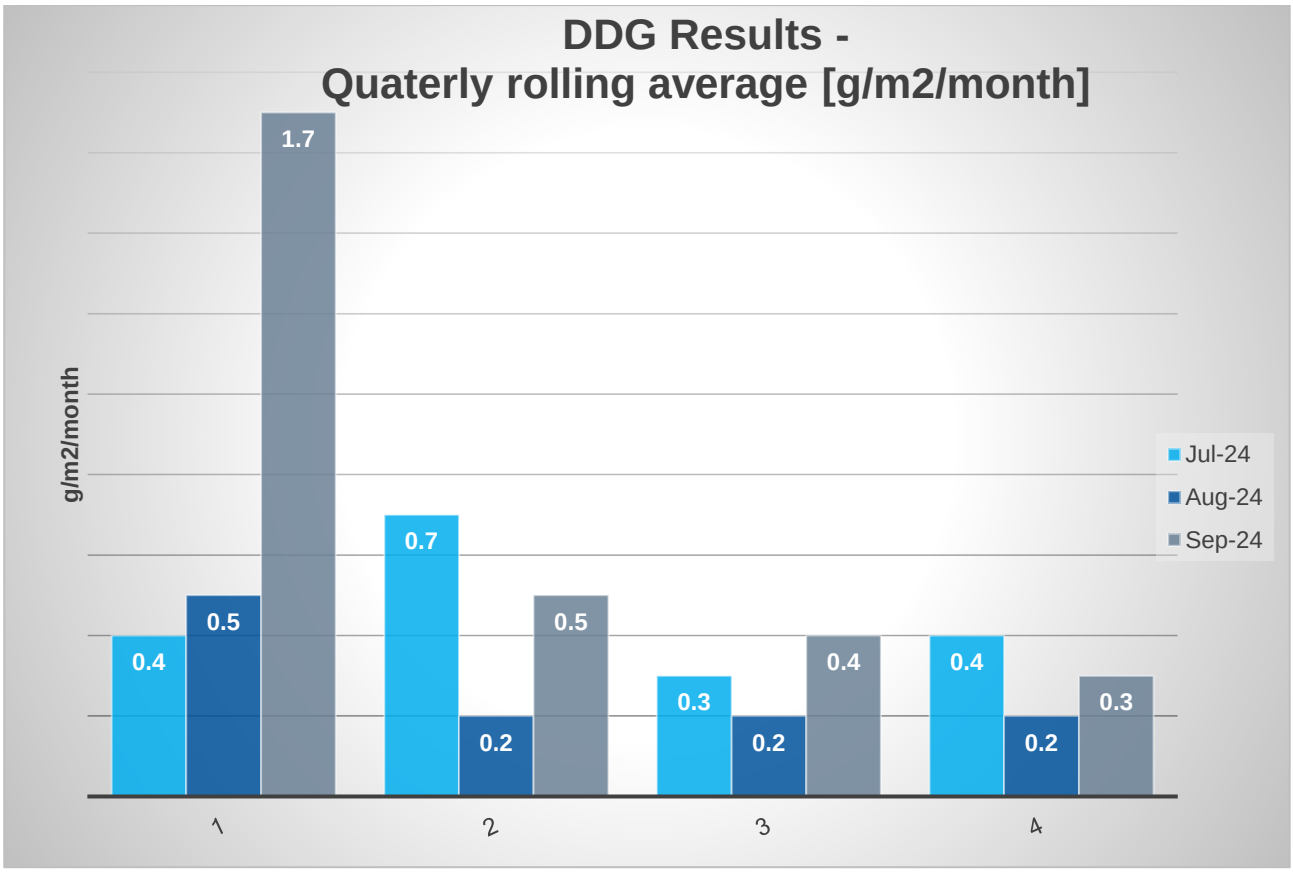
The Water Management Plan was updated and submitted to the DPHI for review.

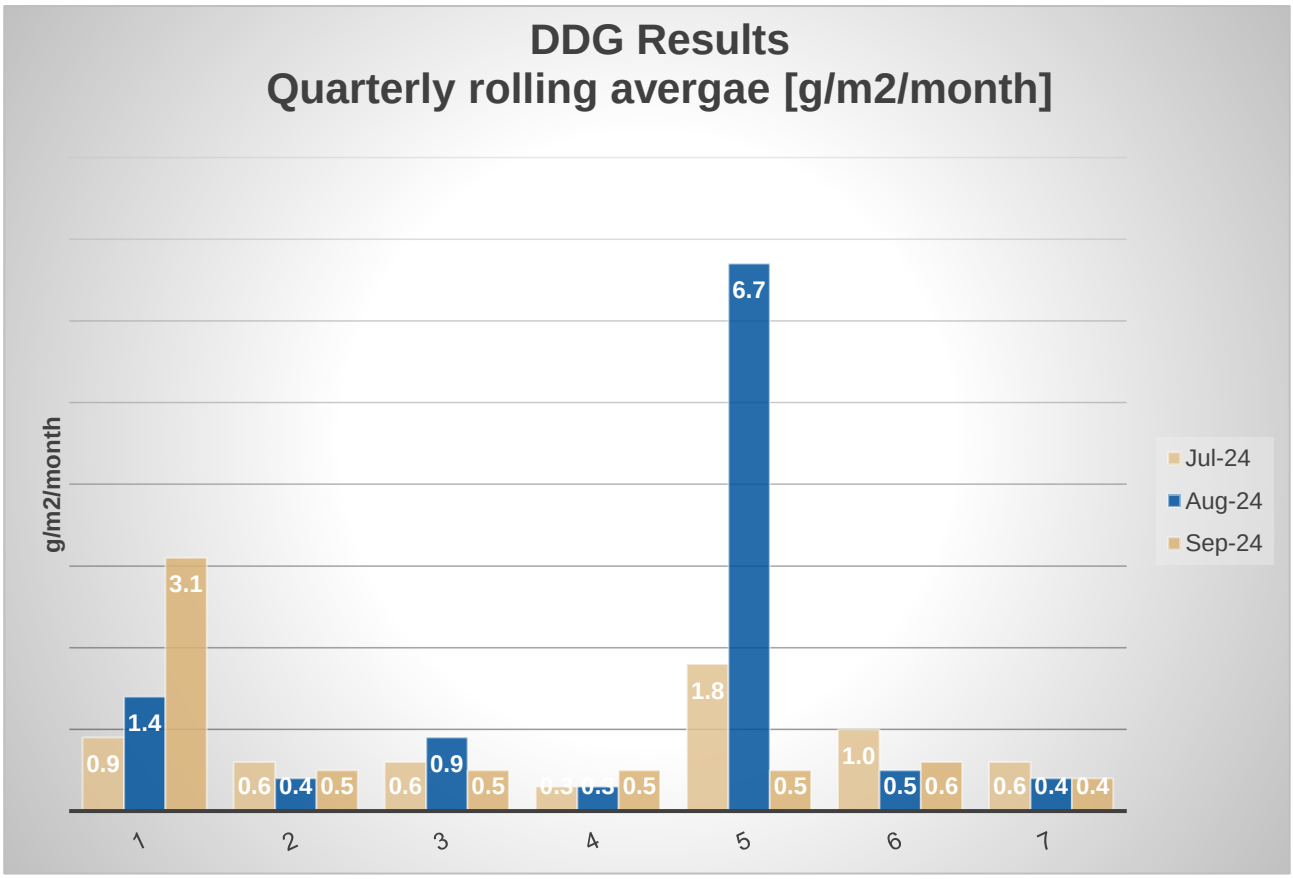
Proposed amendments

The Noise Management Plan will be updated to reflect the amended monitoring locations and incorporate road noise monitoring conducted by Tarrawonga Coal Mine on the haulage route.

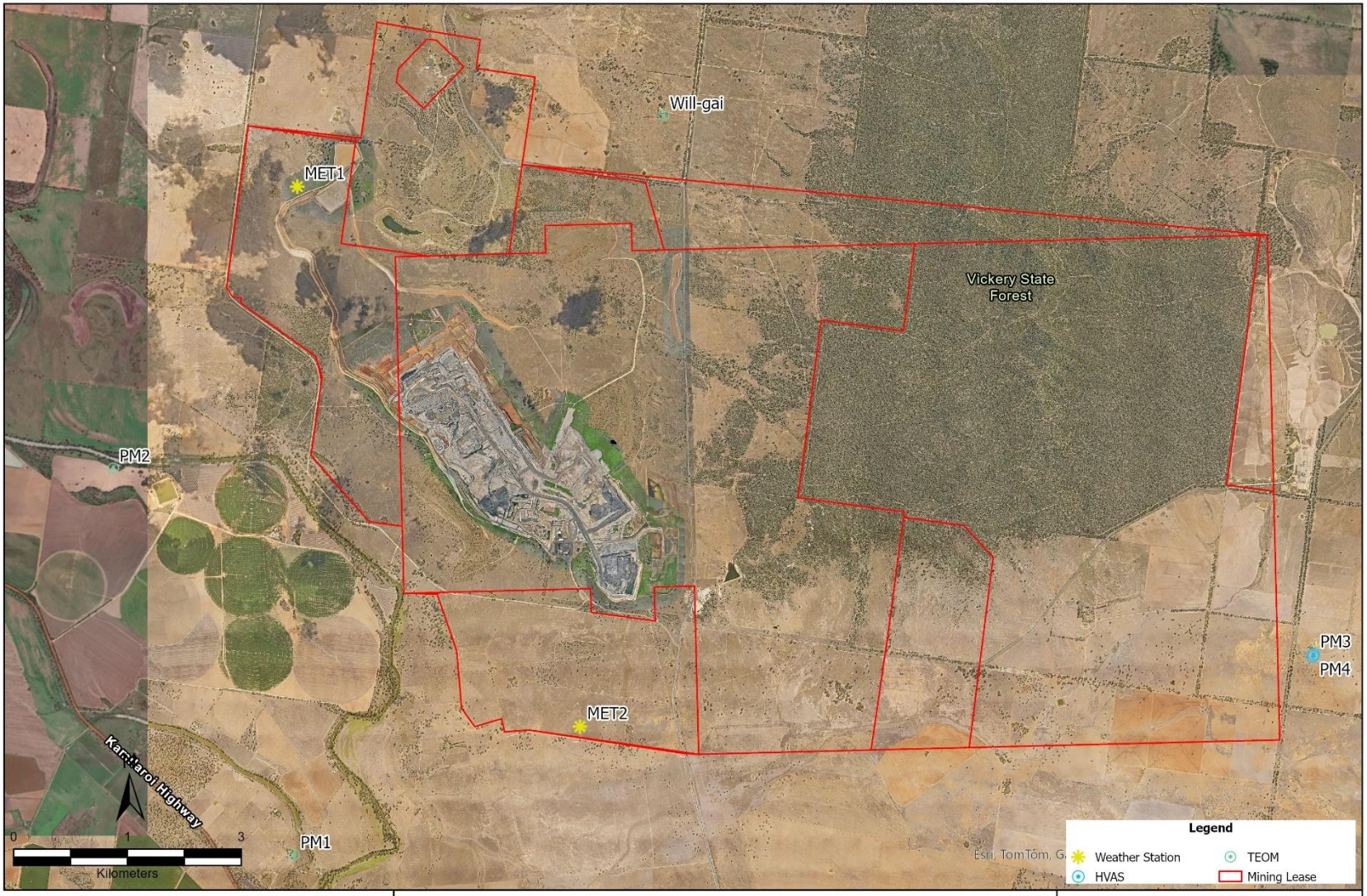
The Air Quality Management Plan will be reviewed and updated.

Appendix A


DDG Results -
Quaterly rolling average [g/m2/month]
g/m2/month
1.7
0.4
0.5
0.7
0.2
0.5
0.3
0.2
0.4
0.4
0.2
0.3
1
2
3
4
Jul-24
Aug-24
Sep-24

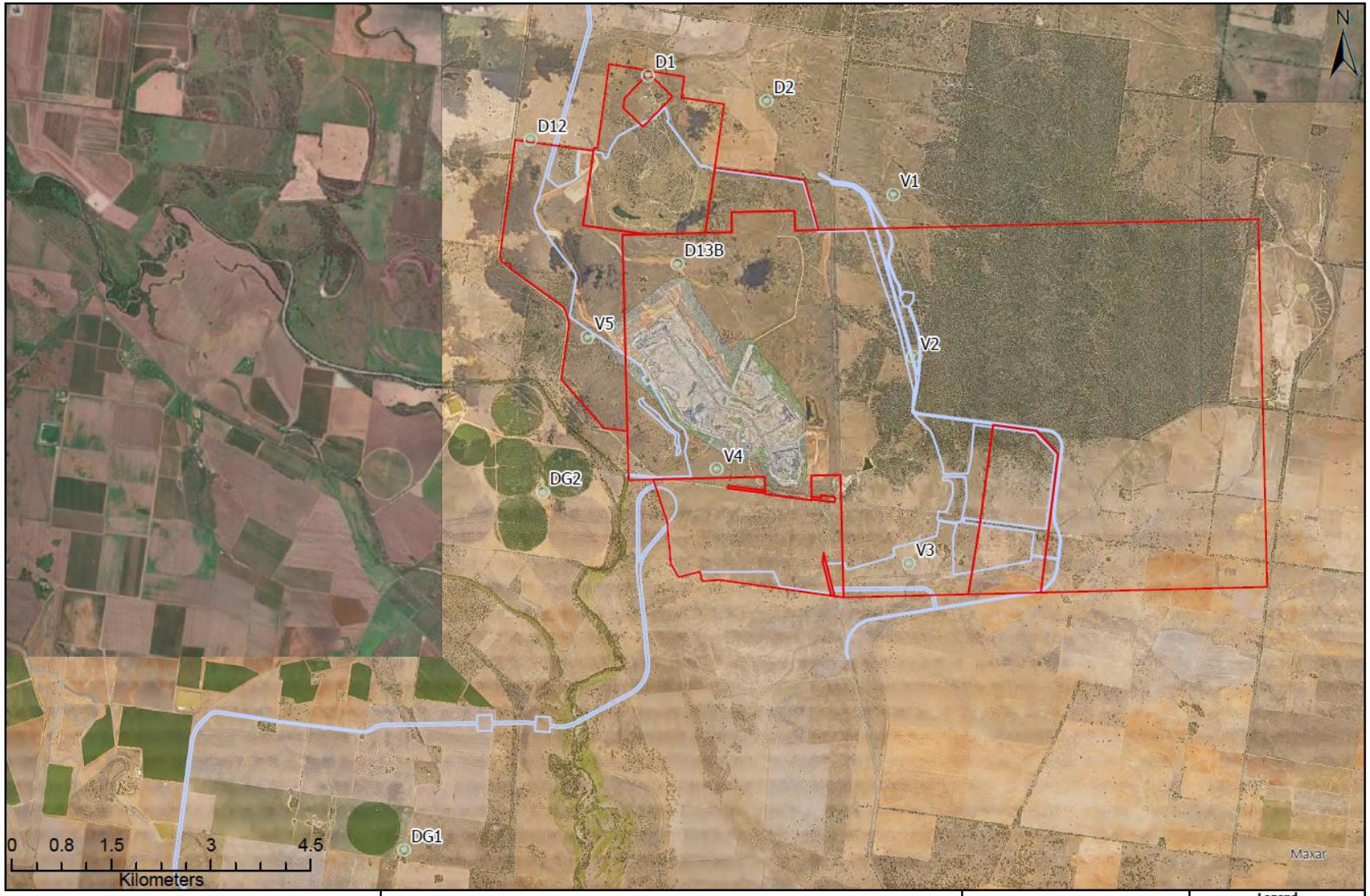

DDG Results
Quarterly rolling avergae [g/m2/month]
g/m2/month
0.9
1.4
3.1
0.6
0.4
0.5
0.6
0.9
0.5
0.5
1.8
6.7
0.5
1.0
0.5
0.6
0.6
0.4
0.4
1
2
3
4
5
6
7
Jul-24
Aug-24
Sep-24

Appendix B



Vickery Coal Mine
Air Quality Monitoring Locations

Date: Oct 2024 | Scale: 1:51,000
MGA Zone 56 | Author: A. Quiroz

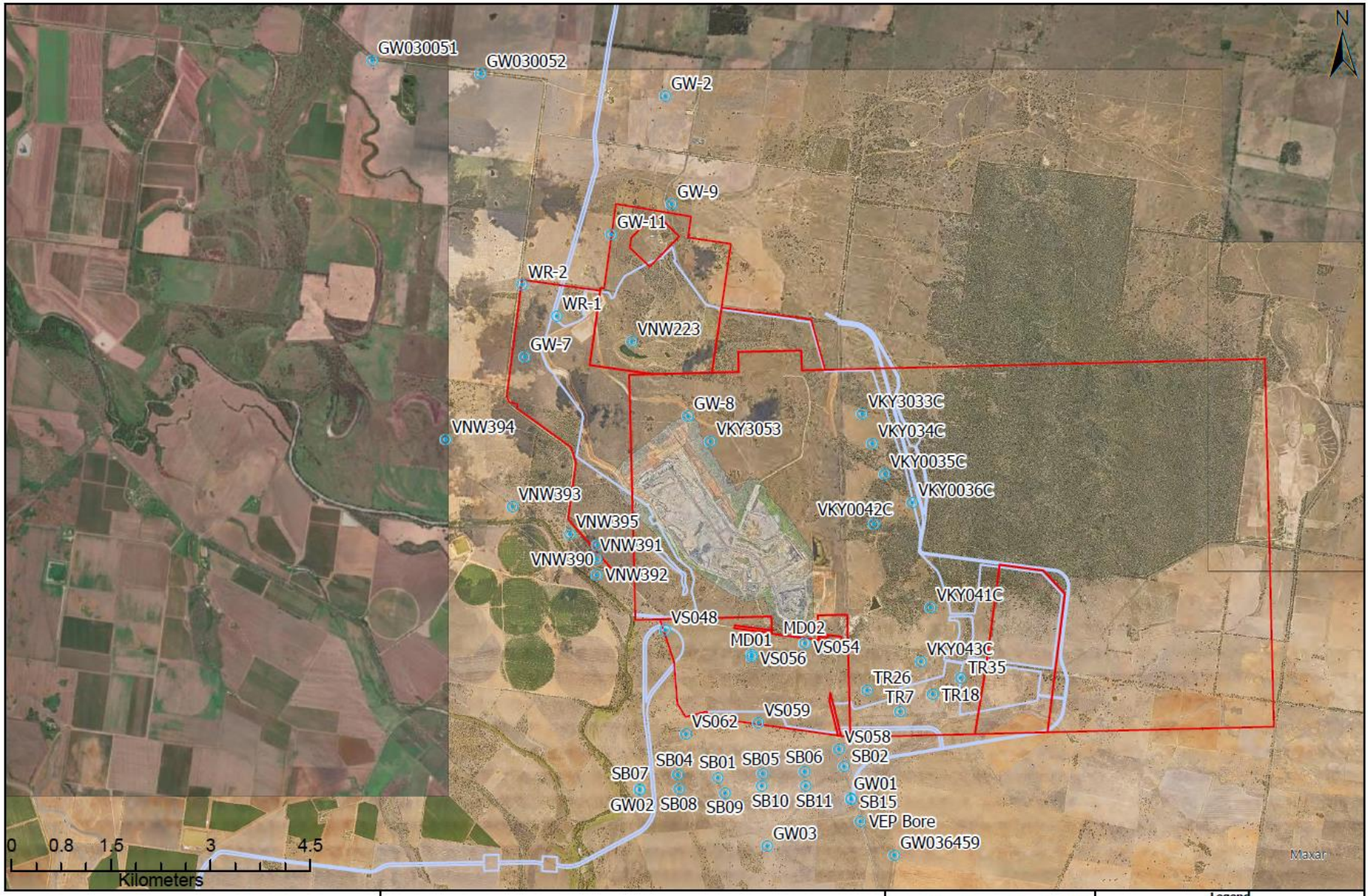


WHITEHAVEN COAL

Dust Deposition Gauges Monitoring Locations

Date: Jun 2024 | Scale: 1:70,000
MGA Zone 56 | Author: A. Quiroz

Legend
- DDGs
- Mining Lease
- Approved Disturbance Area

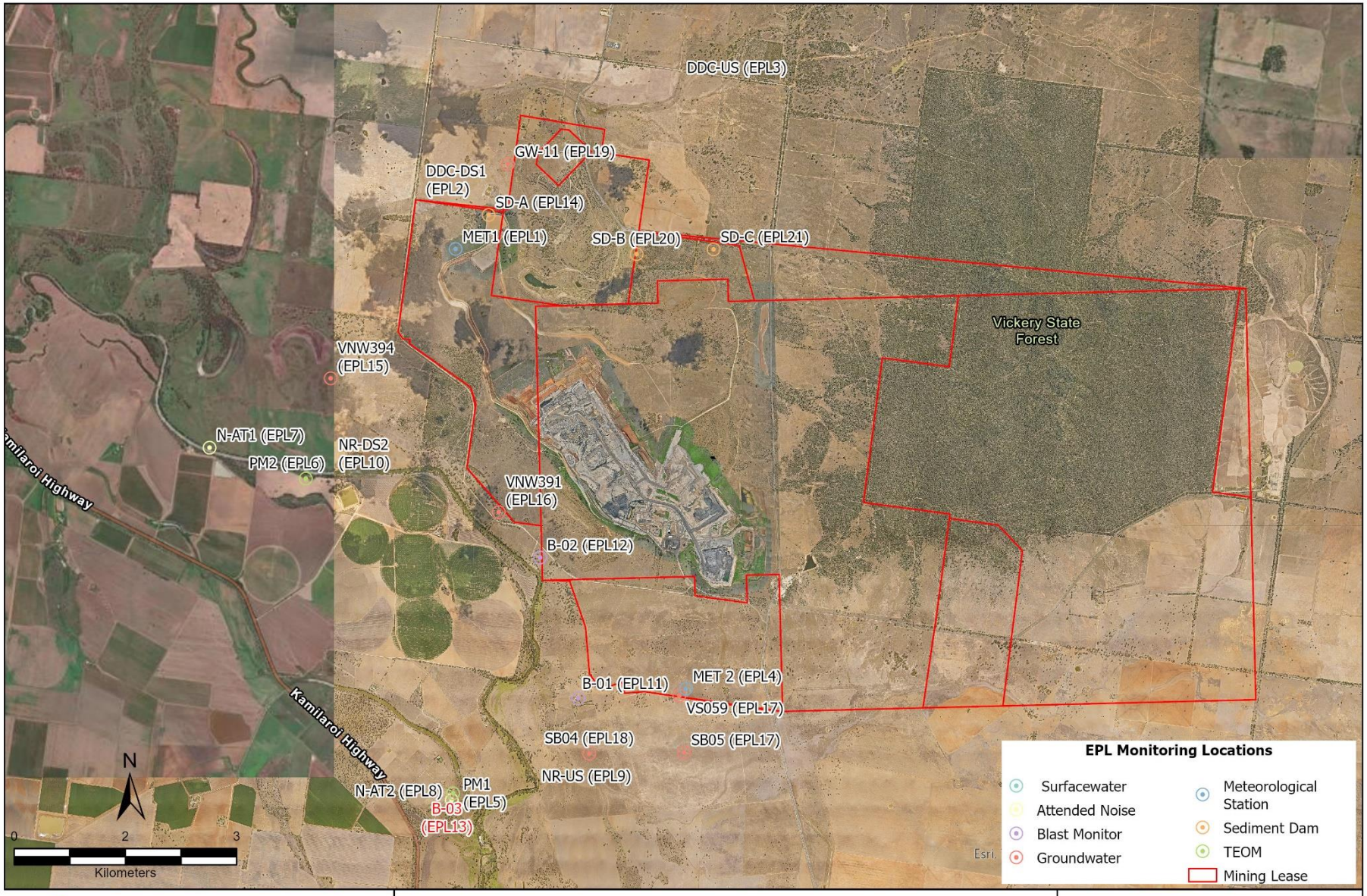


WHITEHAVEN COAL

Ground Water Monitoring Locations

Date: May 2024 Scale: 1:70,000
MGA Zone 56 Author: A. Quiroz

Legend
Groundwater Bores
Mining Lease
Approved Disturbance Area

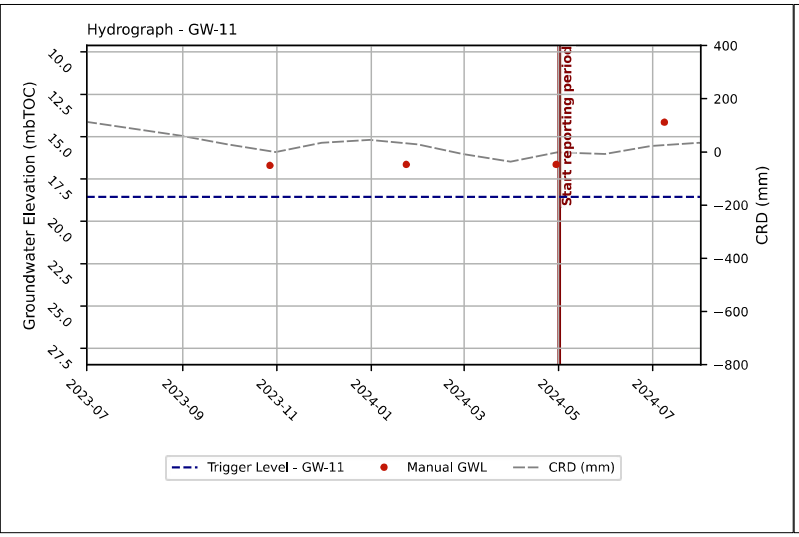


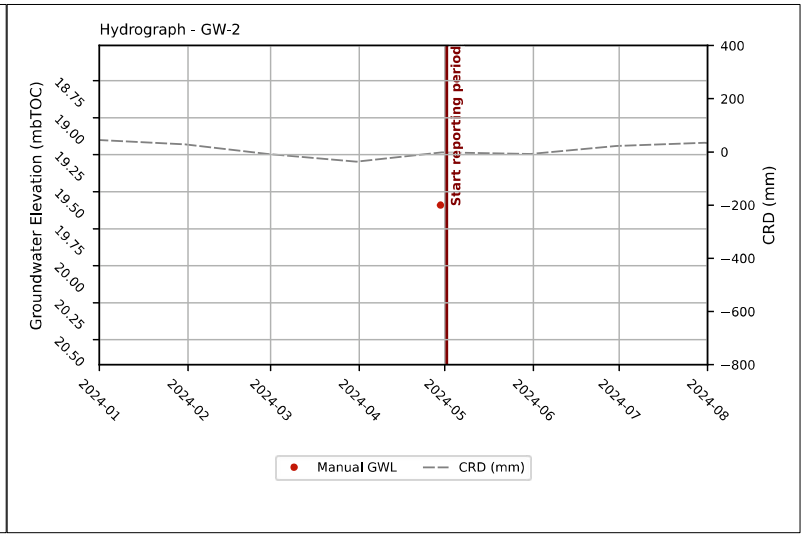
WHITEHAVEN COAL

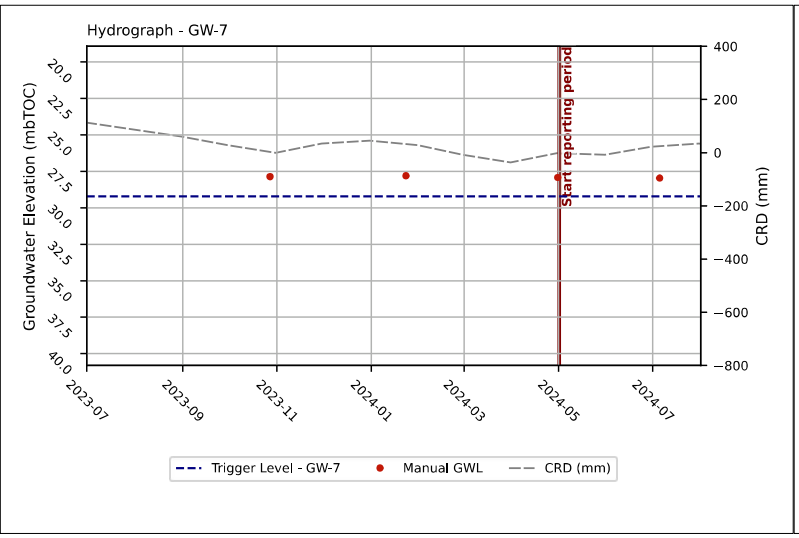
Vickery Coal Mine
EPL Monitoring Locations

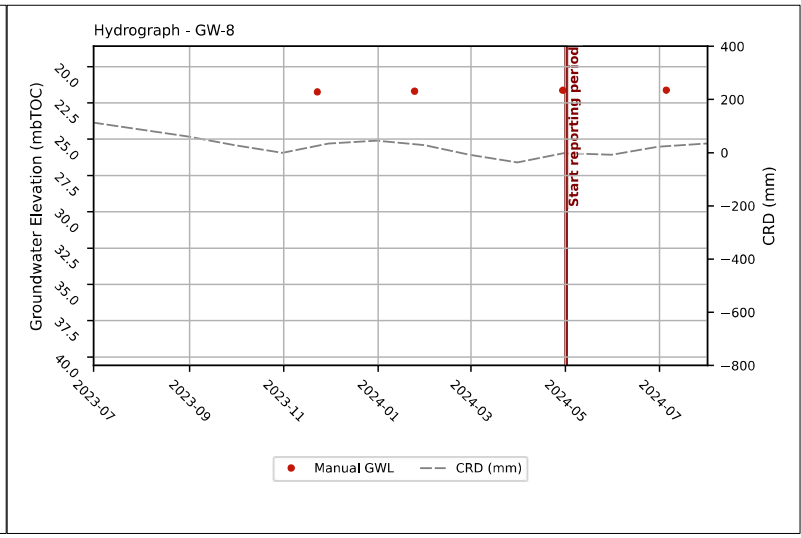
Date: Oct 2024 | Scale: 1:51,000
MGA Zone 56 | Author: A. Quiroz

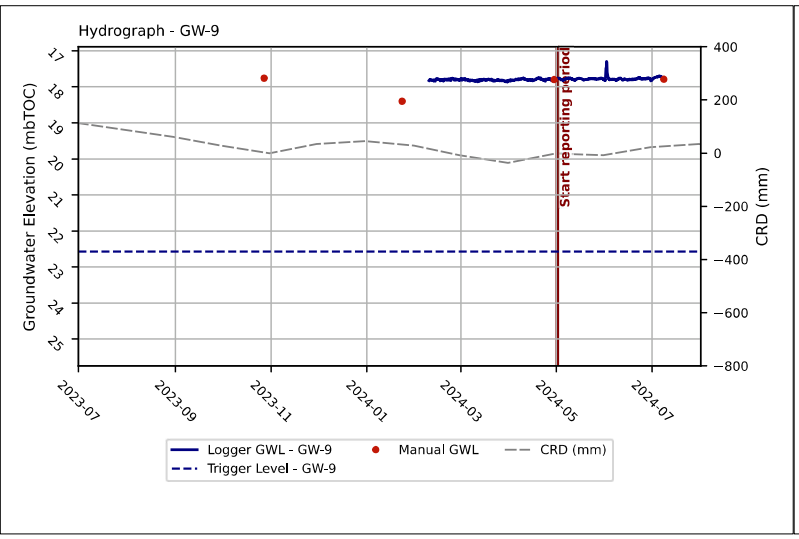
Appendix C

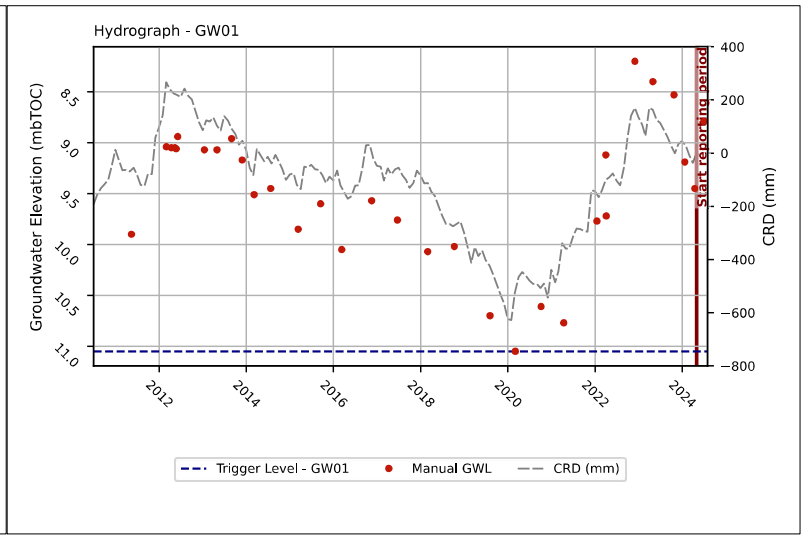

Hydrograph - GW-11
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - GW-11
Manual GWL
CRD (mm)

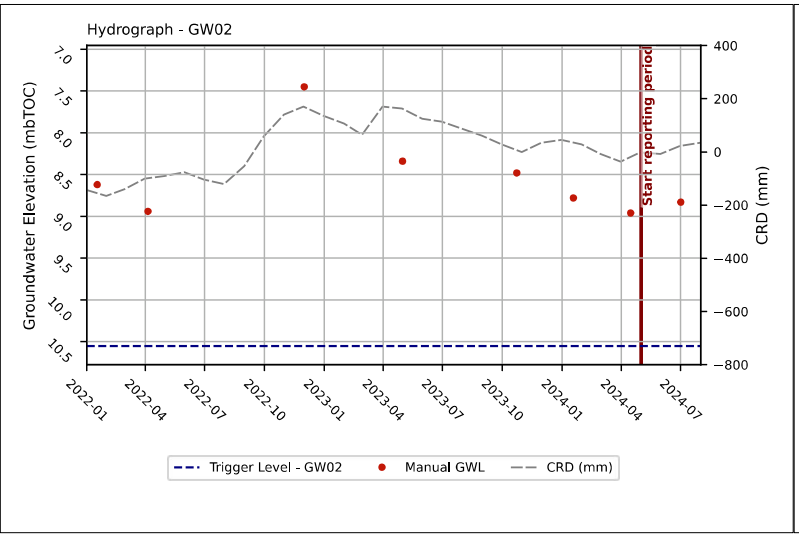

Hydrograph - GW-2
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

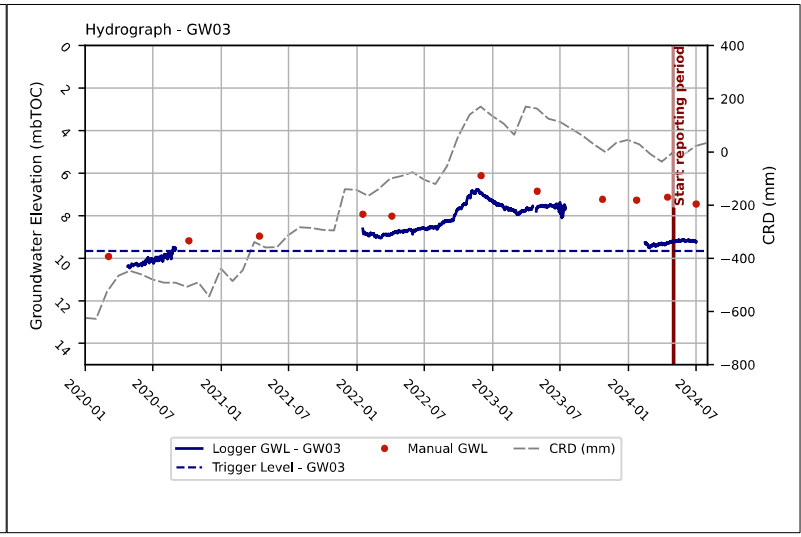

Hydrograph - GW-7
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - GW-7
Manual GWL
CRD (mm)

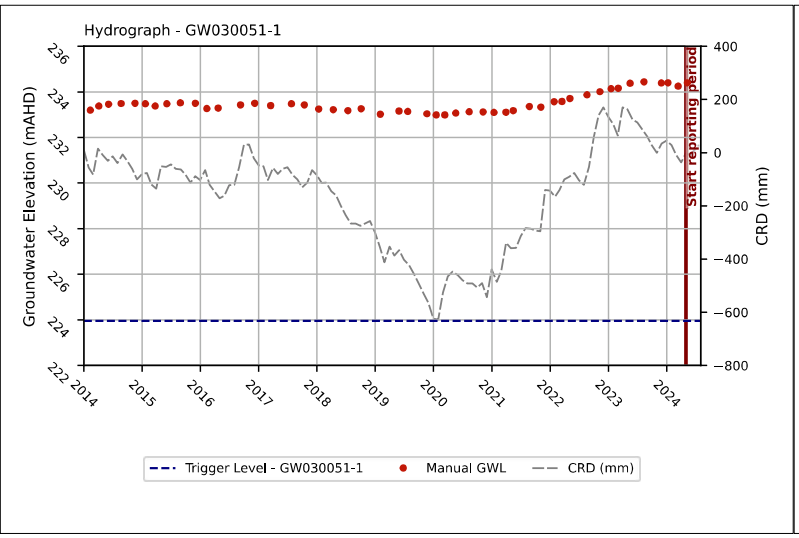

Hydrograph - GW-8
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

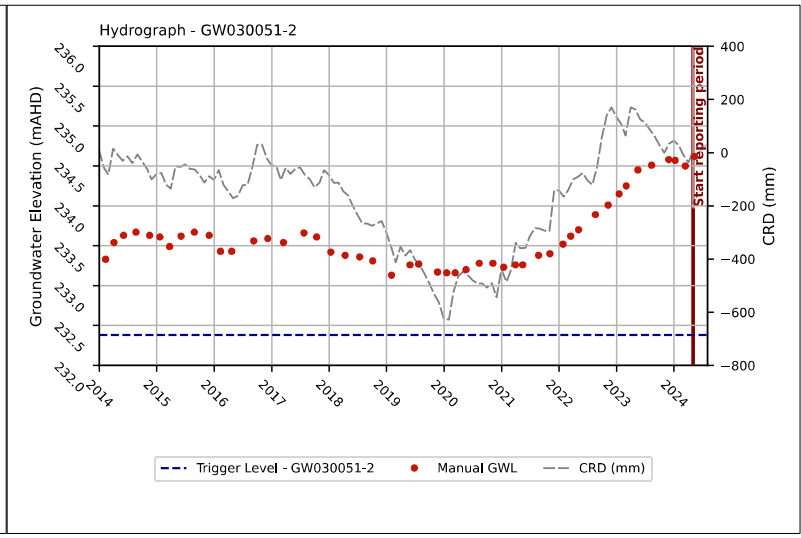

Hydrograph - GW-9
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - GW-9
Trigger Level - GW-9
Manual GWL
CRD (mm)

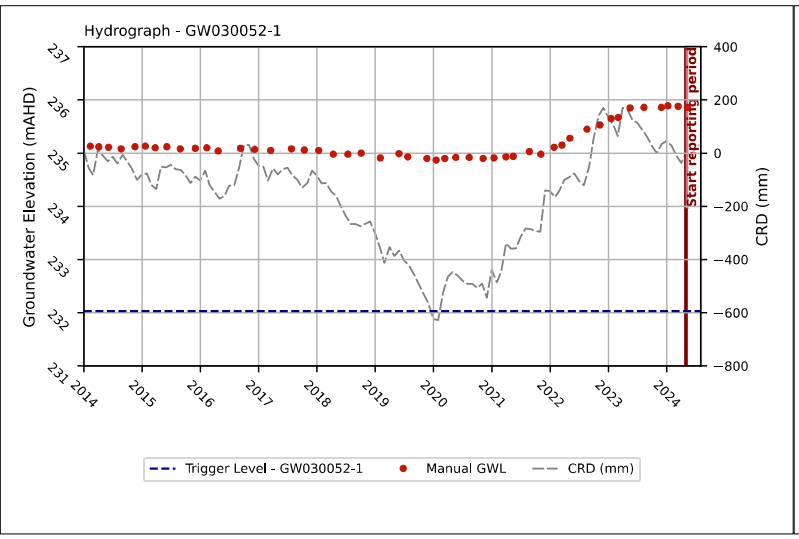

Hydrograph - GW01
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - GW01
Manual GWL
CRD (mm)

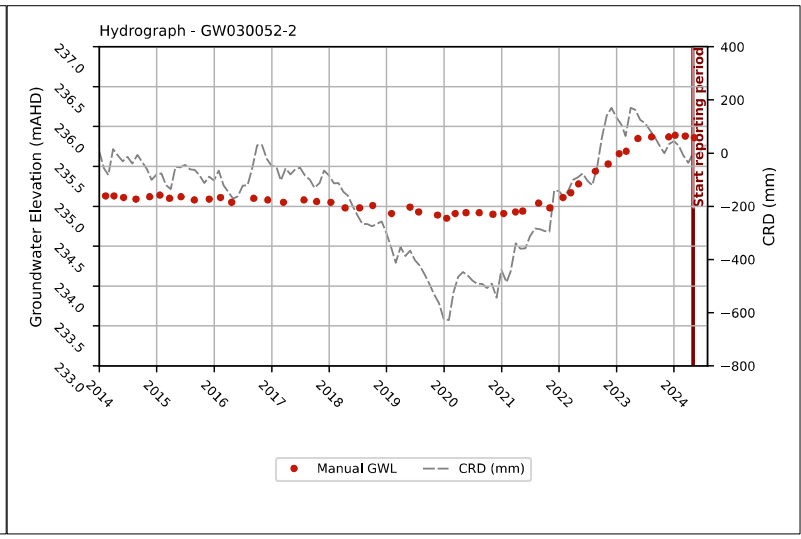

Hydrograph - GW02
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - GW02
Manual GWL
CRD (mm)

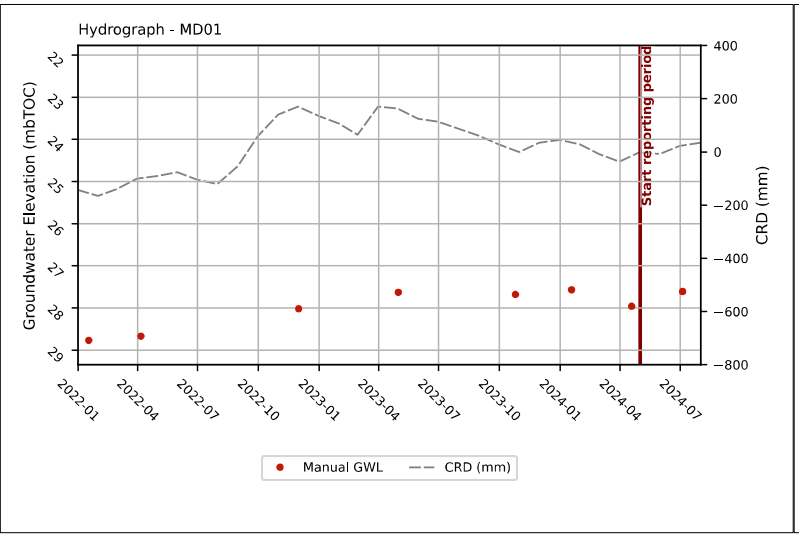

Hydrograph - GW03
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - GW03
Manual GWL
CRD (mm)
Trigger Level - GW03

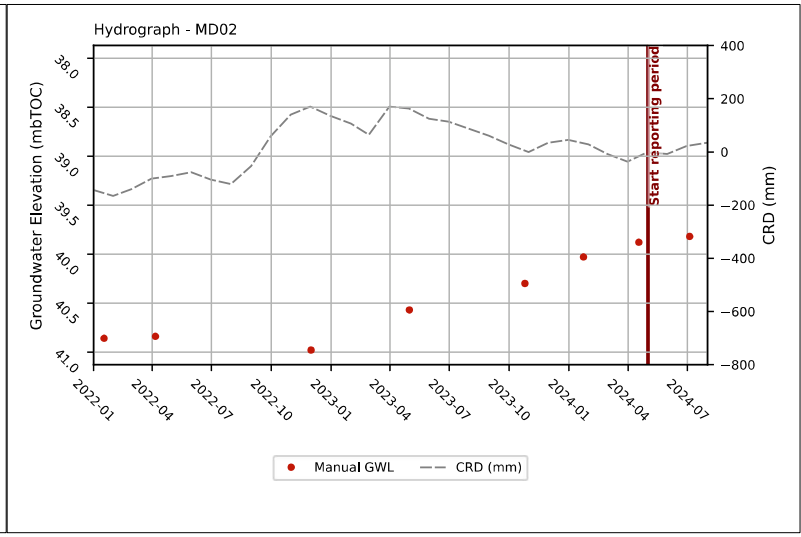

Hydrograph - GW030051-1
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Trigger Level - GW030051-1
Manual GWL
CRD (mm)

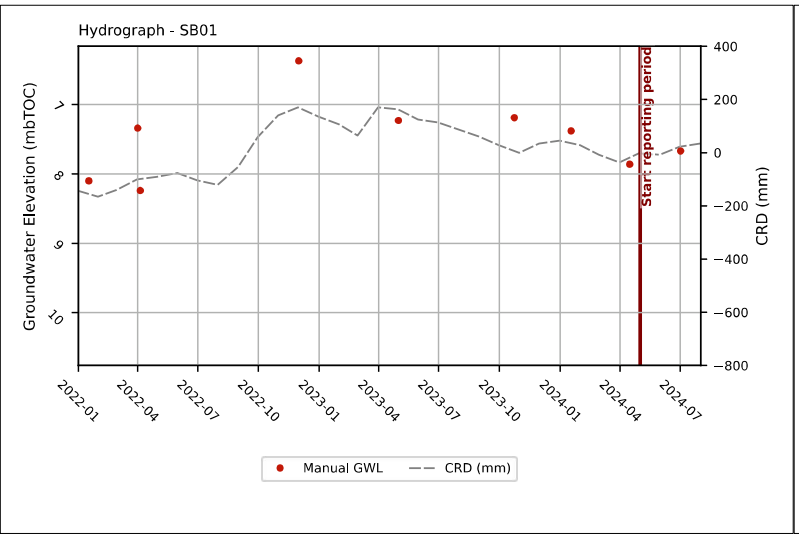

Hydrograph - GW030051-2
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Trigger Level - GW030051-2
Manual GWL
CRD (mm)

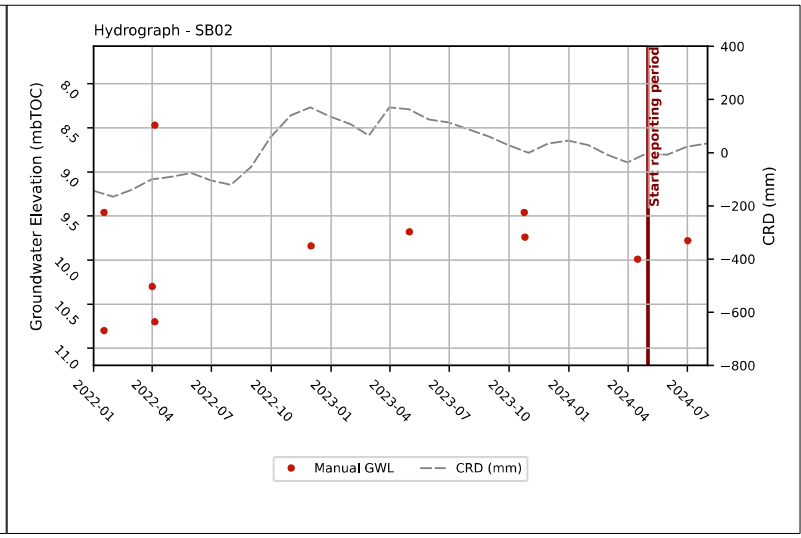

Hydrograph - GW030052-1
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Trigger Level - GW030052-1
Manual GWL
CRD (mm)

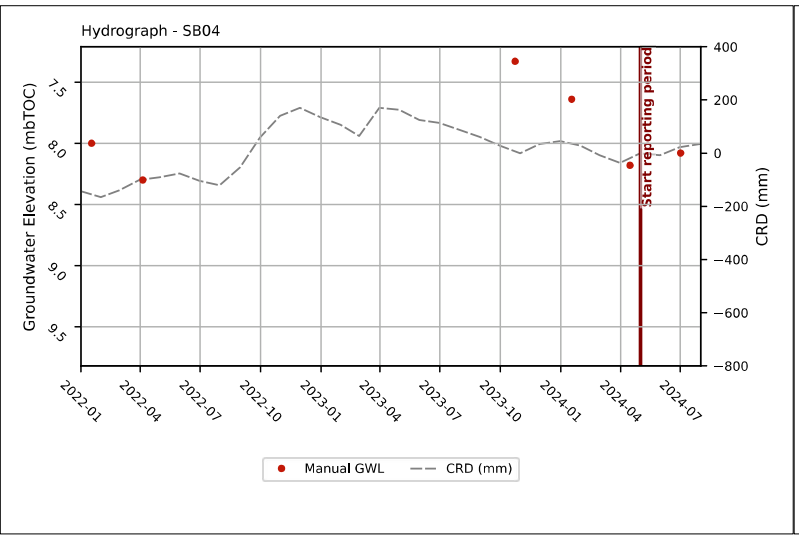

Hydrograph - GW030052-2
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

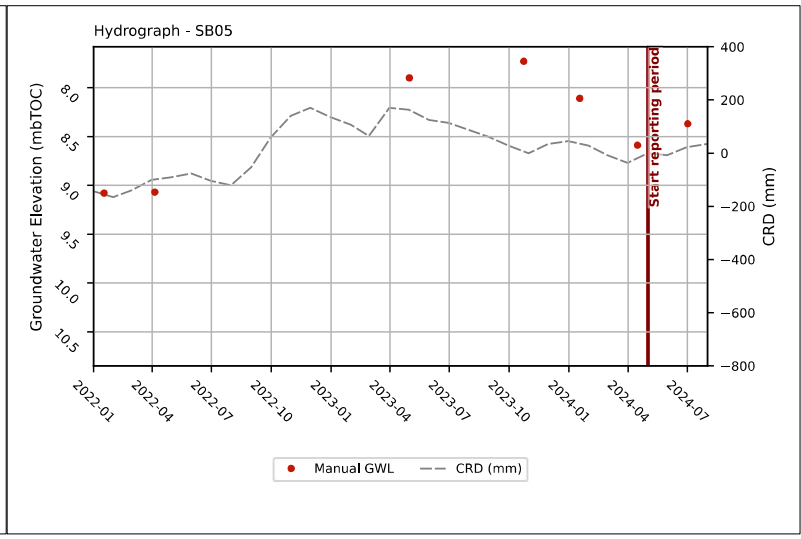

Hydrograph - MD01
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

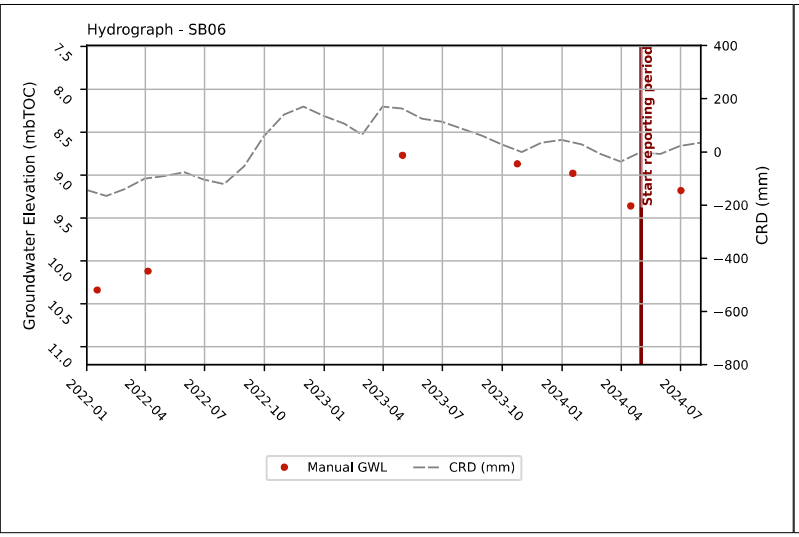

Hydrograph - MD02
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

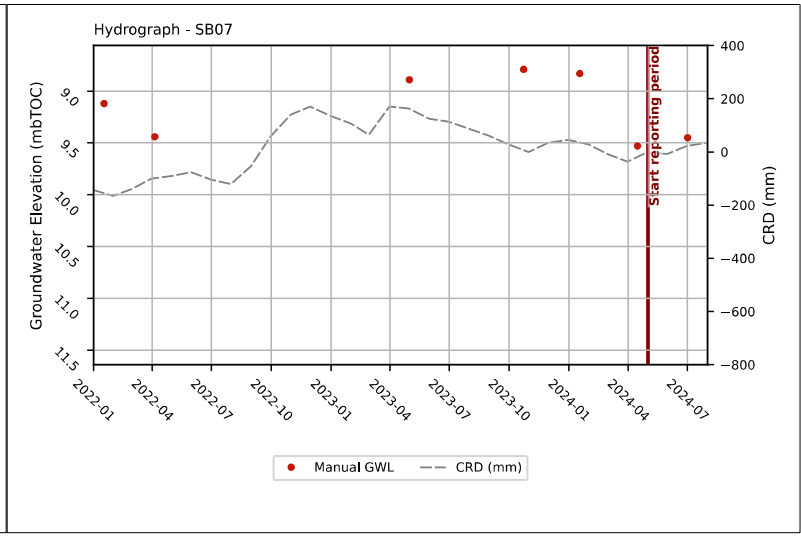

Hydrograph - SB01
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

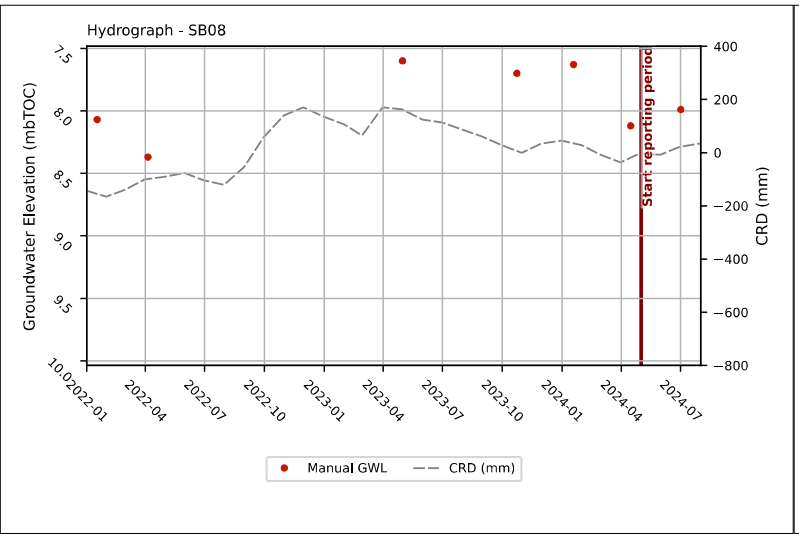

Hydrograph - SB02
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

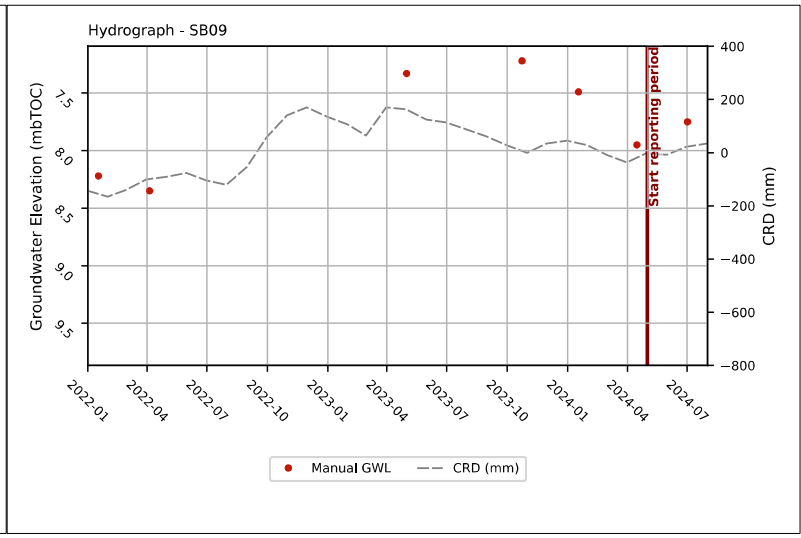

Hydrograph - SB04
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

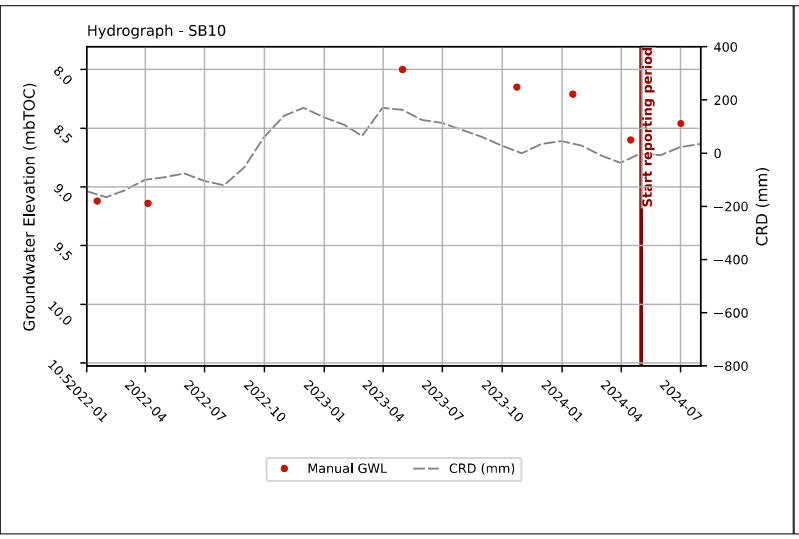

Hydrograph - SB05
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

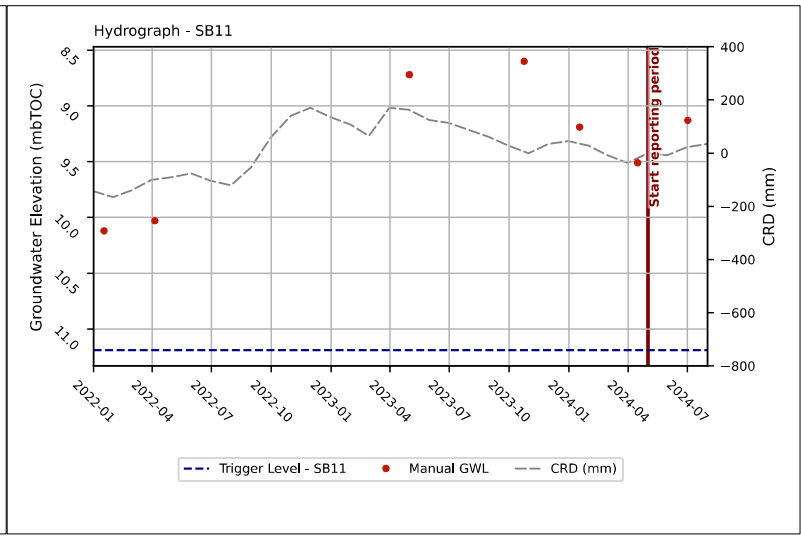

Hydrograph - SB06
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

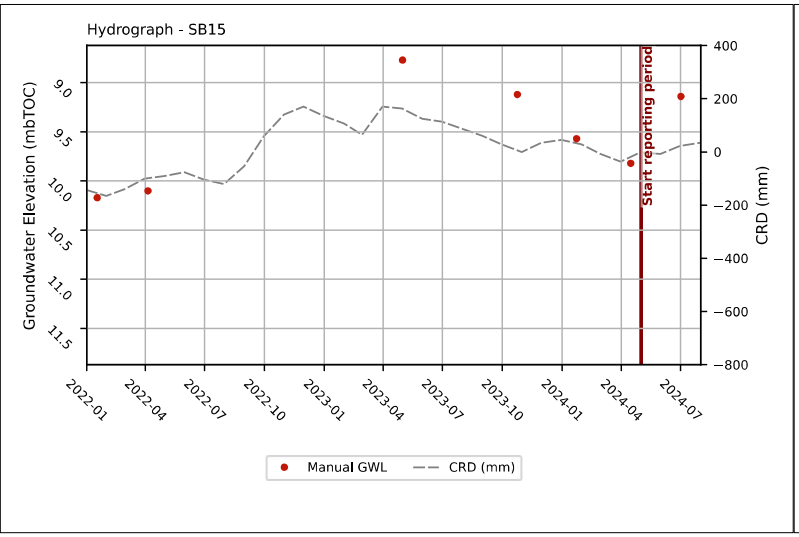

Hydrograph - SB07
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

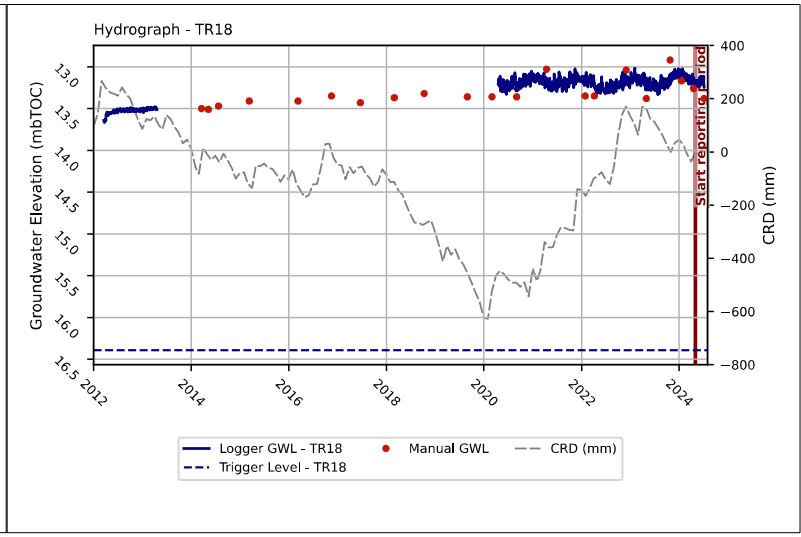

Hydrograph - SB08
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

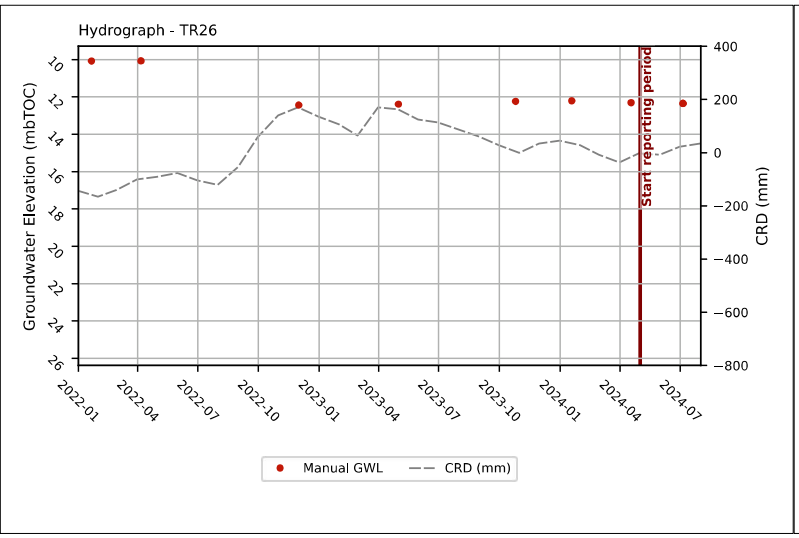

Hydrograph - SB09
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

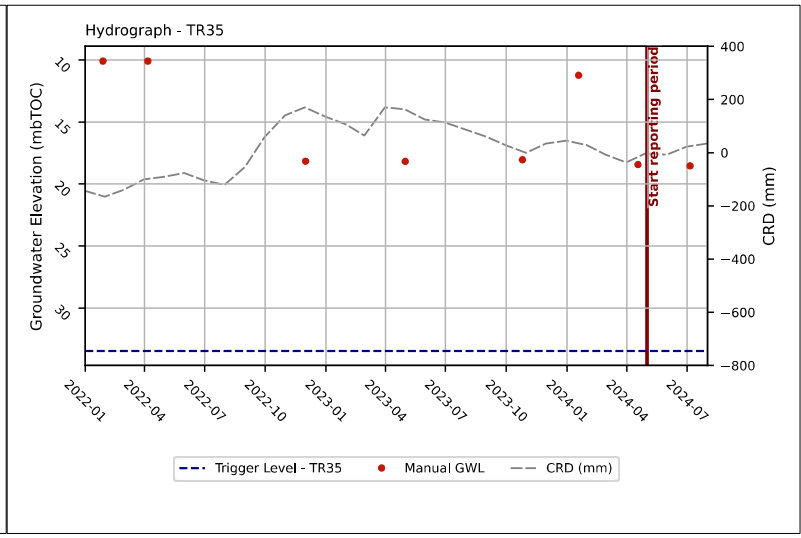

Hydrograph - SB10
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

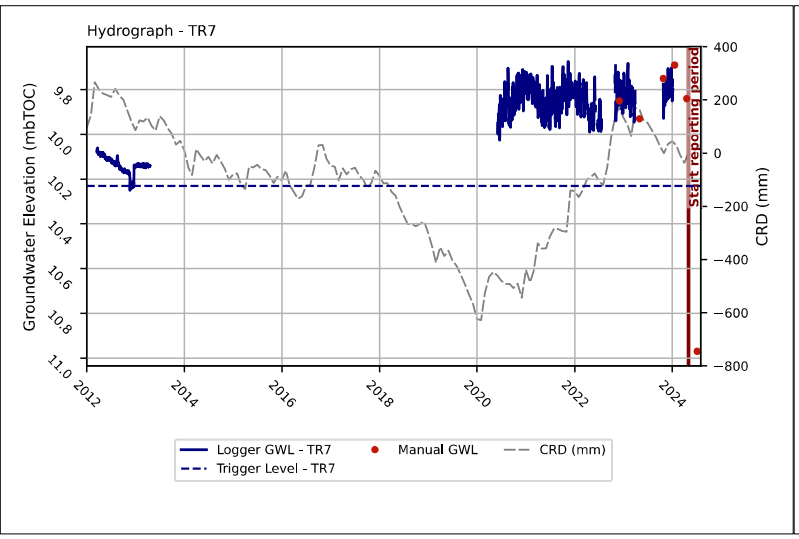

Hydrograph - SB11
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - SB11
Manual GWL
CRD (mm)

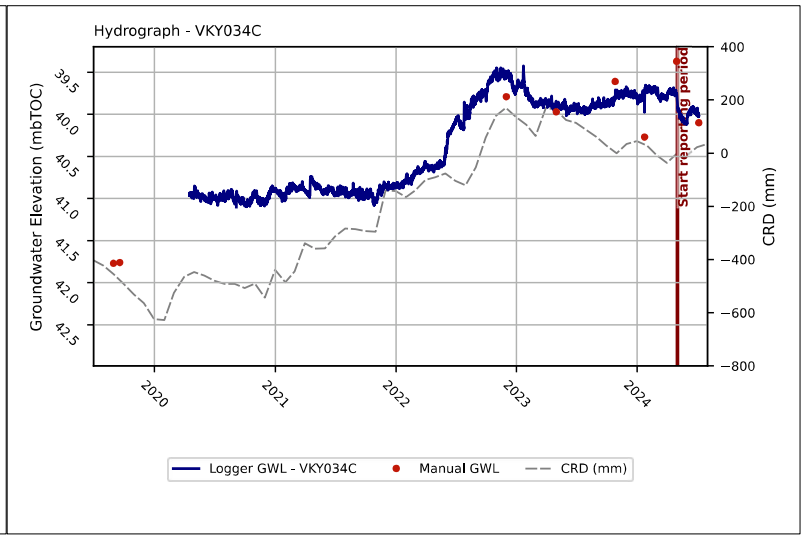

Hydrograph - SB15
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

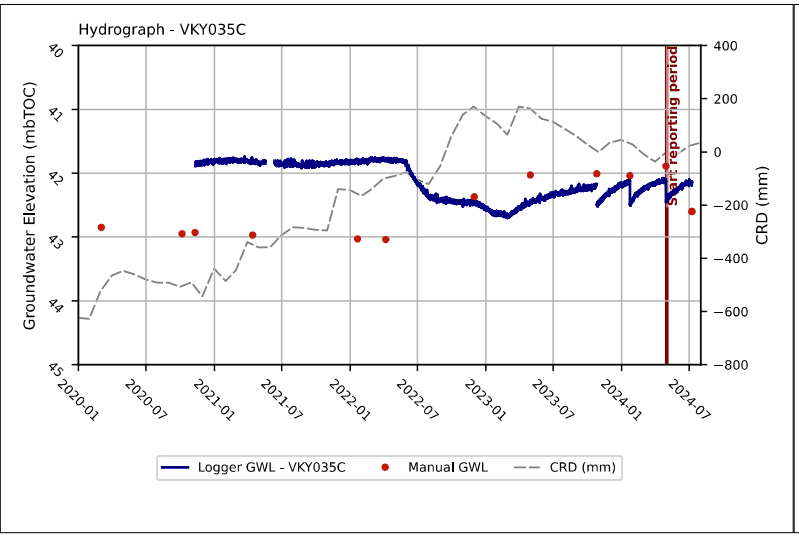

Hydrograph - TR18
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - TR18
Manual GWL
CRD (mm)
Trigger Level - TR18

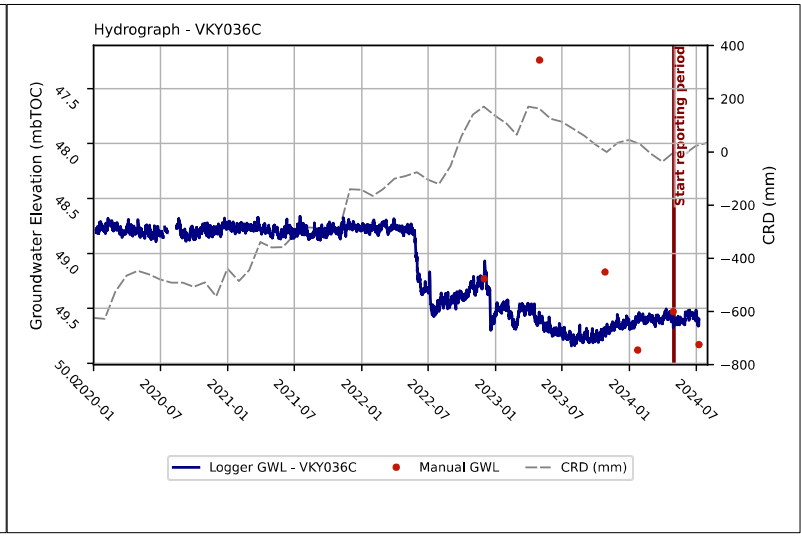

Hydrograph - TR26
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

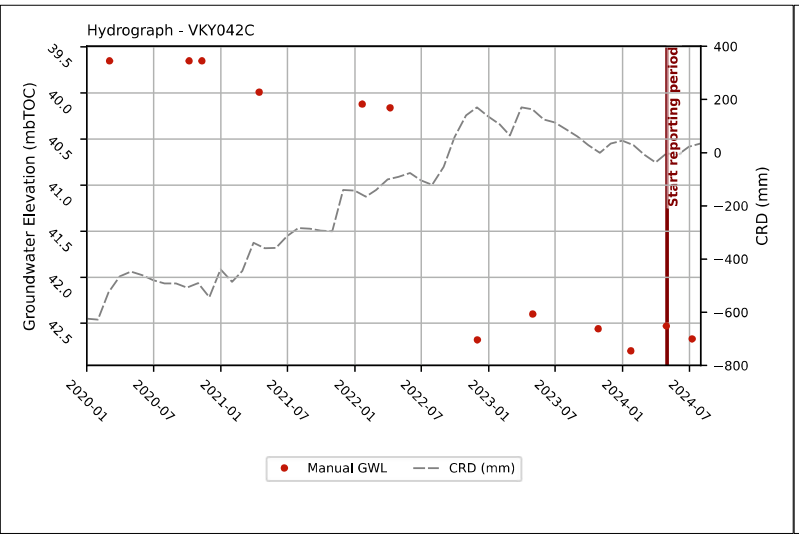

Hydrograph - TR35
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - TR35
Manual GWL
CRD (mm)

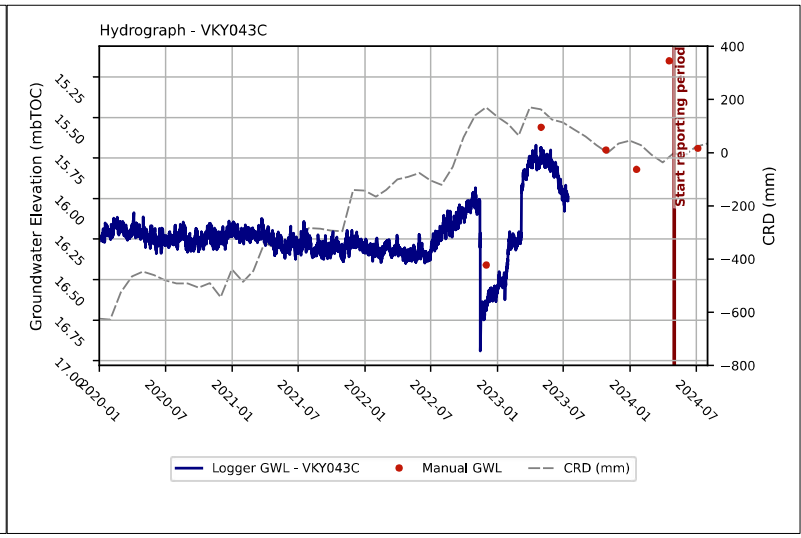

Hydrograph - TR7
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - TR7
Manual GWL
CRD (mm)
Trigger Level - TR7

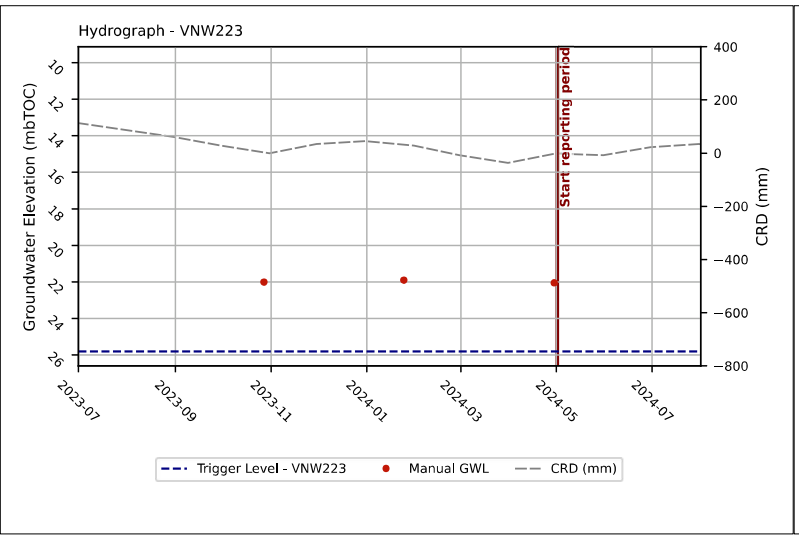

Hydrograph - VKY034C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY034C
Manual GWL
CRD (mm)

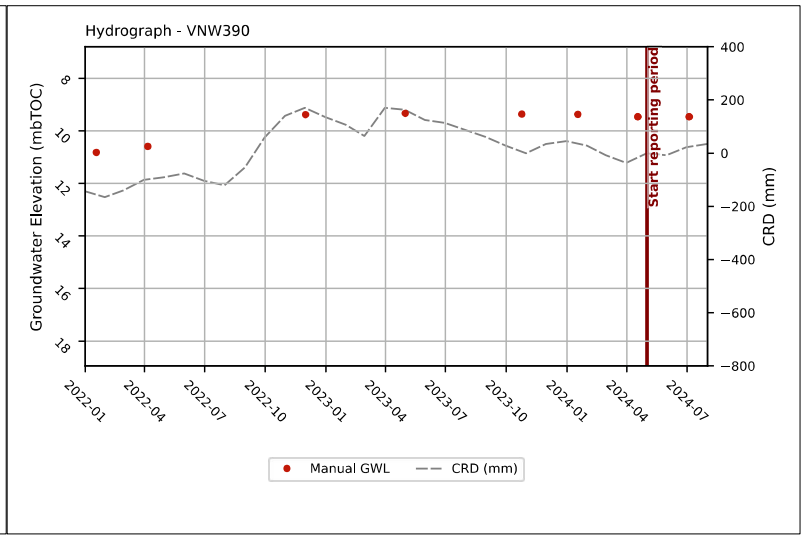

Hydrograph - VKY035C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY035C
Manual GWL
CRD (mm)

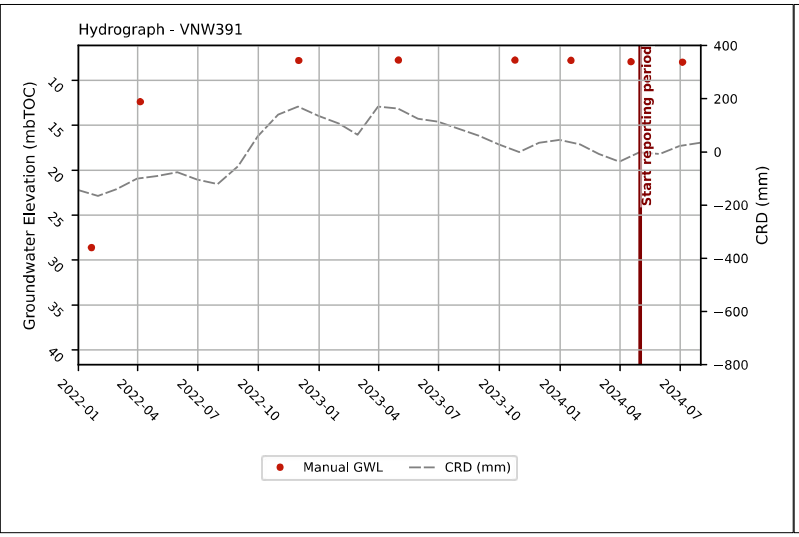

Hydrograph - VKY036C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY036C
Manual GWL
CRD (mm)

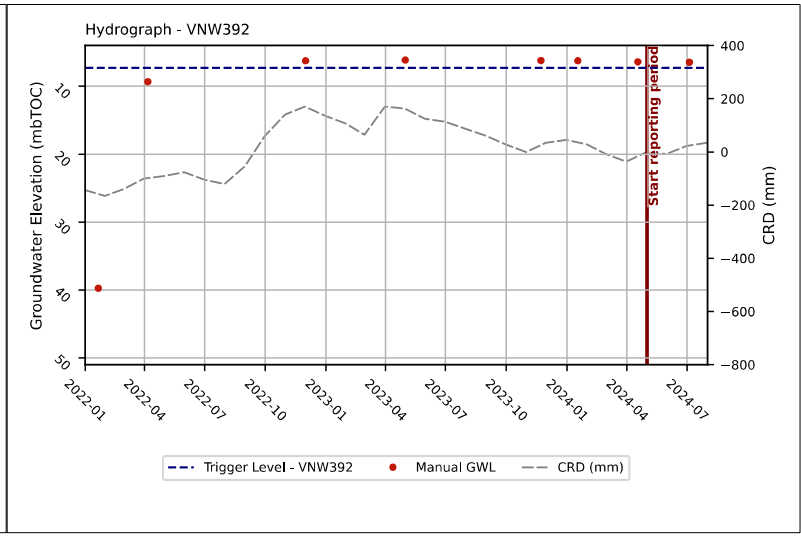

Hydrograph - VKY042C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

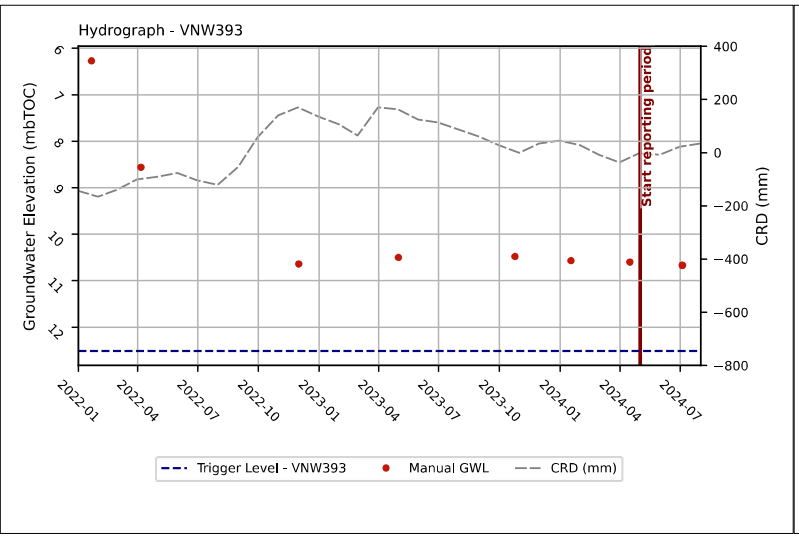

Hydrograph - VKY043C
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VKY043C
Manual GWL
CRD (mm)

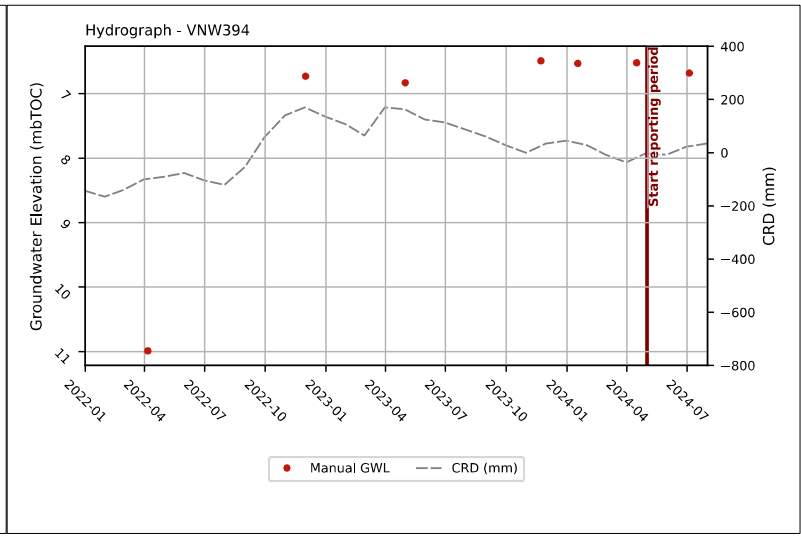

Hydrograph - VNW223
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - VNW223
Manual GWL
CRD (mm)

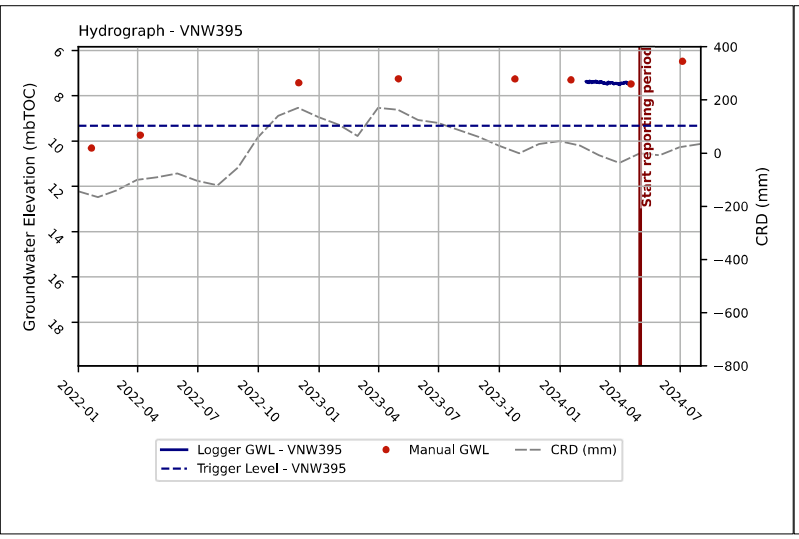

Hydrograph - VNW390
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

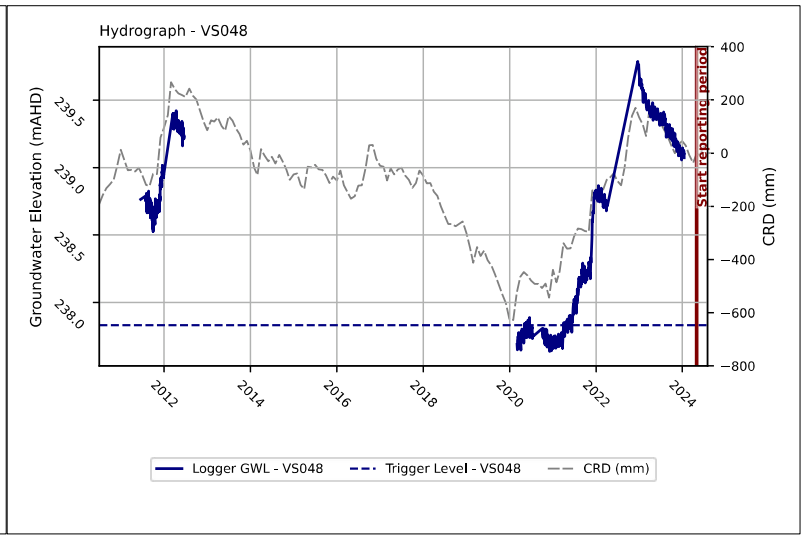

Hydrograph - VNW391
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

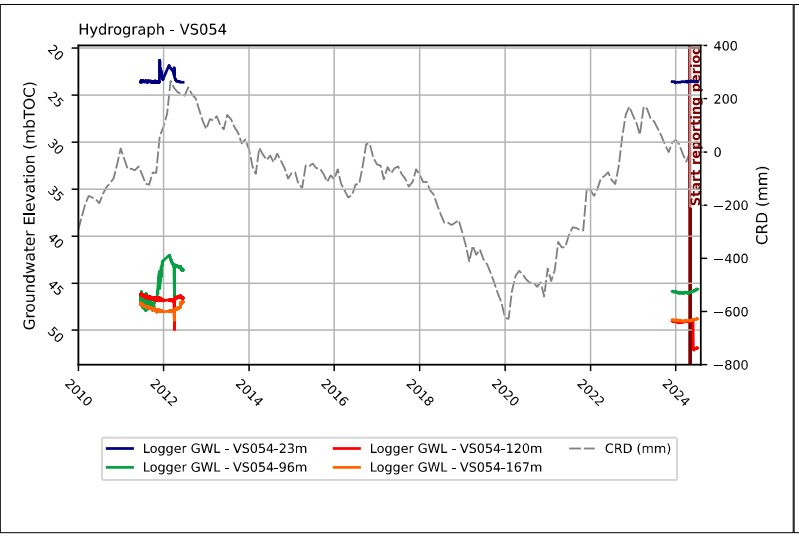

Hydrograph - VNW392
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - VNW392
Manual GWL
CRD (mm)

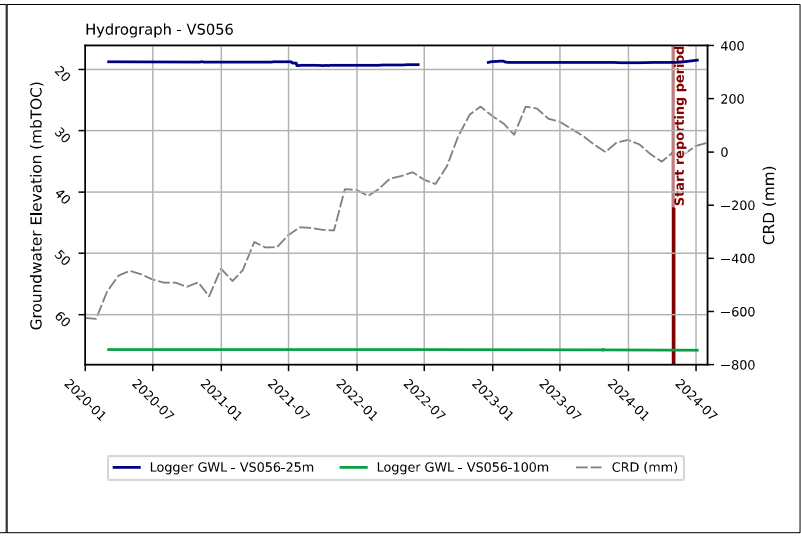

Hydrograph - VNW393
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Trigger Level - VNW393
Manual GWL
CRD (mm)

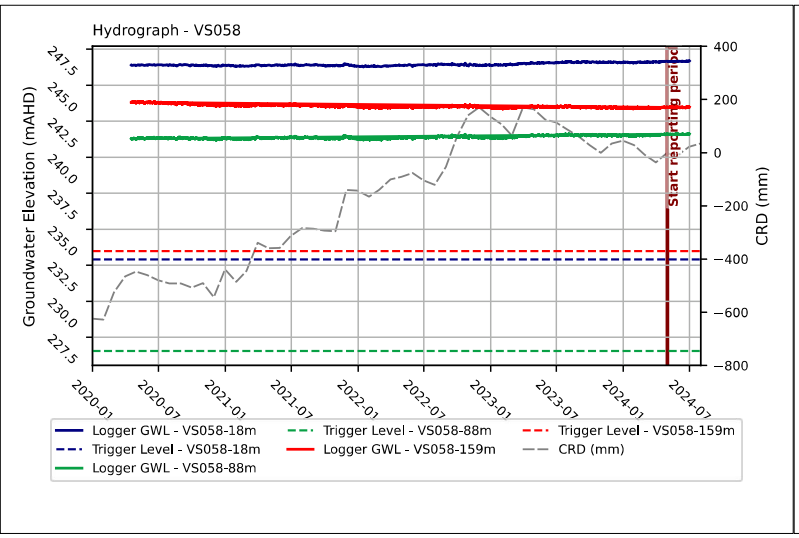

Hydrograph - VNW394
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Manual GWL
CRD (mm)

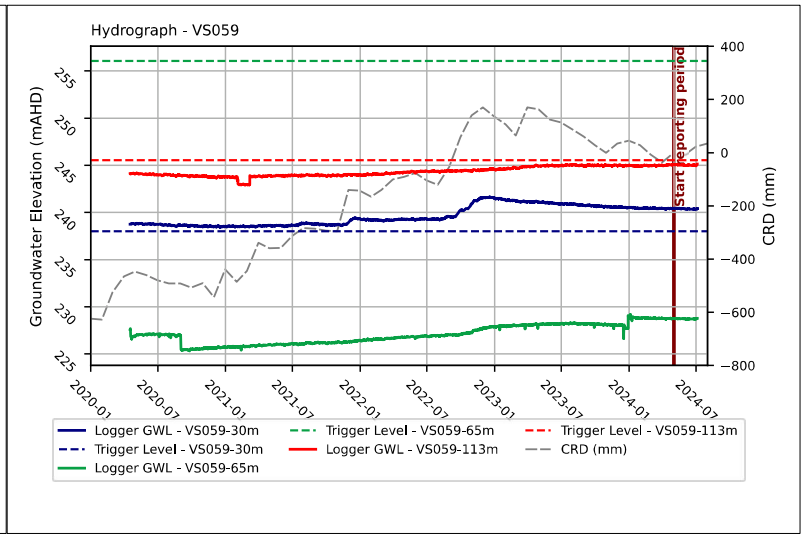

Hydrograph - VNW395
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VNW395
Manual GWL
CRD (mm)
Trigger Level - VNW395

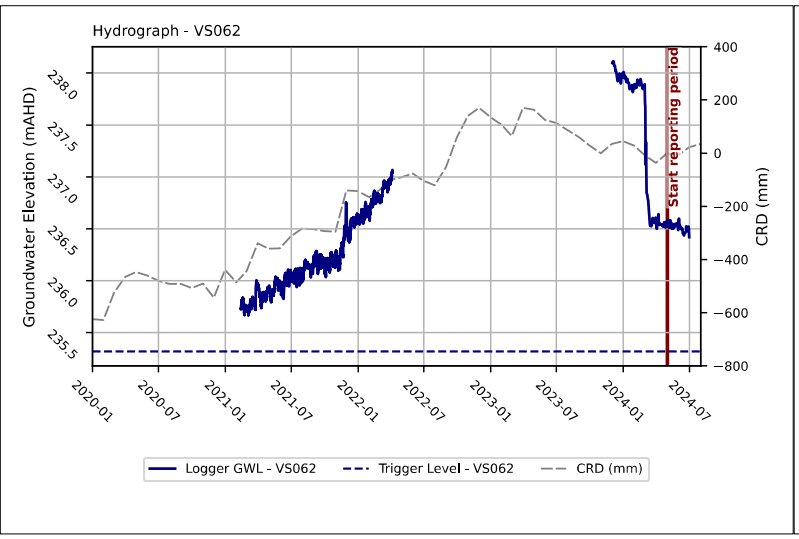

Hydrograph - VS048
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Logger GWL - VS048
Trigger Level - VS048
CRD (mm)

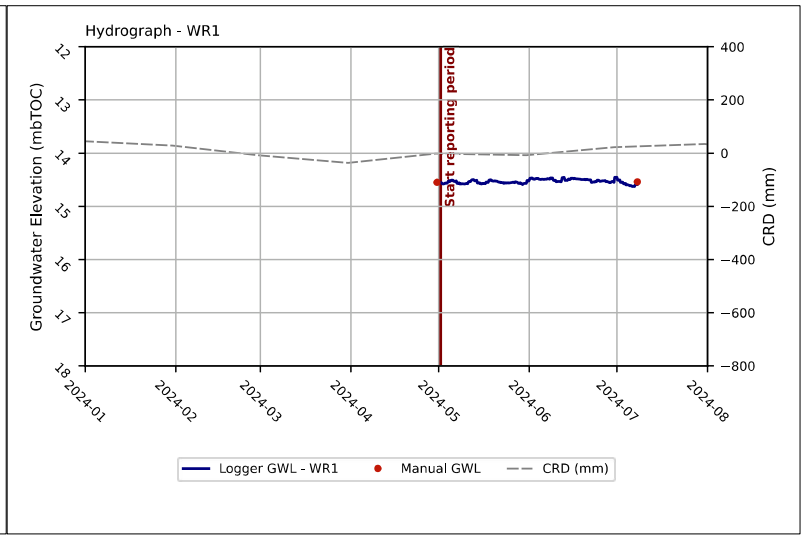

Hydrograph - VS054
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VS054-23m
Logger GWL - VS054-120m
CRD (mm)
Logger GWL - VS054-96m
Logger GWL - VS054-167m

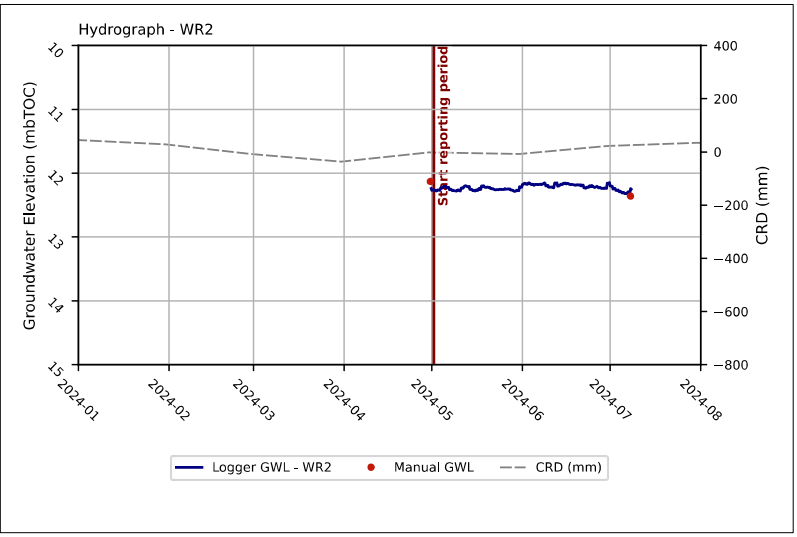

Hydrograph - VS056
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - VS056-25m
Logger GWL - VS056-100m
CRD (mm)


Hydrograph - VS058
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Logger GWL - VS058-18m
Trigger Level - VS058-88m
Trigger Level - VS058-159m
Trigger Level - VS058-18m
Logger GWL - VS058-159m
CRD (mm)
Logger GWL - VS058-88m


Hydrograph - VS059
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Logger GWL - VS059-30m
Trigger Level - VS059-65m
Trigger Level - VS059-113m
Trigger Level - VS059-30m
Logger GWL - VS059-113m
CRD (mm)
Logger GWL - VS059-65m


Hydrograph - VS062
Groundwater Elevation (mAHD)
CRD (mm)
Start reporting period
Logger GWL - VS062
Trigger Level - VS062
CRD (mm)


Hydrograph - WR1
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
Logger GWL - WR1
Manual GWL
CRD (mm)


Hydrograph - WR2
Groundwater Elevation (mbTOC)
CRD (mm)
Start reporting period
10
11
12
13
14
15
400
200
0
−200
−400
−600
−800
2024-01
2024-02
2024-03
2024-04
2024-05
2024-06
2024-07
2024-08
Logger GWL - WR2
Manual GWL
CRD (mm)