

Monitoring Point	Type	Group	Basin	Stream	latitude (GDA 94)	longitude (GDA94)	Surface RL (mAHD)	Install Date	Depth (mgl)	Screened Section (mgl)
MB2	Groundwater	Rangal Coal Measures (Coal)	Fitzroy	New Chum Creek	22° 01' 50" S	148° 14' 18" E	262.38		90	72 - 90
MB8A	Groundwater	Rewan Group	Fitzroy	New Chum Creek	22° 00' 28" S	148° 14' 03" E	259.10	2014	30	22 - 28
MB8B	Groundwater	Rangal Coal Measures (Sandstone)	Fitzroy	New Chum Creek	22° 00' 28" S	148° 14' 03" E	259.10	2014	80	62 - 74
MB9A	Groundwater	Fort Cooper Coal Measures (Coal)	Fitzroy	New Chum Creek	22° 00' 34" S	148° 14' 43" E	251.80	2014	30	22 - 30
MB9B	Groundwater	Fort Cooper Coal Measures (Sandstone)	Fitzroy	New Chum Creek	22° 00' 34" S	148° 14' 43" E	251.80	2014	80	60 - 74
MB10A	Groundwater	Fort Cooper Coal Measures (Sandstone)	Fitzroy	New Chum Creek	22° 01' 33" S	148° 16' 00" E	233.90	2014	35	27 - 35
MB10B	Groundwater	Fort Cooper Coal Measures (Sandstone)	Fitzroy	New Chum Creek	22° 01' 33" S	148° 16' 00" E	233.90	2014	80	64 - 76
CS_MB2	Groundwater	Rangal Coal Measures (Coal)	Fitzroy		22° 1' 10" S	148° 17' 16" E	236.63		170	161-164



Monitoring Point	Date	Aluminium - Dissolved (mg/L)	Antimony - Dissolved (mg/L)	Arsenic - Dissolved (mg/L)	Boron - Dissolved (mg/L)	Electrical Conductivity (µS/c)	Cadmium - Dissolved (mg/L)	Chromium - D. Cobalt - Dissolved (mg/L)	Copper - Dissolve Lead - Dissolve Manganese - t Molybdenum	Nickel - Dissol pH (pH Units)	Selenium Uranium - Diss; Vanadium - Di	Zinc - Dissolve Iron - Dissolved (n Sulfate (mg/L)	Mercury-Dissolved (mg/L)	Free Cyanide (mg/L)	Weak Acid Dissociable Cyanide (mg/L)	Fluoride (mg/L)
MB2	24/05/2022	<0.01	<0.001	<0.001	<0.001	9730			<0.001	7.66	<0.01		285	<0.0001		
MB8A	24/05/2022	BORE DRY														
MB8B	24/05/2022	<0.01	<0.001	<0.001	0.001	23500			<0.001	7.61	<0.01		432	<0.0001		
MB9A	24/05/2022	<0.01	<0.001	<0.001	<0.001	19900			<0.001	7.66	<0.01		68	<0.0001		
MB9B	24/05/2022	0.02	<0.001	<0.001	0.002	13200			0.005	7.99	<0.01		<1	<0.0001		
MB10A	24/05/2022	NO ACCESS - WET WEATHER														
MB10B	24/05/2022	NO ACCESS - WET WEATHER														
MB2	18/10/2022	BORE DRY														
MB8A	18/10/2022	BORE DRY														
MB8B	18/10/2022	<0.01	<0.001	<0.001	<0.001	23700			0.001	7.29	<0.01		<0.05	402	<0.0001	
MB9A	19/10/2022	0.94	<0.001	<0.001	0.005	20000			0.004	7.26	<0.01		1.47	44	<0.0001	
MB9B	19/10/2022	0.56	<0.001	<0.001	0.003	12800			0.005	7.69	<0.01		3.81	2	<0.0001	
MB10A	19/10/2022	0.14	<0.001	<0.001	0.004	3800			0.001	7.37	<0.01		0.42	58	<0.0001	
MB10B	19/10/2022	0.03	<0.001	<0.001	<0.001	11100			<0.001	7.42	<0.01		0.75	42	<0.0001	
MB2	22/11/2022	0.02	<0.001	<0.001	<0.001	9940			<0.001	7.51	<0.01		5.49	284	<0.0001	
MB8A	22/11/2022	BORE DRY														
MB8B	22/11/2022	0.05	<0.001	<0.001	<0.001	24300			<0.001	7.45	<0.01		4.65	427	<0.0001	
MB9A	22/11/2022	0.23	<0.001	<0.001	<0.001	20500			<0.001	7.47	<0.01		2.32	42	<0.0001	
MB9B	22/11/2022	0.18	<0.001	<0.001	0.003	13600			0.005	7.87	<0.01		4.72	<1	<0.0001	
MB10A	22/11/2022	<0.01	<0.001	<0.001	<0.001	11400			<0.001	7.37	<0.01		0.98	43	<0.0001	
MB10B	22/11/2022	0.05	<0.001	<0.001	0.005	3820			0.001	7.54	<0.01		0.74	59	<0.0001	
MB2	22/02/2023	<0.01	<0.001	<0.001	<0.001	9680			<0.001	7.59	<0.01		<0.05	285	<0.0001	
MB8A	01/02/2023	BORE DRY														
MB8B	01/02/2023	<0.01	<0.001	<0.001	<0.001	22300			<0.001	7.24	<0.01		<0.05	418	<0.0001	
MB9A	31/01/2023	<0.01	0.001	<0.001	<0.001	20100			<0.001	7.35	<0.01		<0.05	76	<0.0001	
MB9B	31/01/2023	<0.01	0.002	<0.001	<0.001	13100			0.007	8.07	<0.01		<0.05	<1	<0.0001	
MB10A	31/01/2023	<0.01	<0.001	<0.001	0.003	3770			0.002	7.58	<0.01		<0.05	59	<0.0001	
MB10B	31/01/2023	<0.01	<0.001	<0.001	<0.001	11100			<0.001	7.69	<0.01		<0.05	44	<0.0001	
MB2	10/05/2023	<0.01	<0.001	<0.001	<0.001	9650			<0.001	7.38	<0.01		<0.05	294	<0.0001	
MB8A	10/05/2023	BORE DRY														
MB8B	10/05/2023	<0.01	<0.001	<0.001	<0.001	22900			<0.001	7.31	<0.01		<0.05	425	<0.0001	
MB9A	09/05/2023	<0.01	<0.001	<0.001	0.001	19100			0.001	7.32	<0.01		<0.05	77	<0.0001	
MB9B	09/05/2023	<0.01	<0.001	<0.001	<0.001	12300			0.006	7.77	<0.01		<0.05	5	<0.0001	
MB10A	10/05/2023	<0.01	<0.001	<0.001	0.004	3150			0.001	7.39	<0.01		<0.05	64	<0.0001	
MB10B	10/05/2023	<0.01	<0.001	<0.001	<0.001	10800			<0.001	7.43	<0.01		<0.05	48	<0.0001	
MB2	18/08/2023	0.04	<0.001	<0.001	<0.001	9760			<0.001	8.28	<0.01		<0.05	282	<0.0001	
MB8A	18/08/2023	BORE DRY														
MB8B	18/08/2023	0.05	<0.001	<0.001	<0.001	24400			<0.001	7.67	<0.01		<0.05	399	<0.0001	
MB9A	18/08/2023	0.13	<0.001	<0.001	<0.001	20100			<0.001	7.53	<0.01		<0.05	53	<0.0001	
MB9B	18/08/2023	0.08	<0.001	<0.001	0.002	13100			0.005	7.91	<0.01		<0.05	1	<0.0001	
MB10A	18/08/2023	0.02	<0.001	<0.001	0.005	3680			0.002	7.53	<0.01		<0.05	59	<0.0001	
MB10B	18/08/2023	0.02	<0.001	<0.001	<0.001	11000			<0.001	7.57	<0.01		<0.05	54	<0.0001	
MB2	21/11/2023	0.02	<0.001	0.001	<0.001	8960			<0.001	7.42	<0.01		5.87	370	<0.0001	
MB8A	21/11/2023	BORE DRY														
MB8B	21/11/2023	<0.01	<0.001	<0.001	<0.001	23500			<0.001	7.27	<0.01		0.035	4.33	424	<0.0001
MB9A	21/11/2023	0.16	<0.001	<0.001	<0.001	19900			0.002	7.23	<0.01		0.021	0.89	62	<0.0001
MB9B	21/11/2023	0.1	<0.001	<0.001	0.003	13300			<0.001	7.65	<0.01		0.024	4.07	1	<0.0001
MB10A	21/11/2023	0.05	<0.001	<0.001	0.004	3320			<0.001	7.29	<0.01		0.01	0.46	54	<0.0001
MB10B	21/11/2023	0.03	<0.001	<0.001	<0.001	10800			<0.001	7.33	<0.01		0.008	0.90	54	<0.0001
MB2	08/02/2024	<0.01	<0.001	<0.001	<0.001	9330	<0.0001	<0.001	<0.001	7.66	<0.01		0.036	<0.05	517	<0.0001
MB8A	8/02/2024	BORE DRY														
MB8B	08/02/2024	<0.01	<0.001	<0.001	<0.001	24600	<0.0001	<0.001	<0.001	7.2	<0.01		0.005	<0.05	422	<0.0001
MB9A	08/02/2024	<0.01	0.002	<0.001	<0.001	20800	<0.0001	<0.001	<0.001	7.24	<0.01		0.013	<0.05	72	<0.0001
MB9B	08/02/2024	<0.01	<0.001	<0.001	0.002	13800	<0.0001	<0.001	<0.001	7.68	<0.01		0.009	<0.05	1	<0.0001
MB10A	08/02/2024	<0.01	<0.001	<0.001	0.004	3700	<0.0001	<0.001	<0.001	7.29	<0.01		<0.005	<0.05	53	<0.0001
MB10B	08/02/2024	<0.01	<0.001	<0.001	<0.001	11200	<0.0001	<0.001	<0.001	7.36	<0.01		0.007	<0.05	55	<0.0001
MB2	25/04/2024	BORE DRY														
MB8A	25/04/2024	BORE DRY														
MB8B	24/04/2024	<0.01	<0.001	<0.001	<0.001	24000	<0.0001	0.008	<0.001	<0.001	<0.001		0.005	4.47	390	<0.0005
MB9A	25/04/2024	<0.01	<0.001	<0.001	<0.001	20400	<0.0001	0.014	<0.001	7.56	<0.01		0.007	2.34	75	<0.0005
MB9B	25/04/2024	<0.01	<0.001	0.001	<0.001	13500	<0.0001	0.020	<0.001	7.87	<0.01		0.010	3.70	2	<0.0001
MB10A	24/04/2024	<0.01	<0.001	0.003	<0.001	3820	<0.0001	0.006	<0.001	7.63	<0.01		0.006	0.54	60	<0.0001
MB10B	24/04/2024	<0.01	<0.001	<0.001	<0.001	11200	<0.0001	0.009	<0.001	7.59	<0.01		0.008	0.82	67	<0.0001

EPML00819213 Table D1: Groundwater monitoring locations and frequency & Table D2: Groundwater Contaminant Trigger Values - see EPML00819213 tab.

EPML00819213 Appendix 5 Historical Groundwater Quality Results



MonitoringPoint	Date	Calcium	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Chloride (mg/L)	Sulphate as SO4 (mg/L)	Bicarbonate Alkalinity (mg/L)	CarbonateAlkalinity	Total Alkalinity as CaCO3 (mg/L)	Hydroxide Alkalinity as CaCO3	
GW_BORE_MB2	12/03/2018											
GW_BORE_MB8A	12/03/2018											
GW_BORE_MB8B	12/03/2018	522	595	4020	42	8190	411	471		471		
GW_BORE_MB9A	12/03/2018	308	412	3440	40	6340	107	1000		1000		
GW_BORE_MB9B	12/03/2018	46	55	1120	10	1600	66	348		348		
GW_BORE_MB10A	12/03/2018											
GW_BORE_MB10B	12/03/2018											
GW_BORE_MB2	13/06/2018											
GW_BORE_MB8A	14/06/2018											
GW_BORE_MB8B	14/06/2018	808	624	4470	44	8560	469	640		640		
GW_BORE_MB9A	14/06/2018	352	429	3700	42	6530	98	994		994		
GW_BORE_MB9B	14/06/2018	192	90	2470	15	3850	2	559		559		
GW_BORE_MB10A	14/06/2018	56	170	593	5	689	71	955		955		
GW_BORE_MB10B	14/06/2018	251	450	1590	11	3430	105	594		594		
GW_BORE_MB2	17/09/2018											
GW_BORE_MB8A	17/09/2018											
GW_BORE_MB8B	17/09/2018	670	534	3760	40	7770	478	611		611		
GW_BORE_MB9A	17/09/2018	313	395	3180	40	6140	95	936		936		
GW_BORE_MB9B	17/09/2018	148	86	2210	15	3590	2	536		536		
GW_BORE_MB10A	17/09/2018	48	155	520	5	632	57	918		918		
GW_BORE_MB10B	17/09/2018	218	393	1310	11	3120	100	601		601		
GW_BORE_MB2	28/11/2018											
GW_BORE_MB8A	28/11/2018											
GW_BORE_MB8B	28/11/2018	730	540	3790	39	8010	488	590		590		
GW_BORE_MB9A	28/11/2018	321	403	3210	39	6160	90	959		959		
GW_BORE_MB9B	28/11/2018	186	85	2200	14	3720	3	543		543		
GW_BORE_MB10A	28/11/2018	55	152	509	5	656	70	922		922		
GW_BORE_MB10B	28/11/2018	249	400	1340	10	3150	103	592		592		
GW_BORE_MB2	28/02/2019											
GW_BORE_MB8A	28/02/2019											
GW_BORE_MB8B	28/02/2019	620	550	3660	41	7820	503	589		589		
GW_BORE_MB9A	28/02/2019	287	409	2990	46	6040	110	953		953		
GW_BORE_MB9B	28/02/2019	115	83	2060	14	3200	4	503		503		
GW_BORE_MB10A	28/02/2019	44	154	475	6	650	90	913		913		
GW_BORE_MB10B	28/02/2019	157	404	1270	9	2820	99	596		596		
GW_BORE_MB2	18/06/2019											
GW_BORE_MB8A	18/06/2019											
GW_BORE_MB8B	18/06/2019	801	533	4060	38	8470	475	592		592		
GW_BORE_MB9A	18/06/2019	161	93	2370	10	4050	1	527		527		
GW_BORE_MB9B	18/06/2019	347	417	3400	38	6670	92	967		967		
GW_BORE_MB10A	18/06/2019	<b>Hydrosleeve Failed - reset</b>										
GW_BORE_MB10B	18/06/2019	61	160	585	5	749	66	923		923		
GW_BORE_MB2	07/11/2019											
GW_BORE_MB8A	07/11/2019											
GW_BORE_MB8B	07/11/2019	579	533	3980	39	7610	404	600		600		
GW_BORE_MB9A	07/11/2019	253	428	3340	39	6110	96	1000		1000		
GW_BORE_MB9B	07/11/2019	101	96	2430	15	3780	3	584		584		
GW_BORE_MB10A	07/11/2019	43	162	614	5	772	69	1000		1000		
GW_BORE_MB10B	07/11/2019	155	420	1470	10	3080	81	600		600		
GW_BORE_MB2	5/02/2020											
GW_BORE_MB8A	5/02/2020											
GW_BORE_MB8B	5/02/2020	708	541	4020	41	8210	461	544		544		
GW_BORE_MB9A	5/02/2020	319	430	3380	41	6190	107	929		929		
GW_BORE_MB9B	5/02/2020	154	98	2460	16	3910	1	531		531		
GW_BORE_MB10A	5/02/2020	42	160	595	5	766	70	895		895		
GW_BORE_MB10B	5/02/2020	166	392	1360	10	3320	72	581		581		
GW_BORE_MB2	06/05/2020											
GW_BORE_MB8A	06/05/2020											
GW_BORE_MB8B	06/05/2020	586	544	3960	38	8220	471	555		555		

EPML00819213 Appendix 5 Historical Groundwater Quality Results



MonitoringPoint	Date	Calcium	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Chloride (mg/L)	Sulphate as SO4 (mg/L)	Bicarbonate Alkalinity (mg/L)	CarbonateAlkalinity	Total Alkalinity as CaCO3 (mg/L)	Hydroxide Alkalinity as CaCO3
GW_BORE_MB9A	06/05/2020	269	415	3190	38	6410	96	933		933	
GW_BORE_MB9B	06/05/2020	146	92	2280	15	4140	<1	534		534	
GW_BORE_MB10A	06/05/2020	48	157	571	6	768	56	913		913	
GW_BORE_MB10B	06/05/2020	170	397	1360	12	3510	71	558		558	
GW_BORE_MB2	03/08/2020										
GW_BORE_MB8A	03/08/2020										
GW_BORE_MB8B	03/08/2020	614	520	3700	36	7950	458	569		569	
GW_BORE_MB9A	03/08/2020	307	442	3250	39	6330	75	995		995	
GW_BORE_MB9B	03/08/2020	139	98	2330	15	3870	2	547		547	
GW_BORE_MB10A	03/08/2020	45	155	579	5	793	65	933		933	
GW_BORE_MB10B	03/08/2020	177	417	1380	10	3370	66	560		560	
GW_BORE_MB2	27/10/2020										
GW_BORE_MB8A	27/10/2020										
GW_BORE_MB8B	27/10/2020	760	527	3900	38	7570	478	562		562	
GW_BORE_MB9A	28/10/2020	188	97	2450	14	3650	1	534		534	
GW_BORE_MB9B	28/10/2020	345	477	3480	39	6240	77	1070		1070	
GW_BORE_MB10A	29/10/2020	52	161	619	5	778	64	994		994	
GW_BORE_MB10B	29/10/2020	242	420	1460	10	3150	61	555		555	
GW_BORE_MB2	09/02/2021										
GW_BORE_MB8A	09/02/2021										
GW_BORE_MB8B	09/02/2021	539	490	3690	36	7740	466	535		535	
GW_BORE_MB9A	09/02/2021	296	440	3150	36	6170	64	921		921	
GW_BORE_MB9B	09/02/2021	82	95	2330	15	3820	2	491		491	
GW_BORE_MB10A	09/02/2021	37	149	570	5	755	52	917		917	
GW_BORE_MB10B	09/02/2021	98	398	1380	10	3170	48	522		522	
GW_BORE_MB2	12/05/2021										
GW_BORE_MB8A	12/05/2021										
GW_BORE_MB8B	12/05/2021	746	642	4760	45	8390	448	558		558	
GW_BORE_MB9A	12/05/2021	350	521	3900	46	6590	79	1010		1010	
GW_BORE_MB9B	12/05/2021	176	128	3140	19	4320	1	557		557	
GW_BORE_MB10A	12/05/2021	54	179	666	6	752	50	937		937	
GW_BORE_MB10B	12/05/2021	205	526	1800	13	3650	49	556		556	
GW_BORE_MB2	10/08/2021										
GW_BORE_MB8A	10/08/2021										
GW_BORE_MB8B	10/08/2021	623	512	3990	36	8420	420	442		442	
GW_BORE_MB9A	10/08/2021	321	481	3460	37	6960	62	984		984	
GW_BORE_MB9B	10/08/2021	148	102	2530	15	4310	3	503		503	
GW_BORE_MB10A	10/08/2021	46	160	615	5	800	62	948		948	
GW_BORE_MB10B	10/08/2021	179	426	1530	11	3800	52	565		565	
GW_BORE_MB2	8/11/2021										
GW_BORE_MB8A	8/11/2021										
GW_BORE_MB8B	8/11/2021	695	533	4220	38	7790	430	537		537	
GW_BORE_MB9A	8/11/2021	358	511	3790	39	6290	57	1050		1050	
GW_BORE_MB9B	8/11/2021	160	110	2780	15	3990	<1	571		571	
GW_BORE_MB10A	8/11/2021	48	174	691	6	749	64	977		977	
GW_BORE_MB10B	8/11/2021	194	474	1700	11	3340	47	573		573	
MB2	01/02/2022	388	223	1190	22	2890	291	203	<1	203	<1
MB8A	01/02/2022										
MB8B	01/02/2022	622	459	3550	37	8100	445	539	<1	539	<1
MB9A	01/02/2022	305	422	3130	37	6690	54	999	<1	999	<1
MB9B	01/02/2022	163	94	2240	15	4400	<1	572	<1	572	<1
MB10A	01/02/2022	45	145	568	5	780	61	955	<1	955	<1
MB10B	01/02/2022	200	402	1370	11	3710	46	574	<1	574	<1
MB2	24/05/2022	394	232	1280	22	3400	285	188	<1	188	<1
MB8A	24/05/2022										
MB8B	24/05/2022	621	520	3900	36	8290	432	515	<1	515	<1
MB9A	24/05/2022	336	496	3560	40	6800	68	1020	<1	1020	<1
MB9B	24/05/2022	169	105	2620	16	4480	<1	540	<1	540	<1
MB10A	24/05/2022										

NO ACCESS - WET WEATHER

MonitoringPoint	Date	Calcium	Magnesium (mg/L)	Sodium (mg/L)	Potassium (mg/L)	Chloride (mg/L)	Sulphate as SO4 (mg/L)	Bicarbonate Alkalinity (mg/L)	CarbonateAlkalinity	Total Alkalinity as CaCO3 (mg/L)	Hydroxide Alkalinity as CaCO3
MB10B	24/05/2022										
						NO ACCESS - WET WEATHER					
MB2	18/10/2022										
						BORE DRY					
MB8A	18/10/2022										
						BORE DRY					
MB8B	18/10/2022	668	492	4000	37	8030	402	509	<1	509	<1
MB9A	19/10/2022	330	461	3330	38	6700	44	1020	<1	1020	<1
MB9B	19/10/2022	154	99	2390	17	4290	2	516	<1	516	<1
MB10A	19/10/2022	46	148	563	5	725	58	908	<1	908	<1
MB10B	19/10/2022	183	418	1460	12	3690	42	512	<1	512	<1
MB2	22/11/2022	361	222	1170	21	3210	284	196	<1	196	<1
MB8A	22/11/2022										
						BORE DRY					
MB8B	22/11/2022	606	474	3530	35	8300	427	515	<1	515	<1
MB9A	22/11/2022	321	460	3210	38	6820	42	1020	<1	1020	<1
MB9B	22/11/2022	144	102	2420	15	4510	<1	561	<1	561	<1
MB10A	22/11/2022	165	415	1410	10	3730	43	551	<1	551	<1
MB10B	22/11/2022	46	149	550	5	720	59	889	<1	889	<1
MB2	22/02/2023	390	224	1180	21	3270	285	194	<1	194	<1
MB8A	01/02/2023										
						BORE DRY					
MB8B	01/02/2023	702	546	4210	40	7900	418	500	<1	500	<1
MB9A	31/01/2023	349	517	3660	41	6600	76	1020	<1	1020	<1
MB9B	31/01/2023	132	98	2380	16	4350	<1	522	<1	522	<1
MB10A	31/01/2023	45	158	601	5	707	59	866	<1	866	<1
MB10B	31/01/2023	186	462	1610	12	3660	44	512	<1	512	<1
MB2	10/05/2023	370	224	1200	22	3400	294	182	<1	182	<1
MB8A	10/05/2023										
						BORE DRY					
MB8B	10/05/2023	588	461	3550	36	8320	425	481	<1	481	<1
MB9A	09/05/2023	316	440	3090	36	6900	77	978	<1	978	<1
MB9B	09/05/2023	110	94	2310	15	4350	5	506	<1	506	<1
MB10A	10/05/2023	45	142	521	6	726	64	885	<1	885	<1
MB10B	10/05/2023	130	399	1350	10	3830	48	529	<1	529	<1
MB2	18/08/2023	386	232	1270	23	3220	282	216	<1	216	<1
MB8A	18/08/2023										
						BORE DRY					
MB8B	18/08/2023	638	496	3810	38	8120	399	496	<1	496	<1
MB9A	18/08/2023	328	496	3480	39	6680	53	1050	<1	1050	<1
MB9B	18/08/2023	136	106	2590	16	4450	1	555	<1	555	<1
MB10A	18/08/2023	43	157	572	5	675	59	951	<1	951	<1
MB10B	18/08/2023	162	451	1520	11	3660	54	568	<1	568	<1
MB2	21/11/2023	382	261	1270	24	3080	370	235		235	
MB8A	21/11/2023										
						BORE DRY					
MB8B	21/11/2023	601	494	3960	36	8170	424	492	<1	492	<1
MB9A	21/11/2023	324	496	3570	38	6820	62	1000	<1	1000	<1
MB9B	21/11/2023	123	110	2720	16	4540	1	534	<1	534	<1
MB10A	21/11/2023	48	153	563	5	690	54	911	<1	911	<1
MB10B	21/11/2023	139	447	1530	11	3620	54	555	<1	555	<1
MB2	08/02/2024	327	230	1180	23	2840	517	351	<1	351	<1
MB8A	8/02/2024										
						BORE DRY					
MB8B	08/02/2024	578	456	3640	35	8180	422	487	<1	487	<1
MB9A	08/02/2024	318	462	3380	37	6670	72	1020	<1	1020	<1
MB9B	08/02/2024	137	99	2440	15	4460	1	550	<1	550	<1
MB10A	08/02/2024	45	152	566	5	716	53	943	<1	943	<1
MB10B	08/02/2024	142	405	1360	11	3620	55	572	<1	572	<1
MB2	25/04/2024										
						BORE DRY					
MB8A	25/04/2024	BORE DRY									
MB8B	24/04/2024	558	472	3780	36	8180	390	463	<1	463	<1
MB9A	25/04/2024	283	481	3370	36	6870	75	982	<1	982	<1
MB9B	25/04/2024	137	101	2490	15	4570	2	512	<1	512	<1
MB10A	24/04/2024	43	146	542	5	776	60	904	<1	904	<1
MB10B	24/04/2024	163	415	1340	10	3670	67	544	<1	544	<1

Station Name	Station Number	Date (Y-M)	Rainfall (mm)
MS1	1	2018-03	24.6
MS1	1	2018-04	5.8
MS1	1	2018-05	9.8
MS1	1	2018-06	5.4
MS1	1	2018-07	2
MS1	1	2018-08	2.8
MS1	1	2018-09	1.6
MS1	1	2018-10	49.6
MS1	1	2018-11	17
MS1	1	2018-12	64.2
MS1	1	2019-01	82.2
MS1	1	2019-02	39
MS1	1	2019-03	145.4
MS1	1	2019-04	16
MS1	1	2019-05	3.4
MS1	1	2019-06	25.6
MS1	1	2019-07	26.2
MS1	1	2019-08	0.2
MS1	1	2019-09	0
MS1	1	2019-10	0.6
MS1	1	2019-11	1.6
MS1	1	2019-12	23
MS1	1	2020-01	112.6
MS1	1	2020-02	75.6
MS1	1	2020-03	48.4
MS1	1	2020-04	0.8
MS1	1	2020-05	51.2
MS1	1	2020-06	15.2
MS1	1	2020-07	19.2
MS1	1	2020-08	18.2
MS1	1	2020-09	25.6
MS1	1	2020-10	15.8
MS1	1	2020-11	3.8
MS1	1	2020-12	122.8
MS1	1	2021-01	94.2
MS1	1	2021-02	14.2
MS1	1	2021-03	31.8
MS1	1	2021-04	40.8
MS1	1	2021-05	0
MS1	1	2021-06	60.4
MS1	1	2021-07	59.6
MS1	1	2021-08	44
MS1	1	2021-09	0.6
MS1	1	2021-10	4.4
MS1	1	2021-11	23.6
MS1	1	2021-12	27.2
MS1	1	2022-01	37.4
MS1	1	2022-02	4.4
MS1	1	2022-03	19
MS1	1	2022-04	52.6

Station Name	Station Number	Date (Y-M)	Rainfall (mm)
MS1	1	2022-05	108
MS1	1	2022-06	0.2
MS1	1	2022-07	116.6
MS1	1	2022-08	4.2
MS1	1	2022-09	56.8
MS1	1	2022-10	43
MS1	1	2022-11	169.4
MS1	1	2022-12	17.4
MS1	1	2023-01	169.4
MS1	1	2023-02	38.8
MS1	1	2023-03	27.8
MS1	1	2023-04	20.6
MS1	1	2023-05	0.6
MS1	1	2023-06	2.8
MS1	1	2023-07	71.6
MS1	1	2023-08	20.8
MS1	1	2023-09	0.2
MS1	1	2023-10	1
MS1	1	2023-11	70.6
MS1	1	2023-12	68.6
MS1	1	2024-01	147.4
MS1	1	2024-02	92.4
MS1	1	2024-03	12
MS1	1	2024-04	16.6
MS1	1	2024-05	5



**Table D1: Groundwater monitoring locations and frequency**

Monitoring Site ID	Latitude (GDA94)	Longitude (GDA94)	Ground elevation (mAHD)	Depth (mgl)	Screens (mbgl)	Aquifer	Monitoring Frequency	Monitoring Parameters
MB2	22° 10' 49" S	148° 14' 18" E	262.38	90	72 - 90	Permian Rangal	Quarterly	SWL
MB8A	22° 00' 27" S	148° 14' 20" E	259.1	30	22 - 28	Fort Cooper (New Chum Creek Alluvium)	Quarterly	SWL and Quality
MB8B	22° 00' 27" S	148° 14' 20" E	259.1	80	62 - 74	Fort Cooper	Quarterly	SWL and Quality
MB9A	22° 00' 34" S	148° 14' 43" E	251.8	30	22 - 30	Fort Cooper (New Chum Creek Alluvium)	Quarterly	SWL and Quality
MB9B	22° 00' 34" S	148° 14' 43" E	251.8	80	60 - 74	Fort Cooper	Quarterly	SWL and Quality
MB10A	22° 10' 33" S	148° 16' 00" E	233.9	35	27 - 35	Fort Cooper (New Chum Creek Alluvium)	Quarterly	SWL and Quality
MB10B	22° 10' 33" S	148° 16' 00" E	233.9	80	64 - 76	Fort Cooper	Quarterly	SWL and Quality
CS_MB2	22° 1' 10" S	148° 17' 16" E	236.63	170 (?)	155-158	Permian Rangal CM (Leichardt Seam)	Quarterly	SWL

**Table D2: Groundwater Contaminant Trigger Values**

Aquifer	Monitoring Point	Field pH	Lab EC (µS/cm)	Al (mg/L) (dissolved)*	As (mg/L) (dissolved)*	Cu (mg/L) (dissolved)*	Hg (mg/L) (dissolved)*	Mo (mg/L) (dissolved)*	Sb (mg/L) (dissolved)*	Se (mg/L) (dissolved)*	Zn (mg/L) (dissolved)*	C6 - C10 Fraction (µg/L)	C10 - C40 Fraction (µg/L)	Major ions (Ca, Na, Mg, K, HCO <sub>3</sub> , CO <sub>3</sub> , SO <sub>4</sub> ) (mg/l)	Cl (mg/L)	Fe (mg/L)*	
Fort Cooper CM - Sandstone	MB8A	6.0 - 7.5 <sup>A</sup>	8910 <sup>C</sup>	0.055 <sup>B</sup>	0.013 <sup>B</sup>	0.0014 <sup>B</sup>	0.0006 <sup>B</sup>	0.034 <sup>B</sup>	0.009 <sup>B</sup>	0.011 <sup>B</sup>	0.008 <sup>B</sup>	20	100	Interpretation only	3185 <sup>C</sup>	No increasing trend	
Fort Cooper CM - Sandstone	MB8B		24240	0.055 <sup>B-C</sup>							0.03 <sup>C</sup>	0.317 <sup>D</sup>			20 <sup>C</sup>		8520
Moranbah Coal Seam	MB9A		20329	0.055 <sup>B-C</sup>								0.06 <sup>C</sup>			20		6785
Moranbah Coal Measures Sandstone	MB9B		16000 <sup>D-C</sup>	0.055 <sup>B</sup>		0.008 <sup>B</sup>					5905 <sup>D-C</sup>						
Fort Cooper (Sandstone)	MB10A		3998	0.0014 <sup>B</sup>		0.034 <sup>C</sup>					0.06 <sup>C</sup>	789					
Fort Cooper (Sandstone)	MB10B		10265 <sup>C</sup>			0.055 <sup>B-C</sup>					0.034 <sup>C</sup>	0.008 <sup>B</sup>					5905 <sup>D-C</sup>