



Pollution Monitoring Data - Holcim Dunloe Sand Quarry (EPL Number 13077)

Facility Address	Pottsville-Mooball Road, MOOBALL, NSW, 2483
Link to EPL on Public Register	https://epa.nsw.gov.au/propose/Detail.aspx?instid=13077&id=13077&option=licence&searchrange=licence&range=POEC%20licence&orgno&status=issued
Date published	25-Oct-2023

Air Quality Monitoring - Deposition Results

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description	Month Sample Date	Annual average (2022)	Monthly data used for determining Annual average only											
									January 12/01/2023	February 13/02/2023	March 15/03/2023	April 12/04/2023	May 11/05/2023	June 13/06/2023	July 11/07/2023	August 09/08/2023	September 11/09/2023	October 12/10/2023	November 13/11/2023	December
Haul Road	Monthly	EPL	-	4	g/m2/month	Insoluble Solids	Result	0.3	0.1	0.2	0.5	0.3	0.4	0.1	0.1	0.2	0.2	0.3	1.1	
Windmill	Monthly	EPL	-	4	g/m2/month	Insoluble Solids	Result	1.3	0.1	0.3	3.1	0.2	0.5	0.1	3.5	0.4	2.2	2.3	2	
Sugar Shed	Monthly	EPL	-	4	g/m2/month	Insoluble Solids	Result	0.8	0.1	0.5	0.3	0.8	4.3	0.7	0.2	0.2	0.5	0.2	0.7	
Black Rock	Monthly	EPL	-	4	g/m2/month	Insoluble Solids	Result	0.4	0.2	0.1	0.1	0.2	0.5	1.1	0.3	0.1	0.3	0.1	1	
Laboratory Report Issue Date								N/A	25/01/2023	27/02/2023	29/03/2023	21/04/2023	31/05/2023	05/07/2023	28/07/2023	06/09/2023	21/09/2023	31/10/2023	27/11/2023	

2023 Comments regarding deposition monitoring outcomes

Comment 1	
Comment 2	
Comment 3	
Comment 4	
Comment 5	
Comment 6	
Comment 7	
Comment 8	

Noise Monitoring Results

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Quarter Sample Date	2023 Q1		2023 Q2		2023 Q3		2023 Q4	
								Time	01/11/2023	Time	14/06/2023	Time	07/11/2023	Time	
NE Boundary Near Overall Road R1	Quarterly (EMP R7.2)	EPL Section L4	-	48	dB(A)	L _{Aeq} (15 min) Day	Estimated query contribution	-	-	-	-	-	-	-	-
Dwelling Pottsville Road R2	Quarterly (EMP R7.2)	EPL Section L4	-	48	dB(A)	L _{Aeq} (15 min) Day	Estimated query contribution	-	-	-	-	-	-	-	-
Dwelling Warwick Park Road R3	Quarterly (EMP R7.2)	EPL Section L4	-	48	dB(A)	L _{Aeq} (15 min) Day	Estimated query contribution	-	-	-	-	-	-	-	-
26 Warwick Park Road R4	Quarterly (EMP R7.2)	EPL Section L4	-	48	dB(A)	L _{Aeq} (15 min) Day	Estimated query contribution	-	-	-	-	-	-	-	-
157 Warwick Park Road R6	Quarterly (EMP R7.2)	EPL Section L4	-	42	dB(A)	L _{Aeq} (15 min) Day	Estimated query contribution	15.14	<42	9.01	<38	12.59	<19		
122 Warwick Park Road R7	Quarterly (EMP R7.2)	EPL Section L4	-	48	dB(A)	L _{Aeq} (15 min) Day	Estimated query contribution	14.55	<48	8.39	<35	12.47	<26		
679 Pottsville Road R8	Quarterly (EMP R7.2)	EPL Section L4	-	41	dB(A)	L _{Aeq} (15 min) Day	Estimated query contribution	14.26	<41	9.22	<25	13.21	<27		
Report Issue Date								11/04/2023		25/07/2023		26/10/2023			

2023 Comments regarding noise monitoring outcomes

Comment 1	
Comment 2	
Comment 3	

Surface Water Results

Discharge Surface Water Monitoring Results

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Month Sample Date	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	
								11/1/2023	13/2/2023	14/3/2023	12/04/2023	11/05/2023	14/06/2023	11/07/2023	09/08/2023	11/09/2023	11/10/2023	13/11/2023		
Point 1 Silt Pond	Within 24 Hours Prior to Discharge & Daily During Each Discharge Event	EPL Section 5	6.5	8.5	pH units	pH	Result	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry		
			-	-	V = Visible NV = None Visible	Total Oil & Grease	Result	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	
			0	50	mg/L	Suspended Solids	Result	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	
Point 2 Dredge Pond	Within 24 Hours Prior to Discharge & Daily During Each Discharge Event	EPL Section 5	6.5	8.5	pH units	pH	Result	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry		
			-	-	V = Visible NV = None Visible	Total Oil & Grease	Result	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	
			0	50	mg/L	Suspended Solids	Result	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	
Laboratory report issue date								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		

2023 Comments regarding blue green algae monitoring requirements

Comment 1	
Comment 2	
Comment 3	
Comment 4	
Comment 5	
Comment 6	

EMP - Blue Green Algae Monitoring Requirements

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Month	January 2023	January 2023	February 2023	February 2023	March 2023	March 2023	April 2023	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	October 2023	October 2023	November 2023	November 2023	December 2023	December 2023
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Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Month Sample Date	11/1/2023	20/01/2023	13/02/2023	20/02/2023	15/03/2023	20/3/2023	11/4/2023	19/04/2023	11/5/2023	14/06/2023	11/7/2023	8/8/2023	11/9/2023	11/10/2023	20/10/2023	13/11/2023	20/11/2023
Dredge Pond	Monthly	EMP Section 7.4.7	-	50000	cells/mL	of cells/mL (M aerugin)	Result	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			-	4	mm3/L	Total biovolume	Result	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Silt Pond	Monthly	EMP Section 7.4.7	-	50000	cells/mL	of cells/mL (M aerugin)	Result	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			-	4	mm3/L	Total biovolume	Result	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Laboratory report issue date							Sample Date	12/01/2023	20/01/2023	15/02/2023	21/02/2023	17/03/2023	21/03/2023	12/04/2023	19/04/2023	11/05/2023	14/06/2023	12/07/2023	10/08/2023	12/09/2023	11/10/2023	20/10/2023	17/11/2023	24/11/2023

2023 Comments regarding blue green algae monitoring requirements

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Comment 5:
Comment 6:

EMP - Monthly Surface Water Monitoring Requirements

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Month Sample Date	January 11/1/2023	February 16/02/2023	March 16/03/2023	April 11/4/2023	May 11/5/2023	June 14/06/2023	July 11/7/2023	August 8/8/2023	September 11/9/2023	October 11/10/2023	November 13/11/2023			
Pond 1 - Silt Pond	Monthly	EMP Section 6.2	5	8.5	pH units	pH	Result	5.7	5.5	6.2	5.2	3.9	5.5	5.8	5.1	6.9	8.1	7.5			
			0	5500	µS/cm	Electrical Conductivity	Result	83	108	1490	111	124	109	121	115	166	332	213			
			4	-	mg/L	Dissolved Oxygen	Result	6.3	4.7	6.4	6.1	6.9	7.2	7	7	8.3	7.9	5.7			
			0	20	NTU	Turbidity	Result	33.9	75.3	301	264	5.1	124	56.6	61.9	61	765	1000			
			5	10	mg/L	Oil & Grease	Result	7.5	15	12	5.9	10	31	5	8.7	5	20	12			
			5	8.5	pH units	pH	Result	5	4.8	4.8	5.3	5.8	4.4	4.8	4.8	7	8.2	7.2			
Pond 2 - Dredge Pond	Monthly	EMP Section 6.2	0	5500	µS/cm	Electrical Conductivity	Result	116	73	123	960	103	105	103	103	120	245	210			
			4	-	mg/L	Dissolved Oxygen	Result	6.7	5.6	7.2	6.3	7.8	7.5	6.1	7.8	8.3	7.5	7.5			
			0	20	NTU	Turbidity	Result	1.1	5.8	4.6	1.7	1	1.8	2.9	1.9	5.1	74.7	4.5			
			0	10	mg/L	Oil & Grease	Result	5.7	14	17	5	10	18	5	5	23	10				
			Laboratory report issue date							Sample Date	25/01/2023	16/02/2023	29/03/2023	21/04/2023	31/05/2023	04/07/2023	28/07/2023	06/09/2023	21/09/2023	3/11/2023	27/11/2023

2023 Comments regarding monthly surface water monitoring outcomes

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Comment 5:
Comment 6:

EMP - Quarterly Surface Water Monitoring Requirements

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Month Sample Date	2023 Q1 13/02/2023	2023 Q2 14/06/2023	2023 Q3 8/8/2023	2023 Q4
SW3 Northern Creek	Quarterly	EMP Section 6.2	5	7.5	pH units	pH	Result	6.5	6.4	7.9	
			1800	2400	µS/cm	Electrical Conductivity	Result	15400	8360	2850	
			0	25	mg/L	Suspended Solids	Result	15	55	48	
			6	-	mg/L	Dissolved Oxygen	Result	4.13	5.3	4.6	
			0	1	mg/L	Total Nitrogen	Result	0.2	0.2	0.78	
			0	0.08	mg/L	Total Phosphorus	Result	0.03	0.04	0.01	
			-	-	Ebb or flood	Flow direction	Result	Not Flowing	Not Flowing	Not Flowing	
SW4 Northern Creek	Quarterly	EMP Section 6.2	5	7.5	pH units	pH	Result	6.9	6.2	7.5	
			1800	2400	µS/cm	Electrical Conductivity	Result	18100	1020	2790	
			0	25	mg/L	Suspended Solids	Result	13	34	12	
			6	-	mg/L	Dissolved Oxygen	Result	3.1	5.3	5.9	
			0	1	mg/L	Total Nitrogen	Result	0.2	0.4	0.89	
			0	0.08	mg/L	Total Phosphorus	Result	0.03	0.01	0.01	
			-	-	Ebb or flood	Flow direction	Result	Not Flowing	Not Flowing	Flowing	
SW9 Southern Creek	Quarterly	EMP Section 6.2	5	7.5	pH units	pH	Result	6.7	7.4	6.7	
			1800	2400	µS/cm	Electrical Conductivity	Result	18100	1120	2890	
			0	25	mg/L	Suspended Solids	Result	15	77	30	
			6	-	mg/L	Dissolved Oxygen	Result	3	5.8	4.9	
			0	1	mg/L	Total Nitrogen	Result	0.2	0.29	0.2	
			0	0.08	mg/L	Total Phosphorus	Result	0.03	0.01	0.01	
			-	-	Ebb or flood	Flow direction	Result	Not Flowing	Not Flowing	Not Flowing	
SW10 Southern Creek	Quarterly	EMP Section 6.2	5	7.5	pH units	pH	Result	6	7.8	7.3	
			1800	2400	µS/cm	Electrical Conductivity	Result	15300	7620	3690	
			0	25	mg/L	Suspended Solids	Result	17	91	6.9	
			6	-	mg/L	Dissolved Oxygen	Result	3.23	6.4	5.8	
			0	1	mg/L	Total Nitrogen	Result	1.6	0.2	1.67	
			0	0.08	mg/L	Total Phosphorus	Result	0.02	0.03	0.02	
			-	-	Ebb or flood	Flow direction	Result	Not Flowing	Not Flowing	Not Flowing	
Laboratory report issue date							Sample Date	27/02/2023	05/07/2023	06/09/2023	

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Month Sample Date	2023 Q1 13/02/2023	2023 Q2 14/06/2023	2023 Q3 8/8/2023	2023 Q4
Pond 1 - Silt Pond	Quarterly	EMP Section 6.2	0	40	mg/L	Manganese	Result	0.15	0.24	0.12	
			0	100	mg/L	Magnesium	Result	2.3	2.8	3.5	
			0	500	mg/L	Sodium	Result	7.6	8.3	10	
			0	40	mg/L	Potassium	Result	2.2	1.8	2	
			0	400	mg/L	Bicarbonate	Result	20	20	31	
			0	1000	mg/L	Chloride	Result	11	21	13	
			0	800	mg/L	Sulphate	Result	62	67	69	
			0	0.5	mg/L	Aluminium (Soluble)	Result	0.05	0.6	0.88	
			0	0.005	µg/L	Arsenic	Result	0.001	0.001	0.002	
			0	20	mg/L	Ammonium	Result	0.01	0.01	0.04	
			0	20	µg/L	Iron (Soluble)	Result	0.05	0.71	1.4	
			2	10	µg/L	Chlorophyll a	Result	10	5	8	
			0	1000	Median no/100mL	Faecal coliforme	Result	290	90	1810	
			0	230	Median no/100mL	Enterococci	Result	140	90	850	
Pond 2 - Dredge Pond	Quarterly	EMP Section 6.2	0	40	mg/L	Manganese	Result	0.29	0.3	0.33	
			0	100	mg/L	Magnesium	Result	2	2.6	2.7	
			0	500	mg/L	Sodium	Result	7.5	8.4	8.8	
			0	40	mg/L	Potassium	Result	2.1	1.7	1.8	
			0	400	mg/L	Bicarbonate	Result	20	20	20	
			0	1000	mg/L	Chloride	Result	13	11	11	
			0	800	mg/L	Sulphate	Result	51	54	62	
			0	0.5	mg/L	Soluble Aluminium	Result	0.02	0.68	0.25	

		0	0.005	µg/L	Arsenic	Result	0.001	0.002	0.001	
		0	20	mg/L	Ammonium	Result	0.01	0.01	0.01	
		0	20	µg/L	Soluble Iron	Result	0.12	1.3	0.12	
		2	10	mg/L	Chlorophyll a	Result	10	11	5	
		0	1000	Median no./100mL	Faecal coliforms	Result	100	10	10	
		0	230	Median no./100mL	Enterococci	Result	450	30	10	
					Laboratory report issue date		15/02/2023 & 16/02/2023	10/06/2023 & 5/07/2023	11/08/2023 & 6/09/2023	

2023 Comments regarding quarterly surface water monitoring outcomes

Comment 1	
Comment 2	
Comment 3	
Comment 4	
Comment 5	
Comment 6	

EMP - Quarterly Vertical Profile Monitoring

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Quarter	2023 Q1																		
								Sample Date	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1	2023 Q1				
Pond 2 Dredge Pond	Quarterly	2020 EMP Soil and Water Management Plan	5	8.5	pH units	pH	Result	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023	15/03/2023			
			0	5500	µS/cm	Electrical Conductivity	Result	0	0.95	2.1	3.1	4.15	5.15	6.05	7.05	8	8.95	9.95	10.35							
			4	-	mg/L	Dissolved Oxygen	Result	4.8	5.7	5.2	4.8	4.6	4.5	4.5	4.4	4.4	4.4	4.3	4.4	4.4	4.3					
			0	20	NTU	Turbidity	Result	120	421	420	420	420	420	420	420	420	420	421	421	421	421					
			0	10	mg/L	Oil & Grease	Result	7.2	10.9	9.8	9.3	8.6	7.9	7.4	7.1	6.6	6.4	6.6	6.6	7.5						
			0	20	NTU	Turbidity	Result	4.6	5.3	5.2	5.4	5.6	5.5	5.3	5.1	5.1	5.1	5.1	37.3	54.8						
			0	10	mg/L	Oil & Grease	Result	1.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
								Laboratory report issue date	29/03/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Quarter	2023 Q2																	
								Sample Date	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2	2023 Q2			
Pond 2 Dredge Pond	Quarterly	2020 EMP Soil and Water Management Plan	5	8.5	pH units	pH	Result	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023	11/4/2023		
			0	5500	µS/cm	Electrical Conductivity	Result	0.1	0.8	2.1	2.75	3.5	5.2	6.05	7.2										
			4	-	mg/L	Dissolved Oxygen	Result	5.6	5.1	4.3	4.2	4.2	4.1	3.9	3.8										
			0	20	NTU	Turbidity	Result	960	95	95	95	96	96	96	96										
			0	10	mg/L	Oil & Grease	Result	6.3	7.8	7.6	7.8	7.7	7.5	7.4											
			0	20	NTU	Turbidity	Result	1.7	0.9	1	1	1	0.9	1.4	1										
			0	10	mg/L	Oil & Grease	Result	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A										
								Laboratory report issue date	21/04/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Quarter	2023 Q3																	
								Sample Date	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3	2023 Q3			
Pond 2 Dredge Pond	Quarterly	2020 EMP Soil and Water Management Plan	5	8.5	pH units	pH	Result	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023	8/8/2023		
			0	5500	µS/cm	Electrical Conductivity	Result	0	1	2	3	4	5												
			4	-	mg/L	Dissolved Oxygen	Result	4.8	5.3	6.8	5.8	5.5	4.8												
			0	20	NTU	Turbidity	Result	103	229	229	220	219	217												
			0	10	mg/L	Oil & Grease	Result	7.8	10.5	10.8	10.9	10.9	11.2												
			0	20	NTU	Turbidity	Result	1.9	4.2	4.2	4.1	4.6	5.6												
			0	10	mg/L	Oil & Grease	Result	5	N/A	N/A	N/A	N/A	N/A												
								Laboratory report issue date	06/09/2023	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

Location	Frequency	Source	Lower Criteria	Upper Criteria	Unit	Description	Quarter	2023 Q4																	
								Sample Date	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4	2023 Q4			
Pond 2 Dredge Pond	Quarterly	2020 EMP Soil and Water Management Plan	5	8.5	pH units	pH	Result																		
			0	5500	µS/cm	Electrical Conductivity	Result																		
			4	-	mg/L	Dissolved Oxygen	Result																		
			0	20	NTU	Turbidity	Result																		
			0	10	mg/L	Oil & Grease	Result																		
			0	20	NTU	Turbidity	Result																		
			0	10	mg/L	Oil & Grease	Result																		
								Laboratory report issue date																	

Ground Water Results

EPL - Annual Groundwater Water Monitoring Requirements

Location	Frequency	Source	Lower Limit	Upper Limit	Unit	Description	Year	2023
								Sample Date
EPL Point 3 Ground Water Monitoring Bore DLP1	Yearly	EPL Section M2	-	-	mAHD	Standing Water Level	Result	0.33
			-	-	pH units	pH	Result	7
			-	-	mg/L	Ammonia	Result	2.6
			-	-	mg/L	Chloride	Result	240
			-	-	µS/cm	Conductivity	Result	845
			-	-	mg/L	Total Oil & Grease	Result	10
			-	-	mg/L	Sulfate	Result	190
EPL Point 4 Ground Water Monitoring Bore DLP3	Yearly	EPL Section M2	-	-	mAHD	Standing Water Level	Result	0.43
			-	-	pH units	pH	Result	5.9
			-	-	mg/L	Ammonia	Result	3.4
			-	-	mg/L	Chloride	Result	3200
			-	-	µS/cm	Conductivity	Result	5000
			-	-	mg/L	Total Oil & Grease	Result	11
			-	-	mg/L	Sulfate	Result	310
EPL Point 5 Ground Water Monitoring Bore DLP5	Yearly	EPL Section M2	-	-	mAHD	Standing Water Level	Result	0.4
			-	-	pH units	pH	Result	4.5
			-	-	mg/L	Ammonia	Result	0.65
			-	-	mg/L	Chloride	Result	630
			-	-	µS/cm	Conductivity	Result	1170
			-	-	mg/L	Total Oil & Grease	Result	17
			-	-	mg/L	Sulfate	Result	57
EPL Point 6 Ground Water Monitoring Bore DLP6	Yearly	EPL Section M2	-	-	mAHD	Standing Water Level	Result	0.84
			-	-	pH units	pH	Result	4.9
			-	-	mg/L	Ammonia	Result	0.63
			-	-	mg/L	Chloride	Result	17
			-	-	µS/cm	Conductivity	Result	59
			-	-	mg/L	Total Oil & Grease	Result	10
			-	-	mg/L	Sulfate	Result	32
EPL Point 7 Ground Water Monitoring	Yearly	EPL Section M2	-	-	mAHD	Standing Water Level	Result	0.18
			-	-	pH units	pH	Result	7.1
			-	-	mg/L	Ammonia	Result	0.87
			-	-	mg/L	Chloride	Result	680

DLP6			0	500	mg/L	Sodium	Result	9.2	9.9	28			
			0	0.5	mg/L	Soluble Aluminium	Result	0.15	0.11	0.61			
			0	7.5	µg/L	Soluble Iron	Result	9.3	7.6	16			
			0	800	mg/L	Sulphate	Result	32	14	95			
			-	-	mg/L	Oil & Grease	Result	10	13	5.9			
			-	-	mg/L	Ammonia	Result	0.87	2.3	2.9			
Ground Water Monitoring Bore DLP7	Quarterly	EMP Section 7.4.10	0	0.005	µg/L	Arsenic	Result	0.001	0.01	0.01			
			0	400	mg/L	Bicarbonate	Result	410	390	500			
			0	55	mg/L	Calcium	Result	15	16	16			
			0	1000	mg/L	Chloride	Result	680	620	720			
			0	100	mg/L	Magnesium	Result	34	33	35			
			0	0.15	mg/L	Manganese	Result	0.063	0.069	0.06			
			0	40	mg/L	Potassium	Result	23	23	25			
			0	500	mg/L	Sodium	Result	560	560	630			
			0	0.5	mg/L	Soluble Aluminium	Result	1.1	0.5	0.5			
			0	7.5	µg/L	Soluble Iron	Result	1.5	1.4	1.6			
			0	800	mg/L	Sulphate	Result	280	250	260			
			-	-	mg/L	Oil & Grease	Result	10	29	5			
			Laboratory report issue date:							16/02/2023	06/07/2023	06/09/2023	

2023 Comments regarding quarterly groundwater monitoring outcomes

Comment 1:	Arsenic result for DLP7 in Q2 exceeds the trigger value as the lab were unable to obtain an LDR for this sample lower than <0.01 µg/L, due to matrix interference as a result of the high sodium content in the sample.
Comment 2:	
Comment 3:	
Comment 4:	
Comment 5:	
Comment 6:	