ACIRL Pty Ltd ABN 41 000 513 888 Unit 3, 16 Donald street Lithgow, NSW, 2790, Australia Tel: +61 2 6507400



# Analysis and Testing Report Walker Quarries Bi-Annual Groundwater Monitoring, May 2024

Report To: Wayne Chapman

Address: Lot 6 Great Western Highway,

Wallerwang NSW 2845

Walker Quarries

Report On: Bi-Annual Groundwater Monitoring, May

2024

Report No: 2400-7420-05-02 Amended 01

Report Status: Final Report

Date Sampled: 31/05/2024

Unique ID of Sample(s): As per Result tab

Sampled By: B. Collins & C. Bulkeley

Testing & Analysis Requireme Client Instructions

Report Prepared By: Trudie MacPhee

Date Reported: 13/06/2024

Re-issued 17/06/2024

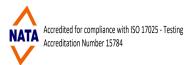
Adriana Hernandez

Environmental Project/Quality Officer -

Lithgow NSW

### These reported results only relate to the items sampled and tested.

Sampling performed by: ACIRL Lithgow NSW NATA Accreditation No. 15784, Site No. 11436 in accordance with AS Standards listed on Page 4.



Reported By:

^.CIRL Lithgow NSW right solutions, BN 66 003 451 876 right partner.



# Analysis and Testing Report-Walker Quarries Bi-Annual Groundwater Monitoring

	Units				
Date of Sample			31/05/2024		
Report No:		2400-7420-05-02 Amended 01			
ALS Sydney Report No.		ES2418246			
Site Reference		GW1	GW2	GW3	
Sampled by		B.Collins & C. Buck			
General Comments/ Observations		31/05/2024	31/05/2024	31/05/2024	
pH Value	pH Unit	7.66	6.91	6.78	
Electrical Conductivity	μS/cm	680	230	234	
Standing Water Level	m	17.03	40.86	40.86	
Total Volume Purged	L	3.0	2.0	2.0	
Alkalinity by PC Titrator					
Hydroxide Alkalinity as CaCO3	mg/L	<1	<1	<1	
Carbonate Alkalinity as CaCO3	mg/L	<1	<1	<1	
Bicarbonate Alkalinity as CaCO3	mg/L	296	83	85	
Total Alkalinity as CaCO3	mg/L	296	83	85	
Chloride by Discrete Analyser					
Chloride	mg/L	20	12	12	
Sulfate (Turbidimetric) as SO4					
Sulfate as SO4 - Turbidimetric	mg/L	43	15	12	
Dissolved Major Cations					
Calcium	mg/L	85	20	20	
Magnesium	mg/L	10	4	4	
Sodium	mg/L	67	27	26	
Potassium	mg/L	6	2	2	
Dissolved Metals by ICP-MS					
Arsenic	mg/L	0.002	<0.001	<0.001	
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	
Chromium	mg/L	0.005	<0.001	<0.001	
Copper	mg/L	0.002	0.003	0.002	
Lead	mg/L	0.003	<0.001	<0.001	
Nickel	mg/L	0.007	0.012	0.009	
Zinc	mg/L	0.439	0.313	0.107	
Dissolved Mercury by FIMS					
Mercury	mg/L	<0.0001	<0.0001	<0.0001	



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### **METHODS OF ANALYSIS**

Tests for results issued in this report have been carried out at the following NATA accredited laboratories in accordance with the methods as detailed below:-

TEST	METHOD	ACIRL Lithgow NATA Accreditation #11436	Measure of Uncertainty
Electrical Conductivity uS/cm	CBM-E006	APHA 2510 B	2.0%
pH value	CBM-E005	APHA 4500 H	0.10 pH Units

The remaining analysis performed at ALS Environmental, 277-289 Woodpark Rd, Smithfield, NSW 2164.

Low yielding bores have been purged to dryness, otherwise bores purged to constant Electrical Conductivity

Report No: 2400-7420-05-02 Amended 01

ALS Sydney Report No. ES2418246

Samples were analysed in accordance with the following Australian Standards or equivalent:

Australian Standards Description

AS/NZS 5667.1 Part 1: Guidance on the design of sampling programs, sampling

techniques and the preservation and handling of samples

ISO 5667-3 Part 3: Preservation and handling of water samples AS/NZS 5667.11 Part 11: Guidance on sampling of ground waters