



**ALS AIRBORNE DUST AND WATER
ANALYSIS AND TESTING REPORT**

REPORT TO: Walker Quarries

REPORT ON: Walker Quarries
Groundwater Sample
Mar-22

REPORT NO: 2400-7253-02

SAMPLED BY: C.Roach & M.Young

REPORTED BY: T.MacPhee

REPORT DATE: 31/03/2022



Accreditation # 15784
Site # 11436

WORLD RECOGNISED
ACCREDITATION

Adriana Hernandez
Environmental Project/Quality Officer– Lithgow NSW

Accredited for compliance with ISO/IEC 17025.

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ANALYSIS AND TESTING REPORT



WALKER QUARRY

	Units			
Date of Sample		Purged 22/03/2022 - Sampled 24/3/2022		
REPORT NO:		2400-7253-02		
ALS Sydney Report No.		ES2210544		
Site Reference		GW1	GW2	GW3
Sampled by		C. Roach & M. Young		
General Comments/ Observations		Slightly cloudy	Slightly cloudy	Slightly cloudy
Standing Water Level	m	79.33	26.22	19.69
Total Volume Purged	L	3.0	4.0	5.0
pH	pH Unit	7.3	6.2	6.6
Electrical Conductivity	µS/cm	503	140	447
Alkalinity by PC Titrator				
Hydroxide Alkalinity as CaCO ₃	mg/L	<1	<1	<1
Carbonate Alkalinity as CaCO ₃	mg/L	<1	<1	<1
Bicarbonate Alkalinity as CaCO ₃	mg/L	279	74	233
Total Alkalinity as CaCO ₃	mg/L	279	74	233
Sulfate (Turbidimetric) as SO ₄				
Sulfate as SO ₄ - Turbidimetric	mg/L	<1	6	36
Chloride by Discrete Analyser				
Chloride	mg/L	15	2	7
Dissolved Major Cations				
Calcium	mg/L	68	12	78
Magnesium	mg/L	5	3	5
Sodium	mg/L	56	17	27
Potassium	mg/L	3	2	4

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Dissolved Metals by ICP-MS				
Arsenic	mg/L	0.009	0.002	0.002
Cadmium	mg/L	<0.0001	0.0	<0.0001
Chromium	mg/L	0.001	0.002	0.004
Copper	mg/L	0.002	0.010	0.011
Lead	mg/L	<0.001	0.001	0.001
Nickel	mg/L	0.002	0.013	0.011
Zinc	mg/L	0.036	0.094	0.159
Dissolved Mercury by FIMS				
Mercury	mg/L	<0.0001	<0.0001	<0.0001
EN055: Ionic Balance				
Total Anions	meq/L	6.00	1.66	5.60
Total Cations	meq/L	6.32	1.64	5.58
Ionic Balance	%	2.6	-	0.20



ALS ANALYSIS AND TESTING REPORT

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

In accordance with "Standard Methods for the Examination of Water & Wastewater" APHA, AWWA, and Water & Wastewater Examination Manual (V. Dean Adams)

Preservation procedures in accordance with AS/NZS 5667/1 when sampled by ACIRL staff unless otherwise stated.

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

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