1510-0011

Charles Sturt University

CLIENT:	Macquarie Gold (Challenger Mines)				
CONTACT:	Brett Hampel/Ramon Atayde				
ADDRESS:	65 Golden Gully Road Cadelong NSW 2729 ABN:				
TELEPHONE:	0407 729 788		E-mail	bwh.business@bigpond.com	

SAMPLE IDENTIFICATION	NATURE OF SAMPLE	DATE SAMPLED	TIME SAMPLED	CONTAINER TYPE	NUMBER OF CONTAINERS
#3 spill way Woodlawn dam	Water	1-10-15	8:50	Plastic/~~glass~~	#1
#spill way Woodlawn dam	Water	1-10-15	8:50	~~Plastic~~/glass	#1

ANALYTES REQUIRED *Complete & tick as required*

Alkalinity, BOD, CN, Ec, pH	Hardness, SAR	TSS, Turbidity	Al, As, B, Cd, Ca, Cr, Co, Cu	Fe, Pb, Mg, Mn, Hg, Mo, Ni, P	K, Se, Na, S, Zn	Oil & Grease	Cl, F							

Pleas supply a brown glass O&G bottle if Oil and grease is required as well as a 1L plastic

	NAME	SIGNATURE	ORGANISATION	DATE	TIME
RELINQUISHED BY:	Melanie Maher	Maher	Challenger mines PTY LTD	1-10-15	9:45
Mode of Transport Include Consignment Note # if applicable	TNT				
RECEIVED BY:					

Charles Sturt University

ENVIRONMENTAL AND ANALYTICAL LABORATORIES

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Macquarie Gold Ltd
c/- 'Willowie' Delegate Road
Bombala NSW 2632
Attention: Mike Walcott

Thursday, October 22, 2015

NATA Accredited Laboratory Number: 9597

LABORATORY ANALYSIS REPORT

Report Number:1510-0011
Page 1 of 3
For all enquiries related to this report please quote document number: 1510-0011

Facility:
Order # Order 071
Sample Type Water
Collected By M Maher
Date Received 06-October-2015

EAL ID	Client ID. / Date/Time sample taken	Test	Result (units)		Method Reference	Limit of Reporting
15Oct-0063	**#3 Goodwin Dam Spillway** 01.10.15 8.50am					
		Alkalinity, Total as CaCO3	**116**	mg/L	APHA 2320 B	2
		Aluminium (acid extractable)	**2.27**	mg/L	APHA 3030 E/3120 B	0.03
		Arsenic (acid extractable)	**<0.02**	mg/L	APHA 3030 E/3120 B	0.02
		Biochemical Oxygen Demand	**3**	mg/L	APHA 5210 B/4500-O G	2
		Boron (acid extractable)	**<0.02**	mg/L	* APHA 3030 E/3120 B	0.02
		Cadmium (acid extractable)	**<0.002**	mg/L	APHA 3030 E/3120 B	0.002
		Calcium (acid extractable)	**46.9**	mg/L	APHA 3030 E/3120 B	0.03
		Chloride	**5.9**	mg/L	APHA 4110 B	0.1
		Chromium (acid extractable)	**0.002**	mg/L	APHA 3030 E/3120 B	0.002
		Cobalt (acid extractable)	**<0.003**	mg/L	* APHA 3030 E/3120 B	0.003
		Copper (acid extractable)	**0.006**	mg/L	APHA 3030 E/3120 B	0.002
		Cyanide	**0.009**	mg/L	* APHA 4500-CN E	0.002
		Conductivity	**432**	µS/cm	APHA 2510 B	1
		Fluoride	**0.3**	mg/L	APHA 4110 B	0.1
		Total Hardness as CaCO3	**172**	mg/L	APHA 2340 B	2
		Iron (acid extractable)	**1.32**	mg/L	APHA 3030 E/3120 B	0.01
		Lead (acid extractable)	**<0.01**	mg/L	APHA 3030 E/3120 B	0.01
		Magnesium (acid extractable)	**13.4**	mg/L	APHA 3030 E/3120 B	0.02
		Manganese (acid extractable)	**0.107**	mg/L	APHA 3030 E/3120 B	0.001
		Mercury	**<0.0001**	mg/L	Analysis by Ecowise, Melbourne (acc no: 992)	
		Molybdenum (acid extractable)	**<0.01**	mg/L	* APHA 3030 E/3120 B	0.01
		Nickel (acid extractable)	**<0.01**	mg/L	APHA 3030 E/3120 B	0.01

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Macquarie Gold Ltd
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Bombala NSW 2632
Attention: Mike Walcott

Thursday, October 22, 2015

NATA Accredited Laboratory Number: 9597

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LABORATORY ANALYSIS REPORT

Report Number:1510-0011
Page 2 of 3
For all enquiries related to this report please quote document number: 1510-0011

Facility: **Order #** Order 071

Sample Type **Collected By** **Date Received**
Water M Maher 06-October-2015

EAL ID	Client ID. / Date/Time sample taken	Test	Result (units)		Method Reference	Limit of Reporting
15Oct-0063	**#3 Goodwin Dam Spillway** 01.10.15 8.50am					
		Oil & Grease	**2**	mg/L	APHA 5520 D	1
		Phosphorus	**0.03**	mg/L	APHA 3030 E/3120 B	0.02
		pH	**8.5**	pH units	APHA 4500-H+ B	
		Potassium (acid extractable)	**2.5**	mg/L	APHA 3030 E/3120 B	0.2
		Sodium Adsorption Ratio	**1**	Ratio	LTM-W-039	
		Selenium (acid extractable)	**<0.02**	mg/L	APHA 3030 E/3120 B	0.02
		Sodium (acid extractable)	**16.3**	mg/L	APHA 3030 E/3120 B	0.05
		Sulphur (acid extractable)	**33.2**	mg/L	* APHA 3030 E/3120 B	0.06
		Total Suspended Solids	**47**	mg/L	APHA 2540 D	2
		Turbidity	**17**	NTU	APHA 2130 B	1
		Zinc (acid extractable)	**0.008**	mg/L	APHA 3030 E/3120 B	0.002

Note:

NATA accreditation not held for tests marked with *

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Sample Type **Collected By** **Date Received**
Water M Maher 06-October-2015

EAL ID	Client ID. Date/Time sample taken	Test	Result (units)	Method Reference	Limit of Reporting

Signed ..... David Wade, Laboratory Manager.

All samples analysed as received.
All soil results are reported on a dry basis.
The EAL takes no responsibility for the end use of results within this report.
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