



SWEP
PTY. LTD.

ABN 26 005 031 569

**ANALYTICAL
LABORATORIES**

Tel: (03) 9701 6007

REPORT ON SAMPLE OF GYPSUM

FILE NO : 2003150162

DATE ISSUED : 18/03/2020

MANNA ENTERPRISES
PO BOX 1775

CLIENT ID : MAN069
PHONE : 08 9316 8020

APPLECROSS, WA 6953

REFERENCE :

REFERENCE ID :

SAMPLE ID : SAMPLE A - GYPSUM

PHONE :

ANALYSIS REQUIRED : Full

DATE RECEIVED : 12/03/2020

ITEMS	ABBREVIATION	UNIT	RESULTS
TOTAL CALCIUM	Ca	%	22.1
TOTAL MAGNESIUM	Mg	%	0.0395
TOTAL SODIUM	Na	%	0.088
TOTAL POTASSIUM	K	%	0.031
TOTAL NITROGEN	N	ppm	<DL
TOTAL PHOSPHORUS	P	ppm	848
TOTAL IRON	Fe	ppm	469
TOTAL MANGANESE	Mn	ppm	3.78
TOTAL ZINC	Zn	ppm	2.28
TOTAL COPPER	Cu	ppm	2.95
TOTAL COBALT	Co	ppm	0.167
TOTAL BORON	B	ppm	6.54
TOTAL SULPHUR	S	%	16.9
TOTAL MOLYBDENUM	Mo	ppm	0.708
CALCIUM CARBONATE	CaCO ₃	%	2.37
	(Calculated from Total Calcium)		
MAGNESIUM CARBONATE	MgCO ₃	%	0.138
	(Calculated from Total Magnesium)		
MATERIAL > 2mm		%	10.3
MATERIAL 1.00 - 2.00 mm		%	4.93
MATERIAL 0.85 - 1.00 mm		%	1.18
MATERIAL 0.30 - 0.85 mm		%	3.99
MATERIAL 0.075 - 0.30 mm		%	23
MATERIAL < 0.075mm		%	56.6
Electrical Conductivity		µS/cm	2230
pH		(1:5 Water)	8.27

ITEMS	ABBREVIATION	UNIT	RESULTS
NEUTRALISING VALUE	NV	%	2.53
EFFECTIVE NEUTRALISING VALUE	ENV	%	2.12
MOISTURE CONTENT	MC	%	5.78
GYPSUM	CA ₂ SO ₄ .2H ₂ O	%	90.9

ITEMS	ANALYTICAL METHODS
TOTAL CALCIUM	HCl Evaporation, ICPAES
TOTAL MAGNESIUM	HCl Evaporation, ICPAES
TOTAL SODIUM	HCl Evaporation, ICPAES
TOTAL POTASSIUM	HCl Evaporation, ICPAES
TOTAL NITROGEN	Dumas method, LECO
TOTAL PHOSPHORUS	HCl Evaporation, ICPAES
TOTAL IRON	HCl Evaporation, ICPAES
TOTAL MANGANESE	HCl Evaporation, ICPAES
TOTAL ZINC	HCl Evaporation, ICPAES
TOTAL COPPER	HCl Evaporation, ICPAES
TOTAL COBALT	HCl Evaporation, ICPAES
TOTAL BORON	HCl Evaporation, ICPAES
TOTAL SULPHUR	HCl Evaporation, ICPAES
TOTAL MOLYBDENUM	HCl Evaporation, ICPAES
CALCIUM CARBONATE	Calculated from Total Calcium
MAGNESIUM CARBONATE	Calculated from Total Magnesium
Electrical Conductivity	Method 3A1, water extract*
pH	Method 4A1, water suspension*
MOISTURE CONTENT	Gravimetric method

* Rayment, G.E. & Lyons, D.J. (2011). Soil Chemical Methods - Australasia. CSIRO Publishing, 150 Oxford Street, Collingwood Vic 3066, Australia.