



TEST PIT/BOREHOLE LOG SOIL

No:

Page: 1 of 1

Client: Tas magnesite
Project: Arthur River
Job No: ARO27
Location: 63/4/11
Date: 19/4/11

Contractor Co: Edrill
Contractor:
Type: Diamond (GA)
Inclination: -8-55
Bearing: 060

Easting:
Northing:
Grid Ref:
Collar RL:
Logged by: GSA Checked by:

Depth (m)	Method	Water	Group Symbol	MATERIAL DESCRIPTION Type, colour, particle size and shape, structure	Moisture	Consistency / Density	In situ Testing	FIELD TESTS & NOTES	Sampling / Run	Lab. Testing
0.00				Brown clays						
0.25				Occasional sub angular to sub-rounded quartz up to 3mm	M	ST MD				
0.50				~90% clay						
0.75				Poorly graded						
1.00				Massive, no visible structure						
1.25				Rare lithics up to 1cm, sub-rounded						
1.50				As above but with many extremely weathered carbonate and schist clasts up to 6cm	M	ST MD				
1.75				Poorly graded						
2.00				No internal structure						
2.25				End of soil log						
2.50				Refer to rock.						

consistency:

VS very soft
S soft
F firm
ST stiff
VST very stiff
H hard

relative density:

VL very loose
L loose
MD medium dense
D dense
VD very dense

moisture:

D Dry
M Moist
W Wet

water:

water level

level risen to

water inflow

notes:

sampling:

Intact sample from core

Intact tube sample

Disturbed sample

WS Water Sample

BS Bulk Sample

AS Auger Sample

soil classification:

soils classified in accordance with AS1728
unless otherwise noted

CORE LOG SHEET

Client: **TAS MAGNESITE**Project: **Arthur River**Location: **AR 027**

LOCATION No.

SHEET 1 OF 5

Position:

Surface RL:

Inclination/Bearing: **5/60**

Processed:

Contractor: **Edrill**Rig Type: **Diamond**

Checked:

Date Started: **6/4/11**Date Completed: **19/4/11**Logged by: **CCA**

Date:

DRILLING

MATERIAL

ADDITIONAL DATA

SCALE (m)	Method	Run	Water	Depth (RL) metres	Graphic Log	Description ROCK TYPE, colour, grain size, structure	Weathering	Estimated Strength	Core Recovery (%)	Defect Spacing (mm)	Samples & Tests	Additional Data Joints, partings, seams, zones and veins Fracture type, orientation, infilling or coating, shape, roughness, other In situ test results	SCALE (m)
				5.65		CARBONATE, pink groundmass, white mottle. Sheared	xw EL		75			Sheared - mainly in lower half	
				6.8		Residual MAGNESITE add residual DOLOMITE, brown/yellow, gravel	xw EL		90			Angular, fine gravels	
				6.9		SCHIST, white/grey poorly organised structure	xw EL		33				
				8.5		FINE GRAVEL, Magnesite, dolomite, schist clasts, quartz crystals brown-white	xw EL		66				
				10.1		SCHIST, clayey brown	xw EL		100			Poorly structured, similar to 0-4.5m of soil log but exhibits shear	
				11.1		SCHIST, red, clayey groundmass	xw EL		100			Decomposing dolomite + dolerite rocks	
				11.5		SCHIST, pink, v. weakly sheared. Laminated pink/white	xw EL		80			Retains some carbonate-like texture	
				12.1		CARBONATE, pink/frag weakly sheared in parts	xw VL		200			Fractures have v. deep red stain SRC 10-12	
				13.0		As above, pink/purple weakly sheared.	xw EL		20			St. Clayey in parts, very broken	
				15.8		SCHIST laminated grey, yellow clayey	xw EL		100				
				16.8		CARBONATE, pink v. broken, clayey in parts	xw EL		75			Variable hardness → harder towards base	
				18.0		DOLOMITE grey, mottled (white)			200			SRC 4-6. Joints heavily Fe-stained.	
				18.6		CARBONATE, pink	xw EL		70			Occasional rocks with H hardness	
				20.0									

See standard sheets for details of abbreviations & basis of descriptions



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CORE LOG SHEET

Client: **TAS MAGNESITE**
 Project: **Arthur River**
 Location: **ARO27**

LOCATION No.

SHEET **2** of **5**

Position: , Surface RL: Inclination/Bearing: **155/60** Processed:
 Contractor: **Edmell** Rig Type: **Diamond** Checked:
 Date Started: **6/4/11** Date Completed: **19/4/11** Logged by: **CCA** Date:

DRILLING				MATERIAL						ADDITIONAL DATA		
SCALE (m)	Method	Run	Water	Depth (RL) metres	Graphic Log	Description ROCK TYPE, colour, grain size, structure	Weathering	Estimated Strength	Core Recovery (%)	Defect Spacing (mm)	Samples & Tests	SCALE (m)
									20 80 100 1000			
				20.0		MAGNESITE, white/yellow sands, brown/purple rock, intermixed	XW EL (EL) (H)		60		Hard rock has v. strong Fe-stain throughout, gossanous v. broken	
				20.5		NO RECOVERY						
				22.0		MAGNESITE, brown/purple, gossanous v. broken	XW H		30		Intensely Fe-stained/replaced	
				22.5		MAGNESITE, orange/dark brown, lightly foliated/sheared	XW EL		40		Highly oxidised parts form hard gravel (dark)	
1				26.5		SCHIST, white/grey, moderately sheared, clayey	XW EL		40			1
				29.4		SCHIST, brown/dark brown. As above	XW EL		25			
				31.0		POOR RECOVERY, Brown muds	XW EL		5		Some angular quartz + carbonate	
				32.5		CARBONATE SCHIST, white/grey, lightly laminated, clayey, sheared	XW EL		25		Sheared, small, fresh magnesite chips at base	
2				34		NO RECOVERY					(Sands + fine gravel)	2
				38.5		RUBBLE, sub-rounded to sub-angular quartz	XW		5		(Sands + fine gravel also, but not captured)	
				41.5		(SCHIST) + MAGNESITE, brown, clayey, partly laminated, lightly sheared	XW EL		65		Appears as less altered magnesite within foliated, brown, shear fabric.	
				45.3		MAGNESITE, pink	MW H		200		Bottom surface bounded by linear vein.	
				45.5		MAGNESITE, white	FR VH		250		Many breaks roughly aligned to	
				48.9								

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CORE LOG SHEET

Client: **TAS MAGNESITE**
 Project: **Arthur River**
 Location: **ARO27**

LOCATION No.

SHEET 3 OF 5

Position: , Surface RL: Inclination/Bearing: **155/60** Processed:
 Contractor: **Edrill** Rig Type: **Diamond** Checked:
 Date Started: **6/4/11** Date Completed: **19/4/11** Logged by: **CCA** Date:

DRILLING			MATERIAL							ADDITIONAL DATA			
SCALE (m)	Method	Run	Water	Depth / (RL) metres	Graphic Log	Description ROCK TYPE, colour, grain size, structure	Weathering	Estimated Strength	Core Recovery (%)	Defect Spacing (mm)	Samples & Tests	SCALE (m)	
								20	80	10	100	1000	
				48.4		MAGNESITE, pink	FR VH			150			JRC 8-10 10-12
				49		MAGNESITE, white	FR VH			300			JRC 8-10 v. slightly pink
				52.1		MAGNESITE, pink	MW H			150			Small cavities at top+bottom
				52.5		NO RECOVERY	REL						
				61.5		MAGNESITE, pink	MW H			90			Running down side of cavity Half core, half cavity
				62.2		NO RECOVERY							
				63		MAGNESITE	MW L			45			Remnant veins, infilled with gravelly muds
				65.2		MAGNESITE, pink/ grey	MW H			100			Fresh centre, highly weathered ends. is vein remnants
				65.9		NO RECOVERY							
				67.0		FAULT GAUGE, brown/grey, clayey	XW EL			25			Shear textured clay, with weathered magnesite/dolomite frags.
				67.6		MAGNESITE, grey to pink	MW H			250			Softens towards base (pink)
				68.3		MAGNESITE, pink	MW EL			20			Highly fractured with ~50% clay
				68.4		CLAY, yellow							
				68.5		MAGNESITE, pink	MW H			100			Limonite coating veins at ends, weathered to clay at extremes
				69.4		NO RECOVERY							
				70.0		MAGNESITE, pink	MW VH			300			
				71.4		FILL, brown, graded, occasional magnetite chips	XW EL			10			Cavity fill
				71.5		MAGNESITE, white	FR VH						Fe-staining on ends.

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CORE LOG SHEET

Client: **TAS MAGNESITE**
 Project: **Arthur River**
 Location: **ARO27**


LOCATION No.

SHEET 5 OF 5

Position: Surface RL: Inclin/Bearing: **1-55/60** Processed:
 Contractor: **Edrill** Rig Type: **Normal** Checked:
 Date Started: **6/4/11** Date Completed: **19/4/11** Logged by: **CCA** Date:

DRILLING			MATERIAL					ADDITIONAL DATA				
SCALE (m)	Method	Run	Water	Depth / (RL) metres	Graphic Log	Description ROCK TYPE, colour, grain size, structure	Weathering	Estimated Strength Core Recovery (%) 20 30 40 50 60 70 80 90 100	Defect Spacing (mm)	Samples & Tests	JOINTS, LITHOLOGY, STRATA, ZONES AND VENTS Fracture type, orientation, infilling or coating, shape, roughness, other Notes, test results	SCALE (m)
76.0						NO RECOVERY,					most likely v. shattered DOLOMITE	
77.9						MAGNESITE, pink	FR VH			200		
78.0						SILTSTONE, grey, v. fine grained, waxy	FR H		10		Waxy Pyrite-rich siltstone within magnesite SRC 12-14	
78.1						MAGNESITE, white	FR VH			300		
98.9						NO RECOVERY						
102.6						MAGNESITE, white	FR VH			500	SRC 10-12	
111.6						TALC, white, powdery	FR		30		Powdery white material within magnesite. Alteration from magnesite SRC 12-14	
112						MAGNESITE, white	FR VH			600	SRC 10-12	
114.9						SILTSTONE, grey/green, very fine, deformed	FR H				Infilling fault zone?	
115.0						MAGNESITE, white	FR VH			600	Some Fractures filled with pyritic siltstone (<5mm)	
117.0						POOR RECOVERY DOLOMITE+magnesian Sands recovered at base						
130.2						MAGNESITE, pink	MW H				Weathering controlled by linear veins	
136.5						MAGNESITE, pink/white	FR VH			400		
135.2						NO RECOVERY						
141.0						MAGNESITE, pink DOLOMITE, grey	MW H			200		
141.7						NO RECOVERY						
144.4						DOLOMITE, grey	FR VH			500		
145.0						MAGNESITE, white	FR VH			500		
146.7						NO RECOVERY					Sands. No material recovered	

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