

Sloane Weldon Pty. Ltd.

Engineering & Groundwater Geologists

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A 19240

43 044

SW Report: 1997/75

**Geotechnical Assessment:
Foundation conditions - foreshore stack
Pasminco Smelters EZ Risdon Plant**

Client: Sinclair Knight Merz Pty. Ltd.

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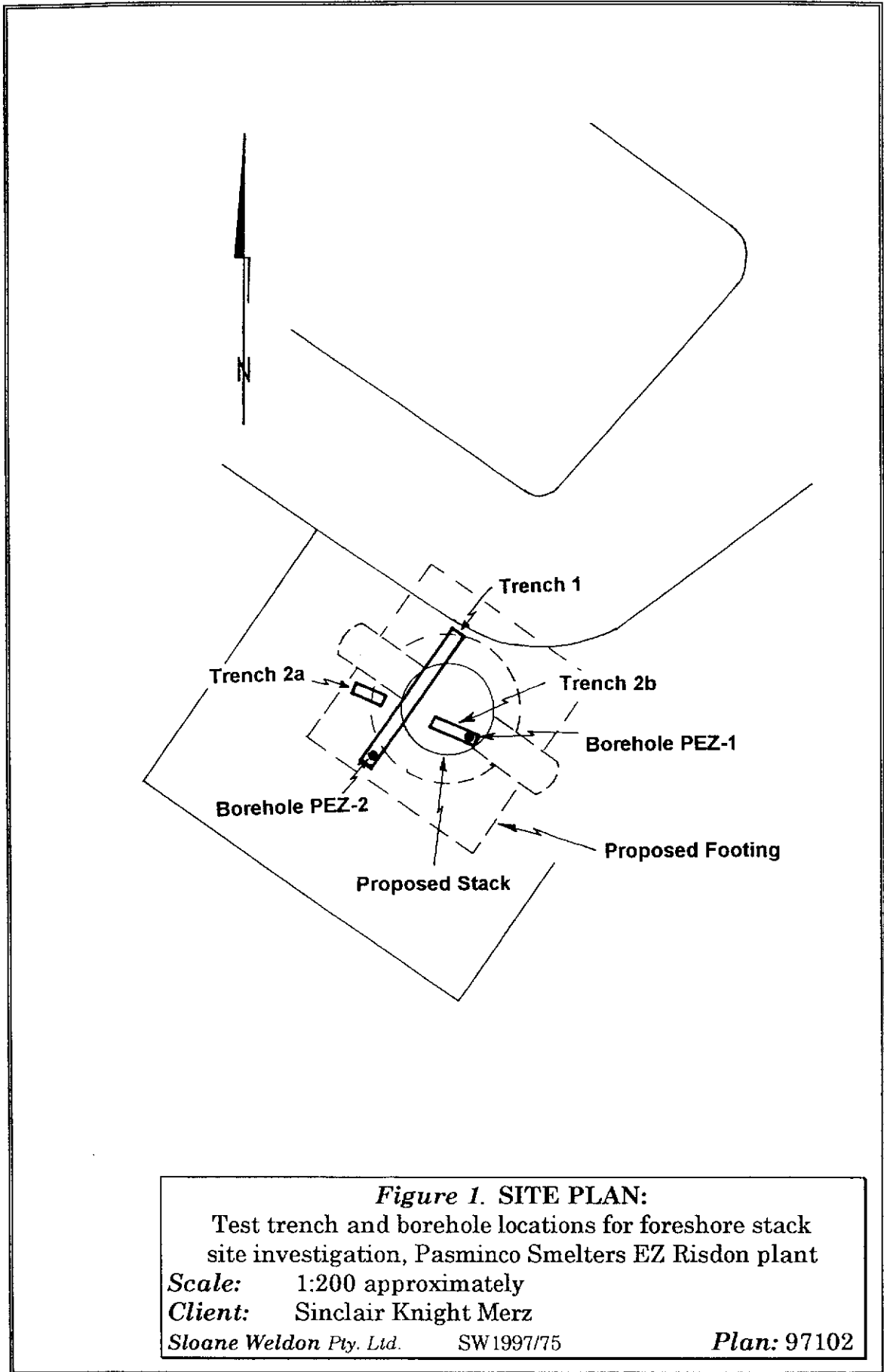


Figure 1. SITE PLAN:
Test trench and borehole locations for foreshore stack site investigation, Pasminco Smelters EZ Risdon plant
Scale: 1:200 approximately
Client: Sinclair Knight Merz
Sloane Weldon Pty. Ltd. SW1997/75 **Plan:** 97102

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ENGINEERING LOG - Cored Borehole

Borehole no.:
PEZ-1
sheet: 1 of 1

Project: **Foreshore Stacks.** E. 525 774
N. 525 7811
Location: **Pasminco - EZ, Risdon.**

Co-ordinates : Refer to Site plan Drill type : Pioneer P160 Hole Commenced : 8/10/97
R.L. : Approx m A.H.D. Drill method : NQ TT Hole Completed : 8/10/97
Inclination : Vertical Drill fluid : Polymer Logged by : BDW
Bearing : Contractor : KMR Drilling Checked by : NJH

Drilling Information				Rock substance				Rock mass defects									
case lift	fluid loss	water	notes	depth metres	graphic log	substance description rock type: grain characteristics; colour; structure and minor components.	weathering	strength					defect spacing mm	defect description			
								EL	V	L	M	H		BT	30	100	300
				1.0													
				1.50													
				1.78		CORE LOSS											
				2.0		DOLERITE: Fine to medium grained; blue-grey with brown staining.	SW										
				2.15													
				2.85													
				3.0													
				3.55													
				3.65													
				3.90			SW										
				4.0													
				4.35			HW										
				4.73		CORE LOSS											
				5.0		DOLERITE: Fine to medium grained; grey-brown to blue-grey	SW										
				5.75			HW										
				5.94		CORE LOSS											
				6.0		DOLERITE: Fine to medium grained; grey-brown to blue-grey	SW										
				6.55													
				7.0													
				8.0													
				9.0													
				10.0													

Joints generally planar, rough surfaces, often iron stained & some with either clay coatings or gypsum crystals; 40-70 degrees form horizontal; iron staining about tight joints up to 2mm wide.

Crystal growth.

Crystal growth & clay lined (2-4mm thick) 60 degree subvertical joints.

REF 19326

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ENGINEERING LOG - Cored Borehole

Borehole no.:
PEZ-2
sheet: 1 of 1

Project: **Foreshore Stacks.** *E.525770*
N.5257810 Location: **Pasminco - EZ, Risdon.**

Co-ordinates : Refer to Site plan Drill type : Pioneer P160 Hole Commenced : 8/10/97
R.L. : Approx m A.H.D. Drill method : NQ TT Hole Completed : 8/10/97
Inclination : Vertical Drill fluid : Polymer Logged by : BDW
Bearing : Contractor : KMR Drilling Checked by : NJH

Drilling Information				Rock substance				Rock mass defects								
case lift	fluid loss	water	notes	depth metres	graphic log	substance description rock type: grain characteristics; colour; structure and minor components.	weathering	strength				defect spacing mm		defect description thickness, type, inclination, planarity, roughness, coating.		
								EL	V	L	H	30	100	300	1000	3000
				1.0												
				1.50												
				1.77		CORE LOSS										
				2.0		DOLERITE: Fine to medium grained; brown-grey-blue.	SW									
				2.15			HW									
				3.0												
				4.0			SW									
				4.35			HW									
				5.10		DOLERITE: Fine to medium grained; brown-grey-blue.	Fr									
				5.80												
				6.0												
				6.25												
				7.0												
				8.0												
				9.0												
				10.0												

Clay lined & iron stained subvertical joints 2.15-2.35m.

Clay coating to 10mm on subvertical joints 4.35-4.95m.

Joints generally planar, rough with iron staining & some with clay coating 1-5mm. Some gypsum crystallisation & white needle like mineral growth. Joints dip at 40-70 degrees to horizontal.

Zeolite lined joints at 60 degrees light planar.

43 047