ARUP Geotechnics

BOREHOLE RECORD

HOLE BH111 | SHEET 1 OF 1

PROJECT South West Arterial

LOGGED BY PBF
DATES 27/7/99

CONTRACTOR SP & KF Christensen Pty Ltd
DRILL MODEL Jacro 350
MOUNTING 4WD Truck

ANGLE Vertical
BEARING
DIAMETER

GROUND LEVEL RL 67.4
EASTING 491 260.7
NORTHING 939 050.9

DRILLING	STRATA				MATERIAL DESCRIPTION	CONDITION		OBSERVATION
SAMPLE, TEST, BIT, SUPPORT, ETC.	R.L. AHD	DEPTH m	GROUP SYMBOL	LEGEND	SOIL TYPE Colour, Plasticity, Grain Size, Minor Components	WATER / MOISTURE	CONSISTENCY: COHESIVE VS S F ST VST H; NON COHESIVE VL L MD D VD	SOIL ORIGIN, STRUCTURE, ETC.
Augering		0	CL		Sandy CLAY (CL): Orange brown, medium plasticity			RESIDUAL
		1			Sandy CLAY / XW SANDSTONE, pale grey			XW SANDSTONE/ XW SILTSTONE
		1.4			weaker band			
		1.5			SILTSTONE: Dark grey to black			
		2						
		2.2			SILTSTONE: Light grey			
		2.5			increasing in strength			
SPT @ 3.0m 30/150mm N=R		3			SILTSTONE: Dark grey			
Wash Boring		3.8						
		4			SANDSTONE: Orange brown			
		4.1			SILTSTONE: Dark grey			
					Start Coring at 4.5m			
		5						
		6						
		7						
		8						
		9						
		10						

NOTES

JOB 11613

FN30.14 October 1994

ARUP Geotechnics — CORED BOREHOLE RECORD

HOLE BH111 | SHEET 1 OF 1

PROJECT South West Arterial

LOGGED BY PBF
DATE/S 27/7/99

CONTRACTOR SP & KF Christensen Pty Ltd | ANGLE Vertical
DRILL MODEL Jacro 350 | BEARING
MOUNTING 4WD Truck | DIAMETER NMLC

GROUND LEVEL RL 67.4
NORTHING 939 050.9
EASTING 491 260.7

DRILLING | STRATA | MATERIAL DESCRIPTION | DISCONTINUITIES

RUN REC. (%)	WATER	SAMPLE TEST	R.L. AHD	DEPTH m	LEGEND	ROCK TYPE Colour, Grain Size, Structure, Minor Components	WEATHERING	ESTIMATED ROCK STRENGTH	FREQUENCY (per mm)	SPECIFIC TYPE	SPECIFIC ANGLE	SPECIFIC THICKNESS (mm)	GENERAL DESCRIPTION Roughness Class, Coating, Infill
				4.6		Start Coring at 4.5m							
100%				4.9		SILTSTONE: Dark grey, very low strength	XW			Cr	–	300	highly fractured zone
				5.5		IRONSTONE: Red brown, low strength SILTSTONE: Dark grey, very low strength, highly fractured				Cr	–	80	highly fractured siltstone
				5.7						Cr	–	90	
				5.8		becoming MUDSTONE				Jo	90	<5	Smooth, veneer clay coating
100%		Is50= 1.10MPa		6.2		Coal band, highly fractured	DW			Jo	75	3	Rough, undulating
				6.4		SANDSTONE: light brown, high strength				Jo	75	3	Smooth, iron stained
				6.5									
				6.7									
				6.85		Coal Band, highly fractured, low strength							
				7.25		MUDSTONE: Dark grey, high strength, with thin interbedded coal seams							
100%		Is50= 0.85MPa		7.55									
				8.1		Coal band, low strength				Jo	0	100	Coal seam
				8.4		MUDSTONE: Dark grey, medium to high strength, highly fractured							
						END BH111 at 8.55m							

NOTES

TYPE OF DISCONTINUITY

Jo	JOINT
Be	BEDDING PLANE PARTING
Fo	FOLIATION PARTING
Cl	CLAY SEAM
We	WEATHERED SEAM
Cr	CRUSHED SEAM
Sh	SHEARED ZONE

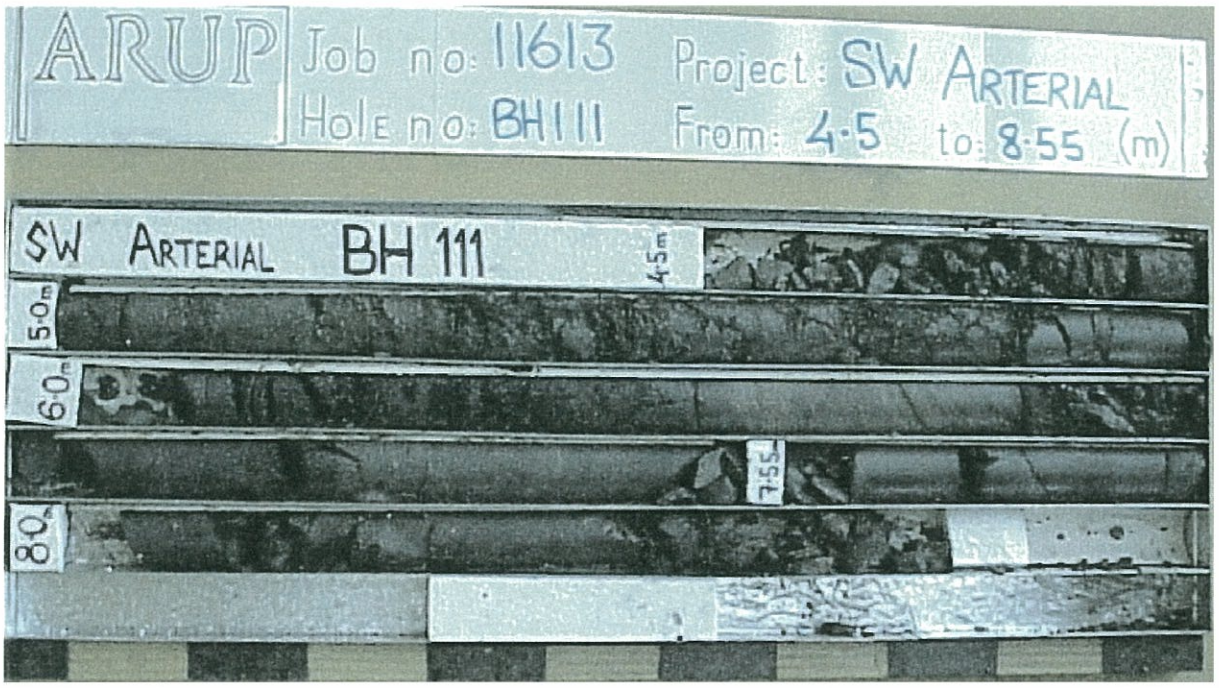
JOB 11613

FN32.14 October 1994

ARUP

SOUTH WEST ARTERIAL

JOB # 11613



BOREHOLE 111

PLATE No. 10