TONKIN & TAYLOR LTD.

028W/0206.

4281

BOREHOLE LOG

BOREHOLE NO: 1

SHEET 1 OF 2

PROJECT: WAIRAU VALLEY

LOCATION: HOLT PROPERTY, POWER STATION 1 SITE

JOB NO: 83228.002

CO-ORDINATES: 5950360 N
2534460 E

RL: EST 295 m

DATUM:

DRILL TYPE: SCHRAMM T64

DRILL METHOD: 125mm CONCENTRIC SYSTEM

DRILL FLUID: AIR FLUSH

HOLE STARTED: 17-12-03

HOLE FINISHED: 17-12-03

DRILLED BY: CW DRILLING

LOGGED BY: NCP CHECKED BY:

DRILLING AND TESTS					ENGINEERING DESCRIPTION							GEOLOGICAL	
WATER	CORE RECOVERY	METHOD/CASING	SAMPLES, TESTS	RL (m) / DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	SOIL NAME, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, SECONDARY AND MINOR COMPONENTS	MOISTURE CONDITION	SHEAR STRENGTH OR RELATIVE DENSITY	ESTIMATED SHEAR STRENGTH, kPa	ORIGIN TYPE, MINERAL COMPOSITION, DETECTS, STRUCTURE	UNIT
			STEEL TOBY IN CONCRETE; DRILL CUTTINGS	1.0		GM	DRILLERS DESCRIPTION: brown, medium coarse gravels, cobbles, some sandy silt matrix (Damp 2.7 - 9.0m)	M			UNDIFFERENTIATED COLLUVIUM AND FAN (u)	
			BE 1.5m	2.0		GM	SILTY GRAVEL, brown silt with minor sand with grey, unweathered and slightly weathered, sub angular and sub rounded, fine, medium and coarse sized, well graded, predominantly greywacke.	M			MATERIAL DESCRIPTIONS BASED ON DRILLERS LOG AND DISTURBED SAMPLES of DRILL CUTTINGS	
			BENTONITE PELLETS; STANDPIPE AS BUILT; 50mm uPVC; 25mm uPVC	3.0; 4.0								
			BE 5.0m; GRAVEL (3-5mm)	5.0; 6.0		GM	SILTY GRAVEL, light brown silt, with minor sand, with dark grey, slightly and moderately weathered, sub angular and sub rounded, fine, medium and coarse sized, well graded, predominantly greywacke	M				
GWL SHALLOW WELL; GWL DEEP WELL 17-12-03			BE 7.5m; BENTONITE PELLETS	7.0; 8.0		GM	SILTY GRAVEL, brown silt and dark grey gravel as per 5.0m with minor clay.	M				
			BE 9.0m	9.0		GM	SILTY GRAVEL, as description at 5.0m					
			BE 9.4m; SPT, 26 26, REF for 80mm	10.0		GM	DRILLERS DESCRIPTION: grey gravels, medium coarse, light brown silt. SILTY GRAVEL, light brown silt with dark grey gravel, minor sand with trace of clay. GRAVEL description as per 5.0m	W			UNDIFFERENTIATED COLLUVIUM AND FAN (u)	

TONKIN & TAYLOR LTD.

BOREHOLE LOG

BOREHOLE NO: 1

SHEET 2 OF 2

PROJECT: Wairau Valley
LOCATION: Holt Property, Power Station 1 Site
JOB NO: 83228.002

CO-ORDINATES: 5950360 N
2534460 E
RL: GST 295m
DATUM:

DRILL TYPE: Schramm T64
DRILL METHOD: 125mm Concentrix System
DRILL FLUID: Air Flush

HOLE STARTED: 17-12-03
HOLE FINISHED: 17-12-03
DRILLED BY: CW Drilling & Investigation
LOGGED BY: NCP
CHECKED BY: [illegible]

DRILLING AND TESTS					ENGINEERING DESCRIPTION						GEOLOGICAL	
WATER	CORE RECOVERY	METHOD/CASING	SAMPLES, TESTS	RL (m) / DEPTH (m)	GRAPHIC LOG	CLASSIFICATION SYMBOL	SOIL NAME, PLASTICITY OR PARTICLE SIZE CHARACTERISTICS, COLOUR, SECONDARY AND MINOR COMPONENTS	MOISTURE CONDITION	SHEAR STRENGTH OR RELATIVE DENSITY	ESTIMATED SHEAR STRENGTH, kPa (10, 25, 50, 100, 200)	ORIGIN TYPE, MINERAL COMPOSITION, DETECTS, STRUCTURE	UNIT
			BC 10.0m; GRAVEL (3-5mm); BC 12.0m; BC 15.2m; BC 15.0m	10.0; 11.0; 12.0; 13.0; 14.0; 15.0; 16.0; 17.0; 18.0; 19.0; 20.0		GM	SILTY GRAVEL, light brown Silt with minor clay, with dark grey, unweathered and slightly weathered, Sub angular and Sub rounded, fine, medium and Coarse Sized, predominantly greywacke gravel.	M-W			UNDIFFERENTIATED Colluvium & Fan (4)	
						GM	SILTY GRAVEL, grey brown Silt with dark grey gravel. Gravel description as per 10.0m, with minor clay.	W				
						GM	DRILLERS DESCRIPTION: grey gravels, medium Coarse, Some Cobbles, light grey Silt	W			UNDIFFERENTIATED Colluvium and Fan (4)	
							SILTY GRAVEL, grey, unweathered and slightly weathered, Sub angular and Sub rounded, fine, medium and Coarse Sized, predominantly greywacke gravel with Silt	W				
							SILTY GRAVEL, dark grey. Gravel description as per 13.2m	W				
							Borehole completed at 15.2m.					