BOREHOLE LOG

Tonkin+Taylor

BOREHOLE No.: BH12

SHEET: 1 OF 4

PROJECT: EEETA
JOB No.: 1097984.1000.2000
LOCATION: Vanuatu Supreme Court

CO-ORDINATES: 168.31933700° (WGS84) -17.73557400°
DIRECTION: 180°
ANGLE FROM HORIZ.: -90°

R.L. GROUND: 73.20m
R.L. COLLAR: 73.20m
DATUM: ELLIPSOID
SURVEY: Map or aerial photograph

DRILLED BY: Jono
LOGGED BY: COCU
CHECKED: CRB
START DATE: 16/02/2026
FINISH DATE: 17/02/2026
CONTRACTOR: Vanuatu Drilling

GEOLOGICAL UNIT	MATERIAL DESCRIPTION (SOIL: Classification, colour, consistency / density, moisture, plasticity; ROCK: Weathering, colour, fabric, name, strength, cementation)	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	ROCK MASS DISCONTINUITIES: Defect Log	Fracture Spacing (mm)	RQD (%)	Description & Additional Observations	Water Level / Fluid Loss (%)	Casing	Installation	Core Box No
Fill	*0.00m:* Coarse GRAVEL; grey and white. Loosely packed, moist. Gravel, Concrete and coral; fill, concrete fragments. [FILL]			HQTT	40		73	0									
	0.10m: Medium to coarse GRAVEL, some sand, trace clay; light brownish white and reddish brown. Loosely packed, moist, poorly graded. Gravel, sub-angular, Coral. [REEF LIMESTONE FORMATION]																
	0.60m: CORE LOSS - Suspect washed out.						72	1									
Reef Limestone Formation	*1.50m:* Fine to coarse GRAVEL, some sand, trace silt; white and brown and black. Medium dense, moist, poorly graded. Gravel, sub-rounded to sub-angular, Coral.			SPT	100	6/5// 3/3/4/4 N=14											
	2.45m: CORE LOSS - Suspect washed out.			HQTT	48		71	2									
	3.00m: Fine to coarse GRAVEL, some sand, trace silt; white, brown and black. Medium dense, moist, poorly graded. Gravel, sub-rounded to sub-angular, Coral.			SPT	100	6/4// 2/3/3/5 N=13											
	3.45m: CORE LOSS - Suspect washed out.						70	3									
	3.60m: Sandy fine to coarse GRAVEL, minor silt; light grey and white. Loosely packed, moist, well graded. Gravel, sub-angular, Coral.			HQTT	86												
	4.05m: Highly weathered, light brownish white, LIMESTONE. Extremely weak, poorly cemented, coarse grained. Recovered as: fine to coarse GRAVEL, some sand; light brownish white. Medium dense, moist, poorly graded. Gravel, sub-angular.			SPT	100	4/2// 4/4/4/4 N=16	69	4									
	5.10m: CORE LOSS - Suspect core bound, washed away weathered tuff. [EFATE PUMICE FORMATION]			HQTT	14		68	5					*5.50 - 13.50m:* Brown silt cuttings				
Efate Pumice Formation	*6.00m:* Completely weathered, brown mixed white, TUFF. Extremely weak. Pumacious. Soil description: SILT, some gravel, minor clay and minor sand; brown mixed white. Stiff, moist, medium plasticity; gravel, fine to coarse, extremely weak, tuff and coral.			SPT	100	1/1// 2/1/3/2 N=8	67	6									Box 0.00-6.80m
	7.00m: Completely weathered, brown, TUFF. Extremely weak. Pumacious. Soil description: SILT, some clay, trace sand; brown. Stiff, moist, high plasticity.			HQTT	100		66	7									
				SPT	100	2/2// 3/2/3/2 N=10							*7.50 - 7.95m:* Atterberg Limits - LL = 115, PL = 86, and PI = 29				
	8.10m: Completely weathered, light brown banded orange and grey, TUFF. Extremely weak. Pumicious. Soil description: sandy SILT; light brown banded orange and grey. Stiff, moist, non-plastic, volcanic flecks. Laminations at 40 to 50 deg; sand, fine to medium.			HQTT	100		65	8					*8.60m:* BF, 50°, PL, SM, Cn				
				SPT	100	3/2// 2/2/2/1 N=7	64	9					*9.00 - 9.45m:* Allophane content - 5 - 7 %				
				HQTT	100												

Water Level / Fluid Loss (%): 25, 50, 75; 17/02/2026 Drilling fluid

COMMENTS: 1. Borehole has downhole geophysics installation. 2. Water circulation maintained after 5 m bgl

Hole Depth 31.5m

Scale 1:50

Rev.: A

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc

BOREHOLE LOG

Tonkin+Taylor

BOREHOLE No.: BH12

SHEET: 2 OF 4

PROJECT: EEETA
JOB No.: 1097984.1000.2000
LOCATION: Vanuatu Supreme Court

CO-ORDINATES: 168.31933700° (WGS84) -17.73557400°
DIRECTION: 180°
ANGLE FROM HORIZ.: -90°

R.L. GROUND: 73.20m
R.L. COLLAR: 73.20m
DATUM: ELLIPSOID
SURVEY: Map or aerial photograph

DRILLED BY: Jono
LOGGED BY: COCU
CHECKED: CRB
START DATE: 16/02/2026
FINISH DATE: 17/02/2026
CONTRACTOR: Vanuatu Drilling

GEOLOGICAL UNIT	MATERIAL DESCRIPTION (SOIL: Classification, colour, consistency / density, moisture, plasticity; ROCK: Weathering, colour, fabric, name, strength, cementation)	Rock Weathering (UW SW MW HW CW RS)	Rock Strength (VS+ S MS W VW EW)	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	ROCK MASS DISCONTINUITIES: Defect Log	Fracture Spacing (mm) (2000 600 200 60 20)	RQD (%)	Description & Additional Observations	Water Level / Fluid Loss (%) (25 50 75)	Casing	Installation	Core Box No
Efate Pumice Formation	[CONT] *8.10m:* Completely weathered, light brown banded orange and grey, TUFF. Extremely weak. Pumicious. Soil description: sandy SILT; light brown banded orange and grey. Stiff, moist, non-plastic, volcanic flecks. Laminations at 40 to 50 deg; sand, fine to medium.			HQTT	100		63						*10.05m:* BF, 40°, PL, SM, Cn				Box 6.80-10.50m
	10.50m: Completely weathered, brownish orange speckled black, TUFF. Extremely weak. Pumacious. Soil description: SILT, some gravel; brownish orange speckled black. Stiff, moist, non-plastic, volcanic flecks. Laminations at 40 to 50 deg; gravel, coarse, angular, Tuff.			SPT	100	2/3// 2/2/3/3 **N=10**	62	11									
	11.40m: Highly weathered, brownish grey speckled black, TUFF. Extremely weak, pumacious with volcanic flecks. Soil description: SILT, some sand and some gravel; brownish grey speckled black. Very stiff to hard, moist, non-plastic; gravel, fine to coarse, very weak, Tuff.			HQTT	100								*11.30m:* BF, 50°, PL, SM, Cn *11.40m:* BF, 50°, PL, SM, Cn				
				SPTC	100	4/5// 5/6/6/8 **N=25** Solid Cone	61	12									
	13.15m: Slightly weathered, grey banded black, TUFF. Very weak, laminations at 10 to 20 deg.			HQTT	100			13				33					
				SPT	100	20/30// for 45mm **N>=50** Solid Cone Bouncing	60										
				HQTT	100	BH12_Triaxial @ 14.11m	59	14				94					Box 10.50-14.40m
	14.60m: Slightly weathered, dark grey banded black, TUFF. Very weak, unwelded, laminations at 10 to 20 deg. Breaks down to silt between fingers.			SPT	100	30/20// for 25mm **N>=50** Solid Cone Bouncing	58	15					*15.20m:* J, 50°, PL, SM, Cn				
	15.30 - 15.80m: Light grey.			HQTT	100		57	16				85	*15.75m:* BF, 15°, PL, SM, Cn *16.10m:* BF, 20°, PL, SM, Cn *16.30m:* J, 70°, PL, SM, Cn				
				SPT	100	40/10// for 5 mm **N>=50** Solid Cone	56	17									
	16.90 - 17.50m: Light grey.			HQTT	100							95					Box 14.40-18.00m
				SPT	100	30/20// for 25mm **N>=50** Solid Cone	55	18									
				HQTT	100		54	19				100					
	19.70 - 20.00m: Light grey.			HQTT	100							100					

COMMENTS: 1. Borehole has downhole geophysics installation. 2. Water circulation maintained after 5 m bgl

Hole Depth 31.5m

Scale 1:50

Rev.: A

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc

BOREHOLE LOG

Tonkin+Taylor

BOREHOLE No.: BH12

SHEET: 3 OF 4

PROJECT: EEETA
JOB No.: 1097984.1000.2000
LOCATION: Vanuatu Supreme Court

CO-ORDINATES: 168.31933700° (WGS84) -17.73557400°
DIRECTION: 180°
ANGLE FROM HORIZ.: -90°

R.L. GROUND: 73.20m
R.L. COLLAR: 73.20m
DATUM: ELLIPSOID
SURVEY: Map or aerial photograph

DRILLED BY: Jono
LOGGED BY: COCU
CHECKED: CRB
START DATE: 16/02/2026
FINISH DATE: 17/02/2026
CONTRACTOR: Vanuatu Drilling

GEOLOGICAL UNIT	MATERIAL DESCRIPTION (SOIL: Classification, colour, consistency / density, moisture, plasticity; ROCK: Weathering, colour, fabric, name, strength, cementation)	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	ROCK MASS DISCONTINUITIES: Defect Log	Fracture Spacing (mm)	RQD (%)	Description & Additional Observations	Water Level / Fluid Loss (%)	Casing	Installation	Core Box No
Efate Pumice Formation	[CONT] *14.60m:* Slightly weathered, dark grey banded black, TUFF. Very weak, unwelded, laminations at 10 to 20 deg. Breaks down to silt between fingers.			HQTT	100		53	20				100					
	21.55 - 22.40m: Light grey.			HQTT	100		52	21				100					
	21.90 - 22.10m: Calcite veins less than 1 mm thick.																Box 18.00-21.90m
	22.70 - 23.20m: Black coarse sand beds, 1 to 5 cm thick.			HQTT	100		51	22									
							50	23				70					
	24.85m: Slightly weathered, light grey banded black, TUFF. Weak, densely welded, fine grained, volcanic flecks. Breaks down to silt between fingers.			HQTT	100	BH12_Triaxial @ 25.08m	49	24				90					
	25.30m: Slightly weathered, dark grey banded black, TUFF. Very weak, unwelded, fine grained, breaks down to silt between fingers.						48	25					*25.00m:* J, 60°, PL, SM, Cn				Box 21.90-25.50m
	26.15m: Slightly weathered, grey mixed red and orange, volcaniclastic BRECCIA. Very weak, fine to coarse grained, volcaniclastic clasts up to 50 mm.			HQTT	100		47	26				100					
	26.30m: Slightly weathered, grey spotted orange and white, TUFF. Weak, moderately welded, fine grained, volcaniclastic clasts up to 20 mm, in bands up to 80 mm thick.																
	27.20m: Slightly weathered, light grey banded black, TUFF. Weak, moderately welded, fine grained, volcaniclastic clasts up to 10 mm. Laminations at 10 degrees. Breaks down to silt between fingers.			HQTT	100		46	27				100					
	28.30 - 29.50m: Dark grey with black bands.						45	28				100					Box 25.50-29.00m
	29.40 - 30.10m: Black and orange coarse sand and pumice bed. 5 cm thick.			HQTT	100	BH12_triaxial @ 29.70m	44	29				93					

COMMENTS: 1. Borehole has downhole geophysics installation. 2. Water circulation maintained after 5 m bgl

Hole Depth 31.5m

Scale 1:50

Rev.: A

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc

BOREHOLE LOG

Tonkin+Taylor

BOREHOLE No.: BH12

SHEET: 4 OF 4

PROJECT: EEETA

JOB No.: 1097984.1000.2000

LOCATION: Vanuatu Supreme Court

CO-ORDINATES: 168.31933700° (WGS84) -17.73557400°

DIRECTION: 180°

ANGLE FROM HORIZ.: -90°

R.L. GROUND: 73.20m

R.L. COLLAR: 73.20m

DATUM: ELLIPSOID

SURVEY: Map or aerial photograph

DRILLED BY: Jono

LOGGED BY: COCU

CHECKED: CRB

START DATE: 16/02/2026

FINISH DATE: 17/02/2026

CONTRACTOR: Vanuatu Drilling

GEOLOGICAL UNIT	MATERIAL DESCRIPTION SOIL: Classification, colour, consistency / density, moisture, plasticity ROCK: Weathering, colour, fabric, name, strength, cementation	Rock Weathering (UW SW MW HW CW DW RS)	Rock Strength (VS+ S MS W VW EW)	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	ROCK MASS DISCONTINUITIES: Defect Log	Fracture Spacing (mm) (2000 600 200 60 20)	RQD (%)	Description & Additional Observations	Water Level / Fluid Loss (%) (25 50 75)	Casing	Installation	Core Box No
Efate Pumice Formation	[CONT] *27.20m:* Slightly weathered, light grey banded black, TUFF. Weak, moderately welded, fine grained, volcaniclastic clasts up to 10 mm. Laminations at 10 degrees. Breaks down to silt between fingers.			HQTT	100		43					100					
	31.00m: Slightly weathered, light grey banded orange, TUFF. Weak, moderately welded, medium grained, breaks down to sand between fingers.						42	31									Box 29.00-31.50m
	31.5m: END OF BOREHOLE						41	32					*31.50m:* Suspected drilling fluid in borehole 24 hours after completion. Groundwater tabe below base of borehole				
							40	33									
							39	34									
							38	35									
							37	36									
							36	37									
							35	38									
							34	39									

COMMENTS: 1. Borehole has downhole geophysics installation. 2. Water circulation maintained after 5 m bgl

Hole Depth 31.5m

Scale 1:50

Rev.: A

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc

CORE PHOTOS

BOREHOLE No.: **BH12**

Hole Location: Vanuatu Supreme Court

PROJECT: EEETA	LOCATION: Port Vila	JOB No.: 1097984.1000.2000
CO-ORDINATES: 168.319337 (WGS84) -17.735573999999996 R.L.: 73.20m DATUM: ELLIPSOID	DRILL TYPE: Trailer rig METHOD: Rotary cored	HOLE STARTED: 16/02/2026 HOLE FINISHED: 17/02/2026 DRILLED BY: Vanuatu Drilling LOGGED BY: COCU CHECKED: CRB



0.00-6.80m



6.80-10.50m

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc

CORE PHOTOS

BOREHOLE No.: **BH12**

Hole Location: Vanuatu Supreme Court

PROJECT: EEETA	LOCATION: Port Vila	JOB No.: 1097984.1000.2000
CO-ORDINATES: 168.319337 (WGS84) -17.735573999999996 R.L.: 73.20m DATUM: ELLIPSOID	DRILL TYPE: Trailer rig METHOD: Rotary cored	HOLE STARTED: 16/02/2026 HOLE FINISHED: 17/02/2026 DRILLED BY: Vanuatu Drilling LOGGED BY: COCU CHECKED: CRB



10.50-14.40m



14.40-18.00m

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc

CORE PHOTOS

BOREHOLE No.: **BH12**

Hole Location: Vanuatu Supreme Court

PROJECT: EEETA	LOCATION: Port Vila	JOB No.: 1097984.1000.2000
CO-ORDINATES: 168.319337 (WGS84) -17.735573999999996 R.L.: 73.20m DATUM: ELLIPSOID	DRILL TYPE: Trailer rig METHOD: Rotary cored	HOLE STARTED: 16/02/2026 HOLE FINISHED: 17/02/2026 DRILLED BY: Vanuatu Drilling LOGGED BY: COCU CHECKED: CRB



18.00-21.90m



21.90-25.50m

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc

CORE PHOTOS

BOREHOLE No.: **BH12**

Hole Location: Vanuatu Supreme Court

PROJECT: EEETA	LOCATION: Port Vila	JOB No.: 1097984.1000.2000
CO-ORDINATES: 168.319337 (WGS84) -17.735573999999996 R.L.: 73.20m DATUM: ELLIPSOID	DRILL TYPE: Trailer rig METHOD: Rotary cored	HOLE STARTED: 16/02/2026 HOLE FINISHED: 17/02/2026 DRILLED BY: Vanuatu Drilling LOGGED BY: COCU CHECKED: CRB



25.50-29.00m



29.00-31.50m

TTNZ_20251211 - GeneralLog - 7/05/2026 3:10:34 pm - Produced with Core-GS by GeRoc