

Appendix 4.2 – Engineering Geological Bore Logs

ENGINEERING GEOLOGICAL BORE LOGS NOS. 1-27 INCLUSIVE

Bore No. 1 (Moe 57)

Location: Landslide No. 15, Trafalgar – Narracan Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.20	Fill, coarse road gravel	Fill	Slipped Childers Formation
0.20-1.25	Firm sandy <u>silty clay</u> , red, brown and grey mottled, moist (near plastic limit), minor fine angular quartz sand, medium to high plasticity.	CH	
0.25-4.60	Stiff, <u>silty clay</u> and fissile, friable <u>clayey silt</u> , pale brown with minor yellow-brown and grey zones, medium to low plasticity, natural moisture content below plastic limit. Dark brown to black <u>carbonaceous seams</u> up to 2 cm thick are present at 3.8 m, 4.0 m and 4.5 m. The original rock fabric and sub-horizontal bedding (containing fossil plant fragments) are still discernible. 100% core recovery was obtained, but the core crumbled on removal from the split tube sampler	CL, CH, ML, MH	In-situ Lower Cretaceous
4.60-6.05	Fissile, friable, hard, <u>clayey silt</u> , pale grey with minor pale brown zones, relatively dry (< plastic limit). Lamellar (< 1 cm), sub-horizontal bedding planes frequently contain fossil plant fragments	MH	
6.05	End of bore		

Notes:

1. Core samples from 0.20-1.25 m, 2.30-2.70 m and 5.30-5.70 m were selected for soil testing.
2. No groundwater encountered during drilling, but after 3 days, slow seepage from unknown depth(s) within the bore produced a water level at 5.85 m from the surface.

Bore No. 2 (Moe 58)

Location: Landslide No. 15, Trafalgar-Narracan Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Fill, coarse road gravel	Fill	Slipped Childers Formation
0.30-5.35	Firm – stiff, sandy <u>silty clay</u> , red brown and grey mottled, sand content decreases with depth, sand is fine grained angular quartz, medium to high plasticity, moisture content near plastic limit	CH	
0.35-6.55	Stiff, <u>fine sandy silty clay</u> and fissile, friable sandy clayey silt, pale brown with minor yellow-brown and grey zones, medium plasticity, moisture content near plastic limit, original rock fabric and sub-horizontal bedding discernible.	CH and MH	In-situ Lower Cretaceous
6.35-7.35	Fissile, friable, hard, <u>fine sandy clayey silt</u> , pale grey with minor pale brown zones, moisture content near plastic limit, lamellar (< 1 cm) sub-horizontal bedding planes frequently containing fossil plant fragments	MH	
7.35	End of bore		

Notes:

1. Core sample from 2.50-3.05 m selected for soil testing
2. Samples from 3.10 m and 5.08 m selected for x-ray analysis
3. Groundwater entered the bore at 4.80 m.

Bore No. 3 (Moe 59)

Location: Landslide No. 10, Trafalgar-Thorpdale Road, near Ryans Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.60	Firm to stiff, <u>silty clay</u> , pale brown moist (near plastic limit); AND, compact, <u>silty fine sand</u> , white moist; AND compact clayey silty sand, pale brown-grey, moist. All have low plasticity.	CL, SM and SC	Slipped (?) Childers Formation
1.60-2.35	Stiff, <u>clay</u> , pale grey, medium to high plasticity, moisture content ~ plastic limit, several thin (<2 mm) black carbonaceous seams are present	CH	
2.35-2.88	Compact, <u>clayey silty fine-medium sand</u> , pale grey and white, saturated occasional rounded quartz gravel particles up to 4 cm across occur.	SC	
2.88-3.72	Very stiff, <u>silty clay</u> , grey, fissured, moisture content near plastic limit, a few thin (<2 mm) carbonaceous seams, samples sheared along planes of preferred weakness due to over-driving the sampler. Slight fine sand content.	CH	
3.72-5.10	Stiff, <u>clayey silty sand</u> , minor gravel content, red-brown and yellow-brown, moisture content near plastic limit, ferruginized seam of coarse sand at 4.60-4.70 m.	SM	
5.10-5.64	Stiff, <u>clayey silt</u> , grey and brown, friable, fossil plant fragments present.	CL	
5.64-6.20	Hard, <u>clayey silt</u> , pale brown and grey, fissile, friable, low moisture content, completely weathered mudstone.	MH	

Notes:

1. Core samples from 1.20-1.60 m, 2.43-3.00 m, 2.90-3.35 m, 4.00-4.50 m and 5.70-6.20 m.
2. Sample from 1.85-3.50 m selected for palynological examination
3. Groundwater encountered at 2.43 m.

Bore No. 4 (Moe 60)

Location: Landslide No. 10, Trafalgar-Thorpdale Road, in farm off Ryans Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.09	Clay topsoil		
0.09-2.30	Firm, <u>clay</u> , chocolate brown, friable, medium to high plasticity, moisture content ~ plastic limit.	CH	Slipped Tertiary Older Volcanics
2.30-4.90	Stiff, <u>clay</u> , yellow brown and grey mottled, medium to high plasticity, moisture content ~ plastic limit, friable sections, original basalt texture discernable in some sections	CH	
4.90-7.10	Firm to stiff, <u>clay</u> , brown, medium to high plasticity, moisture content > plastic limit	MH	
7.10-8.10	Stiff-hard, <u>clay</u> , yellow, brown and grey mottled, medium to high plasticity, moist, friable, original basalt texture is discernable.	CH	
8.10-8.16	Highly weathered basalt.		
8.16	End of bore		

Notes:

1. Core sample from 5.25-5.85 m selected for soil testing
2. The soil has been described as clay, rather than silty or sandy clay because the sand and silt content consists of felspar grains which are completely weathered to clay and therefore allows the soil to behave in a cohesive fashion.
3. Sample from 5.90 m selected for x-ray analysis.
4. Groundwater encountered during drilling, but level not recorded.

Bore No. 4 (Moe 61)

Location: Landslide No. 10, Trafalgar-Thorpdale Road, in farm off Ryans Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.50	Topsoil: dark brown <u>silty clay</u> , friable, moist, occasional angular quartz grains.	CL	Slipped Childers Formation
1.50-2.66	Stiff, <u>silty clay</u> , brown and grey mottled, friable, moist (> plastic limit), occasional limonite nodules up to 1 cm across.	CH	Slipped/In-situ? Tertiary Older Volcanics
2.66-8.67	Firm to stiff, <u>silty clay</u> , brown, grey and yellow showing original basalt texture, sand sized grains of completely weathered feldspar are common, friable, moisture content ~ plastic limit, high plasticity; soft, plastic clay zones occur at 3.45-3.80 m, 6.00-6.30 m and 8.30-8.40 m	CH	
8.67	End of bore		

Notes:

1. Core samples from 2.16-2.66 m, 4.40-4.90 m and 6.80-7.40 m selected for soil testing.
2. The soil has been described as clay rather than sandy clay or clayey sand, because the sand content consists of feldspar grains which are completely weathered to clay and therefore allows the soil to behave like a cohesive soil.
3. Sample from 6.0 m selected for x-ray analysis.
4. Groundwater encountered at 5.11 m. Sample taken for chemical analysis.

Bore No. 6 (Moe 62)

Location: Landslide No. 10, Trafalgar-Thorpdale Road, near Ryans Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.80	Firm-stiff, <u>silty clay</u> , red-brown, high plasticity, moisture content exceeds plastic limit, small percentage of quartz sand, clay appears to be of basaltic origin	CH	Slipped Childers Formation
1.80-5.72	Stiff, <u>clay</u> , grey, yellow-brown and red-brown mottled, medium to high plasticity, small percentage of limonite sand particles, decomposed basalt present, moisture content exceeds plastic limit.	CH	In-situ? Tertiary Older Volcanics
5.72	End of bore		

Notes:

1. Core sample from 4.30-4.90 m selected for soil testing.
2. The soil is described as clay rather than silty sandy clay, because the sand and silt consists of completely weathered felspar which allows the soil to behave in a purely cohesive fashion.
3. Groundwater presence not recorded.

Bore No. 7 (Moe 63)

Location: Landslide No. 9, Narracan Connection Road, 0.5 km west of Narracan

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Topsoil		
0.30-4.85	Stiff, red-brown and minor grey, <u>clay</u> , medium-high plasticity, moisture content exceeds plastic limit, basaltic clay.	CH	Slipped Tertiary Older Volcanics
4.85-5.05	Stiff, mottled red-brown and grey, <u>clay</u> , medium plasticity, high moisture content	CH	
5.05-7.92	Compact, grey and white <u>silty sand</u> , <u>sandy silt</u> and <u>clayey silt</u> , very low plasticity, saturated.	SM and MH	In-situ? Childers Formation
7.92	End of bore		

Notes:

1. Core samples from 4.30-4.85 m, 5.45-6.30 m and 7.00-7.50 m and undisturbed sample from 3.34-3.80 m taken for soil testing.
2. Groundwater encountered at 4.5 m during drilling then rose to a static level of 6.30 m.

Bore No. 8 (Moe 64)

Location: Landslide No. 17, Trafalgar-Coalville Road, adjacent to junction with Narracan-Moe Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Clay topsoil		
0.30-1.60	Firm-stiff, <u>clay</u> , brown, red-brown and yellow mottled, medium to high plasticity, fissured, basaltic clay.	CH	Slipped Tertiary Older Volcanics
1.60-1.90	Stiff, <u>clay</u> , red-brown, high plasticity, basaltic clay.	CH	
1.90	End of bore.		

Notes:

1. Further penetration of augers prevented by basalt floater.
2. Groundwater not encountered during drilling, but rose to 1.0 m next day

Bore No. 9 (Moe 65)

Location: Landslide No. 17, Trafalgar-Coalville Road adjacent to junction with Narracan-Moe Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Clay topsoil	CH	Slipped/in-situ Tertiary Older Volcanics
0.30-6.70	Firm, <u>clay</u> , brown completely weathered basalt showing original rock texture, highly weathered rock kernels varying in size from 1 cm to 10 cm or more are common, moist, medium to high plasticity.		
6.70	End of bore		

Notes:

1. Core sample from 3.35-3.60 m and undisturbed sample from 6.25-6.70 m taken for soil testing
2. Groundwater encountered at 2.8 m, then rose to ground level

Bore No. 10 (Moe 66)

Location: Landslide No. 16, Trafalgar-Coalville Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.85	Firm-stiff, slightly <u>sandy clay</u> , brown, medium plasticity, moisture content ~ plastic limit, angular to subrounded quartz sand.	CL	Slipped? Childers Formation
1.85-3.10	Soft, <u>sandy clay</u> , brown, medium to low plasticity, saturated, angular-rounded quartz sand and rounded quartz gravel up to 2 cm across	CL	
3.10-4.10	Compact, <u>clayey coarse sand</u> , slightly plastic, small percentage of rounded quartz gravel and pebbles up to 5 cm, moist.	SC	
4.10	End of bore.		

Notes:

1. Core sample from 1.65-1.83 m selected for soil testing.
2. Groundwater not encountered

Bore No. 11 (Moe 67)

Location: Landslide No. 16, Trafalgar-Coalville Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.10	Loose, <u>slightly coarse sand</u> , grey, moist, non-plastic	SM	In-situ? Childers Formation
1.10-1.80	Compact, <u>slightly coarse sand</u> , banded brown and yellow-brown, non-plastic	SM	
1.80-2.50	Compact, <u>silty sandy gravel</u> , grey rounded quartz gravel, non-plastic	GM	
2.50-3.38	Compact, <u>clayey sandy gravel</u> , reddish brown, rounded quartz gravel, slight plasticity.	GC	
3.38	End of bore		

Notes:

1. SPT test carried out at 2.5 m(23 blows/0.3 metres)
2. Groundwater encountered at 1.8 m.

Bore No. 12 – not drilled.

Bore No. 13 (Moe 69)

Location: Landslide No. 17, Narracan-Moe Road near junction with Trafalgar-Coalville Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-3.05	Firm, <u>sandy clay</u> , dark red brown, medium plasticity, saturated, sand consists of medium to coarse quartz grains, occasional rounded quartz gravel particles.	CL	Slipped Childers Formation
3.05	End of bore		

Notes:

1. Core sample from 2.50-2.70 m selected for soil testing
2. Groundwater encountered at 3.0 m.

Bore No. 14 (Moe 70)

Location: Landslide No. 9, Narracan Connection Road, 0.5 km west of Narracan

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Brown clay topsoil	CH	Slipped Tertiary Older Volcanics
0.30-4.00	Firm <u>clay</u> , brown & buff speckled, medium to high plasticity, moisture content > plastic limit, occasional limonite nodules and soft black non-organic concretions up to 1 cm across		
4.00-5.45	Stiff to very stiff, <u>silty clay</u> , grading to <u>clayey fine sandy silt</u> with depth, pale grey and minor pale brown, medium to low plasticity, moist	CL and ML	In-situ? Childers Formation
5.45	End of bore		

Notes:

1. Core samples from 3.20-3.35 m and 4.80-5.00 m and undisturbed samples from 4.10-4.55 m and 5.00-5.45 m taken for soil testing.
2. Samples from 3.0 m and 5.0 m selected for x-ray analysis.
3. Groundwater encountered at 1.35 m and settled to a static level of 4.40 m.

Bore No. 15 (Moe 71)

Location: Landslide No. 10, Trafalgar-Thorpdale Road, in farm off Ryans Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-3.95	Soft to firm, <u>clay</u> , brown and grey, original basalt texture clearly evident, medium to high plasticity, saturated, some ferruginized zones and a few limonite coated joints	CH	Slipped Tertiary Older Volcanics
3.95-4.05	Loose, <u>coarse sand</u> , brown, saturated	SW	Slipped? Childers Formation
4.05-4.75	Soft, <u>clayey silt</u> , yellow brown, medium to high plasticity, very moist	MH	
4.75-5.15	Soft, <u>silty clay</u> , grey, medium-high plasticity, very moist, carbonaceous	CH	
5.15-5.90	Firm to stiff, <u>silty clay</u> , grey and brown, medium to low plasticity, finely laminated, fissile, sub-horizontal bedding, moist	CL	In-situ Lower Cretaceous
5.90	End of bore		

Notes:

1. Core samples from 3.05-3.35 m, 4.20-4.50 m and 5.60-5.90 m, and undisturbed sample from 4.50-4.87 m taken for soil testing
2. Sample from 4.50 m selected for x-ray analysis
3. Groundwater at 0.30 m the next day
4. The surface of rupture occurs within and on the clay silt/silty clay strata between 4.05 and 5.15 m

Bore No. 16 (Moe 72)

Location: Landslide No. 10, Trafalgar-Thorpdale Road, in farm off Ryans Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Clay topsoil		
0.30-2.70	Firm, <u>clay</u> , brown and red-brown, medium to high plasticity, moisture content \geq plastic liquid, partly friable, quartz is absent. Striated from 0.30-1.82 m, specked from 1.82-2.70 m.	CH	Slipped Tertiary Older Volcanics
2.70-2.85	Firm, <u>clay</u> topsoil, dark brown.		
2.85-4.10	Firm-stiff, <u>clay</u> , red-brown and grey mottled, medium to high plasticity, moisture content \sim liquid limit, partly friable, quartz grains absent.	CH	In-situ? Tertiary Older Volcanics
4.10-6.07	Stiff, <u>clay</u> , speckled pale brown and grey, medium-high plasticity, moist, friable, basaltic texture present, soft black non-organic concretions up to 2 cm across occur between 5.00 and 6.07 m.		

Notes:

1. Core samples from 1.60-1.82 m and 4.7-4.9 m, and undisturbed samples from 4.10-4.50 m and 5.62-6.07 m taken for soil testing.
2. Sample from 5.0 m selected for x-ray analysis.
3. Groundwater at 2.6 m the next day.

Bore No. 17 (Moe 73)

Location: Landslide No. 9, Narracan Connection Road, 0.5 m west of Narracan

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Brown <u>clay</u> topsoil		Slipped ⁽⁴⁾ Tertiary Older Volcanics
0.30-1.85	Stiff, <u>clay</u> , dark brown, moderately friable, moisture content < plastic limit, plant roots present. Basaltic clay.	CH	
1.85-2.60	Stiff to very stiff, <u>clay</u> , dark brown, moderately friable, moisture content ~ plastic limit. Basaltic clay.	CH	
2.60-7.15	Very stiff, <u>clay</u> , dark red-brown and minor grey, moisture content \geq plastic limit. Basaltic clay.	CH	
7.15	End of bore		

Notes:

1. Core sample from 6.10-6.25 m and undisturbed sample from 4.10-4.55 m taken for soil testing.
2. Sample from 6.40 m selected for x-ray analysis.
3. Groundwater level at 6.10 m at completion of drilling.
4. Confirmed by the detection of quartz in the mineralogical examination.

Bore No. 18 (Moe 74)

Location: Landslide No. 17, Trafalgar-Coalville Road adjacent to junction with Narracan-Moe Road.

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Sandy <u>clay</u> topsoil		Slipped Childers Formation
0.30-2.40	Firm, <u>sandy clay</u> , dark brown, moist, medium plasticity, occasional pieces of weathered basalt up to 2 cm across.	CL	
2.40-5.60	Firm to stiff, <u>clay</u> , brown and grey, medium to high plasticity, moist, occasional pieces of weathered basalt up to 5 cm across and limonite nodules up to 5 mm across.	CH	In-situ? Tertiary Older Volcanics
5.60	End of bore		

Notes:

1. Core samples from 1.68-1.90 m and 3.20-3.35 m, and undisturbed sample from 3.35-3.80 m taken for soil testing.
2. Sample from 2.0 m selected for x-ray analysis.
3. Groundwater level measured at 1.50 m.

Bore No. 19 (Moe 75)

Location: Klevans Landslide: Yarragon-Leongatha Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-0.30	Brown and grey <u>silty clay</u> topsoil with particle of highly weathered mudstone	CL	Slipped Lower Cretaceous
0.30-2.27	Highly weathered brown and grey <u>mudstone</u> with some completely weathered <u>clay</u> zones. The rock core is fragmented. A few fossil plant impressions occur. Limonite stained joints are common.		
2.27	End of bore, further core drilling prevented by highly to moderately weathered rock.		

Notes:

1. Groundwater not encountered.

Bore No. 20 (Moe 76)

Location: Klevans Landslide: Yarragon-Leongatha Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-2.60	Stiff, brown and grey silty <u>clay</u> with up to 30% angular highly weathered mudstone particles mainly of coarse grave size, low plasticity, moisture content < plastic limit	CL	Slipped Lower Cretaceous
2.60-3.05	Highly weathered brown and grey fissile <u>mudstone</u> .		In-situ Lower Cretaceous
3.05	End of bore.		

Notes:

1. Sample from 1.90 m selected for x-ray analysis.
2. Groundwater not encountered.

Bore No. 21 (Moe 77)

Location: Landslide No. 20, Allambee-Thorpdale Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.05	Fill, soil and road gravel	CH	Fill
1.05-6.25	Stiff, <u>clay</u> , pale grey and brown with a few red-brown-yellow and grey mottled zones. Occasional quartz grains up to 3 mm across occur. Carbonaceous zone at 5.35-5.46 m. Lignite filled joints dipping at 35° occur at 5.80 and 6.10 m. Medium to high plasticity. Clay appears to be pure kaolinite.		In-situ? Childers Formation
6.25-6.70	Compact, clayey silty fine sand, pale brown and yellow brown. Moist, medium plasticity.		
6.70	End of bore.		

Notes:

1. Soil core from 3.05-3.35 m and undisturbed samples from 4.87-5.32 m and 6.25-6.70 m taken for soil testing.
2. Sample from 5.35 m selected for x-ray analysis.
3. Sample from 5.32-5.46 m submitted for palynological examination – no spores were found.
4. Groundwater not encountered.

Bore No. 22 (Warragul 14)

Location: Landslide No. 20, Allambee-Thorpdale Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.05	Fill and topsoil		Fill
1.05-5.90	Stiff, <u>clay</u> and <u>silty clay</u> , pale grey, red-brown and yellow-brown mottled. Medium to high plasticity. Occasional grains of quartz sand. Ligonite filled joint dipping at 45° is present at 4.90 m. Moisture content approximately at plastic limit. Fissured. Occasional carbonaceous concretions up to 2 cm across.	CH	In-situ, Childers Formation
5.90-7.70	Compact, <u>silty very fine sand</u> and stiff <u>sandy clayey silt</u> , pale grey and brown mottled, moist, low plasticity.	ML	
7.70-8.67	Compact, <u>silty very fine sand</u> , pale grey. Non plastic, moist.	SM	
8.67	End of bore.		

Notes:

1. Soil core from 4.15-4.30, 6.85-7.15 and 8.67-8.83 m and undisturbed samples from 3.35-3.80 m and 3.80-4.25 m taken for soil testing.
2. Sample from 4.30 m selected for x-ray analysis.
3. Groundwater not encountered.

Bore No. 23 (Warragul 15)

Location: Landslide No. 20, Allambee-Thorpdale Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.73	Fill and clay topsoil		Fill
1.73-8.00	Stiff to very stiff, <u>clay and silty clay</u> , predominantly pale grey with some red-brown, yellow and grey mottled zones, medium to high plasticity, occasional angular quartz grains up to 3 mm across, clay appears to be pure kaolinite, fissured.	CH	In-situ? Childers Formation
8.00-8.67	Compact, <u>clayey sandy silt</u> , pale grey, low plasticity, moist	ML	
8.67-9.80	Compact, <u>silty fine sand</u> , mottled red, brown, yellow & grey, low plasticity, moist	SM	
9.80-10.17	Stiff, <u>sandy silty clay</u> , red, brown and grey, medium plasticity	CL	
10.17	End of bore		

Notes:

1. Soil core from 9.40-9.65 m and undisturbed samples from 2.12-2.57 m and 7.15-7.60 m taken for soil testing.
2. Groundwater not encountered.

Bore No. 24 (Allambee East 5)

Location: Landslide No. 13, Childers Settlement Road, 1½ km W from McDonald's Track

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.05	Fill, soil, sand and rock gravel	SC	Fill
1.05-1.97	Compact <u>sandy clayey silt</u> , brown and grey mottled. Sand consists of sub-rounded quartz grains, predominantly of medium size, but fine and coarse sized sand particles are also present. Medium moisture content.		Slipped Childers Formation
1.97-9.11	Dense, friable <u>clayey silty sand</u> and stiff <u>sandy silty clay</u> , pale brown. Sand consists of angular very fine quartz particles. Occasional rounded quartz particles up to 1 cm across occur. Root veinlets are common. The sandy silty clay is fissured, moist and of medium plasticity.	SC, CL	In-situ Childers Formation
9.11	End of bore.		

Notes:

1. Soil cores from 1.20-1.45 m and 6.25-.55 m and undisturbed sample from 8.67-9.11 m taken for soil testing.
2. Sample from 3.00 m selected for x-ray analysis.
3. Static groundwater at ground level.

Bore No. 25 (Allambee East 6)

Location: Landslide No. 7, Mirboo-Yarragon Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.05	Fill, soil and road gravel		In-situ/Slipped Lower Cretaceous
1.05-1.82	Firm, <u>silty clay</u> , brown, minor very fine sand content. Medium to low plasticity, natural moisture content \geq plastic limit	CL	
1.82-2.30	Stiff, <u>silty clay</u> , dark grey and brown, minor fine sand content. Some carbonaceous matter present. Medium plasticity. Natural moisture content \sim plastic limit.	CL	
2.30-4.10	Stiff, <u>silty clay</u> , brown, minor fine sand content. Medium plasticity. Natural moisture content \sim plastic limit.	CL	
4.10-5.70	Firm-stiff, <u>silty, sandy clay</u> , brown & grey. Friable in parts. Sand content is very fine to fine grained. Moist, medium plasticity.	CL	
5.70-6.25	Completely weathered <u>mudstone</u> . Pale brown & grey, fragmented. Fossil plant fragments common.		
6.25	End of bore.		

Notes:

1. Soil core from 1.65-1.82 m and undisturbed sample from 4.10-4.55 m taken for soil testing.
2. Groundwater level recorded at 1.50 m. Sample taken for chemical analysis.

Bore No.26 (Allambee East 7)

Location: Landslide No. 7, Mirboo-Yarragon Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-1.05	Fill; soil and road gravel		Fill
1.05-4.57	Very compact, friable, silty very fine sand and silty fine sand, pale brown and grey, low plasticity. Relatively dry (< plastic limit). Limonite stained in places especially on discontinuities. Minor clay content (<10%). Lamellar (<1 cm) sub-horizontal bedding plane are common.	SM	In-situ? Lower Cretaceous
4.57	End of bore		

Notes:

1. Core samples from 1.15-1.40 m and 2.57-2.82 m were selected for soil testing.
2. Groundwater not encountered.

Bore No. 27 (Allambee East, 8)

Location: Landslide No. 7, Mirboo-Yarragon Road

Depth below surface in metres	Soil Description	Unified soil Classification	Stratigraphy
0-2.50	Fill, compact clay, sand and crushed rock		Fill
2.50-4.10	Stiff <u>silty clay</u> and friable <u>clayey silt</u> , containing angular pieces of highly weathered siltstone, brown, some ferruginised zones, low plasticity, moist	CL and MH	Slipped Lower Cretaceous
4.10-6.40	Fissile, friable, hard, <u>clayey silt</u> , pale grey and brown, relatively dry (<plastic limit). Lamellar (<1 cm) of sub-horizontal bedding planes	ML	In-situ Lower Cretaceous
6.40	End of bore.		

Notes:

1. Core samples from 4.87-5.12 and 6.25-6.50 m, selected for soil testing.
2. Sample from 5.62 m selected for x-ray analysis.
3. Groundwater not encountered.