SOIL LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation	JOB NO : QB10200.4	PAGE : 1 OF 8
POSITION : E: 470430, N: 6949721 (56 MGA94)	SURFACE ELEVATION : 57.9 (AHD)	LOCATION : Brisbane Valley Hwy
RIG TYPE : Hydrapower Scout	CONTRACTOR : GeoDrill - T Partleton	DIP / AZIMUTH : 90°
DATE DRILLED : 12/5/11 to 12/5/11	LOGGED BY : LN CHECKED BY : VP	STANDARD : AS1736

DRILLING & WATER DETAIL	LAB DATA: Moisture Content	Dry Density	% Fines	Atterberg Limits	SAMPLES & SPT DATA	RL (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION (Soil Type, Colour, Plasticity or Particle Characteristic; Secondary and Minor Components)	MOISTURE	CONSISTENCY / RELATIVE DENSITY (S / L, F / MD, St / D, VSt / VD)	COMMENTS (Field Test Data & Other Observations)
					D				CLAY - sandy gravelly CLAY, high plasticity, orange brown in colour, some fine to coarse sand and gravel, moist, soft to firm.	M		0.00: FILL
						57.4	0.5					
					0.60m D				0.60m CLAY - sandy CLAY, high plasticity, orange brown, some fine to coarse sand, moist, soft to firm.	M		0.60: FILL
					0.80m							
					1.00m SPT 1, 2, 4 N=6	56.9	1.0		1.00m CLAY - high plasticity, red brown in colour, moist, firm.	M		1.00: NATURAL
					1.45m							
						56.4	1.5					
Groundwater					2.00m SPT U 3, 5, 7 N=12	55.9	2.0		2.00m CLAY - sandy CLAY, high plasticity, red brown mottled grey, some fine to medium sand, moist, stiff.			
					2.45m							
					2.50m	55.4	2.5			M		
					3.00m SPT 3, 6, 9 N=15	54.9	3.0		3.00m CLAY - silty sandy CLAY, high plasticity, dark red brown in colour, some fine to medium sand, moist, very stiff.	M		
					3.45m							

DRILLING

HA	Hand Auger	HQ	HQ Coring
AS	Auger	NQ	NQ Coring
WB	Washbore	PQ	PQ Coring
RR	Rock Rolling		NMLC NMLC Coring

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

SAMPLES & FIELD TESTS

D	Disturbed Sample	SPT	SPT Sample
ES	Env Soil Sample	U	Undisturbed Tube Sample
EW	Env Water Sample	W	Water Sample

HP Hand Penetrometer
HV Hand Vane Shear
(P: Peak Su R: Residual Su)
N SPT blows per 300mm
HW SPT penetration by hammer weight
RW SPT penetration by rod weight

MOISTURE CONDITION
D = Dry M = Moist W = Wet

DENSITY (N-value)

VL	Very Loose	0 - 4
L	Loose	4 - 10
MD	Medium Dense	10 - 30
D	Dense	30 - 50
VD	Very Dense	50 - 100
CO	Compact	>50/150mm

CONSISTENCY (Su) {N-value}

VS	Very Soft	< 12 kPa {0-2}
S	Soft	12 - 25 {2-4}
F	Firm	25 - 50 {4-8}
St	Stiff	50 - 100 {8-15}
VSt	Very Stiff	100 - 200 {15-30}
H	Hard	> 200 kPa {>30}

SKM AGS REV02.1 (WORKIN-BRISBANE).GLB Log SKM SOIL LOG BRISBANE VALLEY GRADE SEPARATION TP,AH AND BH LOGS.GPJ <<DrawingFile>> 29/11/2011 11:00

SOIL LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation	JOB NO : QB10200.4	PAGE : 2 OF 8
POSITION : E: 470430, N: 6949721 (56 MGA94)	SURFACE ELEVATION : 57.9 (AHD)	LOCATION : Brisbane Valley Hwy
RIG TYPE : Hydrapower Scout	CONTRACTOR : GeoDrill - T Partleton	DIP / AZIMUTH : 90°
DATE DRILLED : 12/5/11 to 12/5/11	LOGGED BY : LN CHECKED BY : VP	STANDARD : AS1736

DRILLING & WATER DETAIL	LAB DATA: Moisture Content	Dry Density	% Fines	Atterberg Limits	SAMPLES & SPT DATA	RL (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION Soil Type, Colour, Plasticity or Particle Characteristic Secondary and Minor Components	MOISTURE	CONSISTENCY / RELATIVE DENSITY (S / L, F / MD, St / D, VSt / VD)	COMMENTS Field Test Data & Other Observations
Groundwater									CLAY - silty sandy CLAY, high plasticity, dark red brown in colour, some fine to medium sand, moist, very stiff. *(continued)*	M		
									3.80m			
					4.00m SPT 6, 7, 9 N=16	53.9	4.0		SILT - sandy gravelly SILT, high plasticity, orange with some grey layering, fine to coarse sand. Layers of extremely weathered and extremely low strength dark red brown ironstone gravel, moist, stiff.			
					4.45m	53.4	4.5			M		
					5.00m SPT 6, 8, 15 N=23	52.9	5.0		5.00m SILT - sandy SILT, high plasticity fines, orange mottled grey, fine to coarse sand, trace of weathered medium gravel, moist, very stiff.			
					5.45m	52.4	5.5			M		
									5.80m IRONSTONE - extremely low strength and extremely weathered, dark red brown, moist, medium density.	M		
					6.00m SPT 15, 11, 12 N=23	51.9	6.0		6.10m SILT - high plasticity fines, grey mottled orange, moist, very stiff.			
					6.45m	51.4	6.5			M		
									6.80m IRONSTONE - extremely weathered and extremely low strength, dark red brown, fine to coarse in size, moist, medium dense.	M		
					7.00m							

DRILLING

HA	Hand Auger	HQ	HQ Coring
AS	Auger	NQ	NQ Coring
WB	Washbore	PQ	PQ Coring
RR	Rock Rolling		NMLC NMLC Coring

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

SAMPLES & FIELD TESTS

D	Disturbed Sample	SPT	SPT Sample
ES	Env Soil Sample	U	Undisturbed Tube Sample
EW	Env Water Sample	W	Water Sample

HP Hand Penetrometer
HV Hand Vane Shear
(P: Peak Su R: Residual Su)
N SPT blows per 300mm
HW SPT penetration by hammer weight
RW SPT penetration by rod weight

MOISTURE CONDITION
D = Dry M = Moist W = Wet

DENSITY (N-value)

VL	Very Loose	0 - 4
L	Loose	4 - 10
MD	Medium Dense	10 - 30
D	Dense	30 - 50
VD	Very Dense	50 - 100
CO	Compact	>50/150mm

CONSISTENCY (Su) {N-value}

VS	Very Soft	< 12 kPa {0-2}
S	Soft	12 - 25 {2-4}
F	Firm	25 - 50 {4-8}
St	Stiff	50 - 100 {8-15}
VSt	Very Stiff	100 - 200 {15-30}
H	Hard	> 200 kPa {>30}

SOIL LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation | JOB NO : QB10200.4 | PAGE : 3 OF 8

POSITION : E: 470430, N: 6949721 (56 MGA94) | SURFACE ELEVATION : 57.9 (AHD) | LOCATION : Brisbane Valley Hwy

RIG TYPE : Hydrapower Scout | CONTRACTOR : GeoDrill - T Partleton | DIP / AZIMUTH : 90°

DATE DRILLED : 12/5/11 to 12/5/11 | LOGGED BY : LN | CHECKED BY : VP | STANDARD : AS1736

DRILLING & WATER DETAIL	LAB DATA: Moisture Content	Dry Density	% Fines	Atterberg Limits	SAMPLES & SPT DATA	RL (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION (Soil Type, Colour, Plasticity or Particle Characteristic; Secondary and Minor Components)	MOISTURE	CONSISTENCY / RELATIVE DENSITY	COMMENTS (Field Test Data & Other Observations)
					SPT 17, 10, 12 N=22				IRONSTONE - extremely weathered and extremely low strength, dark red brown, fine to coarse in size, moist, medium dense. *(continued)*	M		
									7.20m			
									SILT -sandy SILT, high plasticity fines, grey mottled orange, fine to coarse sand, moist, hard.			
					7.45m	50.4	7.5			M		
					8.00m	49.9	8.0		8.00m			
					SPT 13, 30/120mm N=R				SILT - sandy SILT, high plasticity fines, grey mottled orange, fine to coarse sand, moist, hard.			
					8.27m					M		
						49.4	8.5					
									8.80m			
									IRONSTONE - extremely weathered and extremely low strength, dark red brown, fine to coarse in size, moist, medium dense.	M		
									8.90m			
									SILT - high plasticity fines, grey mottled orange, moist, hard.			
					9.00m	48.9	9.0					
					SPT 21, 30/110mm N=R							
					9.26m					M		
						48.4	9.5					
					10.00m	47.9	10.0		10.00m			
					SPT 11, 26, 28 N=54				SILT -high plasticity fines, grey with some orange fissuring, moist, hard.			
										M		
					10.45m							

Groundwater

SKM AGS REV02.1 (WORKIN-BRISBANE).GLB Log SKM SOIL LOG BRISBANE VALLEY GRADE SEPARATION TP,AH AND BH LOGS.GPJ <<DrawingFile>> 29/11/2011 11:00

DRILLING

HA	Hand Auger	HQ	HQ Coring
AS	Auger	NQ	NQ Coring
WB	Washbore	PQ	PQ Coring
RR	Rock Rolling		NMLC NMLC Coring

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

SAMPLES & FIELD TESTS

D	Disturbed Sample	SPT	SPT Sample
ES	Env Soil Sample	U	Undisturbed Tube Sample
EW	Env Water Sample	W	Water Sample

HP Hand Penetrometer
HV Hand Vane Shear
(P: Peak Su R: Residual Su)
N SPT blows per 300mm
HW SPT penetration by hammer weight
RW SPT penetration by rod weight

MOISTURE CONDITION
D = Dry M = Moist W = Wet

DENSITY (N-value)

VL	Very Loose	0 - 4
L	Loose	4 - 10
MD	Medium Dense	10 - 30
D	Dense	30 - 50
VD	Very Dense	50 - 100
CO	Compact	>50/150mm

CONSISTENCY (Su) {N-value}

VS	Very Soft	< 12 kPa {0-2}
S	Soft	12 - 25 {2-4}
F	Firm	25 - 50 {4-8}
St	Stiff	50 - 100 {8-15}
VSt	Very Stiff	100 - 200 {15-30}
H	Hard	> 200 kPa {>30}

SOIL LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation | JOB NO : QB10200.4 | PAGE : 4 OF 8

POSITION : E: 470430, N: 6949721 (56 MGA94) | SURFACE ELEVATION : 57.9 (AHD) | LOCATION : Brisbane Valley Hwy

RIG TYPE : Hydrapower Scout | CONTRACTOR : GeoDrill - T Partleton | DIP / AZIMUTH : 90°

DATE DRILLED : 12/5/11 to 12/5/11 | LOGGED BY : LN | CHECKED BY : VP | STANDARD : AS1736

DRILLING & WATER DETAIL	LAB DATA: Moisture Content	Dry Density	% Fines	Atterberg Limits	SAMPLES & SPT DATA	RL (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION (Soil Type, Colour, Plasticity or Particle Characteristic, Secondary and Minor Components)	MOISTURE	CONSISTENCY / RELATIVE DENSITY (S / L, F / MD, St / D, VSt / VD)	COMMENTS (Field Test Data & Other Observations)
									SILT -high plasticity fines, grey with some orange fissuring, moist, hard. *(continued)*			
										M		
					11.00m				11.00m			
					SPT 11, 18, 20 N=38	46.9	11.0		SILT - high plasticity fines, grey mottled orange, trace of fine to medium gravel, moist, hard.			
					11.45m							
						46.4	11.5			M		
					12.00m				12.00m			
					SPT 18, 30/85mm N=R	45.9	12.0		SILT -sandy SILT, high plasticity fines, grey, fine to coarse sand, moist, hard.			
					12.24m							
						45.4	12.5			M		
					13.00m				13.00m			
					SPT 30/140mm N=R	44.9	13.0		SILT - sandy SILT, high plasticity fines, grey mottled orange, fine to coarse sand, moist, hard.			
					13.14m							
						44.4	13.5			M		
					14.00m				14.00m			

Groundwater

SKM AGS REV02.1 (WORKIN-BRISBANE).GLB Log SKM SOIL LOG BRISBANE VALLEY GRADE SEPARATION TP,AH AND BH LOGS.GPJ <<DrawingFile>> 29/11/2011 11:00

DRILLING

HA	Hand Auger	HQ	HQ Coring
AS	Auger	NQ	NQ Coring
WB	Washbore	PQ	PQ Coring
RR	Rock Rolling		NMLC NMLC Coring

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

SAMPLES & FIELD TESTS

D	Disturbed Sample	SPT	SPT Sample
ES	Env Soil Sample	U	Undisturbed Tube Sample
EW	Env Water Sample	W	Water Sample

HP Hand Penetrometer
HV Hand Vane Shear
(P: Peak Su R: Residual Su)
N SPT blows per 300mm
HW SPT penetration by hammer weight
RW SPT penetration by rod weight

MOISTURE CONDITION
D = Dry M = Moist W = Wet

DENSITY (N-value)

VL	Very Loose	0 - 4
L	Loose	4 - 10
MD	Medium Dense	10 - 30
D	Dense	30 - 50
VD	Very Dense	50 - 100
CO	Compact	>50/150mm

CONSISTENCY (Su) {N-value}

VS	Very Soft	< 12 kPa	{0-2}
S	Soft	12 - 25	{2-4}
F	Firm	25 - 50	{4-8}
St	Stiff	50 - 100	{8-15}
VSt	Very Stiff	100 - 200	{15-30}
H	Hard	> 200 kPa	{>30}

SOIL LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation | JOB NO : QB10200.4 | PAGE : 5 OF 8

POSITION : E: 470430, N: 6949721 (56 MGA94) | SURFACE ELEVATION : 57.9 (AHD) | LOCATION : Brisbane Valley Hwy

RIG TYPE : Hydrapower Scout | CONTRACTOR : GeoDrill - T Partleton | DIP / AZIMUTH : 90°

DATE DRILLED : 12/5/11 to 12/5/11 | LOGGED BY : LN | CHECKED BY : VP | STANDARD : AS1736

DRILLING & WATER DETAIL	LAB DATA: Moisture Content	LAB DATA: Dry Density	LAB DATA: % Fines	LAB DATA: Atterberg Limits	SAMPLES & SPT DATA	RL (m)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION Soil Type, Colour, Plasticity or Particle Characteristic Secondary and Minor Components	MOISTURE	CONSISTENCY / RELATIVE DENSITY: S / L	F / MD	St / D	VSt / VD	COMMENTS Field Test Data & Other Observations
					SPT 30, 0 N=R 14.40m				SILT - sandy SILT, high plasticity fines, grey to dark grey, fine to coarse sand, moist, hard. 14.50m	M					
						43.4	14.5		Continued as Cored Borehole						
						42.9	15.0								
						42.4	15.5								
						41.9	16.0								
						41.4	16.5								
						40.9	17.0								

DRILLING

HA	Hand Auger	HQ	HQ Coring
AS	Auger	NQ	NQ Coring
WB	Washbore	PQ	PQ Coring
RR	Rock Rolling		NMLC NMLC Coring

GROUNDWATER SYMBOLS
= Water level (static)
= Water level (during drilling)

SAMPLES & FIELD TESTS

D	Disturbed Sample	SPT	SPT Sample
ES	Env Soil Sample	U	Undisturbed Tube Sample
EW	Env Water Sample	W	Water Sample

HP Hand Penetrometer
HV Hand Vane Shear
(P: Peak Su R: Residual Su)
N SPT blows per 300mm
HW SPT penetration by hammer weight
RW SPT penetration by rod weight

MOISTURE CONDITION
D = Dry M = Moist W = Wet

DENSITY (N-value)

VL	Very Loose	0 - 4
L	Loose	4 - 10
MD	Medium Dense	10 - 30
D	Dense	30 - 50
VD	Very Dense	50 - 100
CO	Compact	>50/150mm

CONSISTENCY (Su) {N-value}

VS	Very Soft	< 12 kPa {0-2}
S	Soft	12 - 25 {2-4}
F	Firm	25 - 50 {4-8}
St	Stiff	50 - 100 {8-15}
VSt	Very Stiff	100 - 200 {15-30}
H	Hard	> 200 kPa {>30}

SKM AGS REV02.1 (WORKIN-BRISBANE).GLB Log SKM SOIL LOG BRISBANE VALLEY GRADE SEPARATION TP,AH AND BH LOGS.GPJ <<DrawingFile>> 29/11/2011 11:00

ROCK LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation	JOB NO : QB10200.4	PAGE : 6 OF 8
POSITION : E: 470430, N: 6949721 (56 MGA94)	SURFACE ELEVATION : 57.9 (AHD)	LOCATION : Brisbane Valley Hwy
RIG TYPE : Hydrapower Scout	CONTRACTOR : GeoDrill - T Partleton	DIP / AZIMUTH : 90°
DATE DRILLED : 12/5/11 to 12/5/11	LOGGED BY : LN CHECKED BY : VP	STANDARD : AS1736

DRILLING			MATERIAL					DEFECTS & COMMENTS		
DRILLING & WATER DETAIL	TCR/RQD DRILL DEPTH	FIELD TESTS	RL (m)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness alteration, cementation, etc as applicable)	Weathering	ESTIMATED STRENGTH Is(50) ● - Axial ○ - Diametral (EL -0.03, VL -0.1, L -0.3, M -1, H -3, VH -10, EH)	DEFECT SPACING (mm) (20, 60, 200, 600, 2000)	COMMENTS Description of joints, seams, defects, additional observations and comments	INSTALLATION DETAIL
						START CORING AT 14.50m					
		14.53m	43.4	14.5		SILTSTONE- fine to medium grain, faintly layered, grey, low strength, slightly weathered,	SW			14.50: ROCK	
		14.67m									
		15.00m	42.9	15.0							
		D-DS 17									
		15.20m									
		15.52m	42.4	15.5		SILTSTONE - fine to medium sand, faintly layered, grey, low strength, slightly weathered.					
Run 1	100% TCR 91% RQD	15.64m									
			41.9	16.0			SW				
						SANDSTONE -massive, medium sand, orange brown, very low strength, moderately to highly weathered.	SW				
			41.4	16.5			MW - HW				
						SILTSTONE - fine to medium grain, faintly layered, grey, low strength, slightly weathered.	SW				
		16.80				SANDSTONE - massive, medium sand, orange brown, very low strength, moderately to highly weathered.	MW - HW				
						SANDSTONE - massive, fine to medium sand, grey, high srtength, slightly weathered.	SW				
Run 2	100% TCR 85% RQD		40.9	17.0							
		17.20				SANDSTONE - massive, coarse sand, orange streaked grey, low to medium strength, moderately to highly weathered. Open irregular fractures @ 17.84 - 18.20 m.	MW - HW				
	100% TCR 74% RQD										

DRILLING

NMLC NMLC Coring
NQ NQ Coring
HQ HQ Coring
PQ PQ Coring

TCR % core run recovered
RQD % core run > 100mm long (rock fraction only measured)

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

SAMPLES & FIELD TESTS

D Disturbed Sample
W Water Sample
SPT SPT Sample
U Undisturbed Tube Sample
ES Env Soil Sample
EW Env Water Sample

PHOTOGRAPHS NOTES ☐ YES ☒ NO

DEFECT ABBREVIATIONS

CS Crushed Seam
CZ Crushed Zone
DB Drill Break
FZ Fractured Zone
JT Joint
IS Infilled Seam
SZ Shear Zone
VN Vein
CN Clean
CT Coating
SN Stain
VR Veneer
POL Polished
RF Rough
S Smooth
SL Slickensided
Cu Curved
IR Irregular
PR Planar
ST Stepped
Un Undulated

ROCK STRENGTH (Is50 MPa)

0-0.03	Extremely Low
0.03-0.1	Very Low
0.1-0.3	Low
0.3-1.0	Medium
1.0-3.0	High
3.0-10	Very High

SKM AGS REV02.1 (WORKIN-BRISBANE).GLB Log SKM ROCK(BRISBANE) BRISBANE VALLEY GRADE SEPARATION TP,AH AND BH LOGS.GPJ <<DrawingFile>> 29/11/2011 11:06

ROCK LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation	JOB NO : QB10200.4	PAGE : 7 OF 8
POSITION : E: 470430, N: 6949721 (56 MGA94)	SURFACE ELEVATION : 57.9 (AHD)	LOCATION : Brisbane Valley Hwy
RIG TYPE : Hydrapower Scout	CONTRACTOR : GeoDrill - T Partleton	DIP / AZIMUTH : 90°
DATE DRILLED : 12/5/11 to 12/5/11	LOGGED BY : LN CHECKED BY : VP	STANDARD : AS1736

DRILLING			MATERIAL					DEFECTS & COMMENTS		
DRILLING & WATER DETAIL	TCR/RQD DRILL DEPTH	FIELD TESTS	RL (m)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness alteration, cementation, etc as applicable)	Weathering	ESTIMATED STRENGTH Is(50) ● - Axial ○ - Diametral EL VL L M H VH EH (-0.03, -0.1, -0.3, -1, -3, -10)	DEFECT SPACING (mm) 20 60 200 600 2000	COMMENTS Description of joints, seams, defects, additional observations and comments	INSTALLATION DETAIL
			39.9	18.0		SANDSTONE - massive, coarse sand, orange streaked grey, low to medium strength, moderately to highly weathered. Open irregular fractures @ 17.84 - 18.20 m. *(continued)*	MW - HW			— IR RF J85(ro)(op)W	
Run 3	100% TCR 74% RQD		39.4	18.5		SANDSTONE - massive, medium sand, light grey, fine to medium sub rounded quartz gravels, minor coarse sand, medium to high strength, moderately weathered.	MW				
		19.22m	38.9	19.0		SANDSTONE - massive, coarse sand, light grey with some yellow staining, some fine gravel, high strength, slightly to moderately weathered. 18.64 - 18.69 recovered as gravelly sand.	SW				
	19.50	19.50m	38.4	19.5		SANDSTONE - massive, medium to coarse sand, orange, some gravel, medium strength, moderately weathered.	MW				
		19.85m				SANDSTONE - massive, coarse sand, orange with some grey streaking, some fine gravel, medium strength, moderately weathered.	MW				
Run 4	100% TCR 100% RQD	20.00m	37.9	20.0							
		20.36m				SANDSTONE - massive, fine to medium sand, grey, very high strength, slightly weathered.	SW				
	20.52		37.4	20.5							
	100% TCR 92% RQD					SANDSTONE - massive, coarse sand, orange, high strength, slightly weathered.	SW				

DRILLING

NMLC NMLC Coring
NQ NQ Coring
HQ HQ Coring
PQ PQ Coring

TCR % core run recovered
RQD % core run > 100mm long (rock fraction only measured)

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

SAMPLES & FIELD TESTS

D Disturbed Sample
W Water Sample
ES Env Soil Sample
EW Env Water Sample
SPT SPT Sample
U Undisturbed Tube Sample

PHOTOGRAPHS NOTES ☐ YES ☒ NO

DEFECT ABBREVIATIONS

CS Crushed Seam
CZ Crushed Zone
DB Drill Break
FZ Fractured Zone
JT Joint
IS Infilled Seam
SZ Shear Zone
VN Vein
CN Clean
CT Coating
SN Stain
VR Veneer
POL Polished
RF Rough
S Smooth
SL Slickensided
Cu Curved
IR Irregular
PR Planar
ST Stepped
Un Undulated

ROCK STRENGTH (Is50 MPa)

0-0.03	Extremely Low
0.03-0.1	Very Low
0.1-0.3	Low
0.3-1.0	Medium
1.0-3.0	High
3.0-10	Very High

SKM AGS REV02.1 (WORKIN-BRISBANE).GLB Log SKM ROCK(BRISBANE) BRISBANE VALLEY GRADE SEPARATION TP,AH AND BH LOGS.GPJ <<DrawingFile>> 29/11/2011 11:06

ROCK LOG

HOLE NO: **BH BV 3**

PROJECT : Brisbane Valley Grade Separation	JOB NO : QB10200.4	PAGE : 8 OF 8
POSITION : E: 470430, N: 6949721 (56 MGA94)	SURFACE ELEVATION : 57.9 (AHD)	LOCATION : Brisbane Valley Hwy
RIG TYPE : Hydrapower Scout	CONTRACTOR : GeoDrill - T Partleton	DIP / AZIMUTH : 90°
DATE DRILLED : 12/5/11 to 12/5/11	LOGGED BY : LN CHECKED BY : VP	STANDARD : AS1736

DRILLING			MATERIAL					DEFECTS & COMMENTS		
DRILLING & WATER DETAIL	TCR/RQD DRILL DEPTH	FIELD TESTS	RL (m)	DEPTH (m)	GRAPHIC LOG	DESCRIPTION ROCK TYPE : Colour, Grain size, Structure (texture, fabric, mineral composition, hardness alteration, cementation, etc as applicable)	Weathering	ESTIMATED STRENGTH Is(50) ● - Axial ○ - Diametral EL VL L M H VH EH (-0.03, -0.1, -0.3, -1, -3, -10)	DEFECT SPACING (mm) 20 60 200 600 2000	COMMENTS Description of joints, seams, defects, additional observations and comments	INSTALLATION DETAIL
						SANDSTONE - massive, coarse sand, orange, high strength, slightly weathered. *(continued)*	SW				
Run 5			36.4	21.5		SANDSTONE - massive, coarse sand, orange brown, trace of fine angular quartz gravel, high strength, slightly weathered.	SW				
	100% TCR 92% RQD		35.9	22.0		SANDSTONE - massive, coarse sand, dark orange brown, trace of fine angular quartz gravel, high strength, slightly weathered.	SW			— IR RF J85(ro)(op)W	
						SANDSTONE - massive, coarse sand, dark red brown, medium strength, moderately weathered.	MW				
	22.52		35.4	22.5							
Run 6	100% TCR 89% RQD					SANDSTONE - massive, fine to medium sand, grey, very high strength, slightly weathered.	SW			— IR RF J85(ro)(op)W	
						SANDSTONE - massive, coarse sand, orange with grey layering, medium strength, moderately weathered.	MW				
	23.09		34.9	23.0							
						Terminated @ 23.09 m. No water encountered.					
			34.4	23.5							
			33.9	24.0							

DRILLING

NMLC NMLC Coring
NQ NQ Coring
HQ HQ Coring
PQ PQ Coring

TCR % core run recovered
RQD % core run > 100mm long (rock fraction only measured)

GROUNDWATER SYMBOLS
▼ = Water level (static)
▽ = Water level (during drilling)

SAMPLES & FIELD TESTS

D Disturbed Sample
W Water Sample
ES Env Soil Sample
EW Env Water Sample
SPT SPT Sample
U Undisturbed Tube Sample

PHOTOGRAPHS
NOTES
☐ YES ☒ NO

DEFECT ABBREVIATIONS

CS Crushed Seam
CZ Crushed Zone
DB Drill Break
FZ Fractured Zone
JT Joint
IS Infilled Seam
SZ Shear Zone
VN Vein
CN Clean
CT Coating
SN Stain
VR Veneer
POL Polished
RF Rough
S Smooth
SL Slickensided
Cu Curved
IR Irregular
PR Planar
ST Stepped
Un Undulated

ROCK STRENGTH (Is50 MPa)

0-0.03	Extremely Low
0.03-0.1	Very Low
0.1-0.3	Low
0.3-1.0	Medium
1.0-3.0	High
3.0-10	Very High

CORE PHOTOGRAPHS	PROJECT: Brisbane Valley Grade Separation	
JOB NO.: QB10200.4	LOCATION: Warrego – Brisbane Valley Hwy Intersection	
BOREHOLE: BH BV 3	DEPTH:23.09 m	RL:57.9
CLIENT:TMR	COORDS:	DRILL RIG: Hydra Scout	CONTRACTOR: Geodrill
LOGGED BY:LN	CHECKED BY:VP	DATE:12/5/11

CORE: BH BV 3, 14.5 m to 19.5 m

CORE: BH BV 3, 19.5 m to 23.09 m

CORE