

## **Appendix IV**

### **Borehole Logs**

Project Name  
GlossopProject No.  
J1782/11/E

Co-ords: -

Hole Type  
WLS

Location: Charlestown Road, Glossop

Level: -

Scale  
1:50

Client: MET Consulting Engineers

Dates: 13/01/2011

Logged By  
RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
	▽	0.00-0.21	C		0.21			CONCRETE. (Subangular to rounded fine and medium (up to 20mm) aggregate; Slight brown weathering discolouration; 1.5% Excess voidage) (MG)
		0.21-1.00	C		0.60 0.80			MADE GROUND (Medium dense buff-grey slightly clayey silty sandy angular to subrounded fine to coarse gravel of Carboniferous limestone) (MG)
		0.70-2.00	C		1.20  2.00			MADE GROUND (Soft to firm brown silty sandy clay with scattered fine to coarse gravel sized clinker/ash/bitumen macadam fragments) (MG)
								Loose becoming very loose brown clayey silty fine and medium SAND with frequent narrow and very thin lenses and seams of silty sandy gravelly clay. Gravel is subangular to rounded, fine to coarse and of shaly mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone. Flecks of black carbonaceous material. (ALLUVIUM) (RA)
								No recovery 2.0 - 3.0m.
								End of Borehole at 2.00 m

Remarks: 0.0 - 0.21m = Concrete core 0.21 - 1.0m = 95% Recovery 0.7 - 2.0m = 40% Recovery.  
Driller reported borehole collapse at 1.0m..

Project Name

Glossop

Project No.

**J1782/11/E**

**Co-ords: -**

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

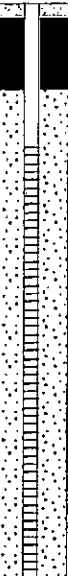


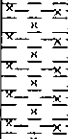


1:50

Client: MET Consulting Engineers

Dates: 12/01/2011

Logged By

BB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.05			Brown silty TOPSOIL with scattered root remains. (MG)
		0.00-1.00	C			0.75		MADE GROUND (Medium dense becoming very loose to loose brown-black sandy fine to coarse gravel sized clinker/ash fragments) (MG)
		1.00-2.00	C			2.00		Soft to firm slightly fissured at depth variably friable brown silty CLAY with rare narrow lenses and seams of yellow-brown fine and medium sand. Fissures predominantly clean. Fissure surfaces dull. Flecks of black carbonaceous material. (ALLUVIUM) (RA)
		2.00-3.00	C			3.00		No recovery 2.0 - 3.0m.
		3.00-4.00	C			4.00		Soft becoming soft to firm slightly fissured brown CLAY/SILT with rare well-rounded fine and medium gravel of fine grained micaceous sandstone. Fissures predominantly clean. Fissure surfaces dull. (ALLUVIUM) (RA)
								End of Borehole at 4.00 m

Remarks: 0.0 - 1.0m = 95% Recovery 1.0 - 2.0m = 90% Recovery 2.0 - 3.0m = 0% Recovery 3.0 - 4.0m = 75% Recovery

AGS

**RGS**

Borehole No

**WS 3**

Sheet 1 of 1

Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

1:50

Client: MET Consulting Engineers

Dates: 13/01/2011

Logged By

RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
					0.03			Brown silty TOPSOIL with scattered root remains. (MG)
		0.00-1.00	C					MADE GROUND (Medium dense locally medium dense to dense brown and yellow-brown locally clayey silty angular to well-rounded fine to coarse gravel of mixed lithology with occasional cobbles. Occasional medium and coarse gravel sized brick/concrete fragments. Clinker and ash traces. Occasional fine/medium/coarse closed rootlets) (MG)
		1.00-2.00	C		1.00			No recovery 1.0 - 2.0m.
		2.00-3.00	C		2.00			MADE GROUND (Medium dense brown sandy angular to subrounded fine to coarse gravel of mixed lithology with occasional cobbles. Many fine to coarse gravel sized brick/concrete fragments. Clinker and ash traces) (MG)
					3.00			End of Borehole at 3.00 m

Remarks: 0.0 - 1.0m = 80% Recovery 1.0 - 2.0m = 0% Recovery 2.0 - 3.0m = 50% Recovery

**AGS**

Hole Type  
WLS

Scale  
1:50

Logged By  
RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.22	C		0.06 0.22			CONCRETE screed. (MG)
		0.22-0.70	C		0.70			CONCRETE. (Subangular to rounded fine to coarse (up to 28mm) aggregate; Slight brown weathering discolouration; 0.5% Excess voidage) (MG)
								No recovery 0.22 - 0.7m.
								End of Borehole at 0.70 m

Remarks: 0.0 - 0.22m = Concrete core 0.22 - 0.7m = 0% Recovery

Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

1:50

Client: MET Consulting Engineers

Dates: 12/01/2011

Logged By

RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-1.00	C		0.03			Brown silty TOSOIL with scattered root remains. (MG)
		1.00-1.80	C		1.80			MADE GROUND (Medium dense locally dense brown/red and yellow speckled locally clayey, silty and sandy fine to coarse gravel often cobble sized brick/mortar/concrete fragments. Scattered fine to coarse gravel sized clinker/ash fragments. Scattered subangular to well-rounded fine to coarse gravel of mixed lithology with occasional cobbles) (MG)
								End of Borehole at 1.80 m

Remarks: 0.0 - 1.0m = 95% Recovery 1.0 - 1.8m = 80% Recovery. Driller reported borehole collapse at 1.8m.

Project Name  
GlossopProject No.  
J1782/11/E

Co-ords: -

Hole Type  
WLS

Location: Charlestown Road, Glossop

Level: -

Scale  
1:50

Client: MET Consulting Engineers

Dates: 13/01/2011

Logged By  
RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.12	C		0.12			CONCRETE. (Angular fine to coarse (up to 25mm) aggregate; Slight brown weathering discolouration; 1.5% Excess voidage) (MG)
		0.63-0.70	C		0.63			MADE GROUND (Brick wall recovered as half and whole bricks) (Driller's notes) (MG)
		0.70-1.00	C		0.70			CONCRETE. (Excess voidage = 3%; 80% angular fine and medium aggregate; Slight brown weathering discolouration) (MG)
		1.00-2.00	C		1.20			MADE GROUND (Very soft brown very silty very sandy clay with much angular to well-rounded fine to coarse gravel of mixed lithology and scattered fine and medium gravel sized brick/clinker/ash fragments) (MG)
		2.00-3.00	C		2.10			Very soft brown very silty very sandy CLAY with much angular to well-rounded fine to coarse gravel of mudstone/siltstone/fine grained micaceous sandstone/quartzitic pebbles. Cobble sized inclusion of plastic amorphous/spongy pseudo-fibrous material at 2.1m. (ALLUVIUM) (RA)
		3.00-4.00	C		3.70			Very loose brown slightly silty fine to coarse SAND with much angular to well-rounded fine and medium gravel of mudstone/siltstone/fine and medium grained micaceous sandstone/coarse grained feldspathic sandstone/quartzitic pebbles. (ALLUVIUM) (RA)
					4.00			Firm to stiff slightly fissured brown silty CLAY with scattered angular to well-rounded fine and medium gravel of mudstone/siltstone/fine and medium grained micaceous sandstone. Fissures predominantly clean. Fissure surfaces dull. Flecks of black carbonaceous material. (ALLUVIUM) (RA)
								End of Borehole at 4.00 m

Remarks: 0.0 - 0.12m = Concrete core 0.625 - 0.7m = Concrete core 0.7 - 1.0m = 100% Recovery  
 1.0 - 2.0m = 75% Recovery 2.0 - 3.0m = 80% Recovery 3.0 - 4.0m = 90% Recovery

Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

1:50

Client: MET Consulting Engineers

Dates: 14/01/2011

Logged By

RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.27	C		0.05 0.27			CONCRETE screed. (MG)
		0.27-1.00	C					CONCRETE. (Angular and subangular fine and medium (up to 18mm) aggregate; Slight brown weathering discolouration; 6mm diameter square mesh re-bar at depth of 0.095m; 0.5% Excess voidage) (MG)
		1.00-1.40	C		1.40			MADE GROUND (Loose locally medium dense to dense brown/red and grey speckled locally clayey, silty and sandy fine to coarse gravel often cobble sized brick/concrete fragments. Scattered angular to subrounded fine to coarse gravel of mixed lithology with occasional cobbles. Clinker and ash traces) (MG)
								End of Borehole at 1.40 m

Remarks: 0.0 - 0.27m = Concrete core 0.27 - 1.0m = 80% Recovery 1.0 - 1.4m = 90% Recovery



Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

1:50

Client: MET Consulting Engineers

Dates: 17/01/2011

Logged By

RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.24	C		0.06 0.24			CONCRETE screed. (MG)
		0.24-1.00	C					CONCRETE. (Angular and subangular fine to coarse (up to 25mm) aggregate; Slight brown weathering discolouration; 5% Excess voidage) (MG)
		1.00-1.80	C		1.00			MADE GROUND (Medium dense red and grey coarse gravel and cobble sized brick/concrete fragments. Clinker and ash traces) (MG)
		1.80-2.50	C		1.80 2.50			MADE GROUND (Loose becoming medium dense to dense brown/red and yellow speckled clayey silty sandy fine to coarse gravel occasionally cobble sized brick/concrete fragments. Scattered subangular to rounded fine to coarse gravel of fine and medium grained micaceous sandstone. Clinker and ash traces) (MG)
								End of Borehole at 2.50 m

Remarks: 0.0 - 0.24m = Concrete core 0.24 - 1.0m = 60% Recovery 1.0 - 1.8m = 0% Recovery 1.8 - 2.5m = 50% Recovery

## Glossop

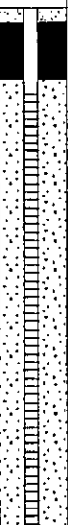






Level: -

Scale  
1:50

**Client:** MET Consulting Engineers

**Dates:** 14/01/2011

Logged By  
RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-1.00	C		0.10			MADE GROUND (Asphalt recovered as fine to coarse gravel and cobble sized fragments) (MG)
		1.00-2.00	C		0.40			MADE GROUND (Medium dense to dense becoming loose to medium dense brown silty fine and medium sand with much subangular and subrounded fine to coarse gravel of fine and medium grained micaceous sandstone. Scattered fine and medium gravel sized clinker/ash fragments) (MG)
					0.65			MADE GROUND (Firm friable grey-brown silty sandy clay with much subangular to well-rounded fine to coarse gravel of mixed lithology. Clinker and ash traces) (MG)
					1.00			Loose brown clayey silty SAND/GRAVEL with occasional cobbles. Sand is fine to coarse. Gravel is angular to well-rounded, fine to coarse and of mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone/quartzitic pebbles. (ALLUVIUM) (RA)
		2.00-3.00	C		3.00			Very soft to soft variably friable brown locally sandy silty CLAY with scattered locally much angular to well-rounded fine to coarse gravel of mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone/quartzitic pebbles. Occasional fine and medium gravel sized inclusions of plastic amorphous/spongy pseudo-fibrous material. (ALLUVIUM) (RA)
		3.00-3.60	C		3.60			Medium dense brown very clayey very silty SAND/GRAVEL. Sand is fine to coarse. Gravel is angular to well-rounded, fine to coarse and of mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone/quartzitic pebbles. (ALLUVIUM) (RA)
End of Borehole at 3.60 m								

Remarks: 0.0 - 1.0m = 100% Recovery 1.0 - 2.0m = 75% Recovery 2.0 - 3.0m = 50% Recovery 3.0 - 3.6m = 95% Recovery

Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

1:50

Client: MET Consulting Engineers

Dates: 17/01/2011

Logged By

RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.36	C		0.04			CONCRETE screed. (MG)
		0.36-1.00	C		0.36			CONCRETE. (Angular and subangular fine to coarse (up to 25mm) aggregate; slight brown weathering discolouration; 5% Excess voidage) (MG)
		1.00-2.00	C		0.75			MADE GROUND (Very loose brown clayey silty fine to coarse sand with scattered fine to coarse gravel sized brick/concrete fragments. Occasional subangular to rounded fine to coarse gravel of mixed lithology. Rare pottery) (MG)
		2.00-3.00	C		1.00			Loose to medium dense brown silty very clayey very sandy subangular to well-rounded fine to coarse GRAVEL of mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone/quartzitic pebbles. (ALLUVIUM) (RA)
		3.00-3.50	C		3.50			Firm to stiff locally firm slightly fissured brown silty CLAY with scattered subangular to well-rounded fine and medium gravel of mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone/limestone/chert/quartzitic pebbles. Rare fine to coarse gravel sized inclusions/narrow and lenses and seams of yellow-brown fine and medium sand. Flecks of black carbonaceous material. (ALLUVIUM/possible TILL)
								End of Borehole at 3.50 m

Remarks: 0.0 - 0.36m = Concrete core 0.36 - 1.0m = 100% Recovery 1.0 - 2.0m = 100% Recovery  
2.0 - 3.0m = 20% Recovery 3.0 - 3.5m = 100% Recovery

Project Name  
GlossopProject No.  
J1782/11/E

Co-ords: -

Hole Type  
WLS

Location: Charlestown Road, Glossop

Level: -

Scale  
1:50

Client: MET Consulting Engineers

Dates: 17/01/2011

Logged By  
RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-0.26	C		0.05 0.26			CONCRETE screed. (MG)
		0.26-1.00	C		1.00			CONCRETE. (Angular and subangular fine to coarse (up to 26mm) aggregate; Slight brown weathering discolouration; 5% Excess voidage) (MG)
								MADE GROUND (Loose to medium dense red-brown locally clayey and silty sandy medium and coarse gravel often cobble sized brick/mortar fragments. Many fine to coarse gravel sized clinker/ash fragments in upper levels. Occasional subangular to well-rounded fine to coarse gravel of mixed lithology) (MG)
								End of Borehole at 1.00 m

Remarks: 0.0 - 0.26m = Concrete core 0.26 - 1.0m = 80% Recovery

## Glossop

Level: -

1:50

Location: Charlestown Road, Glossop

**Client:** MET Consulting Engineers

Dates: 18/01/2011

Logged By

RB

Remarks: 0.0 - 0.48m = Concrete core 0.48 - 1.0m = 75% Recovery 1.0 - 2.0m = 95% Recovery



Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

1:50

Client: MET Consulting Engineers

Dates: 17/01/2011

Logged By

RB

Well	Water Strikes	Samples & In Situ Testing		Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type				
		0.00-0.18	C	0.05 0.18			CONCRETE screed. (MG)
	▽	0.18-1.00	C	0.70			CONCRETE. (Angular and subangular fine and medium (up to 20mm) aggregate; Slight brown weathering discolouration; 0.5% Excess voidage) (MG)
		1.00-2.00	C	1.30			MADE GROUND (Very loose grey-brown fine to coarse gravel often cobble sized concrete fragments with much subangular to rounded fine to coarse gravel of mixed lithology. Clinker and ash traces) (MG)
		2.00-3.00	C				Loose becoming very loose brown slightly clayey slightly silty SAND/GRAVEL. Sand is fine to coarse. Gravel is subangular to well-rounded, fine to coarse and of mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone/limestone/chert/quartzitic pebbles. (ALLUVIUM) (RA)
		3.00-4.00	C				Very loose to loose becoming loose locally poorly and thickly laminated yellow-brown slightly silty fine and medium SAND. (ALLUVIUM) (RA)
				3.80 4.00			Loose brown slightly clayey sandy micaceous SILT. (ALLUVIUM) (RA)
							End of Borehole at 4.00 m

Remarks: 0.0 - 0.18m = Concrete core 0.18 - 1.0m = 95% Recovery 1.0 - 2.0m = 95% Recovery 2.0 - 3.0m = 60% Recovery 3.0 - 4.0m = 75% Recovery

Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale


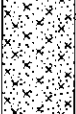


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Client: MET Consulting Engineers

Dates: 18/01/2011

Logged By

RB

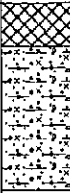
Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.00-0.12	C		0.12			CONCRETE. (Angular and subangular fine to coarse (up to 26mm) aggregate; Slight brown weathering discolouration; 0% Excess voidage) (MG)	
		0.12-1.00	C		0.50			MADE GROUND (Very loose brown very clayey very silty fine and medium sand with scattered fine and medium gravel sized clinker/ash fragments. Scattered angular to well-rounded fine and medium gravel of mixed lithology) (MG)	1
		1.00-2.00	C					Very loose locally poorly and thickly laminated brown silty fine to coarse SAND with occasional well-rounded fine and medium quartzitic pebbles. (ALLUVIUM) (RA)	2
		2.00-3.00	C		2.30			Very soft grey-brown silty sandy CLAY with scattered locally much angular to well-rounded fine to coarse gravel of mudstone/siltstone/fine grained micaceous sandstone/coarse grained feldspathic sandstone/limestone/chert/quartzitic pebbles. Traces of spongy pseudo-fibrous organic material. (ALLUVIUM) (RA)	3
		3.00-4.00	C		3.20			End of Borehole at 4.00 m	4
									5
									6
									7
									8
									9

Remarks: 0.0 - 0.12m = Concrete core 0.12 - 1.0m = 80% Recovery 1.0 - 2.0m = 60% Recovery 2.0 - 3.0m = 70% Recovery 3.0 - 4.0 = 20% Recovery

Hole Type  
WLS

Scale  
1:50

Logged By  
RB

Well	Water Strikes	Samples & In Situ Testing			Depth (m)	Level (m AOD)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.00-1.00	C		0.30			MADE GROUND (Loose becoming medium dense grey-brown slightly clayey slightly silty sandy angular to rounded fine and medium gravel of Carboniferous limestone. Clinker and ash traces) (MG)
		1.00-1.30	C		1.30			POSSIBLE MADE GROUND (Medium dense to dense yellow-brown and grey slightly sandy clayey silty angular to subrounded fine to coarse GRAVEL of fine and medium grained micaceous sandstone/medium and coarse grained feldspathic sandstone with many cobbles)
								End of Borehole at 1.30 m

Remarks: 0.0 - 1.0m = 95% Recovery 1.0 - 1.3m = 95% Recovery





Project Name

Glossop

Project No.

J1782/11/E

Co-ords: -

Hole Type

WLS

Location: Charlestown Road, Glossop

Level: -

Scale

1:50

Client: MET Consulting Engineers

Dates: 18/01/2011

Logged By

RB

Well	Water Strikes	Samples & In Situ Testing		Depth (m)	Level (m AOD)	Legend	Stratum Description	
		Depth (m)	Type					
		0.00-1.00	C				MADE GROUND (Very loose becoming loose at depth grey-brown slightly sandy clayey silty angular to subrounded fine to coarse gravel of Carboniferous limestone/fine and medium grained micaceous sandstone with occasional cobbles. Clinker/ash traces and glass in upper levels. Cobble sized inclusion of coarse gravel sized polystyrene fragments at 1.2m) (MG)	1
		1.00-2.00	C	1.30			Very loose locally poorly and thickly laminated friable grey-brown slightly organic slightly clayey sandy SILT with scattered fine and medium gravel sized inclusions of spongy pseudo-fibrous organic material. (ALLUVIUM) (RA)	2
		2.00-3.00	C	2.00			No recovery 2.0 - 3.0m.	
		3.00-4.00	C	3.00			Very loose becoming medium dense at depth grey-brown slightly organic very clayey very silty SAND/GRAVEL. Sand is fine to coarse. Gravel is angular to well-rounded, fine to coarse and of mudstone/siltstone/fine and medium grained micaceous sandstone/limestone/chert/quartzitic pebbles. Scattered fine and medium gravel sized inclusions of spongy pseudo-fibrous organic material. (ALLUVIUM) (RA)	3
				4.00			End of Borehole at 4.00 m	4
								5
								6
								7
								8
								9

Remarks: 0.0 - 1.0m = 90% Recovery 1.0 - 2.0m = 95% Recovery 2.0 - 3.0m = 0% Recovery 3.0 - 4.0m = 60% Recovery

Co-ords: -

WLS

Location: Charlestown Road, Glossop

Level: -

Scale  
1:50

**Client:** MET Consulting Engineers

**Dates:** 18/01/2011

Logged By  
RB

[illegible]

Remarks: 0.0 - 0.5m = 90% Recovery. Driller reported broken sample tube and abandonment of borehole at 0.5m.

AGS