| | | | | Borehole | number | | | | | GLOSBH0 | 1-2014 | | | | |
|---------------------------|-----|--------------------------------------|---|----------|----------------|---------------|--------------|---------------------------------------|------|----------------------------|------------|-------------|------------|---------------------------|---------------------------|
| Site Date .ogged by | | Glossop 05/11/2014 Andy Nortor | C C | | | | | Contractor Drill Type Casing | | Abovo Window sa 0-3m | mple and C | Conventiona | l core | | |
| | | Ê | | | 0 | | | | | | | C | ore Recove | | ir r |
| From | To | Level (m AOD) | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| 0.0 | 1.2 | | NO Recovery (Hand dug inspection pit) | | | | | 0 | | | | | | | |
| | | | | | | | | 1 | 1.2 | 2 | 0.8 | 0.7 | NA | NA | 100 |
| 1.2 | 2.0 | | WINDOW SAMPLE, stiff, medium brown, micaceous, structureless, very weak, silty SANDSTONE, distinctly weathered to destructed. | | | | | 1.5 | 1.2 | | 0.0 | 0.7 | | | 100 |
| 2.0 | 3.0 | | WINDOW SAMPLE, No Recovery | | | | | 2 2.5 | | | | | | | |
| | | | | | | | | 3 | | | | | | Mainly | |
| 3.0 | 4.2 | | Medium strong, thickly laminated, brownish medium grey, fine grained, micaceous MUDSTONE (Millstone Grit Group, Marsde Formation). With common thin laminations of pale grey medium fine grained quartz rich sandstone. Distinctly weathered with common very closely spaced fractures, planar, smooth, open, surface stained, bedding planes c.95° to the axis of the core At 3.56m 1 subvertical joint, planar, smooth open, surface stained. | n if | Sample 1 | | Sample 1 | <u>3.5</u> | 3 | 6 | 2.3 | 0.45 | 0 | Broken | 77 |
| 4.2 | 6.0 | | Medium strong, thickly laminated, medium to dark grey, fine and fine medium grained, micaceous MUDSTONE (Marsden Formation). With common thin laminations of pale grey medium fine grained quartz rich sandstone. Partially weathered along fractures, with common extremely to very closely spaced fractures. | of | | | | <u>4.5</u> 5 | | | | | | | |

| Mudstone | Sandstone band | Р | Planar | U | Undulating | MBP | Many bedding planes |
|------------------------|----------------|---|---------|----|------------|-----|-----------------------------|
| Siltstone / band | Subsoil | 0 | Open | St | Stepped | UN | Unsuitable for brick making |
| Sandstone (blockstone) | Topsoil | S | Smooth | W | Wide | BZ | Broken Zone |
| | | В | Bedding | J | Joint | | |

| | | | | | Borehole | e number | | | | | GLOSBH | 01-2014 | |] | | |
|---------------------|----------------------|-------------------------------------|--|---|---------------------|----------------|---------------|--------------|---------------------------------------|------|---------------------------|-------------|------------------------------|-------------|---------------------------|---------------------------|
| e ate gged by | 2 2 | Glossop 05/11/2014 Andy Norto | l n | Ground Lev Easting Northing Inclination Vertical Diameter 9cm | | | | | Contractor Drill Type Casing | | Abovo Window s 0-3m | ample and C | Conventiona | Il core | | |
| | | | | | | | | | · · · · · | | | 1 | (| Core Recove | | |
| From | To | Level (m AOD) | | Description | Log | DISC Sample | Fired Disc | XRF / XRD | - | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| | | | stained, be the core. | are planar, smooth, open, surfac edding planes c.95° to the axis o It appears the content of the I particles within the mudston does vary. | f | | | | 5 | | | | | | | |
| 6.0 | 7.7 | | | | | | | | 6 | 6 | 7.7 | 1.2 | 0.15 | 0 | MBP(25+) + 5 joints | 71 |
| | | | dark grey micac Formation) pale grey sandstone and dark | ong, thickly laminated, medium y, fine and fine medium grained, eous SILTSTONE (Marsden . With common thin laminations medium fine grained quartz rich e. With occasional biotite? blebs grey carbonaceous? fragments. weathered along fractures, core mainly broken. | of | Sample 2 | | | <u>6.5</u> 7 | | | | | | | |
| 7.7 | 11.2 | | | | | | - | | 7.5 | 7.7 | 10.4 | 2.35 | 1.85 | 0 | 2BZ + 15B + 2J | 87 |
| | | | dark grey micac Formation) pale grey sandstone at 8.3m. P with comm orientated sub vertic rou | ong, thickly laminated, medium v, fine and fine medium grained, eous MUDSTONE (Marsden . With common thin laminations medium fine grained quartz rich e. With occasional pyrite crystals artially weathered along fracture on very closely spaced fractures 95° to the axis of the core. With ral joint from 9.1-10.4m stepped, gh, open, surface stained. m MUDSTONE is dark grey and | Df 5, 7, 1 | Sample 3 | | Sample 3 | 8 8.5 9 | | | | | | | |
| nments | : | | | broken. | | | | | <u>9.5</u> 10 | | | | | | | |
| zometei | r Installed | | | | | | | | | | | | | | | |
| | Mudston Siltstone | | | Sandstone band Subsoil | P | Planar Open | | U St | Undulating Stepped | | MBP UN | | ding planes e for brick m | | | |
| | | e (blockstone | .) | Topsoil | C C | Smooth | | W | Wide | | BZ | Broken Zo | | ~ | | |

Topsoil

Sandstone (blockstone)

S

В

Smooth Bedding ΒZ

W

J

Wide

Joint

Broken Zone

| | | | | Borehole | number | | | | | GLOSBHO | 1-2014 | |] | | |
|---------------------------|------|--------------------------------------|--|------------------------|----------------|---------------|--------------|---------------------------------------|------|----------------------------|-------------|-------------|-------------|-------------------|---------------------------|
| Site Date Logged by | | Glossop 05/11/2014 Andy Nortor | 5 | | | | | Contractor Drill Type Casing | | Abovo Window sa 0-3m | ample and C | conventiona | l core | | |
| | | | | | | | | | | | | C | Core Recove | ery | |
| From | То | Level (m AOD) | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | | Percent age Recover |
| | | | From 10.4m MUDSTONE is dark grey ar broken. | nd | | | | 10 <u>10.5</u> 11 | 10.4 | 13.1 | 2.5 | 1.2 | 0.45 | 2BZ + 15B + 5J | 93 |
| 11.2 | 11.3 | | Strong, thinly laminated, buff yellow brow medium grained and medium fine graine SANDSTONE (Huddersfield White Roc Formation Upper Leaf?). Quartz rock, n fractures. | d K | | | | | | | | | | | |
| 11.3 | 13.1 | | Medium strong, thickly laminated, medium dark grey, fine and fine medium grained micaceous MUDSTONE (Marsden Formation). With common thin laminations pale grey medium fine grained quartz ric sandstone. Partially weathered along fractures, with common very closely to closely spaced, planar, smooth, open fractures (bedding) c.85° to the axis. Join 11.8m P,S,O 140°, at 12.1m U,S,O sub vertical, at 12.6m P,S,O 30° to axis. | , s of h t at | Sample 4 | | Sample 4 | 11.5 12 12.5 13 | 12.1 | 15.7 | 2.25 | 17 | 116 | 100 1 207 | 00 |
| 13.1 | 15.7 | | Medium strong, thickly laminated, medium dark grey, fine and fine medium grained micaceous MUDSTONE (Marsden Formation). With common thin laminations pale grey medium fine grained quartz ric sandstone. Partially weathered along fractures, with common closely spaced fractures (bedding). With 1 subvertical jo at 13.75m U,S,O | , of h | Sample 5 | | Sample 5 | 13.5 14 14.5 15 | 13.1 | 15.7 | 2.35 | 1.7 | 1.16 | 18B + 3BZ | 90 |

| Siltstone / band Subsoil | 0 | Open | <u> </u> | | | |
|--------------------------------|---|---------|----------|---------|----|-----------------------------|
| | Ţ | Open | St | Stepped | UN | Unsuitable for brick making |
| Sandstone (blockstone) Topsoil | S | Smooth | W | Wide | BZ | Broken Zone |
| | В | Bedding | J | Joint | | |

| | | | erge | > r | Borehole | number | | | | | GLOSBHO |)1-2014 | | | | |
|---------------------|----------------------|-------------------------------------|---|--|----------|----------------|---------------|--------------|---------------------------------------|----------|----------------------------|-------------------------|---------------|-------------|---------------------------|---------------------------|
| e ate gged by | | Glossop 05/11/2014 Andy Norto | 1 n | Ground Le Easting Northing Inclination Vertical Diameter 9cm | | | | | Contractor Drill Type Casing | | Abovo Window sa 0-3m | ample and C | Conventiona | Il core | | |
| | | | | | | | | 1 | 1 | | | I | (| Core Recove | | Γ. |
| From | To | Level (m AOD) | | Description | Log | DISC Sample | Fired Disc | XRF / XRD | 15 | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| | | | | | | | | | 15.5 | | | | | | | |
| 5.7 | 20.0 | | | | | | | | | 15.7 | 17.2 | 1.35 | 0.9 | 0.32 | 9B + 2BZ | 90 |
| | | | | | | | | | 16 | | | | | | | |
| | | | | | | Sample 6 | | Sample 6 | 16.5 | | | | | | | |
| | | | | | | | | | 17 | | | | | | | |
| | | | Medium str | ong, thickly laminated, medium to | | | | | | 17.2 | 18.1 | 0.95 | 0.4 | 0 | 8B and 2BZ | 106 |
| | | | dark grey micac Formation) pale grey | y, fine and fine medium grained, ceous SILTSTONE (Marsden . With common thin laminations of medium fine grained quartz rich | | | | | 17.5 | | | | | | | |
| | | | fractures. weak and closely sp | one. Partially weathered along 18.38-18.55m a dark grey band, I thinly laminated. With common baced P,S,O fractures (bedding) | | | | | 18 | | | | | | c.20B + | |
| | | | A joint at 19.55m P, | ained, 70-100° to axis of the core. t 19.35m P,S,O 40° to axis, and S,O sub vertical, both have a thin r of weathered siltstone infill. | | | | | 18.5 | 18.1 | 20 | 1.9 | 1.4 | 0.56 | 1BZ + 4J | 100 |
| | | | | | | Sample 7 | | Sample 7 | | | | | | | | |
| | | | | | | | | | 19 | | | | | | | |
| | | | | | | | | | 19.5 | | | | | | | |
| | | | | | | | | | 20 | | | | | | | |
| ments | : | 1 | • | | | | 1 | | 1-2 | <u> </u> | | L | J | l | 4 | 1 |
| | nstalled Mudstone | | | Sandstone band | Р | Planar | | U | Undulating | ŗ | MBP | Many bedo | ding planes | | | |
| | Siltstone / | band | | Subsoil Topsoil | 0 | Open Smooth | | St W | Stepped Wide | , | UN | Unsuitable Broken Zo | e for brick m | | | |

Topsoil

S

В

Smooth Bedding

Sandstone (blockstone)

Broken Zone

ΒZ

Wide

Joint

W

J

| \ | | erbe | | | Borehole | number | | | | | GLOSBH |)1-2014 | | | | |
|--|--------------------------------------|--------------------------------------|--|---|-------------|----------------|---------------|--------------|---------------------------------------|----------|----------------------------|-------------|------------------------------|-------------|---------------------------|---------------------------|
| WIE bite bate bogged by bage 5 | | Glossop 05/11/2014 Andy Norton | C E N N | Ground Lev Easting Northing nclination Vertical Diameter 9cm | | | | | Contractor Drill Type Casing | | Abovo Window si 0-3m | ample and C | Conventiona | I core | | |
| | | | | | | 1 | | 1 | | - | | T | (| Core Recove | ery | T |
| From | То | Level (m AOD) | | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| 20.0 | 29.7 | | | | | | | | 20 | 20 | 22.4 | 2.3 | 1.5 | 0.36 | 18B + 1BZ + 4J | 96 |
| | | | | | | | | | 20.5 | | | | | | | |
| | | | | | | | | | 21 | | | | | | | |
| | | | | | | Sample 8 | | Sample 8 | 21.5 | | | | | | | |
| | | | | | | | | | 22 | | | | | | | |
| | | | dark grey, micace Formation). | ng, thickly laminated, medium fine and fine medium grained ous MUDSTONE (Marsden With common thin lamination | d, s of | | | | | | 05.4 | 2.2 | | | 13B + | 72 |
| | | | sandstone. along fractur fractures o | nedium fine grained quartz rid Partially weathered occasion res, with common closely spa c.90° to the core axis. At 21.4 Int set P,S,O 55° to axis. | ally ced | | | | 22.5 | 22.4 | 25.4 | 2.2 | 1 | 0.1 | 2BZ + 2J | 73 |
| | | | | | | | | | 23 | | | | | | | |
| | | | | | | | | | 23.5 | | | | | | | |
| | | | | | | Sample 9 | | Sample 9 | 24 | | | | | | | |
| | | | | | | | | | 24.5 | | | | | | | |
| | | | | | | | | | 25 | | | | | | | |
| | | 7 | I | | | | | 1 | 123 | <u> </u> | 1 | 1 | I | 1 | 1 | 1 |
| omments: | | 1 | | | | | | | | | | | | | | |
| | Installed | | | | | | | | | | | | | | | |
| | Installed Mudstone Siltstone / | | | Sandstone band Subsoil | P | Planar Open | | U St | Undulating Stepped | | MBP | | ding planes e for brick m | | | |

| | | erbe | | | Borehole | number | | | | | GLOSBH |)1-2014 | | | | |
|------------------------------|------------------|--------------------------------------|-------------------------|---|----------|----------------|---------------|--------------|---------------------------------------|------|---------------------------|-------------|---------------|------------|---------------------------|---------------------------|
| te ate ogged by age | | Glossop 05/11/2014 Andy Norton | ı | Ground Lev Easting Northing Inclination Vertical Diameter 9cm | | | | | Contractor Drill Type Casing | | Abovo Window s 0-3m | ample and C | Conventiona | l core | | |
| | | 1 | | | | | | 1 | • | | | 1 | C | ore Recove | | |
| From | To | Level (m AOD) | | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| 20.0 | 29.7 | | | | | | | | 25 | | | | | | | |
| | | | | | | | | | | 25.4 | 27.8 | 2.1 | 0.9 | 0.2 | Mainly Broken | 87 |
| | | | | | | | | | 25.5 | | | | | | +3J | |
| | | | | | | | | | 26 | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | 26.5 | | | | | | | |
| | | | From 25.4 | 27.9m with common yory closely | | | | | 27 | | | | | | | |
| | | | to closely s axis. F | - 27.8m with common very closely spaced fractures c.90° to the core from 28.9m the sand content s. At 28.35m joint P,S,O 130° to | | | | | | | | | | | | |
| | | | axis. A | t 29m joint P,S,O 70° to axis. | | Sample 10 | | Sample 10 | 27.5 | | | | | | | |
| | | | | | | | | | 28 | 27.8 | 30 | 2.2 | 1.25 | 0.1 | MBP + 2BZ + 2J | 100 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | 28.5 | | | | | | | |
| | | | | | | | | | 29 | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | 29.5 | | | | | | | |
| 29.7 | 29.8 | | fine grair White F | nassive, very pale grey, medium ed SANDSTONE (Huddersfield Rock Formation?). Quartz and dspar? rich, no fractures. | | | | | | | | | | | | |
| 29.8 | 30.0 | | MUDSTO | NE as above with bedding planes at 85° to the core axis | | | | | 30 | | | | | | | |
| mments | : r Installed |] | | | | | | | | | | | | | | |
| | Mudstone | 2 | | Sandstone band | Р | Planar | | U | Undulating | , | MBP | Manybod | ding planes | | | |
| | Siltstone / | band | | Subsoil | Р 0 | Open | | St | Stepped | | UN | Unsuitable | e for brick m | | | |
| | | e (blockstone | <u> </u> | Topsoil | S | Smooth | | W | Wide | | BZ | Broken Zo | | | | |

S

В

Smooth

Bedding

Topsoil

Sandstone (blockstone)

W

J

Wide

Joint

ΒZ

Broken Zone

| ~~~~ | | | | Borehole | number | | | | | GLOSBH0 | 1-2014 | | | | |
|-----------------------------------|------|--------------------------------------|---|----------|----------------|---------------|--------------|---------------------------------------|------|----------------------------|-------------|-------------|------------|---------------------------|----------------|
| Site Date Logged by Page | | Glossop 05/11/2014 Andy Norton | 6 | | | | | Contractor Drill Type Casing | | Abovo Window sa 0-3m | ample and C | Conventiona | l core | | |
| | | | | | | | | | | | 1 | (| ore Recove | | • |
| From | To | Level (m AOD) | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age |
| 30.0 | 31.4 | Ŭ | | | | | | 30 | 30 | 32.3 | 2.3 | 1.6 | 1.27 | 4BZ | 10 |
| | | | | | | | | | | | | | | | |
| | | | Strong, massive, very pale grey, medium | | | | | 30.5 | | | | | | | |
| | | | fine grained SANDSTONE (Huddersfield White Rock Formation). Fresh, quartz and | | | | | | | | | | | | |
| | | | feldspar? rich. With a sub vertical fracture P,S,O at 30.4m. | | | | | | | | | | | | |
| | | | r ,0,0 at 30.4111. | | | | | 31 | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 31.4 | 32.3 | | Medium strong to strong, massive, buff | | | | | 31.5 | | | | | | | |
| | | | orangy, medium fine grained SANDSTONE (Huddersfield White Rock Formation). | | | | | | | | | | | | |
| | | | Distinctly weathered (oxide staining), quartz | | | | | | | | | | | | |
| | | | and feldspar? rich. With a fracture at 31.7m P,S,W 160° to axis and infilled with broken | | | | | 32 | | | | | | | |
| | | | sandstone. | | | | | | | | | | | | |
| 32.3 | 33.8 | | | | | | | - | 32.3 | 33.8 | 1.44 | 1.44 | 1.44 | 3 | 9 |
| | | | | | | | | 32.5 | | | | | | | |
| | | | Strong, massive, very pale grey, medium | | | | | | | | | | | | |
| | | | fine grained SANDSTONE (Huddersfield White Rock Formation). Fresh, quartz and | | | | | 33 | | | | | | | |
| | | | feldspar? rich. With rare mud intraclasts | | | | | 33 | | | | | | | |
| | | | near the base of the unit. With occasional fractures P,S,O, medium to wide spacing | | | | | | | | | | | | |
| | | | c.90° to axis of core. | | | | | 33.5 | | | | | | | |
| | | | | | | | | 00.0 | | | | | | | |
| | | | | | | | |] [| | | | | | | |
| 33.8 | 34.4 | | | | | | | 34 | 33.8 | 36 | 2.04 | 1.03 | 0.8 | 15B + 1J | 9 |
| | | | As 32.3 - 33.8 no intraclasts. | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 34.4 | 35.2 | | Medium strong, thickly laminated, medium to | | | | | 34.5 | | | | | | | |
| | | | dark grey, fine to medium fine grained, micaceous MUDSTONE (Marsden | | | | | | | | | | | | |
| | | | Formation). With common thin laminations of pale grey medium fine grained quartz rich | | | | | | | | | | | | |
| | | | sandstone, with increasing frequency towards the base of this unit. With very | | | | | 35 | | | | | | | |
| | | | closely spaced fractures P,S,O c.95° to axis and a sub vertical joint at 33.8m. | | | | | | | | | | | | |
| 35.2 | 36.0 | | Strong, massive, very pale grey and buff, | | | | |] | | | | | | | |
| | | | medium fine grained SANDSTONE (Huddersfield White Rock Formation). | | | | | 35.5 | | | | | | | |
| | | | Quartz and feldspar? rich. With a sub vertical joint which continues from the unit | | | | | | | | | | | | |
| | | | above to 35.8m (2m persistence). And very closely spaced fractures P,S,O c.85° to axis. | | | | | | | | | | | | |
| | | | Closely spaced fractures P,S,U C.85° TO AXIS. | | | | | 36 | | | | | | | |

| Mudstone | Sandstone band | Р | Planar | U | Undulating | MBP | Many bedding planes |
|------------------------|----------------|---|--------|----|------------|-----|-----------------------------|
| Siltstone / band | Subsoil | 0 | Open | St | Stepped | UN | Unsuitable for brick making |
| Sandstone (blockstone) | Topsoil | S | Smooth | W | Wide | BZ | Broken Zone |

| | | | | | | | | | | | | | | | 1 | 1 | I |
|---------------------------------|---------------------------|--------------------------------------|-----------------|--|---|----------|-------------------|---------------|--------------|---------------------------------------|------|----------------------------|-------------------------|-------------|-------------|---------------------------|---------------------------|
| | onc | erbe | rac |) r | | Borehole | e number | | | | | GLOSBHO | 02-2014 | | | | |
| ite Date ogged by Page | | Glossop 05/11/2014 Andy Norton | 1 | Ground Lev Easting Northing Inclination V Diameter | | | | | | Contractor Drill Type Casing | | Abovo Window sa 0-3m | ample and C | Conventiona | l core | | |
| | | | | | | I | | | 1 | | | | | C | Core Recove | | |
| From | To | Level (m AOD) | | Descri | ption | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| 0.0 | 0.3 | | Topsoil - D | ark brown | | | | | | 0 | 0 | 3 | 3 | NA | NA | SOIL | 100 |
| 0.3 | 2.8 | | | | | | | | | 0.5 | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 1 | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | tiff, medium and buff | | | | | 1.5 | | | | | | | |
| | | | distin | ctly weathere | silty clay SUBSOIL, ed to destructed. lier with depth | | | | | | | | | | | | |
| | | | | | | | | | | 2 | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 2.5 | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 2.8 | 3.1 | | | rown SANDS | very weak, massive, STONE, distinctly | | | | | 3 | | | | | | | |
| 3.1 | 6.0 | | | weathe | ered. | | | | | | 3 | 4.5 | 0.94 | 0.35 | 0 | MBP + 3BZ | 63 |
| | | | | | | | | | | 3.5 | | | | | | | |
| | | | laminated | d, medium to | inly bedded to thickly b dark grey, fine and | | | | | | | | | | | | |
| | | | MUDST(commo | ONE (Marsde | ned, micaceous en Formation). With ations of pale grey | | | | | 4 | | | | | | | |
| | | | Partially | weathered a | uartz rich sandstone. long fractures, with y spaced fractures | | Sample 1 | | Sample 1 | | | | | | | | |
| | | | P,S,O bed | dding, 85° to ' | 100° to the core axis. oken and distinctly | | | | | 4.5 | | | | | | | |
| | | | | | | | | | | | 4.5 | 6 | 1.27 | 0.35 | 0 | MBP | 85 |
| | | | | | | | | | | 5 | | | | | | | |
| nment | 5: | 1 | | | | | | | | | | | | | | | |
| zomete | er Installed | | | | | | | | | | | | | | | | |
| | Mudstone / Siltstone / | band | | 9 | Sandstone band Subsoil | P O | Planar Open | | U St | Undulating Stepped | | MBP UN | Many bedo Unsuitable | for brick m | | | |
| | Sandstone | e (blockstone |) | | Topsoil | S B | Smooth Bedding | | W | Wide Joint | | BZ | Broken Zo | ne | | | |

В

Bedding

J

Joint

| \&/; | | erbe | | | Borehole | e number | | | | | GLOSBHO |)2-2014 | |] | | |
|-----------------------------------|-------------|--------------------------------------|--------------------------|---|----------|-------------------|---------------|--------------|---------------------------------------|------|----------------------------|-------------|-------------|-------------|---------|---------------------------|
| Site Date Logged by Page | | Glossop 05/11/2014 Andy Nortor | 1 | Ground Lev Easting Northing Inclination Vertical Diameter 9cm | | | | | Contractor Drill Type Casing | | Abovo Window sa 0-3m | ample and C | Conventiona | Il core | | |
| | | | | | | | | | | | | | (| Core Recove | ery | |
| From | То | Level (m AOD) | | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | | Percent age Recover |
| | | | | | | | | | 5 | | | | | | | |
| | | | | | | | | | 5.5 | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 6.0 | 6.9 | | | | | | | | 6 | 6 | 6.6 | 0.6 | 0.6 | 0 | 8B + 1J | 100 |
| | | | medium fin SANDST | ninly laminated, pale buff brown, ne grained, micaceous, quartzose ONE (Huddersfield White Rock, f Formation). Partially weathered | | | | | 6.5 | | | | | | | |
| | | | along fr | P,S,O 90° to the axis and 1 joint subvertical P,S,O. | | | | | 6.5 | 6.6 | 7.5 | 0.9 | 0.9 | 0.13 | 12B+1J | 100 |
| 6.9 | 9.0 | | | | | | | | 7 | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | rong, very thinly to thinly bedded, o dark grey, fine and fine medium | | | | | 7.5 | 7.5 | 9 | 1.5 | 1.1 | 0 | MBP 3BZ | 100 |
| | | | Formation) pale grey | icaceous MUDSTONE (Marsden . With common thin laminations of medium fine grained quartz rich ne and very thin beds of sandy | | | | | | | | | | | + 4J | |
| | | | mudstone along fractu | e / siltstone. Partially weathered ures. With common very closely to aced fractures P,S,O bedding, 85° | | Sample 2 | | Sample 2 | 8 | | | | | | | |
| | | | to 100° to | the core axis and a sub vertical 6 and 8.5m St, R, O and 0.5m persistence. | | | | | 8.5 | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | 9 | | 10.4 | 1.2 | 0.4 | | Mainly | 02 |
| 9.0 | 11.9 | | | | | | | | | 9 | 10.4 | 1.3 | 0.4 | 0 | Broken | 93 |
| | | | | | | Sample 3 | | Sample 3 | 9.5 | | | | | | | |
| | | | | | | | | | | | | | | | | |
| omments | :: | | | | | | | | 10 | | | | <u>]</u> | | | |
| | r Installed | | | | | | | | | | | | | | | |
| | Mudston | | | Sandstone band | Р | Planar | | U | Undulating | | MBP | Many bedo | | | | |
| | Siltstone | | \ | Subsoil | 0 | Open | | St | Stepped | | UN | Unsuitable | | naking | | |
| | Sandston | e (blockstone |) | Topsoil | S B | Smooth Bedding | | W J | Wide Joint | | BZ | Broken Zo | ne | | | |

| | | | | | Borehole | e number | | | | | GLOSBHO | 2-2014 | | | | | |
|---|-------------------------|------------------|----------------------------|--|-----------------------------------|----------------|---------------|--------------|-----------------|------|--|-----------|---------------|-------------|---------------------------|---------------------------|--|
| Wienerberger te Glossop Ground Lev ate 05/11/2014 Easting ogged by Andy Norton Northing age 3 Inclination Vertical Diameter 9cm | | | | Ground Lev Easting Northing Inclination Vertical | Contra Drill Type Casing | | | | | | Abovo Window sample and Conventiona 0-3m | | | | | | |
| | | | | | - | | | | | | | | | Core Recove | | | |
| From | 4 D | Level (m AOD) | | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover | |
| | | | | | | | | | 10 | | | | | | | | |
| | | | | | | | | | 10.5 | 10.4 | 11.9 | 1.5 | 0.6 | 0.1 | Mainly Broken | 100 | |
| | | | fine grained | rong, thinly laminated, dark grey, d, micaceous in part MUDSTONE Formation). Partially weathered | | | | | | | | | | | | | |
| | | | along fractu closely sp | aced, P,S,O fractures (bedding) the axis and a sub vertical joint | | Sample 3 | | Sample 3 | 11 | | | | | | | | |
| | | | | t,S,O, c.2m persistence. | | | | | | | | | | | | | |
| | | | | | | | | | 11.5 | | | | | | | | |
| 11.9 | 15.9 | | | | | | | | 12 | 11.9 | 13.4 | 1.45 | 1.45 | 0.32 | 15B + 3J | 97 | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 12.5 | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | rong, thinly laminated, dark grey, rained, generally micaceous | | Sample 4 | | Sample 4 | 13 | | | | | | | | |
| | | | MUDSTON weathere | IE (Marsden Formation). Partially d along fractures, with common psely to closely spaced, P,S,O | | | | | | | | 1.4 | 0.4 | 0 | MBP 12B | 93 | |
| | | | fractures (b a joint p | edding) c.85-100 $^{\circ}$ to the axis and lane at 12.6 and 14.6m U,S,O rsistence and 13.75m P,S,O 135 $^{\circ}$ | | | | | 13.5 | 13.4 | 14.9 | | | | + 4J | | |
| | | | | and at 15.64m 125° to axis. | | | | | 14 | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | Sample 5 | | Sample 5 | 14.5 | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 15 | 14.9 | 16.4 | 1.4 | 0.75 | 0.1 | 9B 2BZ 1J | 93 | |
| mments | | | | | | | | | | | | | | | | | |
| zomete | r Installed Mudstone | <u></u> | | Sandstone band | Р | Planar | | U | Undulating | | MBP | Many body | ding planes | | | | |
| | Siltstone | | , | Subsoil Topsoil | 0 | Open Smooth | | St W | Stepped Wide | | | | e for brick m | | | | |
| | - SALUDSTON | | | | | | | | | | · K/ | | | | | | |

S

В

Smooth

Bedding

Topsoil

W

J

Wide

Joint

ΒZ

Broken Zone

Sandstone (blockstone)

| W i | ana | II rhc | erger | Borehole | e number | | | | | GLOSBHO | 2-2014 | |] | | |
|-----------------------------------|------|-------------------------------------|---|---------------------------------------|----------------|---------------|--------------|------------|------|--|--------|------|-------------|---------------------------|---------------------------|
| Site Date Logged by Page | | Glossop 05/11/2014 Andy Norto | Ground Lev Easting | Contractor Drill Type Casing | | | | | | Abovo Window sample and Conventional core 0-3m | | | | | |
| | 1 | | 1 | | | <u> </u> | 1 | , | | | 1 | (| Core Recove | | I L |
| From | To | Level (m AOD) | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| | | | | | | | | 15 15.5 | | | | | | | |
| 15.9 | 18.4 | | | | - | | - | 16 | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | 16.5 | 16.4 | 17.6 | 1.2 | 0.45 | 0.1 | 5B 2BZ 2J | 100 |
| | | | Medium strong, very thinly to thinly bedde medium to dark grey, fine and fine medium greined missessus MUDSTONE (Marade | m | | | | | | | | | | | |
| | | | grained, micaceous MUDSTONE (Marsde Formation). With common pale grey thick laminations and thin beds medium fine | | Sample 6 | | Sample 6 | 17 | | | | | | | |
| | | | grained quartz rich siltstone. Partially weathered along fractures, with common | | | | | | | | | | | | |
| | | | very closely to closely spaced fractures P,S,O bedding, c.80° to the core axis. Wit P,S,O joints at 16.1m 110° and a subvertion | h | | | | 17.5 | | | | | | | |
| | | | joint at 18m. At 17.6 - 18.4 no siltstone bands. | | | | | | 17.6 | 19.1 | 1.4 | 0.5 | 0.25 | Mainly Broken | 93 |
| | | | | | | | | 18 | | | | | | | |
| | | | | | | | | | | | | | | | |
| 18.4 | 18.7 | | Strong, thinly laminated, pale grey, medium fine grained micaceous, quartz rich SANDSTONE (Huddersfield White Rock Formation). With occasional mudstone intraclasts and occasional P,S,O fracture | | | | | 18.5 | | | | | | | |
| 18.7 | 21.4 | | 90° to axis. | | | | | | | | | | | | |

| 10.7 | 21.4 | | | |
|------|------|--|----------|--|
| | | | | |
| | | | Sample 7 | |
| | | | | |
| | | | | |

| | 19 | | | | | | | | |
|----------|------|------|------|-----|-----|------|-----------|----|--|
| | | 19.1 | 20.6 | 1.4 | 0.9 | 0.25 | 7B 1BZ 2J | 93 | |
| Sample 7 | 19.5 | | | | | | | | |
| | | | | | | | | | |
| | 20 | | | | | | | | |

Piezometer Installed

| Mudstone | Sandstone band | Р | Planar | U | Undulating | MBP | Many bedding planes |
|------------------------|----------------|---|---------|----|------------|-----|-----------------------------|
| Siltstone / band | Subsoil | 0 | Open | St | Stepped | UN | Unsuitable for brick making |
| Sandstone (blockstone) | Topsoil | S | Smooth | W | Wide | BZ | Broken Zone |
| | | В | Bedding | J | Joint | | |

| | | | | | Borehole | e number | | | | | GLOSBH0 | 2-2014 | |] | | |
|------------------------------|------------------------|--------------------------------------|---|--|----------|----------------|---------------|--------------|---------------------------------------|------|--|------------|-------------|-------------|------------------------------------|---------------------------|
| te ate ogged by age | | Glossop 05/11/2014 Andy Nortor | 1 | Ground Lev Easting Northing Inclination Vertical Diameter 9cm | C T | | | | Contractor Drill Type Casing | | Abovo Window sample and Conventional core 0-3m | | | | | |
| | | | | | | | | | | | | | (| Core Recove | | |
| From | То | Level (m AOD) | | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| | | | dark g MUDST(common v | rong, very thinky to thinly bedded, grey, fine grained, micaceous DNE (Marsden Formation). With ery thin beds and thin laminations | | | | | 20 20.5 | | | | | | Mainly broken | |
| | | | sandsto fracture closely sp the core a | ey medium fine grained quartz rich one. Partially weathered along s, with common very closely to baced P,S,O fractures c.85-95° to xis. Two joints both P,S,O at 19m overtical and 20.05m 150°. | | Sample 7 | | Sample 7 | 21 | 20.6 | 22.1 | 1.5 | 0.95 | 0.6 | shale 6B 1J | 100 |
| 21.4 | 22.6 | | medium f quartz ri | laminated, pale grey and buff, ine and fine grained micaceous, ch SANDSTONE (Huddersfield k Formation). Partially weathered | | | | | 21.5 22 | | | | | | | |
| | | | spaced fra | ures. With very closely to medium actures (bedding) P,S,O 80-85° to bint, subvertical P,S,O persistent through the unit. | | | | | 22.5 | 22.1 | 23.6 | 1.5 | 1.35 | 0.74 | Mainly broken shale 6B 1J | 100 |
| 22.6 | 23.5 | | dark grey micac Formation and very th grained weathere | strong, thinly bedded, medium to y, fine and medium fine grained, eous MUDSTONE (Marsden). With common thick laminations hin beds of pale grey medium fine quartz rich sandstone. Partially ed along fractures, with common spaced P,S,O fractures. A joint U,R,O at 22.2m. | | Sample 8 | | Sample 8 | 23 | | | | | | | |
| 23.5 | 24.5 | | fine and fir SANDST Formation | assive, pale buff brown, medium ne grained micaceous, quartz rich ONE (Huddersfield White Rock n). With occasional medium grey d laminations the base of the unit. | | | | | 23.5 24 | 23.6 | 25.1 | 1.3 | 0.85 | 0.81 | 1B + 1BZ | 87 |
| 24.5 | 25.1 | | fine gr SANDST | strong, orangy, medium fine and ained micaceous, quartz rich ONE (Huddersfield White Rock n). Distinctly weathered, broken. | | | | | 24.5 25 | | | | | | | |
| omments | | | | | | | | | | | | | | | | |
| iezometei | r Installed Mudstor | | | Sandstone band | Р | Planar | | U | Undulating | | MBP | Many bedo | ling planes | | | |
| | Siltstone | | | Subsoil | 0 | Open | | St | Stepped | | UN | Unsuitable | | aking | | |
| | | | | | | | | | brepped | | | Unsuitable | | laking | | |

| | |))) rho | erger | Borehole | number | | | | | GLOSBH0 | 2-2014 | | | | |
|------------------------|------|--------------------------------------|--|----------|----------------|---------------|--------------|---------------------------------------|------|----------------------------|-------------|-------------|-------------|---------------------------|---------------------------|
| ite ate ogged by | | Glossop 05/11/2014 Andy Norton | Ground Lev Easting | | | | | Contractor Drill Type Casing | | Abovo Window sa 0-3m | ample and C | Conventiona | l core | | |
| | | | | | | 30 | ~ 0 | | ۶ | | | с | Core Recove | | er er |
| From | То | Level (m AOD) | Description | Log | DISC Sample | Fired Disc | XRF / XRD | | From | То | TCR | SCR | RQD | Fracture Frequen cy | Percent age Recover |
| 25.1 | 25.9 | | Strong, massive, pale buff brown, medium fine and fine grained micaceous, quartz rich SANDSTONE (Huddersfield White Rock Formation). With occasional mudstone | | | | | 25 | 25.1 | 26.6 | 1.4 | 1.33 | 1.06 | 8B + 1J | 93 |
| | | | intraclasts at 24.4m and is pale grey at the base. | | | | | | | | | | | | |
| 25.9 | 26.5 | | Strong, laminated, pale grey and buff brown, | | | | | 26 | | | | | | | |
| | | | medium fine grained micaceous, quartz rich SANDSTONE (Huddersfield White Rock Formation). With common thin to thick laminations of dark grey mudstone and a thin bed of mudstone at the start of the unit. | | | | | 26.5 | | | | | | | |
| 26.5 | 26.6 | | Medium to dark grey SILTSTONE with common mudstone lenticualr clasts (10- 30mm diameter). | | | | | | | | | | | | |
| | | | | | | | | 27 | | | | | | | |
| | | | | | | | | | | | | | | | |
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| | | | | 1 | | | | - | | | | | | | |

| Mudstone | Sandstone band | Р | Planar | U | Undulating | MBP | Many bedding planes |
|------------------------|----------------|---|---------|----|------------|-----|-----------------------------|
| Siltstone / band | Subsoil | 0 | Open | St | Stepped | UN | Unsuitable for brick making |
| Sandstone (blockstone) | Topsoil | S | Smooth | W | Wide | BZ | Broken Zone |
| | | В | Bedding | J | Joint | | |