



### OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

### **TEST REPORT**

Site:

Whatley Quarry

Client:

Mr A Fussell
Hanson Aggregates
Whatley Quarry
Nr Frome
Bath
Somerset
BA11 3LF

Job Number: 21139

Report Number: FD/ 10146 Report Date: 06/01/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

#### Report Comment:

Approved by:

John Perry, Senior Analyst

**Environmental Laboratory** 





Report Number

FD/ 10146

Job Number 21139

ID Number 119743

Site Description

Whatley Quarry

Sample

8 - Whatley Cross

Date Received

15/12/2016

Sampling Period 09/11/2016 to 15/12/2016

36 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

51

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>) 36

Detection Limit (mg)

0.5

Date Tested 05/01/2017

Method ENV/FD05

Result

Soiling

LOD 1

Date Tested 05/01/2017

Test / Direction	Measured Value *	Units	Reported Result	
N	99	% reflectance	0.0	%EAC.d <sup>™</sup>
NE	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
E	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SE	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
S	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
SW	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
W	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NW	99	% reflectance	0.0	%EAC.d <sup>-1</sup>





OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

### **TEST REPORT**

Site:

Whatley Quarry

Client:

Mr A Fussell Hanson Aggregates Whatley Quarry Nr Frome Bath Somerset

BA11 3LF Job Number: 21287

Report Number: FD/ 10222 Report Date: 26/01/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

#### Report Comment:

Approved by:

John Perry, Senior Analyst Environmental Laboratory





Report Number

FD/ 10222

Job Number 21287

ID Number 120599

Site Description

Whatley Quarry

Sample

8 - Whatley Cross

Date Received

13/01/2017

Sampling Period 15/12/2016 to 11/01/2017

27 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

149

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>)

139 0.5

Date Tested 25/01/2017

Method ENV/FD05

www.esg.co.uk

Detection Limit (mg)

Result

Soiling

LOD 1

Date Tested 23/01/2017

Test / Direction	Measured Value *	Units	Reported Result	PROCESSOR (1997)
N	100	% reflectance	0.0	%EAC.d <sup>-1</sup>
NE	100	% reflectance	0.0	%EAC.d⁻¹
E	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SE	99	% reflectance	0.0	%EAC.d⁻¹
S	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SW	99	% reflectance	0.0	%EAC.d⁻¹
W	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
NW	99	% reflectance	0.0	%EAC.d <sup>-1</sup>





#### OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

### TEST REPORT

Site:

Whatley Quarry

Client:

Mr A Fussell Hanson Aggregates Whatley Quarry Nr Frome Bath Somerset

BA11 3LF Job Number: 21528

Report Number: FD/ 10332 Report Date: 03/03/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

#### Report Comment:

Approved by:

John Perry, Senior Analyst

Environmental Laboratory





Report Number

FD/ 10332

Job Number 21528

ID Number 121946

Site Description

Whatley Quarry

Sample

8 - Whatley Cross

Comment

Some contamination in Frisbee, likely source is house guttering

Date Received

15/02/2017 Sampling Period 11/01/2017 to 15/02/2017

35 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

325

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>)

Detection Limit (mg)

234

0.5

Date Tested 24/02/2017

Method ENV/FD05

Result

Soiling

LOD 1

Date Tested 23/02/2017

Test / Direction	Measured Value *	Units	Reported Result	
Ν	99	% reflectance	0.0	%EAC.d⁻¹
NE	99	% reflectance	0.0	%EAC.d⁻¹
E	98	% reflectance	0.1	%EAC.d⁻¹
SE	98	% reflectance	0.1	%EAC.d⁻¹
S	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
W	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>





### OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

#### TEST REPORT

Site:

Whatley Quarry

Client:

Mr A Fussell
Hanson Aggregates
Whatley Quarry
Nr Frome
Bath
Somerset
BA11 3LF

Job Number: 22937

Report Number: FD/ 11471 Report Date: 27/04/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

#### Report Comment:

Approved by:

John Perry, Senior Analyst

**Environmental Laboratory** 





Report Number

FD/ 11471

Job Number 22937

ID Number 125588

Site Description

Whatley Quarry

Sample

8 - Whatley Cross

Date Received

11/04/2017

Sampling Period 15/03/2017 to 11/04/2017

27 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

52

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>)

48 0.5

Date Tested 26/04/2017

Method ENV/FD05

www.esg.co.uk

Detection Limit (mg)

Result

Soiling

LOD 1

Date Tested 26/04/2017

Test / Direction	Measured Value *	Units	Reported Result	A-22-20129-030-00
N	96	% reflectance	0.1	%EAC.d <sup>-1</sup>
NE	97	% reflectance	0.1	%EAC.d <sup>-1</sup>
E	96	% reflectance	0.1	%EAC.d <sup>-1</sup>
SE	93	% reflectance	0.3	%EAC.d <sup>-1</sup>
S	96	% reflectance	0.1	%EAC.d <sup>-1</sup>
SW	96	% reflectance	0.1	%EAC.d <sup>-1</sup>
W	95	% reflectance	0.2	%EAC.d <sup>-1</sup>
NW	96	% reflectance	0.1	%EAC.d <sup>-1</sup>





OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

### **TEST REPORT**

Site:

Whatley Quarry

Client:

Mr A Fussell Hanson Aggregates Whatley Quarry Nr Frome Bath Somerset BA11 3LF

Job Number: 23143

Report Number: FD/ 11533 Report Date: 23/05/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

Report Comment:

Approved by:

/ Commune

Helen Latham, Team Leader Environmental Laboratory Direct Dial: 01283 554486





Report Number

FD/ 11533

Job Number 23143

ID Number 127035

Site Description

n Whatley Quarry

Sample

8 - Whatley Cross

Date Received

09/05/2017

Sampling Period 11/04/2017 to 09/05/2017

28 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

17

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>) 15

Detection Limit (mg)

0.5

Date Tested 19/05/2017

Method ENV/FD05

www.esg.co.uk

Result

Soiling

LOD 1

Date Tested 17/05/2017

Test / Direction	Measured Value *	Units	Reported Result	
N	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NE	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
E	100	% reflectance	0.0	%EAC.d⁻¹
SE	99	% reflectance	0.0	%EAC.d~1
S	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
W	98	% reflectance	0.1	%EAC.d⁻¹
NW	97	% reflectance	0.1	%EAC.d <sup>-1</sup>





### OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

#### TEST REPORT

Site:

Whatley Quarry

Client:

Mr A Fussell
Hanson Aggregates
Whatley Quarry
Nr Frome
Bath
Somerset
BA11 3LF

Job Number: 23337

Report Number: FD/ 11615 Report Date: 20/06/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

#### Report Comment:

Approved by:

John Perry, Senior Analyst

**Environmental Laboratory** 





Report Number

FD/ 11615

Job Number 23337

ID Number 128276

Site Description

Whatley Quarry

Sample

8 - Whatley Cross

Date Received

01/06/2017

Sampling Period 09/05/2017 to 01/06/2017

23 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

20

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>) 22

Detection Limit (mg)

0.5

Date Tested 16/06/2017

Method ENV/FD05

Result

Soiling

LOD 1

Date Tested 09/06/2017

Test / Direction	Measured Value *	Units	Reported Result	W10 1600 V100
N	99	% reflectance	0.0	%EAC.d⁻¹
NE	99	% reflectance	0.0	%EAC.d⁻¹
E	99	% reflectance	0.0	%EAC.d⁻¹
SE	99	% reflectance	0.0	%EAC.d⁻¹
S	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SW	98	% reflectance	0.1	%EAC.d⁻¹
W	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NW	99	% reflectance	0.0	%EAC.d <sup>-1</sup>





### OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

#### TEST REPORT

Site:

Whatley Quarry

Client:

Mr A Fussell
Hanson Aggregates
Whatley Quarry
Nr Frome
Bath
Somerset
BA11 3LF

Job Number: 23565
Report Number: FD/ 11711

Report Date: 18/07/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

#### Report Comment:

Approved by:

John Perry, Senior Analyst

**Environmental Laboratory** 





Report Number

FD/ 11711

Job Number 23565

ID Number 129690

Site Description

n Whatley Quarry

Sample

8 - Whatley Cross

Date Received

04/07/2017 Sa

Sampling Period 01/06/2017 to 04/07/2017

33 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

25

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>) 19

0.5

Date Tested 14/07/2017

Method ENV/FD05

Detection Limit (mg)

Result

Soiling

LOD 1

Date Tested 05/07/2017

Test / Direction	Measured Value *	Units	Reported Result	PROFESSIONAL PROFE
N	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
NE	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
E	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
SE	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
S	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
SW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
W	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
NW	99	% reflectance	0.0	%EAC.d <sup>-1</sup>





### OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

### **TEST REPORT**

Site:

Whatley Quarry

Client:

Mr A Fussell
Hanson Aggregates
Whatley Quarry
Nr Frome
Bath
Somerset
BA11 3LF

Job Number: 24817

Report Number: FD/ 12801 Report Date: 22/08/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

#### Report Comment:

Approved by:

John Perry, Senior Analyst Environmental Laboratory





Report Number

FD/ 12801

Job Number 24817

ID Number 132384

Site Description

Whatley Quarry

Sample

8 - Whatley Cross

Date Received

07/08/2017

Sampling Period 04/07/2017 to 07/08/2017

34 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

31

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>) 23

Detection Limit (mg)

0.5

Date Tested 16/08/2017

Method ENV/FD05

Result

Soiling

LOD 1

Date Tested 14/08/2017

Test / Direction	Measured Value *	Units	Reported Result	
N	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
NE	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
E	97	% reflectance	0.1	%EAC.d <sup>-1</sup>
SE	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
S	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
W	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>





OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

### **TEST REPORT**

Site:

Whatley Quarry

Client:

Mr A Fussell
Hanson Aggregates
Whatley Quarry
Nr Frome
Bath
Somerset
BA11 3LF

Job Number: 25041 Report Number: FD/ 12883

Report Date: 18/09/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

ESG is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

Report Comment:

Approved by:

John Perry, Senior Analyst

**Environmental Laboratory** 





Report Number

FD/ 12883

Job Number 25041

ID Number 133824

Site Description

on Whatley Quarry

Sample

8 - Whatley Cross

Date Received

06/09/2017

Sampling Period 07/08/2017 to 05/09/2017

29 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

20

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>) 17

0.5

Date Tested 15/09/2017

Method ENV/FD05

www.esg.co.uk

Detection Limit (mg)

Result

Soiling

LOD 1

Date Tested 07/09/2017

Test / Direction	Measured Value *	Units	Reported Result	VIRGINITY COV
N	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NE	98	% reflectance	0.1	%EAC.d⁻¹
E	97	% reflectance	0.1	%EAC.d⁻¹
SE	98	% reflectance	0.1	%EAC.d⁻¹
S	99	% reflectance	0.0	%EAC.d⁻¹
SW	97	% reflectance	0.1	%EAC.d⁻¹
W	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>





#### OCCUPATIONAL HYGIENE AND ENVIRONMENTAL MONITORING LABORATORY

#### **TEST REPORT**

Site:

Whatley Quarry

Client:

Mr A Fussell Hanson Aggregates Whatley Quarry Nr Frome Bath Somerset **BA11 3LF** 

Job Number: 25238 Report Number: FD/ 12978

Report Date: 19/10/2017

Method N°. ENV/FD01: The determination of Fugitive Dust Based on BS 872: 2005 Method N°. ENV/FD05: The determination of reflectance values using a smoke stain

reflectometer

UKAS accredited tests are denoted by an asterisk(\*)

SOCOTEC is not UKAS accredited for environmental dust gauge sampling.

The dust samples will be retained at the laboratory for a period of 6 months in case extended analysis is required in future. Liquids associated with dust samples are not normally retained at the laboratory.

Report Comment:

Approved by:

HELathan

Helen Latham, Team Leader **Environmental Laboratory** Direct Dial: 01283 554486





Report Number

FD/ 12978

Job Number 25238

ID Number 135189

Site Description

n Whatley Quarry

Sample

8 - Whatley Cross

Date Received

03/10/2017

Sampling Period 05/09/2017 to 03/10/2017

28 Days

UKAS accredited tests are denoted by an asterisk(\*)

Method ENV/FD01

Gauge Type Combined Frisbee deposit and Adh

\* Dust mass (mg)

24

Deposition (mg.m<sup>-2</sup>d<sup>-1</sup>)

22 0.5

Date Tested 16/10/2017

Method ENV/FD05

Detection Limit (mg)

Result

Soiling

LOD 1

Date Tested 11/10/2017

Test / Direction	Measured Value *	Units	Reported Result	
N	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
NE	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
E	99	% reflectance	0.0	%EAC.d <sup>-1</sup>
SE	100	% reflectance	0.0	%EAC.d <sup>-1</sup>
S	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
SW	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
W	98	% reflectance	0.1	%EAC.d <sup>-1</sup>
NW	99	% reflectance	0.0	%EAC.d <sup>-1</sup>