APPENDIX E

CCTV Surveys

Client (s): OPUS INTERNATIONAL CONSULTANTS	Tower Surveys Ltd
	Issue Status: **Information**
Project: **R-12715 Hertfordshire Road Void Inspection**	Location: **Hertfordshire**
Title: **CCTV SURVEY OF VERTICAL BORE HOLES– VOID INSPECTION**	
Originator:	Client Contact:
Name: Przemyslaw Krych (Tower Surveys) Sign: P. Krych Date 11/01/2016	Name: Emma Small (Opus International (UK) Ltd) Sign: Date

Doc Ref:	**R-12715 Hertfordshire Road Void Inspection**	Original Author:	PK
		Original Crew:	PK

Revision:	Date:	Eng:	Ck:	Notes:

Activity: **Survey of Bore holes: 103 and 205**

Notes:
All cores were surveyed on the **09/01/2016**

Methodology

Bore hole locations were provided by OPUS, each location was inspected using a CCTV camera inserted into the borehole, where site conditions and time permitted the camera and lighting were panned around to view the general void detail. Footage was recorded onto digital video recorder and then processed upon return to office; detailed technical review has not been undertaken by Tower Surveys Ltd. Defects or detail shown in the following screen shots are for information only, this may not include all relevant points of interest, for further information and to understand the extents of the inspection the original footage should be viewed along with other plans and technical commentary undertaken by others.

Bore Hole 103

Bore Hole 103

Bore Hole 103

Bore Hole 103

Bore Hole 103

Bore Hole 103

Bore Hole 103

Bore Hole 103

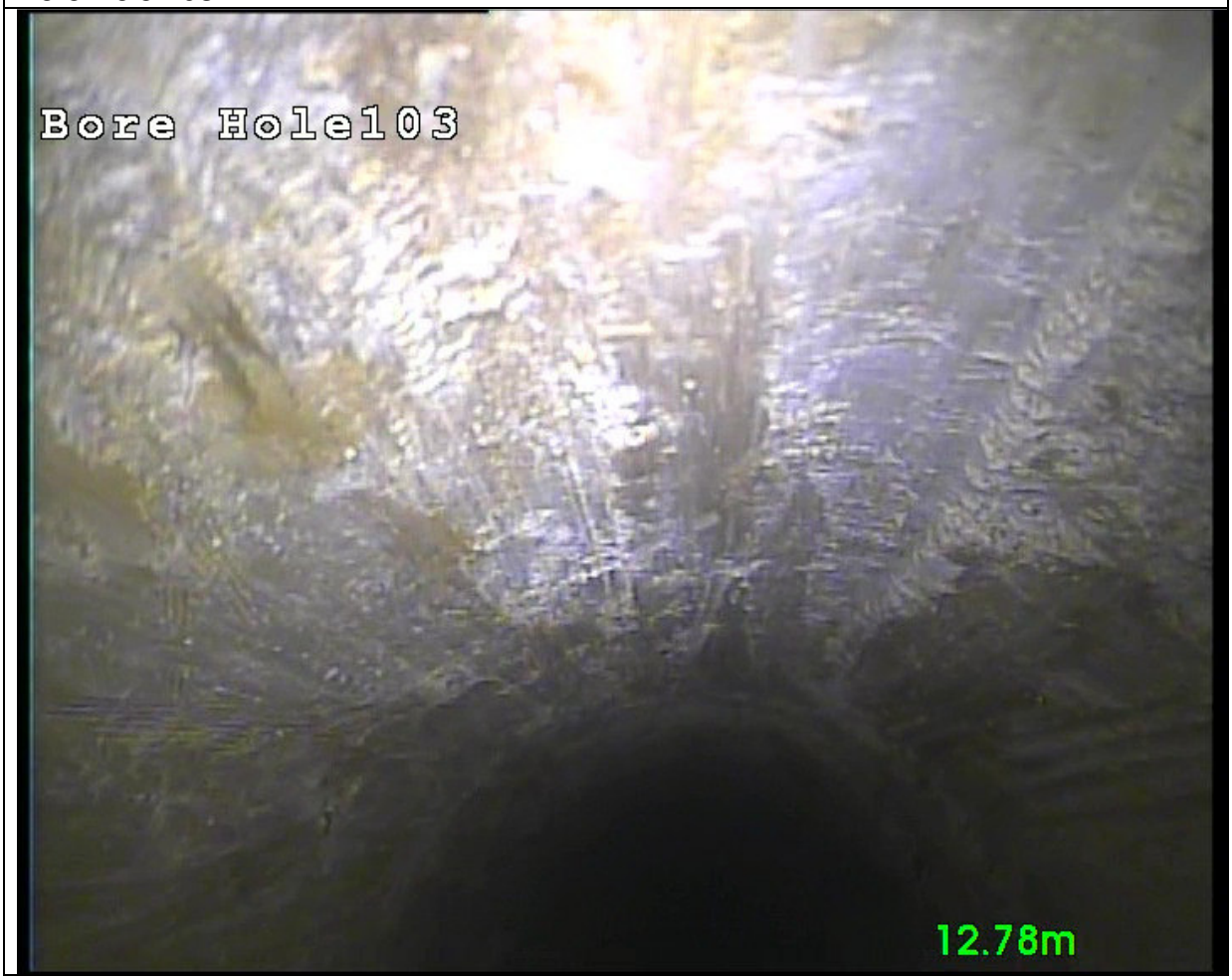
Bore Hole 103

Bore Hole 103

Bore Hole 103

Bore Hole 103

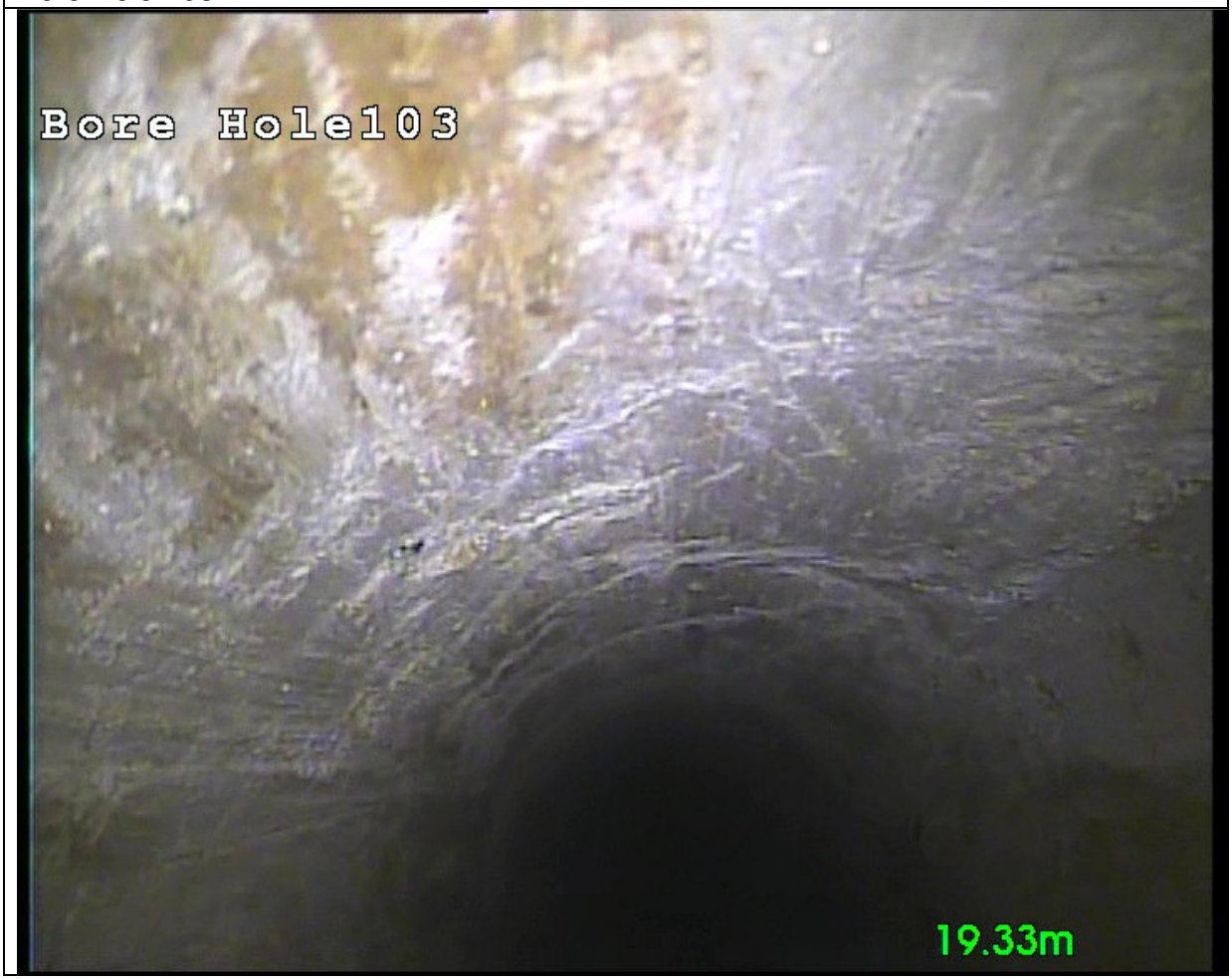
Bore Hole 103



Bore Hole 103

Bore Hole 103

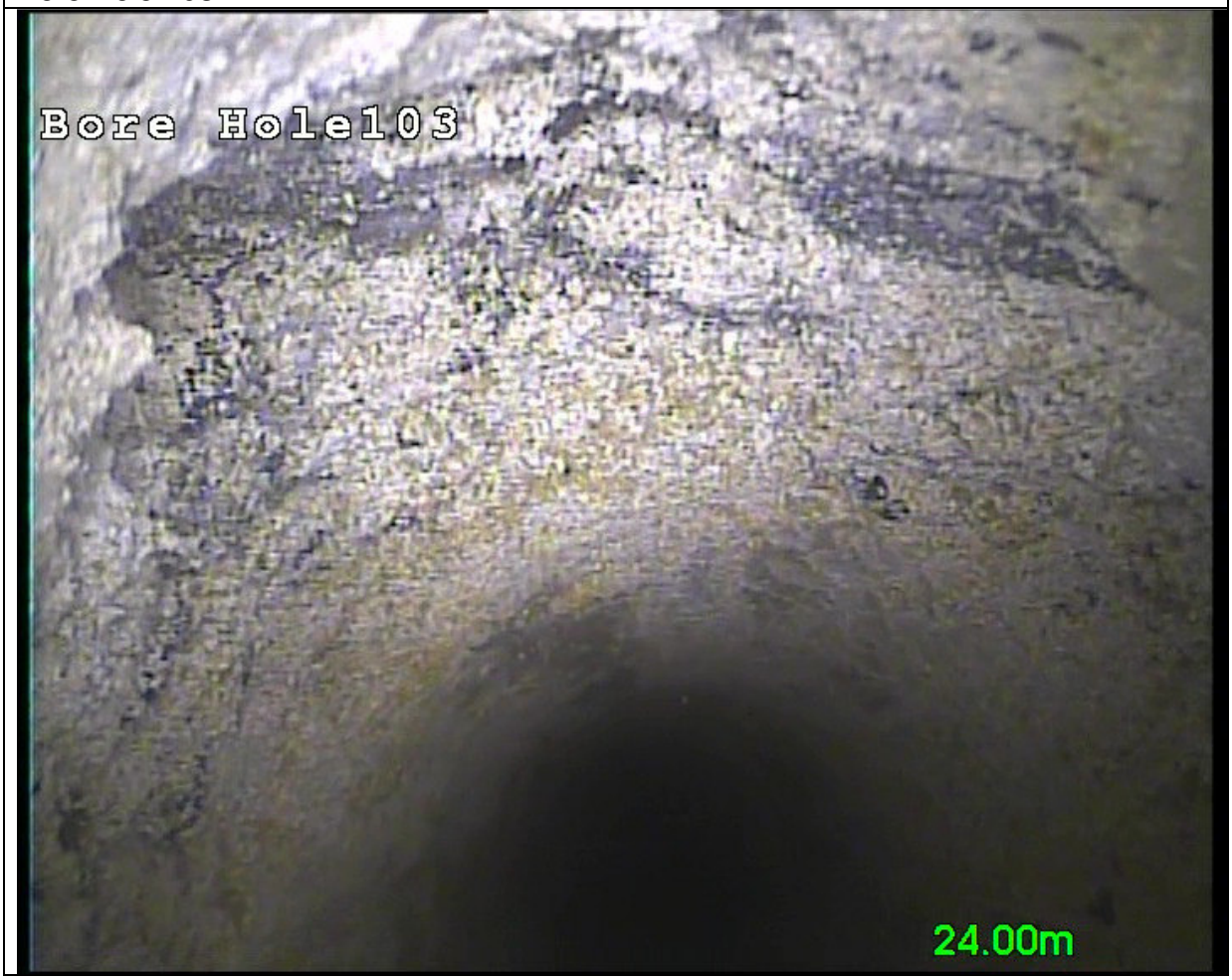
Bore Hole 103



Bore Hole 103

Bore Hole 103

Bore Hole 103



Bore Hole 103

Bore Hole 103

Bore Hole 103

Client (s): OPUS INTERNATIONAL CONSULTANTS OPUS	Tower Surveys Ltd Issue Status: **Information**
Project: **R-12715 Hertfordshire Road Void Inspection**	Location: **Hertfordshire**
Title: **CCTV SURVEY OF VERTICAL BORE HOLES– VOID INSPECTION**	
Originator:	Client Contact:
Name: Dariusz Trendowicz (Tower Surveys) Sign: Date 13/01/2016	Name: Emma Small (Opus International (UK) Ltd) Sign: Date

Doc Ref:	**R-12715 Hertfordshire Road Void Inspection_130116.**	Original Author:	DT
		Original Crew:	DT

Revision:	Date:	Eng:	Ck:	Notes:

Activity: **Survey of Bore holes 102A, 102AB and manhole chamber 'Judo'.**

Notes:
All cores were surveyed on the **13/01/2016**

Methodology
Bore hole locations were provided by OPUS, each location was inspected using a CCTV camera inserted into the borehole, where site conditions and time permitted the camera and lighting were panned around to view the general void detail. Footage was recorded onto digital video recorder and then processed upon return to office; detailed technical review has not been undertaken by Tower Surveys Ltd. Defects or detail shown in the following screen shots are for information only, this may not include all relevant points of interest, for further information and to understand the extents of the inspection the original footage should be viewed along with other plans and technical commentary undertaken by others.

Bore Hole 102A

Bore Hole 102A

Bore Hole 102A

Bore Hole 102A

Bore Hole 102A

Bore Hole 102A

Bore Hole 102A

Bore Hole 102A, B

Bore Hole 102A, B

Bore Hole 102A, B

Bore Hole 102A, B

Bore Hole 102A, B

Bore Hole 102A, B

Bore Hole 102A, B

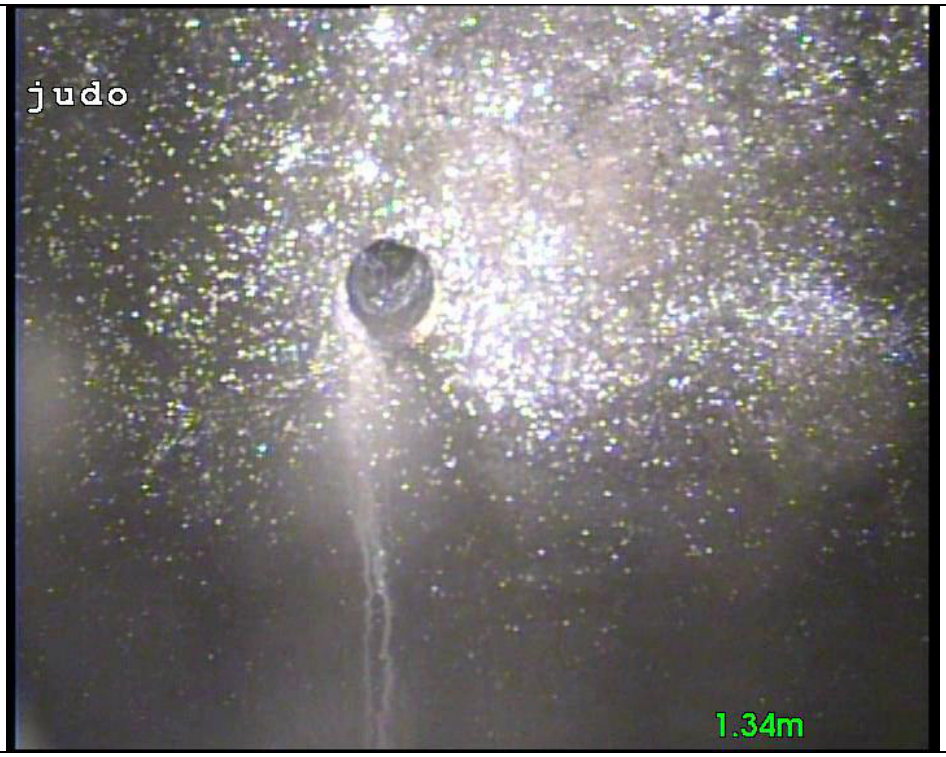
Bore Hole 102A, B

Bore Hole 102A, B

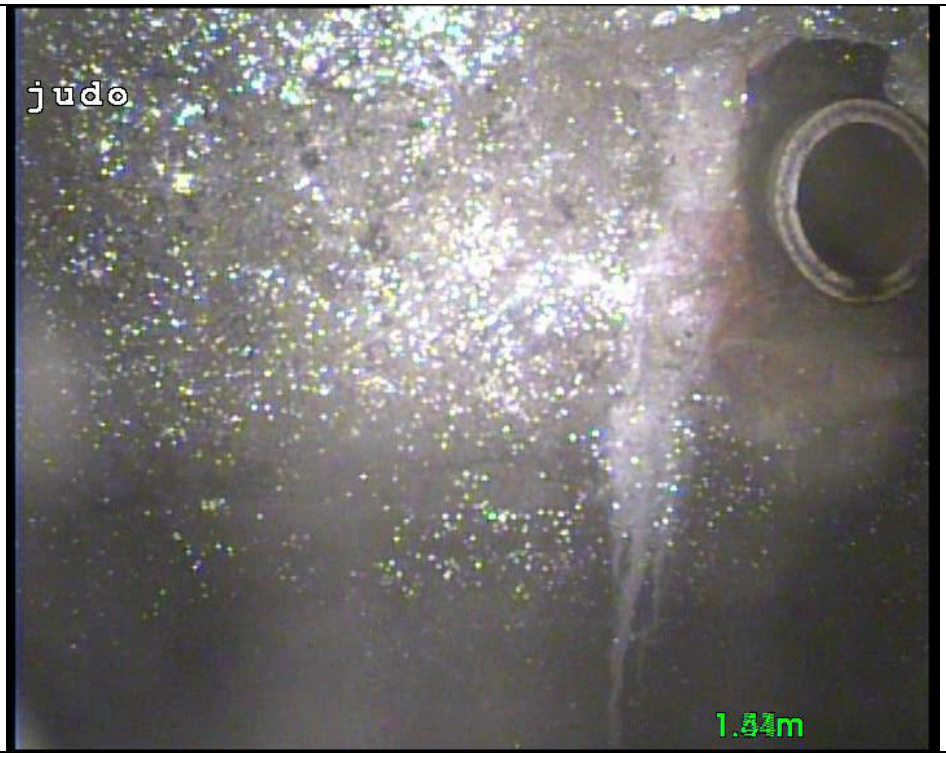
Manhole Chamber ‘Judo’.

Manhole Chamber ‘Judo’.

Manhole Chamber ‘Judo’.

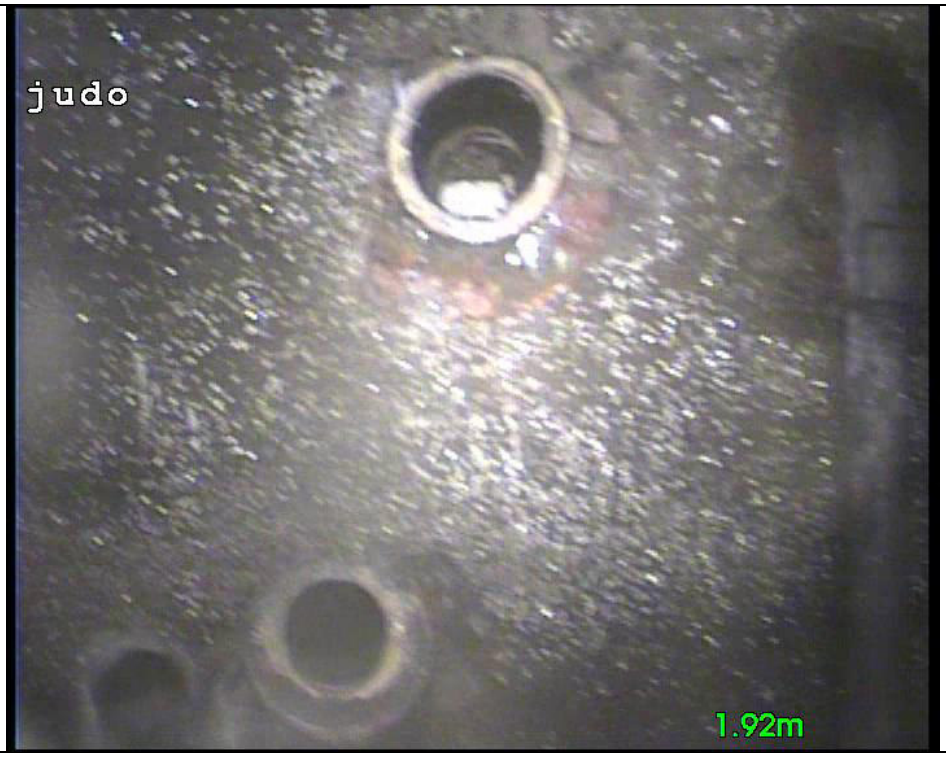


Manhole Chamber ‘Judo’.

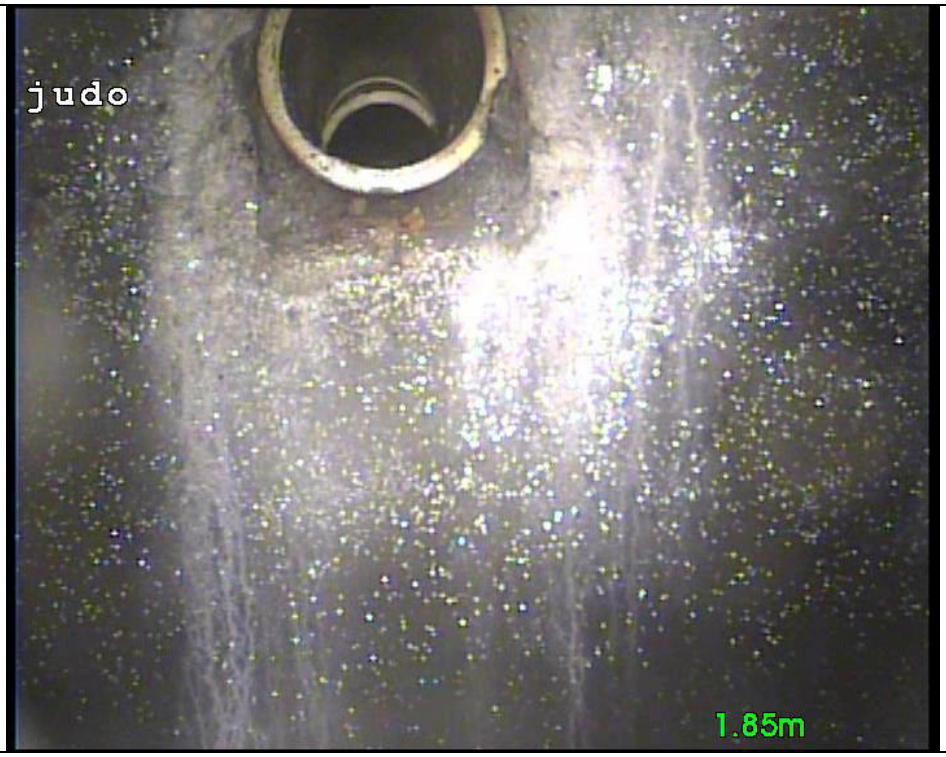


Manhole Chamber ‘Judo’.

Manhole Chamber ‘Judo’.



Manhole Chamber ‘Judo’.



Manhole Chamber ‘Judo’.

Client (s): OPUS INTERNATIONAL CONSULTANTS	Tower Surveys Ltd
	Issue Status: **Information**
Project: **R-12715 Hertfordshire Road Void Inspection**	Location: **Hertfordshire**
Title: **CCTV SURVEY OF VERTICAL BORE HOLES– VOID INSPECTION**	
Originator:	Client Contact:
Name: Przemyslaw Krych (Tower Surveys) Sign: P. Krych Date 09/02/2016	Name: Emma Small (Opus International (UK) Ltd) Sign: Date

Doc Ref:	**R-12715 Hertfordshire Road Void Inspection**	Original Author:	PK
		Original Crew:	AB

Revision:	Date:	Eng:	Ck:	Notes:

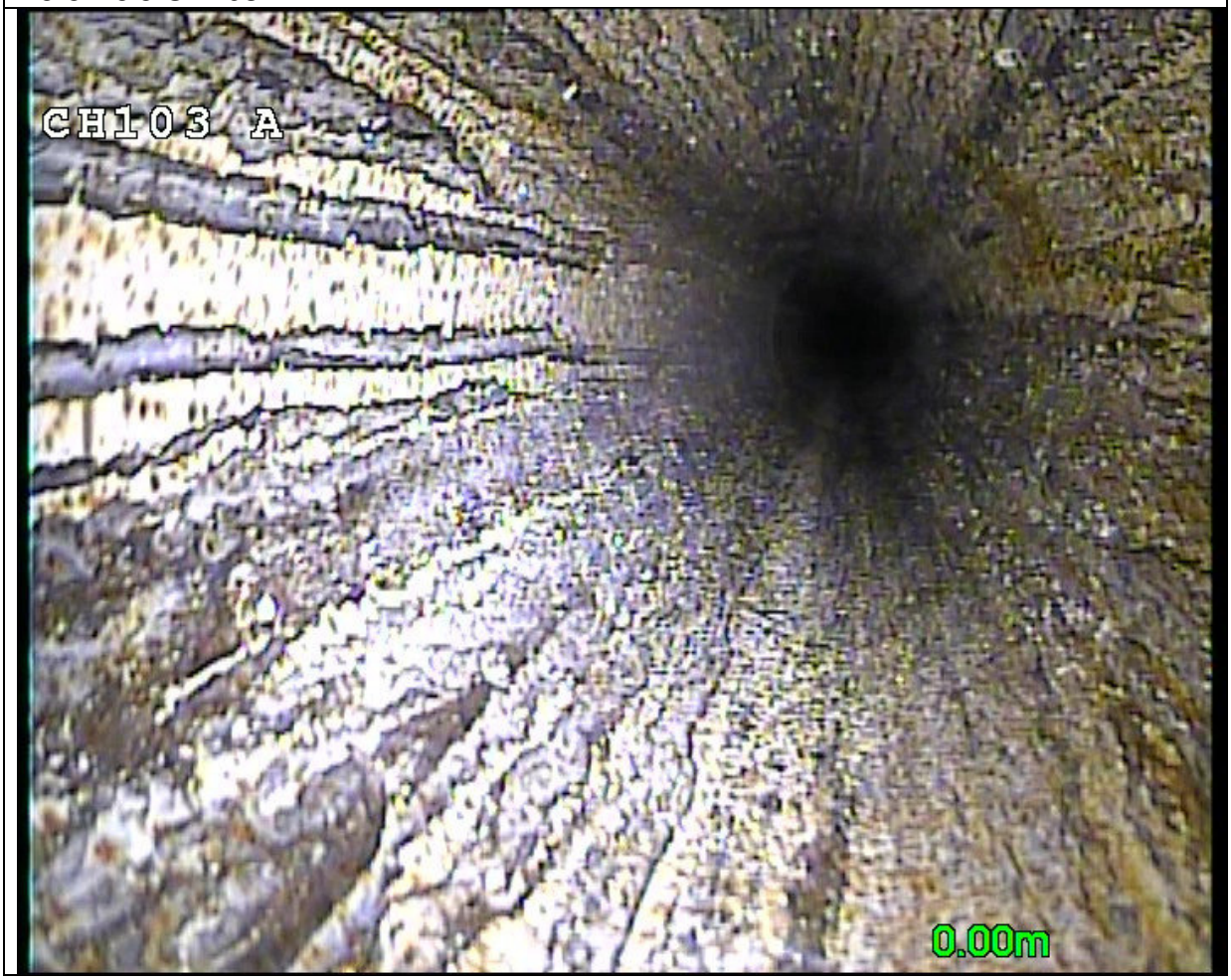
Activity: **Survey of Borehole: CH103 A**

Notes:
All cores were surveyed on the **27/02/2016**

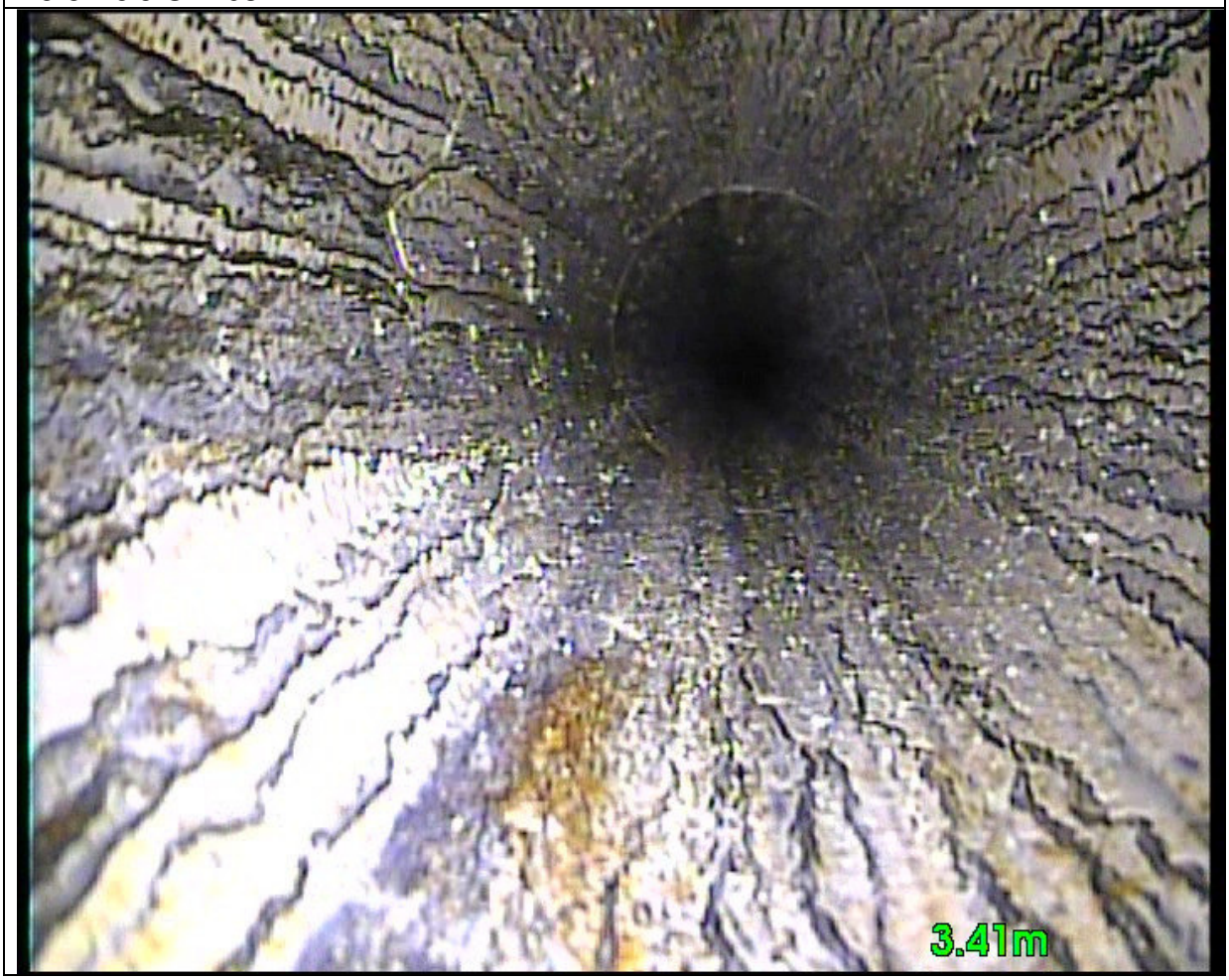
Methodology

Bore hole locations were provided by OPUS, each location was inspected using a CCTV camera inserted into the borehole, where site conditions and time permitted the camera and lighting were panned around to view the general void detail. Footage was recorded onto digital video recorder and then processed upon return to office; detailed technical review has not been undertaken by Tower Surveys Ltd. Defects or detail shown in the following screen shots are for information only, this may not include all relevant points of interest, for further information and to understand the extents of the inspection the original footage should be viewed along with other plans and technical commentary undertaken by others.

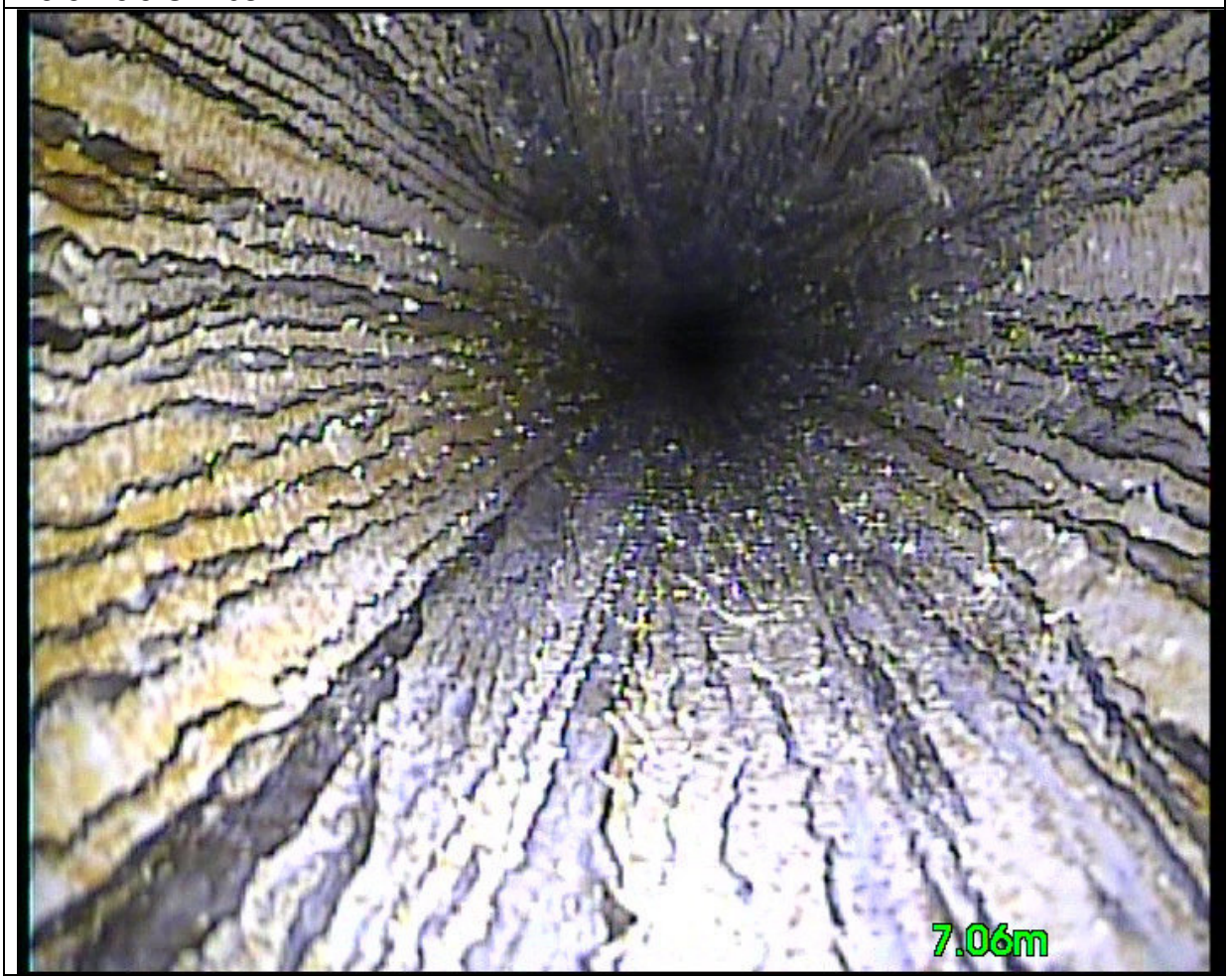
Bore Hole CH103 A



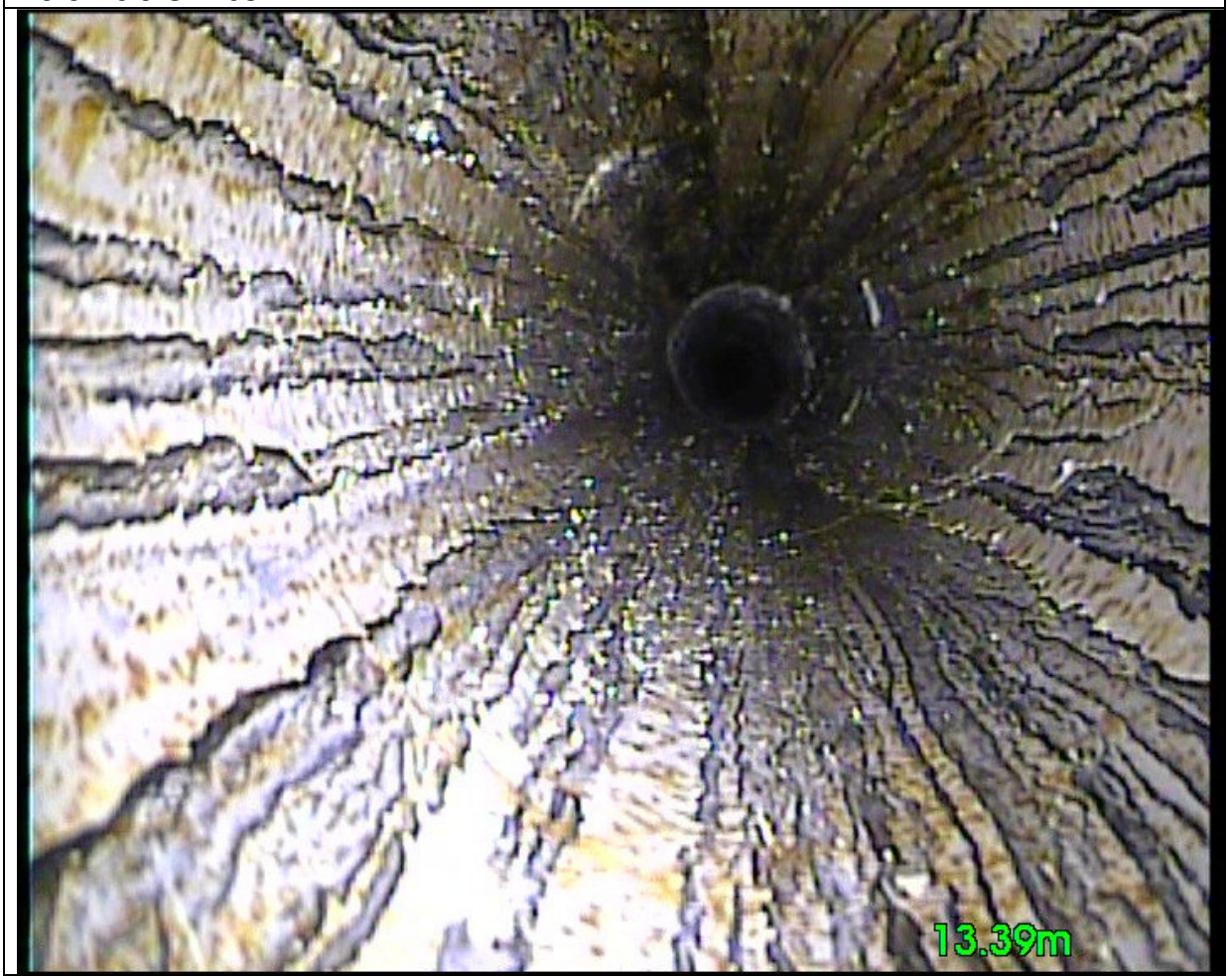
Bore Hole CH103 A



Bore Hole CH103 A



Bore Hole CH103 A

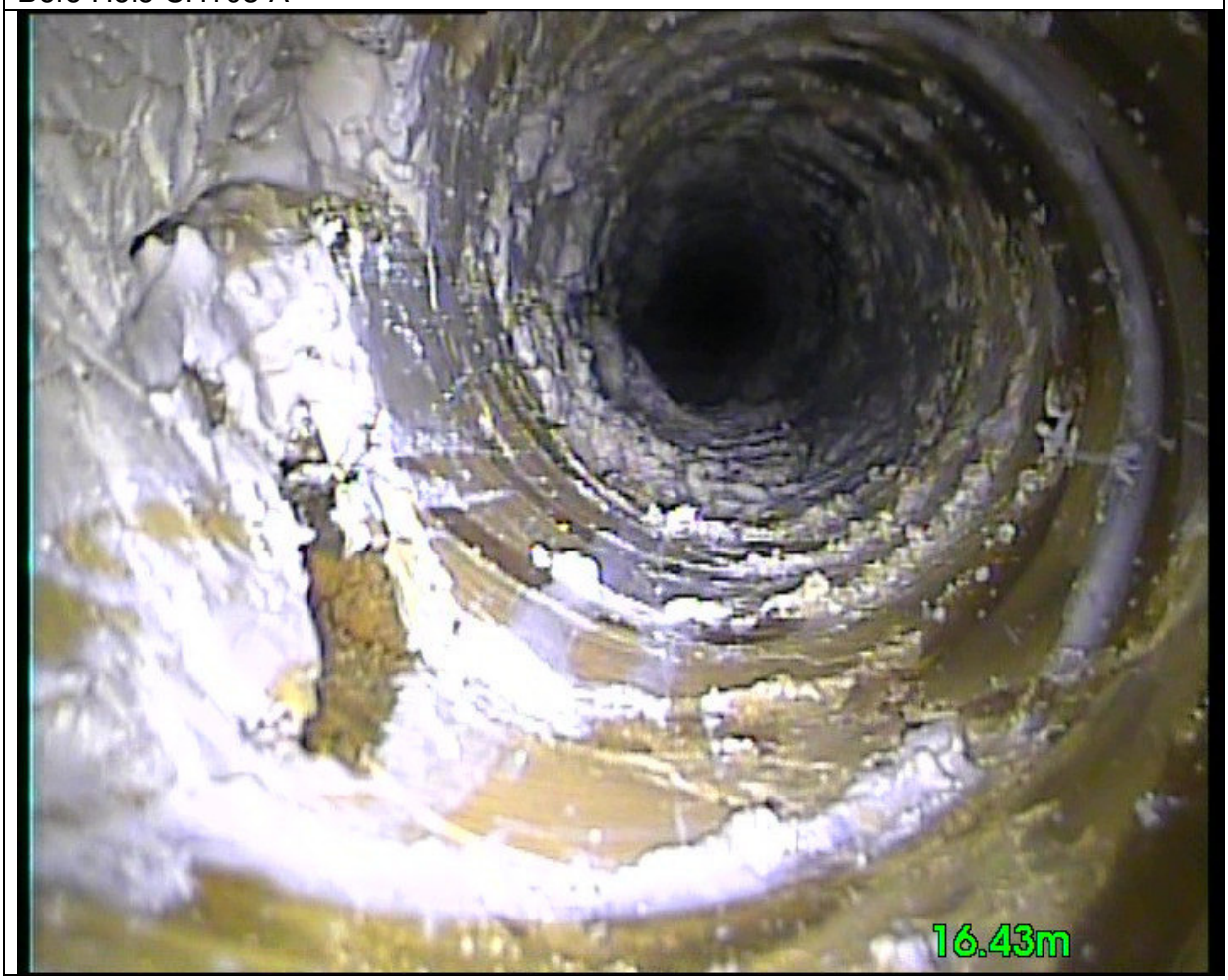


Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A



Bore Hole CH103 A

Bore Hole CH103 A

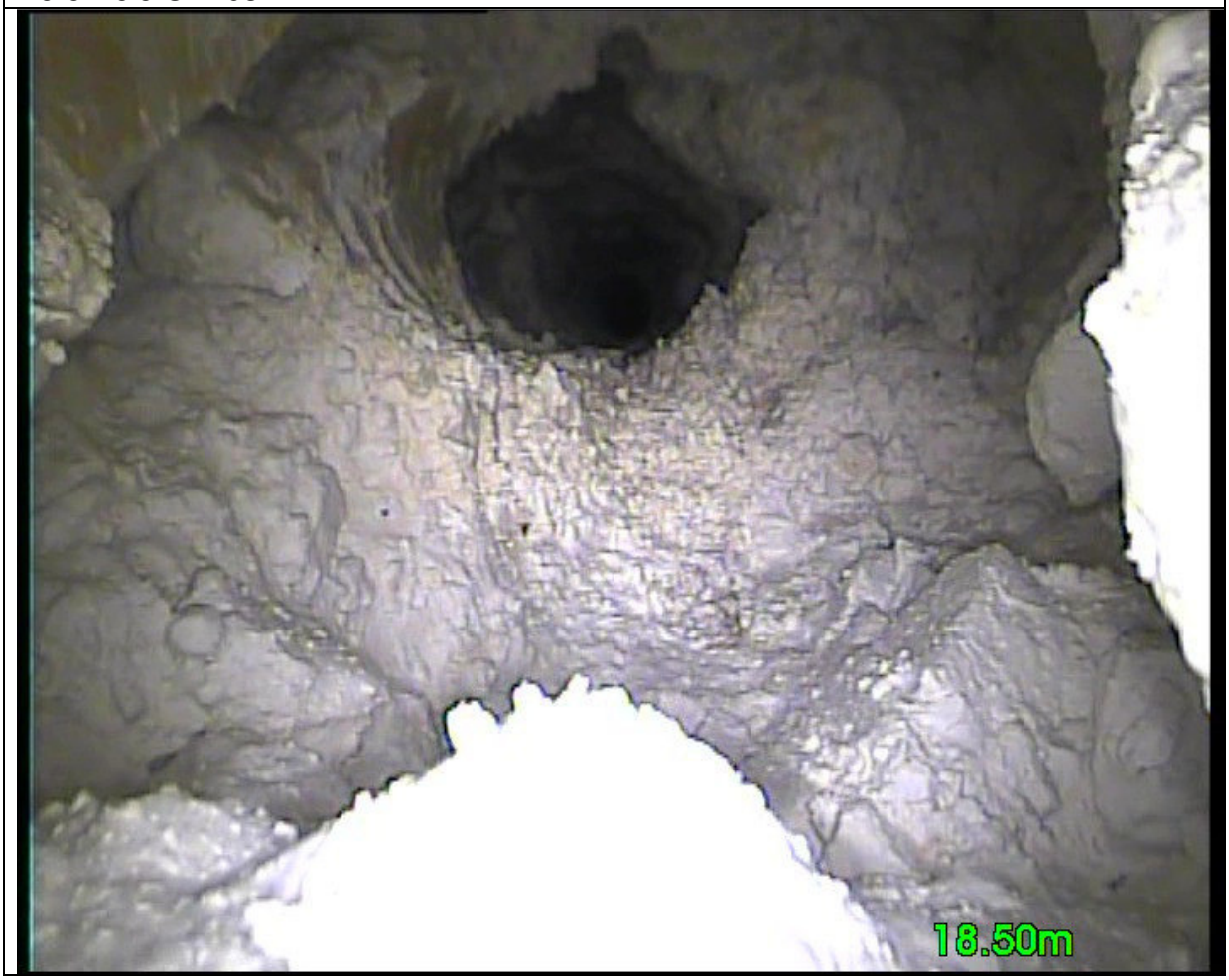
Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A



Bore Hole CH103 A

Bore Hole CH103 A

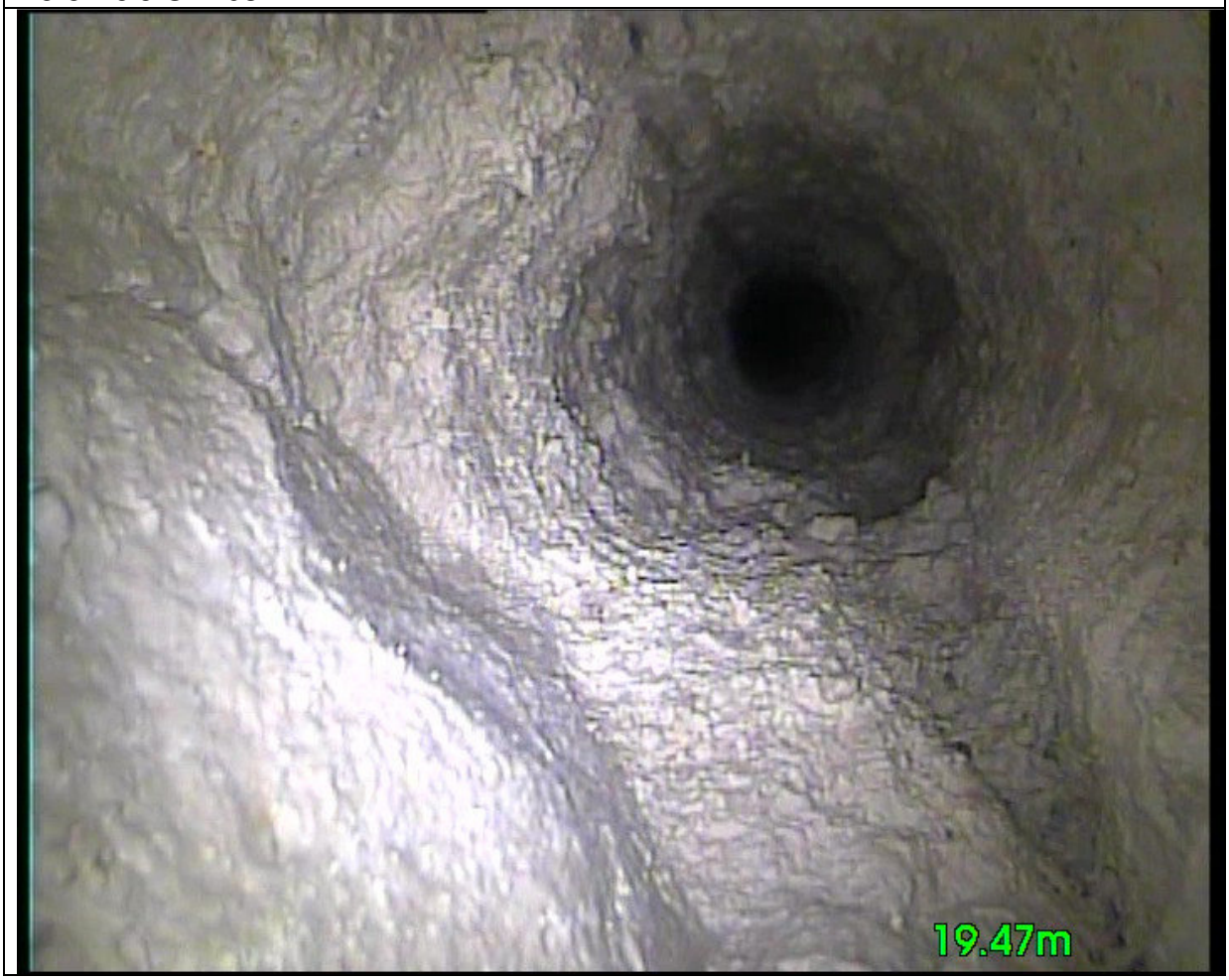
Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A

Bore Hole CH103 A



Bore Hole CH103 A