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GAS MEMBRANE VALIDATION

Site Name: Belle Vue	**Project Number:** 12-123
Company Name: Countryside Properties	**Date**: 27-10-2022
Project Manager: S. Ellis	**E3P Engineer:** P. Lavelle
PM Qualifications: BSc (Hons), FGS, Cenv	**Engineer Qualifications:** GGS Gas training Feb 22

Ground Gas Risk Assessment: **Amber 1**

Overview:

The membrane comprised a Visqueen low permeability gas membrane (Yellow) resistant to radon, carbon dioxide and low levels of methane. E3P can confirm there were no holes or rips at the time of inspection. Upon being laid the membrane is to be covered with a Celotex (closed Cell) floor insulation material which is considered to provide a high degree of protection.

All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant DPM. The membrane was taped to the gas resistant DPM using a double-sided jointing tape. All the overlaps were then additionally taped using foil backed girth tape.

Each unit has a service duct located to the front and outer edge of the property. E3P inspected each one and can confirm that the top-hats have been adequately sealed against the membrane.

Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that **Plots 181-183 have** been installed with gas protection measures in accordance with Amber 1 to an acceptable level of workmanship.

GAS MEMBRANE VALIDATION

Complete

Score	100%
Site Name	Belle Vue
Location	Belle Vue Greyhound Stadium, Kirkmanshulme Lane Manchester England M18 7BD United Kingdom (53.461446598944846, -2.18399460069138)
Project Manager	Stuart Ellis
Project number	12123
Developer	Countryside
Site representative Signature	Paul Lewis 27 Oct 2022 3:36 PM BST
Conducted on	27 Oct 2022 3:20 PM BST
Prepared by	Patrick Lavelle

Inspection Gas Membrane - 100%

100%

Plot Inspection - 100%

100%

Plot Inspection 1 - 100%

100%

Plot Number	181
Type of Development: Other add note	House

Photo 1

Gas Characteristic Situation	CS2
Foundation Type: Other add note	Suspended Floor
Gas Membrane Type: Manufacturer, gauge, and colour.	Yellow visqueen brand not stated

Photo 2

Gas Membrane Condition: Open punctures, tears, rips, stretching, Presence of debris, Repairs, Signs of weakness such as raised or sunken indentations, Protection plan in place to restrict access to lain gas membrane? IF FAIL DESCRIPTION IN ACTIONS AND PHOTOS REQUIRED	Pass

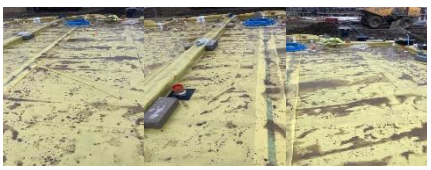


Photo 3 Photo 4 Photo 5

Laps, welds, and joints seals: Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice? Are welds complete? Appropriate joining/double-sided tape used, Folds running in line with joints? (no joints cutting across folds)	Pass

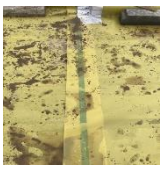


Photo 6

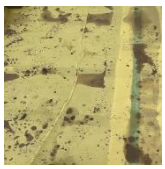


Photo 7

Photo 8

Photo 9

Photo 10

Photo 11

Service entries seals: Top hats seal arrangements fixed around service entries? Use of Jubilee clips?

Yes

Photo 12

Photo 13

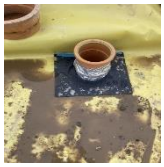


Photo 14

Photo 15

Photo 16

Photo 17

Photo 18

Photo 19

Photo 20

Photo 21

Photo 22

Type of joints/ Lapping

Taped

Corners / Internal joints: Check all corners are correctly formed or contractor has used performed corners.

Pass

Photo 23

Photo 24

Photo 25

Photo 26

Photo 27

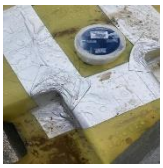


Photo 28

Photo 29

Photo 30

Photo 31

Photo 32

Photo 33

Extent of Coverage: Is the membrane covering the entire plot? Does membrane span over outside walls?

Yes

Photo 34

Photo 35

Photo 36

Condition of sub-grade and underside of gas membrane: Check that the subgrade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.	Pass
Slab / membrane condition (is membrane clear of debris or insulation): Can membrane be fully seen and photographed – ask contractor to remove an debris so membrane can be fully seen an inspected – this is a requirement of NHBC and local authorities.	Pass

Photo 37

Plot Inspection 2 - 100%	100%
Plot Number	182
Type of Development: Other add note	House

Photo 38

Gas Characteristic Situation	CS2
Foundation Type: Other add note	Suspended Floor
Gas Membrane Type: Manufacturer, gauge, and colour.	Yellow visqueen brand not stated

Photo 39

Gas Membrane Condition: Open punctures, tears, rips, stretching, Presence of debris, Repairs, Signs of weakness such as raised or sunken indentations, Protection plan in place to restrict access to lain gas membrane? IF FAIL DESCRIPTION IN ACTIONS AND PHOTOS REQUIRED	Pass

Photo 40

Photo 41

Photo 42

Photo 43

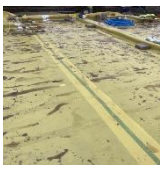


Photo 44

Laps, welds, and joints seals: Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice? Are welds complete? Appropriate joining/double-sided tape used, Folds running in line with joints? (no joints cutting across folds)	Pass

Photo 45 Photo 46 Photo 47

Service entries seals: Top hats seal arrangements fixed around service entries? Use of Jubilee clips?

Yes

Photo 48 Photo 49 Photo 50 Photo 51 Photo 52 Photo 53

Photo 54 Photo 55 Photo 56 Photo 57 Photo 58 Photo 59

Photo 60

Type of joints/ Lapping

Taped

Corners / Internal joints: Check all corners are correctly formed or contractor has used performed corners.

Pass

Photo 61 Photo 62 Photo 63 Photo 64 Photo 65 Photo 66

Photo 67 Photo 68 Photo 69 Photo 70 Photo 71

Extent of Coverage: Is the membrane covering the entire plot? Does membrane span over outside walls?

Yes

Photo 72 Photo 73 Photo 74

Condition of sub-grade and underside of gas membrane: Check that the subgrade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.	Pass
Slab / membrane condition (is membrane clear of debris or insulation): Can membrane be fully seen and photographed – ask contractor to remove an debris so membrane can be fully seen an inspected – this is a requirement of NHBC and local authorities.	Pass

Photo 75 Photo 76 Photo 77

Plot Inspection 3 - 100%	100%
Plot Number	183
Type of Development: Other add note	House

Photo 78

Gas Characteristic Situation	CS2
Foundation Type: Other add note	Suspended Floor
Gas Membrane Type: Manufacturer, gauge, and colour.	Yellow visqueen brand not stated
Gas Membrane Condition: Open punctures, tears, rips, stretching, Presence of debris, Repairs, Signs of weakness such as raised or sunken indentations, Protection plan in place to restrict access to lain gas membrane? IF FAIL DESCRIPTION IN ACTIONS AND PHOTOS REQUIRED	Pass

Photo 79

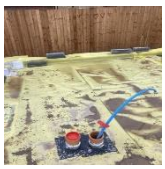


Photo 80

Photo 81

Photo 82

Laps, welds, and joints seals: Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice? Are welds complete? Appropriate joining/double-sided tape used, Folds running in line with joints? (no joints cutting across folds)	Pass

Photo 83

Photo 84

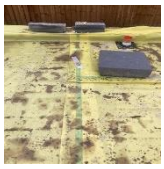


Photo 85

Photo 86

Photo 87

Photo 88

Photo 89

Photo 90

Service entries seals: Top hats seal arrangements fixed around service entries? Use of Jubilee clips?

Yes

Photo 91

Photo 92

Photo 93

Photo 94

Photo 95

Photo 96

Photo 97

Photo 98

Photo 99

Photo 100

Photo 101

Photo 102

Photo 103

Photo 104

Type of joints/ Lapping

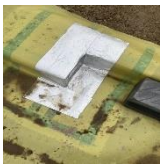
Taped

Corners / Internal joints: Check all corners are correctly formed or contractor has used performed corners.

Pass

Photo 105

Photo 106



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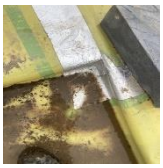


Photo 108

Photo 109

Photo 110

Photo 111

Photo 112

Photo 113

Photo 114

Photo 115

Extent of Coverage: Is the membrane covering the entire plot? Does membrane span over outside walls?

Yes

Photo 116

Photo 117

Photo 118

Photo 119

Photo 120

Condition of sub-grade and underside of gas membrane: Check that the subgrade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.	Pass
Slab / membrane condition (is membrane clear of debris or insulation): Can membrane be fully seen and photographed – ask contractor to remove an debris so membrane can be fully seen an inspected – this is a requirement of NHBC and local authorities.	Pass

Photo 121

Photo 122

Photo 123

Photo 124

Passive Venting

Sub-floor Void: Is a check possible on future plots (insert Plot number or NO in text box)	No
External Wall Air bricks: Numbers, size. positions as design drawing? (Minimum of 3 walls)	Pass

Photo 125

Photo 126

Photo 127

Photo 128

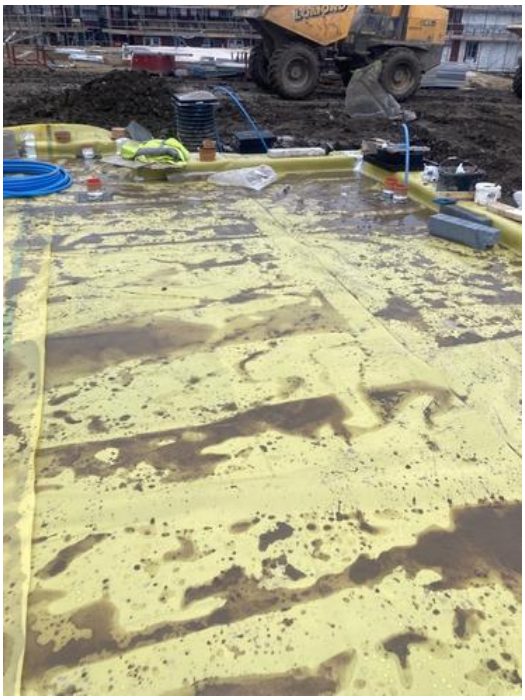
Appendix

Photo 1

Photo 2

Photo 3

Photo 4



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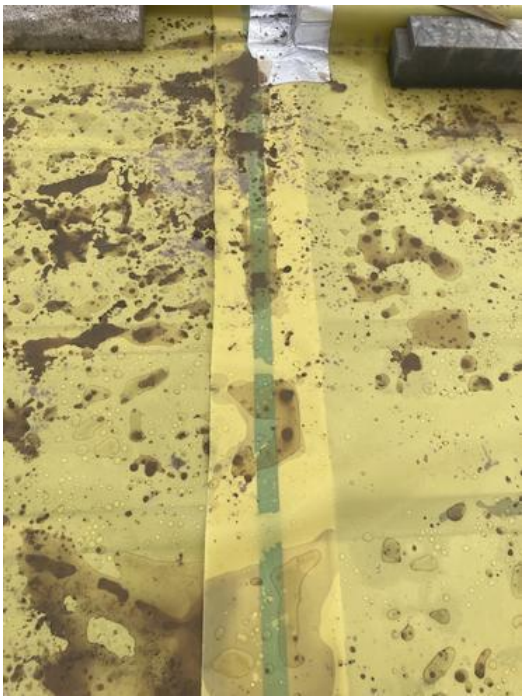

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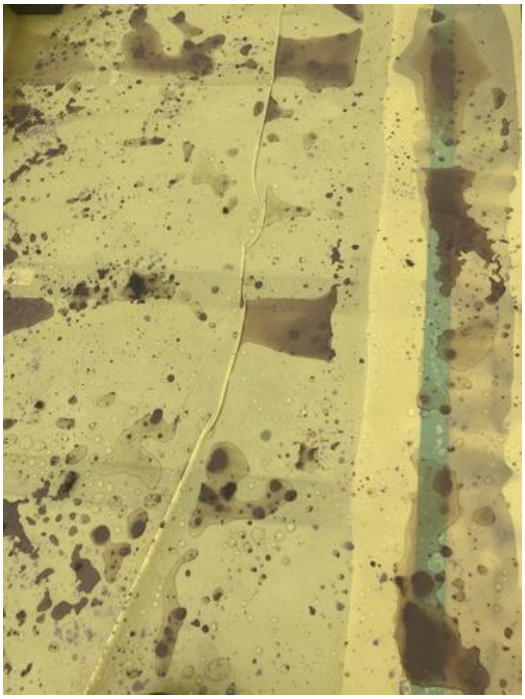

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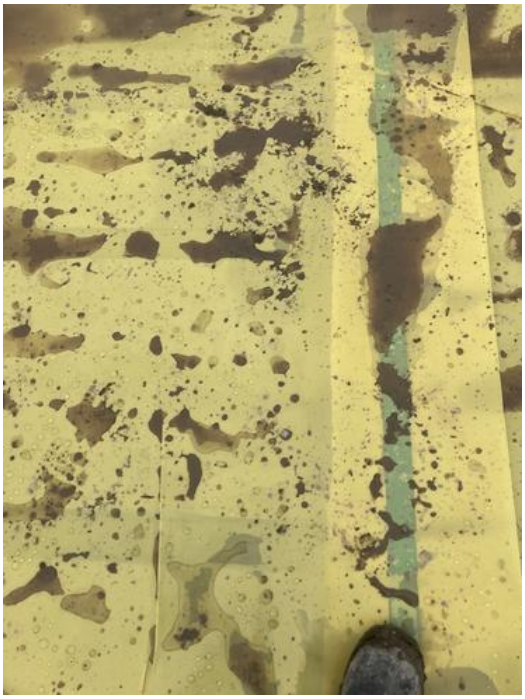

Photo 8

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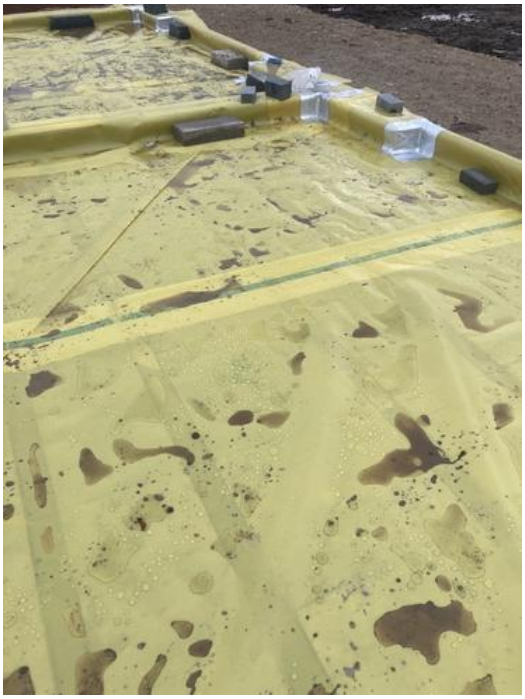

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Photo 42

Photo 43

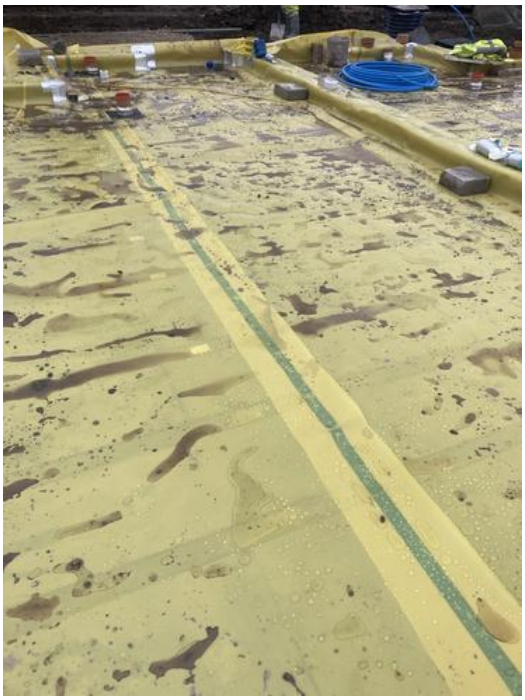
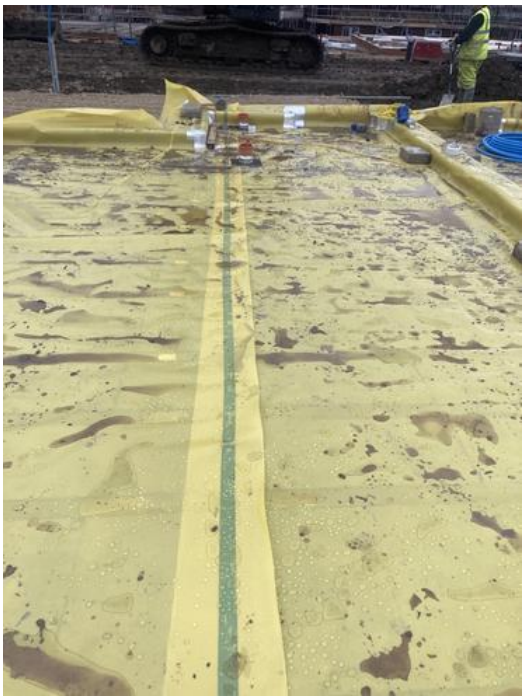


Photo 44

Photo 45

Photo 46



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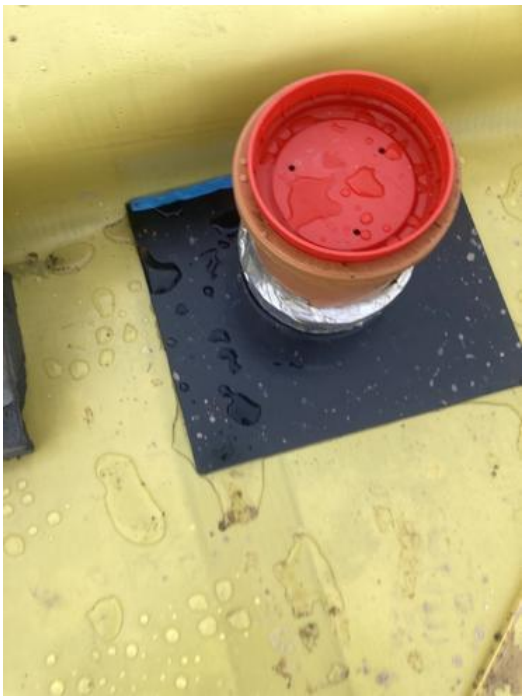

Photo 48

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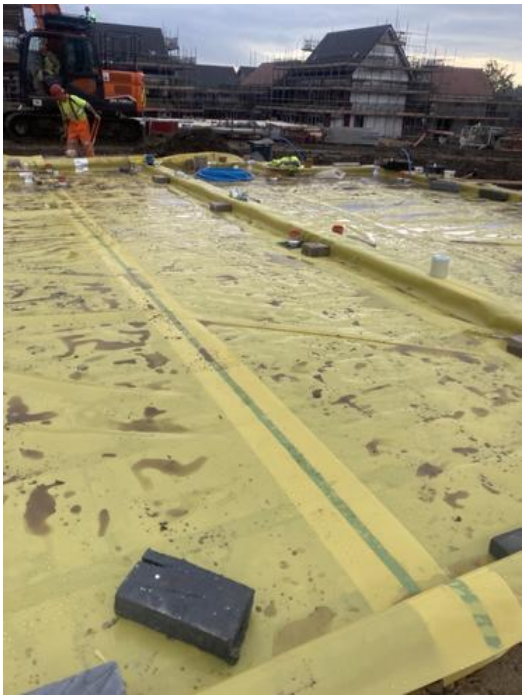

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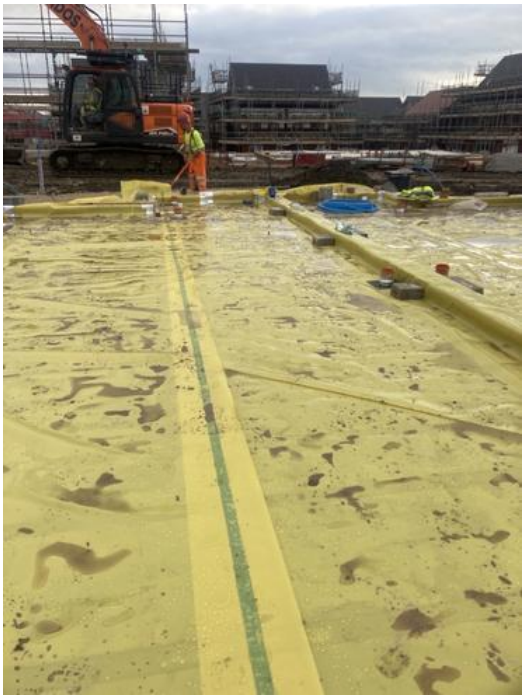

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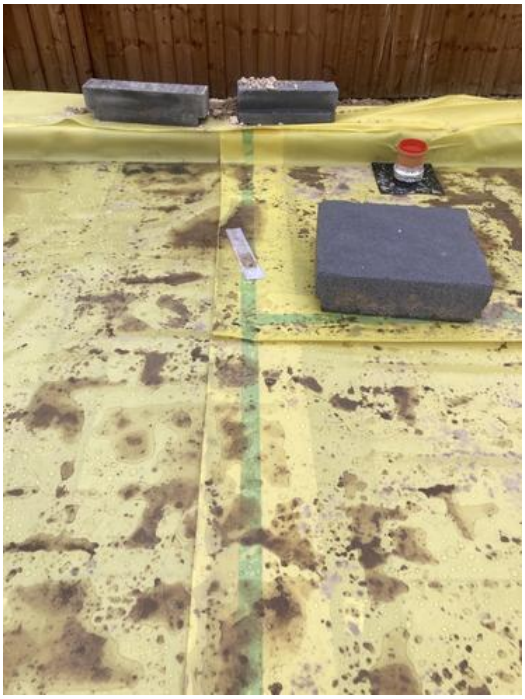

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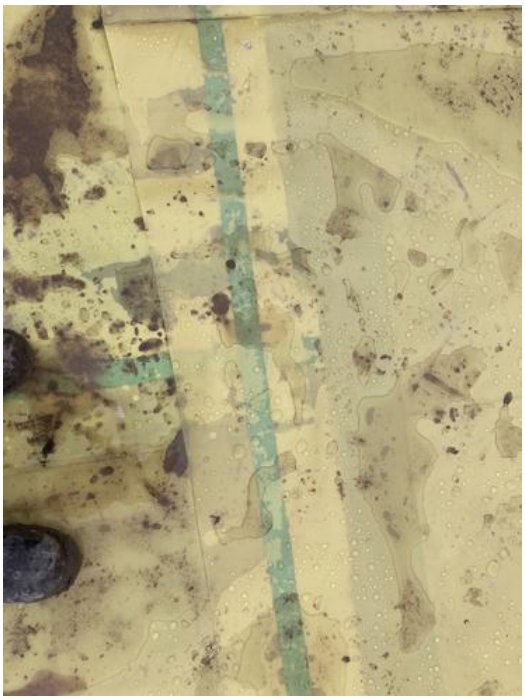

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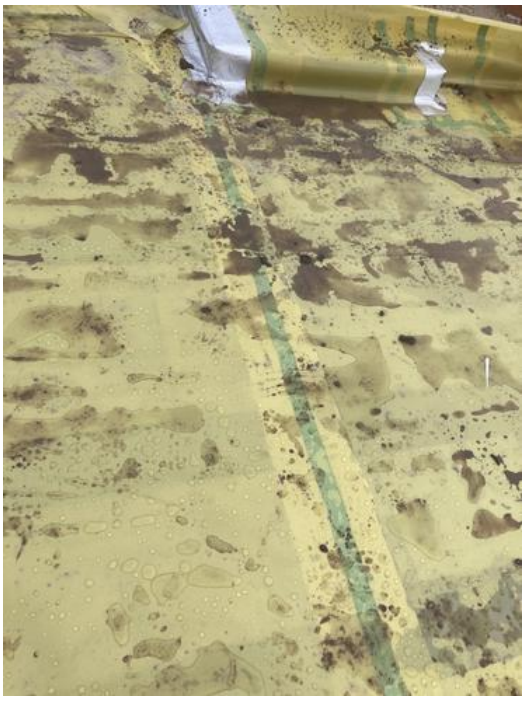

Photo 89

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