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Fax: 01454 269760
Web: www.enzygo.com

Site: Richmond

WS1

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 28-04-21 Finish 28-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, tarmac, brick and ash.
					0.45			Brown sandy CLAY. Sand is fine.
					0.70			Brown clayey fine to medium SAND.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 7				1.00 - 1.45 Loose.
					1.30			Light brown slightly clayey fine to medium SAND.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 11				
					2.20			Brown to light brown very sandy CLAY. Sand is fine.
					2.60			Light brown slightly clayey gravelly fine to medium SAND. Gravel is angular medium flint.
		2.90 - 3.00	D					
		3.00 - 3.45	SPT	C 56	3.00			Light brown slightly clayey gravelly fine to medium SAND. Gravel is angular medium flint.
								3.00 - 3.45 Very dense, refused.
					3.45			Borehole completed at 3.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

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Fax: 01454 269760
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Site				
Richmond				**WS2**
Job No: CRM.1027.087	Dates: Start 27-04-21, Finish 27-04-21	Ground Level (m)	Co-Ordinates	
Client: Hill Partnership				Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES		0.20			MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, ash and brick. 0.00 - 1.80 With roots.
					0.45			MADE GROUND: Brown to black clayey very gravelly fine SAND. Gravel is angular fine to coarse flint, ash and clinker.
		0.90 - 1.00	D					Brown sandy CLAY. Sand is fine.
		1.00 - 1.45	SPT	C 14				
					1.40			Brown clayey fine SAND.
					1.80			
		1.90 - 2.00	D					Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint. 2.00 - 2.45 Medium dense.
		2.00 - 2.45	SPT	C 29				
		2.90 - 3.00	D					
		3.00 - 3.45	SPT	C 53	3.00			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint. 3.00 - 3.45 Very dense, refused.
					3.45			Borehole completed at 3.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisngs.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS4

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-04-21 Finish 27-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
					0.70			Brown CLAY.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 22				1.00 - 1.45 Stiff, high strength.
					1.50			Multicoloured (light orange brown to light grey) gravelly fine to coarse SAND. Gravel is angular coarse flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 50	2.00			Multicoloured (light orange brown to light grey) gravelly fine to coarse SAND. Gravel is angular coarse flint.
								2.00 - 2.45 Very dense. Refused at 2.45m begl.
					2.45			Borehole completed at 2.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site				
Richmond				**WS5**
Job No: CRM.1027.087	Dates: Start 27-04-21, Finish 27-04-21	Ground Level (m)	Co-Ordinates	
Client: Hill Partnership				Sheet: 1 of 2

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES		0.20			MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, ash and brick.
					0.45			MADE GROUND: Brown to black clayey very gravelly fine SAND. Gravel is angular fine to coarse flint, ash and clinker.
		0.90 - 1.00	D					Brown to light brown clayey very occasionally gravelly fine SAND. Gravel is subrounded fine flint.
		1.00 - 1.45	SPT	C 8				1.00 - 1.45 Loose.
					1.60			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 24				2.00 - 2.45 Medium dense.
	▽							
		2.90 - 3.00	D					
		3.00 - 3.45	SPT	C 24				3.00 - 3.45 Medium dense.
		3.90 - 4.00	D					
		4.00 - 4.45	SPT	C 51	4.00 {4.00}			Continued next sheet

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater encountered at 2.20m begl.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 3.50m begl, granular response zone (3.50m-0.50m), bentonite seal 0.50m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
27/04/21	2.20		

All dimensions in metres
Scale 1:25

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Site				WS5
Richmond				
Job No: CRM.1027.087	Dates: Start 27-04-21, Finish 27-04-21	Ground Level (m)	Co-Ordinates	
Client: Hill Partnership				Sheet: 2 of 2

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
								Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
								4.00 - 4.45 Very dense, refused.
					4.45			Borehole completed at 4.45m.
					{8.00}			

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater encountered at 2.20m begl.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 3.50m begl, granular response zone (3.50m-0.50m), bentonite seal 0.50m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site				
Richmond				**WS6**
Job No: CRM.1027.087	Dates: Start 27-04-21, Finish 27-04-21	Ground Level (m)	Co-Ordinates	
Client: Hill Partnership				Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES		0.15			MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint and brick.
								MADE GROUND: Multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND with asbestos fibres and cast iron pieces. Gravel is subangular and subrounded, fine to coarse flint and ash.
					0.60			Brown to light brown occasionally gravelly sand CLAY. Gravel is subrounded fine flint. Sand is fine.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 9				1.00 - 1.45 Firm, low strength.
					1.70			Pale orange yellow slightly gravelly fine to coarse SAND, mostly fine. Gravel is subangular and subrounded fine flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 34				2.00 - 2.45 Dense.
		2.50 - 2.60	D					
		2.60 - 2.98	SPT	C 53	2.60			2.60 Sampler barrel refused.
								2.60 - 2.98 Very dense, refused. Pale orange yellow slightly gravelly fine to coarse SAND, mostly fine. Gravel is subangular and subrounded fine flint.
					2.98			Borehole completed at 2.98m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.60m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 2.50m begl, granular response zone (2.50m-0.50m), bentonite seal 0.50m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS7

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-04-21 Finish 27-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) occasionally gravelly clayey to very clayey fine SAND with glass fragments. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
					0.55			Dark brown to brown occasionally gravelly CLAY. Gravel is subangular medium flint.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 16	1.00			1.00 - 1.45 Medium dense. Brown to light grey brown clayey very gravelly fine SAND. Gravel is angular and subrounded, fine to medium flint.
					1.70			Very light green to very light brown very slightly clayey fine SAND.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 53	2.00			Very light green to very light brown very slightly clayey fine SAND. 2.00 - 2.45 Very dense, refused.
					2.45			Borehole completed at 2.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 2.00m begl, granular response zone (2.00m-0.50m), bentonite seal 0.50m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS8

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-04-21 Finish 27-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	D ES		0.15			MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint and brick.
					0.40			MADE GROUND: Multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND with asbestos fibres. Gravel is subangular and subrounded, fine to coarse flint, ash, and brick.
								Brown to light grey brown clayey fine SAND.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 9				1.00 - 1.45 Loose.
					1.70			Very light green to very light brown very slightly clayey occasionally gravelly fine SAND. Gravel is subrounded fine flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 51	2.00			Very light green to very light brown very slightly clayey occasionally gravelly fine SAND. Gravel is subrounded fine flint.
								2.00 - 2.45 Very dense, refused.
					2.45			Borehole completed at 2.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS9

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 28-04-21 Finish 28-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES		0.40			MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
		0.90 - 1.00	D		0.90			Brown CLAY.
		1.00 - 1.45	SPT	C 12				Brown very clayey fine SAND. 1.00 - 1.45 Medium dense.
		1.90 - 2.00	D		1.50			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
		2.00 - 2.45	SPT	C 51	2.00			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint. 2.00 - 2.45 Very dense, refused.
					2.45			Borehole completed at 2.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 2.00m begl, granular response zone (2.00m-0.50m), bentonite seal 0.50m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS10

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 29-04-21 Finish 29-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	B ES		0.15			MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
								MADE GROUND: Multicolored (brown to red to light grey) sandy gravelly CLAY. Gravel is angular, fine to coarse flint, brick, concrete and ash. Sand is fine.
					0.60			Brown CLAY.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 28				
					1.10			Multicoloured (light orange brown to light grey) gravelly fine to coarse SAND. Gravel is angular coarse flint.
		1.50 - 1.60	D					
		1.60 - 2.05	SPT	C 52	1.60			1.60 Sampler barrel refused.
								1.60 - 2.05 Very dense, refused. Multicoloured (light orange brown to light grey) gravelly fine to coarse SAND. Gravel is angular coarse flint.
					2.05			Borehole completed at 2.05m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-1.60m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS11

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 28-04-21 Finish 28-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
					0.50			
								Brown sandy CLAY. Sand is fine.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 12				
					1.20			
								Brown clayey fine to medium SAND.
					1.70			
		1.90 - 2.00	D					Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
		2.00 - 2.45	SPT	C 50	2.00			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
								2.00 - 2.45 Very dense. Refused at 2.45m begl.
					2.45			Borehole completed at 2.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS12

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 29-04-21 Finish 29-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES		0.20			MADE GROUND: Grass over multicoloured (brown to light brown and light black) very clayey very occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
								MADE GROUND: Multicolored (brown to red to light grey) sandy gravelly CLAY. Gravel is angular, fine to coarse flint, brick, concrete and ash. Sand is fine.
					0.60			Brown CLAY.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 12				1.00 - 1.45 Firm, medium strength.
					1.50			Multicoloured (light orange brown to light grey) gravelly fine to coarse SAND. Gravel is angular coarse flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 15				2.00 - 2.45 Medium dense.
								2.70 - 3.00 Becoming very gravelly.
		2.90 - 3.00	D					
		3.00 - 3.45	SPT	C 53	3.00			Multicoloured (light orange brown to light grey) gravelly fine to coarse SAND. Gravel is angular coarse flint.
								3.00 - 3.45 Very dense, refused.
					3.45			Borehole completed at 3.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisngs.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS13

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 29-04-21 Finish 29-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES		0.20			MADE GROUND: Grass over multicoloured (brown to light brown and light black) very clayey very occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
								MADE GROUND: Multicolored (brown to red to light grey) sandy gravelly CLAY. Gravel is angular, fine to coarse flint, brick, concrete and ash. Sand is fine.
					0.65			Brown CLAY.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 50	1.00			Brown CLAY.
								1.00 - 1.45 Very stiff, very high strength. Refused at 1.45m begl.
					1.45			Borehole completed at 1.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

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Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Richmond

WS14

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 28-04-21 Finish 28-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
					0.50			Brown sandy CLAY. Sand is fine.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 10				
					1.20			Brown clayey fine to medium SAND.
					1.70			Multicoloured (light brown occasionally Light green to cream) clayey gravelly fine SAND. Gravel is subangular fine flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 50	2.00			Multicoloured (light brown occasionally Light green to cream) clayey gravelly fine SAND. Gravel is subangular fine flint. 2.00 - 2.45 Very dense. Refused at 2.45m begl.
					2.45			Borehole completed at 2.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 2.00m begl, granular response zone (2.00m-0.50m), bentonite seal 0.50m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Richmond

WS15

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-04-21 Finish 27-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES		0.15			MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint and brick.
					0.40			MADE GROUND: Multicoloured (brown to light brown and light black) clayey to very clayey occasionally cobbly very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, ash, brick, and occasional cobble of brick.
					0.70			MADE GROUND: Brown very clayey fine SAND with occasional coarse sand-sized brick and ash.
		0.90 - 1.00	D					Brown to light grey brown clayey very gravelly fine SAND. Gravel is angular and subrounded, fine to medium flint.
		1.00 - 1.45	SPT	C 9				1.00 - 1.45 Loose.
					1.70			Very light green to very light brown very slightly clayey occasionally gravelly fine SAND. Gravel is subrounded fine flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 55	2.00			Very light green to very light brown very slightly clayey occasionally gravelly fine SAND. Gravel is subrounded fine flint.
								2.00 - 2.45 Very dense, refused.
					2.45			Borehole completed at 2.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

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Fax: 01454 269760
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Site				
Richmond				**WS16**
Job No: CRM.1027.087	Dates: Start 28-04-21, Finish 28-04-21	Ground Level (m)	Co-Ordinates	
Client: Hill Partnership				Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey occasionally gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, brick and ash.
					0.50			
								Brown sandy CLAY. Sand is fine.
					0.80			
		0.90 - 1.00	D					Brown clayey fine to medium SAND.
		1.00 - 1.45	SPT	C 8				1.00 - 1.45 Loose.
					1.70			
		1.90 - 2.00	D					Light brown to very light green very slightly clayey very occasionally gravelly fine SAND. Gravel is subangular fine flint.
		2.00 - 2.45	SPT	C 29				2.00 - 2.45 Medium dense.
					2.20			
								Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
		2.90 - 3.00	D					
		3.00 - 3.45	SPT	C 50	3.00			
								Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
								3.00 - 3.45 Very dense. Refused at 3.45m begl.
					3.45			
								Borehole completed at 3.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 3.00m begl, granular response zone (3.00m-1.00m), bentonite seal 1.00m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Site: Richmond

WS17

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-04-21 Finish 27-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, ash and brick.
					0.40			MADE GROUND: Multicoloured (brown to light brown occasionally light grey) occasionally gravelly slightly to very sandy CLAY with sewer pipe fragments. Gravel is subangular and subrounded medium flint, brick, and ash, Sand is fine.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 7				1.00 - 1.45 Soft, low strength.
					1.20			Brown sandy CLAY. Sand is fine.
					1.60			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 15				2.00 - 2.45 Medium dense.
		2.90 - 3.00	D					
		3.00 - 3.45	SPT	C 50	3.00			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
								3.00 - 3.45 Very dense. Refused at 3.45m begl.
					3.45			Borehole completed at 3.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

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Fax: 01454 269760
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Site: Richmond

WS18

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-04-21 Finish 27-04-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		0.20 - 0.40	ES					MADE GROUND: Grass over multicoloured (brown to light brown and light black) clayey to very clayey very gravelly fine SAND. Gravel is subangular and subrounded, fine to coarse flint, ash and brick.
					0.45			Brown sandy CLAY. Sand is fine.
		0.90 - 1.00	D					
		1.00 - 1.45	SPT	C 10				
					1.20			Brown clayey fine to medium SAND.
					1.70			Multicoloured (brown to light brown and light grey) clayey very gravelly medium to coarse SAND. Gravel is subrounded fine flint.
		1.90 - 2.00	D					
		2.00 - 2.45	SPT	C 13	2.00			2.00 - 2.45 Medium dense. Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint.
		2.90 - 3.00	D					
		3.00 - 3.45	SPT	C 51	3.00			Multicoloured (light brown to light grey and very light orange) clayey to locally slightly clayey, occasionally gravelly fine to coarse SAND. Gravel is rounded and subrounded fine flint. 3.00 - 3.45 Very dense, refused.
					3.45			Borehole completed at 3.45m.
					{4.00}			

0 1 2 3 4

General Remarks

EQUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, a slotted pipe (50mm) was installed to 3.00m begl, granular response zone (3.00m-1.00m), bentonite seal 1.00m-0.10m, flush steel cover 0.10m-0.00m.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH1

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 1 of 4

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.00			MADE GROUND: Grass over firm brown slightly sandy slightly gravelly CLAY. Gravel is subnagular and fine of brick and flint.
					0.60			Firm brown to light brown very sandy slightly gravelly CLAY. Gravel is subnaguar and coarse of flint.
		1.50 - 1.95	SPT	23	1.60			Medium dense to dense light brown slightly clayey slightly gravelly medium and coarse SAND. Gravel is angular and subangular coarse of flint.
		3.00 - 3.45	SPT	22				
	▽	4.50 - 4.95	SPT	21				
		5.00	D					
					5.40			Stiff greyish brown slightly gravelly CLAY. Gravel is angular and coarse of claystone. Note: Groundwater encountered at 4.3 m bgl.
		6.00 - 6.45	SPT	11				
		7.50 - 7.95	SPT	18				
					{8.00}			Continued next sheet

0 1 2 3 4 5 6 7 8

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Groundwater encountered at 4.3 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
	4.30		

All dimensions in metres
Scale 1:50

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Fax: 01454 269760
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Site: Ashburnham Road, Richmond

BH1

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 2 of 4

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		9.00 - 9.45	SPT	20				
		10.00	D					
		10.50 - 10.95	SPT	30				
		12.00 - 12.45	SPT	25				
		13.50 - 13.95	SPT	28				
		15.00	D	46				
		15.00 - 15.45	SPT		{16.00}			Continued next sheet

8 9 10 11 12 13 14 15 16

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Groundwater encountered at 4.3 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

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Site: Ashburnham Road, Richmond

BH1

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 3 of 4

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description
		Depth (m)	No/Type	Results				
		16.50 - 16.95	SPT	29				
		18.00 - 18.45	SPT	37				
		19.50 - 19.95	SPT	37				
		20.00	D					
		21.00 - 21.45	SPT	37				
		22.50 - 22.95	SPT	39				
		24.00 - 24.45	SPT	41	{24.00}			Continued next sheet

16 17 18 19 20 21 22 23 24

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Groundwater encountered at 4.3 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

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Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH1

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 4 of 4

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		25.00	D		25.00			Borehole completed at 25.00m.
					{32.00}			

24 25 26 27 28 29 30 31 32

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Groundwater encountered at 4.3 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

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Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH2

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 1 of 4

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
								MADE GROUND: Grass over firm brown slightly sandy slightly gravelly CLAY. Gravel is subangular and fine of brick and flint.
					0.50			Firm brown and mottled light brown very sandy slightly gravelly CLAY. Gravel is subangular and fine to coarse of flint.
		1.50 - 1.95	SPT	14	1.50			Medium dense to dense light brown slightly clayey slightly sandy medium and coarse SAND. Gravel is angular and subangular medium and coarse of flint. Note: Groundwater encountered at 3.8 m bgl.
		3.00 - 3.45	SPT	41				
	▽							
		4.50 - 4.80	SPT	50				
		5.00	D					
					5.20			Stiff greyish brown slightly gravelly CLAY. Gravel is angular and coarse of claystone.
		6.00 - 6.45	SPT	14				
		7.50 - 7.95	SPT	19				
					{8.00}			Continued next sheet

0 1 2 3 4 5 6 7 8

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Ground water encountered at 5.0 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
	3.80		

All dimensions in metres
Scale 1:50

Logged By: KC

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Fax: 01454 269760
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Site: Ashburnham Road, Richmond

BH2

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 2 of 4

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		9.00 - 9.45	SPT	16				
		10.00	D					
		10.50 - 10.95	SPT	23				
		12.00 - 12.45	SPT	22				
		13.50 - 13.95	SPT	26				
		15.00 15.00 - 15.45	D SPT	25				
					{16.00}			Continued next sheet

8 9 10 11 12 13 14 15 16

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Ground water encountered at 5.0 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

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Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH2

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 3 of 4

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description
		Depth (m)	No/Type	Results				
		16.50 - 16.95	SPT	25				
		18.00 - 18.45	SPT	27				
		19.50 - 19.95	SPT	30				
		20.00	D					
		21.00 - 21.45	SPT	24				
		22.50 - 22.95	SPT	30				
		24.00 - 24.45	SPT	34	{24.00}			Continued next sheet

16 17 18 19 20 21 22 23 24

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Ground water encountered at 5.0 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

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Tel: 01454 269237
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Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH2

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 4 of 4

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
		25.00	D		25.00			Borehole completed at 25.00m.
					{32.00}			

24 25 26 27 28 29 30 31 32

General Remarks

Cable Percussive Borehole advanced from ground level to 25.0 m bgl. No services encountered. Ground water encountered at 5.0 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

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Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH3

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 16-08-21		

Client: Hill Partnership Ltd

Sheet: 1 of 2

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.60			MADE GROUND: Grass over firm brown slightly sandy slightly gravelly CLAY. Gravel is subangular and fine of brick and flint.
		1.20 - 1.65	SPT	6	1.50			Firm brown and mottled light brown very sandy slightly gravelly CLAY. Gravel is subangular and fine to coarse of flint.
	▽	3.00 - 3.45	SPT	33				Medium dense to dense light brown slightly clayey slightly gravelly medium and coarse SAND. Gravel is angular and subangular and coarse of flint. Note: Groundwater encountered at 3.4 m bgl.
		4.50 - 4.95	SPT	13				
		5.00	D		5.30			Firm greyish brown CLAY.
		6.00 - 6.45	SPT	14				
		7.50 - 7.95	SPT	23	{8.00}			Continued next sheet

0 1 2 3 4 5 6 7 8

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 3.4 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
	3.40		

All dimensions in metres
Scale 1:50

Logged By: KC

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Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH3

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 16-08-21 Finish 16-08-21		

Client: Hill Partnership Ltd

Sheet: 2 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description
		Depth (m)	No/Type	Results				
		9.00 - 9.45	SPT	21				
		10.00	D		10.00			Borehole completed at 10.00m.
					{16.00}			

8 9 10 11 12 13 14 15 16

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 3.4 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH4

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 18-08-21 Finish 18-08-21		

Client: Hill Partnership Ltd

Sheet: 1 of 2

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.00			MADE GROUND: Firm brown slightly sandy slightly gravelly CLAY. Gravel is subangular and fine of brick and flint.
		1.50 - 1.95	SPT	17	0.60			Firm light brown and orangish brown very sandy CLAY. Sand is fine to coarse.
		3.00 - 3.45	SPT	13	2.50			Medium dense light brown slightly clayey slightly gravelly medium and coarse SAND. Gravel is angular and subangular and coarse of flint. Note: Groundwater encountered at 4.3 m bgl.
	▽	4.50 - 4.95	SPT	11				
		5.00	D		5.20			Firm greyish brown CLAY.
		6.00 - 6.45	SPT	14				
		7.50 - 7.95	SPT	19	{8.00}			Continued next sheet

0 1 2 3 4 5 6 7 8

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 4.3 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
	4.30		

All dimensions in metres
Scale 1:50

Logged By: KC

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Fax: 01454 269760
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Site: Ashburnham Road, Richmond

BH4

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 18-08-21 Finish 18-08-21		

Client: Hill Partnership Ltd

Sheet: 2 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description
		Depth (m)	No/Type	Results				
		9.00 - 9.45	SPT	19				
		10.00	D		10.00			Borehole completed at 10.00m.
					{16.00}			

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 4.3 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH5

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 18-08-21 Finish 18-08-21		

Client: Hill Partnership Ltd

Sheet: 1 of 2

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.50			MADE GROUND: Brown slightly sandy slightly gravelly CLAY. Gravel is subangular and fine of brick and flint.
								Firm brown and mottled light brown very sandy slightly gravelly CLAY. Gravel is subangular and fine to coarse of flint.
		1.50 - 1.95	SPT	10	1.50			Medium dense to dense light brown slightly clayey slightly gravelly medium and coarse SAND. Gravel is angular and subangular and coarse of flint. Note: Groundwater encountered at 2.5 m bgl.
	▽	3.00 - 3.45	SPT	37				
		4.50 - 4.95	SPT	37				
		5.00	D					
					5.80			
		6.00 - 6.45	SPT	13				Firm to stiff greyish brown CLAY. Note: Claystone between 8.3 and 8.4 m bgl.
		7.50 - 7.95	SPT	14				
					{8.00}			Continued next sheet

0 1 2 3 4 5 6 7 8

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 2.5 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
	2.50		

All dimensions in metres
Scale 1:50

Logged By: KC

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Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH5

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 18-08-21 Finish 18-08-21		

Client: Hill Partnership Ltd

Sheet: 2 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description
		Depth (m)	No/Type	Results				
		9.00 - 9.45	SPT	19				
		10.00	D		10.00			Borehole completed at 10.00m.
					{16.00}			

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 2.5 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

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Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH6

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 17-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 1 of 2

Well	Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
								MADE GROUND: Firm brown slightly sandy slightly gravelly CLAY. Gravel is subangular and fine of brick, concrete and flint.
					0.70			Firm light brown and orangish brown very sandy CLAY. Sand is fine.
		1.50 - 1.95	SPT	13				
					2.80			Medium dense to dense light brown slightly clayey slightly gravelly medium and coarse SAND. Gravel is angular and subangular and coarse of flint. Note: Groundwater encountered at 3.8 m bgl.
	▽	3.00 - 3.45	SPT	34				
		4.50 - 4.95	SPT	36				
		5.00	D					
					5.40			Frim to stifff greyish brown CLAY.
		6.00 - 6.45	SPT	11				
		7.50 - 7.95	SPT	15				
					{8.00}			Continued next sheet

0 1 2 3 4 5 6 7 8

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 3.8 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)
	3.80		

All dimensions in metres
Scale 1:50

Logged By: KC

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Web: www.enzygo.com

Site: Ashburnham Road, Richmond

BH6

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 17-08-21 Finish 17-08-21		

Client: Hill Partnership Ltd

Sheet: 2 of 2

Well	Water Levels	Samples & In Situ Testing			Depth (m)	Level (mAD)	Legend	Stratum Description
		Depth (m)	No/Type	Results				
		9.00 - 9.45	SPT	18				
		10.00	D		10.00			Borehole completed at 10.00m.
					{16.00}			

General Remarks

Cable Percussive Borehole advanced from ground level to 10.0 m bgl. No services encountered. Groundwater encountered at 3.8 m bgl. Backfilled with arisings upon completion.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:50

Logged By: KC

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Site: Ashburnham Road, Richmond

WS1

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 25-10-21 Finish 25-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.02			MADE GROUND: - Angular fine GRAVEL of basalt.
					0.15			MADE GROUND: Tarmacadam comprising light black to light grey very sandy subrounded coarse GRAVEL of flint in tar. Sand is coarse.
		0.30 - 0.40	ES					MADE GROUND: Multicoloured (yellow to red occasionally black to light brown) occasionally clayey sandy GRAVEL of brick and flint with coarse sand-sized ash. Gravel is angular fine to coarse flint. Sand is fine to coarse.
					0.50			
		0.70 - 0.80	ES					Brown occasionally gravelly sandy CLAY. Gravel is angular fine flint. Sand is fine.
					1.30			Light brown orange occasionally gravelly slightly clayey medium to coarse SAND. Gravel is subangular fine flint.
					2.00			Borehole completed at 2.00m.
					{4.00}			

0 1 2 3 4

General Remarks

EUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

WS2

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 25-10-21 Finish 25-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.15			MADE GROUND: Tarmacadam comprising light black to light grey very sandy subrounded coarse GRAVEL of flint in tar. Sand is coarse.
		0.30 - 0.40	ES		0.22			MADE GROUND: Subbase comprising light grey to cream gravelly fine to coarse SAND. Gravel is angular and subrounded fine to medium flint.
		0.60 - 0.80	ES		0.55			MADE GROUND: Multicoloured (yellow to red occasionally light black to light brown) occasionally clayey sandy, angular fine to coarse GRAVEL of brick and flint. Sand is fine to coarse.
								Brown occasionally gravelly sandy CLAY. Gravel is angular fine flint. Sand is fine.
					1.75			Light brown orange occasionally gravelly slightly clayey medium to coarse SAND. Gravel is subangular fine flint.
					3.00			Borehole completed at 3.00m.
					{4.00}			

0 1 2 3 4

General Remarks

EUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-3.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

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Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

WS3

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 25-10-21 Finish 25-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.02			MADE GROUND: - Angular fine GRAVEL of basalt.
					0.13			MADE GROUND: Tarmacadam comprising light black to light grey very sandy subrounded coarse GRAVEL of flint in tar. Sand is coarse.
		0.30 - 0.45	ES					MADE GROUND: Multicoloured (yellow to red occasionally black to light brown) occasionally clayey sandy GRAVEL of brick and flint with coarse sand-sized ash. Gravel is angular fine to coarse flint. Sand is fine to coarse.
					0.45			
		0.60 - 0.70	ES					Brown occasionally gravelly sandy CLAY. Gravel is angular fine flint. Sand is fine.
					1.30			Light brown orange occasionally gravelly slightly clayey medium to coarse SAND. Gravel is subangular fine flint.
					2.00			Borehole completed at 2.00m.
					{4.00}			

0 1 2 3 4

General Remarks

EUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

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Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

WS4

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 25-10-21 Finish 25-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.02			MADE GROUND: - Angular fine GRAVEL of basalt.
					0.12			MADE GROUND: Tarmacadam comprising light black to light grey very sandy subrounded coarse GRAVEL of flint in tar. Sand is coarse.
		0.30 - 0.50	ES					MADE GROUND: Subbase comprising light grey to cream gravelly fine to coarse SAND. Gravel is angular and subrounded fine to medium flint.
					0.55			
		0.70 - 0.80	ES					Brown occasionally gravelly sandy CLAY. Gravel is angular fine flint. Sand is fine.
					1.45			Light brown orange occasionally gravelly slightly clayey medium to coarse SAND. Gravel is subangular fine flint.
					2.00			Borehole completed at 2.00m.
					{4.00}			

0 1 2 3 4

General Remarks

EUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

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Tel: 01454 269237
Fax: 01454 269760
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Site: Ashburnham Road, Richmond

WS5

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 25-10-21 Finish 25-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.02			MADE GROUND: - Angular fine GRAVEL of basalt.
					0.13			MADE GROUND: Tarmacadam comprising light black to light grey very sandy subrounded coarse GRAVEL of flint in tar. Sand is coarse.
		0.35 - 0.48	ES					MADE GROUND: Subbase comprising light grey to cream sandy rounded to subrounded medium GRAVEL of flint and concrete. Sand is fine.
					0.45			
		0.60 - 0.70	ES		0.48			MADE GROUND: Orange brown to black rounded to subrounded coarse GRAVEL of flint with coarse sand-sized ash.
								Brown occasionally gravelly sandy CLAY. Gravel is angular fine flint. Sand is fine.
					1.10			Brown to light brown very clayey fine SAND.
					1.60			Light brown orange occasionally gravelly slightly clayey medium to coarse SAND. Gravel is subangular fine flint.
					2.90			Sampler refused. Borehole completed at 2.90m.
					{4.00}			

0 1 2 3 4

General Remarks

EUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-2.90m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

WS6

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 25-10-21 Finish 25-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Well	Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
					0.02			MADE GROUND: - Angular fine GRAVEL of basalt.
					0.15			MADE GROUND: Tarmacadam comprising light black to light grey very sandy subrounded coarse GRAVEL of flint in tar. Sand is coarse.
		0.30 - 0.40	ES		0.35			MADE GROUND: Subbase comprising light grey to cream gravelly fine to coarse SAND. Gravel is angular and subrounded fine to medium flint.
					0.60			MADE GROUND: Multicoloured (yellow to red occasionally light black to light brown) occasionally clayey sandy, angular fine to coarse GRAVEL of brick and flint. Sand is fine to coarse.
		0.70 - 0.80	ES					Brown occasionally gravelly sandy CLAY. Gravel is angular fine flint. Sand is fine. 1.00 - 1.40 Increasing sand conent.
					1.40			Light brown orange occasionally gravelly slightly clayey medium to coarse SAND. Gravel is subangular fine flint.
					4.00 {4.00}			Borehole completed at 4.00m.

0 1 2 3 4

General Remarks

EUIPMENT: Archway compact window sampling tracked rig.
METHOD: Hand dug inspection pit 0.00m-1.00m begl. Dynamic sampled 1.00m-4.00m begl.
CASING: Not used.
GROUNDWATER: Groundwater not encountered.
BACKFILL: On completion, the borehole was backfilled with arisings.

Groundwater

Date	Strike Depth (m)	Casing Depth (m)	Depth After Observation (m)

All dimensions in metres
Scale 1:25

Logged By: KC

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Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

SA1

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-10-21 Finish 27-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
				0.00			MADE GROUND: Black to dark brown slightly gravelly very sandy CLAY with red tiles. Gravel is subangular and subrounded fine flint and brick. Sand is fine.
				0.40			Brown CLAY.
				1.00			Brown slightly sandy CLAY. Sand is fine.
				1.80			Brown clayey medium SAND.
				2.00			Trial Pit completed at 2.00m.
				{4.00}			

0 1 2 3 4

General Remarks

Dimensions: 2.00x0.60x2.00
1. Machine excavated pit from ground level to 2.00m begl.
2. Groundwater not encountered.
3. Trial pit sides remained vertical and stable.
4. On completion, trial pit was backfilled with arisings.

All dimensions in metres
Scale 1:25

Logged By: KC

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Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

SA2

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-10-21 Finish 27-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
				0.30			MADE GROUND: Black to dark brown slightly gravelly very sandy CLAY with red tiles. Gravel is subangular and subrounded fine flint and brick. Sand is fine.
				1.10			Brown CLAY.
				1.50			Brown clayey medium SAND.
				2.00			Light brown slightly clayey fine SAND.
				{4.00}			Trial Pit completed at 2.00m.

0 1 2 3 4

General Remarks

Dimensions: 2.00x0.60x2.00
1. Machine excavated pit from ground level to 2.00m begl.
2. Groundwater not encountered.
3. Trial pit sides remained vertical and stable.
4. On completion, trial pit was backfilled with arisings.

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site				
Ashburnham Road, Richmond				**SA3**
Job No: CRM.1027.087	Dates: Start 26-10-21, Finish 26-10-21	Ground Level (m)	Co-Ordinates	
Client: Hill Partnership				Sheet: 1 of 1

Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
				0.30			MADE GROUND: Grass over black to dark brown slightly gravelly very sandy CLAY. Gravel is subangular and subrounded fine flint and brick. Sand is fine.
				0.50			Brown slightly sandy CLAY. Sand is fine.
				2.00			Light brown occasionally gravelly sandy CLAY. Gravel is subangular fine flint. Sand is fine.
				{4.00}			Trial Pit completed at 2.00m.

0 1 2 3 4

General Remarks

Dimensions: 2.00x0.60x2.00
1. Machine excavated pit from ground level to 2.00m begl.
2. Groundwater not encountered.
3. Trial pit sides remained vertical and stable.
4. On completion, trial pit was backfilled with arisings.

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

SA4

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 26-10-21 Finish 26-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
				0.00			MADE GROUND: Black to dark brown slightly gravelly very sandy CLAY. Gravel is subangular and subrounded fine flint and brick. Sand is fine.
				0.40			Brown slightly sandy CLAY. Sand is fine.
				0.60			Light brown clayey gravelly fine to medium SAND. Gravel is subangular fine to medium flint.
				2.00			Trial Pit completed at 2.00m.
				{4.00}			

0 1 2 3 4

General Remarks

Dimensions: 2.00x0.60x2.00
1. Machine excavated pit from ground level to 2.00m begl.
2. Groundwater not encountered.
3. Trial pit sides remained vertical and stable.
4. On completion, trial pit was backfilled with arisings.

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site				
Ashburnham Road, Richmond				**SA5**
Job No: CRM.1027.087	Dates: Start 26-10-21, Finish 26-10-21	Ground Level (m)	Co-Ordinates	
Client: Hill Partnership				Sheet: 1 of 1

Water Levels	Samples & In Situ Testing: Depth (m)	No/Type	Results	Depth (m)	Level (mAD)	Legend	Stratum Description
				0.00			MADE GROUND: Black to dark brown slightly gravelly very sandy CLAY. Gravel is subangular and subrounded fine flint and brick. Sand is fine.
				0.30			MADE GROUND: Multicoloured (yellow to red occasionally light black to light brown) occasionally clayey sandy angular fine to coarse GRAVEL of brick, concrete and flint. Sand is fine to coarse.
				0.55			Light brown occasionally gravelly sandy CLAY. Gravel is subangular fine flint. Sand is fine.
				2.00			Trial Pit completed at 2.00m.
				{4.00}			

0 1 2 3 4

General Remarks

Dimensions: 2.00x0.60x2.00
1. Machine excavated pit from ground level to 2.00m begl.
2. Groundwater not encountered.
3. Trial pit sides remained vertical and stable.
4. On completion, trial pit was backfilled with arisings.

All dimensions in metres
Scale 1:25

Logged By: KC

Enzygo Ltd
Tel: 01454 269237
Fax: 01454 269760
Web: www.enzygo.com

Site: Ashburnham Road, Richmond

SA6

Job No	Dates	Ground Level (m)	Co-Ordinates
CRM.1027.087	Start 27-10-21 Finish 27-10-21		

Client: Hill Partnership

Sheet: 1 of 1

Water Levels	Samples & In Situ Testing: Depth (m)	Samples & In Situ Testing: No/Type	Samples & In Situ Testing: Results	Depth (m)	Level (mAD)	Legend	Stratum Description
				0.40			MADE GROUND: Black to dark brown slightly gravelly very sandy CLAY with red tiles. Gravel is subangular and subrounded fine flint and brick. Sand is fine.
				2.00			Light brown to light orange brown slightly clayey medium SAND.
				{4.00}			Trial Pit completed at 2.00m.

0 1 2 3 4

General Remarks

Dimensions: 2.00x0.60x2.00
1. Machine excavated pit from ground level to 2.00m begl.
2. Groundwater not encountered.
3. Trial pit sides remained vertical and stable.
4. On completion, trial pit was backfilled with arisings.

All dimensions in metres
Scale 1:25

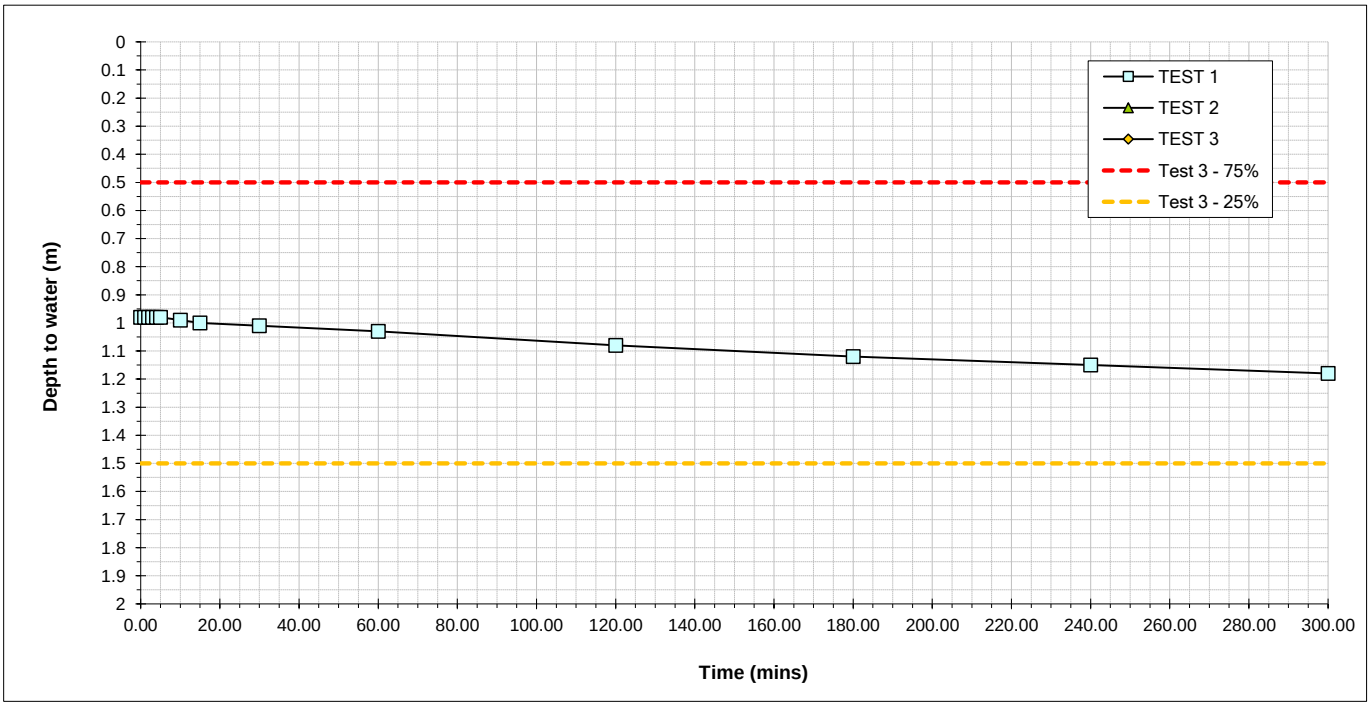
Logged By: KC

Site..... Ashburnham Rd Richmond	Soakaway Number....	SA1
Job Number..... CRM.1027.087	Length.....	1.25 m
Date of Test..... 26th to 27th October 2021	Width.....	0.60 m
	Depth.....	2.00 m
SOIL INFILTRATION RATE TEST	Groundwater Level....	Dry m
See B.R.E. Digest 365, 1991, Soakaway Design.		

	TEST 1		TEST 2		TEST 3	
	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
	0.0	0.98	0.0	0.00	0.0	0.00
	1.0	0.98	0.0	0.00	0.0	0.00
	2.0	0.98	0.0	0.00	0.0	0.00
	3.0	0.98	0.0	0.00	0.0	0.00
	4.0	0.98	0.0	0.00	0.0	0.00
	5.0	0.98	0.0	0.00	0.0	0.00
	10.0	0.99	0.0	0.00	0.0	0.00
	15.0	1.00	0.0	0.00	0.0	0.00
	30.0	1.01	0.0	0.00	0.0	0.00
	60.0	1.03	0.0	0.00	0.0	0.00
	120.0	1.08	0.0	0.00	0.0	0.00
			120.0	1.92	0.0	0.00

Effective Storage Depth	m	1.02	2.00	2.00
75% Effective Storage Depth	m	0.77	1.50	1.50
(i.e. depth below GL)	m	**1.24**	**0.50**	**0.50**
25% Effective Storage Depth	m	0.26	0.50	0.50
(i.e. depth below GL)	m	**1.75**	**1.50**	**1.50**
Effective Storage Depth 75%-25%	m	0.51	1.00	1.00
Time to fall to 75% effective depth	mins			
Time to fall to 25% effective depth	mins			
V (75%-25%)	m3	0.38	0.75	0.75
a (50%)	m2	2.64	4.45	4.45
t (75%-25%)	mins	0.00	0.00	0.00
SOIL INFILTRATION RATE	m/s	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

DESIGN SOIL INFILTRATION RATE, f **#DIV/0!** **m/s**



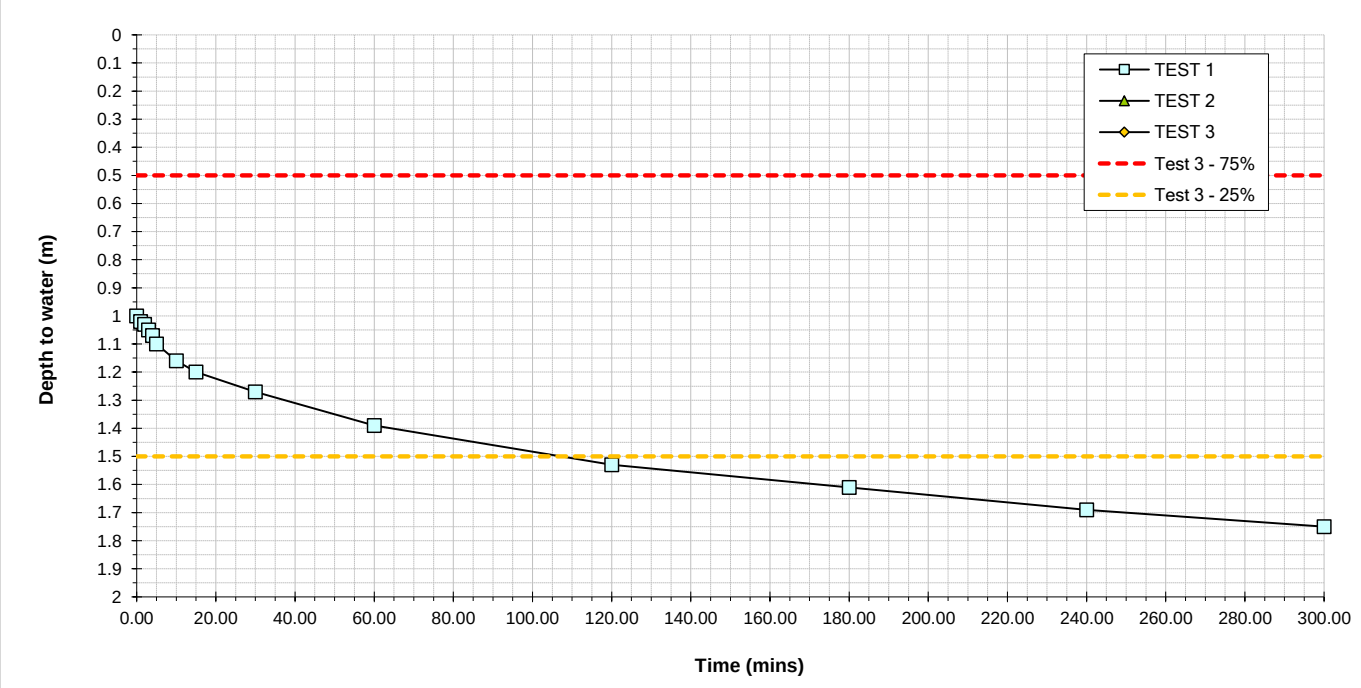
Compiled By:	Date:	Checked By:	Date:	Approved By:	Date:
G.Parr	19.04.21	R.Hamilton	19.04.21	S.Rhodes	19.04.21

enzygo	Site..... Ashburnham Rd Richmond Job Number..... CRM.1027.087 Date of Test..... 26th to 27th October 2021	Soakaway Number.... SA2 Length..... 1.50 m Width..... 0.60 m Depth..... 2.00 m	
	SOIL INFILTRATION RATE TEST See B.R.E. Digest 365, 1991, Soakaway Design.	Groundwater Level.... Dry m	

	TEST 1		TEST 2		TEST 3	
	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
	0.0	1.00	0.0	0.00	0.0	0.00
	1.0	1.02	0.0	0.00	0.0	0.00
	2.0	1.03	0.0	0.00	0.0	0.00
	3.0	1.05	0.0	0.00	0.0	0.00
	4.0	1.07	0.0	0.00	0.0	0.00
	5.0	1.10	0.0	0.00	0.0	0.00
	10.0	1.16	0.0	0.00	0.0	0.00
	15.0	1.20	0.0	0.00	0.0	0.00
	30.0	1.27	0.0	0.00	0.0	0.00
	60.0	1.39	0.0	0.00	0.0	0.00
	120.0	1.53	0.0	0.00	0.0	0.00
			120.0	1.92	0.0	0.00

Effective Storage Depth	m	1.00	2.00	2.00
75% Effective Storage Depth	m	0.75	1.50	1.50
(i.e. depth below GL)	m	**1.25**	**0.50**	**0.50**
25% Effective Storage Depth	m	0.25	0.50	0.50
(i.e. depth below GL)	m	**1.75**	**1.50**	**1.50**
Effective Storage Depth 75%-25%	m	0.50	1.00	1.00
Time to fall to 75% effective depth	mins	25.00		
Time to fall to 25% effective depth	mins	300.00		
V (75%-25%)	m3	0.45	0.90	0.90
a (50%)	m2	3.00	5.10	5.10
t (75%-25%)	mins	275.00	0.00	0.00
SOIL INFILTRATION RATE	m/s	**9.09E-06**	**#DIV/0!**	**#DIV/0!**

DESIGN SOIL INFILTRATION RATE, f **#DIV/0!** **m/s**



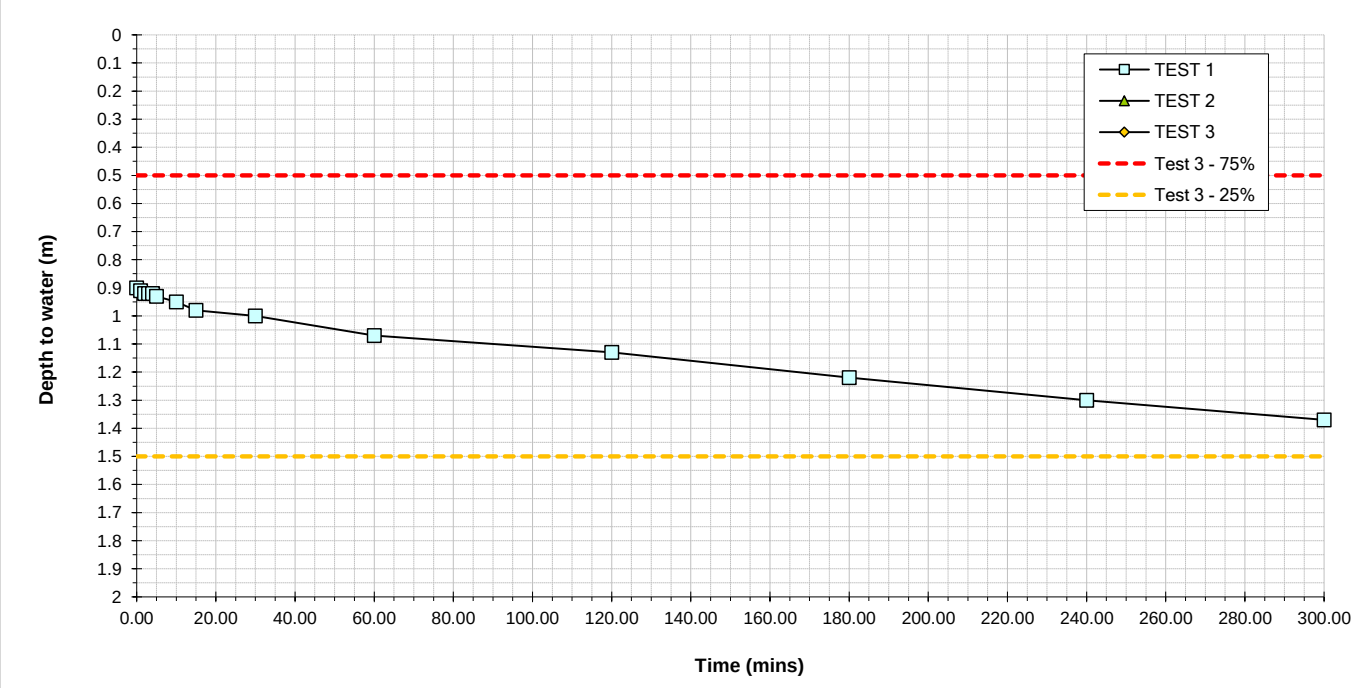
Compiled By:	Date:	Checked By:	Date:	Approved By:	Date:
G.Parr	19.04.21	R.Hamilton	19.04.21	S.Rhodes	19.04.21

Site..... Ashburnham Rd Richmond	Soakaway Number....	SA3
Job Number..... CRM.1027.087	Length.....	1.30 m
Date of Test..... 26th to 27th October 2021	Width.....	0.60 m
	Depth.....	2.00 m
SOIL INFILTRATION RATE TEST	Groundwater Level....	Dry m
See B.R.E. Digest 365, 1991, Soakaway Design.		

	TEST 1		TEST 2		TEST 3	
	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
	0.0	0.90	0.0	0.00	0.0	0.00
	1.0	0.91	0.0	0.00	0.0	0.00
	2.0	0.92	0.0	0.00	0.0	0.00
	3.0	0.92	0.0	0.00	0.0	0.00
	4.0	0.92	0.0	0.00	0.0	0.00
	5.0	0.93	0.0	0.00	0.0	0.00
	10.0	0.95	0.0	0.00	0.0	0.00
	15.0	0.98	0.0	0.00	0.0	0.00
	30.0	1.00	0.0	0.00	0.0	0.00
	60.0	1.07	0.0	0.00	0.0	0.00
	120.0	1.13	0.0	0.00	0.0	0.00
			120.0	1.92	0.0	0.00

Effective Storage Depth	m	1.10	2.00	2.00
75% Effective Storage Depth	m	0.83	1.50	1.50
(i.e. depth below GL)	m	**1.18**	**0.50**	**0.50**
25% Effective Storage Depth	m	0.28	0.50	0.50
(i.e. depth below GL)	m	**1.73**	**1.50**	**1.50**
Effective Storage Depth 75%-25%	m	0.55	1.00	1.00
Time to fall to 75% effective depth	mins			
Time to fall to 25% effective depth	mins			
V (75%-25%)	m3	0.43	0.78	0.78
a (50%)	m2	2.87	4.58	4.58
t (75%-25%)	mins	0.00	0.00	0.00
SOIL INFILTRATION RATE	m/s	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

DESIGN SOIL INFILTRATION RATE, f **#DIV/0!** **m/s**



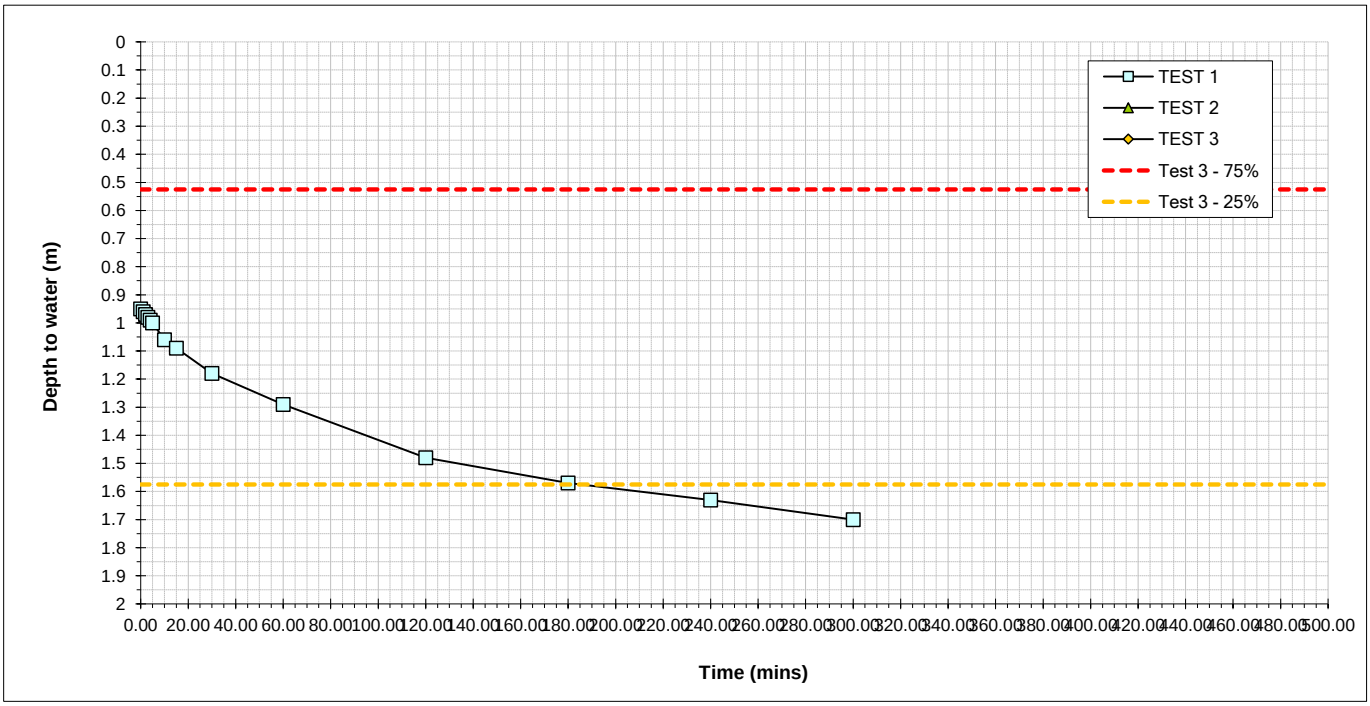
Compiled By:	Date:	Checked By:	Date:	Approved By:	Date:
G.Parr	19.04.21	R.Hamilton	19.04.21	S.Rhodes	19.04.21

Site..... Ashburnham Rd Richmond	Soakaway Number....	SA4
Job Number..... CRM.1027.087	Length.....	1.40 m
Date of Test..... 26th to 27th October 2021	Width.....	0.60 m
	Depth.....	2.10 m
SOIL INFILTRATION RATE TEST	Groundwater Level....	Dry m
See B.R.E. Digest 365, 1991, Soakaway Design.		

	TEST 1		TEST 2		TEST 3	
	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
	0.0	0.95	0.0	0.00	0.0	0.00
	1.0	0.96	0.0	0.00	0.0	0.00
	2.0	0.97	0.0	0.00	0.0	0.00
	3.0	0.98	0.0	0.00	0.0	0.00
	4.0	0.99	0.0	0.00	0.0	0.00
	5.0	1.00	0.0	0.00	0.0	0.00
	10.0	1.06	0.0	0.00	0.0	0.00
	15.0	1.09	0.0	0.00	0.0	0.00
	30.0	1.18	0.0	0.00	0.0	0.00
	60.0	1.29	0.0	0.00	0.0	0.00
	120.0	1.48	0.0	0.00	0.0	0.00
			120.0	1.92	0.0	0.00

Effective Storage Depth	m	1.15	2.10	2.10
75% Effective Storage Depth	m	0.86	1.58	1.58
(i.e. depth below GL)	m	**1.24**	**0.53**	**0.53**
25% Effective Storage Depth	m	0.29	0.53	0.53
(i.e. depth below GL)	m	**1.81**	**1.58**	**1.58**
Effective Storage Depth 75%-25%	m	0.58	1.05	1.05
Time to fall to 75% effective depth	mins	45.00		
Time to fall to 25% effective depth	mins	500.00		
V (75%-25%)	m3	0.48	0.88	0.88
a (50%)	m2	3.14	5.04	5.04
t (75%-25%)	mins	455.00	0.00	0.00
SOIL INFILTRATION RATE	m/s	**5.63E-06**	**#DIV/0!**	**#DIV/0!**

DESIGN SOIL INFILTRATION RATE, f	**#DIV/0!**	**m/s**



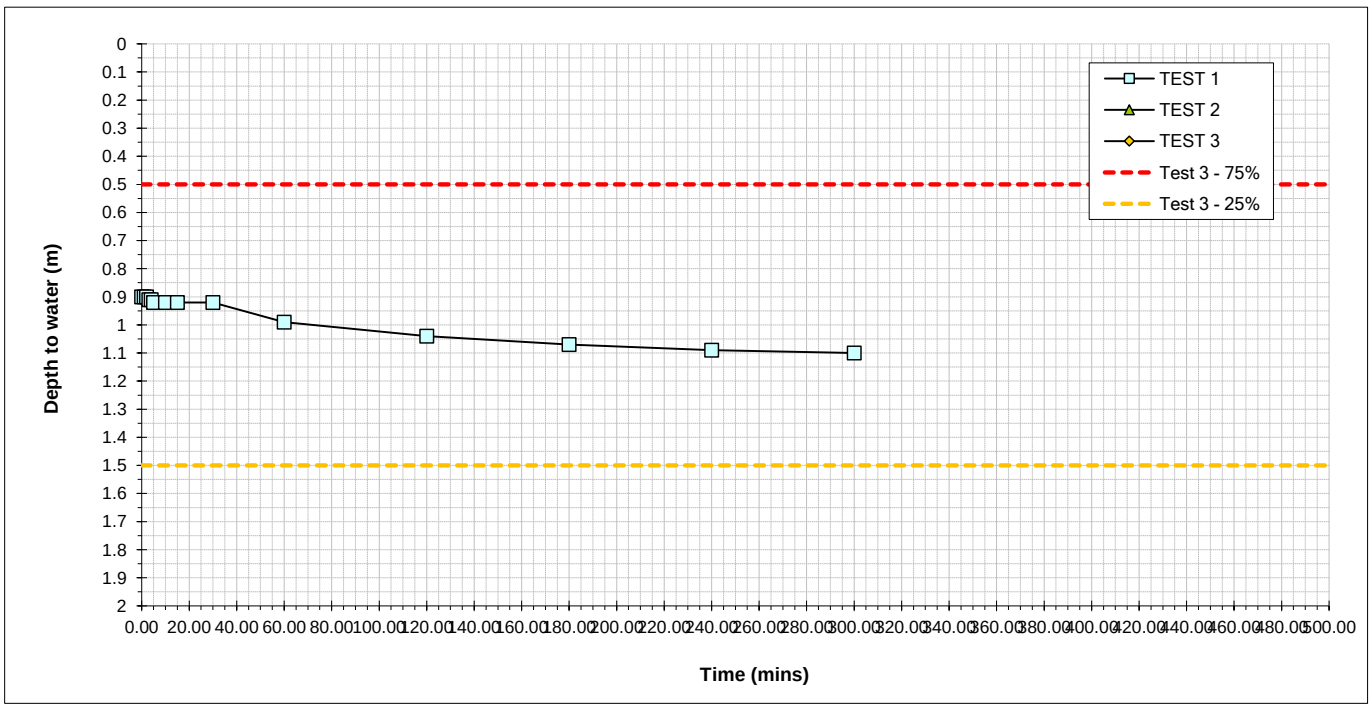
Compiled By:	Date:	Checked By:	Date:	Approved By:	Date:
G.Parr	19.04.21	R.Hamilton	19.04.21	S.Rhodes	19.04.21

Site..... Ashburnham Rd Richmond	Soakaway Number....	SA5
Job Number..... CRM.1027.087	Length.....	1.50 m
Date of Test..... 26th to 27th October 2021	Width.....	0.60 m
	Depth.....	2.00 m
SOIL INFILTRATION RATE TEST	Groundwater Level....	Dry m
See B.R.E. Digest 365, 1991, Soakaway Design.		

	TEST 1		TEST 2		TEST 3	
	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
	0.0	0.90	0.0	0.00	0.0	0.00
	1.0	0.90	0.0	0.00	0.0	0.00
	2.0	0.90	0.0	0.00	0.0	0.00
	3.0	0.91	0.0	0.00	0.0	0.00
	4.0	0.91	0.0	0.00	0.0	0.00
	5.0	0.92	0.0	0.00	0.0	0.00
	10.0	0.92	0.0	0.00	0.0	0.00
	15.0	0.92	0.0	0.00	0.0	0.00
	30.0	0.92	0.0	0.00	0.0	0.00
	60.0	0.99	0.0	0.00	0.0	0.00
	120.0	1.04	0.0	0.00	0.0	0.00
			120.0	1.92	0.0	0.00

Effective Storage Depth	m	1.10	2.00	2.00
75% Effective Storage Depth	m	0.83	1.50	1.50
(i.e. depth below GL)	m	**1.18**	**0.50**	**0.50**
25% Effective Storage Depth	m	0.28	0.50	0.50
(i.e. depth below GL)	m	**1.73**	**1.50**	**1.50**
Effective Storage Depth 75%-25%	m	0.55	1.00	1.00
Time to fall to 75% effective depth	mins			
Time to fall to 25% effective depth	mins			
V (75%-25%)	m3	0.50	0.90	0.90
a (50%)	m2	3.21	5.10	5.10
t (75%-25%)	mins	0.00	0.00	0.00
SOIL INFILTRATION RATE	m/s	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**

DESIGN SOIL INFILTRATION RATE, f **#DIV/0!** **m/s**



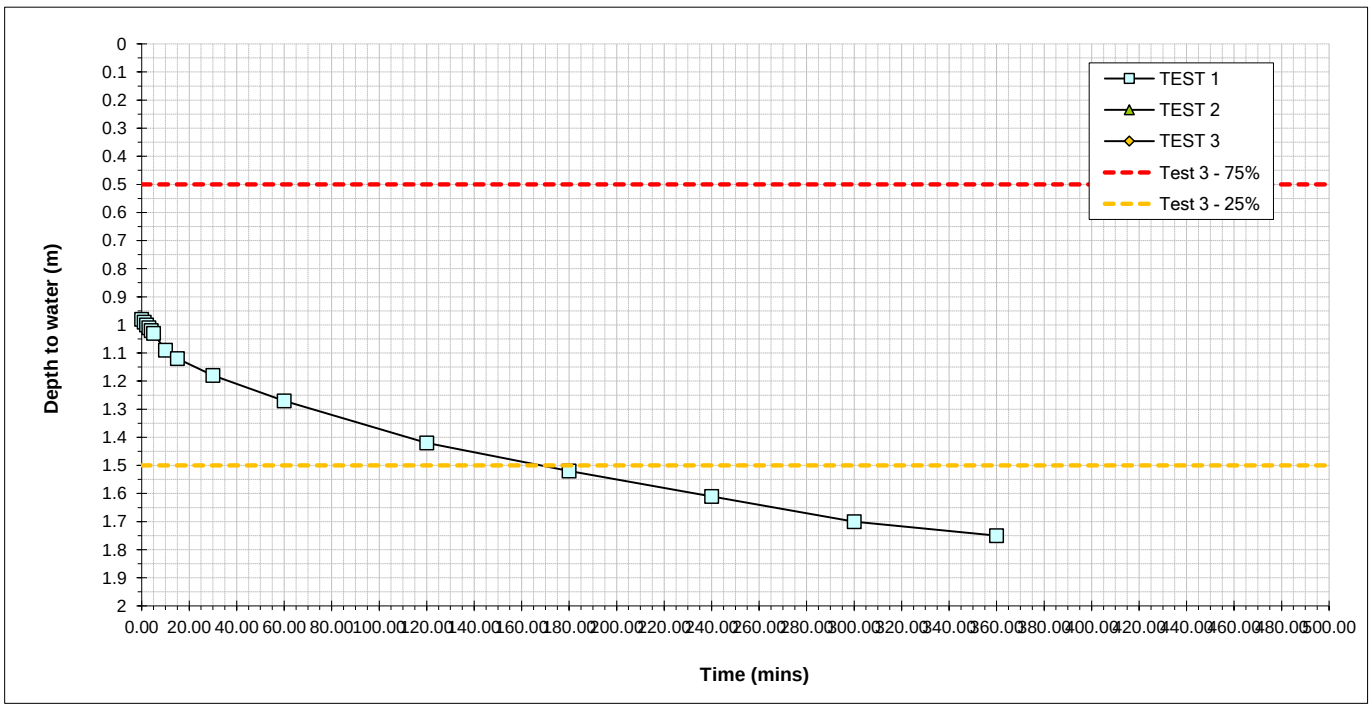
Compiled By:	Date:	Checked By:	Date:	Approved By:	Date:
G.Parr	19.04.21	R.Hamilton	19.04.21	S.Rhodes	19.04.21

Site..... Ashburnham Rd Richmond	Soakaway Number....	SA6
Job Number..... CRM.1027.087	Length.....	1.20 m
Date of Test..... 26th to 27th October 2021	Width.....	0.60 m
	Depth.....	2.00 m
SOIL INFILTRATION RATE TEST	Groundwater Level....	Dry m
See B.R.E. Digest 365, 1991, Soakaway Design.		

	TEST 1		TEST 2		TEST 3	
	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)	Time(min)	Depth to Water (m)
	0.0	0.98	0.0	0.00	0.0	0.00
	1.0	0.99	0.0	0.00	0.0	0.00
	2.0	1.00	0.0	0.00	0.0	0.00
	3.0	1.01	0.0	0.00	0.0	0.00
	4.0	1.02	0.0	0.00	0.0	0.00
	5.0	1.03	0.0	0.00	0.0	0.00
	10.0	1.09	0.0	0.00	0.0	0.00
	15.0	1.12	0.0	0.00	0.0	0.00
	30.0	1.18	0.0	0.00	0.0	0.00
	60.0	1.27	0.0	0.00	0.0	0.00
	120.0	1.42	0.0	0.00	0.0	0.00
					0.0	0.00

Effective Storage Depth	m	1.02	2.00	2.00
75% Effective Storage Depth	m	0.77	1.50	1.50
(i.e. depth below GL)	m	**1.24**	**0.50**	**0.50**
25% Effective Storage Depth	m	0.26	0.50	0.50
(i.e. depth below GL)	m	**1.75**	**1.50**	**1.50**
Effective Storage Depth 75%-25%	m	0.51	1.00	1.00
Time to fall to 75% effective depth	mins	50.00		
Time to fall to 25% effective depth	mins	360.00		
V (75%-25%)	m3	0.37	0.72	0.72
a (50%)	m2	2.56	4.32	4.32
t (75%-25%)	mins	310.00	0.00	0.00
SOIL INFILTRATION RATE	m/s	**7.72E-06**	**#DIV/0!**	**#DIV/0!**

DESIGN SOIL INFILTRATION RATE, f	**#DIV/0!**	**m/s**



Compiled By:	Date:	Checked By:	Date:	Approved By:	Date:
G.Parr	19.04.21	R.Hamilton	19.04.21	S.Rhodes	19.04.21

Steve Rhodes
Enzygo Geoenvironmental Ltd
The Byre
Woodend Lane
Cromhall
Gloucestershire
GL12 8AA

e: steve.rhodes@enzygo.com

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-72260

Project / Site name:	Richmond	**Samples received on:**	29/04/2021
Your job number:	CRM.1265.087	**Samples instructed on/ Analysis started on:**	30/04/2021
Your order number:		**Analysis completed by:**	11/05/2021
Report Issue Number:	1	**Report issued on:**	11/05/2021
Samples Analysed:	22 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-72260
Project / Site name: Richmond

Lab Sample Number				1856420	1856421	1856422	1856423	1856424
Sample Reference				WS1	WS2	WS2	WS4	WS5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.20-0.45	1.00	0.40	0.40
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.3	5.9	10	11	8.4
Total mass of sample received	kg	0.001	NONE	1.2	1.2	0.50	1.2	1.2
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Crocidolite	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.006	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.006	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.7	7.7	8.2	6.9	8.1
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.4	1.3	0.3	0.9	1.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.74	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.57	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.60	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	6.5	< 0.05	< 0.05	0.76	< 0.05
Anthracene	mg/kg	0.05	MCERTS	1.8	< 0.05	< 0.05	0.20	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	15	0.53	< 0.05	1.3	0.46
Pyrene	mg/kg	0.05	MCERTS	14	0.51	< 0.05	1.2	0.46
Benzo(a)anthracene	mg/kg	0.05	MCERTS	8.1	0.36	< 0.05	0.67	0.26
Chrysene	mg/kg	0.05	MCERTS	5.2	0.32	< 0.05	0.55	0.23
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	8.1	0.44	< 0.05	0.63	0.30
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	3.2	0.24	< 0.05	0.33	0.15
Benzo(a)pyrene	mg/kg	0.05	MCERTS	7.0	0.40	< 0.05	0.60	0.27
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.0	0.25	< 0.05	0.41	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.1	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.6	0.29	< 0.05	0.43	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	80.9	3.34	< 0.80	7.12	2.13
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	40	16	17	16
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	0.8	1.5	0.4	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	26	26	26	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	52	36	7.6	26	35
Lead (aqua regia extractable)	mg/kg	1	MCERTS	310	150	11	73	84
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.2	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	19	21	22	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	140	110	46	94	130

Analytical Report Number: 21-72260
Project / Site name: Richmond

Lab Sample Number				1856420	1856421	1856422	1856423	1856424
Sample Reference				WS1	WS2	WS2	WS4	WS5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.20-0.45	1.00	0.40	0.40
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	7.3	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	38	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	99	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	140	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	140	< 10	< 10	< 10	< 10
TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16)	mg/kg	4	MCERTS	7.3	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21)	mg/kg	1	MCERTS	38	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C21 - C35)	mg/kg	1	MCERTS	99	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C35 - C44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C44	mg/kg	10	NONE	140	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-72260
Project / Site name: Richmond

Lab Sample Number				1856425	1856426	1856427	1856428	1856429
Sample Reference				WS5	WS6	WS6	WS7	WS8
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	0.40	1.00	0.40	1.00
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	-	< 0.1	-
Moisture Content	%	0.01	NONE	10	9.1	-	7.5	-
Total mass of sample received	kg	0.001	NONE	0.50	1.2	-	1.0	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.4	7.8	-	7.2	-
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.3	1.5	-	1.6	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.64	-	0.60	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.57	-	0.55	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.38	-	0.37	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.33	-	0.32	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.42	-	0.50	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.23	-	0.28	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.33	-	0.42	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.25	-	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.22	-	< 0.05	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	3.37	-	3.04	-
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	19	-	18	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	0.7	-	0.8	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	-	< 4.0	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	21	-	25	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	11	32	-	33	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	160	-	120	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	20	-	21	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	110	-	170	-

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Project / Site name: Richmond

Lab Sample Number				1856425	1856426	1856427	1856428	1856429
Sample Reference				WS5	WS6	WS6	WS7	WS8
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	0.40	1.00	0.40	1.00
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	-	< 8.4	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	-	< 8.4	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	-	< 10	-
TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0	< 4.0	-	< 4.0	-
TPH (C16 - C21)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH (C21 - C35)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH (C35 - C44)	mg/kg	10	NONE	< 10	< 10	-	< 10	-
TPH Total C5 - C44	mg/kg	10	NONE	< 10	< 10	-	< 10	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-72260
Project / Site name: Richmond

Lab Sample Number				1856430	1856431	1856432	1856433	1856434
Sample Reference				WS8	WS9	WS10	WS11	WS12
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.40	0.40	0.40	0.40
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5.7	7.1	9.3	8.7	9.4
Total mass of sample received	kg	0.001	NONE	0.50	1.2	1.2	1.2	1.2
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	3.127	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	3.13	-	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.6	8.2	10.8	7.9	8.0
Total Organic Carbon (TOC)	%	0.1	MCERTS	2.7	1.2	1.6	1.0	1.7
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	2.2	< 0.05	< 0.05	0.48	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.43	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	5.9	0.46	0.48	0.81	0.50
Pyrene	mg/kg	0.05	MCERTS	4.8	0.41	0.55	0.72	0.50
Benzo(a)anthracene	mg/kg	0.05	MCERTS	3.8	0.26	0.43	0.44	0.24
Chrysene	mg/kg	0.05	MCERTS	2.3	0.27	0.36	0.38	0.38
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	3.4	0.35	0.47	0.48	0.52
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.5	0.21	0.26	0.26	0.13
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.6	0.32	0.47	0.42	0.34
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.6	< 0.05	0.31	0.30	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.53	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.7	< 0.05	0.38	0.31	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	30.7	2.28	3.71	4.60	2.61
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	34	16	17	19	18
Boron (water soluble)	mg/kg	0.2	MCERTS	2.3	0.9	0.3	0.6	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	22	25	25	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	110	37	27	30	40
Lead (aqua regia extractable)	mg/kg	1	MCERTS	320	140	250	110	140
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.9	< 0.3	< 0.3	< 0.3	0.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	48	18	19	23	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	310	120	160	190	180

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Project / Site name: Richmond

Lab Sample Number				1856430	1856431	1856432	1856433	1856434
Sample Reference				WS8	WS9	WS10	WS11	WS12
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	0.40	0.40	0.40	0.40
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	16	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	50	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	66	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	66	< 10	< 10	< 10	< 10
TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21)	mg/kg	1	MCERTS	16	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C21 - C35)	mg/kg	1	MCERTS	50	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C35 - C44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C44	mg/kg	10	NONE	66	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Project / Site name: Richmond

Lab Sample Number				1856435	1856436	1856437	1856438	1856439
Sample Reference				WS13	WS13	WS14	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	0.40	0.40	0.40
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.3	14	8.7	11	7.9
Total mass of sample received	kg	0.001	NONE	1.2	0.40	1.2	1.2	1.2
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.2	8.3	8.4	8.3	7.9
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.1	0.4	2.5	1.2	1.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.31	< 0.05	0.55	0.66	0.27
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.59	< 0.05	0.81	1.7	0.42
Pyrene	mg/kg	0.05	MCERTS	0.54	< 0.05	0.69	1.5	0.39
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.39	< 0.05	0.46	0.73	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.39	< 0.05	0.41	1.0	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.40	< 0.05	0.48	1.1	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.29	< 0.05	< 0.05	0.66	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.36	< 0.05	0.41	0.87	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.26	0.60	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.30	0.59	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	3.27	< 0.80	4.37	9.38	1.08
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	18	19	19	16
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1.2	0.7	0.8	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	30	28	29	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	35	14	42	43	27
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110	26	85	170	370
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	28	33	28	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	160	55	110	150	110

Analytical Report Number: 21-72260
Project / Site name: Richmond

Lab Sample Number				1856435	1856436	1856437	1856438	1856439
Sample Reference				WS13	WS13	WS14	WS15	WS16
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40	1.00	0.40	0.40	0.40
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	15	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	22	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	< 10	22	< 10
TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	6.8	< 1.0
TPH (C21 - C35)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	15	< 1.0
TPH (C35 - C44)	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C44	mg/kg	10	NONE	< 10	< 10	< 10	22	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-72260
Project / Site name: Richmond

Lab Sample Number				1856440	1856441
Sample Reference				WS17	WS18
Sample Number				None Supplied	None Supplied
Depth (m)				0.40	0.40
Date Sampled				28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.9	6.1
Total mass of sample received	kg	0.001	NONE	1.2	1.0
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	8.1	8.2
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.1	1.9
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.46
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.56	1.0
Pyrene	mg/kg	0.05	MCERTS	0.49	0.87
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.29	0.57
Chrysene	mg/kg	0.05	MCERTS	0.28	0.38
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.71
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.57
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.33
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.42
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	1.62	5.49
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	18
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	41
Lead (aqua regia extractable)	mg/kg	1	MCERTS	92	280
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	110

Analytical Report Number: 21-72260
Project / Site name: Richmond

Lab Sample Number				1856440	1856441
Sample Reference				WS17	WS18
Sample Number				None Supplied	None Supplied
Depth (m)				0.40	0.40
Date Sampled				28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	11
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	11
TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0	< 4.0
TPH (C16 - C21)	mg/kg	1	MCERTS	< 1.0	2.9
TPH (C21 - C35)	mg/kg	1	MCERTS	< 1.0	7.7
TPH (C35 - C44)	mg/kg	10	NONE	< 10	< 10
TPH Total C5 - C44	mg/kg	10	NONE	< 10	11

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-72260
Project / Site name: Richmond
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
1856421	WS2	0.20-0.45	165	Loose Fibrous Debris	**Crocidolite**	0.006	**0.006**
1856426	WS6	0.40	220	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**
1856430	WS8	0.40	158	Hard/Cement Type Material	**Chrysotile**	3.127	**3.13**

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 21-72260
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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1856420	WS1	None Supplied	0.4	Brown sandy loam with gravel and vegetation.
1856421	WS2	None Supplied	0.20-0.45	Brown sandy loam with gravel and vegetation.
1856422	WS2	None Supplied	1	Brown clay and sand with gravel.
1856423	WS4	None Supplied	0.4	Brown clay and loam with gravel and vegetation.
1856424	WS5	None Supplied	0.4	Brown clay and loam with gravel and brick.
1856425	WS5	None Supplied	1	Brown clay and loam.
1856426	WS6	None Supplied	0.4	Brown loam and clay with gravel and vegetation.
1856428	WS7	None Supplied	0.4	Brown sandy loam with gravel and vegetation.
1856430	WS8	None Supplied	0.4	Brown sandy loam with gravel.
1856431	WS9	None Supplied	0.4	Brown loam and clay with gravel.
1856432	WS10	None Supplied	0.4	Brown loam and clay with gravel and brick.
1856433	WS11	None Supplied	0.4	Brown loam and clay with gravel and brick.
1856434	WS12	None Supplied	0.4	Brown loam and clay with gravel and vegetation.
1856435	WS13	None Supplied	0.4	Brown loam and clay with gravel and brick.
1856436	WS13	None Supplied	1	Brown loam and clay with gravel and vegetation.
1856437	WS14	None Supplied	0.4	Brown clay and loam with gravel.
1856438	WS15	None Supplied	0.4	Brown loam and clay with gravel and vegetation.
1856439	WS16	None Supplied	0.4	Brown sandy clay with gravel and vegetation.
1856440	WS17	None Supplied	0.4	Brown sandy clay with gravel and vegetation.
1856441	WS18	None Supplied	0.4	Brown sandy clay with gravel and vegetation.

Analytical Report Number : 21-72260
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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Steve Rhodes
Enzygo Geoenvironmental Ltd
The Byre
Woodend Lane
Cromhall
Gloucestershire
GL12 8AA

e: steve.rhodes@enzygo.com

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-72267

Project / Site name:	Richmond	**Samples received on:**	29/04/2021
Your job number:	CRM.1265.087	**Samples instructed on/ Analysis started on:**	30/04/2021
Your order number:		**Analysis completed by:**	12/05/2021
Report Issue Number:	1	**Report issued on:**	12/05/2021
Samples Analysed:	5 wac multi samples		

Signed:

Zina Abdul Razzak
Senior Quality Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	21-72267						
					Client: ENZYGOGEO		
Location	Richmond						
Lab Reference (Sample Number)	1856455				Landfill Waste Acceptance Criteria Limits		
Sampling Date	28/04/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS1						
Depth (m)	0.40						
Solid Waste Analysis							
TOC (%)**	1.4				3%	5%	6%
Loss on Ignition (%) **	3.7				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.30				1	--	--
Mineral Oil (mg/kg) #	95				500	--	--
Total PAH (WAC-17) (mg/kg)	81.9				100	--	--
pH (units)**	7.9				--	>6	--
Acid Neutralisation Capacity (mol / kg)	3.8				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		0.080	0.5	2	25
Barium *	0.023	0.043		0.41	20	100	300
Cadmium *	< 0.0005	< 0.0005		0.0035	0.04	1	5
Chromium *	< 0.0010	0.0010		0.0095	0.5	10	70
Copper *	0.032	0.026		0.26	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	< 0.0030	< 0.0030		< 0.020	0.5	10	30
Nickel *	0.0068	0.0058		0.059	0.4	10	40
Lead *	0.0098	0.057		0.52	0.5	10	50
Antimony *	0.014	0.0060		0.069	0.06	0.7	5
Selenium *	< 0.010	< 0.010		0.049	0.1	0.5	7
Zinc *	0.017	0.0398		0.37	4	50	200
Chloride *	< 4.0	< 4.0		38	800	15000	25000
Fluoride	0.76	0.59		6.1	10	150	500
Sulphate *	5.6	6.6		65	1000	20000	50000
TDS*	91	60		630	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	15	23		220	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	92						
Moisture (%)	8.3						
Stage 1							
Volume Eluate L2 (litres)	0.34						
Filtered Eluate VE1 (litres)	0.19						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

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** = MCERTS accredited

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i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**21-72267**						
					Client:	**ENZYGOGEO**	
Location	**Richmond**						
Lab Reference (Sample Number)	1856456				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	28/04/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS6						
Depth (m)	1.00						
Solid Waste Analysis							
TOC (%)**	0.4				3%	5%	6%
Loss on Ignition (%) **	2.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.30				1	--	--
Mineral Oil (mg/kg) #	49				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.5				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.7				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.0058	0.029		0.27	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	< 0.0010		< 0.0050	0.5	10	70
Copper *	0.0086	0.0067		0.069	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	< 0.0030	< 0.0030		< 0.020	0.5	10	30
Nickel *	0.013	0.0040		0.047	0.4	10	40
Lead *	< 0.0050	< 0.0050		< 0.020	0.5	10	50
Antimony *	< 0.0050	< 0.0050		< 0.020	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.014	0.0067		0.074	4	50	200
Chloride *	< 4.0	4.7		45	800	15000	25000
Fluoride	0.15	0.16		1.6	10	150	500
Sulphate *	7.4	5.1		53	1000	20000	50000
TDS*	45	34		350	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	8.6	21		200	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	86						
Moisture (%)	14						
Stage 1							
Volume Eluate L2 (litres)	0.32						
Filtered Eluate VE1 (litres)	0.15						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

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i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park

Telephone: 01923 225404
Fax: 01923 237404

Watford, WD18 8YS email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	21-72267						
					Client: ENZYGOGEO		
Location	Richmond						
Lab Reference (Sample Number)	1856457				Landfill Waste Acceptance Criteria Limits		
Sampling Date	28/04/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS8						
Depth (m)	1.00						
Solid Waste Analysis							
TOC (%)**	0.6				3%	5%	6%
Loss on Ignition (%) **	2.2				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.30				1	--	--
Mineral Oil (mg/kg) #	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	7.6				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.4				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.0075	0.031		0.29	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	< 0.0010		0.0090	0.5	10	70
Copper *	0.0047	0.017		0.16	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	< 0.0030	< 0.0030		< 0.020	0.5	10	30
Nickel *	0.0042	0.0044		0.044	0.4	10	40
Lead *	< 0.0050	< 0.0050		< 0.020	0.5	10	50
Antimony *	< 0.0050	< 0.0050		< 0.020	0.06	0.7	5
Selenium *	< 0.010	< 0.010		0.046	0.1	0.5	7
Zinc *	0.013	0.0128		0.13	4	50	200
Chloride *	< 4.0	4.2		41	800	15000	25000
Fluoride	0.27	0.24		2.5	10	150	500
Sulphate *	4.4	6.1		60	1000	20000	50000
TDS*	52	39		400	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	9.1	19		180	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	87						
Moisture (%)	13						
Stage 1							
Volume Eluate L2 (litres)	0.32						
Filtered Eluate VE1 (litres)	0.14						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

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i2 Analytical
7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results
Report No: 21-72267

					Client:	**ENZYGOGEO**	
Location	**Richmond**						
Lab Reference (Sample Number)	1856458				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	28/04/2021				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS10						
Depth (m)	0.40						
Solid Waste Analysis							
TOC (%)**	0.7				3%	5%	6%
Loss on Ignition (%) **	2.3				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.30				1	--	--
Mineral Oil (mg/kg) #	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	3.71				100	--	--
pH (units)**	8.1				--	>6	--
Acid Neutralisation Capacity (mol / kg)	7.5				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.020	0.023		0.23	20	100	300
Cadmium *	< 0.0005	< 0.0005		0.0032	0.04	1	5
Chromium *	0.0072	0.012		0.11	0.5	10	70
Copper *	0.012	0.018		0.17	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	< 0.0030	< 0.0030		< 0.020	0.5	10	30
Nickel *	0.0031	0.0043		0.042	0.4	10	40
Lead *	< 0.0050	0.026		0.23	0.5	10	50
Antimony *	0.011	< 0.0050		0.042	0.06	0.7	5
Selenium *	< 0.010	< 0.010		0.052	0.1	0.5	7
Zinc *	0.0079	0.0285		0.26	4	50	200
Chloride *	< 4.0	< 4.0		35	800	15000	25000
Fluoride	0.54	0.40		4.1	10	150	500
Sulphate *	9.3	23		220	1000	20000	50000
TDS*	94	80		820	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	8.0	13		120	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	91						
Moisture (%)	9.3						
Stage 1							
Volume Eluate L2 (litres)	0.33						
Filtered Eluate VE1 (litres)	0.20						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.					*= UKAS accredited (liquid eluate analysis only)		
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Watford, WD18 8YS

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Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results		
Report No:	**21-72267**	
		Client: **ENZYGOGEO**

Location	Richmond						
Lab Reference (Sample Number)	1856459				Landfill Waste Acceptance Criteria Limits		
Sampling Date	28/04/2021						
Sample ID	WS18				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)	0.40						
Solid Waste Analysis							
TOC (%)**	0.9				3%	5%	6%
Loss on Ignition (%) **	3.0				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.30				1	--	--
Mineral Oil (mg/kg) #	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	10.4				100	--	--
pH (units)**	7.4				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.1				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.017	0.019		0.18	20	100	300
Cadmium *	< 0.0005	< 0.0005		0.0025	0.04	1	5
Chromium *	< 0.0010	< 0.0010		0.0099	0.5	10	70
Copper *	0.021	0.016		0.16	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	< 0.0030	< 0.0030		< 0.020	0.5	10	30
Nickel *	0.0092	0.0046		0.051	0.4	10	40
Lead *	< 0.0050	0.0072		0.070	0.5	10	50
Antimony *	0.024	0.0058		0.075	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.0099	0.0230		0.22	4	50	200
Chloride *	< 4.0	< 4.0		33	800	15000	25000
Fluoride	0.58	0.45		4.6	10	150	500
Sulphate *	5.3	8.5		82	1000	20000	50000
TDS*	95	72		740	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	13	17		170	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.0						
Dry Matter (%)	94						
Moisture (%)	6.1						
Stage 1							
Volume Eluate L2 (litres)	0.34						
Filtered Eluate VE1 (litres)	0.16						

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Analytical Report Number : 21-72267
Project / Site name: Richmond

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1856455	WS1	None Supplied	0.4	Brown sandy loam with gravel and vegetation.
1856456	WS6	None Supplied	1	Brown clay and sand.
1856457	WS8	None Supplied	1	Brown clay.
1856458	WS10	None Supplied	0.4	Brown loam and clay with gravel and brick.
1856459	WS18	None Supplied	0.4	Brown sandy clay with gravel and vegetation.

Analytical Report Number : 21-72267
Project / Site name: Richmond

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	NONE
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of dichloromethane/hexane extractable hydrocarbons in soil by GC-MS.	In-house method based on USEPA 8270	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS

Analytical Report Number : 21-72267
Project / Site name: Richmond

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Steve Rhodes
Enzygo Geoenvironmental Ltd
The Byre
Woodend Lane
Cromhall
Gloucestershire
GL12 8AA

e: steve.rhodes@enzygo.com

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-18748

Project / Site name:	Richmond	**Samples received on:**	26/10/2021
Your job number:	CRM 1265 087	**Samples instructed on/ Analysis started on:**	26/10/2021
Your order number:		**Analysis completed by:**	02/11/2021
Report Issue Number:	1	**Report issued on:**	02/11/2021
Samples Analysed:	6 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-18748
Project / Site name: Richmond

Lab Sample Number				2060566	2060567	2060568	2060569	2060570
Sample Reference				WS101	WS102	WS103	WS104	WS105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.50	0.30-0.40	0.30-0.45	0.30-0.50	0.35-0.45
Date Sampled				25/10/2021	25/10/2021	25/10/2021	25/10/2021	25/10/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	15	16	10	6.6
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	10.3	9.8	8.9	10.8	11.1
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.9	1.1	1.7	1.2	1.5
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.33	< 0.05	0.28	0.37
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.28	0.48	< 0.05	0.59	0.50
Pyrene	mg/kg	0.05	MCERTS	0.30	0.57	< 0.05	0.50	0.49
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.28	0.66	< 0.05	0.43	0.37
Chrysene	mg/kg	0.05	MCERTS	0.20	0.49	< 0.05	0.39	0.33
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	1.1	< 0.05	0.43	0.29
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.74	< 0.05	0.26	0.24
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.3	< 0.05	0.34	0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.72	< 0.05	0.27	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.91	< 0.05	0.33	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	1.06	7.35	< 0.80	3.82	2.89
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	18	30	83	23
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.7	1.7	14	2.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	37	25	35	64	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	470	28	79	340	180
Lead (aqua regia extractable)	mg/kg	1	MCERTS	180	1400	130	510	320
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	1.1	< 0.3	0.6	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	35	17	44	34	30
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	470	230	110	340	260

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Project / Site name: Richmond

Lab Sample Number				2060566	2060567	2060568	2060569	2060570
Sample Reference				WS101	WS102	WS103	WS104	WS105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.50	0.30-0.40	0.30-0.45	0.30-0.50	0.35-0.45
Date Sampled				25/10/2021	25/10/2021	25/10/2021	25/10/2021	25/10/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	5.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	68	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	82	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	36	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	< 8.4	17	< 8.4	< 8.4
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	190	< 10	< 10
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	< 10	< 10	210	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	13	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	58	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	30	50	< 10	< 10
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	< 8.4	27	38	< 8.4	< 8.4
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	36	120	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	< 10	63	160	< 10	< 10
TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0	< 2.0	5.0	< 2.0	< 2.0
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0	< 4.0	82	< 4.0	< 4.0
TPH (C16 - C21)	mg/kg	1	MCERTS	< 1.0	6.2	140	< 1.0	< 1.0
TPH (C21 - C35)	mg/kg	1	MCERTS	< 1.0	30	86	< 1.0	< 1.0
TPH (C35 - C44)	mg/kg	10	NONE	< 10	27	55	< 10	< 10
TPH Total C5 - C44	mg/kg	10	NONE	< 10	63	370	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

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Lab Sample Number				2060571
Sample Reference				WS106
Sample Number				None Supplied
Depth (m)				0.30-0.40
Date Sampled				25/10/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	9.9
Total mass of sample received	kg	0.001	NONE	1.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
General Inorganics				
pH - Automated	pH Units	N/A	MCERTS	10.3
Total Organic Carbon (TOC)	%	0.1	MCERTS	1.0
Total Phenols				
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
Speciated PAHs				
Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.33
Pyrene	mg/kg	0.05	MCERTS	0.35
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.21
Chrysene	mg/kg	0.05	MCERTS	0.21
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05
Total PAH				
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	1.10
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.4
Boron (water soluble)	mg/kg	0.2	MCERTS	3.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	45
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	49

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Lab Sample Number				2060571
Sample Reference				WS106
Sample Number				None Supplied
Depth (m)				0.30-0.40
Date Sampled				25/10/2021
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Petroleum Hydrocarbons				
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	13
TPH-CWG - Aliphatic > EC35 - EC44	mg/kg	8.4	NONE	23
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	13
TPH-CWG - Aliphatic (EC5 - EC44)	mg/kg	10	NONE	36
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	32
TPH-CWG - Aromatic > EC35 - EC44	mg/kg	8.4	NONE	62
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	35
TPH-CWG - Aromatic (EC5 - EC44)	mg/kg	10	NONE	96
TPH (>C5 - C7)	mg/kg	1	MCERTS	< 1.0
TPH (>C7 - C8)	mg/kg	1	MCERTS	< 1.0
TPH (C8 - C10)	mg/kg	0.1	MCERTS	< 0.1
TPH (C10 - C12)	mg/kg	2	MCERTS	< 2.0
TPH (C12 - C16)	mg/kg	4	MCERTS	< 4.0
TPH (C16 - C21)	mg/kg	1	MCERTS	2.5
TPH (C21 - C35)	mg/kg	1	MCERTS	45
TPH (C35 - C44)	mg/kg	10	NONE	85
TPH Total C5 - C44	mg/kg	10	NONE	130

U/S = Unsuitable Sample I/S = Insufficient Sample

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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2060566	WS101	None Supplied	0.30-0.50	Grey clay and sand with gravel.
2060567	WS102	None Supplied	0.30-0.40	Brown clay and sand with rubble.
2060568	WS103	None Supplied	0.30-0.45	Brown clay and sand with rubble.
2060569	WS104	None Supplied	0.30-0.50	Brown clay and sand with rubble.
2060570	WS105	None Supplied	0.35-0.45	Brown sand with rubble.
2060571	WS106	None Supplied	0.30-0.40	Brown sand with gravel and rubble.

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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Determinant	Units	GAC Value Residential					
		With Plant Uptake			Without Plant Uptake		
Arsenic	mg/kg	37			40		
Cadmium	mg/kg	11			85		
Chromium	mg/kg	910			910		
Chromium VI	mg/kg	6			6		
Lead	mg/kg	200			310		
Mercury	mg/kg	40			56		
Nickel	mg/kg	180			180		
Selenium	mg/kg	250			430		
Copper	mg/kg	2400			7100		
Zinc	mg/kg	3700			40000		
Cyanide	mg/kg	791			800		
SOM	%	1	2.5	6	1	2.5	6
Phenol	mg/kg	120	200	380	440	690	1200
Napthalene	mg/kg	2.3	5.6	13	2.3	5.6	13
Acenaphtylene	mg/kg	170	420	920	2900	4600	6000
Acenaphthene	mg/kg	210	510	1100	3000	4700	6000
Flourene	mg/kg	170	400	860	2800	3800	4500
Phenanthrene	mg/kg	95	220	440	1300	1500	1500
Anthracene	mg/kg	2400	5400	11000	31000	35000	37000
Fluoranthene	mg/kg	280	560	890	1500	1600	1600
Pyrene	mg/kg	620	1200	2000	3700	3800	3800
Benzo(a)Anthracene	mg/kg	7.2	11	13	11	14	15
Chrysene	mg/kg	15	22	27	30	31	32
Benzo(b)Flouranthene	mg/kg	2.6	3.3	3.7	3.9	4.0	4.0
Benzo(k)Flouranthene	mg/kg	77	93	100	110	110	110
Benzo(a)Pyrene	mg/kg	2.2	2.7	3.0	3.2	3.2	3.2
Indeno(123-cd)Pyrene	mg/kg	27	36	41	45	46	46
Dibenzo(a,h)Anthracene	mg/kg	0.24	0.28	0.3	0.31	0.32	0.32
Benzo(ghi)Perylene	mg/kg	320	340	350	360	360	360
TPH C_5-C_6 Aliphatic	mg/kg	**42**	**78**	**160**	**42**	**78**	**160**
TPH C_6-C_8 Aliphatic	mg/kg	**100**	**230**	**530**	**100**	**230**	**530**
TPH C_8-C_{10} Aliphatic	mg/kg	**27**	**65**	**150**	**27**	**65**	**150**
TPH C_{10}-C_{12} Aliphatic	mg/kg	130	330	760	**130**	**330**	**770**
TPH C_{12}-C_{16} Aliphatic	mg/kg	1100	2400	4300	**1100**	2400	4400
TPH C_{16}-C_{35} Aliphatic	mg/kg	65000	92000	110000	65000	92000	110000
TPH C_{35}-C_{44} Aliphatic	mg/kg	65000	92000	110000	65000	92000	110000
TPH C_5-C_7 Aromatic	mg/kg	70	140	300	370	690	1400
TPH C_7-C_8 Aromatic	mg/kg	130	290	660	860	1800	3900
TPH C_8-C_{10} Aromatic	mg/kg	34	83	190	47	110	270
TPH C_{10}-C_{12} Aromatic	mg/kg	**74**	**180**	**380**	250	590	1200
TPH C_{12}-C_{16} Aromatic	mg/kg	**140**	**330**	**660**	1800	**2300**	**2500**
TPH C_{16}-C_{21} Aromatic	mg/kg	**260**	**540**	**930**	**1900**	**1900**	**1900**
TPH C_{21}-C_{35} Aromatic	mg/kg	**1100**	**1500**	**1700**	**1900**	**1900**	**1900**
TPH C_{35}-C_{44} Aromatic	mg/kg	**1100**	**1500**	**1700**	**1900**	**1900**	**1900**
Benzene	mg/kg	0.087	0.17	0.37	0.38	0.70	1.4
Toluene	mg/kg	130	290	660	880	1900	3900
Ethylebenzene	mg/kg	47	110	260	83	190	440
Xylene	mg/kg	56	130	310	79	180	430

Determinant	Units	GAC Value					
		Residential POS			Commercial		
Arsenic	mg/kg	79			640		
Cadmium	mg/kg	120			190		
Chromium	mg/kg	1500			8600		
Chromium VI	mg/kg	7.7			33		
Lead	mg/kg	630			2330		
Mercury	mg/kg	120			1100		
Nickel	mg/kg	230			980		
Selenium	mg/kg	1100			12000		
Copper	mg/kg	12000			68000		
Zinc	mg/kg	81000			730000		
Cyanide	mg/kg	N/A			16200		
SOM	%	1	2.5	6	1	2.5	6
Phenol	mg/kg	440	690	1300	440	690	1300
Napthalene	mg/kg	4900	4900	4900	190	460	1100
Acenaphtylene	mg/kg	15000	15000	15000	83000	97000	100000
Acenaphthene	mg/kg	15000	15000	15000	84000	97000	100000
Flourene	mg/kg	9900	9900	9900	63000	68000	71000
Phenanthrene	mg/kg	3100	3100	3100	22000	22000	23000
Anthracene	mg/kg	74000	74000	74000	520000	540000	540000
Fluoranthene	mg/kg	3100	3100	3100	23000	23000	23000
Pyrene	mg/kg	7400	7400	7400	54000	54000	54000
Benzo(a)Anthracene	mg/kg	29	29	29	170	170	180
Chrysene	mg/kg	57	57	57	350	350	350
Benzo(b)Flouranthene	mg/kg	7.1	7.2	7.2	44	44	45
Benzo(k)Flouranthene	mg/kg	190	190	190	1200	1200	1200
Benzo(a)Pyrene	mg/kg	5.7	5.7	5.7	35	35	36
Indeno(123-cd)Pyrene	mg/kg	82	82	82	500	510	510
Dibenzo(a,h)Anthracene	mg/kg	0.57	0.57	0.58	3.5	3.6	3.6
Benzo(ghi)Perylene	mg/kg	640	640	640	3900	4000	4000
TPH C_5-C_6 Aliphatic	mg/kg	570000	590000	600000	**3200**	**5900**	**12000**
TPH C_6-C_8 Aliphatic	mg/kg	600000	610000	620000	**7800**	**17000**	**40000**
TPH C_8-C_{10} Aliphatic	mg/kg	13000	13000	13000	**2000**	**4800**	**11000**
TPH C_{10}-C_{12} Aliphatic	mg/kg	13000	13000	13000	**9700**	**23000**	47000
TPH C_{12}-C_{16} Aliphatic	mg/kg	13000	13000	13000	59000	82000	90000
TPH C_{16}-C_{35} Aliphatic	mg/kg	250000	250000	250000	1600000	1700000	1800000
TPH C_{35}-C_{44} Aliphatic	mg/kg	250000	250000	250000	1600000	1700000	1800000
TPH C_5-C_7 Aromatic	mg/kg	**56000**	**56000**	**56000**	26000	46000	86000
TPH C_7-C_8 Aromatic	mg/kg	**56000**	**56000**	**56000**	56000	110000	180000
TPH C_8-C_{10} Aromatic	mg/kg	**5000**	**5000**	**5000**	3500	8100	17000
TPH C_{10}-C_{12} Aromatic	mg/kg	**5000**	**5000**	**5000**	16000	28000	**34000**
TPH C_{12}-C_{16} Aromatic	mg/kg	**5100**	**5100**	**5000**	**36000**	**37000**	**38000**
TPH C_{16}-C_{21} Aromatic	mg/kg	**3800**	**3800**	**3800**	**28000**	**28000**	**28000**
TPH C_{21}-C_{35} Aromatic	mg/kg	**3800**	**3800**	**3800**	**28000**	**28000**	**28000**
TPH C_{35}-C_{44} Aromatic	mg/kg	**3800**	**3800**	**3800**	**28000**	**28000**	**28000**
Benzene	mg/kg	72	72	73	27	47	90
Toluene	mg/kg	56000	56000	56000	56000	110000	180000
Ethylebenzene	mg/kg	24000	24000	25000	5700	13000	27000
Xylene	mg/kg	41000	42000	43000	5900	14000	30000

Determinant	Units	GAC Value					
		Park POS			Allotments		
Arsenic	mg/kg	170			43		
Cadmium	mg/kg	532			1.9		
Chromium	mg/kg	33000			18000		
Chromium VI	mg/kg	220			1.8		
Lead	mg/kg	1300			80		
Mercury	mg/kg	240			19		
Nickel	mg/kg	3400			230		
Selenium	mg/kg	1800			88		
Copper	mg/kg	44000			520		
Zinc	mg/kg	170000			620		
Cyanide	mg/kg						
SOM	%	1	2.5	6	1	2.5	6
Phenol	mg/kg	440	690	1300	23	42	83
Napthalene	mg/kg	1200	1900	3000	4.1	10	24
Acenaphtylene	mg/kg	29000	30000	30000	28	69	160
Acenaphthene	mg/kg	29000	30000	30000	34	85	200
Flourene	mg/kg	20000	20000	20000	27	67	160
Phenanthrene	mg/kg	6200	6200	6300	15	38	90
Anthracene	mg/kg	150000	150000	150000	380	950	2200
Fluoranthene	mg/kg	6300	6300	6400	52	130	290
Pyrene	mg/kg	15000	15000	15000	110	270	620
Benzo(a)Anthracene	mg/kg	49	56	62	2.9	6.5	13
Chrysene	mg/kg	93	110	120	4.1	9.4	19
Benzo(b)Flouranthene	mg/kg	13	15	16	0.99	2.1	3.9
Benzo(k)Flouranthene	mg/kg	370	410	440	37	75	130
Benzo(a)Pyrene	mg/kg	11	12	13	0.97	2.0	3.5
Indeno(123-cd)Pyrene	mg/kg	150	170	180	9.5	21	39
Dibenzo(a,h)Anthracene	mg/kg	1.1	1.3	1.4	0.14	0.27	0.43
Benzo(ghi)Perylene	mg/kg	1400	1500	1600	290	470	640
TPH C_5-C_6 Aliphatic	mg/kg	95000	130000	180000	730	1700	3900
TPH C_6-C_8 Aliphatic	mg/kg	150000	220000	320000	2300	5600	13000
TPH C_8-C_{10} Aliphatic	mg/kg	14000	18000	21000	320	770	1700
TPH C_{10}-C_{12} Aliphatic	mg/kg	21000	23000	24000	2200	4400	7300
TPH C_{12}-C_{16} Aliphatic	mg/kg	25000	25000	26000	11000	13000	13000
TPH C_{16}-C_{35} Aliphatic	mg/kg	450000	480000	490000	260000	270000	270000
TPH C_{35}-C_{44} Aliphatic	mg/kg	450000	480000	490000	260000	270000	270000
TPH C_5-C_7 Aromatic	mg/kg	**76000**	**84000**	**92000**	**13**	**27**	**57**
TPH C_7-C_8 Aromatic	mg/kg	**87000**	**95000**	**100000**	**22**	**51**	**120**
TPH C_8-C_{10} Aromatic	mg/kg	**7200**	**8500**	**9300**	**8.6**	**21**	**51**
TPH C_{10}-C_{12} Aromatic	mg/kg	**9200**	**9700**	**10000**	**13**	**31**	**74**
TPH C_{12}-C_{16} Aromatic	mg/kg	**10000**	**10000**	**10000**	**23**	**57**	**130**
TPH C_{16}-C_{21} Aromatic	mg/kg	**7600**	**7700**	**7800**	**46**	**110**	**260**
TPH C_{21}-C_{35} Aromatic	mg/kg	**7800**	**7800**	**7900**	**370**	**820**	**1600**
TPH C_{35}-C_{44} Aromatic	mg/kg	**7800**	**7800**	**7900**	**370**	**820**	**1600**
Benzene	mg/kg	90	100	110	0.017	0.034	0.075
Toluene	mg/kg	87000	95000	100000	22	51	120
Ethylebenzene	mg/kg	17000	22000	27000	16	39	91
Xylene	mg/kg	17000	23000	31000	28	67	160

Controlled Waters Assessment Reference Values

Determinant	Unit	EQS Freshwater	Uk DWS	WHO
Arsenic	ug/l	50	10	10
Boron	ug/l	2000	1000	0.3
Cadmium	ug/l	5	5	3
Chromium	ug/l	5 - 250	50	50
Lead	ug/l	4 - 250	25	10
Mercury	ug/l	1	1	1
Selenium	ug/l		10	10
Copper	ug/l	1 - 28	20000	2000
Nickel	ug/l	50 - 200	20	70
Zinc	ug/l	8 - 50	5000	3000
Sulphate	mg/l	400	250	250
PAH	ug/l		0.1	
Anthracene	ug/l	0.02		
Napthalene	ug/l	10		
Benzo(a)Pyrene	ug/l	0.03		0.01
Fluoranthene	ug/l	0.02		
Benzene	ug/l	30	1	10
Toluene	ug/l	50		
Ethylebenzene	ug/l	20		
Xylene	ug/l	30		
TPH	ug/l			
$C_5 – C_6$ Aliphatic	ug/l			15000
$C_6 – C_8$ Aliphatic	ug/l			15000
$C_8 – C_{10}$ Aliphatic	ug/l			300
$C_{10} – C_{12}$ Aliphatic	ug/l			300
$C_{12} – C_{16}$ Aliphatic	ug/l			300
$C_{16} – C_{36}$ Aliphatic	ug/l			N/A
$C_6 – C_7$ Aromatic	ug/l			10
$C_7 – C_8$ Aromatic	ug/l	50		10
$C_8 – C_{10}$ Aromatic	ug/l	20		300
$C_{10} – C_{12}$ Aromatic	ug/l			1000
$C_{12} – C_{16}$ Aromatic	ug/l			1000
$C_{16} – C_{21}$ Aromatic	ug/l			90
$C_{21} – C_{35}$ Aromatic	ug/l			90

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

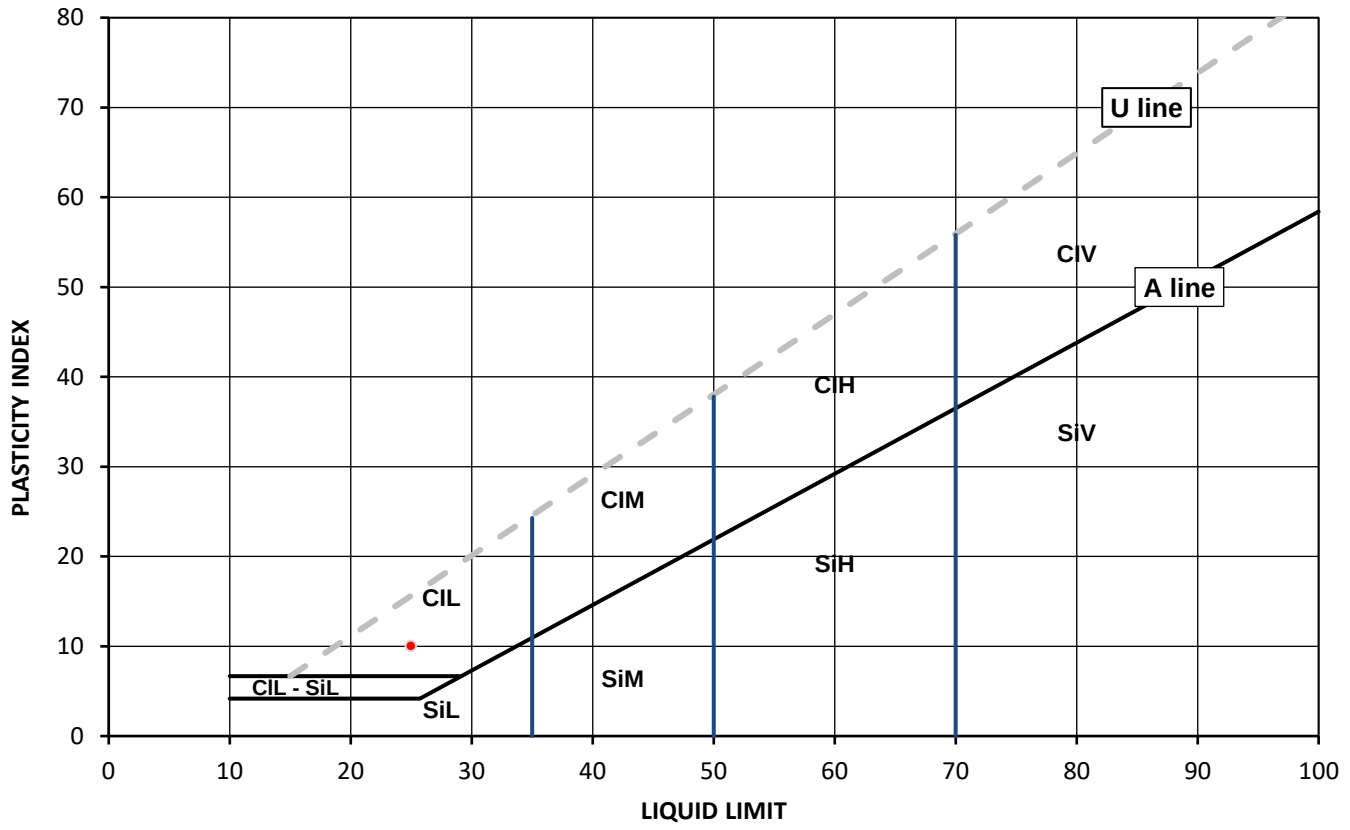
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857736	Depth Top [m]:	1.00
Hole No.:	WS2	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brown clayey SAND with fragments of rootlets		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
16	25	15	10	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 232.10

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
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Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

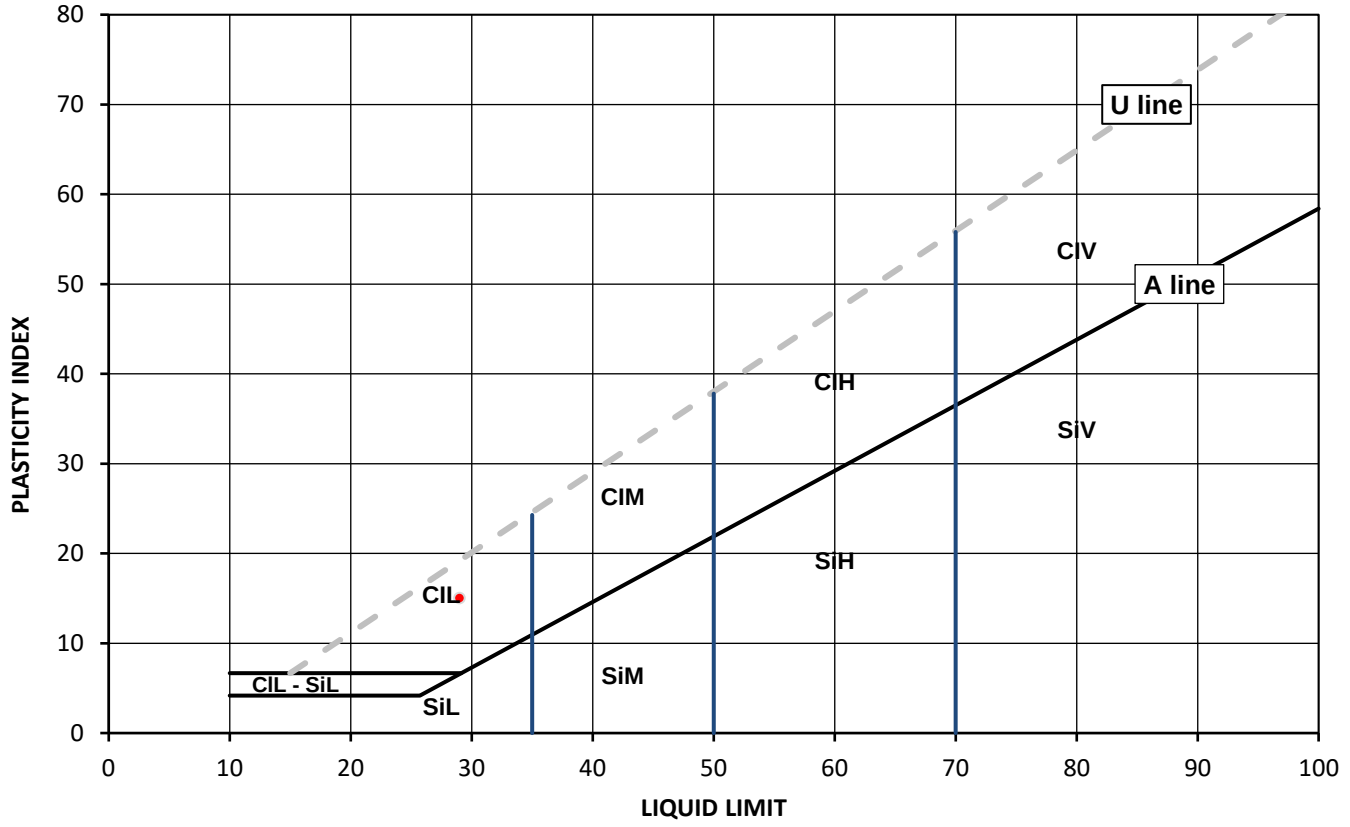
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857737	Depth Top [m]:	2.00
Hole No.:	WS2	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Yellowish brown very gravelly very sandy CLAY		
Sample Preparation:	Tested after washing to remove >425um		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
8.2	29	14	15	29



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

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Northampton NN4 7EB

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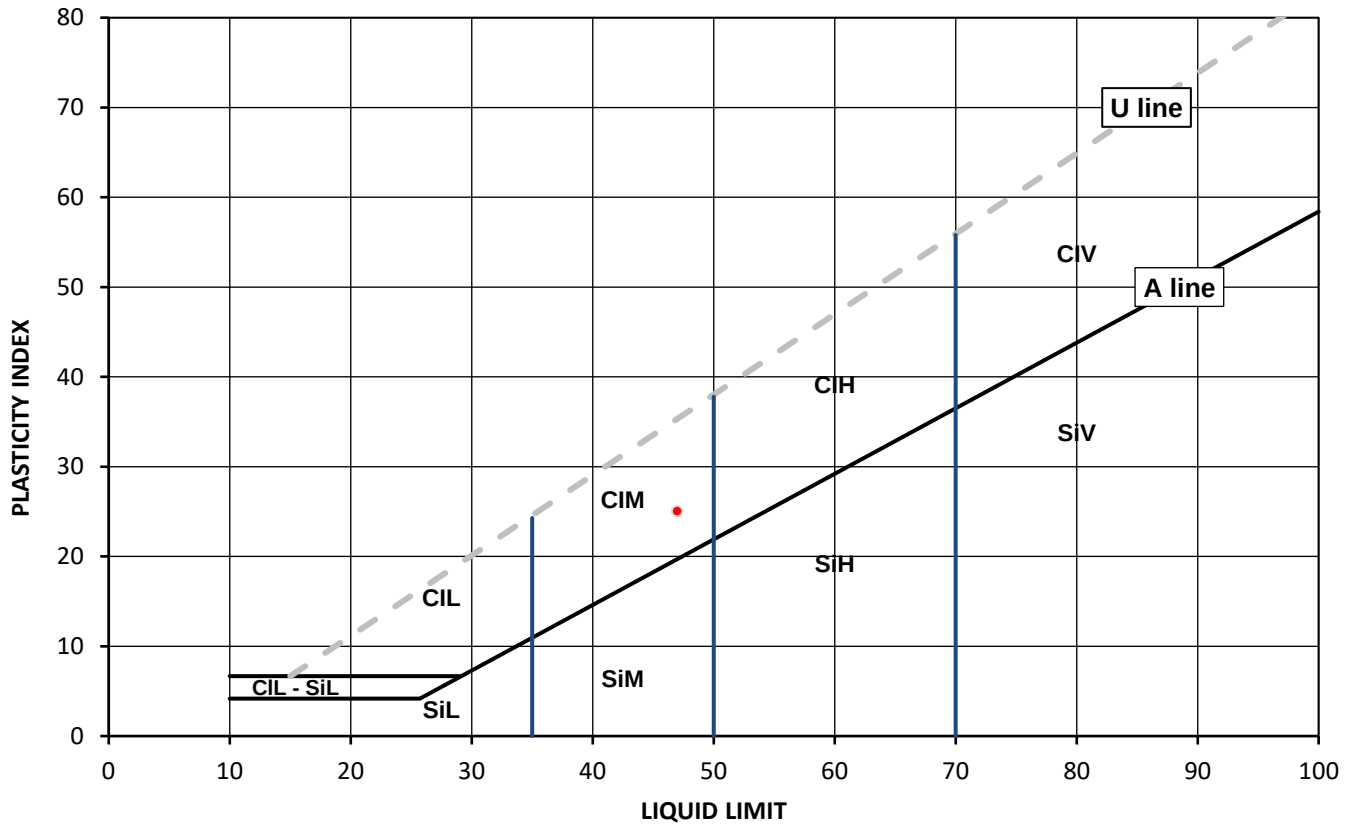
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857738	Depth Top [m]:	1.00
Hole No.:	WS4	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brown slightly sandy CLAY		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
22	47	22	25	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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Date Reported: 24/05/2021

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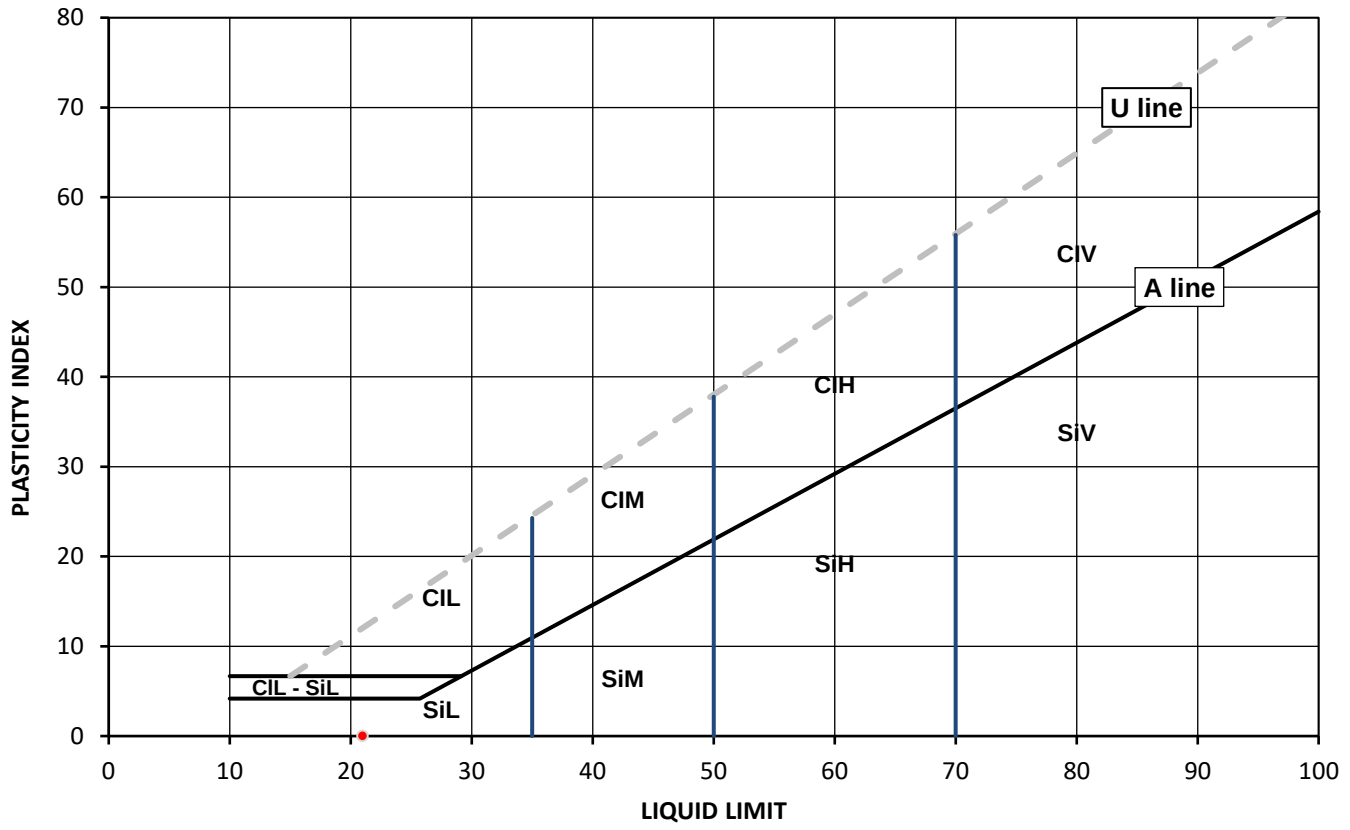
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857739	Depth Top [m]:	2.00
Hole No.:	WS4	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Yellowish brown slightly gravelly slightly clayey SAND		
Sample Preparation:	Tested after >425um removed by hand		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
13	21	NP	NP	68



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks: NP - non plastic

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

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Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

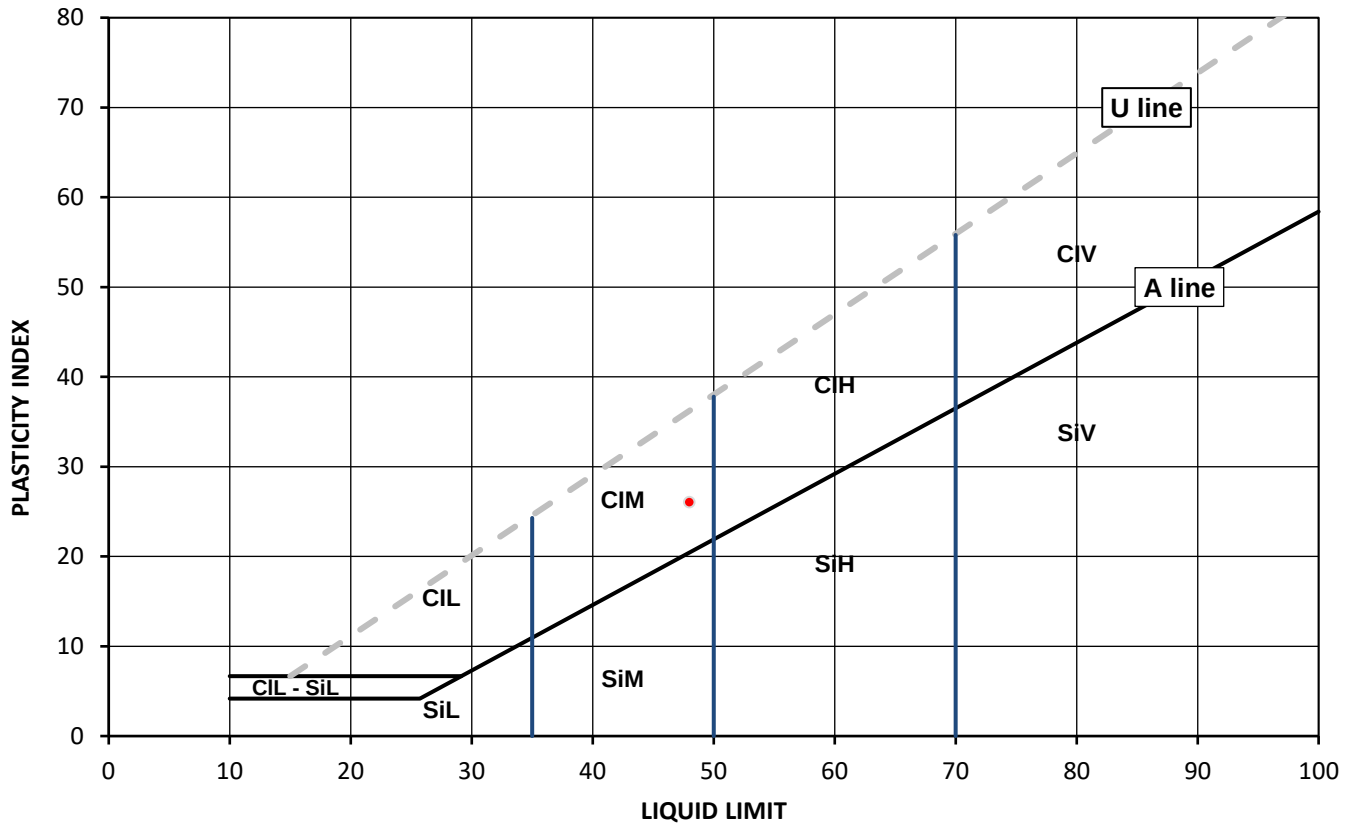
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857740	Depth Top [m]:	1.00
Hole No.:	WS7	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Dark brown slightly gravelly slightly sandy CLAY with fragments of flintstone		
Sample Preparation:	Tested after >425um removed by hand		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
22	48	22	26	76



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

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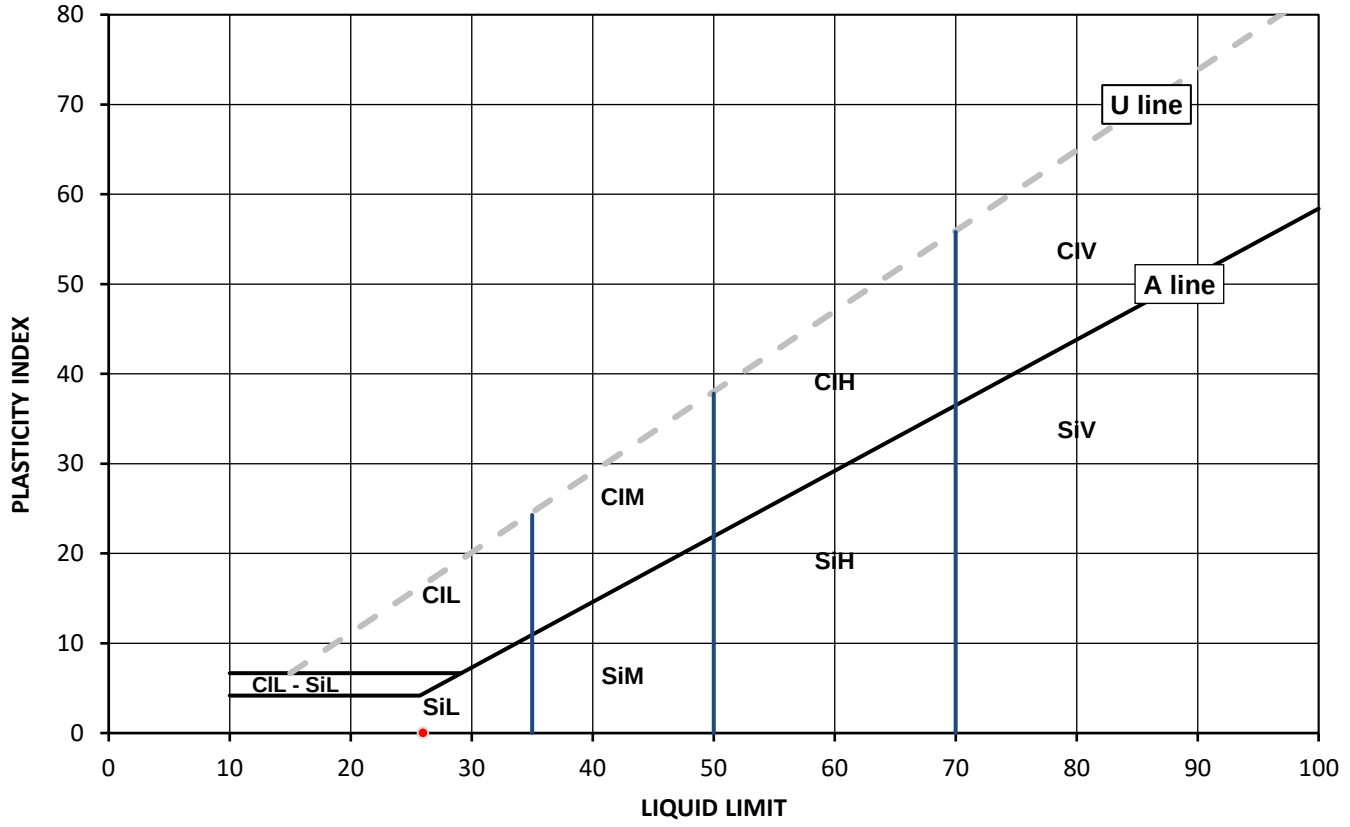
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857741	Depth Top [m]:	2.00
Hole No.:	WS7	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Light brown slightly clayey SAND		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
6.6	26	NP	NP	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks: NP - non plastic

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

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Northampton NN4 7EB

4041

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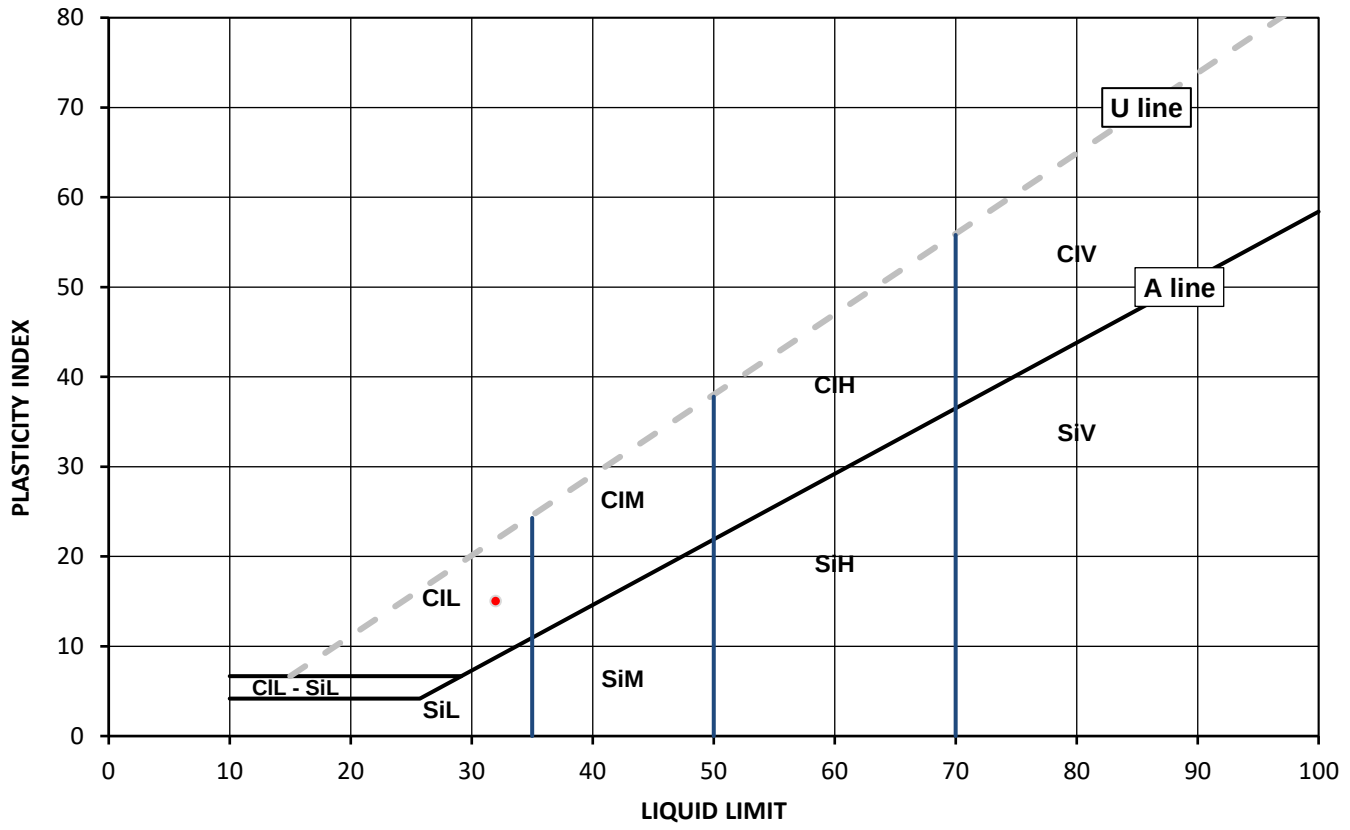
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857742	Depth Top [m]:	1.00
Hole No.:	WS9	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brown very sandy CLAY		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	32	17	15	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

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Northampton NN4 7EB

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		Date Sampled:	28/04/2021
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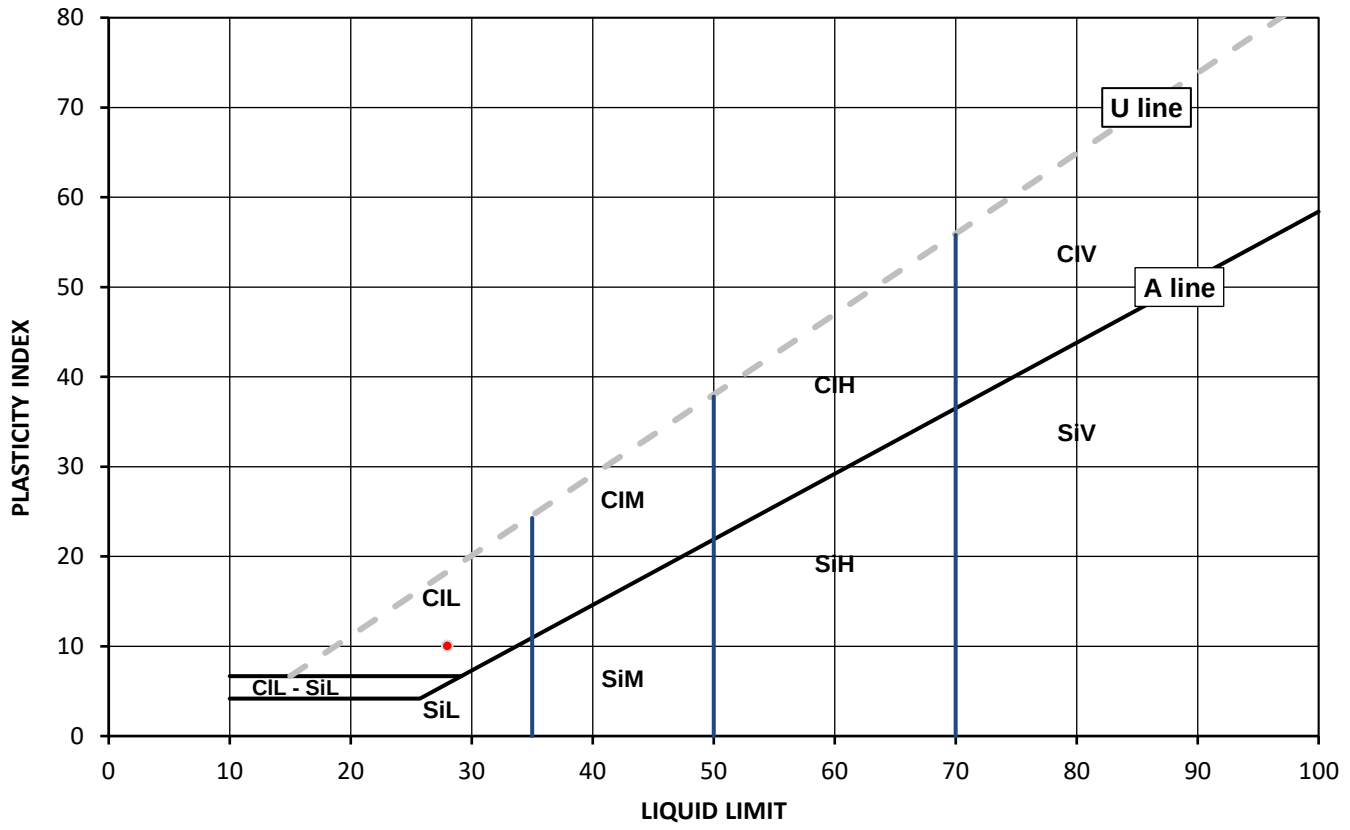
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857743	Depth Top [m]:	2.00
Hole No.:	WS9	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Light brown slightly gravelly very sandy CLAY		
Sample Preparation:	Tested after >425um removed by hand		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
24	28	18	10	99



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 232.10

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

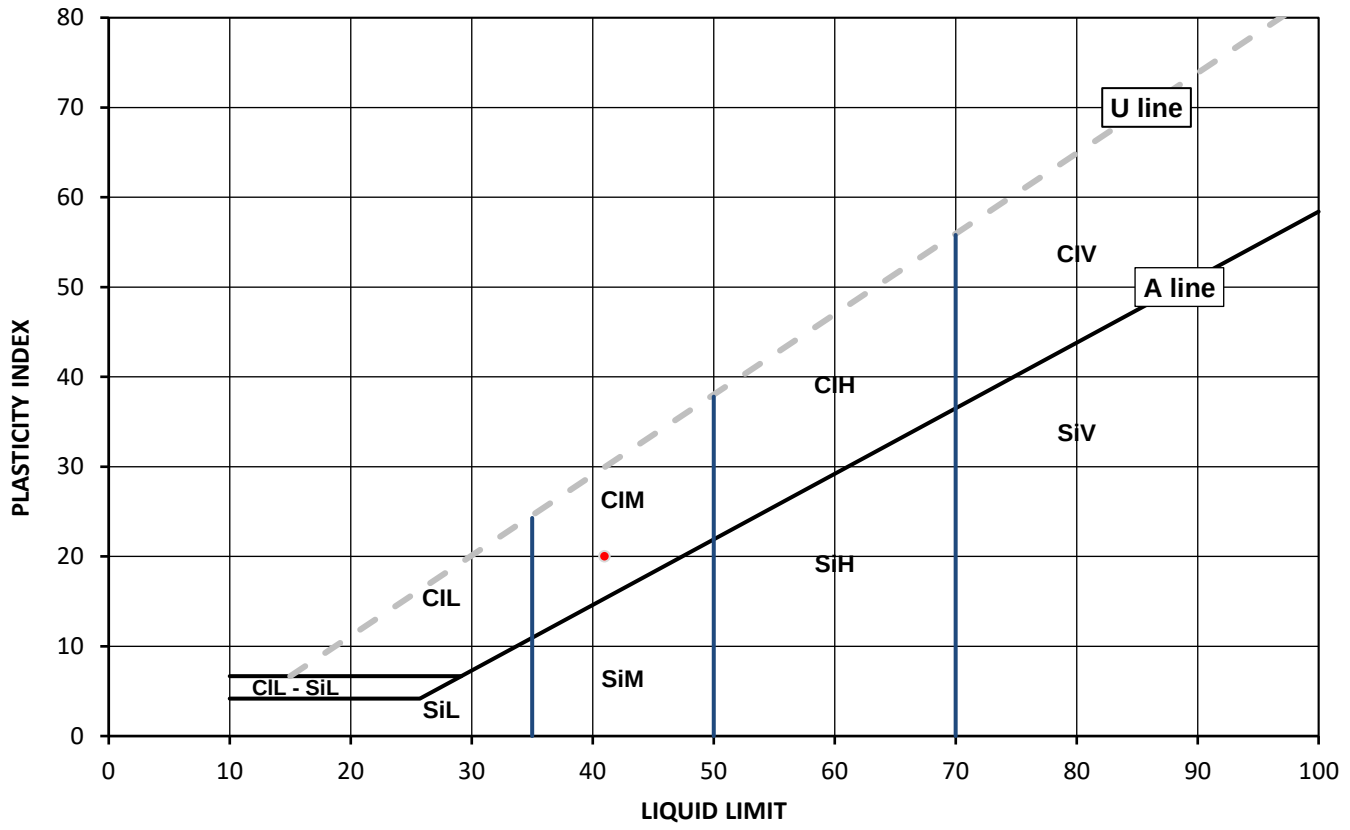
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857744	Depth Top [m]:	1.00
Hole No.:	WS11	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Light brown sandy CLAY		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
19	41	21	20	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 232.10

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

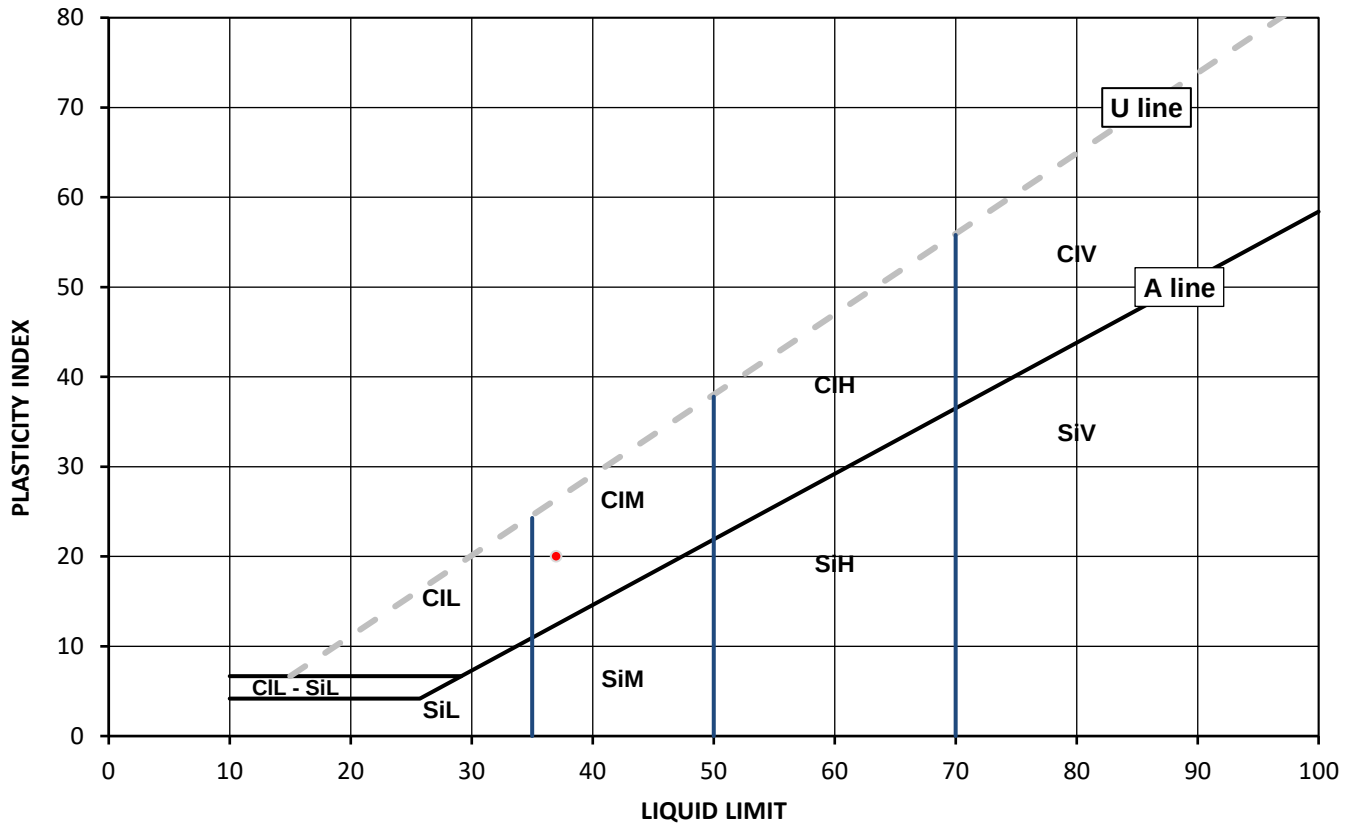
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857745	Depth Top [m]:	1.00
Hole No.:	WS13	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Dark brown sandy CLAY		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
22	37	17	20	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 232.10

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

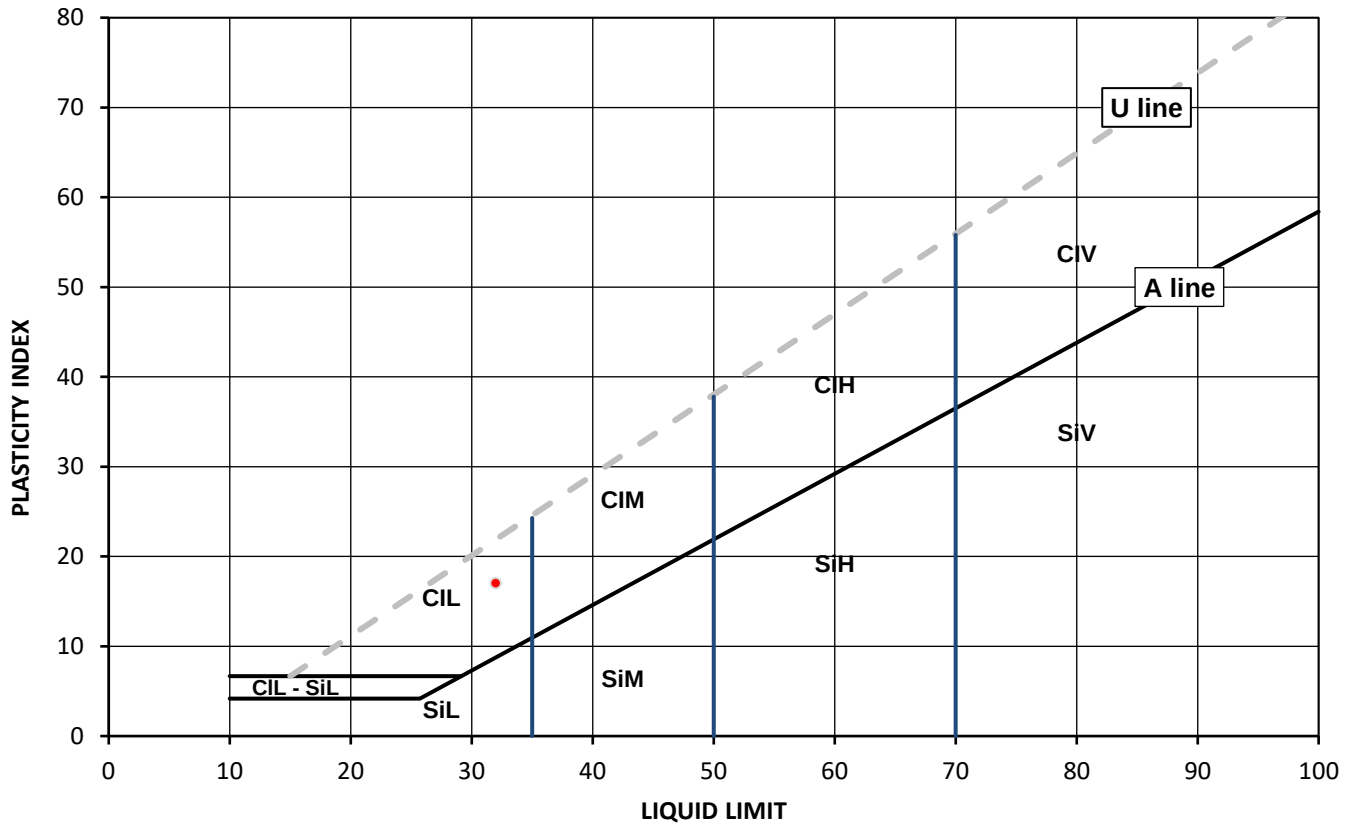
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857746	Depth Top [m]:	1.00
Hole No.:	WS5	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brown very sandy CLAY		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
17	32	15	17	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 232.10

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.4 and 5

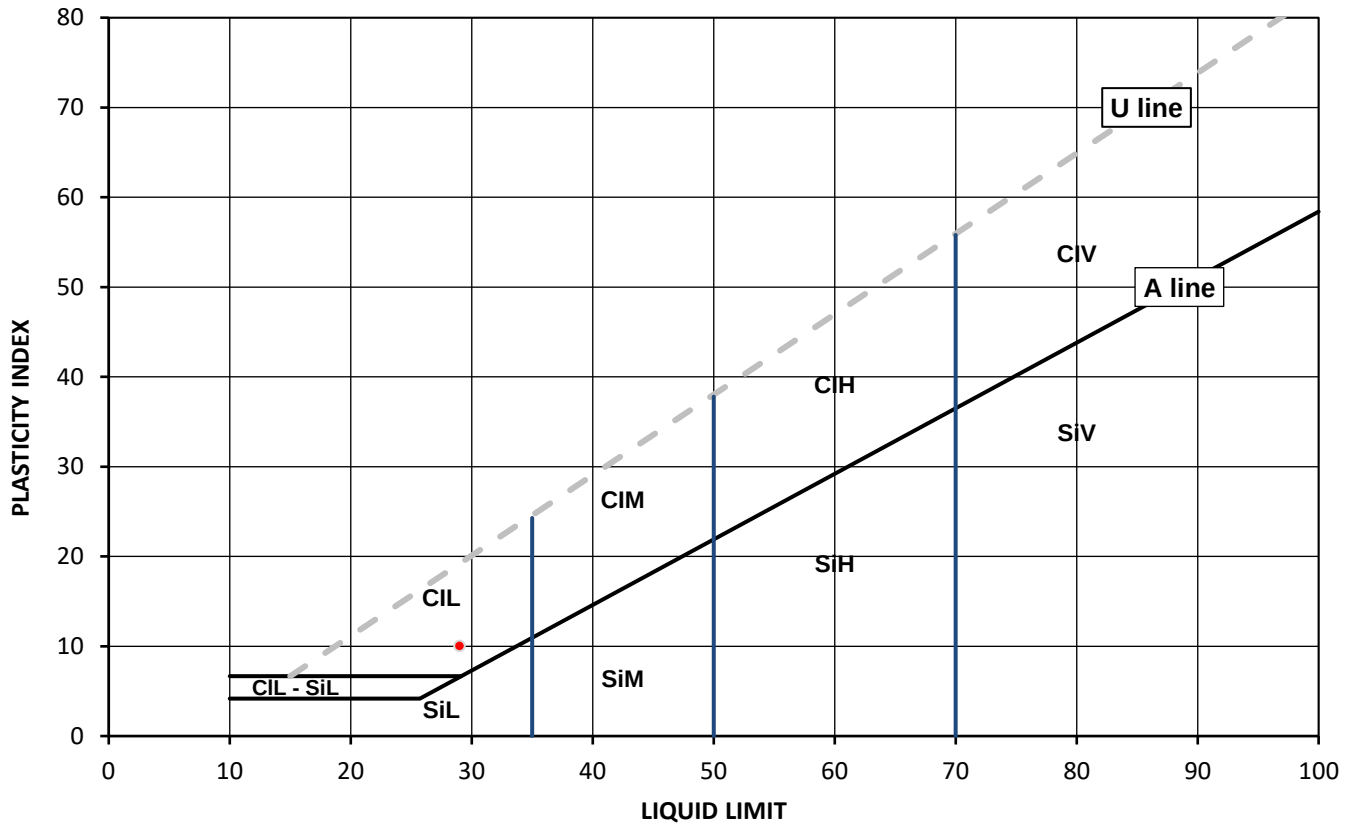
Client:	Enzygo Geoenvironmental Ltd	Client Reference:	CRM 1027 087
Client Address:	The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA	Job Number:	21-72520
		Date Sampled:	28/04/2021
		Date Received:	27/04/2021
Contact:	Steve Rhodes	Date Tested:	19/05/2021
Site Address:	Richmond	Sampled By:	Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1857747	Depth Top [m]:	2.00
Hole No.:	WS5	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Yellowish brown very sandy CLAY		
Sample Preparation:	Tested in natural condition		

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
23	29	19	10	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 232.10

SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with:

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client: Enzygo Geoenvironmental Ltd

Client Address: The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA

Contact: Steve Rhodes

Site Address: Richmond

Client Reference: CRM 1027 087
Job Number: 21-72520
Date Sampled: 28/04/2021
Date Received: 27/04/2021
Date Tested: 19/05/2021
Sampled By: Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m				%	%	%	%	%	%	Mg/m3	Mg/m3	Mg/m3	%		
1857744	WS11	Not Given	1.00	Not Given	D	Light brown sandy CLAY	Atterberg 1 Point	19		100	41	21	20						
1857745	WS13	Not Given	1.00	Not Given	D	Dark brown sandy CLAY	Atterberg 1 Point	22		100	37	17	20						
1857736	WS2	Not Given	1.00	Not Given	D	Brown clayey SAND with fragments of rootlets	Atterberg 1 Point	16		100	25	15	10						
1857737	WS2	Not Given	2.00	Not Given	D	Yellowish brown very gravelly very sandy CLAY	Atterberg 1 Point	8.2		29	29	14	15						
1857738	WS4	Not Given	1.00	Not Given	D	Brown slightly sandy CLAY	Atterberg 1 Point	22		100	47	22	25						
1857739	WS4	Not Given	2.00	Not Given	D	Yellowish brown slightly gravelly slightly clayey SAND	Atterberg 1 Point	13		68	21	NP	NP						
1857746	WS5	Not Given	1.00	Not Given	D	Brown very sandy CLAY	Atterberg 1 Point	17		100	32	15	17						
1857747	WS5	Not Given	2.00	Not Given	D	Yellowish brown very sandy CLAY	Atterberg 1 Point	23		100	29	19	10						
1857740	WS7	Not Given	1.00	Not Given	D	Dark brown slightly gravelly slightly sandy CLAY with fragments of flintstone	Atterberg 1 Point	22		76	48	22	26						
1857741	WS7	Not Given	2.00	Not Given	D	Light brown slightly clayey SAND	Atterberg 1 Point	6.6		100	26	NP	NP						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 234.12

SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

UKAS TESTING 4041

Environmental Science

Tested in Accordance with:

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client: Enzygo Geoenvironmental Ltd

Client Address: The Byre, Woodend Lane, Cromhall, Gloucestershire, GL12 8AA

Contact: Steve Rhodes

Site Address: Richmond

Client Reference: CRM 1027 087
Job Number: 21-72520
Date Sampled: 28/04/2021
Date Received: 27/04/2021
Date Tested: 19/05/2021
Sampled By: Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top m	Depth Base m	Type			%	%	% Passing 425um %	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3	%		
1857742	WS9	Not Given	1.00	Not Given	D	Brown very sandy CLAY	Atterberg 1 Point	18		100	32	17	15						
1857743	WS9	Not Given	2.00	Not Given	D	Light brown slightly gravelly very sandy CLAY	Atterberg 1 Point	24		99	28	18	10						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Szczepan Bielatowicz
PL Deputy Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 24/05/2021

GF 234.12

Steve Rhodes
Enzygo Geoenvironmental Ltd
The Byre
Woodend Lane
Cromhall
Gloucestershire
GL12 8AA

e: steve.rhodes@enzygo.com

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-72525

Project / Site name:	Richmond	**Samples received on:**	27/04/2021
Your job number:	CRM 1027 087	**Samples instructed on/ Analysis started on:**	30/04/2021
Your order number:		**Analysis completed by:**	14/05/2021
Report Issue Number:	1	**Report issued on:**	20/05/2021
Samples Analysed:	7 soil samples		

Signed:

Joanna Wawrzeczko
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-72525
Project / Site name: Richmond

Lab Sample Number				1857753	1857754	1857755	1857756	1857757
Sample Reference				WS2	WS2	WS7	WS7	WS11
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	1.00	2.00	1.00
Date Sampled				28/04/2021	28/04/2021	28/04/2021	28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	11	16	4.5	15
Total mass of sample received	kg	0.001	NONE	0.50	0.50	0.50	0.50	0.50
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.0	7.5	6.8	8.5	7.9
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.013	0.015	0.016	0.0058	0.016

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-72525
Project / Site name: Richmond

Lab Sample Number				1857758	1857759
Sample Reference				WS5	WS5
Sample Number				None Supplied	None Supplied
Depth (m)				1.00	2.00
Date Sampled				28/04/2021	28/04/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	16
Total mass of sample received	kg	0.001	NONE	0.50	0.50
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	8.2	8.5
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.034	0.013

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 21-72525
Project / Site name: Richmond

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1857753	WS2	None Supplied	1	Brown clay and sand with gravel.
1857754	WS2	None Supplied	2	Brown sandy clay with gravel and vegetation.
1857755	WS7	None Supplied	1	Brown clay and sand with gravel and vegetation.
1857756	WS7	None Supplied	2	Light brown sand.
1857757	WS11	None Supplied	1	Brown clay and sand with vegetation and gravel
1857758	WS5	None Supplied	1	Brown clay and loam.
1857759	WS5	None Supplied	2	Brown sandy clay with gravel.

Analytical Report Number : 21-72525
Project / Site name: Richmond

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Steve Rhodes
Enzygo Geoenvironmental Ltd
The Byre
Woodend Lane
Cromhall
Gloucestershire
GL12 8AA

e: steve.rhodes@enzygo.com

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-94030

Project / Site name:	Richmond	**Samples received on:**	19/08/2021
Your job number:	CRM.1265.087	**Samples instructed on/ Analysis started on:**	19/08/2021
Your order number:		**Analysis completed by:**	25/08/2021
Report Issue Number:	1	**Report issued on:**	26/08/2021
Samples Analysed:	17 soil samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-94030
Project / Site name: Richmond

Lab Sample Number				1979344	1979345	1979346	1979347	1979348
Sample Reference				BH1	BH1	BH1	BH1	BH1
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				5.00	10.00	15.00	20.00	25.00
Date Sampled				18/08/2021	18/08/2021	18/08/2021	18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.0	15	11	12	11
Total mass of sample received	kg	0.001	NONE	1.0	0.50	0.50	0.50	0.50
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.0	9.1	8.8	9.0	9.3
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.019	0.25	0.45	0.49	0.38

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-94030
Project / Site name: Richmond

Lab Sample Number				1979349	1979350	1979351	1979352	1979353
Sample Reference				BH2	BH2	BH2	BH2	BH2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				5.00	10.00	15.00	20.00	25.00
Date Sampled				18/08/2021	18/08/2021	18/08/2021	18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	11	13	11
Total mass of sample received	kg	0.001	NONE	1.0	0.50	0.50	0.60	0.50
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.0	9.2	9.2	9.0	9.3
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.015	0.31	0.35	0.47	0.50

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-94030
Project / Site name: Richmond

Lab Sample Number				1979354	1979355	1979356	1979357	1979358
Sample Reference				BH3	BH3	BH4	BH4	BH5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				5.00	10.00	5.00	10.00	5.00
Date Sampled				18/08/2021	18/08/2021	18/08/2021	18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.7	12	7.6	14	2.6
Total mass of sample received	kg	0.001	NONE	1.0	0.50	1.0	0.60	0.80
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.9	9.2	8.6	9.0	8.9
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.013	0.27	0.021	0.24	0.0059

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 21-94030
Project / Site name: Richmond

Lab Sample Number				1979359	1979531
Sample Reference				BH6	BH6
Sample Number				None Supplied	None Supplied
Depth (m)				5.00	10.00
Date Sampled				18/08/2021	18/08/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	1.7	11
Total mass of sample received	kg	0.001	NONE	0.90	0.60
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	8.8	9.1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0087	0.22

U/S = Unsuitable Sample I/S = Insufficient Sample

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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1979344	BH1	None Supplied	5	Brown sand with gravel.
1979345	BH1	None Supplied	10	Brown clay.
1979346	BH1	None Supplied	15	Brown clay.
1979347	BH1	None Supplied	20	Brown clay.
1979348	BH1	None Supplied	25	Brown clay.
1979349	BH2	None Supplied	5	Brown sand with gravel.
1979350	BH2	None Supplied	10	Brown clay.
1979351	BH2	None Supplied	15	Brown clay.
1979352	BH2	None Supplied	20	Grey clay.
1979353	BH2	None Supplied	25	Grey clay.
1979354	BH3	None Supplied	5	Brown sand with gravel.
1979355	BH3	None Supplied	10	Grey clay.
1979356	BH4	None Supplied	5	Brown sand with gravel.
1979357	BH4	None Supplied	10	Grey clay.
1979358	BH5	None Supplied	5	Brown sand with gravel.
1979359	BH6	None Supplied	5	Brown sand with gravel.
1979531	BH6	None Supplied	10	Brown clay.

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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Sheffield S36 2AA
Tel: 0114 321 5151

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76 King Street,
Manchester,
M2 4NH

Tel: 0161 413 6444

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