

Style: AGS4_URS_ENV_TP File: \CH-WP-001\CH_GEOENVIRONMENT\PROJECTS\47073800 SPRINGS ROAD - MISSION2 - PROJECT INFORMATION\2.3 - DOCUMENTS\REPORTS\SITE INVESTIGATION\TP LOGS\TP LOGS.GPJ Printed: 14/06/2015 11:03:20

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Client: IGas Energy Plc

Project: Environmental Site Investigation - Springs Road, Misson

Contract No: 47073800





Record of

REA-1

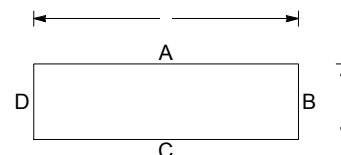
Samples & in situ Tests

Strata

Depth	Type/ No.	Test Results	Water Level	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION	Visual/Olfactory Observations
			0.30			(0.30)	MADE GROUND: Brown, sandy, gravelly, sub-angular cobbles of dolomite. Sand is fine to coarse. Gravel is fine to coarse, sub-angular, of dolomite and mixed natural lithologies.	Moist. NVO.
						(0.40)	Firm, brown and light grey mottled, slightly gravelly, sandy CLAY.	Wet. NVO.
						0.70	Trial pit terminated at 0.70m	
1								
2								
3								
4								

GENERAL REMARKS

NVO - No visual or olfactory evidence of contamination
Trial pit terminated at 0.7m depth due to water ingress



Exploratory hole logs should be read in conjunction with corresponding Key Sheets.

Logged by:
KT 07/05/15
Checked by:
DT
Status:
Draft

Equipment:
JCB 3CX
Sub-contractor:
Wilf Noble

Co-ordinates:
Not Surveyed

Ground Level:
Not Surveyed

Date:
Start: 07/05/2015
End: 07/05/2015



Sheet 1 of 1

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Client: IGas Energy Plc										<div>URS</div> <div>Record of TP-E1</div>	
Project: Environmental Site Investigation - Springs Road, Misson											
Contract No: 47073800											
Samples & in situ Tests					Strata						
Depth	Type/ No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION	Visual/Olfactory Observations		
0.30	ES/TP-E1 0.3m		0.1				(0.40)	TOPSOIL: Brown, slightly gravelly, fine to coarse sand. Gravel is fine to coarse, sub-rounded to rounded, of mixed natural lithologies. Rootlets in upper 0.1m.	Dry, NVO.		
0.60	ES/TP-E1 0.6m						0.40	Firm to stiff, orange-brown, sandy CLAY with occasional fine to medium, sub-rounded to rounded gravel of mixed natural lithologies.	Dry, NVO.		
1			0.0				(1.80)	0.6m: Occasional lenses of orange, medium sand (wet).			
2							2.20				
3							(1.00)	Stiff to very stiff, red-brown and light grey, slightly sandy CLAY. Sand is fine to medium. (Fully weathered Mercia Mudstone)	Dry, NVO.		
							2.8m: Clay becoming laminated				
							3.20	Trial pit terminated at 3.20m			
4											

TP-E1: Photograph of trial pit at termination depth showing strata encountered

GENERAL REMARKS				<div></div>	
NVO - No visual or olfactory evidence of contamination					

Exploratory hole logs should be read in conjunction with corresponding Key Sheets.

Logged by: KT 07/05/15	Equipment: JCB 3CX	Co-ordinates: Not Surveyed	Ground Level: Not Surveyed	Date: Start: 07/05/2015 End: 07/05/2015	<div>AGS</div> <div>Sheet 1 of 1</div>
Checked by: DT	Sub-contractor: Wilf Noble				
Status: Draft					

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Client: IGas Energy Plc										<div>URS</div> <div>Record of TP-E2</div>	
Project: Environmental Site Investigation - Springs Road, Misson											
Contract No: 47073800											
Samples & in situ Tests					Strata						
Depth	Type/ No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION	Visual/Olfactory Observations		
0.30	ES/TP-E2 0.3m		0.2				(0.60)	MADE GROUND: Dark brown to black, ashy, gravelly fine to coarse sand. Gravel is fine to medium, sub-angular, of mixed natural lithologies, charcoal and tarmacadam. Rootlets in upper 0.1m.	Dry, frequent ash.		
0.60	ES/TP-E2 0.6m		0.1				0.60	Stiff, orange-brown and light grey mottled, sandy, slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to medium, sub-rounded to rounded, of mixed natural lithologies.	Dry, NVO.		
1							(1.40)				
2							2.00	Stiff to very stiff, red-brown and grey, sandy CLAY with occasional sub-angular to angular gravel of mudstone. (Fully weathered (or possibly re-worked) Mercia Mudstone)	Dry, NVO.		
				2.90			(0.90)				
3							2.90	Trial pit terminated at 2.90m			
4											

TP-E2: Photograph showing arisings from 0 - 0.6m depth (ashy sand)

GENERAL REMARKS				<div><div>A</div><div>B</div><div>C</div><div>D</div></div>	
NVO - No visual or olfactory evidence of contamination Trial pit terminated at 2.9m depth due to water ingress					
Exploratory hole logs should be read in conjunction with corresponding Key Sheets.					
Logged by: KT 07/05/15		Equipment: JCB 3CX		Co-ordinates: Not Surveyed	
Checked by: DT		Sub-contractor: Wilf Noble		Ground Level: Not Surveyed	
Status: Draft				Date: Start: 07/05/2015 End: 07/05/2015	
				<div>AGS</div> <div>Sheet 1 of 1</div>	

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Client: IGas Energy Plc										<div>URS</div> <div>Record of TP-E3</div>	
Project: Environmental Site Investigation - Springs Road, Misson											
Contract No: 47073800											
Samples & in situ Tests						Strata					
Depth	Type/ No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION	Visual/Olfactory Observations		
0.20	ES/TP-E3 0.2m		0.0				(0.50)	TOPSOIL: Dark brown, silty, fine to medium sand. Rootlets in upper 0.1m.	Dry, NVO.		
							0.50				
				0.0				(0.80)	Orange-brown and light grey mottled, gravelly, slightly clayey, fine to coarse SAND. Gravel is fine to coarse, sub-rounded to rounded, of mixed natural lithologies. Occasional lenses of soft, grey silty clay.	Dry, NVO.	
				0.0				1.30			
				0.0				(0.90)	Stiff to very stiff, red-brown, slightly sandy CLAY with occasional fine to medium, sub-rounded to rounded gravel of mudstone and sandstone. Occasional lenses of orange-brown, fine to medium sand. (Fully weathered (or possibly re-worked) Mercia Mudstone)	Dry, NVO.	
				2.20			2.20	← 2.0m: Clay becoming red-brown and light grey. Increasing light grey with depth.			
			0.0				(0.80)	(East side of pit only) Orange, medium to coarse SAND with rare medium to coarse, rounded gravel of mixed natural lithologies.	Wet, NVO.		
							3.00	Trial pit terminated at 3.00m			
TP-E3: Photograph of trial pit at termination depth showing strata encountered											
GENERAL REMARKS											
NVO - No visual or olfactory evidence of contamination Trial pit terminated at 3.0m depth due to water ingress											
Exploratory hole logs should be read in conjunction with corresponding Key Sheets.											
Logged by: KT 07/05/15		Equipment: JCB 3CX				Co-ordinates: Not Surveyed		Ground Level: Not Surveyed		Date: Start: 07/05/2015 End: 07/05/2015	
Checked by: DT		Sub-contractor: Wilf Noble								Sheet 1 of 1	
Status: Draft											

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Client: IGas Energy Plc								 Record of TP-E4	
Project: Environmental Site Investigation - Springs Road, Misson									
Contract No: 47073800									
Samples & in situ Tests					Strata				
Depth	Type/ No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION	Visual/Olfactory Observations
0.30	ES/TP-E4 0.3m		0.0				(0.40)	TOPSOIL: Dark brown, clayey, slightly gravelly, fine to medium sand. Gravel is fine to medium, subangular to subrounded, of mixed atural lithologies. Rootlets in upper 0.1m.	Dry, NVO.
0.50	ES/TP-E4 0.5m						0.40	Stiff, red-brown and light grey, slightly sandy, slightly gravelly CLAY. Sand is fine to medium. Gravel is fine to coarse, sub-rounded to rounded, of mudstone and sandstone. (Fully weathered (or possibly re-worked) Mercia Mudstone)	Dry, NVO.
1			0.1				(1.60)	←0.8m: Becoming red-brown and light grey	
			0.0				2.00	←1.5m: Becoming very stiff	
Trial pit terminated at 2.00m									
GENERAL REMARKS NVO - No visual or olfactory evidence of contamination Trial pit terminated at 2.0m depth due to water ingress									
Exploratory hole logs should be read in conjunction with corresponding Key Sheets. Logged by: KT 07/05/15 Checked by: DT Status: Draft									Equipment: JCB 3CX Sub-contractor: Wilf Noble
Co-ordinates: Not Surveyed		Ground Level: Not Surveyed		Date: Start: 07/05/2015 End: 07/05/2015		 Sheet 1 of 1			

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Client: IGas Energy Plc								URS	
Project: Environmental Site Investigation - Springs Road, Misson								Record of	
Contract No: 47073800								TP-E6	
Samples & in situ Tests					Strata				
Depth	Type/No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Visual/Olfactory Observations
0.40	ES/TP-E6 0.4m		0.1	0.50			(0.50)	MADE GROUND: Buff, sub-angular cobbles of dolomite in a matrix of brown, clayey, slightly gravelly, fine to coarse sand. Gravel is fine, sub-angular to angular, of dolomite.	Dry, NVO.
0.60	ES/TP-E6 0.6m		0.1				0.50	Firm, brown, slightly gravelly, sandy CLAY. Gravel is fine to coarse, sub-rounded, of mixed natural lithologies.	Wet, NVO.
0.70							0.70	Trial pit terminated at 0.70m	
1									
2									
3									
4									

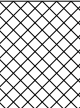
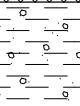
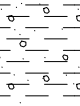

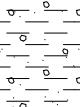
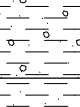
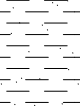
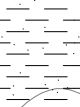

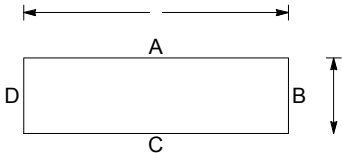


TP-E6: Photograph of trial pit at termination depth - trial pit flooded

GENERAL REMARKS					
NVO - No visual or olfactory evidence of contamination Trial pit terminated at 0.7m depth due to water ingress					
Exploratory hole logs should be read in conjunction with corresponding Key Sheets.					
Logged by: KT 07/05/15	Equipment: JCB 3CX	Co-ordinates: Not Surveyed	Ground Level: Not Surveyed	Date: Start: 07/05/2015 End: 07/05/2015	AGS Sheet 1 of 1
Checked by: DT	Sub-contractor: Wilf Noble				
Status: Draft					

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Client: IGas Energy Plc								<div>URS</div> <div>Record of TP-E7</div>		
Project: Environmental Site Investigation - Springs Road, Misson										
Contract No: 47073800										
Samples & in situ Tests					Strata					
Depth	Type/ No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thick- ness)	DESCRIPTION	Visual/Olfactory Observations	
0.20	ES/TP-E7 0.2m		0.2				(0.50)	MADE GROUND: Brown, sandy, gravelly, sub-angular cobbles of dolomite. Sand is fine to coarse. Gravel is fine to coarse, sub-angular, of dolomite and mixed natural lithologies.	Moist, NVO.	
0.60	ES/TP-E7 0.6m		0.0				0.50	Stiff, orange-brown and light grey mottled, sandy CLAY with occasional fine to coarse, sub-rounded gravel of mixed natural lithologies.		
1			0.0					1.2m: Increasing light grey with depth		
				1.80			(2.30)	1.8m: Slow groundwater seep (west side of pit only)	Dry, NVO.	
2			0.1					2.0m: Becoming very stiff		
							2.80			
3							(1.20)	Very stiff, red-brown and light grey, sandy CLAY. Sand is fine. (Fully weathered Mercia Mudstone)	Dry, NVO.	
							4.00			
Trial pit terminated at 4.00m										
<div></div> <p>TP-E7: Photograph of trial pit at termination depth showing strata encountered</p>										
GENERAL REMARKS								<div></div>		
NVO - No visual or olfactory evidence of contamination										
Exploratory hole logs should be read in conjunction with corresponding Key Sheets.										
Logged by: KT 07/05/15		Equipment: JCB 3CX			Co-ordinates: Not Surveyed		Ground Level: Not Surveyed		Date: Start: 07/05/2015 End: 07/05/2015	<div>AGS</div> <div>Sheet 1 of 1</div>
Checked by: DT		Sub-contractor: Wilf Noble								
Status: Draft										

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Client: IGas Energy Plc

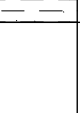




Project: Environmental Site Investigation - Springs Road, Misson

Contract No: 47073800

URS

Record of

TP-E8

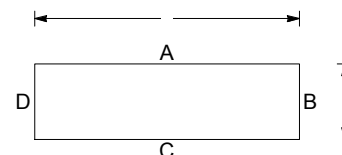
Samples & in situ Tests					Strata				
Depth	Type/No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Visual/Olfactory Observations
0.20	ES/TP-E8 0.2m		0.0				(0.50)	TOPSOIL: Dark brown, slightly gravelly, fine to medium sand. Gravel is fine to medium, sub-angular to sub-rounded, of mixed natural lithologies. Rootlets in upper 0.1m.	Dry, NVO.
0.60	ES/TP-E8 0.6m		0.0				0.50	Stiff, orange-brown and light grey mottled, sandy CLAY with occasional fine to coarse, sub-rounded gravel of mixed natural lithologies.	Dry, NVO.
1.50							(1.50)	Orange, medium to coarse SAND.	
2.00							2.00	Stiff, red-brown and light grey, sandy CLAY with rare fine to medium, sub-rounded to rounded gravel of mudstone and sandstone. (Fully weathered (or possibly re-worked) Mercia Mudstone)	
2.20							2.20	Stiff, red-brown and light grey, sandy CLAY with rare fine to medium, sub-rounded to rounded gravel of mudstone and sandstone. (Fully weathered (or possibly re-worked) Mercia Mudstone)	Wet, NVO.
2.70							(0.50)	Stiff, red-brown and light grey, sandy CLAY with rare fine to medium, sub-rounded to rounded gravel of mudstone and sandstone. (Fully weathered (or possibly re-worked) Mercia Mudstone)	Dry, NVO.
2.70							2.70	Trial pit terminated at 2.70m	
3									
4									



TP-E8: Photograph of trial pit at termination depth showing strata encountered

GENERAL REMARKS

NVO - No visual or olfactory evidence of contamination



Exploratory hole logs should be read in conjunction with corresponding Key Sheets.

Logged by:
KT 07/05/15
Checked by:
DT
Status:
Draft

Equipment:
JCB 3CX
Sub-contractor:
Wilf Noble

Co-ordinates:
Not Surveyed

Ground Level:
Not Surveyed

Date:
Start: 07/05/2015
End: 07/05/2015



Sheet 1 of 1

Style: AGS4_URS_ENV_TP File: \CH-WP-001\CH_GEOENVIRONMENT\PROJECTS\47073800 SPRINGS ROAD - MISSION2 - PROJECT INFORMATION\2.3 - DOCUMENTS\REPORTS\SITE INVESTIGATION\TP LOGS\SPRINGS RD MISSION2_3 - TP LOGS.GPJ Printed: 14/06/2015 11:06:22

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Client: IGas Energy Plc



Project: Environmental Site Investigation - Springs Road, Misson

Contract No: 47073800

URS

Record of

TP-E9

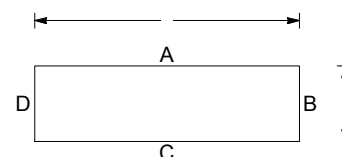
Samples & in situ Tests					Strata				
Depth	Type/No.	Test Results	PID (ppm)	Water Level	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	Visual/Olfactory Observations
0.50	ES/TP-E9 0.5m		0.2				(0.70)	TOPSOIL: Dark brown, slightly gravelly, fine to medium sand. Gravel is fine to coarse, sub-rounded to rounded, of mixed natural lithologies. Rootlets in upper 0.1m.	Dry, NVO.
1			0.2				0.70	Stiff, red-brown and light grey, sandy CLAY with rare fine to medium, sub-rounded to rounded gravel of mudstone and sandstone. (Fully weathered (or possibly re-worked) Mercia Mudstone)	Dry, NVO.
2							(2.90)		
3								2.8m: Clay becoming friable with occasional sub-angular to angular gravel and cobbles of mudstone.	Dry, NVO.
							3.60		
4								Trial pit terminated at 3.60m	



TP-E9: Photograph of arisings from TP-E9 at 2.8 - 3.6m depth (weathered mudstone)

GENERAL REMARKS

NVO - No visual or olfactory evidence of contamination



Exploratory hole logs should be read in conjunction with corresponding Key Sheets.

Logged by:

KT 07/05/15

Checked by:

DT

Status:

Draft

Equipment:

JCB 3CX

Sub-contractor:

Wilf Noble

Co-ordinates:

Not Surveyed

Ground Level:

Not Surveyed

Date:

Start: 07/05/2015

End: 07/05/2015



Sheet 1 of 1