

A19.3a

Groundwater
Monitoring
Record Sheets
Round 1 2021

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink	MetroLink			
Contract No:	18_9975	18_9975			
Date/Time	25/02/2021				
Weather Conditions:	Dry, cold and clear				
GW location ID:	AWN01(S)	AZ Zone	AZ-3		
Installation diameter (mm)	38	Туре:	PVC		
SWL (mbtoc)	6.04	Total depth (mbtoc)	18		
SWL (mBGL)	5.74	S/P recess/ above g/I (m)	0.3		
General location details:	Agricultural land south of Dublin Airport				
GPS co-ordinates (ITM):	715696, 742154				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & PG
OA Dun on drawn for Marking			

QA Procedures for Multi-meter:				
Last Field Calibration	Date:	25/02/2021	Time:	-
Last Full Calibration	January_202	1		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	11.6	11.5	11.5	
pН	8.32	8.31	8.26	
Electrical Conductivity (uS/cm)	930	931	931	
TDS (ppt)	0.66	0.66	0.66	

Water Sample Observations (field)					
Colour	Brown to dark brown	Capped at ground level	Y / N	Yes, above ground	
Odour Present	No	Other field related:	Other field related:		
Sediment/Precipitate	Slight				
Free Product	No	Acti	Active farming field		
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Agricultural	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/2750

Client:	Jacobs Engineering, Ireland		
Project:	MetroLink		
Contract No:	18_9975		
Date/Time	25/02/2021		
Weather Conditions:	Dry, cold and clear		
GW location ID:	AWN02(D)	AZ Zone	AZ-3
Installation diameter (mm)	38	Type:	PVC
SWL (mbtoc)	6.24	Total depth (mbtoc)	28.35
SWL (mBGL)	5.92	S/P recess/ above g/l (m)	0.29
General location details:	Agricultural land south of Dublin Airport		
GPS co-ordinates (ITM):	715427, 741788		





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Sampling Equipment:	Tubing, Level & Fi	eld Meter	AWN Consultant(s):	CD & PG	
QA Procedures for Multi-n	neter:				
Last Field Calibration		Date:	25/02/2021	Time:	-

Last Full Calibration January\_2021

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	9.7	9.7	9.7	
рН	8.15	8.14	8.14	
Electrical Conductivity (uS/cm)	715	715	715	
TDS (ppt)	0.5	0.5	0.5	

Water Sample Observations (field)						
Colour	Merky to light brown	Capped at ground level	Y / N	Yes, above ground		
Odour Present	No	Other field related:	Other field related:			
Sediment/Precipitate	Slight	Door draings sybibited as	Deep designs subjitited on the field I spelled the time is			
Free Product	No	ů.	Poor drainge exhibited on the field. Localised fly tipping no during site visit			
Hydrocarbon Sheen	No	u.				



Environmental setting:	Access constraints:
Agricultural	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/2750

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	02/02/2021				
Weather Conditions:	Dry, calm and overcast				
GW location ID:	NBH04	AZ Zone	AZ-2		
Installation diameter (mm)	50	Type:	PVC		
SWL (mbtoc)	3.48 Total depth (mbtoc) 30				
SWL (mBGL)	3.57 S/P recess/ above g/l (m) -0.09				
General location details:	T2 surface car park at Dublin Airport				
GPS co-ordinates (ITM):	716965.57, 743512.23				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Fi	ield Meter	AWN Consultant(s):	CD & PG		
QA Procedures for Multi-meter:						
Last Field Calibration Date: 02/02/2021 Time: -						
Last Full Calibration February 2021						

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	11.2	11.0	11.0		
рН	7.21	7.20	7.20		
Electrical Conductivity (uS/cm)	970	965	965		
TDS (ppt)	0.69	0.68	0.68		

Water Sample Observations (field)								
Colour	Merky to turbid	Capped at ground level	Y / N	Yes, flush				
Odour Present	Yes, organic	Other field related:	Other field related:					
Sediment/Precipitate	Slight	The TO surface and his	TI TO (					
Free Product	No	•	The T2 surface car park is close to fire fighting activities area in the Dublin Airport					
Hydrocarbon Sheen	No		- Dubiiri Alipoit					



Environmental setting:	Access constraints:	
Urban	None	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/1428

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	21/01/2021				
Weather Conditions:	Overcast, dry and cold (heavy rain the night before)				
GW location ID:	NBH06A AZ Zone AZ-3				
Installation diameter (mm)	150	Type:	PVC		
SWL (mbtoc)	5.45 Total depth (mbtoc) 22.5				
SWL (mBGL)	5.02 S/P recess/ above g/l (m) 0.43				
General location details:	Agricultural land just south of the Dublin Airport and along the old Airport Road				
GPS co-ordinates (ITM):	716322.45, 742232.9				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & MA
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QA Procedures for Multi-meter:				
Last Field Calibration	Date:	21/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements						
Parameter	Parameter test 1	Parameter test 2	Parameter test 3			
Temp (°C)	9.2	9.2	9.2			
pН	7.75	7.75	7.75			
Electrical Conductivity (uS/cm)	895	895	895			
TDS (ppt)	0.63	0.63	0.63			

Water Sample Observations (field)					
Colour	Clear	Capped at ground level	Y / N	Capped above ground	
Odour Present	Slight organic/ rotten eggs	Other field related:	Other field related:		
Sediment/Precipitate	No	The agricultural land is susceptible to local flooding. A lot of surface			
Free Product	No	water ponding across the site. Ground conditions are poor (very			
Hydrocarbon Sheen	No		soft)		



Access constraints:
None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/805

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	21/01/2021				
Weather Conditions:	Overcast, dry and cold (heavy rain the night before)				
GW location ID:	NBH06W AZ Zone AZ-3				
Installation diameter (mm)	150 Type: PVC				
SWL (mbtoc)	5.23 Total depth (mbtoc) 45				
SWL (mBGL)	4.96 S/P recess/ above g/l (m) 0.27				
General location details:	Agricultural land just south of the Dublin Airport and along the old Airport Road				
GPS co-ordinates (ITM):	71632.43, 742224.11				





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Sampling Equipment:	Tubing, Level & Fi	eld Meter	AWN Consultant(s):	CD & MA		
QA Procedures for Multi-meter:						
Last Field Calibration		Date:	21/01/2021	Time:	-	
Last Full Calibration		January_202	1			

Water Quality - Field Measurements  Parameter						
Temp (°C)	10.1	10.1	10.1			
pH	7.84	7.84	7.84			
Electrical Conductivity (uS/cm)	747	747	747			
TDS (ppt)	0.53	0.53	0.53			

Water Sample Observations (field)					
Colour	Clear	Capped at ground level	Y / N	Capped above ground	
Odour Present	Yes, organic/ rotten eggs	Other field related:			
Sediment/Precipitate	No	The agricultural land is susc	eptible to loca	al flooding. A lot of surface	
Free Product	No	water ponding across the	site. Ground of	conditions are poor (very	
Hydrocarbon Sheen	No		soft)		



Access constraints:
None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/805

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975					
Date/Time	06/01/2021					
Weather Conditions:	Overcast, rainy and cold					
GW location ID:	NBH12 AZ Zone AZ-3					
Installation diameter (mm)	50	Type:	PVC			
SWL (mbtoc)	10.07	Total depth (mbtoc)	28.5			
SWL (mBGL)	9.97 S/P recess/ above g/I (m) 0.1					
General location details:	Greenfield / parkland					
GPS co-ordinates (ITM):	715308.61,740710.89					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:					
Last Field Calibration Date: 04/01/2021 Time: -					
Last Full Calibration	January_202	1			

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	9.5	9.5	9.5		
рН	7.44	7.44	7.44		
Electrical Conductivity (uS/cm)	700	700	700		
TDS (ppt)	0.45	0.45	0.45		

Water Sample Observations (field)					
Colour	Clear	Capped at ground level Y / N Capped above ground			
Odour Present	No	Other field related:			
Sediment/Precipitate	No	Develope on was oney upon arrival and some debric was noted			
Free Product	No	Borehole cap was open upon arrival and some debris was noted within bore.			
Hydrocarbon Sheen	No	within bore.			



Environmental setting:	Access constraints:
Greenfield / parkland	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/78

Client:	Jacobs Engineering, Ireland			
Project:	MetroLink			
Contract No:	18_9975			
Date/Time	07/01/2021			
Weather Conditions:	Overcast, snow/wet and cold			
GW location ID:	NBH17 AZ Zone AZ-4			
Installation diameter (mm)	38 Type: PVC			
SWL (mbtoc)	2.76	Total depth (mbtoc)	31.6	
SWL (mBGL)	2.901 S/P recess/ above g/l (m) -0.141			
General location details:	Soccer park / pitch (Home Farm)			
GPS co-ordinates (ITM):	715433.93, 737253.02			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment: Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration Date: 04/01/2021 Time: -				
Last Full Calibration	January_2021			

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	9.1	9.1	9.1		
рН	7.3	7.3	7.3		
Electrical Conductivity (uS/cm)	888	888	888		
TDS (ppt)	0.57	0.57	0.57		

Water Sample Observations (field)						
Colour	Clear to slightly silty	Capped at ground level	Y / N	Capped flush to the ground		
Odour Present	No	Other field related:	Other field related:			
Sediment/Precipitate	Slight					
Free Product	No	Slow to mod	Slow to moderate recharge noted.			
Hydrocarbon Sheen	No		1			



Environmental setting:	Access constraints:
Recreational / parkland	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/142

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	08/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH18(S) AZ Zone AZ-4				
Installation diameter (mm)	38 Type: PVC				
SWL (mbtoc)	6.96	Total depth (mbtoc)	15		
SWL (mBGL)	7.00 S/P recess/ above g/l (m) -0.04				
General location details:	Urban - derlict factory close to railway line				
GPS co-ordinates (ITM):	715055.26, 736378.66				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration	Date:	04/01/2021	Time:	-
Last Full Calibration	January_202	1		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	10.2	10.2	10.2	
pН	7.41	7.41	7.41	
Electrical Conductivity (uS/cm)	1259	1259	1259	
TDS (ppt)	0.81	0.81	0.81	

Water Sample Observations (field)				
Colour	Clear to merky / turbid	Capped at ground level	Y / N	Yes, flush
Odour Present	No	Other field related:		
Sediment/Precipitate	Slight			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:
Urban, derlict factory and house	Yes, gated entrance

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/243

Client:	Jacobs Engineering, Ireland			
Project:	MetroLink	MetroLink		
Contract No:	18_9975	18_9975		
Date/Time	08/01/2021	08/01/2021		
Weather Conditions:	Overcast, dry and cold			
GW location ID:	NBH19A	AZ Zone	AZ-4	
Installation diameter (mm)	150	Type:	PVC	
SWL (mbtoc)	9.34	Total depth (mbtoc)	18.5	
SWL (mBGL)	9.49	S/P recess/ above g/l (m)	-0.15	
General location details:	Urban - car park behind the Brian Boru pub			
GPS co-ordinates (ITM):	714960.6, 736410.98			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:				
Last Field Calibration	Date:	04/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	12.1	12.1	12.1	
рН	7.01	7.01	7.01	
Electrical Conductivity (uS/cm)	1021	1021	1021	
TDS (ppt)	0.66	0.66	0.66	

Water Sample Observations (field)				
Colour	Merky, slightly turbid	Capped at ground level	Y / N	Yes, flush
Odour Present	No	Other field related:		
Sediment/Precipitate	Slight			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:
Turban, car park area	No, groundwater monitoring location is located behind smoking area of pub

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/243

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink	MetroLink			
Contract No:	18_9975				
Date/Time	08/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH19W	AZ-4			
Installation diameter (mm)	150	Type:	PVC		
SWL (mbtoc)	9.65	Total depth (mbtoc)	40		
SWL (mBGL)	9.75 S/P recess/ above g/l (m) -0.10				
General location details:	Urban - car park behind the Brian Boru pub				
GPS co-ordinates (ITM):	714957.65, 736411.45				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:				
Last Field Calibration	Date:	04/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	11.9	11.9	11.9	
рН	7.45	7.45	7.45	
Electrical Conductivity (uS/cm)	860	860	860	
TDS (ppt)	0.55	0.55	0.55	

Water Sample Observations (field)				
Colour	Clear to merky	Capped at ground level	Y / N	Yes, flush
Odour Present	No	Other field related:		
Sediment/Precipitate	Slight			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:		
Turban, car park area	No, groundwater monitoring location is located behind smoking area of pub		

Sample taken: Y / N	Laboratory Report Ref:
Yes	EMT 21/243

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink	MetroLink			
Contract No:	18_9975				
Date/Time	08/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH20(S)	AZ-4			
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	9.08	Total depth (mbtoc)	15.5		
SWL (mBGL)	9.09	-0.01			
General location details:	Urban - walkway along the Royal Canal				
GPS co-ordinates (ITM):	714951.03, 736318.28				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:				
Last Field Calibration	Date:	04/01/2021	Time:	-
Last Full Calibration	January_202	1		

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	9.15	9.15	9.15		
pН	7.52	7.52	7.52		
Electrical Conductivity (uS/cm)	599	599	599		
TDS (ppt)	0.38	0.38	0.38		

Water Sample Observations (field)					
Colour	Light brown, turbid	Capped at ground level	Y / N	Yes, flush	
Odour Present	No	Other field related:			
Sediment/Precipitate	Yes				
Free Product	No				
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Urban, walkway along the Royal Canal	No, located along Royal Canal

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/243

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland			
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	11/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH21(S) AZ Zone AZ-4				
Installation diameter (mm)	38	Туре:	PVC		
SWL (mbtoc)	16.9	Total depth (mbtoc)	20		
SWL (mBGL)	17.12 S/P recess/ above g/I (m) -0.22				
General location details:	GW loction located along taxi rank beside St. Joesph Church				
GPS co-ordinates (ITM):	715245.81, 735693.89				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & F	ield Meter	AWN Consultant(s):	CD & RD	
QA Procedures for Multi-	-meter:				
Last Field Calibration		Date:	11/01/2021	Time:	-
Last Full Calibration		January 202	<u>.</u> 1		

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	12.92	12.92	12.92		
pН	7.28	7.28	7.28		
Electrical Conductivity (uS/cm)	995	995	995		
TDS (ppt)	0.64	0.64	0.64		

Water Sample Observations (field)					
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Yes, flush	
Odour Present	Slight organic odour Other field related:				
Sediment/Precipitate	Yes	Minimal water, well was pumped dry four times (slow recharge noted).			
Free Product	No				
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Urban, taxi rank	No

Sample taken: Y / N	Laboratory Report Ref:
Yes	EMT 21/278

Last Full Calibration

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink					
Contract No:	18_9975					
Date/Time	09/02/2021	09/02/2021				
Weather Conditions:	Snow, wet and cold					
GW location ID:	NBH22(S) AZ Zone AZ-4					
Installation diameter (mm)	38	Type:	PVC			
SWL (mbtoc)	1.65	Total depth (mbtoc)	19			
SWL (mBGL)	1.70 S/P recess/ above g/l (m) -0.05		-0.05			
General location details:	Moore Lane / O' Connell Street - Construction site					
GPS co-ordinates (ITM):	715712.71, 73492	4.57				





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Sampling Equipment:	Tubing, Level & Field Meter		AWN Consultant(s):	CD & PG	
QA Procedures for Multi-meter:					
Last Field Calibration		Date:	08/02/2021	Time:	-

February\_2021

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	12.2	12.1	12.1		
рН	8.16	8.07	8.08		
Electrical Conductivity (uS/cm)	890	887	887		
TDS (ppt)	0.63	0.63	0.63		

Water Sample Observations (field)						
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Yes, flush		
Odour Present	No	Other field related:				
Sediment/Precipitate	Yes					
Free Product	No					
Hydrocarbon Sheen	No					



Environmental setting:	Access constraints:		
Urban, active construction site	Yes, contact project manager of the site to gain access		

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/1833

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink					
Contract No:	18_9975						
Date/Time	12/01/2021						
Weather Conditions:	Overcast, dry and cold						
GW location ID:	NBH23A AZ Zone AZ-4						
Installation diameter (mm)	150	Туре:	PVC				
SWL (mbtoc)	4.73	40					
SWL (mBGL)	4.76 S/P recess/ above g/I (m) -0.03						
General location details:	Derlict site between Moore Lane and O'Connell Street						
GPS co-ordinates (ITM):	715730.57, 73484	6.12					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Fi	ield Meter	AWN Consultant	t(s): CD & RD	ı	
QA Procedures for Multi-	meter:					
Last Field Calibration		Date:	11/01/2021	Time:	-	
Last Full Calibration		January 202	1			

Water Quality - Field Measurements						
Parameter	Parameter test 1	Parameter test 2	Parameter test 3			
Temp (°C)	12.59	12.59	12.59			
рН	7.54	7.54	7.54			
Electrical Conductivity (uS/cm)	679	679	679			
TDS (ppt)	0.44	0.44	0.44			

Water Sample Observations (field)						
Colour	Clear	Capped at ground level	Y / N	Yes, flush		
Odour Present	No	Other field related:				
Sediment/Precipitate	No					
Free Product	No					
Hydrocarbon Sheen	No					



Environmental setting:	Access constraints:		
Urban, derlict site / construction area	Yes, gated entrance with a bell		

Sample taken: Y / N	Laboratory Report Ref:	
Yes	EMT 21/331	

Client:	Jacobs Engineering, Ireland						
Project:	MetroLink	MetroLink					
Contract No:	18_9975						
Date/Time	12/01/2021						
Weather Conditions:	Overcast, dry and cold						
GW location ID:	NBH23W AZ Zone AZ-4						
Installation diameter (mm)	150	Туре:	PVC				
SWL (mbtoc)	4.69	36					
SWL (mBGL)	4.85 S/P recess/ above g/l (m) -0.16						
General location details:	Derlict site between Moore Lane and O'Connell Street						
GPS co-ordinates (ITM):	715712.5, 734843	715712.5, 734843.89					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter		AWN Consultant(s):	CD & RD		
QA Procedures for Multi-meter:						
Last Field Calibration		Date:	11/01/2021	Time:	-	
Last Full Calibration		January_2021				

Water Quality - Field Measurements						
Parameter	Parameter test 1	Parameter test 2	Parameter test 3			
Temp (°C)	11.68	11.68	11.68			
рН	7.73	7.73	7.73			
Electrical Conductivity (uS/cm)	340	340	340			
TDS (ppt)	0.22	0.22	0.22			

Water Sample Observations (field)				
Colour	Clear	Capped at ground level Y / N Yes, flush		
Odour Present	No	Other field related:		
Sediment/Precipitate	No			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:
Urban, derlict site/ construction area	Yes, gated entrance with a bell

Sample taken: Y / N	Laboratory Report Ref:	
Yes	EMT 21/331	

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink					
Contract No:	18_9975	18_9975				
Date/Time	12/01/2021					
Weather Conditions:	Overcast, dry and cold					
GW location ID:	NBH24(S) AZ Zone AZ-4					
Installation diameter (mm)	38	Type:	PVC			
SWL (mbtoc)	4.69	Total depth (mbtoc)	16			
SWL (mBGL)	4.71	S/P recess/ above g/I (m)	-0.02			
General location details:	Car parking area for Dublin Bus employees in the main office on O'Connell Street					
GPS co-ordinates (ITM):	715744.2, 734753.45					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & F	ield Meter	AWN Consultant(s):	CD & RD	
QA Procedures for Multi-	meter:				
Last Field Calibration		Date:	11/01/2021	Time:	-
Last Full Calibration		January 202	<u>.</u> 1	•	

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	12.84	12.84	12.84	
рН	7.89	7.89	7.89	
Electrical Conductivity (uS/cm)	391	391	391	
TDS (ppt)	0.25	0.25	0.25	

Water Sample Observations (field)			
Colour	Clear	Capped at ground level Y / N Yes, flush	
Odour Present	No	Other field related:	
Sediment/Precipitate	No		
Free Product	No		
Hydrocarbon Sheen	No		



Environmental setting:	Access constraints:
Urban, car park area	Yes, poter from Dublin Bus main office

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/331

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	13/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH25(S) AZ Zone AZ-4				
Installation diameter (mm)	38	Туре:	PVC		
SWL (mbtoc)	3.6	Total depth (mbtoc)	8		
SWL (mBGL)	3.70	S/P recess/ above g/l (m)	-0.10		
General location details:	Poolbeg Street - bus standby area				
GPS co-ordinates (ITM):	716228.69, 734372.1				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Fi	ield Meter	AWN Consultant(s):	CD & RD	
QA Procedures for Multi-	-meter:				
Last Field Calibration		Date:	11/01/2021	Time:	-
Last Full Calibration		January_202	1	•	•

Parameter	Parameter test 1	Parameter test 2	Parameter test 3
Temp (°C)	16.14	16.14	16.14
рН	7.20	7.20	7.20
Electrical Conductivity (uS/cm)	22,654	22,654	22,654
TDS (ppt)	14.72	14.72	14.72

Water Sample Observations (field)							
Colour	Brown to dark brown	Capped at ground level	Y / N	Yes, flush			
Odour Present	Yes - rotten eggs	Other field related:					
Sediment/Precipitate	Yes						
Free Product	Slight	Pumped dry four times, lir	Pumped dry four times, limited water and recharge is very slow				
Hydrocarbon Sheen	Slight						



Environmental setting:	Access constraints:
Urban, roadway	No but be aware of traffic

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/381

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland			
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	13/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH26CA AZ Zone AZ-4				
Installation diameter (mm)	150	Type:	PVC		
SWL (mbtoc)	4.105 Total depth (mbtoc) 9				
SWL (mBGL)	4.18 S/P recess/ above g/I (m) -0.08				
General location details:	Derlict site along Luke Lane and adjacent to train tracks				
GPS co-ordinates (ITM):	716262.56, 73433	4.47			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & F	ield Meter	AWN Consultant	(s): CD & RD		
QA Procedures for Multi-	meter:					
Last Field Calibration		Date:	11/01/2021	Time:	-	
Last Full Calibration		January 202	1			

Water Quality - Field Measurements							
Parameter	Parameter test 1	Parameter test 2	Parameter test 3				
Temp (°C)	13.75	13.75	13.75				
рН	7.06	7.06	7.06				
Electrical Conductivity (uS/cm)	26,506	26,506	26,506				
TDS (ppt)	17.22	17.22	17.22				

Water Sample Observations (field)						
Colour	Clear to slightly merky	Capped at ground level	Y / N	Yes, flush		
Odour Present	Yes - strong rotten eggs	Other field related:				
Sediment/Precipitate	Slight					
Free Product	No	Strong organic odour				
Hydrocarbon Sheen	No					



Environmental setting:	Access constraints:		
Urban	Yes, gated entrance		

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/381

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland				
Project:	MetroLink					
Contract No:	18_9975					
Date/Time	13/01/2021					
Weather Conditions:	Overcast, dry and cold					
GW location ID:	NBH26CW AZ Zone AZ-4					
Installation diameter (mm)	150	Type:	PVC			
SWL (mbtoc)	4.191 Total depth (mbtoc) 36					
SWL (mBGL)	4.23 S/P recess/ above g/I (m) -0.04					
General location details:	Derlict site along Luke Lane and adjacent to train tracks					
GPS co-ordinates (ITM):	716264.09, 73433	31.43				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & F	ield Meter	AWN Consultant	t(s): CD & RD		
QA Procedures for Multi-	meter:					
Last Field Calibration		Date:	11/01/2021	Time:	-	
Last Full Calibration		January 202	1			

Water Quality - Field Measurements							
Parameter	Parameter test 1	Parameter test 2	Parameter test 3				
Temp (°C)	13.67	13.67	13.67				
рН	7.11	7.11	7.11				
Electrical Conductivity (uS/cm)	29,058	29,058	29,058				
TDS (ppt)	18.88	18.88	18.88				

Water Sample Observations (field)					
Colour	Clear to slightly merky	Capped at ground level	Υ /	N	Yes, flush
Odour Present	Yes - strong rotten eggs	Other field related:			
Sediment/Precipitate	No				
Free Product	No Strong organic odour		ur		
Hydrocarbon Sheen	drocarbon Sheen No				



Environmental setting:	Access constraints:	
Urban	Yes, gated entrance	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/381

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink	MetroLink			
Contract No:	18_9975	18_9975			
Date/Time	18/01/2021	18/01/2021			
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH31 AZ Zone AZ-4				
Installation diameter (mm)	50	Type:	PVC		
SWL (mbtoc)	4.71	Total depth (mbtoc)	37.63		
SWL (mBGL)	4.88	S/P recess/ above g/l (m)	-0.17		
General location details:	Dartmouth Road - construction site				
GPS co-ordinates (ITM):	716097, 732476				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment: Tubing, Level & Field Meter	AWN Consultant(s):	CD & PG
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QA Procedures for Multi-meter:			
Last Field Calibration Date: 18/01/2021 Time: -			
Last Full Calibration	January_2021		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	11.2	11.2	11.2	
рН	7.43	7.43	7.43	
Electrical Conductivity (uS/cm)	645	645	645	
TDS (ppm)	895	895	895	

Water Sample Observations (field)				
Colour	Brown to merky	Capped at ground level Y / N Flush		
Odour Present	No	Other field related:		
Sediment/Precipitate	Slight	Area by borehole is along and augustrom the main works of the		
Free Product	No	Area by borehole is clear and away from the main works of the construction site.		
Hydrocarbon Sheen	No	Construction site.		



Environmental setting:	Access constraints:	
Urban - construction site	None	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/609

Client:	Jacobs Engineering, Ireland			
Project:	MetroLink			
Contract No:	18_9975			
Date/Time	02/02/2021			
Weather Conditions:	Dry, calm and overcast			
GW location ID:	NBH60 AZ Zone AZ-2			
Installation diameter (mm)	50	Type:	PVC	
SWL (mbtoc)	1.23	Total depth (mbtoc)	1.4	
SWL (mBGL)	1.32 S/P recess/ above g/l (m) -0.09		-0.09	
General location details:	T2 surface car park at Dublin Airport			
GPS co-ordinates (ITM):	716919.9, 743471.85			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

	l		
Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	ICD & DC
Sambinu Eudibineni.	liubiliu, Level & Lielu Melel	IAVVIN CONSUITANTISI.	ICD & FG

QA Procedures for Multi-meter:			
Last Field Calibration Date: 02/02/2021 Time: -			
Last Full Calibration	February_2021		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	8.6	8.1	8.1	
pН	8.11	8.10	8.10	
Electrical Conductivity (uS/cm)	731	730	730	
TDS (ppt)	0.53	0.52	0.52	

Water Sample Observations (field)					
Colour	Light brown to brown, turbid	Capped at ground level	Y / N	Yes, flush	
Odour Present	Slight, organic	Other field related:			
Sediment/Precipitate	Yes	The TO seems and in the	t- C C-	halin ni nadiodalin ni nanni lin alin	
Free Product	No	The T2 surface car park is close to fire fighting activities area  Dublin Airport. Minimal purge due to water volume in well be			
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/1428

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink	MetroLink			
Contract No:	18_9975	18_9975			
Date/Time	02/02/2021	02/02/2021			
Weather Conditions:	Dry, calm and overcast				
GW location ID:	NBH61	AZ Zone	AZ-2		
Installation diameter (mm)	50	Type:	PVC		
SWL (mbtoc)	1.70	Total depth (mbtoc)	2.12		
SWL (mBGL)	1.83	S/P recess/ above g/l (m)	-0.13		
General location details:	T2 surface car park at Dublin Airport				
GPS co-ordinates (ITM):	716963.23, 743504.73				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & PG
OA December 6 - Multi-			

QA Procedures for Multi-meter:				
Last Field Calibration	Date:	02/02/2021	Time:	-
Last Full Calibration	February_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	9.4	9.4	9.4	
pН	7.50	7.49	7.49	
Electrical Conductivity (uS/cm)	1210	1210	1210	
TDS (ppt)	0.85	0.85	0.85	

Water Sample Observations (field)					
Colour	Light brown to brown, turbid	Capped at ground level	Y / N	Yes, flush	
Odour Present	Slight, organic	Other field related:			
Sediment/Precipitate	Very slight	The T2 surface car park is also	a ta fina fin	haling policities area in the	
Free Product	No	The T2 surface car park is close to fire fighting activities area  Dublin Airport. Minimal purge due to water volume in well b			
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/1428

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	02/02/2021				
Weather Conditions:	Dry, calm and overcast				
GW location ID:	NBH62	AZ Zone	AZ-2		
Installation diameter (mm)	50	Type:	PVC		
SWL (mbtoc)	1.55	Total depth (mbtoc)	2.47		
SWL (mBGL)	1.63	S/P recess/ above g/I (m) -0.08			
General location details:	T2 surface car park at Dublin Airport				
GPS co-ordinates (ITM):	716992.96, 74355	1.69	716992.96, 743551.69		





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Lost Field Colibration		<b>D</b> :	00/00/0004	T:			
QA Procedures for Multi-n	QA Procedures for Multi-meter:						
Sampling Equipment:	oment: Tubing, Level & Field		AWN Consultant(s):	CD & PG			

Last Field Calibration	Date:	02/02/2021	Time:	-
Last Full Calibration	February_202	21		

Water Quality - Field Measurements						
Parameter	Parameter test 1	Parameter test 2	Parameter test 3			
Temp (°C)	9.7	9.7	9.7			
pН	7.75	7.75	7.75			
Electrical Conductivity (uS/cm)	1072	1072	1072			
TDS (ppt)	0.76	0.76	0.76			

Water Sample Observations (field)						
Colour	Light brown to brown, turbid	Capped at ground level	)	/ /	N	Yes, flush
Odour Present	No	Other field related:				
Sediment/Precipitate	Slight	The TO surface and the place to fine finishing a sticking and		- than a - thattan thattan		
Free Product	No	The T2 surface car park is close to fire fighting activities area  Dublin Airport. Minimal purge due to water volume in well b				
Hydrocarbon Sheen	No					er volume in well bore.



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/1428

Client:	Jacobs Engineering, Ireland			
Project:	MetroLink			
Contract No:	18_9975			
Date/Time	12/01/2021			
Weather Conditions:	Overcast, dry and cold			
GW location ID:	NBH63	AZ-4		
Installation diameter (mm)	50 Type: PVC		PVC	
SWL (mbtoc)	DRY Total depth (mbtoc) 3.99		3.99	
SWL (mBGL)	DRY S/P recess/ above g/I (m) -0.10			
General location details:	Derlict site between Moore Lane and O'Connell Street			
GPS co-ordinates (ITM):	715732.18, 734849.17			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter		AWN Consultant(s):	CD & RD	
QA Procedures for Multi-	-meter:				
Last Field Calibration		Date:	11/01/2021	Time:	-
Last Full Calibration		January_202	1		

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	n/a	n/a	n/a		
рН	n/a	n/a	n/a		
Electrical Conductivity (uS/cm)	n/a	n/a	n/a		
TDS (ppt)	n/a	n/a	n/a		

Nater Sample Observations (field)						
Colour	n/a	Capped at ground level	Y / N	Yes, flush		
Odour Present	n/a	Other field related:				
Sediment/Precipitate	n/a					
Free Product	n/a	Cover observed as b	oroken at tim	ne of monitoring		
Hydrocarbon Sheen	n/a					



Environmental setting:	Access constraints:
Urban, derlict site/ construction area	Yes, gated entrance with a bell

Sample taken:	Y / N	Laboratory Report Ref:
No		

Last Full Calibration

Client:	Jacobs Engineerin	Jacobs Engineering, Ireland			
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	13/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH64	AZ Zone	AZ-4		
Installation diameter (mm)	50	Type:	PVC		
SWL (mbtoc)	2.135	Total depth (mbtoc)	4		
SWL (mBGL)	2.38 S/P recess/ above g/I (m) -0.25		-0.25		
General location details:	Car parking lot for residents along Townsend Street and Poolbeg Street				
GPS co-ordinates (ITM):	716277.69, 734312.18				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

T: + 353 1 847 4220 F: + 353 1 847 4257 E: info@awnconsulting.com W: www.awnconsulting.com

Sampling Equipment:	Tubing, Level & Field Meter		AWN Consultant(s): CD & RD		
QA Procedures for Multi-m	neter:				
Last Field Calibration		Date:	11/01/2021	Time:	-

January\_2021

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	13.22	13.22	13.22	
рН	7.16	7.16	7.16	
Electrical Conductivity (uS/cm)	1,696	1,696	1,696	
TDS (ppt)	1.10	1.10	1.10	

Water Sample Observations (field)					
Colour	Light brown to brown, turbid	Capped at ground level	Y / N	Yes, flush	
Odour Present	No	Other field related:			
Sediment/Precipitate	Yes				
Free Product	No	Gas tap installed			
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Urban	Yes, gated entrance

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/381

Client:	Jacobs Engineering, Ireland		
Project:	MetroLink		
Contract No:	18_9975		
Date/Time	05/01/2021		
Weather Conditions:	Overcast, rainy and cold		
GW location ID:	NBH72(S)	AZ Zone	AZ-1
Installation diameter (mm)	38	Type:	PVC
SWL (mbtoc)	1.39	Total depth (mbtoc)	6.45
SWL (mBGL)	1.04	S/P recess/ above g/I (m)	0.35
General location details:	Argicultural		
GPS co-ordinates (ITM):	718705.56, 748413.29		





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
	ubing, Level & Field Meter	ubing, Level & Field Meter AWN Consultant(s):

QA Procedures for Multi-meter:				
Last Field Calibration	Date:	04/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	11	11	11	
рН	7.35	7.35	7.35	
Electrical Conductivity (uS/cm)	775	775	775	
TDS (ppt)	0.5	0.5	0.5	

Water Sample Observations (field)				
Colour	Light brown	Capped at ground level Y / N Capped above ground		
Odour Present	Slight organic	Other field related:		
Sediment/Precipitate	No	Field is appointible to flooding, during an ditab was flooded in		
Free Product	No	Field is susceptible to flooding - drainage ditch was flooded in areas during site visit		
Hydrocarbon Sheen	No	areas during site visit		



Environmental setting:	Access constraints:
Agricultural	Yes, call farmer for access

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/53

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975					
Date/Time	06/01/2021					
Weather Conditions:	Overcast, rainy and cold					
GW location ID:	NBH73(S) AZ Zone AZ-3					
Installation diameter (mm)	38	Type:	PVC			
SWL (mbtoc)	7.15	Total depth (mbtoc)	10.28			
SWL (mBGL)	7.05 S/P recess/ above g/l (m) 0.32					
General location details:	Greenfield / parkland					
GPS co-ordinates (ITM):	715293.86, 740600.55					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:					
Last Field Calibration Date: 04/01/2021 Time: -					
Last Full Calibration	January_202	1			

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	9.03	9.03	9.03		
pН	7.37	7.37	7.37		
Electrical Conductivity (uS/cm)	650	650	650		
TDS (ppt)	0.42	0.42	0.42		

Water Sample Observations (field)						
Colour	Brown to dark brown	Capped at ground level	Y / N	Capped above ground		
Odour Present	No	Other field related:				
Sediment/Precipitate	Yes					
Free Product	No	Very silty and meta	Very silty and metals could not be filtered on site.			
Hydrocarbon Sheen	No					



Environmental setting:	Access constraints:
Greenfield / parkland	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/78

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	Metro <mark>Link</mark>				
Contract No:	18_9975	18_9975				
Date/Time	07/01/2021					
Weather Conditions:	Overcast, snow/wet and cold					
GW location ID:	NBH102(S) AZ Zone AZ-4					
Installation diameter (mm)	38	Type:	PVC			
SWL (mbtoc)	10.06	Total depth (mbtoc)	23.94			
SWL (mBGL)	10.16 S/P recess/ above g/l (m) -0.1					
General location details:	Residential on roadway					
GPS co-ordinates (ITM):	715445.38, 738601.77					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment: Tubing, Level & Field I	eter AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:					
Last Field Calibration Date: 04/01/2021 Time: -					
Last Full Calibration	January_2021				

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	11.9	11.9	11.9		
рН	7.29	7.29	7.29		
Electrical Conductivity (uS/cm)	802	802	802		
TDS (ppt)	0.52	0.52	0.52		

Water Sample Observations (field)					
Colour	Clear	Capped at ground level Y / N Capped flus ground		Capped flush to the ground	
Odour Present	No	Other field related:			
Sediment/Precipitate	Slight				
Free Product	No	Slow to moderate recharge.			
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:	
Residential / roadway	None	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/142

Client:	Jacobs Engineerin	ng, Ireland	
Project:	MetroLink		
Contract No:	18_9975		
Date/Time	09/02/2021		
Weather Conditions:	Snow, wet and col	ld	
GW location ID:	ABH30i	AZ Zone	AZ-4
Installation diameter (mm)	50	Туре:	PVC
SWL (mbtoc)	5.30	Total depth (mbtoc)	29.6
SWL (mBGL)	5.60 S/P recess/ above g/I (m)		-0.30
General location details:	Albert College - ballymun road side		
GPS co-ordinates (ITM):	715433, 738337		





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Fi	ield Meter	AWN Consultant(s)	): CD & PG	6	
QA Procedures for Multi-r	meter:					
Last Field Calibration		Date:	08/02/2021	Time:	-	
Last Full Calibration		February 20	21			

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	10.3	10.4	10.3		
рН	7.9	7.92	7.89		
Electrical Conductivity (uS/cm)	720	722	721		
TDS (ppt)	0.52	0.51	0.52		

Water Sample Observations (field)				
Colour	Merky to grey	Capped at ground level	Y / N	Yes, flush
Odour Present	No	Other field related:	·	
Sediment/Precipitate	Slight			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:	
Recreational / Parkland	No	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/1833

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	06/01/2021				
Weather Conditions:	Overcast, rainy and cold				
GW location ID:	NBH203A(S)	AZ Zone	AZ-4		
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	9.73	Total depth (mbtoc)	17.9		
SWL (mBGL)	9.8 S/P recess/ above g/l (m) -0.0		-0.07		
General location details:	Urban				
GPS co-ordinates (ITM):	715426.93, 73998	9.93			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration	Date:	04/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	8.8	8.8	8.8	
рН	8.74	8.74	8.74	
Electrical Conductivity (uS/cm)	887	887	887	
TDS (ppt)	0.57	0.57	0.57	

Water Sample Observations (field)					
Colour	Brown to dark brown	Capped at ground level	Υ	/ N	Capped flush to the ground
Odour Present	No	Other field related:			
Sediment/Precipitate	Yes	Very silty and metals could	not be	filtered	on site. Duplicate taken
Free Product	No	at this location. Monitor	ring loca	ation is lo	ocated adjacent to a
Hydrocarbon Sheen	No	со	nstructi	ion site.	



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/78

Client:	Jacobs Engineering, Ireland			
Project:	MetroLink	MetroLink		
Contract No:	18_9975	18_9975		
Date/Time	06/01/2021			
Weather Conditions:	Overcast, rainy and cold			
GW location ID:	NBH203A(D)	AZ Zone	AZ-4	
Installation diameter (mm)	38	Type:	PVC	
SWL (mbtoc)	9.73	Total depth (mbtoc)	35	
SWL (mBGL)	9.75	S/P recess/ above g/l (m)	-0.02	
General location details:	Urban			
GPS co-ordinates (ITM):	715426.93, 739989.93			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration	Date:	04/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Me Parameter	Parameter test 1	Parameter test 2	Parameter test 3
Temp (°C)	11.6	11.6	11.6
pН	7.88	7.88	7.88
Electrical Conductivity (uS/cm)	808	808	808
TDS (ppt)	0.52	0.52	0.52

Water Sample Observations (field)				
Colour	Brown to dark brown	Capped at ground level	Y / N	Capped flush to the ground
Odour Present	No	Other field related:		
Sediment/Precipitate	Yes	Very silty and metals could i	not be filtered	l on site. Duplicate taken
Free Product	No	at this location. Monitorir	ng location is	located adjacent to a
Hydrocarbon Sheen	No	con	struction site	•



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/78

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland				
Project:	MetroLink					
Contract No:	18_9975	18_9975				
Date/Time	06/01/2021	06/01/2021				
Weather Conditions:	Overcast, rainy and cold					
GW location ID:	NBH207(D) AZ Zone AZ-4					
Installation diameter (mm)	38	Type:	PVC			
SWL (mbtoc)	9.65	Total depth (mbtoc)	38			
SWL (mBGL)	9.73 S/P recess/ above g/l (m) -0.08					
General location details:	Residential on grass verge					
GPS co-ordinates (ITM):	715437.83, 738723.41					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

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Sampling Equipment:	Tubing, Level & Fi	eld Meter	AWN Consultant(s):	CD & RD	
QA Procedures for Multi-meter:					
Last Field Calibration		Date:	04/01/2021	Time:	-
Last Full Calibration		January_2021			

Water Quality - Field Measurements						
Parameter	Parameter test 1	Parameter test 2	Parameter test 3			
Temp (°C)	11.1	11.1	11.1			
рН	7.52	7.52	7.52			
Electrical Conductivity (uS/cm)	685	685	685			
TDS (ppt)	0.45	0.45	0.45			

Water Sample Observations (field)							
Colour	Brown to dark brown	Capped at ground level	Y / N	Capped flush to the ground			
Odour Present	No	Other field related:	Other field related:				
Sediment/Precipitate	Yes	V	V 76 1 1 1 1 6 6 7 7 7 7 7 7 7 7 7 7 7 7				
Free Product	No		Very silty and metals could not be filtered on site. Duplicate taken at this location.				
Hydrocarbon Sheen	No	a	at this location.				



Environmental setting:	Access constraints:
Residential on grass verge	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/78

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975					
Date/Time	07/01/2021					
Weather Conditions:	Overcast, snow/wet and cold					
GW location ID:	NBH211 AZ Zone AZ-4					
Installation diameter (mm)	50	Туре:	PVC			
SWL (mbtoc)	At surface	Total depth (mbtoc)	29.2			
SWL (mBGL)	At surface S/P recess/ above g/I (m) -0.2					
General location details:	Soccer park / pitch (Home Farm)					
GPS co-ordinates (ITM):	715469.68, 737364.2					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
	ubing, Level & Field Meter	ubing, Level & Field Meter AWN Consultant(s):

QA Procedures for Multi-meter:					
Last Field Calibration Date: 04/01/2021 Time: -					
Last Full Calibration	January_2021				

Water Quality - Field Measurements						
Parameter	Parameter test 1	Parameter test 2	Parameter test 3			
Temp (°C)	10.9	10.9	10.9			
рН	7.38	7.38	7.38			
Electrical Conductivity (uS/cm)	707	707	707			
TDS (ppt)	0.46	0.46	0.46			

Water Sample Observations (field)							
Colour	Clear	Capped at ground level	Y / N	Capped flush to ground			
Odour Present	No	Other field related:					
Sediment/Precipitate	Slight	Outstand to the second Wall is allered to a standard Theory is a transfer to the					
Free Product	No	Quick recharge. Well is slightly artesian. There is strong upwar pressure noted within this well.					
Hydrocarbon Sheen	No	pressure noted within this well.					



Environmental setting:	Access constraints:
Recreational / parkland	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/142

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975					
Date/Time	11/01/2021					
Weather Conditions:	Overcast, dry and cold					
GW location ID:	NBH215(S) AZ Zone		AZ-4			
Installation diameter (mm)	38	Туре:	PVC			
SWL (mbtoc)	DRY	Total depth (mbtoc)	15.75			
SWL (mBGL)	DRY S/P recess/ above g/l (m) -0.10		-0.10			
General location details:	Street parking area close to Life Pharmacy					
GPS co-ordinates (ITM):	715163.41, 735713.3					



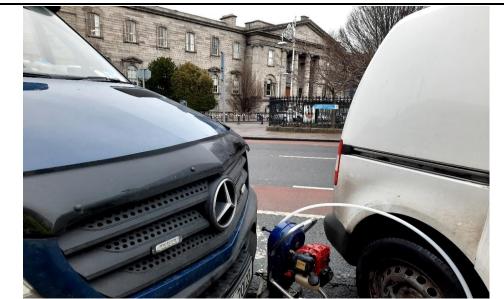


The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & F	ield Meter	AWN Consultant(s):	CD & RD	
QA Procedures for Multi-	meter:				
Last Field Calibration		Date:	11/01/2021	Time:	-
Last Full Calibration		January 202	<u>.</u> 1	•	

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	n/a	n/a	n/a		
рН	n/a	n/a	n/a		
Electrical Conductivity (uS/cm)	n/a	n/a	n/a		
TDS (ppt)	n/a	n/a	n/a		

Water Sample Observations (field)				
Colour	n/a	Capped at ground level Y / N Yes, flush		
Odour Present	n/a	Other field related:		
Sediment/Precipitate	n/a			
Free Product	n/a			
Hydrocarbon Sheen	n/a			



Environmental setting:	Access constraints:	
Urban, street parking	No, but parking can be busy	

Sample taken: Y /	N	Laboratory Report Ref:
No		

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland			
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	11/01/2021				
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH215(D) AZ Zone AZ-4				
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	14.21 Total depth (mbtoc) 22		22		
SWL (mBGL)	14.34 S/P recess/ above g/I (m) -0.13				
General location details:	Street parking area close to Life Pharmacy				
GPS co-ordinates (ITM):	715163.41, 735713.3				



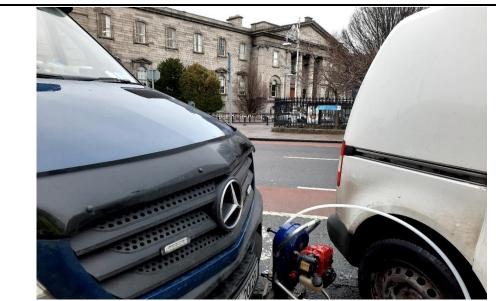


The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Fi	eld Meter	AWN Consultant(s):	CD & RD	
QA Procedures for Multi-r	meter:				
Last Field Calibration		Date:	11/01/2021	Time:	-
Last Full Calibration		January 202	1		

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	11.95	11.95	11.95		
pН	7.59	7.59	7.59		
Electrical Conductivity (uS/cm)	708	708	708		
TDS (ppt)	0.46	0.46	0.46		

Water Sample Observations (field)					
Colour	Merky to brown, turbid	Capped at ground level	Y / N	Yes, flush	
Odour Present	No	Other field related:			
Sediment/Precipitate	Yes				
Free Product	No				
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Urban, street parking	No, but parking can be busy

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/278

Client:	Jacobs Engineerin	ng, Ireland	
Project:	MetroLink		
Contract No:	18_9975		
Date/Time	12/01/2021		
Weather Conditions:	Overcast, dry and cold		
GW location ID:	NBH216A(S)	AZ Zone	AZ-4
Installation diameter (mm)	38	Туре:	PVC
SWL (mbtoc)	15.159	Total depth (mbtoc)	19
SWL (mBGL)	15.30	S/P recess/ above g/I (m)	-0.14
General location details:	Driveway for St. Joesph's Church		
GPS co-ordinates (ITM):	715249.41, 735643.64		





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Fi	ield Meter	AWN Consultant(s	): CD & RD	)	
QA Procedures for Multi-	meter:					
Last Field Calibration		Date:	11/01/2021	Time:	-	
Last Full Calibration		January 202	1			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	10.86	10.86	10.86	
рН	7.18	7.18	7.18	
Electrical Conductivity (uS/cm)	1028	1028	1028	
TDS (ppt)	0.67	0.67	0.67	

Water Sample Observations (field)				
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Yes, flush
Odour Present	Slight rotten eggs	Other field related:		
Sediment/Precipitate	Yes			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:
Urban, driveway of church	Yes, call church to open gates of driveway

Sample taken: Y / N	Laboratory Report Ref:
Yes	EMT 21/331

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland			
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	12/01/2021	12/01/2021			
Weather Conditions:	Overcast, dry and cold				
GW location ID:	NBH216A(D)	AZ Zone	AZ-4		
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	18.561	Total depth (mbtoc)	31		
SWL (mBGL)	18.60 S/P recess/ above g/l (m) -0.04				
General location details:	Driveway for St. Joesph's Church				
GPS co-ordinates (ITM):	715249.41, 735643.64				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:				
Last Field Calibration	Date:	11/01/2021	Time:	-
Last Full Calibration	January_202	1		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	10.85	10.85	10.85	
рН	7.32	7.32	7.32	
Electrical Conductivity (uS/cm)	800	800	800	
TDS (ppt)	0.52	0.52	0.52	

Water Sample Observations (field)				
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Yes, flush
Odour Present	Slight rotten eggs	Other field related:	·	
Sediment/Precipitate	Yes			
Free Product	Oberved during purging - drilling fluid			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:
Urban, driveway of church	Yes, call church to open gates of driveway

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/331

Client:	Jacobs Engineerin	Jacobs Engineering, Ireland				
Project:	MetroLink	MetroLink				
Contract No:	18_9975	18_9975				
Date/Time	18/01/2021					
Weather Conditions:	Overcast, dry and cold					
GW location ID:	NBH219B(S) AZ Zone		AZ-4			
Installation diameter (mm)	38	Туре:	PVC			
SWL (mbtoc)	4.31	Total depth (mbtoc)	12.1			
SWL (mBGL)	4.40	S/P recess/ above g/l (m)	-0.09			
General location details:	Hume Street located along street parking area					
GPS co-ordinates (ITM):	716187.85, 733386.16					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

	Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & PG
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QA Procedures for Multi-meter:				
Last Field Calibration Date: 18/01/2021 Time: -				-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	14.5	14.5	14.5	
рН	7.98	7.98	7.98	
Electrical Conductivity (uS/cm)	566	566	566	
TDS (ppt)	0.40	0.40	0.40	

Water Sample Observations (field)				
Colour	Merky, slightly turbid	Capped at ground level	Y / N	Flush
Odour Present	No	Other field related:	•	
Sediment/Precipitate	No			
Free Product	No	Borehole located v	vithin the mide	dle of a car space
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/609

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975					
Date/Time	18/01/2021					
Weather Conditions:	Overcast, dry and cold					
GW location ID:	NBH219B(D)	AZ Zone	AZ-4			
Installation diameter (mm)	38	Туре:	PVC			
SWL (mbtoc)	5.58	Total depth (mbtoc)	27.1			
SWL (mBGL)	5.95 S/P recess/ above g/I (m) -0.37		-0.37			
General location details:	Hume Street located along street parking area					
GPS co-ordinates (ITM):	716187.85, 733386.16					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & PG

QA Procedures for Multi-meter:				
Last Field Calibration	t Field Calibration Date: 18/01/2021 Time: -			
Last Full Calibration	January_2021			

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	12.8	12.8	12.8		
рН	7.28	7.28	7.28		
Electrical Conductivity (uS/cm)	992	992	992		
TDS (ppt)	0.70	0.70	0.70		

Water Sample Observations (field)					
Colour	Brown to dark brown, turbid	Capped at ground level	Υ	/ N	Flush
Odour Present	Slight organic	Other field related:			
Sediment/Precipitate	Yes				
Free Product	No	Borehole located w	ithin th	e mido	lle of a car space
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:	
Urban	None	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/609

Client:	Jacobs Engineering, Ireland			
Project:	MetroLink			
Contract No:	18_9975	18_9975		
Date/Time	07/01/2021	07/01/2021		
Weather Conditions:	Overcast, snow/wet and cold			
GW location ID:	NBH223(S)	AZ Zone	AZ-4	
Installation diameter (mm)	38	Type:	PVC	
SWL (mbtoc)	1.175	Total depth (mbtoc)	11.5	
SWL (mBGL)	1.215	S/P recess/ above g/I (m)	-0.04	
General location details:	Whitehall college - urban on grass verge			
GPS co-ordinates (ITM):	715484.97, 737307.3			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
OA Dropoduroo for Multi-r	motor:		

QA Procedures for Multi-meter:				
Last Field Calibration Date: 04/01/2021 Time: -				-
Last Full Calibration	January_202	1		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	8.0	8.0	8.0	
рН	7.6	7.6	7.6	
Electrical Conductivity (uS/cm)	850	850	850	
TDS (ppt)	0.55	0.55	0.55	

Water Sample Observations (field)				
Colour	Brown to turbid	Capped at ground level	Y / N	Flush
Odour Present	Yes - H2S, rotten eggs	Other field related:		
Sediment/Precipitate	Slight	Oviek recharge Well is ali		Thorois strong unword
Free Product	No	Quick recharge. Well is slightly artesian. There is strong up pressure noted within this well.		o .
Hydrocarbon Sheen	No	pressure noted within this well.		



Environmental setting:	Access constraints:	
Urabn on grass verge	None	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/142

Client:	Jacobs Engineering, Ireland			
Project:	MetroLink	MetroLink		
Contract No:	18_9975	18_9975		
Date/Time	05/01/2021	05/01/2021		
Weather Conditions:	Overcast, rainy and cold			
GW location ID:	NBH401	AZ Zone	AZ-1	
Installation diameter (mm)	150	Туре:	PVC	
SWL (mbtoc)	4.08	Total depth (mbtoc)	6	
SWL (mBGL)	3.94	S/P recess/ above g/l (m)	0.14	
General location details:	Parkland			
GPS co-ordinates (ITM):	718499.7, 747695.24			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:				
Last Field Calibration Date: 04/01/2021 Time: -				
Last Full Calibration	January_202	1		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	10	10	10	
рН	7.3	7.3	7.3	
Electrical Conductivity (uS/cm)	794	794	794	
TDS (ppt)	0.52	0.52	0.52	

Water Sample Observa	ations (field)	
Colour	Clear	Capped at ground level Y / N Capped above ground
Odour Present	No	Other field related:
Sediment/Precipitate	No	
Free Product	No	Ground level is uneven around borehole
Hydrocarbon Sheen	No	



Environmental setting:	Access constraints:
Parkland	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/53

	1			
Client:	Jacobs Engineering	Jacobs Engineering, Ireland		
Project:	MetroLink			
Contract No:	18_9975			
Date/Time	05/01/2021	05/01/2021		
Weather Conditions:	Overcast, rainy and cold			
GW location ID:	NBH402	AZ Zone	AZ-1	
Installation diameter (mm)	150	Type:	PVC	
SWL (mbtoc)	3.955	Total depth (mbtoc)	13	
SWL (mBGL)	3.75	S/P recess/ above g/l (m)	0.2	
General location details:	Parkland			
GPS co-ordinates (ITM):	718494.27, 747690.57			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:				
Last Field Calibration Date: 04/01/2021 Time: -				
Last Full Calibration	January_202	1		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	10	10	10	
рН	7.32	7.32	7.32	
Electrical Conductivity (uS/cm)	794	794	794	
TDS (ppt)	0.52	0.52	0.52	

Water Sample Observa	tions (field)		
Colour	Clear	Capped at ground level Y / N Capped above	ground
Odour Present	No	Other field related:	
Sediment/Precipitate	No		
Free Product	No	Ground level is uneven around borehole	
Hydrocarbon Sheen	No		



Environmental setting:	Access constraints:
Parkland	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/53

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	05/01/2021				
Weather Conditions:	Overcast, rainy and cold				
GW location ID:	NBH406 AZ Zone AZ-1				
Installation diameter (mm)	150	Type:	PVC		
SWL (mbtoc)	4.72	Total depth (mbtoc)	18		
SWL (mBGL)	4.51 S/P recess/ above g/l (m) 0.21				
General location details:	Residential				
GPS co-ordinates (ITM):	718547.12, 747431.91				





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:						
Last Field Calibration	Date:	04/01/2021	Time:	-		
Last Full Calibration	January_2021					

Water Quality - Field Measurements						
Parameter	Parameter test 1	Parameter test 2	Parameter test 3			
Temp (°C)	10	10	10			
рН	7.45	7.45	7.45			
Electrical Conductivity (uS/cm)	664	664	664			
TDS (ppt)	0.043	0.043	0.043			

Water Sample Observations (field)							
Colour	Clear		Capped at ground level	Y / N	Capped above ground		
Odour Present	No		Other field related:	•			
Sediment/Precipitate	No						
Free Product	No						
Hydrocarbon Sheen	No						



Environmental setting:	Access constraints:
Residential grass verge area	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EMT 21/53

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	14/01/2021				
Weather Conditions:	Overcast and dry				
GW location ID:	GBH01(S) AZ Zone AZ-4				
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	7.80 Total depth (mbtoc) 18				
SWL (mBGL)	7.86 S/P recess/ above g/I (m) -0.06				
General location details:	Urban - car park along the Brian Boru pub				
GPS co-ordinates (ITM):	715006.95, 73637	715006.95, 736376.32			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:						
Last Field Calibration	Date:	11/01/2021	Time:	-		
Last Full Calibration	January_2021					

Water Quality - Field Measurements							
Parameter	Parameter test 1	Parameter test 2	Parameter test 3				
Temp (°C)	12.34	12.34	12.34				
pH	7.41	7.41	7.41				
Electrical Conductivity (uS/cm)	977	977	977				
TDS (ppt)	0.63	0.63	0.63				

Water Sample Observations (field)						
Colour	Clear	Capped at ground level	Y / N	Capped flush to ground level		
Odour Present	No	Other field related:				
Sediment/Precipitate	No					
Free Product	No					
Hydrocarbon Sheen	No					



Environmental setting:	Access constraints:
Urban	None

Sample taken: Y / N	Laboratory Report Ref:
Yes	EUROFINS 21-01104

Client:	Jacobs Engineerir	Jacobs Engineering, Ireland				
Project:	MetroLink					
Contract No:	18_9975					
Date/Time	14/01/2021	14/01/2021				
Weather Conditions:	Overcast and dry					
GW location ID:	GBH01(D) AZ Zone AZ-4					
Installation diameter (mm)	38	Type:	PVC			
SWL (mbtoc)	7.87	Total depth (mbtoc)	40			
SWL (mBGL)	7.96	S/P recess/ above g/I (m)	-0.09			
General location details:	Urban - car park along the Brian Boru pub					
GPS co-ordinates (ITM):	715006.95, 736376.32					





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:					
Last Field Calibration	Date:	11/01/2021	Time:	-	
Last Full Calibration	January_2021				

Water Quality - Field Mea	Parameter test 1	Parameter test 2	Parameter test 3
Temp (°C)	11.95	11.95	11.95
рН	7.30	7.30	7.30
Electrical Conductivity (uS/cm)	1,136	1,136	1,136
TDS (ppt)	0.74	0.74	0.74

Water Sample Observations (field)				
Colour	Light brown to merky	Capped at ground level	Y / N	Capped flush to ground level
Odour Present	No	Other field related:		
Sediment/Precipitate	Slight			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:
Urban	None

Sample taken: Y / N	Laboratory Report Ref:
Yes	EUROFINS 21-01104

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975					
Date/Time	14/01/2021	14/01/2021				
Weather Conditions:	Overcast and dry					
GW location ID:	GBH02(S) AZ Zone AZ-4					
Installation diameter (mm)	38	Type:	PVC			
SWL (mbtoc)	9.28	Total depth (mbtoc)	17			
SWL (mBGL)	9.44	S/P recess/ above g/I (m)	-0.16			
General location details:	Urban - car park at the back of Des Kelly carpets					
GPS co-ordinates (ITM):	714954.15, 73636	3.46				





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Sampling Equipment:	Tubing, Level & F	ield Meter	AWN Consultant	(s): CD & RD		
QA Procedures for Multi-	meter:					
Last Field Calibration		Date:	11/01/2021	Time:	-	
Last Full Calibration		January 202	1		-	

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	9.78	9.78	9.78		
рН	7.40	7.40	7.40		
Electrical Conductivity (uS/cm)	764	764	764		
TDS (ppt)	0.49	0.49	0.49		

Water Sample Observations (field)					
Colour	Brown and dark brown, turbid	Capped at ground level	Y / N	Capped flush to ground level	
Odour Present	No	Other field related:			
Sediment/Precipitate	Yes				
Free Product	No				
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Urban	Gated access - pin code needed

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EUROFINS 21-01104

Last Full Calibration

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975	18_9975				
Date/Time	14/01/2021	14/01/2021				
Weather Conditions:	Overcast and dry					
GW location ID:	GBH02(D) AZ Zone AZ-4					
Installation diameter (mm)	38 Type: PVC					
SWL (mbtoc)	10.15 Total depth (mbtoc) 40					
SWL (mBGL)	10.26 S/P recess/ above g/l (m) -0.11					
General location details:	Urban - car park at the back of Des Kelly carpets					
GPS co-ordinates (ITM):	714954.15, 736363.46					





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Sampling Equipment:	Tubing, Level & Fi	eld Meter	AWN Consultant(s):	CD & RD	
QA Procedures for Multi-m	neter:				
Last Field Calibration		Date:	11/01/2021	Time:	-

January\_2021

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	11.3	11.3	11.3		
рН	7.33	7.33	7.33		
Electrical Conductivity (uS/cm)	743	743	743		
TDS (ppt)	0.48	0.48	0.48		

Water Sample Observations (field)					
Colour	Brown and dark brown, turbid	Capped at ground level	Y / N	Capped flush to ground level	
Odour Present	No	Other field related:			
Sediment/Precipitate	Yes				
Free Product	No				
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:	
Urban	Gated access - pin code needed	

Sample taken: Y / N	Laboratory Report Ref:
Yes	EUROFINS 21-01104

Client:	Jacobs Engineering, Ireland					
Project:	MetroLink	MetroLink				
Contract No:	18_9975	18_9975				
Date/Time	15/01/2021	15/01/2021				
Weather Conditions:	Overcast and dry					
GW location ID:	GBH04(S) AZ Zone AZ-4					
Installation diameter (mm)	38 Type: PVC					
SWL (mbtoc)	3.53 Total depth (mbtoc) 6.5					
SWL (mBGL)	4.02 S/P recess/ above g/l (m) -0.49					
General location details:	Car park located at the back of the Brian Boru pub					
GPS co-ordinates (ITM):	714881.14, 736421.36					





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Sampling Equipment: Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration	Date:	11/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	11.11	11.11	11.11	
рН	7.29	7.29	7.29	
Electrical Conductivity (uS/cm)	1,275	1,275	1,275	
TDS (ppt)	0.82	0.82	0.82	

Water Sample Observations (field)				
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Capped flush to ground level
Odour Present	No	Other field related:		
Sediment/Precipitate	Yes	Slow recharge within well. There is limited water - well was pudry three to four times		
Free Product	No			
Hydrocarbon Sheen	Slight			103



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EUROFINS 21-01104

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink	MetroLink			
Contract No:	18_9975				
Date/Time	15/01/2021				
Weather Conditions:	Overcast and dry				
GW location ID:	GBH04(D)	AZ Zone	AZ-4		
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	6.74	Total depth (mbtoc)	13.5		
SWL (mBGL)	7.04	S/P recess/ above g/l (m)	-0.3		
General location details:	Car park located at the back of the Brian Boru pub				
GPS co-ordinates (ITM):	714881.14, 736421.36				





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Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration	Date:	11/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	10.33	10.33	10.33	
рН	7.49	7.49	7.49	
Electrical Conductivity (uS/cm)	975	975	975	
TDS (ppt)	0.63	0.63	0.63	

Water Sample Observations (field)				
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Capped flush to ground level
Odour Present	No	Other field related:		
Sediment/Precipitate	Yes	Slow recharge within well. There is limited water - well was pudry three to four times		
Free Product	No			
Hydrocarbon Sheen	Slight			103



Environmental setting:	Access constraints:
Urban	None

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EUROFINS 21-01104

Client:	Jacobs Engineerin	Jacobs Engineering, Ireland			
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	14/01/2021				
Weather Conditions:	Overcast and dry				
GW location ID:	GBH06 AZ Zone AZ-4				
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	11.014	Total depth (mbtoc)	15		
SWL (mBGL)	11.079 S/P recess/ above g/l (m) -0.065				
General location details:	Park - gaelic pitch of St. Vincent's School				
GPS co-ordinates (ITM):	714786.4, 736479	.41			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD

QA Procedures for Multi-meter:				
Last Field Calibration Date: 11/01/2021 Time: -				
Last Full Calibration	January_2021			

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	11.21	11.21	11.21		
pН	7.56	7.56	7.56		
Electrical Conductivity (uS/cm)	624	624	624		
TDS (ppt)	0.40	0.40	0.40		

Water Sample Observations (field)					
Colour	Brown to merky, turbid	Capped at ground level	Y / N	Capped flush to ground level	
Odour Present	No	Other field related:			
Sediment/Precipitate	Yes				
Free Product	No	Burnt patch on	grass besi	de well	
Hydrocarbon Sheen	No				



Environmental setting:	Access constraints:
Park and recreational	Yes, contact school secretary to gain access

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EUROFINS 21-01104

Client:	Jacobs Engineerin	Jacobs Engineering, Ireland			
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	14/01/2021				
Weather Conditions:	Overcast and dry				
GW location ID:	GBH09 AZ Zone AZ-4				
Installation diameter (mm)	38	Type:	PVC		
SWL (mbtoc)	7.391	Total depth (mbtoc)	12		
SWL (mBGL)	7.469 S/P recess/ above g/l (m) -0.078				
General location details:	Park - gaelic pitch of St. Vincent's School				
GPS co-ordinates (ITM):	714644.32, 73660	714644.32, 736604.33			





The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17, Ireland.

	Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration Date: 11/01/2021 Time: -				
Last Full Calibration	January_2021			

Water Quality - Field Measurements					
Parameter	Parameter test 1	Parameter test 2	Parameter test 3		
Temp (°C)	10.44	10.44	10.44		
pН	7.55	7.55	7.55		
Electrical Conductivity (uS/cm)	672	672	672		
TDS (ppt)	0.43	0.43	0.43		

Water Sample Observations (field)				
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Capped flush to ground level
Odour Present	No	Other field related:		
Sediment/Precipitate	Yes			
Free Product	No			
Hydrocarbon Sheen	No			



Environmental setting:	Access constraints:	
Park and recreational	Yes, contact school secretary to gain access	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EUROFINS 21-01104

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	15/01/2021				
Weather Conditions:	Overcast and dry				
GW location ID:	GBH11 AZ Zone AZ-4				
Installation diameter (mm)	38 Type: PVC		PVC		
SWL (mbtoc)	5.79 Total depth (mbtoc) 10.5		10.5		
SWL (mBGL)	5.89 S/P recess/ above g/l (m) -0.1				
General location details:	Car park located at the entrance of Glassnevin Cementary				
GPS co-ordinates (ITM):	714468.46, 73681	7.41			





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Sampling Equipment: Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration Date: 11/01/2021 Time: -				
Last Full Calibration	January_202	1		

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	11.2	11.2	11.2	
рН	7.6	7.6	7.6	
Electrical Conductivity (uS/cm)	825	825	825	
TDS (ppt)	0.54	0.54	0.54	

Water Sample Observations (field)				
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Capped flush to ground level
Odour Present	No	Other field related:		
Sediment/Precipitate	Yes	Madagata washagan Limitaday	-4!!	Mall more and almost harman
Free Product	No	Moderate recharge. Limited water in well. Well pumped times		vveii pumpea ary three
Hydrocarbon Sheen	No	umes		



Environmental setting:	Access constraints:	
Urban	None	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EUROFINS 21-01104

Client:	Jacobs Engineering, Ireland				
Project:	MetroLink				
Contract No:	18_9975				
Date/Time	14/01/2021				
Weather Conditions:	Overcast and dry				
GW location ID:	GBH13 AZ Zone AZ-4				
Installation diameter (mm)	38 Type: PVC		PVC		
SWL (mbtoc)	6.98 Total depth (mbtoc) 15				
SWL (mBGL)	7.08 S/P recess/ above g/l (m) -0.1				
General location details:	Along the Royal Canal located within the Cabra Kayak Club				
GPS co-ordinates (ITM):	714737.33, 73642	9.85			





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Sampling Equipment:	Tubing, Level & Field Meter	AWN Consultant(s):	CD & RD
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QA Procedures for Multi-meter:				
Last Field Calibration	Date:	11/01/2021	Time:	-
Last Full Calibration	January_2021			

Water Quality - Field Measurements				
Parameter	Parameter test 1	Parameter test 2	Parameter test 3	
Temp (°C)	10.38	10.38	10.38	
рН	7.61	7.61	7.61	
Electrical Conductivity (uS/cm)	640	640	640	
TDS (ppt)	0.42	0.42	0.42	

Water Sample Observations (field)				
Colour	Brown to dark brown, turbid	Capped at ground level	Y / N	Capped flush to ground level
Odour Present	No	Other field related:		
Sediment/Precipitate	Yes	0		an ald domanton manned at
Free Product	No	Cartaker mentioned that this area was an old dumping ground this site and that the building experienced a fire in the past.		1 00
Hydrocarbon Sheen	No	uns site and that the building experienced a file in the past.		



Environmental setting:	Access constraints:	
Urban	Yes, contact caretaker of the kayak club to gain access	

Sample taken:	Y / N	Laboratory Report Ref:
Yes		EUROFINS 21-01104