

Appendix to Chapter 11: Water

Appendix 11.2: Surface Water Sampling Results

The data and descriptions in this appendix have informed the cumulative evaluations in the EIA Main Report.

A11.2.1 Surface Water Sampling Results

Table 1: Surface Water Sampling Results – UWF Grid Connection

Sample ID	Water Crossing Number	Sampling Date	Ammoniacal Nitrogen (mg/L)	BOD (mg/L)	Chloride (mg/L)	Electrical Conductivity (uS/cm)	Nitrate (mg/L)	Nitrite (mg/L)	Ortho-Phosphate (mg/L)	pH (pH Units)	Suspended Solids (mg/L)	Total Phosphorous (mg/L)	Total Nitrogen (mg/L)
			≤0.065 (mean) or ≤0.140 (95%ile)	≤1.5 (mean) ≤2.6 (95%ile)					≤0.035 (mean) or ≤0.075 (95%ile)	6 - 9			
U2GWS1	W1	22-01-2019	0.019	<1	16.8	238	2.4	<0.005	0.053	7.7	<2	0.06	2.62
U2GWS1	W1	13/02/2019	0.023	<1	19.8	230	2.2	<0.005	0.043	7.6	<2	0.08	2.36
W4B	W5	31-05-2019	0.058	<1	15.3	313	0.774	<0.005	0.019	8.1	3	<0.05	0.848
W5B	W6	31-05-2019	0.059	<1	22.1	483	4.94	0.031	<0.01	8.0	3	<0.05	4.50
W6B	W7	31-05-2019	0.007	1	10.8	125	0.204	<0.005	<0.01	7.9	4	<0.05	<0.5
W7B	W8	31-05-2019	0.018	<1	14.9	241	0.87	0.005	<0.01	7.8	<2	<0.05	0.901
W8B	W9	31-05-2019	0.005	1	13	86.5	<0.1	<0.005	<0.01	7.1	<2	<0.05	0.631
U2GWS3	W10	22-01-2019	0.005	<1	24.3	331	1.39	<0.005	0.022	7.8	334	0.26	1.12
U2GWS3	W10	13/02/2019	0.045	<1	22.6	157	1.27	0.005	0.019	7.2	<2	<0.05	1.12
U2GWS4	W11	22-01-2019	0.009	<1	16.5	167	0.691	<0.005	0.038	7.5	57	<0.05	0.541
U2GWS4	W11	13/02/2019	0.007	<1	17.2	157	0.699	<0.005	0.014	7.4	8	<0.05	0.604
U2GWS5	W18	22-01-2019	0.022	<1	16.7	71.6	<0.1	<0.005	0.015	5.0	10	<0.05	0.701
U2GWS5	W18	13/02/2019	0.01	1	16.4	63.9	<0.1	<0.005	<0.01	5.4	<2	<0.05	0.561
U2GWS6	W28	22-01-2019	0.01	<1	10.7	57.9	<0.1	<0.005	0.014	6.6	5	<0.05	<0.5
U2GWS6	W28	13/02/2019	0.013	<1	10.8	54.8	<0.1	<0.005	0.011	6.7	<2	<0.05	<0.5
U2GWS7	W33	22-01-2019	0.007	<1	13.1	79.0	0.321	<0.005	<0.01	6.8	2	<0.05	<0.5
U2GWS7	W33	13/02/2019	0.007	<1	13.5	76.6	0.452	<0.005	<0.01	6.9	3	<0.05	0.562

U2GWS8	W36	17-01-2019	<0.005	<1	11.1	102	0.348	<0.005	<0.01	6.4	5	<0.05	0.593
U2GWS8	W36	13/02/2019	0.009	1	11.7	107	0.692	<0.005	<0.01	7.3	2	<0.05	0.654
U2GWS9	W38	17-01-2019	0.007	<1	9.14	86.4	0.203	<0.005	<0.01	6.4	4	<0.05	0.573
U2GWS9	W38	13/02/2019	0.017	1	15.8	126	0.758	<0.005	<0.01	7	2	<0.05	0.785
U2GWS10	W41	17-01-2019	0.006	<1	9.88	161	1.3	<0.005	<0.01	6.8	<2	<0.05	1.03
U2GWS10	W41	13/02/2019	0.009	<1	10	144	1.47	<0.005	<0.01	7.4	3	<0.05	1.26
U2GWS11	W43	17-01-2019	0.009	<1	10.8	144	1.19	<0.005	<0.01	6.5	7	<0.05	0.988
U2GWS11	W43	13/02/2019	0.012	<1	11	141	1.36	<0.005	0.011	7.7	<2	<0.05	1.21
U2GWS12	W45	17-01-2019	0.013	<1	12.5	116	0.532	<0.005	<0.01	6.5	15	<0.05	0.597
U2GWS12	W45	13/02/2019	0.01	<1	12.8	109	0.738	<0.005	<0.01	7.5	<2	<0.05	0.737
U2GWS13	W49	17-01-2019	0.006	<1	10.6	110	0.768	<0.005	<0.01	6.5	<2	<0.05	0.663
U2GWS13	W49	13/02/2019	0.059	1	11.2	108	0.83	<0.005	<0.01	7.5	<2	<0.05	0.690
U2GWS14	W53	17-01-2019	0.014	<1	10.7	125	0.683	<0.005	<0.01	6.6	11	<0.05	0.699
U2GWS14	W53	13/02/2019	0.007	<1	12.1	122	0.994	<0.005	<0.01	7.4	<2	<0.05	0.882
U2GWS15	W57	17-01-2019	0.203	<1	14.5	177	0.772	0.008	0.03	6.8	<2	0.06	1.23
U2GWS15	W57	13/02/2019	0.014	<1	12.1	188	1.05	<0.005	<0.01	7.4	<2	<0.05	0.917
U2GWS16	W59	17-01-2019	0.041	<1	13.2	180	0.902	<0.005	<0.01	6.7	3	<0.05	1.06
U2GWS16	W59	13/02/2019	0.008	<1	13.8	200	1.51	<0.005	<0.01	7.3	3	<0.05	1.34
U2GWS17	W61	22-01-2019	0.01	<1	15.6	290	2.65	<0.005	0.023	7.5	7	<0.05	2.32
U2GWS17	W61	13/02/2019	0.007	<1	19.6	265	3.59	<0.005	0.015	7.2	<2	<0.05	3.33
U2GWS18	W64	22-01-2019	0.007	<1	9.53	241	2.24	<0.005	0.012	7.2	94	0.08	1.83
U2GWS18	W64	13/02/2019	0.008	<1	10.7	230	2.3	<0.005	<0.01	7	<2	<0.05	1.98
U2GWS19	W65	22-01-2019	0.007	<1	9.87	222	1.7	<0.005	0.011	7.4	9	<0.05	1.40
U2GWS19	W65	13/02/2019	0.005	<1	11.5	214	1.87	<0.005	<0.01	7.5	<2	<0.05	1.67
U2GWS20	Downstream W1-W9	22-01-2019	<0.005	1	12.4	161	0.637	<0.005	0.014	7.7	4	<0.05	0.778
U2GWS20	Downstream W1-W9	13/02/2019	0.007	<1	13.9	180	1.06	<0.005	<0.01	7.8	<2	<0.05	0.968
U2GWS2	Downstream W5-W9	22-01-2019	0.006	<1	11.9	149	0.532	<0.005	0.019	7.8	<2	<0.05	1.00
U2GWS2	Downstream W5-W9	13/02/2019	<0.005	1	13.6	165	0.936	<0.005	<0.01	7.9	<2	<0.05	0.878
U2GWS21	Downstream W10-W39	22-01-2019	<0.005	1	12.9	126	0.509	<0.005	0.011	7.5	2	<0.05	0.632
U2GWS21	Downstream W10-W39	13/02/2019	0.011	1	13.7	129	0.806	<0.005	<0.01	7.6	<2	0.11	0.828
U2GWS22	Downstream W12-W39	22-01-2019	0.008	<1	12.3	108	0.36	<0.005	0.011	7.4	6	<0.05	<0.5

U2GWS22	Downstream W12-W39	13/02/2019	0.01	<1	12.9	108	0.525	<0.005	<0.01	7.5	<2	<0.05	0.564
U2GWS23	Downstream W27-W39	22-01-2019	0.01	<1	11.7	108	0.412	<0.005	0.012	7.2	3	<0.05	<0.5
U2GWS23	Downstream W27-W39	13/02/2019	0.007	<1	12.3	106	0.565	<0.005	<0.01	7.4	<2	<0.05	0.585
U2GWS24	Downstream W39	22-01-2019	0.012	<1	10.2	115	0.409	<0.005	0.01	7.2	2	<0.05	<0.5
U2GWS24	Downstream W39	13/02/2019	0.008	1	11.2	111	0.5	<0.005	<0.01	7.3	2	<0.05	0.52
U2GWS25	Downstream W40-W63	22-01-2019	0.01	<1	11.5	147	0.879	<0.005	0.011	7.6	11	<0.05	0.833
U2GWS25	Downstream W40-W63	13/02/2019	0.007	1	13.6	139	1.58	<0.005	<0.01	7.8	7	<0.05	1.44
U2GWS26	Downstream W54-W63	22-01-2019	0.01	<1	11.5	174	0.79	<0.005	0.014	7.8	<2	<0.05	0.900
U2GWS26	Downstream W54-W63	13/02/2019	0.008	1	12.6	170	0.949	<0.005	0.011	7.8	2	<0.05	0.953

A11.2.2 Surface Water Sampling Results –UWF Grid Connection Max, Min & Average

Table 2: Surface Water Sampling Results – – UWF Grid Connection Max, Min & Average

	Ammonical Nitrogen (mg/L)	BOD (mg/L)	Chloride (mg/L)	Electrical Conductivity (uS/cm)	Nitrate (mg/L)	Nitrite (mg/L)	Ortho- Phosphate (mg/L)	pH (pH Units)	Suspended Solids (mg/L)	Total Phosphorous (mg/L)	Total Nitrogen (mg/L)
MAXIMUM	0.203	1	24.3	483	4.94	0.031	0.053	8.1	334	0.26	4.5
MINIMUM	0.005	<1	9.14	54.8	<0.1	<0.005	<0.01	5	<2	<0.05	<0.5
AVERAGE	0.0175	<1	13.38	158.5	1.12	<0.005	0.019	7.2	19.8	<0.05	1.1

Appendix to Chapter 11: Water
Appendix 11.2 - Figure 1
Surface Water Sampling Locations

Map Number:
Overview Map

Legend:

Subject Development:

UWF Grid Connection - 110kV UGC

UWF Grid Connection -
Mounthilphus Substation

Survey Results:

EPA Sub-Catchment:

Kileengarriff_SC_010

Newport(Tipperary)_SC_010

Bilboa_SC_010

Suir_SC_030

Survey Results:

Surface Water Sampling Locations
and Identification Numbers

DSW6



Project:

UWF Grid Connection (2019)

Drawn By:

AB

Checked By:

PK

Date:

October
19

Sheet Size:

A4



Aselle Butler
EcoPower Developments Ltd
Surrellstown Business Park, Killybeggy
TEL: +353 56 7750180
MOB: +353 83 8605544

ECOPower



