Facility Information Summary	
AER Reporting Year	2016
Licence Register Number	WO 165-02
Name of site	Ballynagran Residual Landfill
Site Location	Ballynagran,Coolbeg and Kilcandra,County Wicklow
NACE Code	3821
Class/Classes of Activity	11.1,11.5
National Grid Reference (6E, 6 N)	327024E,191229N

A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence** listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.

Ballynagran is a currently operational landfill in Co.Wicklow.It covers an area of 128 hectares approximately. It accepts residual non-hazardous,commercial and industrial waste. The facility was granted a waste License(W0165-01) by the Agency on 5th September 2003 which was reviewed with a revised license (W0165-02) issued on 23rd March 2010. Air Stack emissions are compliant with the license. There were exceedances of the surface water emission limits. The parameters that exceeded were Ammoniacal Nitorgen,Biochemical Oxygen Demand,Sulphate and Total Suspended Solids. All noise emissions were compliant with the license limit.

Declaration:

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

Signature	Date
Tomás Breathnach	25th May 2017
Group/Facility manager (or nominated, suitably qualified and experienced deputy)	

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Answer all questions and complete all tables where relevant

			Additional information
1	Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables	SELECT	

Periodic/Non-Continuous Monitoring

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below		Yes	
3	Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist?	Basic air monitoring checklist AGN2	Yes	

Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision therof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments -reason for change in % mass load from previous year if applicable
Flare 1	Carbon monoxide (CO)	Annual	50	No 30min mean can exceed the ELV	2.93	mg/m3	yes	EN 15058:2006	2.77	
Flare 1	Nitrous oxide (N2O)	Annual	150	No 30min mean can exceed the ELV	81.45	mg/m3	yes	EN 14792:2006	76.96	
Flare 1	Volatile organic compounds (as TOC)	Annual	10	No 30min mean can exceed the ELV	4.05	mg/m3	yes	EN12619:2013	3.83	
Flare 1	Hydrogen Chloride	Annual	50	No 30min mean can exceed the ELV	7.62	mg/m3	yes	EN1911:2010	7.20	
Flare 1	Hydrogen Fluroide	Annual	5	No 30min mean can exceed the ELV	4.89	mg/m3	yes	EN15713:2006	4.62	
Flare 1	Sulphur Dioxide	Annual	-	No 30min mean can exceed the ELV	3257.53	mg/m3		TGN 21	3077.76	
Engine 2	Total Particulate Matter	Annual	130	No 30min mean can exceed the ELV	2.32	mg/m3	yes	EN13284-1:2002	13.12	
Engine 2	Carbon monoxide (CO)	Annual	650	No 30min mean can exceed the ELV	949.9	mg/m3	no	EN 15058:2006	5370.20	Agency has approved an emission limit of 1400mg/m3
Engine 2	Nitrous oxide (N2O)	Annual	500	No 30min mean can exceed the ELV	394.25	mg/m3	yes	EN 14792:2006	372.49	
Engine 2	Hydrogen Chloride	Annual	50	No 30min mean can exceed the ELV	2.33	mg/m3	yes	EN1911:2010	13.17	
Engine 2	Hydrogen Fluroide	Annual	5	No 30min mean can exceed the ELV	1.09	mg/m3	yes	EN15713:2006	6.16	
Engine 2	TA luft organics	Annual	20	No 30min mean can exceed the ELV	0.81	mg/m3	yes	EN13649:2002	6.23	
Engine 2	Sulphur Dioxide	Annual	-	No 30min mean can exceed the ELV	3538.77	mg/m3		TGN 21	19415.74	
Engine 3	Total Particulate Matter	Annual	130	No 30min mean can exceed the ELV	6.55	mg/m3	yes	EN13284-1:2002	50.40	
Engine 3	Carbon monoxide (CO)	Annual	650	No 30min mean can exceed the ELV	837.1	mg/m3	no	EN 15058:2006	6441.79	Agency has approved an emission limit of 1400mg/m3
Engine 3	Nitrous oxide (N2O)	Annual	500	No 30min mean can exceed the ELV	480.9	mg/m3	yes	EN 14792:2006	3700.70	
Engine 3	Hydrogen Chloride	Annual	50	No 30min mean can exceed the ELV	3.43	mg/m3	yes	EN1911:2010	26.40	
Engine 3	Hydrogen Fluroide	Annual	5	No 30min mean can exceed the ELV	8.77	mg/m3	yes	EN15713:2006	67.49	
Engine 3	TA luft organics	Annual	20	No 30min mean can exceed the ELV	<0.73	mg/m3	yes	EN13649:2002	0.00	
Engine 3	Sulphur Dioxide	Annual	-	No 30min mean can exceed the ELV	2954.73	mg/m3	yes	TGN 21	22737.71	
Engine 4	Total Particulate Matter	Annual	130	No 30min mean can exceed the ELV	23.08	mg/m3	yes	EN13284-1:2002	126.63	
Engine 4	Carbon monoxide (CO)	Annual	650	No 30min mean can exceed the ELV	825.67	mg/m3	no	EN 15058:2006	4530.10	Agency has approved an emission limit of 1400mg/m3
Engine 4	Nitrous oxide (N2O)	Annual	500	No 30min mean can exceed the ELV	473.68	mg/m3	yes	EN 14792:2006	2598.88	
Engine 4	Hydrogen Chloride	Annual	50	No 30min mean can exceed the ELV	4.18	mg/m3	yes	EN1911:2010	22.93	
Engine 4	Hydrogen Fluroide	Annual	5	No 30min mean can exceed the ELV	1.06	mg/m3	yes	EN15713:2006	5.82	
Engine 4	TA luft organics	Annual	20	No 30min mean can exceed the ELV	<0.76	mg/m3	yes	EN13649:2002	0.00	
Engine 4	Sulphur Dioxide	Annual	-	No 30min mean can exceed the ELV	3011.57	mg/m3		TGN 21	16523.22	

Note 1: Volumetric flow shall be included as a reportable parameter

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Continuous Monitoring

Does your site carry out continuous air emissions monitoring? No

If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)

Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below SELECT

Do you have a proactive service agreement for each piece of continuous monitoring equipment? SELECT

Did your site experience any abatement system bypasses? If yes please detail them in table A3 below SELECT

Table A2: Summary of average emissions -continuous monitoring

Emission reference no:	Parameter/ Substance	ELV in licence or any revision therof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission	Annual maximum	Monitoring Equipment downtime (hours)
	SELECT			SELECT	SELECT			
	SELECT				SELECT			
	SELECT				SELECT			
	SELECT				SELECT			
	SELECT				SELECT			

note 1: Volumetric flow shall be included as a reportable parameter.

Bypass protocol

Table A3: Abatement system bypass reporting table

Date*	Duration** (hours)	Location	Reason for bypass	Impact magnitude	Corrective action

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

Solvent use and management on site

Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5 SELECT

Table A4: Solvent Management Plan Summary
Total VOC Emission limit value

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

Reporting year	Total solvent input on site (kg)	Total VOC emissions to Air from entire site (direct and	Total VOC emissions as %of solvent input	Total Emission Limit Value (ELV) in licence or any revision therof	Compliance
					SELECT
					SELECT

Table A5: Solvent Mass Balance summary

	(I) Inputs (kg)	(O) Outputs (kg)						
Solvent	(I) Inputs (kg)	Organic solvent emission in waste gases(kg)	Solvents lost in water (kg)	Collected waste solvent (kg)	Fugitive Organic Solvent (kg)	Solvent released in other ways e.g. by-passes (kg)		
							Solvents destroyed onsite through physical reaction	Total emission of Solvent to air (kg)

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	Yes	No									
							Additional information				
1	Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections					Yes					
2	Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections					Yes					

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PRTR Parameter	Licenced Parameter	Monitoring date	ELV or trigger level in licence or any revision thereof*	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
SW-1	upstream	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.58	pH units	yes	
SW-1	upstream	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	6.8	pH units	yes	
SW-1	upstream	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	Dry	pH units	yes	Not sampled due to dry stream
SW-1	upstream	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.24	pH units	yes	
SW-1	upstream	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	172	µS/cm @25oC	yes	
SW-1	upstream	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	201	µS/cm @25oC	yes	
SW-1	upstream	-	Conductivity	18/08/2016	1,000	All values < ELV	Dry	µS/cm @25oC	yes	Not sampled due to dry stream
SW-1	upstream		Conductivity	14/12/2016	1,000	All values < ELV	182	µS/cm @25oC	yes	
SW-1	upstream	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	18.5	mg/L	yes	
SW-1	upstream	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	19.5	mg/L	yes	
SW-1	upstream	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	Dry	mg/L	yes	Not sampled due to dry stream
SW-1	upstream	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	19.1	mg/L	yes	
SW-1	upstream	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.02	mg/L	yes	
SW-1	upstream	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.02	mg/L	yes	
SW-1	upstream	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	Dry	mg/L	yes	Not sampled due to dry stream
SW-1	upstream	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.05	mg/L	yes	
SW-1	upstream	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
SW-1	upstream	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	<10	mg/L	yes	
SW-1	upstream	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	Dry	mg/L	yes	Not sampled due to dry stream
SW-1	upstream	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	71	mg/L	yes	
SW-1	upstream	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
SW-1	upstream	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
SW-1	upstream	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	Dry	mg/L	yes	Not sampled due to dry stream
SW-1	upstream	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	10	mg/L	yes	
SW-1	upstream	SELECT	BOD	10/03/2016	2.6	All values < ELV	1	mg/L	yes	
SW-1	upstream	SELECT	BOD	11/05/2016	2.6	All values < ELV	1	mg/L	yes	
SW-1	upstream	SELECT	BOD	18/08/2016	2.6	All values < ELV	Dry	mg/L	yes	Not sampled due to dry stream
SW-1	upstream	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
SW-1	upstream	SELECT	COD	10/03/2016	N/A	All values < ELV	<7	mg/L	yes	
SW-1	upstream	SELECT	COD	11/05/2016	N/A	All values < ELV	12	mg/L	yes	
SW-1	upstream	SELECT	COD	18/08/2016	N/A	All values < ELV	Dry	mg/L	yes	Not sampled due to dry stream
SW-1	upstream	SELECT	COD	14/12/2016	N/A	All values < ELV	25	mg/L	yes	
SW-1	upstream	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
SW-1	upstream	SELECT	Boron	14/12/2016	2,000	All values < ELV	<12	µg/L	yes	
SW-1	upstream	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
SW-1	upstream	SELECT	Calcium	14/12/2016	250	All values < ELV	9.5	mg/L	yes	
SW-1	upstream	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
SW-1	upstream	SELECT	Iron	14/12/2016	1,000	All values < ELV	172	µg/L	yes	
SW-1	upstream	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	
SW-1	upstream	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	5.1	mg/L	yes	

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	SW-1	upstream	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	4	µg/L	yes	
	SW-1	upstream	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-1	upstream	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-1	upstream	SELECT	Potassium	14/12/2016	N/A	All values < ELV	1.4	mg/l	yes	
	SW-1	upstream	SELECT	Sodium	14/12/2016	N/A	All values < ELV	10.8	mg/l	yes	
	SW-1	upstream	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-1	upstream	SELECT	Sulphate	14/12/2016	200	All values < ELV	14.2	mg/L	yes	
	SW-1	upstream	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	<0.06	mg/L	yes	
	SW-1	upstream	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	4.1	mg/L	yes	
	SW-1	upstream	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	30	mg/L	yes	
			SELECT								
	SW-2	upstream	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.64	pH units	yes	
	SW-2	upstream	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.46	pH units	yes	
	SW-2	upstream	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.44	pH units	yes	
	SW-2	upstream	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.52	pH units	yes	
	SW-2	upstream	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	254	µS/cm @25oC	yes	
	SW-2	upstream	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	259	µS/cm @25oC	yes	
	SW-2	upstream	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	293	µS/cm @25oC	yes	
	SW-2	upstream	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	437	µS/cm @25oC	yes	
	SW-2	upstream	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	26.3	mg/L	yes	
	SW-2	upstream	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	28.6	mg/L	yes	
	SW-2	upstream	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	31.3	mg/L	yes	
	SW-2	upstream	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	35.3	mg/L	yes	
	SW-2	upstream	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.02	mg/L	yes	
	SW-2	upstream	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.39	mg/L	No	
	SW-2	upstream	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.03	mg/L	yes	
	SW-2	upstream	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.31	mg/L	No	
	SW-2	upstream	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-2	upstream	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-2	upstream	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-2	upstream	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	79	mg/L	yes	
	SW-2	upstream	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-2	upstream	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-2	upstream	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-2	upstream	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-2	upstream	SELECT	BOD	10/03/2016	2.6	All values < ELV	<1	mg/L	yes	
	SW-2	upstream	SELECT	BOD	11/05/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-2	upstream	SELECT	BOD	18/08/2016	2.6	All values < ELV	3	mg/L	No	
	SW-2	upstream	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-2	upstream	SELECT	COD	10/03/2016	N/A	All values < ELV	<7	mg/L	yes	
	SW-2	upstream	SELECT	COD	11/05/2016	N/A	All values < ELV	8	mg/L	yes	
	SW-2	upstream	SELECT	COD	18/08/2016	N/A	All values < ELV	35	mg/L	yes	
	SW-2	upstream	SELECT	COD	14/12/2016	N/A	All values < ELV	55	mg/L	yes	
	SW-2	upstream	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-2	upstream	SELECT	Boron	14/12/2016	2,000	All values < ELV	15	µg/L	yes	
	SW-2	upstream	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-2	upstream	SELECT	Calcium	14/12/2016	250	All values < ELV	42.2	mg/L	yes	
	SW-2	upstream	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-2	upstream	SELECT	Iron	14/12/2016	1,000	All values < ELV	131	µg/L	yes	
	SW-2	upstream	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	
	SW-2	upstream	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	9.5	mg/L	yes	
	SW-2	upstream	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	5	µg/L	yes	
	SW-2	upstream	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-2	upstream	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-2	upstream	SELECT	Potassium	14/12/2016	N/A	All values < ELV	9.1	mg/l	yes	
	SW-2	upstream	SELECT	Sodium	14/12/2016	N/A	All values < ELV	14.9	mg/l	yes	
	SW-2	upstream	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-2	upstream	SELECT	Sulphate	14/12/2016	200	All values < ELV	22.8	mg/L	yes	
	SW-2	upstream	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	0.26	mg/L	yes	
	SW-2	upstream	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	17.5	mg/L	yes	
	SW-2	upstream	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	70	mg/L	yes	
	SW-3	downstream	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.54	pH units	yes	
	SW-3	downstream	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.36	pH units	yes	
	SW-3	downstream	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.2	pH units	yes	
	SW-3	downstream	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.43	pH units	yes	
	SW-3	downstream	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	192	µS/cm @25oC	yes	
	SW-3	downstream	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	203	µS/cm @25oC	yes	
	SW-3	downstream	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	249	µS/cm @25oC	yes	
	SW-3	downstream	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	180	µS/cm @25oC	yes	
	SW-3	downstream	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	16.7	mg/L	yes	
	SW-3	downstream	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	18.3	mg/L	yes	
	SW-3	downstream	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	24.6	mg/L	yes	
	SW-3	downstream	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	13.6	mg/L	yes	
	SW-3	downstream	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.02	mg/L	yes	
	SW-3	downstream	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.06	mg/L	yes	

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	SW-3	downstream	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.44	mg/L	No	
	SW-3	downstream	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.1	mg/L	yes	
	SW-3	downstream	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-3	downstream	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	13	mg/L	yes	
	SW-3	downstream	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	36	mg/L	yes	
	SW-3	downstream	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	132	mg/L	yes	
	SW-3	downstream	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-3	downstream	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-3	downstream	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	7	mg/L	yes	
	SW-3	downstream	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-3	downstream	SELECT	BOD	10/03/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-3	downstream	SELECT	BOD	11/05/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-3	downstream	SELECT	BOD	18/08/2016	2.6	All values < ELV	8	mg/L	No	
	SW-3	downstream	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-3	downstream	SELECT	COD	10/03/2016	N/A	All values < ELV	8	mg/L	yes	
	SW-3	downstream	SELECT	COD	11/05/2016	N/A	All values < ELV	15	mg/L	yes	
	SW-3	downstream	SELECT	COD	18/08/2016	N/A	All values < ELV	22	mg/L	yes	
	SW-3	downstream	SELECT	COD	14/12/2016	N/A	All values < ELV	54	mg/L	yes	
	SW-3	downstream	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-3	downstream	SELECT	Boron	14/12/2016	2,000	All values < ELV	<12	µg/L	yes	
	SW-3	downstream	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-3	downstream	SELECT	Calcium	14/12/2016	250	All values < ELV	12.5	mg/L	yes	
	SW-3	downstream	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-3	downstream	SELECT	Iron	14/12/2016	1,000	All values < ELV	227	µg/L	yes	
	SW-3	downstream	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	
	SW-3	downstream	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	5.5	mg/L	yes	
	SW-3	downstream	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	2	µg/L	yes	
	SW-3	downstream	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-3	downstream	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-3	downstream	SELECT	Potassium	14/12/2016	N/A	All values < ELV	5.8	mg/l	yes	
	SW-3	downstream	SELECT	Sodium	14/12/2016	N/A	All values < ELV	7.2	mg/l	yes	
	SW-3	downstream	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	6	µg/L	yes	
	SW-3	downstream	SELECT	Sulphate	14/12/2016	200	All values < ELV	5	mg/L	yes	
	SW-3	downstream	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	0.22	mg/L	yes	
	SW-3	downstream	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	1.5	mg/L	yes	
	SW-3	downstream	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	56	mg/L	yes	
	SW-4	downstream	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.87	pH units	yes	
	SW-4	downstream	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.47	pH units	yes	
	SW-4	downstream	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.35	pH units	yes	
	SW-4	downstream	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.35	pH units	yes	
	SW-4	downstream	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	177	µS/cm @25oC	yes	
	SW-4	downstream	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	184	µS/cm @25oC	yes	
	SW-4	downstream	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	208	µS/cm @25oC	yes	
	SW-4	downstream	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	203	µS/cm @25oC	yes	
	SW-4	downstream	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	15.5	mg/L	yes	
	SW-4	downstream	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	14.8	mg/L	yes	
	SW-4	downstream	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	17.4	mg/L	yes	
	SW-4	downstream	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	22.5	mg/L	yes	
	SW-4	downstream	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.04	mg/L	yes	
	SW-4	downstream	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.04	mg/L	yes	
	SW-4	downstream	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.03	mg/L	yes	
	SW-4	downstream	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.05	mg/L	yes	
	SW-4	downstream	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-4	downstream	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-4	downstream	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-4	downstream	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	193	mg/L	yes	
	SW-4	downstream	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-4	downstream	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-4	downstream	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-4	downstream	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-4	downstream	SELECT	BOD	10/03/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-4	downstream	SELECT	BOD	11/05/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-4	downstream	SELECT	BOD	18/08/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-4	downstream	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-4	downstream	SELECT	COD	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-4	downstream	SELECT	COD	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-4	downstream	SELECT	COD	18/08/2016	N/A	All values < ELV	16	mg/L	yes	
	SW-4	downstream	SELECT	COD	14/12/2016	N/A	All values < ELV	58	mg/L	yes	
	SW-4	downstream	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-4	downstream	SELECT	Boron	14/12/2016	2,000	All values < ELV	15	µg/L	yes	
	SW-4	downstream	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-4	downstream	SELECT	Calcium	14/12/2016	250	All values < ELV	15.3	mg/L	yes	
	SW-4	downstream	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-4	downstream	SELECT	Iron	14/12/2016	1,000	All values < ELV	349	µg/L	yes	
	SW-4	downstream	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	

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	SW-4	downstream	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	4.6	mg/L	yes	
	SW-4	downstream	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	4	µg/L	yes	
	SW-4	downstream	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-4	downstream	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-4	downstream	SELECT	Potassium	14/12/2016	N/A	All values < ELV	2.6	mg/l	yes	
	SW-4	downstream	SELECT	Sodium	14/12/2016	N/A	All values < ELV	8.9	mg/l	yes	
	SW-4	downstream	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-4	downstream	SELECT	Sulphate	14/12/2016	200	All values < ELV	16.4	mg/L	yes	
	SW-4	downstream	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	<0.06	mg/L	yes	
	SW-4	downstream	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	2.4	mg/L	yes	
	SW-4	downstream	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	48	mg/L	yes	
	SW-5	onsite	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.56	pH units	yes	
	SW-5	onsite	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.67	pH units	yes	
	SW-5	onsite	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.5	pH units	yes	
	SW-5	onsite	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.6	pH units	yes	
	SW-5	onsite	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	250	µS/cm @25oC	yes	
	SW-5	onsite	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	284	µS/cm @25oC	yes	
	SW-5	onsite	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	284	µS/cm @25oC	yes	
	SW-5	onsite	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	418	µS/cm @25oC	yes	
	SW-5	onsite	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	26.1	mg/L	yes	
	SW-5	onsite	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	28.7	mg/L	yes	
	SW-5	onsite	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	31.6	mg/L	yes	
	SW-5	onsite	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	33	mg/L	yes	
	SW-5	onsite	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.02	mg/L	yes	
	SW-5	onsite	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.11	mg/L	yes	
	SW-5	onsite	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.02	mg/L	yes	
	SW-5	onsite	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.26	mg/L	No	
	SW-5	onsite	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-5	onsite	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-5	onsite	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	13	mg/L	yes	
	SW-5	onsite	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	111	mg/L	yes	
	SW-5	onsite	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	11	mg/L	yes	
	SW-5	onsite	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-5	onsite	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-5	onsite	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-5	onsite	SELECT	BOD	10/03/2016	2.6	All values < ELV	<1	mg/L	yes	
	SW-5	onsite	SELECT	BOD	11/05/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-5	onsite	SELECT	BOD	18/08/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-5	onsite	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-5	onsite	SELECT	COD	10/03/2016	N/A	All values < ELV	<7	mg/L	yes	
	SW-5	onsite	SELECT	COD	11/05/2016	N/A	All values < ELV	<7	mg/L	yes	
	SW-5	onsite	SELECT	COD	18/08/2016	N/A	All values < ELV	14	mg/L	yes	
	SW-5	onsite	SELECT	COD	14/12/2016	N/A	All values < ELV	45	mg/L	yes	
	SW-5	onsite	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-5	onsite	SELECT	Boron	14/12/2016	2,000	All values < ELV	16	µg/L	yes	
	SW-5	onsite	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-5	onsite	SELECT	Calcium	14/12/2016	250	All values < ELV	44	mg/L	yes	
	SW-5	onsite	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-5	onsite	SELECT	Iron	14/12/2016	1,000	All values < ELV	116	µg/L	yes	
	SW-5	onsite	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	
	SW-5	onsite	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	9.2	mg/L	yes	
	SW-5	onsite	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	4	µg/L	yes	
	SW-5	onsite	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-5	onsite	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-5	onsite	SELECT	Potassium	14/12/2016	N/A	All values < ELV	8.4	mg/l	yes	
	SW-5	onsite	SELECT	Sodium	14/12/2016	N/A	All values < ELV	14.5	mg/l	yes	
	SW-5	onsite	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-5	onsite	SELECT	Sulphate	14/12/2016	200	All values < ELV	26.9	mg/L	yes	
	SW-5	onsite	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	0.2	mg/L	yes	
	SW-5	onsite	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	15.7	mg/L	yes	
	SW-5	onsite	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	76	mg/L	yes	
	SW-6	downstream	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.74	pH units	yes	
	SW-6	downstream	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.92	pH units	yes	
	SW-6	downstream	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.99	pH units	yes	
	SW-6	downstream	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.49	pH units	yes	
	SW-6	downstream	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	263	µS/cm @25oC	yes	
	SW-6	downstream	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	283	µS/cm @25oC	yes	
	SW-6	downstream	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	289	µS/cm @25oC	yes	
	SW-6	downstream	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	279	µS/cm @25oC	yes	
	SW-6	downstream	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	25.3	mg/L	yes	
	SW-6	downstream	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	27.8	mg/L	yes	
	SW-6	downstream	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	30.4	mg/L	yes	
	SW-6	downstream	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	21.6	mg/L	yes	
	SW-6	downstream	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.03	mg/L	yes	
	SW-6	downstream	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.09	mg/L	yes	

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	SW-6	downstream	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.03	mg/L	yes	
	SW-6	downstream	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.16	mg/L	No	
	SW-6	downstream	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-6	downstream	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-6	downstream	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-6	downstream	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	174	mg/L	yes	
	SW-6	downstream	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-6	downstream	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-6	downstream	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-6	downstream	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-6	downstream	SELECT	BOD	10/03/2016	2.6	All values < ELV	<1	mg/L	yes	
	SW-6	downstream	SELECT	BOD	11/05/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-6	downstream	SELECT	BOD	18/08/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-6	downstream	SELECT	BOD	14/12/2016	2.6	All values < ELV	<1	mg/L	yes	
	SW-6	downstream	SELECT	COD	10/03/2016	N/A	All values < ELV	14	mg/L	yes	
	SW-6	downstream	SELECT	COD	11/05/2016	N/A	All values < ELV	11	mg/L	yes	
	SW-6	downstream	SELECT	COD	18/08/2016	N/A	All values < ELV	16	mg/L	yes	
	SW-6	downstream	SELECT	COD	14/12/2016	N/A	All values < ELV	52	mg/L	yes	
	SW-6	downstream	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-6	downstream	SELECT	Boron	14/12/2016	2,000	All values < ELV	16	µg/L	yes	
	SW-6	downstream	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-6	downstream	SELECT	Calcium	14/12/2016	250	All values < ELV	24.9	mg/L	yes	
	SW-6	downstream	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-6	downstream	SELECT	Iron	14/12/2016	1,000	All values < ELV	195	µg/L	yes	
	SW-6	downstream	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	
	SW-6	downstream	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	6	mg/L	yes	
	SW-6	downstream	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	<2	µg/L	yes	
	SW-6	downstream	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-6	downstream	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-6	downstream	SELECT	Potassium	14/12/2016	N/A	All values < ELV	6.5	mg/l	yes	
	SW-6	downstream	SELECT	Sodium	14/12/2016	N/A	All values < ELV	10.8	mg/l	yes	
	SW-6	downstream	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-6	downstream	SELECT	Sulphate	14/12/2016	200	All values < ELV	18.8	mg/L	yes	
	SW-6	downstream	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	0.33	mg/L	yes	
	SW-6	downstream	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	6	mg/L	yes	
	SW-6	downstream	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	60	mg/L	yes	
	SW-7	downstream	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.81	pH units	yes	
	SW-7	downstream	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	8	pH units	yes	
	SW-7	downstream	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	8.08	pH units	yes	
	SW-7	downstream	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.57	pH units	yes	
	SW-7	downstream	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	327	µS/cm @25oC	yes	
	SW-7	downstream	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	375	µS/cm @25oC	yes	
	SW-7	downstream	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	407	µS/cm @25oC	yes	
	SW-7	downstream	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	277	µS/cm @25oC	yes	
	SW-7	downstream	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	24.3	mg/L	yes	
	SW-7	downstream	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	27.5	mg/L	yes	
	SW-7	downstream	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	28.9	mg/L	yes	
	SW-7	downstream	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	21.2	mg/L	yes	
	SW-7	downstream	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.05	mg/L	yes	
	SW-7	downstream	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.07	mg/L	yes	
	SW-7	downstream	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.04	mg/L	yes	
	SW-7	downstream	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.13	mg/L	yes	
	SW-7	downstream	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-7	downstream	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-7	downstream	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-7	downstream	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	81	mg/L	yes	
	SW-7	downstream	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-7	downstream	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-7	downstream	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-7	downstream	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-7	downstream	SELECT	BOD	10/03/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-7	downstream	SELECT	BOD	11/05/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-7	downstream	SELECT	BOD	18/08/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-7	downstream	SELECT	BOD	14/12/2016	2.6	All values < ELV	3	mg/L	No	
	SW-7	downstream	SELECT	COD	10/03/2016	N/A	All values < ELV	8	mg/L	yes	
	SW-7	downstream	SELECT	COD	11/05/2016	N/A	All values < ELV	<7	mg/L	yes	
	SW-7	downstream	SELECT	COD	18/08/2016	N/A	All values < ELV	<7	mg/L	yes	
	SW-7	downstream	SELECT	COD	14/12/2016	N/A	All values < ELV	60	mg/L	yes	
	SW-7	downstream	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-7	downstream	SELECT	Boron	14/12/2016	2,000	All values < ELV	14	µg/L	yes	
	SW-7	downstream	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-7	downstream	SELECT	Calcium	14/12/2016	250	All values < ELV	28.8	mg/L	yes	
	SW-7	downstream	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-7	downstream	SELECT	Iron	14/12/2016	1,000	All values < ELV	232	µg/L	yes	
	SW-7	downstream	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	

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	SW-7	downstream	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	5.9	mg/L	yes	
	SW-7	downstream	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	<2	µg/L	yes	
	SW-7	downstream	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-7	downstream	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-7	downstream	SELECT	Potassium	14/12/2016	N/A	All values < ELV	6.5	mg/l	yes	
	SW-7	downstream	SELECT	Sodium	14/12/2016	N/A	All values < ELV	10.7	mg/l	yes	
	SW-7	downstream	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-7	downstream	SELECT	Sulphate	14/12/2016	200	All values < ELV	18.5	mg/L	yes	
	SW-7	downstream	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	0.26	mg/L	yes	
	SW-7	downstream	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	3.7	mg/L	yes	
	SW-7	downstream	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	80	mg/L	yes	
	SW-8	onsite	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.63	pH units	yes	
	SW-8	onsite	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.72	pH units	yes	
	SW-8	onsite	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.48	pH units	yes	
	SW-8	onsite	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.44	pH units	yes	
	SW-8	onsite	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	245	µS/cm @25oC	yes	
	SW-8	onsite	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	270	µS/cm @25oC	yes	
	SW-8	onsite	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	353	µS/cm @25oC	yes	
	SW-8	onsite	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	426	µS/cm @25oC	yes	
	SW-8	onsite	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	25.8	mg/L	yes	
	SW-8	onsite	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	29	mg/L	yes	
	SW-8	onsite	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	31.6	mg/L	yes	
	SW-8	onsite	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	35.3	mg/L	yes	
	SW-8	onsite	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	0.02	mg/L	yes	
	SW-8	onsite	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	0.04	mg/L	yes	
	SW-8	onsite	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.03	mg/L	yes	
	SW-8	onsite	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.3	mg/L	No	
	SW-8	onsite	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-8	onsite	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-8	onsite	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-8	onsite	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	81	mg/L	yes	
	SW-8	onsite	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-8	onsite	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-8	onsite	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-8	onsite	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-8	onsite	SELECT	BOD	10/03/2016	2.6	All values < ELV	<1	mg/L	yes	
	SW-8	onsite	SELECT	BOD	11/05/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-8	onsite	SELECT	BOD	18/08/2016	2.6	All values < ELV	3	mg/L	No	
	SW-8	onsite	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-8	onsite	SELECT	COD	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-8	onsite	SELECT	COD	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-8	onsite	SELECT	COD	18/08/2016	N/A	All values < ELV	17	mg/L	yes	
	SW-8	onsite	SELECT	COD	14/12/2016	N/A	All values < ELV	52	mg/L	yes	
	SW-8	onsite	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-8	onsite	SELECT	Boron	14/12/2016	2,000	All values < ELV	<12	µg/L	yes	
	SW-8	onsite	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-8	onsite	SELECT	Calcium	14/12/2016	250	All values < ELV	41.8	mg/L	yes	
	SW-8	onsite	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-8	onsite	SELECT	Iron	14/12/2016	1,000	All values < ELV	138	µg/L	yes	
	SW-8	onsite	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	
	SW-8	onsite	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	9.4	mg/L	yes	
	SW-8	onsite	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	7	µg/L	yes	
	SW-8	onsite	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-8	onsite	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	2	µg/L	yes	
	SW-8	onsite	SELECT	Potassium	14/12/2016	N/A	All values < ELV	9	mg/l	yes	
	SW-8	onsite	SELECT	Sodium	14/12/2016	N/A	All values < ELV	14.8	mg/l	yes	
	SW-8	onsite	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	4	µg/L	yes	
	SW-8	onsite	SELECT	Sulphate	14/12/2016	200	All values < ELV	22.1	mg/L	yes	
	SW-8	onsite	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	0.27	mg/L	No	
	SW-8	onsite	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	17.9	mg/L	yes	
	SW-8	onsite	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	68	mg/L	yes	
	SW-9	onsite	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	8.19	pH units	yes	
	SW-9	onsite	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.65	pH units	yes	
	SW-9	onsite	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.97	pH units	yes	
	SW-9	onsite	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.92	pH units	yes	
	SW-9	onsite	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	602	µS/cm @25oC	yes	
	SW-9	onsite	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	633	µS/cm @25oC	yes	
	SW-9	onsite	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	572	µS/cm @25oC	yes	
	SW-9	onsite	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	532	µS/cm @25oC	yes	
	SW-9	onsite	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	34.5	mg/L	yes	
	SW-9	onsite	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	24	mg/L	yes	
	SW-9	onsite	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	25	mg/L	yes	
	SW-9	onsite	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	18.9	mg/L	yes	
	SW-9	onsite	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	1.13	mg/L	No	
	SW-9	onsite	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	1.57	mg/L	No	

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	SW-9	onsite	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.6	mg/L	No	
	SW-9	onsite	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.07	mg/L	yes	
	SW-9	onsite	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	12	mg/L	yes	
	SW-9	onsite	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-9	onsite	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-9	onsite	SELECT	Total Suspended Solids	14/12/2016	N/A	All values < ELV	1009	mg/L	yes	
	SW-9	onsite	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	10	mg/L	yes	
	SW-9	onsite	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-9	onsite	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	8	mg/L	yes	
	SW-9	onsite	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-9	onsite	SELECT	BOD	10/03/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-9	onsite	SELECT	BOD	11/05/2016	2.6	All values < ELV	13	mg/L	No	
	SW-9	onsite	SELECT	BOD	18/08/2016	2.6	All values < ELV	4	mg/L	No	
	SW-9	onsite	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-9	onsite	SELECT	COD	10/03/2016	N/A	All values < ELV	15	mg/L	yes	
	SW-9	onsite	SELECT	COD	11/05/2016	N/A	All values < ELV	31	mg/L	yes	
	SW-9	onsite	SELECT	COD	18/08/2016	N/A	All values < ELV	17	mg/L	yes	
	SW-9	onsite	SELECT	COD	14/12/2016	N/A	All values < ELV	30	mg/L	yes	
	SW-9	onsite	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-9	onsite	SELECT	Boron	14/12/2016	2,000	All values < ELV	23	µg/L	yes	
	SW-9	onsite	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-9	onsite	SELECT	Calcium	14/12/2016	250	All values < ELV	56.9	mg/L	yes	
	SW-9	onsite	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-9	onsite	SELECT	Iron	14/12/2016	1,000	All values < ELV	<20	µg/L	yes	
	SW-9	onsite	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	
	SW-9	onsite	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	7.6	mg/L	yes	
	SW-9	onsite	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	<2	µg/L	yes	
	SW-9	onsite	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-9	onsite	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-9	onsite	SELECT	Potassium	14/12/2016	N/A	All values < ELV	3.7	mg/l	yes	
	SW-9	onsite	SELECT	Sodium	14/12/2016	N/A	All values < ELV	11.1	mg/l	yes	
	SW-9	onsite	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-9	onsite	SELECT	Sulphate	14/12/2016	200	All values < ELV	83.3	mg/L	yes	
	SW-9	onsite	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	<0.06	mg/L	yes	
	SW-9	onsite	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	0.8	mg/L	yes	
	SW-9	onsite	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	186	mg/L	yes	
	SW-10	onsite	SELECT	pH	10/03/2016	6 - 9	No pH value shall deviate from the specified range.	7.55	pH units	yes	
	SW-10	onsite	SELECT	pH	11/05/2016	6 - 9	No pH value shall deviate from the specified range.	7.47	pH units	yes	
	SW-10	onsite	SELECT	pH	18/08/2016	6 - 9	No pH value shall deviate from the specified range.	7.61	pH units	yes	
	SW-10	onsite	SELECT	pH	14/12/2016	6 - 9	No pH value shall deviate from the specified range.	6.97	pH units	yes	
	SW-10	onsite	SELECT	Conductivity	10/03/2016	1,000	All values < ELV	545	µS/cm @25oC	yes	
	SW-10	onsite	SELECT	Conductivity	11/05/2016	1,000	All values < ELV	618	µS/cm @25oC	yes	
	SW-10	onsite	SELECT	Conductivity	18/08/2016	1,000	All values < ELV	421	µS/cm @25oC	yes	
	SW-10	onsite	SELECT	Conductivity	14/12/2016	1,000	All values < ELV	489	µS/cm @25oC	yes	
	SW-10	onsite	SELECT	Chlorides (as Cl)	10/03/2016	250	All values < ELV	37.3	mg/L	yes	
	SW-10	onsite	SELECT	Chlorides (as Cl)	11/05/2016	250	All values < ELV	56.4	mg/L	yes	
	SW-10	onsite	SELECT	Chlorides (as Cl)	18/08/2016	250	All values < ELV	23.2	mg/L	yes	
	SW-10	onsite	SELECT	Chlorides (as Cl)	14/12/2016	250	All values < ELV	21.2	mg/L	yes	
	SW-10	onsite	SELECT	Ammoniacal Nitrogen	10/03/2016	0.14	All values < ELV	1.38	mg/L	No	
	SW-10	onsite	SELECT	Ammoniacal Nitrogen	11/05/2016	0.14	All values < ELV	2.87	mg/L	No	
	SW-10	onsite	SELECT	Ammoniacal Nitrogen	18/08/2016	0.14	All values < ELV	0.03	mg/L	yes	
	SW-10	onsite	SELECT	Ammoniacal Nitrogen	14/12/2016	0.14	All values < ELV	0.11	mg/L	yes	
	SW-10	onsite	SELECT	Total Suspended Solids	10/03/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-10	onsite	SELECT	Total Suspended Solids	11/05/2016	N/A	All values < ELV	25	mg/L	yes	
	SW-10	onsite	SELECT	Total Suspended Solids	18/08/2016	N/A	All values < ELV	<10	mg/L	yes	
	SW-10	onsite	SELECT	Total Suspended Solids	14/12/2016	35	All values < ELV	93	mg/L	No	
	SW-10	onsite	SELECT	Dissolved Oxygen	10/03/2016	N/A	All values < ELV	7	mg/L	yes	
	SW-10	onsite	SELECT	Dissolved Oxygen	11/05/2016	N/A	All values < ELV	6	mg/L	yes	
	SW-10	onsite	SELECT	Dissolved Oxygen	18/08/2016	N/A	All values < ELV	8	mg/L	yes	
	SW-10	onsite	SELECT	Dissolved Oxygen	14/12/2016	N/A	All values < ELV	9	mg/L	yes	
	SW-10	onsite	SELECT	BOD	10/03/2016	2.6	All values < ELV	1	mg/L	yes	
	SW-10	onsite	SELECT	BOD	11/05/2016	2.6	All values < ELV	5	mg/L	No	
	SW-10	onsite	SELECT	BOD	18/08/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-10	onsite	SELECT	BOD	14/12/2016	2.6	All values < ELV	2	mg/L	yes	
	SW-10	onsite	SELECT	COD	10/03/2016	N/A	All values < ELV	25	mg/L	yes	
	SW-10	onsite	SELECT	COD	11/05/2016	N/A	All values < ELV	36	mg/L	yes	
	SW-10	onsite	SELECT	COD	18/08/2016	N/A	All values < ELV	18	mg/L	yes	
	SW-10	onsite	SELECT	COD	14/12/2016	N/A	All values < ELV	28	mg/L	yes	
	SW-10	onsite	SELECT	Chromium and compounds (as Cr)	14/12/2016	30	All values < ELV	<1.5	µg/L	yes	
	SW-10	onsite	SELECT	Boron	14/12/2016	2,000	All values < ELV	22	µg/L	yes	
	SW-10	onsite	SELECT	Cadmium and compounds (as Cd)	14/12/2016	5	All values < ELV	<0.5	µg/L	yes	
	SW-10	onsite	SELECT	Calcium	14/12/2016	250	All values < ELV	65.8	mg/L	yes	
	SW-10	onsite	SELECT	Copper and compounds (as Cu)	14/12/2016	30	All values < ELV	<7	µg/L	yes	
	SW-10	onsite	SELECT	Iron	14/12/2016	1,000	All values < ELV	<20	µg/L	yes	
	SW-10	onsite	SELECT	Lead and compounds (as Pb)	14/12/2016	10	All values < ELV	<5	µg/L	yes	

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	SW-10	onsite	SELECT	Magnesium	14/12/2016	N/A	All values < ELV	8.9	mg/L	yes	
	SW-10	onsite	SELECT	Manganese (as Mn)	14/12/2016	300	All values < ELV	3	µg/L	yes	
	SW-10	onsite	SELECT	Mercury and compounds (as Hg)	14/12/2016	1	All values < ELV	<1	µg/L	yes	
	SW-10	onsite	SELECT	Nickel and compounds (as Ni)	14/12/2016	50	All values < ELV	<2	µg/L	yes	
	SW-10	onsite	SELECT	Potassium	14/12/2016	N/A	All values < ELV	4.5	mg/l	yes	
	SW-10	onsite	SELECT	Sodium	14/12/2016	N/A	All values < ELV	13	mg/l	yes	
	SW-10	onsite	SELECT	Zinc and compounds (as Zn)	14/12/2016	100	All values < ELV	<3	µg/L	yes	
	SW-10	onsite	SELECT	Sulphate	14/12/2016	200	All values < ELV	95.5	mg/L	yes	
	SW-10	onsite	SELECT	Ortho-phosphate (as PO4)	14/12/2016	0.075	All values < ELV	<0.06	mg/L	yes	
	SW-10	onsite	SELECT	Total Oxidised Nitrogen (TON)	14/12/2016	N/A	All values < ELV	0.9	mg/L	yes	
	SW-10	onsite	SELECT	Total Alkalinity	14/12/2016	N/A	All values < ELV	130	mg/L	yes	

*trigger values may be agreed by the Agency outside of licence conditions

Table W2 Visual inspections-Please only enter details where contamination was observed.

Location Reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
	Weekly	No contamination observed throughout 2016	SELECT		
			SELECT		

Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)

3	Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below			SELECT	Additional information
4	Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box	External /Internal Lab Quality checklist	Assessment of results checklist	SELECT	

Table W3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)

Emission reference no:	Emission released to	Parameter/ SubstanceNote 1	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger values in licence or any revision therof[Note 2]	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

	AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)			Lic No:	WO 165-02		Year	2016

Continuous monitoring

			Additional Information
5	Does your site carry out continuous emissions to water/sewer monitoring?	No	

If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)

6	Did continuous monitoring equipment experience downtime? **If yes please record downtime in table W4 below**	SELECT	
7	Do you have a proactive service contract for each piece of continuous monitoring equipment on site?	SELECT	
8	Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below**	SELECT	

Table W4: Summary of average emissions -continuous monitoring

Emission reference no:	Emission released to	Parameter/ Substance	ELV or trigger values in licence or any revision thereof	Averaging Period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change +/- from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedences in reporting year
	SELECT	SELECT		SELECT	SELECT	SELECT				
	SELECT	SELECT		SELECT	SELECT	SELECT				

note 1: Volumetric flow shall be included as a reportable parameter.

Table W5: Abatement system bypass reporting table

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	Corrective action*	Was a report submitted to the EPA?	When was this report submitted?
						SELECT	

*Measures taken or proposed to reduce or limit bypass frequency

Bund/Pipeline testing template	Lic No:	WO 165-02	Year	2016	

Bund testing — dropdown menu click to see options

			Additional information
1	Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included)	Yes	
2	Please provide integrity testing frequency period	3 years	
3	Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds)	Yes	
4	How many bunds are on site?	1	
5	How many of these bunds have been tested within the required test schedule?	1	
6	How many mobile bunds are on site?		
7	Are the mobile bunds included in the bund test schedule?	SELECT	
8	How many of these mobile bunds have been tested within the required test schedule?		
9	How many sumps on site are included in the integrity test schedule?		
10	How many of these sumps are integrity tested within the test schedule?		
	Please list any sump integrity failures in table B1		
11	Do all sumps and chambers have high level liquid alarms?	SELECT	
12	If yes to Q11 are these failsafe systems included in a maintenance and testing programme?	SELECT	
13	Is the Fire Water Retention Pond included in your integrity test programme?	SELECT	

Table B1: Summary details of bund /containment structure integrity test

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
6000L Diesel	other (please specify)		Diesel	6000L		Structural assessment		05/10/2009	No	Pass		SELECT		
	SELECT					SELECT			SELECT	SELECT		SELECT		

* Capacity required should comply with 25% or 110% containment rule as detailed in your licence

			Commentary
15	Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance?	bunding and storage guidelines	SELECT
16	Are channels/transfer systems to remote containment systems tested?		SELECT
17	Are channels/transfer systems compliant in both integrity and available volume?		SELECT

Pipeline/underground structure testing

1	Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested withing the integrity test period as specified**	Yes	
2	Please provide integrity testing frequency period	Other (please specify)	Annual
	*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)		

Table B2: Summary details of pipeline/underground structures integrity test

Structure ID	Type system	Material of construction:	Does this structure have Secondary containment?	Type of secondary containment	Type integrity testing	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest(if in current reporting year)
	Process	concrete	No	Other (please specify)	SELECT	SELECT	Pass				SELECT

Please use commentary for additional details not answered by tables/ questions above

Groundwater/Soil monitoring template	Lic No:	WO 165-02	Year	2016

			Comments	
1	Are you required to carry out groundwater monitoring as part of your licence requirements?	yes		monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER
2	Are you required to carry out soil monitoring as part of your licence requirements?	no		
3	Do you extract groundwater for use on site? If yes please specify use in comment section	no		
4	Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template	yes		Results are compared to Groundwater Trigger Levels approved by the Agency in December 2011. There are upward trends in parameters such as electrical conductivity and within the heavy metals group,however these are usually slight.
5	Is the contamination related to operations at the facility (either current and/or historic)	no		
6	Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site	no	Exceedances of orthophosphate and coliforms related to	
7	Please specify the proposed time frame for the remediation strategy	N/A		
8	Is there a licence condition to carry out/update ELRA for the site?	yes		
9	Has any type of risk assesment been carried out for the site?	yes		
10	Has a Conceptual Site Model been developed for the site?	no		
11	Have potential receptors been identified on and off site?	no		
12	Is there evidence that contamination is migrating offsite?	no		

Upgradient Groundwater monitoring results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTV's*	SELECT**	Upward trend in pollutant concentration over last 5 years of monitoring data
2016	MW-1S	pH	Field Probe	Quarterly	7.33	6.94	pH units	<6.5 & >9.5	IGV	No
2016	MW-1D	pH	Field Probe	Quarterly	7.71	7.38	pH units	<6.5 & >9.5	IGV	No
2016	MW-2S	pH	Field Probe	Quarterly	8.34	7.9	pH units	<6.5 & >9.5	IGV	No
2016	MW-2D	pH	Field Probe	Quarterly	8	30.5	pH units	<6.5 & >9.5	IGV	No
2016	MW-7S	pH	Field Probe	Quarterly	7.71	7.34	pH units	<6.5 & >9.5	IGV	No
2016	MW-7D	pH	Field Probe	Quarterly	7.35	7.01	pH units	<6.5 & >9.5	IGV	No
2016	MW-8S	pH	Field Probe	Quarterly	Dry	Dry	pH units	<6.5 & >9.5	IGV	No
2016	MW-8D	pH	Field Probe	Quarterly	Dry	Dry	pH units	<6.5 & >9.5	IGV	No
2016	MW-1S	Electrical Conductivity	Field Probe	Quarterly	314	263.25	uS/cm	800 - 1,875	GTV	No
2016	MW-1D	Electrical Conductivity	Field Probe	Quarterly	320	296.5	uS/cm	800 - 1,875	GTV	No
2016	MW-2S	Electrical Conductivity	Field Probe	Quarterly	455	414	uS/cm	800 - 1,875	GTV	Yes
2016	MW-2D	Electrical Conductivity	Field Probe	Quarterly	356	340	uS/cm	800 - 1,875	GTV	No
2016	MW-7S	Electrical Conductivity	Field Probe	Quarterly	470	423.75	uS/cm	800 - 1,875	GTV	Yes
2016	MW-7D	Electrical Conductivity	Field Probe	Quarterly	470	342	uS/cm	800 - 1,875	GTV	Yes
2016	MW-8S	Electrical Conductivity	Field Probe	Quarterly	Dry	Dry	uS/cm	800 - 1,875	GTV	-
2016	MW-8D	Electrical Conductivity	Field Probe	Quarterly	Dry	Dry	uS/cm	800 - 1,875	GTV	-
2016	MW-1S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	20.3	20.1	mg/l	24 - 187.5	GTV	No
2016	MW-1D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	20.7	20.45	mg/l	24 - 187.5	GTV	No
2016	MW-2S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	21.8	19.45	mg/l	24 - 187.5	GTV	No
2016	MW-2D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	27.4	27.1	mg/l	24 - 187.5	GTV	Yes
2016	MW-7S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	21.1	17.55	mg/l	24 - 187.5	GTV	No
2016	MW-7D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	20.6	20.4	mg/l	24 - 187.5	GTV	No
2016	MW-8S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	Dry	Dry	mg/l	24 - 187.5	GTV	-
2016	MW-8D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	Dry	Dry	mg/l	24 - 187.5	GTV	-
2016	MW-1S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	MW-1D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.13	0.0625	mg/l	0.065 - 0.175	GTV	No
2016	MW-2S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.33	0.22	mg/l	0.065 - 0.175	GTV	No
2016	MW-2D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.1	0.04	mg/l	0.065 - 0.175	GTV	No
2016	MW-7S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.63	0.38	mg/l	0.065 - 0.175	GTV	No
2016	MW-7D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.28	0.143333333	mg/l	0.065 - 0.175	GTV	Yes
2016	MW-8S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	Dry	Dry	mg/l	0.065 - 0.175	GTV	-
2016	MW-8D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	Dry	Dry	mg/l	0.065 - 0.175	GTV	-
2016	MW-1S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.7	0.675	mg/l	5	IGV	No
2016	MW-1D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.7	0.65	mg/l	5	IGV	No
2016	MW-2S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1.7	1.575	mg/l	5	IGV	Yes
2016	MW-2D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.8	0.675	mg/l	5	IGV	No
2016	MW-7S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	2	1.05	mg/l	5	IGV	Yes
2016	MW-7D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.8	0.7	mg/l	5	IGV	No
2016	MW-8S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	Dry	Dry	mg/l	5	IGV	-

Groundwater/Soil monitoring template					Lic No:	WO 165-02		Year	2016	
2016	MW-8D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	Dry	Dry	mg/l	5	IGV	-
2016	MW-1S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	12	10	mg/l	NAC	IGV	No
2016	MW-1D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	11	9.25	mg/l	NAC	IGV	No
2016	MW-2S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	11	8	mg/l	NAC	IGV	No
2016	MW-2D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	11	9.25	mg/l	NAC	IGV	No
2016	MW-7S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	8.75	mg/l	NAC	IGV	No
2016	MW-7D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	9.333333333	mg/l	NAC	IGV	No
2016	MW-8S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	Dry	Dry	mg/l	NAC	IGV	-
2016	MW-8D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	Dry	Dry	mg/l	NAC	IGV	-
2016	MW-1S	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	MW-1D	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	MW-2S	TOC	TOC analyser	Quarterly	6	4.5	mg/l	37.5	GTV	No
2016	MW-2D	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	MW-7S	TOC	TOC analyser	Quarterly	4	4	mg/l	37.5	GTV	No
2016	MW-7D	TOC	TOC analyser	Quarterly	3	3	mg/l	37.5	GTV	No
2016	MW-8S	TOC	TOC analyser	Quarterly	Dry	Dry	mg/l	37.5	GTV	-
2016	MW-8D	TOC	TOC analyser	Quarterly	Dry	Dry	mg/l	37.5	GTV	-
2016	MW-1S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-1D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-2S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-2D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-7S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-7D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-8S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	NAC	IGV	-
2016	MW-8D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	NAC	IGV	-
2016	MW-1S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<12	<12	ug/l	1,000	IGV	No
2016	MW-1D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<12	<12	ug/l	1,000	IGV	No
2016	MW-2S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	36	36	ug/l	1,000	IGV	No
2016	MW-2D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<12	<12	ug/l	1,000	IGV	No
2016	MW-7S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<12	<12	ug/l	1,000	IGV	No
2016	MW-7D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<12	<12	ug/l	1,000	IGV	No
2016	MW-8S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	1,000	IGV	-
2016	MW-8D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	1,000	IGV	-
2016	MW-1S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-1D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-2S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-2D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-7S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-7D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-8S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	3.75	GTV	-
2016	MW-8D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	3.75	GTV	-
2016	MW-1S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	19	19	mg/l	200	IGV	No
2016	MW-1D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	29.6	29.6	mg/l	200	IGV	No
2016	MW-2S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	54.3	54.3	mg/l	200	IGV	Yes
2016	MW-2D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	35	35	mg/l	200	IGV	No
2016	MW-7S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	46.6	46.6	mg/l	200	IGV	Yes
2016	MW-7D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	43.9	43.9	mg/l	200	IGV	Yes
2016	MW-8S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	mg/l	200	IGV	-
2016	MW-8D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	mg/l	200	IGV	-
2016	MW-1S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-1D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-2S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-2D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-7S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-7D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-8S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	1,500	GTV	-
2016	MW-8D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	1,500	GTV	-
2016	MW-1S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-1D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-2S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-2D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-7S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-7D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-8S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	200	IGV	-
2016	MW-8D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	200	IGV	-
2016	MW-1S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-1D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-2S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-2D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-7S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-7D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-8S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	18.75	GTV	-
2016	MW-8D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	18.75	GTV	-
2016	MW-1S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	5.3	5.3	mg/l	50	IGV	No
2016	MW-1D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	6	6	mg/l	50	IGV	Yes
2016	MW-2S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	7.9	7.9	mg/l	50	IGV	Yes
2016	MW-2D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	9	9	mg/l	50	IGV	No
2016	MW-7S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	12.2	12.2	mg/l	50	IGV	Yes
2016	MW-7D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	16.9	16.9	mg/l	50	IGV	Yes
2016	MW-8S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	mg/l	50	IGV	-
2016	MW-8D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	mg/l	50	IGV	-

Groundwater/Soil monitoring template					Lic No:	WO 165-02		Year	2016	
2016	MW-1S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	No
2016	MW-1D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	13	13	ug/l	50	IGV	Yes
2016	MW-2S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	No
2016	MW-2D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	No
2016	MW-7S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	25	25	ug/l	50	IGV	No
2016	MW-7D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	9	9	ug/l	50	IGV	No
2016	MW-8S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	50	IGV	-
2016	MW-8D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	50	IGV	-
2016	MW-1S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	No
2016	MW-1D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.02	0.02	ug/l	0.75	GTV	Yes
2016	MW-2S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.02	0.02	ug/l	0.75	GTV	Yes
2016	MW-2D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-7S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-7D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-8S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	0.75	GTV	-
2016	MW-8D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	0.75	GTV	-
2016	MW-1S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-1D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-2S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-2D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-7S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-7D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-8S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	15	GTV	-
2016	MW-8D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	15	GTV	-
2016	MW-1S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	14.5	14.5	mg/l	150	GTV	No
2016	MW-1D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	17	17	mg/l	150	GTV	No
2016	MW-2S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	16.1	16.1	mg/l	150	GTV	No
2016	MW-2D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	15.4	15.4	mg/l	150	GTV	Yes
2016	MW-7S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	20	20	mg/l	150	GTV	Yes
2016	MW-7D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	16.5	16.5	mg/l	150	GTV	No
2016	MW-8S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	mg/l	150	GTV	-
2016	MW-8D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	mg/l	150	GTV	-
2016	MW-1S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-1D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-2S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-2D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-7S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	Yes
2016	MW-7D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-8S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	100	IGV	-
2016	MW-8D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	Dry	Dry	ug/l	100	IGV	-
2016	MW-1S	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-1D	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-2S	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-2D	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-7S	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-7D	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-8S	Fluoride	Dionex (Ion-Chromatography).	Annually	Dry	Dry	mg/l	1	IGV	-
2016	MW-8D	Fluoride	Dionex (Ion-Chromatography).	Annually	Dry	Dry	mg/l	1	IGV	-
2016	MW-1S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	10.9	10.9	mg/l	187.5	GTV	No
2016	MW-1D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	8.9	8.9	mg/l	187.5	GTV	No
2016	MW-2S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	62.2	62.2	mg/l	187.5	GTV	No
2016	MW-2D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	10	10	mg/l	187.5	GTV	No
2016	MW-7S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	57	57	mg/l	187.5	GTV	Yes
2016	MW-7D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	39.4	39.4	mg/l	187.5	GTV	Yes
2016	MW-8S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	Dry	Dry	mg/l	187.5	GTV	-
2016	MW-8D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	Dry	Dry	mg/l	187.5	GTV	-
2016	MW-1S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-1D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-2S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-2D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-7S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-7D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-8S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	Dry	Dry	mg/l	0.035	GTV	-
2016	MW-8D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	Dry	Dry	mg/l	0.035	GTV	-
2016	MW-1S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	7.4	7.4	mg/l	NAC	IGV	No
2016	MW-1D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	7.6	7.6	mg/l	NAC	IGV	No
2016	MW-2S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	0.6	0.6	mg/l	NAC	IGV	No
2016	MW-2D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	8.1	8.1	mg/l	NAC	IGV	Yes
2016	MW-7S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	2.8	2.8	mg/l	NAC	IGV	No
2016	MW-7D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	18.1	18.1	mg/l	NAC	IGV	No
2016	MW-8S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	Dry	Dry	mg/l	NAC	IGV	-
2016	MW-8D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	Dry	Dry	mg/l	NAC	IGV	-
2016	MW-1S	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-1D	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-2S	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-2D	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-7S	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-7D	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-8S	Total Cyanide	Flow Injection Analyser	Annually	Dry	Dry	mg/l	0.0375	GTV	-
2016	MW-8D	Total Cyanide	Flow Injection Analyser	Annually	Dry	Dry	mg/l	0.0375	GTV	-
2016	MW-1S	Alkalinity	Metrohm automated titration analyser	Annually	68	68	mg/l	NAC	IGV	No

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2016	MW-1D	Alkalinity	Metrohm automated titration analyser	Annually	68	68	mg/l	NAC	IGV	No
2016	MW-2S	Alkalinity	Metrohm automated titration analyser	Annually	210	210	mg/l	NAC	IGV	No
2016	MW-2D	Alkalinity	Metrohm automated titration analyser	Annually	102	102	mg/l	NAC	IGV	No
2016	MW-7S	Alkalinity	Metrohm automated titration analyser	Annually	122	122	mg/l	NAC	IGV	Yes
2016	MW-7D	Alkalinity	Metrohm automated titration analyser	Annually	122	122	mg/l	NAC	IGV	Yes
2016	MW-8S	Alkalinity	Metrohm automated titration analyser	Annually	Dry	Dry	mg/l	NAC	IGV	-
2016	MW-8D	Alkalinity	Metrohm automated titration analyser	Annually	Dry	Dry	mg/l	NAC	IGV	-
2016	MW-1S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	120	120	mg/l	-	GTV	No
2016	MW-1D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	148	148	mg/l	-	GTV	No
2016	MW-2S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	233	233	mg/l	-	GTV	No
2016	MW-2D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	182	182	mg/l	-	GTV	No
2016	MW-7S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	197	197	mg/l	-	GTV	No
2016	MW-7D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	201	201	mg/l	-	GTV	Yes
2016	MW-8S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	Dry	Dry	mg/l	-	GTV	-
2016	MW-8D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	Dry	Dry	mg/l	-	GTV	-
2016	MW-1S	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-1D	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-2S	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-2D	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-7S	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-7D	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-8S	VOCs	Headspace GC-MS	Annually	Dry	Dry	ug/l	-	GTV	-
2016	MW-8D	VOCs	Headspace GC-MS	Annually	Dry	Dry	ug/l	-	GTV	-
2016	MW-1S	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-1D	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-2S	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-2D	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-7S	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-7D	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-8S	sVOCs	GC-MS	Annually	Dry	Dry	ug/l	-	GTV	-
2016	MW-8D	sVOCs	GC-MS	Annually	Dry	Dry	ug/l	-	GTV	-
2016	MW-1S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-1D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-2S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-2D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-7S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-7D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-8S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	Dry	Dry	ug/l	0.375	GTV	-
2016	MW-8D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	Dry	Dry	ug/l	0.375	GTV	-
2016	MW-1S	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-1D	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-2S	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-2D	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-7S	Total Coliforms	N/A	Annually	>100	>100	cfu/100ml	0	IGV	No
2016	MW-7D	Total Coliforms	N/A	Annually	>100	>100	cfu/100ml	0	IGV	No
2016	MW-8S	Total Coliforms	N/A	Annually	Dry	Dry	cfu/100ml	0	IGV	-
2016	MW-8D	Total Coliforms	N/A	Annually	Dry	Dry	cfu/100ml	0	IGV	-
2016	MW-1S	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-1D	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-2S	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-2D	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-7S	Faecal Coliforms	N/A	Annually	>100	>100	cfu/100ml	0	IGV	No
2016	MW-7D	Faecal Coliforms	N/A	Annually	>100	>100	cfu/100ml	0	IGV	No
2016	MW-8S	Faecal Coliforms	N/A	Annually	Dry	Dry	cfu/100ml	0	IGV	-
2016	MW-8D	Faecal Coliforms	N/A	Annually	Dry	Dry	cfu/100ml	0	IGV	-

ere average indicates arithmetic mean

neasured concentration from all monitoring results produced during the reporting year

Groundwater/Soil monitoring template					Lic No:	WO 165-02		Year	2016	
			Downgradient Groundwater monitoring results							
Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTV's*	SELECT**	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
2016	MW-3S	pH	Field Probe	Quarterly	7.64	7.40	pH units	<6.5 & >9.5	IGV	No
2016	MW-3D	pH	Field Probe	Quarterly	7.72	7.56	pH units	<6.5 & >9.5	IGV	No
2016	MW-4S	pH	Field Probe	Quarterly	7.65	7.25	pH units	<6.5 & >9.5	IGV	No
2016	MW-4D	pH	Field Probe	Quarterly	7.54	7.17	pH units	<6.5 & >9.5	IGV	No
2016	MW-5S	pH	Field Probe	Quarterly	7.92	7.77	pH units	<6.5 & >9.5	IGV	No
2016	MW-5D	pH	Field Probe	Quarterly	8.02	7.64	pH units	<6.5 & >9.5	IGV	No
2016	MW-6S	pH	Field Probe	Quarterly	7.21	6.85	pH units	<6.5 & >9.5	IGV	No
2016	MW-6D	pH	Field Probe	Quarterly	7.63	7.32	pH units	<6.5 & >9.5	IGV	No
2016	MW-3S	Electrical Conductivity	Field Probe	Quarterly	628	447.25	uS/cm	800 - 1,875	GTV	Yes
2016	MW-3D	Electrical Conductivity	Field Probe	Quarterly	370	346.5	uS/cm	800 - 1,875	GTV	No
2016	MW-4S	Electrical Conductivity	Field Probe	Quarterly	496	430.25	uS/cm	800 - 1,875	GTV	Yes
2016	MW-4D	Electrical Conductivity	Field Probe	Quarterly	452	407.25	uS/cm	800 - 1,875	GTV	Yes
2016	MW-5S	Electrical Conductivity	Field Probe	Quarterly	414	366.25	uS/cm	800 - 1,875	GTV	Yes
2016	MW-5D	Electrical Conductivity	Field Probe	Quarterly	368	300	uS/cm	800 - 1,875	GTV	No
2016	MW-6S	Electrical Conductivity	Field Probe	Quarterly	393	323.5	uS/cm	800 - 1,875	GTV	No
2016	MW-6D	Electrical Conductivity	Field Probe	Quarterly	310	282.75	uS/cm	800 - 1,875	GTV	Yes
2016	MW-3S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	22.8	18.025	mg/l	24 - 187.5	GTV	Yes
2016	MW-3D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	16.8	16.625	mg/l	24 - 187.5	GTV	No
2016	MW-4S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	29.9	23.05	mg/l	24 - 187.5	GTV	Yes
2016	MW-4D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	22	21.1	mg/l	24 - 187.5	GTV	Yes
2016	MW-5S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	24.2	22	mg/l	24 - 187.5	GTV	Yes
2016	MW-5D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	23.1	20.6	mg/l	24 - 187.5	GTV	Yes
2016	MW-6S	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	33.3	26.075	mg/l	24 - 187.5	GTV	Yes
2016	MW-6D	Chloride	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	23.2	22.675	mg/l	24 - 187.5	GTV	Yes
2016	MW-3S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	1.03	0.405	mg/l	0.065 - 0.175	GTV	No
2016	MW-3D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.33	0.125	mg/l	0.065 - 0.175	GTV	No
2016	MW-4S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.61	0.21	mg/l	0.065 - 0.175	GTV	Yes
2016	MW-4D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	1.09	0.3225	mg/l	0.065 - 0.175	GTV	Yes
2016	MW-5S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.06	0.04	mg/l	0.065 - 0.175	GTV	No
2016	MW-5D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.05	0.04	mg/l	0.065 - 0.175	GTV	No
2016	MW-6S	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.07	0.0425	mg/l	0.065 - 0.175	GTV	Yes
2016	MW-6D	Ammonia	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Quarterly	0.12	0.045	mg/l	0.065 - 0.175	GTV	Yes
2016	MW-3S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	3.7	2.6	mg/l	5	IGV	No
2016	MW-3D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1.8	1.625	mg/l	5	IGV	No
2016	MW-4S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1.4	1.275	mg/l	5	IGV	Yes
2016	MW-4D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	2.1	1.425	mg/l	5	IGV	Yes
2016	MW-5S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	3	1.675	mg/l	5	IGV	Yes
2016	MW-5D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1.1	0.925	mg/l	5	IGV	No
2016	MW-6S	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1	0.85	mg/l	5	IGV	No
2016	MW-6D	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.7	0.7	mg/l	5	IGV	No
2016	MW-3S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	11	9.5	mg/l	NAC	IGV	No
2016	MW-3D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	12	8	mg/l	NAC	IGV	No
2016	MW-4S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	8.25	mg/l	NAC	IGV	No
2016	MW-4D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	9	mg/l	NAC	IGV	No
2016	MW-5S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	11	10	mg/l	NAC	IGV	No
2016	MW-5D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	7	mg/l	NAC	IGV	No
2016	MW-6S	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	7.5	mg/l	NAC	IGV	No
2016	MW-6D	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	9	8.25	mg/l	NAC	IGV	Yes
2016	MW-3S	TOC	TOC analyser	Quarterly	5	3.5	mg/l	37.5	GTV	No
2016	MW-3D	TOC	TOC analyser	Quarterly	2	2	mg/l	37.5	GTV	No
2016	MW-4S	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	MW-4D	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	MW-5S	TOC	TOC analyser	Quarterly	3	3	mg/l	37.5	GTV	No
2016	MW-5D	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	MW-6S	TOC	TOC analyser	Quarterly	3	3	mg/l	37.5	GTV	No
2016	MW-6D	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	MW-3S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-3D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-4S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No

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2016	MW-4D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-5S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-5D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-6S	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-6D	Total Chromium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<1.5	<1.5	ug/l	NAC	IGV	No
2016	MW-3S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	29	29	ug/l	1,000	IGV	No
2016	MW-3D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	79	79	ug/l	1,000	IGV	Yes
2016	MW-4S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	33	33	ug/l	1,000	IGV	No
2016	MW-4D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	19	19	ug/l	1,000	IGV	No
2016	MW-5S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	26	26	ug/l	1,000	IGV	No
2016	MW-5D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	22	22	ug/l	1,000	IGV	No
2016	MW-6S	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	12	12	ug/l	1,000	IGV	No
2016	MW-6D	Boron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	13	13	ug/l	1,000	IGV	No
2016	MW-3S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.6	0.6	ug/l	3.75	GTV	No
2016	MW-3D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-4S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-4D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-5S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-5D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-6S	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-6D	Cadmium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.5	<0.5	ug/l	3.75	GTV	No
2016	MW-3S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	99.4	99.4	mg/l	200	IGV	Yes
2016	MW-3D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	42.8	42.8	mg/l	200	IGV	No
2016	MW-4S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	43.9	43.9	mg/l	200	IGV	No
2016	MW-4D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	52.2	52.2	mg/l	200	IGV	Yes
2016	MW-5S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	48.6	48.6	mg/l	200	IGV	No
2016	MW-5D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	29	29	mg/l	200	IGV	No
2016	MW-6S	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	40.7	40.7	mg/l	200	IGV	Yes
2016	MW-6D	Calcium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	22.7	22.7	mg/l	200	IGV	Yes
2016	MW-3S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-3D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-4S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-4D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-5S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-5D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-6S	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-6D	Copper	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<7	<7	ug/l	1,500	GTV	No
2016	MW-3S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-3D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-4S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-4D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-5S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-5D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-6S	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-6D	Iron	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<20	<20	ug/l	200	IGV	No
2016	MW-3S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-3D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-4S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-4D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-5S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-5D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-6S	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-6D	Lead	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<5	<5	ug/l	18.75	GTV	No
2016	MW-3S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	13.1	13.1	mg/l	50	IGV	Yes
2016	MW-3D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	8.3	8.3	mg/l	50	IGV	No
2016	MW-4S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	7.9	7.9	mg/l	50	IGV	No
2016	MW-4D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	9.3	9.3	mg/l	50	IGV	No
2016	MW-5S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	8.7	8.7	mg/l	50	IGV	No
2016	MW-5D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	7	7	mg/l	50	IGV	No
2016	MW-6S	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	10	10	mg/l	50	IGV	Yes
2016	MW-6D	Magnesium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	6.4	6.4	mg/l	50	IGV	Yes
2016	MW-3S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	Yes
2016	MW-3D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	No
2016	MW-4S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	15	15	ug/l	50	IGV	Yes
2016	MW-4D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	264	264	ug/l	50	IGV	Yes
2016	MW-5S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	5	5	ug/l	50	IGV	No
2016	MW-5D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	No
2016	MW-6S	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	No
2016	MW-6D	Manganese	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	50	IGV	No
2016	MW-3S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-3D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-4S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-4D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-5S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-5D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes

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2016	MW-6S	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	0.01	0.01	ug/l	0.75	GTV	Yes
2016	MW-6D	Mercury	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<0.01	<0.01	ug/l	0.75	GTV	No
2016	MW-3S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-3D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-4S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-4D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-5S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-5D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-6S	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-6D	Nickel	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<2	<2	ug/l	15	GTV	No
2016	MW-3S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	12	12	mg/l	150	GTV	Yes
2016	MW-3D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	22.3	22.3	mg/l	150	GTV	Yes
2016	MW-4S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	17.9	17.9	mg/l	150	GTV	No
2016	MW-4D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	15.2	15.2	mg/l	150	GTV	No
2016	MW-5S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	14.5	14.5	mg/l	150	GTV	No
2016	MW-5D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	15.2	15.2	mg/l	150	GTV	No
2016	MW-6S	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	17.1	17.1	mg/l	150	GTV	No
2016	MW-6D	Sodium	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	18.2	18.2	mg/l	150	GTV	No
2016	MW-3S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	8	8	ug/l	100	IGV	Yes
2016	MW-3D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-4S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-4D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-5S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-5D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-6S	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-6D	Zinc	Inductively Coupled Plasma - Optical Emission Spectrometry	Annually	<3	<3	ug/l	100	IGV	No
2016	MW-3S	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-3D	Fluoride	Dionex (Ion-Chromatography).	Annually	0.4	0.4	mg/l	1	IGV	No
2016	MW-4S	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-4D	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-5S	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-5D	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-6S	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-6D	Fluoride	Dionex (Ion-Chromatography).	Annually	<0.3	<0.3	mg/l	1	IGV	No
2016	MW-3S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	131.9	131.9	mg/l	187.5	GTV	No
2016	MW-3D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	22.4	22.4	mg/l	187.5	GTV	No
2016	MW-4S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	18.5	18.5	mg/l	187.5	GTV	Yes
2016	MW-4D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	26.4	26.4	mg/l	187.5	GTV	No
2016	MW-5S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	18	18	mg/l	187.5	GTV	Yes
2016	MW-5D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	7.2	7.2	mg/l	187.5	GTV	No
2016	MW-6S	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	10.8	10.8	mg/l	187.5	GTV	Yes
2016	MW-6D	Sulphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	5.6	5.6	mg/l	187.5	GTV	No
2016	MW-3S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-3D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-4S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-4D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-5S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	0.81	0.81	mg/l	0.035	GTV	Yes
2016	MW-5D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	0.11	0.11	mg/l	0.035	GTV	No
2016	MW-6S	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-6D	Ortho Phosphate	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	<0.06	<0.06	mg/l	0.035	GTV	No
2016	MW-3S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	3	3	mg/l	NAC	IGV	No
2016	MW-3D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	2.8	2.8	mg/l	NAC	IGV	No
2016	MW-4S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	0.7	0.7	mg/l	NAC	IGV	Yes
2016	MW-4D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	1.7	1.7	mg/l	NAC	IGV	Yes
2016	MW-5S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	3.6	3.6	mg/l	NAC	IGV	No
2016	MW-5D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	0.9	0.9	mg/l	NAC	IGV	No
2016	MW-6S	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	15.8	15.8	mg/l	NAC	IGV	No
2016	MW-6D	TON	Soluble Ion Analysis Thermo Aquakem Photometric Automatic Analyser	Annually	5	5	mg/l	NAC	IGV	Yes
2016	MW-3S	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-3D	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-4S	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-4D	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-5S	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-5D	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-6S	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-6D	Total Cyanide	Flow Injection Analyser	Annually	<0.01	<0.01	mg/l	0.0375	GTV	No
2016	MW-3S	Alkalinity	Metrohm automated titration analyser	Annually	222	222	mg/l	NAC	IGV	No
2016	MW-3D	Alkalinity	Metrohm automated titration analyser	Annually	168	168	mg/l	NAC	IGV	No
2016	MW-4S	Alkalinity	Metrohm automated titration analyser	Annually	192	192	mg/l	NAC	IGV	No
2016	MW-4D	Alkalinity	Metrohm automated titration analyser	Annually	200	200	mg/l	NAC	IGV	No
2016	MW-5S	Alkalinity	Metrohm automated titration analyser	Annually	166	166	mg/l	NAC	IGV	No
2016	MW-5D	Alkalinity	Metrohm automated titration analyser	Annually	132	132	mg/l	NAC	IGV	No
2016	MW-6S	Alkalinity	Metrohm automated titration analyser	Annually	90	90	mg/l	NAC	IGV	No
2016	MW-6D	Alkalinity	Metrohm automated titration analyser	Annually	72	72	mg/l	NAC	IGV	No
2016	MW-3S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	174	174	mg/l	-	GTV	No

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2016	MW-3D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	204	204	mg/l	-	GTV	No
2016	MW-4S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	249	249	mg/l	-	GTV	No
2016	MW-4D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	253	253	mg/l	-	GTV	Yes
2016	MW-5S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	211	211	mg/l	-	GTV	No
2016	MW-5D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	151	151	mg/l	-	GTV	No
2016	MW-6S	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	107	107	mg/l	-	GTV	No
2016	MW-6D	Total Solids	Gravimetric determination of Total Dissolved Solids/Total Solids	Annually	122	122	mg/l	-	GTV	No
2016	MW-3S	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-3D	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-4S	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-4D	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-5S	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-5D	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-6S	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-6D	VOCs	Headspace GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-3S	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-3D	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-4S	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-4D	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-5S	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-5D	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-6S	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-6D	sVOCs	GC-MS	Annually	ND	ND	ug/l	-	GTV	No
2016	MW-3S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-3D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-4S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-4D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-5S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-5D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-6S	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-6D	Pesticides	Large Volume Injection on GC Triple Quad MS	Annually	ND	ND	ug/l	0.375	GTV	No
2016	MW-3S	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-3D	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-4S	Total Coliforms	N/A	Annually	>100	>100	cfu/100ml	0	IGV	No
2016	MW-4D	Total Coliforms	N/A	Annually	31	31	cfu/100ml	0	IGV	No
2016	MW-5S	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-5D	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-6S	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-6D	Total Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-3S	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-3D	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-4S	Faecal Coliforms	N/A	Annually	>100	>100	cfu/100ml	0	IGV	No
2016	MW-4D	Faecal Coliforms	N/A	Annually	31	31	cfu/100ml	0	IGV	No
2016	MW-5S	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-5D	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-6S	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	MW-6D	Faecal Coliforms	N/A	Annually	<1	<1	cfu/100ml	0	IGV	No
2016	PW-2	pH	Metrohm automated probe analyser.	Quarterly	7.88	7.8	pH units	<6.5 & >9.5	IGV	Yes
2016	PW-3	pH	Metrohm automated probe analyser.	Quarterly	8.16	8.145	pH units	<6.5 & >9.5	IGV	Yes
2016	PW-4	pH	Metrohm automated probe analyser.	Quarterly	7.89	7.89	pH units	<6.5 & >9.5	IGV	-
2016	PW-6	pH	Metrohm automated probe analyser.	Quarterly	7.89	7.4	pH units	<6.5 & >9.5	IGV	No
2016	PW-7	pH	Metrohm automated probe analyser.	Quarterly	7.93	7.895	pH units	<6.5 & >9.5	IGV	No
2016	PW-11	pH	Metrohm automated probe analyser.	Quarterly	7.97	7.96	pH units	<6.5 & >9.5	IGV	No
2016	PW-12	pH	Metrohm automated probe analyser.	Quarterly	8	7.965	pH units	<6.5 & >9.5	IGV	No
2016	PW-13	pH	Metrohm automated probe analyser.	Quarterly	8.21	8	pH units	<6.5 & >9.5	IGV	No
2016	PW-13(2)	pH	Metrohm automated probe analyser.	Quarterly	7.97	7.955	pH units	<6.5 & >9.5	IGV	No
2016	PW-20	pH	Metrohm automated probe analyser.	Quarterly	8.27	8.26	pH units	<6.5 & >9.5	IGV	No
2016	PW-22	pH	Metrohm automated probe analyser.	Quarterly	8.25	7.8	pH units	<6.5 & >9.5	IGV	-
2016	PW-23	pH	Metrohm automated probe analyser.	Quarterly	8.02	7.99	pH units	<6.5 & >9.5	IGV	No
2016	PW-25	pH	Metrohm automated probe analyser.	Quarterly	8.17	8.07	pH units	<6.5 & >9.5	IGV	No
2016	PW-2	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	236	234.5	uS/cm	800 - 1,875	GTV	No
2016	PW-3	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	268	267.5	uS/cm	800 - 1,875	GTV	Yes
2016	PW-4	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	558	558	uS/cm	800 - 1,875	GTV	-
2016	PW-6	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	293	287	uS/cm	800 - 1,875	GTV	Yes
2016	PW-7	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	405	402	uS/cm	800 - 1,875	GTV	No
2016	PW-11	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	474	464	uS/cm	800 - 1,875	GTV	Yes
2016	PW-12	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	348	348	uS/cm	800 - 1,875	GTV	Yes

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2016	PW-13	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	433	424	uS/cm	800 - 1,875	GTV	No
2016	PW-13(2)	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	442	438	uS/cm	800 - 1,875	GTV	Yes
2016	PW-20	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	268	266.5	uS/cm	800 - 1,875	GTV	No
2016	PW-22	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	394	329.5	uS/cm	800 - 1,875	GTV	-
2016	PW-23	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	217	215	uS/cm	800 - 1,875	GTV	No
2016	PW-25	Electrical Conductivity	Metrohm automated probe analyser.	Quarterly	287	287.00	uS/cm	800 - 1,875	GTV	No
2016	PW-2	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	21.6	21.35	mg/l	24 - 187.5	GTV	No
2016	PW-3	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	17	16.60	mg/l	24 - 187.5	GTV	Yes
2016	PW-4	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	48	48.00	mg/l	24 - 187.5	GTV	-
2016	PW-6	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	22.6	21.75	mg/l	24 - 187.5	GTV	Yes
2016	PW-7	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	18	17.20	mg/l	24 - 187.5	GTV	Yes
2016	PW-11	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	18.2	17.65	mg/l	24 - 187.5	GTV	No
2016	PW-12	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	20.1	19.65	mg/l	24 - 187.5	GTV	No
2016	PW-13	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	30.5	29.20	mg/l	24 - 187.5	GTV	Yes
2016	PW-13(2)	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	14.6	14.10	mg/l	24 - 187.5	GTV	No
2016	PW-20	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	24.8	24.55	mg/l	24 - 187.5	GTV	No
2016	PW-22	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	24.8	21.95	mg/l	24 - 187.5	GTV	-
2016	PW-23	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	19.4	18.90	mg/l	24 - 187.5	GTV	yes
2016	PW-25	Chloride	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	19.6	18.85	mg/l	24 - 187.5	GTV	No
2016	PW-2	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-3	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-4	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	-
2016	PW-6	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.03	0.03	mg/l	0.065 - 0.175	GTV	No
2016	PW-7	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-11	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-12	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-13	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-13(2)	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	<0.01	<0.01	mg/l	0.065 - 0.175	GTV	No
2016	PW-20	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.03	0.03	mg/l	0.065 - 0.175	GTV	No
2016	PW-22	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	-
2016	PW-23	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-25	Ammonia	Thermo Aquakem Photometric Automatic Analyser.	Quarterly	0.02	0.02	mg/l	0.065 - 0.175	GTV	No
2016	PW-2	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.7	0.70	mg/l	5	IGV	No
2016	PW-3	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.8	0.75	mg/l	5	IGV	Yes
2016	PW-4	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.9	0.90	mg/l	5	IGV	-
2016	PW-6	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.8	0.80	mg/l	5	IGV	Yes
2016	PW-7	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.9	0.80	mg/l	5	IGV	No
2016	PW-11	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1	0.95	mg/l	5	IGV	Yes
2016	PW-12	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1.1	1.05	mg/l	5	IGV	No
2016	PW-13	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.5	0.50	mg/l	5	IGV	No
2016	PW-13(2)	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.8	0.75	mg/l	5	IGV	No
2016	PW-20	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1.2	1.05	mg/l	5	IGV	No
2016	PW-22	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1.9	1.55	mg/l	5	IGV	-
2016	PW-23	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	1	0.90	mg/l	5	IGV	Yes
2016	PW-25	Potassium	Inductively Coupled Plasma - Optical Emission Spectrometry	Quarterly	0.7	0.65	mg/l	5	IGV	Yes
2016	PW-2	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	8	8.00	mg/l	NAC	IGV	No
2016	PW-3	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	7	6.00	mg/l	NAC	IGV	No
2016	PW-4	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	7	7.00	mg/l	NAC	IGV	-
2016	PW-6	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	8	8.00	mg/l	NAC	IGV	Yes
2016	PW-7	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	8	8.00	mg/l	NAC	IGV	No
2016	PW-11	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	9	7.50	mg/l	NAC	IGV	No
2016	PW-12	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	9.00	mg/l	NAC	IGV	Yes
2016	PW-13	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	9	8.00	mg/l	NAC	IGV	No
2016	PW-13(2)	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	8	6.50	mg/l	NAC	IGV	No
2016	PW-20	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	8	7.50	mg/l	NAC	IGV	No
2016	PW-22	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	8	7.00	mg/l	NAC	IGV	-
2016	PW-23	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	10	9.50	mg/l	NAC	IGV	Yes
2016	PW-25	Dissolved Oxygen	Hach HQ30D Oxygen Meter	Quarterly	6	6.00	mg/l	NAC	IGV	No
2016	PW-2	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-3	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-4	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	-
2016	PW-6	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-7	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-11	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-12	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-13	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-13(2)	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-20	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-22	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	-

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2016	PW-23	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
2016	PW-25	TOC	TOC analyser	Quarterly	<2	<2	mg/l	37.5	GTV	No
							SELECT			SELECT

Groundwater/Soil monitoring template				Lic No: WO 165-02			Year	2016		
			Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013)					Groundwater monitoring template		
*please note exceedance of generic										
information on the use of soil							Surface water EQS	Groundwater regulations GTV's	Drinking water (private supply) standards	
*Depending on location of the site and	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration				Interim Guideline Values (IGV)

Groundwater/Soil monitoring template				Lic No:	WO 165-02		Year	2016
Table 3: Soil results							unit	
Date of sampling							SELECT	
							SELECT	

Additional detail is required please enter it here in 200 words or less

Environmental Liabilities template	Lic No:W0165-02	2016

Click here to access EPA guidance on Environmental Liabilities and Financial provision

			Commentary
1	ELRA initial agreement status	Agreed	
2	ELRA review status		
3	Amount of Financial Provision cover required as determined by the latest ELRA		As part of Condition 12.2.2, the Licensee completed a fully costed Environmental Liabilities Risk Assessment for the site. This document outlines the potential unknown environmental liabilities associated with the landfill and estimates the possible cost of these liabilities. An environmental liability insurance policy has been taken out for €10M.
4	Financial Provision for ELRA status		
5	Financial Provision for ELRA - amount of cover		
6	Financial Provision for ELRA - type	Public Liability Insurance with Environmental Impairment Liability cover,	
7	Financial provision for ELRA expiry date		
8	Closure plan initial agreement status	Closure plan submitted and agreed by EPA	Under condition 12.2.3 of the licence Ballynagran Landfill Ltd is required to maintain a financial provision that is sufficient to cover all liabilities incurred whilst carrying on the activities to which this licence relates. As part of the licence transfer in 2014 the CRAMP liability was recalculated and agreed with the Office for Environmental Enforcement and a financial provision mechanism, to the satisfaction of the Board of the EPA, was put in place.
9	Closure plan review status	Review required and completed	
10	Financial Provision for Closure status	Submitted and agreed by EPA	
11	Financial Provision for Closure - amount of cover		
12	Financial Provision for Closure - type		
13	Financial provision for Closure expiry date		

Environmental Management Programme/Continuous Improvement Programme template Lic No: WO 165-02

Highlighted cells contain dropdown menu click to view

			Additional Information
1	Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information	Yes	In accordance with the requirements of Occupational Health and Safety Assessment Series
2	Does the EMS reference the most significant environmental aspects and associated impacts on-site	Yes	
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	

Environmental Management Programme (EMP) report

Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
Reduction of emissions to Air	Ensure delivery of high gas quality above 39% methane suitable for use engine.	This was achieved		Section Head	Reduced emissions
Reduction of emissions to Air	Target 95% Gas utilisation of all landfill gas generated by the facility, 5% flaring.	95.7% recorded		Section Head	Reduced emissions
Reduction of emissions to Air	Install additional drilled wells when final heights achieved in cell locations	12 vertical wells installed pre final liner installation		Section Head	Reduced emissions
Reduction of emissions to Air	Install additional built wells in new phase of cell back wall	Completed		Section Head	Reduced emissions
Reduction of emissions to Air	Maintain FID surveys on quarterly.	achieved		Section Head	Increased compliance with licence conditions
Reduction of emissions to Water	Maintain the buffer capacity within the leachate lagoon level aim for below 2.3m level.	From mid-February onwards maintained		Section Head	Improved Environmental Management Practices
Reduction of emissions to Water	Review hardstand area for leachate filling and improve where necessary.	Completed		Section Head	Improved Environmental Management Practices
Reduction of emissions to Water	Progress intermediate cap for areas above liner height in cell 6, 7 and 10	Installed final capping		Section Head	Improved Environmental Management Practices
Reduction of emissions to Air	Complete topsoil and grass seeding of bowl cap may 2016,	60% completed, new road install commenced in area.		Section Head	Improved Environmental Management Practices
Reduction of emissions to Air	Minimise dust from construction and minimise areas of soil disturbance	Continuous dust suppression spraying of surface during operations and construction as required.		Section Head	Reduced emissions
Reduction of emissions to Air	Investigate automatic water spray for newly constructed road	To be undertaken		Section Head	Reduced emissions
Groundwater protection	Continue to carry out spillage and emergency response training	Completed and ongoing		Section Head	Improved Environmental Management Practices
Additional improvements	Install new litter netting outside of cell back wall area when completed	Completed and ongoing		Section Head	Improved Environmental Management Practices
Additional improvements	Repair existing netting on cell 9 side of site pre entering back wall area with waste	Completed –shorting of litter netting to open cells area only		Section Head	Improved Environmental Management Practices
Additional improvements	To maintain separation of landfill operations from construction activities	Ongoing		Section Head	Improved Environmental Management Practices
Additional improvements	Improve the separation of plant and personnel and entry and control of personnel	Cross over traffic eliminated shortly into construction works commencement.		Section Head	Improved Environmental Management Practices
Additional improvements	Continually review and assess all nuisance control procedures to ensure minimal impact on surrounding area.	Sign in sign out procedure strictly enforced.		Section Head	Increased compliance with licence conditions

Environmental Management Programme/Continuous Improvement Programme template				Lic No:	WO 165-02
Additional improvements	Improve use of bird scaring devices and update internal bird control plan and implement June 2016.	Updating BNG landfill Procedures		Section Head	Improved Environmental Management Practices
Noise reduction	Ensure noise, dust, odour from vehicle movements are minimised by correct implementation of relevant operational protocols	Existing bird control system working but completion of revised plan to be completed, as part of new procedures.		Section Head	Improved Environmental Management Practices
Additional improvements	Ensure new signage and front gate road access installed	In operation		Section Head	Improved Environmental Management Practices
Additional improvements	Achieve a reduced level in the number and source complaints from previous.	Completed signage update		Section Head	Less complaints
Additional improvements	Continue to promote and facilitate the community develop group meeting and contribution	Complaints increased slightly on previous year		Section Head	Less complaints
Additional improvements	In addition to responding by letter, aim to visit or verbally communicate all complainants during the year. In addition after complaint lodgement, respond to queries as quickly as reasonably practicable, ensuring that any complaints are followed up in writing as soon as possible after receipt of compliant within 5 working days.	Yes ongoing		Section Head	Less complaints
Additional improvements	Ensure monitoring results comply with Licence limits and investigate any exceedances of emission limit value.	A number of visits to complainants during the year		Section Head	Less complaints
Additional improvements	Continue to maintain & improve access to monitoring locations	Completed and ongoing		Section Head	Improved Environmental Management Practices
Additional improvements	Adoption of Improvement driven Safety Observation system for continual improvement. Audit Reports are to be undertaken bi-monthly focussing on swiftly resolving problems as they occur.	Ongoing		Section Head	Improved Environmental Management Practices
Additional improvements	Continue to Develop H&S - develop the trained safety representative on site.	Regular H&S site audits following appoint of new H&S manager, covering site and construction operations		Section Head	Improved Environmental Management Practices
Additional improvements	Develop an additional health and safety trained personnel onsite.	Ongoing,		Section Head	Improved Environmental Management Practices
Additional improvements	Look to develop staff interaction enabling keen spotting of potential problem or hazards through training and communication.			Section Head	Improved Environmental Management Practices
Additional improvements	Ensure toolbox talks are conducted on a monthly bases minimum.	Appointed of New Group Health and Safety Manager		Section Head	Improved Environmental Management Practices
Additional improvements	Prepare system and procedures for the new OH&S system due in 2016	Appointed of new Group Health and Safety Manager		Section Head	Improved Environmental Management Practices
Additional improvements	Encourage feedback on equipment and resources including adequacy of PPE in protective properties, wear ability and durability and look at alternatives, where appropriate.	Ongoing , site audits regularly undertaken in operations and constructions phases		Section Head	Improved Environmental Management Practices
Additional improvements	Continue to engage with all stakeholder and operate the site in an open and inclusive manner, feeding information into the Community fund community visiting neighbours meeting local groups and operating an open door policy.	Ongoing		Section Head	Less complaints
SELECT		SELECT		SELECT	SELECT
SELECT		SELECT		SELECT	SELECT

Noise monitoring summary report

Lic No: WO 165-02 Year

1	Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below	Yes
2	Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? (Noise Guidance note NG4)	Yes
3	Does your site have a noise reduction plan	No
4	When was the noise reduction plan last updated?	Enter date
5	Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?	No

Table N1: Noise monitoring summary

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA_{eq}	LA_{90}	LA_{10}	LA_{max}	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)
07/03/2016	15:22-15:37	NL1		36	38	32		No	SELECT	Facility: Mobile plant in cell area faintly audible. Extraneous: Distant road traffic to E and NE slightly audible continuously. No other noise audible apart from bird song/calls, aircraft and lightly rustling vegetation.
07/03/2016	14:37-14:52	NL2		51	55	38		No		Facility: Tracked excavator on mound continuously audible at low level. Compactor flat spectrum reversing alarm also repeatedly audible. Sporadic truck and crew vehicle movements audible on adjacent haul road Extraneous: Distant road traffic to NE continuously slightly audible. Sporadic traffic outside boundary quite audible. Bird song/calls and aircraft. Lightly rustling vegetation.
07/03/2016	15:01-15:16	NL3		45	47	42		No		Facility: Mobile plant in active cell area continuously quite audible. Occasional truck movements on cell access road clearly audible when present. Extraneous: M11 road traffic to E continuously audible at low level. Aircraft, bird song/calls and lightly rustling vegetation.
07/03/2016	14:08-14:23	NL4		49	48	36		No		Facility: Excavator bucket noise occasionally slightly audible. Several ejector trailer donkey engines also slightly audible during interval. Extraneous: Distant road traffic audible to NE and E continuously in background. Bird song/calls, aircraft and lightly rustling vegetation. Distant dog barking.
07/03/2016	13:47-14:02	NSL1		48	45	39		No		Facility: No emissions audible, apart from occasional slightly audible excavator bucket noise. Extraneous: Road traffic to NE continuously slightly audible. Sporadic passing local traffic dominant when present. Bird song/calls, aircraft and lightly rustling vegetation. Occasional dog barking at nearby dwelling.
07/03/2016	15:55-16:10	NSL2		58	57	43		No		Facility: No cell area emissions audible, apart from one ejector trailer operation. Sporadic truck movements through weighbridge area quite audible. Leachate tanker truck operation audible at low level throughout most of int Extraneous: M11 traffic to NE and E continuously audible at low level. Occasional passing road traffic dominant when present. Crow calls significant. Aircraft.
07/03/2016	16:17-16:32	NSL3		59	63	48		No		Facility: None audible. Extraneous: Intermittent passing traffic dominant. During lulls, M11 traffic continuously clearly audible. No other noise audible apart from local birdsong.
08/06/2016	14:41-14:56	NL1		39	41	36		No		Facility: None audible. Extraneous: M11 traffic to E and NE continuously quite audible, masking all sources other than local bird song/calls.
08/06/2016	13:56-14:11	NL2		41	42	36		No		Facility: Dozer operating at SW corner of site continuously audible at low level. Leachate tanker pump also continuously audible at low level. Mobile plant on mound slightly audible regularly from 1400. Sporadic truck and crew representative of site emissions. Extraneous: Distant road traffic to NE continuously slightly audible. Sporadic traffic outside boundary quite audible. Bird song/calls and aircraft.
08/06/2016	14:21-14:36	NL3		43	45	41		No		Facility: Mobile plant on cell floor slightly audible. No other noise audible apart from several crew vehicle movements on nearest site road. Extraneous: M11 road traffic to E continuously audible at low level. Aircraft, bird song/calls. Breeze through nearby trees continuously quite audible, partially masking other sources.
08/06/2016	15:54-16:09	NL4		46	44	36		No		Facility: Dozer and excavator operations almost continuously slightly audible. Extraneous: Distant road traffic audible to NE and E continuously in background. Bird song/calls and aircraft. One local car pass, dominant when present. Measurement position temporarily relocated 360 m S due to inaccessibility.
08/06/2016	15:35-15:50	NSL1		55	45	38		No		Facility: Dozer operating near SW corner audible continuously, with audibility varying from slight to low level. No other emissions audible. Extraneous: Road traffic to NE continuously slightly audible. Sporadic passing local traffic dominant when present. Bird song/calls, aircraft and lightly rustling vegetation. Occasional dog barking at nearby dwelling.
08/06/2016	15:10-15:25	NSL2		59	57	41		No		Facility: No emissions audible apart from leachate tanker continuously dominant until 1517. Extraneous: No emissions audible until 1517 apart from intermittent passing traffic. Thereafter, M11 traffic to NE and E continuously audible at low level. Mini-excavator regularly audible at low level, operating 200 m E. Bird s
08/06/2016	16:16-16:31	NSL3		57	61	42		No		Facility: None audible. Extraneous: Intermittent passing traffic dominant. During lulls, M11 traffic continuously quite audible. No other noise audible apart from local birdsong and aircraft.
09/08/2016	09:45-10:00	NL1		40	42	36		No		Facility:Excavator bucket at borrow pit N of cell occasionally slightly audible.Extraneous: Breeze through nearby trees audible at low level continuously.Bird song/calls.Aircraft.Distant traffic slightly audible continously with tra SW.
09/08/2016	08:56-09:11	NL2		49	51	34		No		Facility:Occasional truck and crew vehicles on adjacent haul road dominant when present.Excavtor bucket on mound occasionally audible at low level.Extraneous: Road traffic on local road occasionally celearly audible.Rustlin
09/08/2016	09:21-09:36	NL3		51	54	46		No		Facility: Compactors in cell continuously quite audible,dominating L90.Excavator in borrow pit also almost continuously audible at low level.Intermittent 6x6 dump truck movemnts on nearest haul road clearly audible when pr
09/08/2016	10:56-11:11	NL4		54	57	40		No		Facility:No emissions audible.Extraneous:Rustling vegetation significant,masking all other noise apart from local birdsong,cattle and aircraft
09/08/2016	10:30-10:45	NSL1		43	46	36		No		Facility:Plant emissions continuously slightly audible.Several truck movements on nearest haul road slightly audible. Extraneous: Vehicle movemnt x1 on adjacent road dominant when present.Lightly rustling vegetation,bird so
09/08/2016	10:10-10:25	NSL2		61	56	41		No		Facility: Sporadic truck movemtns on haul road near weighbridge quite audible when present.Distant plant emissions slightly audible on breeze. Extraneous: Intermittent passing road traffic dominat when present.
09/08/2016	11:24-11:39	NSL3		56	60	45		No		Facility: No emissions audible.Extraneous:Intermittent traffic on adjacent road and throough nearby intersection dominant when present.M11 traffic continuously clearly audible. Bird song/calls and aircraft.Continuous plant e
23/11/2016	10:14-10:29	NL1		44	46	42		No		Facility: Vibro-roller operating in new cell area occasionally slightly audible, with low frequency rumble. No other emissions audible, apart from well drilling truck audible at low level from during last 3 min. Extraneous: M11 traffic to E continuously clearly audible, dominating soundscape. Bird song and aircraft. Specific LAeq determination: Roller insufficient to influence L90, thus <L90
23/11/2016	11:04-11:19	NL2		52	51	45		No		Facility: Various plant operating on mound and in active cell area almost continuously audible at low level. Reversing alarms also audible. Occasional truck and crew vehicle movements on adjacent haul road dominant when pr Extraneous: M11 traffic continuously audible at low level to E. Birdsong. Specific LAeq determination: LAeq representative.
23/11/2016	10:40-10:55	NL3		71	72	69		No		Facility: Well drilling crew operating at 30 m continuously dominant. No other noise audible. Extraneous: All sources masked by well drilling crew. Specific LAeq determination: LAeq representative
23/11/2016	09:33:00-09:48	NL4		45	46	43		No		Facility: Plant operations slightly audible from time to time on breeze, including excavator bucket and reversing alarms. Extraneous: M11 traffic to NE continuously clearly audible, dominating soundscape. Birdsong and aircraft. Specific LAeq determination: Site emissions <L90.
23/11/2016	09:11-09:26	NSL1		50	49	43		No		Facility: Dozer audible at low level from time to time. Plant reversing alarms repeatedly audible at low level. Truck movements on nearest haul road slightly audible on occasion. Ejector trailer donkey engine audible at low leve Extraneous: Sporadic local traffic intrusive when present. M11 traffic to NE continuously quite audible,dominating background. Birdsong. Dog barking audible at low level at nearby dwelling to 0914. Aircraft. Specific LAeq determination: Plant noise sufficiently audible and frequent to influence measured data, although LAeq and L90 dominated by traffic noise. Possible only to conclude <LAeq
23/11/2016	08:48-09:03	NSL2		60	61	48		No		Facility: Sporadic truck movements through weighbridge area and on haul road audible at low level. Ejector trailer donkey engine audible at low level for a time. Reversing alarms in cell area slightly audible.Extraneous: Interm audibleto NE, dominating background. Aircraft, bird song/calls. Specific LAeq determination: Site emissions not sufficiently frequent or audible to influence measured data due to traffic noise, thus <L90.
23/11/2016	11:27-11:42	NSL3		59	64	48		No		Facility: No emissions audible. Extraneous: Intermittent passing traffic intrusive when present. M11 traffic otherwise dominant. Birdsong, dog barking 200 m N, and aircraft. Specific LAeq determination: Site inaudible, thus <<L90

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options?	SELECT

** please explain the reason for not taking action/resolution of noise issues?
Any additional comments? (less than 200 words)

Resource Usage/Energy efficiency summary	Lic No:	WO 165-02	Year	2016

				Additional information
1	When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below		Enter date of audit	9th March 2010
2	Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information	SEAI - Large Industry Energy Network (LIEN)	No	
3	Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information		No	

Table R1 Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWHrs)				
Total Energy Generated (MWHrs)				
Total Renewable Energy Generated (MWHrs)				
Electricity Consumption (MWHrs)	122	4.142	-33%	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)	191.784	412.143	47%	
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R2 Water usage on site

					Water Emissions	Water Consumption	
Water use	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*	Volume Discharged back to environment(m^3yr):	Volume used i.e not discharged to environment e.g. released as steam m3/yr	Unaccounted for Water:
Groundwater							
Surface water							
Public supply	652	652	0				
Recycled water							
Total							

* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R3 Waste Stream Summary

	Total	Landfill	Incineration	Recycled	Other
Hazardous (Tonnes)					
Non-Hazardous (Tonnes)					

Resource Usage/Energy efficiency summary Lic No: WO 165-02 Year 2016

Table R4: Energy Audit finding recommendations

Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments
23rd February 2009	Prepare Energy Policy Statement		energy audit					
	Appoint responsible person		energy audit					
	Provide appropriate training		energy audit					
	Prepare targets and objectives		energy audit					
	Annual summary on performance in AER		energy audit					
	Assessment of energy efficiency of future plant and equipment		energy audit					
	Communicate policy objectives to staff		energy audit					
	Provide sub meters for gas utilisation plants		energy audit					
	Bi-Monthly data analyses and identification of efficiency opportunities		energy audit					
	Annual summary report in AER		energy audit					
	Provide awareness training to staff		energy audit					
	Provide feed back to staff		energy audit					
	lighting		energy audit					
	for mobile plant.		energy audit					
	Benchmark gas utilisation plant against KTK and IPS systems		energy audit					

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information

	Unit ID	Unit ID	Unit ID	Unit ID	Station Total
Technology					
Primary Fuel					
Thermal Efficiency					
Unit Date of Commission					
Total Starts for year					
Total Running Time					
Total Electricity Generated (GWH)					
House Load (GWH)					
KWH per Litre of Process Water					
KWH per Litre of Total Water used on Site					

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Complaints

	Additional information
Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below	Yes

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective action< 20 words	Resolution status	Resolution date	Further information
01.12.2015	Landfill Gas	-			SELECT		
02.01.2016	Waste	-			SELECT		
02.01.2016	Landfill Gas	-			SELECT		
03.01.2016	Landfill Gas	-			SELECT		
03.01.2016	Landfill Gas	-	COM004291		SELECT		
04.01.2016	Landfill Gas	-					
04.01.2016	Landfill Gas	-					
04.01.2016	Landfill Gas	-					
05.01.2016	Landfill Gas	-					
08.01.2016	Landfill Gas	-					
09.01.2016	Landfill Gas	-					
09.01.2016	Waste	-					
11.01.2016	Landfill Gas	-					
16.01.2016	Landfill Gas	-					
16.01.2016	Landfill Gas	-					
19.01.2016	Landfill Gas	-					
19.01.2016	Landfill Gas	-	COM004354				
19.01.2016	Landfill Gas	-					
21.01.2016	Landfill Gas	-					
22.01.2016	Landfill Gas	-					
25.01.2016	Landfill Gas	-					
08.02.2016	Landfill Gas	-					
11.02.2016	Landfill Gas	-					
11.02.2016	Landfill Gas	-					
12.02.2016	Landfill Gas / Waste	-					
15.02.2016	Landfill Gas	-					
15.02.2016	Landfill Gas	-					
15.02.2016	Landfill Gas	-					
17.02.2016	Landfill Gas	-					
24.02.2016	Landfill Gas	-					
24.02.2016	Landfill Gas	-					
04.03.2016	Landfill Gas / Waste	-					
04.03.2016	Landfill Gas	-					
07.03.2016	Landfill Gas	-					
16.03.2016	Landfill Gas	-					
16.03.2016	Landfill Gas	-					
11.04.2016	Landfill Gas	-	COM004630				
11.04.2016	Landfill Gas	-					
13.04.2016	Landfill Gas	-					
14.04.2016	Landfill Gas	-					
15.04.2016	Landfill Gas	-					
15.04.2016	Landfill Gas	-					
16.04.2016	Landfill Gas	-					
22.04.2016	Landfill Gas	-	COM004684				
25.04.2016	Landfill Gas	-	COM004692				
25.04.2016	Landfill Gas	-	COM004705				
25.04.2016	Landfill Gas	-	COM004691				
25.04.2016	Landfill Gas	-	COM004693				
25.04.2017	Landfill Gas	-	Direct				
26.04.2016	Landfill Gas	-	COM004701				
26.04.2017	Landfill Gas	-	COM004695				
27.04.2016	Landfill Gas	-	COM004706				
06.05.2016	Landfill Gas	-	COM004730				
06.05.2016	Landfill Gas	-	COM004726				
06.05.2016	Landfill Gas	-	COM004729				
11.05.2016	Landfill Gas	-	COM004763				
11.05.2016	Waste	-	COM004765				
11.05.2016	Vermins	-	COM004774				
23.05.2016	Landfill Gas / Waste	-	COM004810				
24.05.2016	Waste	-	COM004814				
27.05.2016	Landfill Gas	-	COM004837				
27.05.2016	Landfill Gas	-	COM004836				
29.05.2016	Landfill Gas / Waste	-	COM004844				
01.06.2016	Waste	-	COM004862				
01.06.2016	Landfill Gas / Waste	-	COM004861				
01.06.2016	Landfill Gas / Waste	-	COM004857				
16.06.2016	Landfill Gas	-	COM004959				
17.06.2016	Landfill Gas	-	COM004970				
28.06.2016	Waste	-	COM005010				
05.07.2016	Landfill Gas	-	COM005051				
14.07.2016	Landfill Gas	-	COM005094				
14.07.2016	Landfill Gas / Waste	-	COM005095				
14.07.2016	Landfill Gas	-	COM005090				
18.07.2016	Waste	-	COM005100				
29.07.2016	Landfill Gas	-	COM005143				
29.07.2016	Waste	-	COM005142				
29.07.2016	Waste	-	COM005149				
29.07.2016	Waste	-	COM005150				
30.07.2016	Waste	-	COM005153				
02.08.2016	Waste	-	COM005152				
15.08.2016	Waste	-	COM005198				
15.08.2016	Landfill Gas	-	COM005209				
17.08.2016	Waste	-	COM005220				
17.08.2016	Landfill Gas	-	COM005224				
18.08.2016	Waste	-	COM005227				
23.08.2016	Waste	-	COM005254				
24.08.2016	Waste	-	COM005257				
25.08.2016	Waste	-	COM005264				
29.08.2016	Waste	-	COM005276				
29.08.2016	Landfill Gas	-	COM005268				
07.09.2016	Waste	-	COM005309				
12.09.2016	Waste	-	COM005337				
13.09.2016	Landfill Gas	-	COM005348				
17.09.2016	Landfill Gas	-	COM005376				
19.09.2016	Waste	-	COM005375				
21.09.2016	Waste	-	COM005399				

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22.09.2016	Landfill Gas	-	COM005409					
25.09.2016	Landfill Gas	-	COM005422					
26.09.2016	Landfill Gas	-	COM005414					
10.10.2016	Waste	-	N/A					
12.10.2016	Landfill Gas	-	N/A					
12.10.2016	Landfill Gas	-	COM005483					
20.10.2016	waste	-						
04.11.2016	Landfill gas	-	Com005563					
6.11.2016	Landfill gas	-	Com005565					
11.11.2016	Waste	-	Com005574					
15.11.2017	Landfill gas	-	Com005577					
20.11.2016	Landfiill gas	-	Com005588					
22.11.2016	Waste	-	Com005589					
23.11.2016	Waste	-	Com005590					
23.11.2016	Waste	-	Com005591					
26.11.2016	Landfill Gas	-	Com005592					
13.12.2016	Landfill Gas / Waste	-	Com005540					
19.12.2016	Landfill Gas	-	Com005565					
27.12.2016	Landfiill Gas	-	Com005669					
25.12.2016	Noise	-	Com005678					
25.12.2016	Waste	-	Com005679					
31.12.2016	Landfill Gas	-	Com005672					

Total complaints open at start of reporting year	
Total new complaints received during reporting year	98
Total complaints closed during reporting year	
Balance of complaints end of reporting year	

Incidents

Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below	Additional information
SELECT	

*For information on how to report and what constitutes an incident	What is an incident

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category*please refer to guidance	Receptor	Cause of incident	Other cause(please specify)	Activity in progress at time of incident	Communication	Occurrence	Corrective action<20 words	Preventative action <20 words	Resolution status	Resolution date	Likelihood of reoccurence
04/01/2016 07:00	Odour	Other location (On site)	1. Minor	Air	Adverse weather	-	Normal activities	EPA	New	Closing off gas collection line to prevent liquid flowing in				
29/01/2016 11:30	Trigger level reached	Licenced discharge point (MG3,MG4,MG5,MG7,MG9,MG10,MG16 and MG49)	1. Minor	Air	Operational controls	-	Normal activities	EPA	New		The landfill gas migration assessment report was completed at the end of January 2016 , a copy of the report will be uploaded with this incident. Monitoring of the additional wells installed in 2015 will continue to be monitored as part of the on-going perimeter gas monitoring programme.			
29/02/2016 14:30	Trigger level reached	Licenced discharge point (MG2,MG4,MG5,MG6,MG7,MG9,MG10,MG11,MG14,MG15,MG16,MG19,MG23,MG46,MG46A,MG49)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring	Continue to monitor levels closely in the next round of perimeter gas well monitoring	Monitoring of the additional wells installed in 2015 will continue to be monitored as part of the on-going perimeter gas monitoring programme.			Possible
27/03/2016 17:00	Trigger level reached	Licenced discharge point (Leachate Level in Cell 7 exceeded 1m mark)	1. Minor	Ground	Operational controls	-	Normal activities	EPA	Recurring	Replacement pump will be used	continue to maintain spare pumps on site to replace when faulty			Possible
25/03/2016 14:00	Trigger level reached	Licenced discharge point (MG2,MG4, MG5, MG6 , MG8 ,MG9, MG10, MG11 ,MG14 ,MG16,MG16A ,MG46 , MG46A and MG49. MG46A)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring					
21/04/2016 00:00	Trigger level reached	Licenced discharge point (MG2,MG7,MG11,MG14,MG16,MG20,MG46A and MG49)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring	Continue to monitor levels closely in the next round of perimeter gas well monitoring	Continue to monitor wells as part of the on-going perimeter gas monitoring programme.			Possible
19/05/2016 10:30	Trigger level reached	Licensed discharge point (MG4,MG5,MG7,MG10,MG11,MG16,MG16A,MG20,MG23,MG46and MG46A)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring	Continue to monitor levels closely in the next round of perimeter gas well monitoring	Continue to monitor wells as part of the on-going perimeter gas monitoring programme.			Possible
22/06/2016 10:30	Trigger level reached	Licensed discharge point (MG5,MG9,MG11,MG16,MG16A,MG17,MG20,MG46and MG46A)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring	Continue to monitor levels closely in the next round of perimeter gas well monitoring	Continue to monitor wells as part of the on-going perimeter gas monitoring programme.			Possible
28/07/2016 11:30	Trigger level reached	Licensed discharge point (MG2,MG4,MG5,MG8,MG9,MG10,MG11,MG16,MG16A,MG22,MG46 and MG46A)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring	Continue to monitor levels closely in the next round of perimeter gas well monitoring	Continue to monitor wells as part of the on-going perimeter gas monitoring programme.			Possible
15/08/2016 10:00	Trigger level reached	Licensed discharge point (MG2,MG4,MG5,MG8,MG9,MG10,MG11,MG16,MG16A,MG22,MG46 and MG46A)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring					
21/09/2016 10:00	Trigger level reached	Licensed discharge point (MG2, MG4,MG5,MG8,MG9,MG10,MG11,MG13,MG14,MG16,MG16A,MG17,MG18,MG19,MG20,MG46A and MG47)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring					
28/10/2016 11:00	Trigger level reached	Licensed discharge point (MG4, MG11, MG14, MG16, MG20, MG21, and MG47)	1. Minor	Air	Plant or equipment issues	-	Normal activities	EPA	Recurring					
30/11/2016 11:00am	Trigger level reached	Licenced discharge point (MG2, MG4,MG5,MG8,MG9, MG10,MG11,MG14,MG16,MG20,MG21, and MG47)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring	Continue to monitor levels closely in the next round of perimeter gas well monitoring	Continue to monitor wells as part of the on-going perimeter gas monitoring programme.			Possible
Dec-16	Trigger level reached	Licenced discharge point (MG2, MG4,MG5,MG7,MG8,MG9, MG10,MG11,MG14,MG16,MG16a,MG17, MG18,MG19,MG20,MG21,MG22, MG46a MG47 MG 49)	1. Minor	Air	Operational controls	-	Normal activities	EPA	Recurring					
07/11/2016 09:00	Monitoring equipment offline	Other location (Cell 10,leachate level pump showed a trip failure)	1. Minor	No Uncontrolled release	Plant or equipment issues	-	Normal activities	EPA	New					
22/11/2016 00:00	Monitoring equipment offline	Other location (Cell 10,leachate pump showed a trip failure)	1. Minor	No Uncontrolled release	Plant or equipment issues	-	Normal activities	EPA	Recurring					
10/11/2016 10:00	Monitoring equipment offline	Other location (Cell 3,transducer pipe in cell 3)	1. Minor	No Uncontrolled release	Plant or equipment issues	-	Normal activities	EPA	Recurring	replace transducer	replace transducer,increase transducer stock on site			
02/12/2016 14:45	Fire	Other location (Compactor Machine fire)	3. Serious	Air	Plant or equipment issues	-	Normal activities	EPA	New					Low
08/12/2016 05:00	Monitoring equipment offline	Other location (TOC meter)	1. Minor	Air	Plant or equipment issues	-	Normal activities	EPA	New	A technician is scheduled to check the TOC meter system tomorrow and assess the equipment.	review of incident and any learnings			Low once instrument is r
14/12/2016 12:00	Breach of ELV	Licenced discharge point (All Sw points exceedance of suspended solids)	1. Minor	Water	Adverse weather	-	Normal activities	EPA	New					
	SELECT	Other location (please specify here)	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT			SELECT		SELECT

Total number of incidents current year	20
Total number of incidents previous year	21
% reduction/ increase	95% reduction

WASTE SUMMARY Lic No: WO 165-02 Year 2016

SECTION A-PRTR ON SITE WASTE TREATMENT AND WASTE TRANSFERS TAB- TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES PRTR Facility Inputs dropdown list click to see options

SECTION B- WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

			Additional Information
1	Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility ?; (waste generated within your boundaries is to be captured through PRTR reporting) If yes please enter details in table 1 below	Yes	
2	Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information	SELECT	
3	Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information	SELECT	

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

Licenced annual tonnage limit for your site (total tonnes/annum)	EWC code European Waste Catalogue EWC codes	Source of waste accepted	Description of waste accepted **Please enter an accurate and detailed description - which applies to relevant EWC code** European Waste Catalogue EWC codes	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reduction/ Increase over previous year +/ - %	Reason for reduction/ increase from previous reporting year	Packaging Content (%)- only applies if the waste has a packaging component	Disposal/Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
	20 03 07	20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Bulky Waste	5,392.70	2,450.82	45			D5- Specially engineered landfill		
	20 03 01	20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	MSW Mixed	120,460.99	57,629.69	48			D5- Specially engineered landfill		
	17 09 04	17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	C&D Mixed	1,102.26	1,695.74	154			D5- Specially engineered landfill		
	17 09 04	17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	C&I Mixed	19,514.54	25,494.57	131			D5- Specially engineered landfill		
	20 02 01	20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Knotweed	36.2	1.66	5			D5- Specially engineered landfill		
	10 01 02	10- WASTES FROM THERMAL PROCESSES	Incinerator ash	423.18	N/A	-			R5-Recycling/reclamation of other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials		
	19 05 99	19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	CLOR stabilised msw fines	1,898.28	292.74	#VALUE!			R3-Recycling/reclamation of organic substances which are not used as solvents(including composting oranother biological transformation processes)which includes gasification and pyrolisis		
	19 12 04	19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	PVC	133.2	N/A	#VALUE!			D5- Specially engineered landfill		
	19 12 09	19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	Grits and screenings	1,858.44	2,174.22	117			D5- Specially engineered landfill		
	19 05 99	19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	CLO stabilised msw fines	9,095.22	2,92.74	3			R5-Recycling/reclamation of other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials		
	17 05 04	17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	Stone	6,294.38	8,275.20	131			R5-Recycling/reclamation of other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials		
	19 12 07	19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	Woodchip	2,720.66	9,690.35	356			R3-Recycling/reclamation of organic substances which are not used as solvents(including composting oranother biological transformation processes)which includes gasification and pyrolisis		
	19 12 12	19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	Fines (C&D, C&I)	41,598.02	37,299.72	90			R5-Recycling/reclamation of other inorganic materials which includes soil celaning resuling in recovery of the soil and recycling of inorganic construction materials		
	17 05 04	17- CONSTRUCTION AND DEMOLITION WASTES	Soil and stones	5,446.86	19,179.34	352			R5-Recycling/reclamation of other inorganic materials		
	20 03 03	20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Street cleanings	11,243.82	N/A	#VALUE!					

WASTE SUMMARY	Lic No:	WO 165-02	Year	2016

Environmental Protection Agency

Guidance to completing the PRTR workbook

PRTR Returns Workbook

Version 1.1.19

REFERENCE YEAR	2016

1. FACILITY IDENTIFICATION

Parent Company Name	Ballynagran Landfill Limited
Facility Name	Ballynagran Residual Landfill
PRTR Identification Number	W0165
Licence Number	W0165-02

Classes of Activity

No.	class_name
-	Refer to PRTR class activities below

Address 1	Ballynagran
Address 2	Coolbeg and Kilcandra
Address 3	
Address 4	
	Wicklow
Country	Ireland
Coordinates of Location	-8.41098 51.914
River Basin District	IEEA
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
AER Returns Contact Name	Tomas Fingleton
AER Returns Contact Email Address	tomas.fingleton@landfills.ie
AER Returns Contact Position	Landfill Manager
AER Returns Contact Telephone Number	0867741813
AER Returns Contact Mobile Phone Number	0867741813
AER Returns Contact Fax Number	045 482629
Production Volume	0.0
Production Volume Units	
Number of Installations	0
Number of Operating Hours in Year	0
Number of Employees	10
User Feedback/Comments	Engine 1 not in operation at the time of the Air Emission Survey therefore no data is availible.
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(d)	Landfills
5(c)	Installations for the disposal of non-hazardous waste
5(d)	Landfills
50.1	General

3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

4. WASTE IMPORTED/ACCEPTED ONTO SITE

Guidance on waste imported/accepted onto site

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	

4.1 RELEASES TO AIR Link to previous years emissions data | PRTR# : W0165 | Facility Name : Ballynagran Residual Landfill | Filename : W0165_2016 PRTR.xls | Return Year : 2016 | 26/05/2017 12:40

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SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs									
POLLUTANT			METHOD									QUANTITY		
			Method Used		Flare 1	Engine 2	Engine 3	Engine 4	Engine 1					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	Emission Point 5	Emission Point 6	Emission Point 7	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
02	**Carbon monoxide (CO)**	M	EN 15058:2004	NCIR By Horiba PG-250	2.77	1138.00	6441.00	4532.00	0.00	0.00	0.00	12113.77	0.0	0.0
05	Nitrous oxide (N2O)	M	EN 14792:2005	Chemiluminescence	77.00	98.00	3701.00	2601.00	0.00	0.00	0.00	6477.0	0.0	0.0
11	Sulphur oxides (SOx/SO2)	C	OTH	NDIR Absorption	3059.00	4240.00	22763.00	1626.00	0.00	0.00	0.00	31688.0	0.0	0.0
01	Methane (CH4)	C	OTH	Gassim Model	0	0.00	0.00	0.00	0.00	0.00	0.00	366151.0	0.0	366151.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO AIR					Please enter all quantities in this section in KGs						
POLLUTANT			METHOD						QUANTITY		
			Method Used								
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)

RELEASES TO AIR					Please enter all quantities in this section in KGs						
POLLUTANT			METHOD						QUANTITY		
			Method Used								
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	Emission Point 4	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

Additional Data Requested from Landfill operators

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Ballynagran Residual Landfill

Please enter summary data on the quantities of methane flared and / or utilised	T (Total) kg/Year	M/C/E	Method Used: Method Code	Method Used: Designation or Description	Facility Total Capacity m3 per hour	
Total estimated methane generation (as per site model)	5480137.0				N/A	
Methane flared	219799.0				0.0	(Total Flaring Capacity)
Methane utilised in engine/s	4894187.0				0.0	(Total Utilising Capacity)
Net methane emission (as reported in Section A above)	366151.0				N/A	

4.2 RELEASES TO WATERS

Link to previous years emissions data

SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING PRTR POLLUTANTS

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT					QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

Link to previous years emissions data

| PRTR# : W0165 | Facility Name : Ballynagran Residual Landfill | Filename : W0165_2016 PRTR.xl 26/05/2017 12:41

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
			Method Used					
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

Link to previous years emissions data

SECTION A : PRTR POLLUTANTS

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

RELEASES TO LAND					Please enter all quantities in this section in KGs		
POLLUTANT		METHOD			QUANTITY		
			Method Used				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
					0.0	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE

Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	19 07 03	No	942.44	landfill leachate other than those mentioned in 19 07 02	D9	M	Weighed	Offsite in Ireland	Rilta Environmental Ltd,W0192-01	Block 402 ,Grant?s Drive ,Greenogue Business Park. Rathcoole ,Dublin,Ireland		
Within the Country	19 07 03	No	27396.29	landfill leachate other than those mentioned in 19 07 02	D9	M	Weighed	Offsite in Ireland	Ringsend WWTP,D00-34-01	Ringsend ,Dublin,-,-,ireland		
Within the Country	19 07 03	No	1011.56	landfill leachate other than those mentioned in 19 07 02	D9	M	Weighed	Offsite in Ireland	Kilcullen Landfill Ltd.,W0081-04	Brownstown,Kilcullen Landfill Ltd.,County Kildare,-,ireland		

* Select a row by double-clicking the Description of Waste then click the delete button