

Table 2
Summary of Groundwater Field Parameters - May 2019

Well ID	Sampling Event	Date Measured	SWL (mbTOC)	BOC (mbTOC)	Dissolved Oxygen (ppm)	Electrical Conductivity (us/cm)	pH	Ox-Red Potential (mV)	Temperature (°C)
CSM_BH02	Event 8 - May 2019	14/05/2019	16.07	28.14	0.24	675	6.91	-61.1	21
CSM_BH04	Event 8 - May 2019	13/05/2019	18.502	35.2	1.82	433.2	5.92	49.3	21.3
CSM_BH05	Event 8 - May 2019	13/05/2019	19.359	33.43	0.31	980	6.57	-3.9	19.9
CSM_BH06	Event 8 - May 2019	14/05/2019	20.395	35.93	0.53	986	6.33	11.4	21.1
CSM_BH08	Event 8 - May 2019	15/05/2019	13.295	35.55	0.74	540	6.38	-18.7	20.7
CSM_BH09S	Event 8 - May 2019	13/05/2019	4.25	6.59	0.71	670	5.89	34.6	19.9
CSM_BH10S	Event 8 - May 2019	13/05/2019	4.349	9.87	0.12	269.7	4.99	198.9	21.5
SRT_BH047	Event 8 - May 2019	14/05/2019	5.198	6.96	0.99	441.5	7.68	91.8	20.6
SRT_BH052	Event 8 - May 2019	14/05/2019	6.246	7.9	2.63	363.4	6.98	84.9	20.7
SRT_BH059	Event 8 - May 2019	15/05/2019	4.204	6	3.72	423.5	6.8	149	21.4
SRT_BH063	Event 8 - May 2019	15/05/2019	10.84	14.5	3.44	793	6.59	74.9	21.2
SRT_CBH015	Event 8 - May 2019	15/05/2019	3.85	5.91	0.3	222.3	5.15	189.3	21.6
SRT_CBH017	Event 8 - May 2019	15/05/2019	2.905	4.96	2.76	153.2	5.75	152.3	21.9



Table 1
Summary of Groundwater Analytical Results - May 2019

	Iron speciation	Inorganics				Hardness & Alkalinity		Major Ions						Nutrients		Metals								BTEXN								
	Ferrous Iron mg/L	pH (Lab)	Total Dissolved Solids mg/L	Total Suspended Solids mg/L	Cyanide (Total) mg/L	Alkalinity (Carbonate as CaCO3) mg/L	Alkalinity (Bicarbonate as CaCO3) mg/L	Calcium mg/L	Magnesium mg/L	Potassium mg/L	Sodium mg/L	Chloride mg/L	Sulfate mg/L	Ammonia as N mg/L	Nitrate (as N) mg/L	Arsenic (Filtered) mg/L	Cadmium (Filtered) mg/L	Chromium (III+VI) (Filtered) mg/L	Copper (Filtered) mg/L	Lead (Filtered) mg/L	Manganese (Filtered) mg/L	Mercury (Filtered) mg/L	Nickel (Filtered) mg/L	Zinc (Filtered) mg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylene (o) µg/L	Xylene (m & p) µg/L	Xylene Total µg/L	Naphthalene (BTEXN) µg/L	BTEX (Sum of Total) - Lab Calc µg/L
EQL	0.05	0.1	10	1	0.005	10	20	0.5	0.5	0.5	0.5	1	5	0.01	0.02	0.001	0.0002	0.001	0.001	0.001	0.005	0.0001	0.001	0.005	1	1	1	1	2	3	10	1
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																
2-4m																									5000	NL	NL			NL	NL	
4-8m																									5000	NL	NL			NL	NL	
>8m																									5000	NL	NL			NL	NL	
NEPM 2013 Table 1C GILs, Marine Waters					0.004											0.0007	0.0044	0.0013	0.0044		0.0001	0.007	0.015	500							50	
NHMRC Recreational Guidelines 2008 - Health					0.8								5000			0.1	0.02		20	0.1	5	0.01	0.2	10	8000	3000			6000			
Sydney Water Trade Waste Acceptance Standards 2018-19 (non-domestic)		7-10			1											1	1	3	5	2	10	0.03	3	5	100	500	1000			1000		

Field_ID	Location_Code	Sampled_Date_Time	Sample_Type	Ferrous Iron	pH	TDS	TSS	Cyanide	Alkalinity (CaCO3)	Alkalinity (HCO3)	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Ammonia as N	Nitrate	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Nickel	Zinc	Benzene	Toluene	Ethylbenzene	Xylene (o)	Xylene (m & p)	Xylene Total	Naphthalene	BTEX
CSM_BH02	CSM_BH02	14/05/2019	Normal	1.4	8.5	410	3300	0.005	11	240	43	26	3.2	64	68	38	0.12	<0.02	<0.001	<0.0002	<0.001	<0.001	<0.001	0.55	<0.0001	0.012	0.01	<1	<1	<1	<1	<2	<3	<10	-
CSM_BH04	CSM_BH04	13/05/2019	Normal	0.12	7.3	260	3700	<0.005	<10	85	5.2	9.5	2.4	66	56	56	<0.01	<0.02	<0.001	<0.0002	<0.001	0.004	<0.001	0.3	<0.0001	0.029	0.29	<1	<1	<1	<1	<2	<3	<10	-
CSM_BH05	CSM_BH05	13/05/2019	Normal	0.99	8.2	560	620	<0.005	<10	220	33	29	6.2	130	190	54	<0.01	<0.02	0.001	<0.0002	<0.001	<0.001	<0.001	0.37	<0.0001	0.008	0.027	<1	<1	<1	<1	<2	<3	<10	-
CSM_BH06	CSM_BH06	14/05/2019	Normal	2.6	8	580	250	<0.005	<10	190	41	35	5.1	100	220	23	0.02	<0.02	0.002	<0.0002	<0.001	<0.001	<0.001	0.25	<0.0001	0.011	0.054	<1	<1	<1	<1	<2	<3	<10	-
CSM_BH08	CSM_BH08	15/05/2019	Normal	5	7.9	310	180	<0.005	<10	120	11	16	3.3	71	92	42	<0.01	<0.02	<0.001	<0.0002	<0.001	<0.001	<0.001	0.3	<0.0001	0.003	0.015	<1	<1	<1	<1	<2	<3	<10	-
CSM_BH09S	CSM_BH09S	13/05/2019	Normal	7.1	7.4	460	66	<0.005	<10	76	6.2	7.3	4.5	100	57	190	0.1	<0.02	<0.001	<0.0002	<0.001	<0.001	<0.001	0.54	<0.0001	0.004	0.019	<1	<1	<1	<1	<2	<3	<10	-
CSM_BH10S	CSM_BH10S	13/05/2019	Normal	0.13	6.6	270	210	<0.005	<10	<20	4	5.6	3.3	45	130	350	<0.01	1.7	<0.001	<0.0002	<0.001	0.003	<0.001	0.43	<0.0001	0.002	0.011	<1	<1	<1	<1	<2	<3	<10	-
QC01	CSM_BH09S	13/05/2019	Interlab_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	<0.0001	<0.001	<0.001	<0.001	-	<0.0001	0.005	0.018	<1	<2	<2	<2	<2	-	<1	
QC02	CSM_BH06	14/05/2019	Field_D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	<0.0002	<0.001	<0.001	<0.001	-	<0.0001	0.011	0.053	<1	<1	<1	<1	<2	<3	<10	-
SRT_BH047	SRT_BH047	14/05/2019	Normal	<0.05	8.1	360	40	<0.005	<10	120	51	9.7	1.2	34	43	11	<0.01	23	<0.001	<0.0002	<0.001	0.002	<0.001	<0.005	<0.0001	<0.001	<0.005	<1	<1	<1	<1	<2	<3	<10	-
SRT_BH052	SRT_BH052	14/05/2019	Normal	<0.05	7.7	230	110	<0.005	<10	90	23	5.2	1.5	47	56	26	<0.01	8.3	<0.001	<0.0002	<0.001	0.002	<0.001	<0.005	<0.0001	<0.001	<0.005	<1	<1	<1	<1	<2	<3	<10	-
SRT_BH059	SRT_BH059	15/05/2019	Normal	<0.05	8.1	270	21	<0.005	<10	210	65	6.9	7.1	11	22	27	<0.01	3.2	<0.001	<0.0002	<0.001	0.006	<0.001	<0.005	<0.0001	<0.001	<0.005	<1	<1	<1	<1	<2	<3	<10	-
SRT_BH063	SRT_BH063	15/05/2019	Normal	<0.05	8.2	460	20	<0.005	<10	340	50	33	5.7	62	89	49	<0.01	<0.02	<0.001	<0.0002	<0.001	0.005	<0.001	<0.005	<0.0001	0.005	0.014	<1	<1	<1	<1	<2	<3	<10	-
SRT_CBH015	SRT_CBH015	15/05/2019	Normal	<0.05	6.5	140	1.7	<0.005	<10	34	2.7	5.3	3.5	29	13	48	0.03	3	<0.001	<0.0002	<0.001	0.007	<0.001	5.1	<0.0001	0.009	0.024	<1	<1	<1	<1	<2	<3	<10	-
SRT_CBH017	SRT_CBH017	15/05/2019	Normal	<0.05	6.7	88	16	<0.005	<10	30	10	6.8	3	11	19	17	<0.01	4.4	<0.001	<0.0002	<0.001	0.003	<0.001	0.7	<0.0001	0.004	0.008	<1	<1	<1	<1	<2	<3	<10	-



Table 1
Summary of Groundwater Analytical Results - May 2019

	TRH - NEPM 2013							NEPM 2013 - SG Cle			TRH - NEPM 1999				RH - NEPM 1999 - SG Clean				PAHs																			
	F1 (C6-C10 minus BTEX)	C6-C10 Fraction	F2 (>C10-C16 minus Naphthalene)	>C10-C16 Fraction	F3 (>C16-C34 Fraction)	F4 (>C34-C40 Fraction)	>C10-C40 (Sum of Total)	>C10-C16 SG Cleanup	>C16-C34 SG Cleanup	>C34-C40 SG Cleanup	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 (Sum of Total)	C10-C14 SG Cleanup	C15-C28 SG Cleanup	C29-C36 SG Cleanup	C10-C36 (sum) SG Cleanup	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(k)fluoranthene	Benzo(e,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Naphthalene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene-PAH	Phenanthrene	Pyrene	PAHs (Sum of total) - Lab calc	Total 8 PAHs (as BaP TEQ)(zero LOR) - Lab Calc
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL	20	20	50	50	100	100	100	50	100	100	20	50	100	100	100	50	100	100	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	
NEPM 2013 Table 1A(4) HSL D Comm/Ind GW for Vapour Intrusion, Sand																																						
2-4m	6000		NL																																			
4-8m	6000		NL																																			
>8m	7000		NL																																			
NEPM 2013 Table 1C GILs, Marine Waters																																						
NHMRC Recreational Guidelines 2008 - Health																																						
Sydney Water Trade Waste Acceptance Standards 2018-19 (non-domestic)																																					5000	
Field_ID	Location_Code	Sampled_Date_Time	Sample_Type	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
CSM_BH02	CSM_BH02	14/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
CSM_BH04	CSM_BH04	13/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CSM_BH05	CSM_BH05	13/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CSM_BH06	CSM_BH06	14/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CSM_BH08	CSM_BH08	15/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CSM_BH09S	CSM_BH09S	13/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CSM_BH10S	CSM_BH10S	13/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
QC01	CSM_BH09S	13/05/2019	Interlab_D	<20	<20	<100	<100	<100	<100	<100	-	-	-	<20	<50	<100	<50	<50	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	
QC02	CSM_BH06	14/05/2019	Field_D	<20	<20	<50	<50	<100	<100	<100	-	-	-	<20	<50	<100	<100	<100	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SRT_BH047	SRT_BH047	14/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
SRT_BH052	SRT_BH052	14/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
SRT_BH059	SRT_BH059	15/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
SRT_BH063	SRT_BH063	15/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
SRT_CBH015	SRT_CBH015	15/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
SRT_CBH017	SRT_CBH017	15/05/2019	Normal	<20	<20	<50	<50	<100	<100	<100	<50	<100	<100	<100	<50	<100	<100	<100	<100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

