Appendix D – Tabulated analytical results

NOTE: THIS DATA IS PROVIDED ELECTRONICALLY ONLY

Appendix D
Table D1
Edithvale CASS Field Results Summary Table

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID18-CASS01	0.3	21/07/2017	3.9	2.7	3	1.2	Grey Brown, Fill, silty Sand	AASS may be present	
	0.5	21/07/2017	6.5	4.5	3	2	Grey black fine Sand	Uncertain	x
	1.0	21/07/2017	5	3.7	1	1.3	Grey black fine Sand	Borderline AASS maybe present	x
	1.5	21/07/2017	4.8	4	1	0.8	Grey fine Sand	Borderline AASS maybe present	
	2.0	21/07/2017	7.3	5.5	2	1.8	Grey fine Sand	Limited net acidifying ability	
	2.5	21/07/2017	6.9	4.8	1	2.1	Grey fine Sand	Unlikely ASS	
	3.0	21/07/2017	4.6	3.7	1	0.9	Grey fine Sand	Borderline AASS maybe present	
	3.5	21/07/2017	5.6	4.1	2	1.5	Grey brown fine Sand	Uncertain	x
	4.0	21/07/2017	4.5	3.5	1	1	Grey brown fine Sand	Borderline AASS maybe present	x
	4.5	21/07/2017	4.3	3.3	1	1	Dark brown Sand	Borderline AASS maybe present	
	5.0	21/07/2017	5.2	3.6	2	1.6	Red brown medium Sand	Borderline AASS maybe present	
ID18-CASS02	0.1	21/07/2017	7	5	2	2	Fill, Dark grey brown silty Sand	Uncertain	x
	0.5	21/07/2017	8.2	5.2	1	3	Dark grey fine Sand	Unlikely ASS	
	1.0	21/07/2017	7.9	4.9	1	3	Dark grey fine Sand	Unlikely ASS	
	1.5	21/07/2017	7.5	5	1	2.5	Grey fine Sand	Unlikely ASS	
	2.0	21/07/2017	7	5.1	2	1.9	Grey fine Sand	Limited net acidifying ability	
	2.5	21/07/2017	8.1	5.4	2	2.7	Grey fine Sand	Limited net acidifying ability	
	3.0	21/07/2017	5.8	4.2	1	1.6	Grey fine Sand	Unlikely ASS	
	3.5	21/07/2017	8.2	5.8	2	2.4	Grey brown fine Sand	Limited net acidifying ability	
	4.0	21/07/2017	4.8	3.1	2	1.7	Grey brown fine Sand	Borderline AASS maybe present	x
	4.5	21/07/2017	3.9	3.2	2	0.7	Grey brown medium Sand	AASS may be present	
	5.0	21/07/2017	5.3	3.7	2	1.6	Red brown medium Sand	Borderline AASS maybe present	x
ID18-CASS03	2.0	3/08/2017	5.7	4.3	1	1.4	Grey fine Sand	Unlikely ASS	
	2.5	3/08/2017	5.7	4.6	1	1.1	Grey fine Sand	Unlikely ASS	
	3.0	3/08/2017	5.5	4.3	1	1.2	Grey fine Sand	Borderline AASS maybe present	x
	3.5	3/08/2017	4.9	4.7	1	0.2	Brown grey fine Sand, black mottles	Borderline AASS maybe present	
	4.0	3/08/2017	5.4	4.5	1	0.9	Brown grey fine Sand, black mottles	Borderline AASS maybe present	
	4.5	3/08/2017	5.6	3.9	2	1.7	Dark brown medium grain Sand	Borderline PASS may be present	x
	5.0	3/08/2017	5.4	4.0	1	1.4	Red brown medium Sand	Borderline AASS maybe present	
	5.5	3/08/2017	5.7	4.0	2	1.7	Grey fine to medium Sand	Borderline PASS may be present	
	6.0	3/08/2017	6.5	3.8	2	2.7	Dark brown black medium Sand, H2S odour	Borderline PASS may be present	
	6.5	3/08/2017	6.8	2.2	2	4.6	Yellow brown Sand	PASS may be present	x
	7.0	3/08/2017	7.4	3.9	2	3.5	Grey fine Sand, slight H2S odour	Borderline PASS may be present	
	7.5	3/08/2017	6.9	3.2	1	3.7	Grey fine Sand, slight H2S odour	Borderline PASS may be present	
	8.0	3/08/2017	7.3	1.5	2	5.8	Grey fine Sand, slight H2S odour	PASS may be present	x
	8.5	3/08/2017	7.8	1.8	2	6	Dark grey silty Sand, trace shell, H2S odour	PASS may be present	
	9.0	3/08/2017	7.9	1.9	4	6	Black sticky Clay, trace shell	PASS may be present	
	9.5	3/08/2017	7.8	1.8	2	6	Grey black sandy Silt, Abundant Shell	PASS may be present	
	10.0	3/08/2017	8.5	1.6	2	6.9	Grey brown fine Sand	PASS may be present	
	10.5	3/08/2017	8.6	6.2	1	2.4	Grey black Clay, hard	Unlikely ASS	x
	11.0	3/08/2017	8.4	5.6	1	2.8	Grey fine Sand	Unlikely ASS	
	11.5	3/08/2017	8.6	5.7	2	2.9	Grey fine Sand	Limited net acidifying ability	x
	12.0	14/08/2017	9	5.6	2	3.4	Grey fine Sand	Limited net acidifying ability	
	12.5	14/08/2017	9.6	5.8	2	3.8	Grey fine Sand, trace shell	Limited net acidifying ability	
	13.0	14/08/2017	9.6	5.6	2	4	Grey fine Sand	Limited net acidifying ability	x
	13.5	14/08/2017	9.3	6.1	2	3.2	Grey fine Sand	Limited net acidifying ability	
	14.0	14/08/2017	9.6	8.2	3	1.4	Grey mottled brown sandy Clay	Limited net acidifying ability	
	14.5	14/08/2017	9.5	8.4	4	1.1	Grey mottled brown sandy Clay	Limited net acidifying ability	
	15.0	14/08/2017	9.6	8.1	3	1.5	Grey mottled brown sandy Clay	Limited net acidifying ability	
	15.5	14/08/2017	9.4	8.3	3	1.1	Grey mottled brown sandy Clay	Limited net acidifying ability	
	16.0	14/08/2017	9.5	7.4	4	2.1	Grey mottled brown sandy Clay	Limited net acidifying ability	x
	16.5	14/08/2017	9.5	6.3	2	3.2	Grey fine Sand	Limited net acidifying ability	
	17.0	14/08/2017	9.3	6.4	2	2.9	Grey fine Sand	Limited net acidifying ability	
	17.5	14/08/2017	8.7	6	2	2.7	Grey fine sandy Clay	Limited net acidifying ability	
	18.0	14/08/2017	8.5	6.6	2	1.9	Grey mottled brown sandy Clay	Limited net acidifying ability	x
	18.5	15/08/2017	8.5	6.1	2	2.4	Grey brown Sand	Limited net acidifying ability	
	19.0	15/08/2017	8.4	5.9	2	2.5	Grey brown Sand	Limited net acidifying ability	
	19.5	15/08/2017	8	6	2	2	Grey brown silty Sand	Limited net acidifying ability	
	20.0	15/08/2017	7.7	5.7	2	2	Grey brown sandy Silt	Limited net acidifying ability	x
	20.5	15/08/2017	7.8	6	2	1.8	Grey brown sandy Silt	Limited net acidifying ability	
	21.0	15/08/2017	7	5.1	2	1.9	Yellow brown silty Sand	Limited net acidifying ability	
	21.5	15/08/2017	7.3	5.4	2	1.9	Grey brown sandy Silt	Limited net acidifying ability	
	22.0	15/08/2017	7.1	5.4	2	1.7	Grey brown sandy Silt	Limited net acidifying ability	x
ID18-CASS03-	16.0	14/08/2017	9.6	8	3	1.6	Grey mottled brown sandy Clay	Limited net acidifying ability	x
ID18-CASS03-	18.0	14/08/2017	8.6	6	2	2.6	Grey mottled brown sandy Clay	Limited net acidifying ability	x
ID18-CASS03-	20.0	15/08/2017	7.5	5.9	2	1.6	Grey brown sandy Silt	Limited net acidifying ability	x
ID18-CASS03-	22.0	15/08/2017	7.2	5.7	2	1.5	Grey brown sandy Silt	Limited net acidifying ability	x
DUP2_30817	11.5	3/08/2017	8.7	5.7	1	3	Grey fine Sand	Unlikely ASS	x

Appendix D
Table D1
Edithvale CASS Field Results Summary Table

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID18-CASS04	0.5	1/08/2017	5.2	4.2	2	1	Dark brown grey silty Fill	Unlikely ASS	x
	1.0	1/08/2017	5.8	4.6	1	1.2	Dark grey black fine Sand	Borderline AASS maybe present	x
	1.5	1/08/2017	5.4	4.5	1	0.9	Grey fine Sand	Borderline AASS maybe present	
	2.0	1/08/2017	5.4	4.7	1	0.7	Grey fine Sand	Borderline AASS maybe present	x
	2.5	1/08/2017	4.8	3.5	2	1.3	Brown grey fine Sand	Borderline AASS maybe present	
	3.0	1/08/2017	4.2	3.3	1	0.9	Brown grey fine Sand	Borderline AASS maybe present	
	3.5	1/08/2017	4.5	3.0	2	1.5	Brown grey fine Sand	Borderline AASS maybe present	x
	4.0	1/08/2017	4.4	3.0	2	1.4	Brown grey fine Sand	Borderline AASS maybe present	
	4.5	1/08/2017	5.3	3.5	2	1.8	Dark red brown medium Sand, iron oxide stain	Borderline AASS maybe present	
	5.0	1/08/2017	4.6	4.1	2	0.5	Dark red brown medium Sand	Borderline AASS maybe present	
	5.5	1/08/2017	5.5	4.1	2	1.4	Dark red brown medium Sand	Borderline PASS may be present	x
	6.0	1/08/2017	6.1	4.0	2	2.1	Brown, fine silty Sand	PASS may be present	
	6.5	1/08/2017	6.2	2.1	2	4.1	Grey medium Sand	PASS may be present	
	7.0	1/08/2017	6.1	2.2	2	3.9	Grey medium Sand	PASS may be present	x
	7.5	1/08/2017	6.1	2.2	2	3.9	Grey medium Sand	PASS may be present	
	8.1	3/08/2017	7.1	2.2	4	4.9	Grey medium Sand	PASS may be present	x
	8.5	3/08/2017	8.6	2.2	4	6.4	Grey black silty Sand, fine, slight H2S odour, tra	PASS may be present	
	9.0	3/08/2017	8.6	2.2	4	6.4	Black sticky silty Clay, strong H2S odour, trace s	PASS may be present	x
	9.5	3/08/2017	8.8	1.8	3	7	Black sticky silty Clay, strong H2S odour, trace s	PASS may be present	
	10.0	3/08/2017	9.2	2.3	4	6.9	Black sticky silty Clay, strong H2S odour, trace s	PASS may be present	
	10.5	3/08/2017	9.6	2.6	4	7	Blue grey Clay, hard stiff	PASS may be present	x
	11.0	3/08/2017	9.7	6	2	3.7	Blue grey silty Clay	Limited net acidifying ability	
	11.5	3/08/2017	9.2	2.3	2	6.9	Grey blue sandy Silt	PASS may be present	x
	12.0	3/08/2017	8.8	4.6	2	4.2	Grey brown sandy Silt	Uncertain	x
	12.5	10/08/2017	8.5	4.9	2	3.6	Dark grey sandy Clay	Uncertain	
	13.0	10/08/2017	8.5	1.6	4	6.9	Grey brown fine to medium Sand	PASS may be present	x
	13.5	10/08/2017	9.2	1.5	3	7.7	Grey brown fine Sand	PASS may be present	
	14.0	10/08/2017	8.6	1.9	3	6.7	Dark grey silty Sand	PASS may be present	
	14.5	10/08/2017	9.6	8.2	3	1.4	Grey mottled brown sandy Clay, trace shell	Limited net acidifying ability	
	15.0	10/08/2017	9.5	8.6	3	0.9	Grey mottled brown sandy Clay, trace shell	Limited net acidifying ability	x
	15.5	10/08/2017	9	7.1	4	1.9	Grey mottled brown sandy Clay, trace shell	Limited net acidifying ability	
	16.0	10/08/2017	9.2	7.9	4	1.3	Grey mottled brown sandy Clay	Limited net acidifying ability	
	16.5	10/08/2017	9.1	9	4	0.1	Grey mottled brown Clay with sand	Limited net acidifying ability	
	17.0	10/08/2017	8.9	8.1	4	0.8	Grey mottled brown Clay with sand	Limited net acidifying ability	x
	17.5	10/08/2017	8.1	6.2	2	1.9	Grey mottled brown Clay with sand	Limited net acidifying ability	
	18.0	10/08/2017	8.1	7.6	3	0.5	Grey mottled brown sandy Silt	Limited net acidifying ability	
	18.5	11/08/2017	8	5.3	2	2.7	Red mottled yellow brown sandy Silt	Limited net acidifying ability	
	19.0	11/08/2017	8.3	5.9	2	2.4	Grey sandy Silt	Limited net acidifying ability	x
	19.5	11/08/2017	8	6.1	2	1.9	Grey sandy Silt	Limited net acidifying ability	
	20.0	11/08/2017	8.1	5.6	2	2.5	Dark grey gravelly sandy Silt	Limited net acidifying ability	
	20.5	11/08/2017	7.6	5.5	2	2.1	Dark grey gravelly sandy Silt	Limited net acidifying ability	
	21.0	11/08/2017	7.8	5.5	2	2.3	Brown sandy Silt with gravel;	Limited net acidifying ability	
	21.5	11/08/2017	7.3	6.2	2	1.1	Red brown clayey Gravel, trace sand	Limited net acidifying ability	
	22.0	11/08/2017	7.2	5.6	2	1.6	Red brown clayey Gravel, trace sand	Limited net acidifying ability	x
ID18-CASS04-	15.0	10/08/2017	8.9	7.1	4	1.8	Grey mottled brown sandy Clay, trace shell	Limited net acidifying ability	x
ID18-CASS04-	17.0	10/08/2017	8.8	8.5	4	0.3	Grey mottled brown Clay with sand	Limited net acidifying ability	x
ID18-CASS04-	19.0	11/08/2017	7.8	6.3	2	1.5	Grey sandy Silt	Limited net acidifying ability	x
ID18-CASS04-	22.0	11/08/2017	7.7	5.5	2	2.2	Red brown clayey Gravel, trace sand	Limited net acidifying ability	x
DUP1_30818	9.0	3/08/2017	8.5	2.1	4	6.4	Black sticky silty Clay, strong H2S odour, trace s	PASS may be present	x
DUP2_10817	5.5	1/08/2017	5.8	4.2	1	1.6	Dark red brown medium Sand	Unlikely ASS	x
ID18-CASS05	0.1	1/08/2017	5.8	4.0	2	1.8	Brown black silty Fill	Borderline PASS may be present	
	0.5	1/08/2017	6.4	4.8	1	1.6	Dark grey fine Sand	Unlikely ASS	
	1.0	1/08/2017	6.4	4.7	2	1.7	Grey fine Sand	Uncertain	
	1.5	1/08/2017	5.7	4.8	1	0.9	Grey fine Sand	Unlikely ASS	
	1.5	17/07/2017	4.2	4.8	1	-0.6	Pale grey fine Sand	Borderline AASS maybe present	x
	2.0	17/07/2017	4.5	4.7	1	-0.2	Pale grey fine Sand	Borderline AASS maybe present	
	2.5	17/07/2017	4.3	4.7	1	-0.4	Pale grey fine Sand	Borderline AASS maybe present	
	3.0	17/07/2017	4.6	4.7	1	-0.1	Pale grey fine Sand	Borderline AASS maybe present	
	3.5	17/07/2017	4.6	4.7	1	-0.1	Pale grey fine Sand	Borderline AASS maybe present	
	4.0	17/07/2017	4.5	4.3	1	0.2	Pale grey fine Sand	Borderline AASS maybe present	
	4.5	17/07/2017	4.5	4	1	0.5	Dark brown medium Sand	Borderline AASS maybe present	x
	5.0	17/07/2017	5.6	4.8	1	0.8	Dark brown medium Sand	Unlikely ASS	
	5.5	17/07/2017	5.6	4.6	1	1.0	Dark brown medium Sand	Unlikely ASS	
	6.0	17/07/2017	7.5	5.5	2	2.0	Brown grey siliceous Sand	Limited net acidifying ability	
	6.5	17/07/2017	8.3	5.5	2	2.8	Brown grey siliceous Sand	Limited net acidifying ability	
	7.0	17/07/2017	8	4.2	2	3.8	Brown grey siliceous Sand	Uncertain	x
	7.5	17/07/2017	7.5	1.4	2	6.1	Brown grey siliceous Sand	PASS may be present	
	8.0	17/07/2017	7.4	1.6	2	5.8	Brown grey siliceous Sand	PASS may be present	x
	8.5	17/07/2017	8.1	4.9	2	3.2	Brown grey siliceous Sand	Uncertain	x
	9.0	17/07/2017	8.3	1.3	4	7.0	Brown grey siliceous Sand	PASS may be present	x
	10.0	17/07/2017	8.1	5.2	2	2.9	Dark grey sandy Silt, trace shells	Limited net acidifying ability	
	10.5	17/07/2017	9.5	5.8	2	3.7	Grey silty Sand	Limited net acidifying ability	x
	11.0	17/07/2017	9.9	6.4	2	3.5	Grey sandy Silt	Limited net acidifying ability	
	11.5	17/07/2017	9.8	5.1	4	4.7	Grey sandy Silt	Limited net acidifying ability	
	12.5	17/07/2017	9.1	5.5	2	3.6	Grey fine Sand	Limited net acidifying ability	
	13.0	18/07/2017	8.3	1.6	2	6.7	Grey fine Sand	PASS may be present	
	13.5	18/07/2017	8	1.8	2	6.2	Grey brown Sand	PASS may be present	x
	14.0	18/07/2017	7.6	2.3	4	5.3	Grey brown Sand	PASS may be present	
	14.5	18/07/2017	8.6	2.1	4	6.5	Grey mottled brown sandy Clay	PASS may be present	x
	15.0	18/07/2017	8.5	5.3	2	3.2	Grey sandy Clay, trace shell	Limited net acidifying ability	x
	15.5	18/07/2017	8.9	6.7	4	2.2	Grey mottled brown sandy Clay trace shell	Limited net acidifying ability	
	16.0	18/07/2017	8.1	4.9	2	3.2	Grey mottled brown sandy Clay trace shell	Uncertain	
	16.5	18/07/2017	8	5.4	2	2.6	Ylw Bwn clayey Sand	Limited net acidifying ability	x
	17.0	18/07/2017	8.1	6.2	2	1.9	Sandy Clay	Limited net acidifying ability	
	17.5	18/07/2017	7.8	5.8	2	2.0	Sandy Clay	Limited net acidifying ability	
	18.0	18/07/2017	8	5.5	2	2.5	Sandy Clay	Limited net acidifying ability	
	18.5	18/07/2017	7.8	5.3	2	2.5	Sandy Clay	Limited net acidifying ability	
	19.0	18/07/2017	7.6	5.4	1	2.2	Sandy Clay	Unlikely ASS	x
	19.5	18/07/2017	7.5	5.4	2	2.1	Sandy Clay	Limited net acidifying ability	
	20.0	18/07/2017	8	5.7	2	2.3	Sandy Clay	Limited net acidifying ability	
	20.5	18/07/2017	7.9	5.4	2	2.5	Sandy Clay	Limited net acidifying ability	
	21.0	18/07/2017	8	5.7	2	2.3	Sandy Clay	Limited net acidifying ability	
	21.5	18/07/2017	7.8	5.3	2	2.5	Sandy Clay	Limited net acidifying ability	
	22.0	18/07/2017	7.7	5.4	2	2.3	Sandy Clay	Limited net acidifying ability	
ID18-	15.0	18/07/2017	9.1	5.3	2	3.8	Grey sandy Clay, trace shell	Limited net acidifying ability	x
ID18-	15.0	18/07/2017	9.2	5.5	2	3.7	Grey sandy Clay, trace shell	Limited net acidifying ability	x
ID18-	16.5	18/07/2017	7.8	5.2	2	2.6	Ylw Bwn clayey Sand	Limited net acidifying ability	x
ID18-	19.0	18/07/2017	7.4	5.5	2	1.9	Sandy Clay	Limited net acidifying ability	x

Appendix D
Table D1
Edithvale CASS Field Results Summary Table

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID18-CASS06	0.1	1/08/2017	6.8	5.2	3	1.6	Brown black silty Fill	Limited net acidifying ability	
	0.5	1/08/2017	7.4	5.4	2	2.0	Grey fine siliceous Sand	Limited net acidifying ability	
	1	1/08/2017	7.5	5.3	2	2.2	Grey fine siliceous Sand	Limited net acidifying ability	
	1.5	1/08/2017	7.2	5.2	2	2.0	Grey fine siliceous Sand	Limited net acidifying ability	
	1.5	19/07/2017	5.5	4.5	1	1.0	Grey fine siliceous Sand	Borderline AASS maybe present	x
	2	19/07/2017	5.1	4.4	1	0.7	Grey fine siliceous Sand	Borderline AASS maybe present	
	2.5	19/07/2017	5.1	4.5	1	0.6	Grey fine siliceous Sand	Borderline AASS maybe present	
	3	19/07/2017	5.3	4.8	2	0.5	Grey fine siliceous Sand	Borderline AASS maybe present	
	3.5	19/07/2017	4.4	4.4	1	0.0	Grey fine siliceous Sand	Borderline AASS maybe present	x
	4	19/07/2017	4.4	3.9	1	0.5	Grey fine siliceous Sand	Borderline AASS maybe present	
	4.5	19/07/2017	6.9	5	2	1.9	Grey fine siliceous Sand	Uncertain	
	5	19/07/2017	6.2	4.1	1	2.1	Dark brown fine to medium Sand, Ferruginous	Unlikely ASS	x
	5.5	19/07/2017	6	4.5	2	1.5	Dark brown fine to medium Sand, Ferruginous	Uncertain	x
	6	19/07/2017	7.1	5.5	2	1.6	Red brown gravelly Sand, ferricrete	Limited net acidifying ability	
	6.5	19/07/2017	7.4	4.5	1	2.9	Brown fine Sand	Unlikely ASS	
	7	19/07/2017	7.6	5.5	1	2.1	Brown fine Sand	Unlikely ASS	
	7.5	19/07/2017	7.8	5.4	2	2.4	Brown fine Sand	Limited net acidifying ability	
	8	19/07/2017	8.4	1.4	2	7.0	Grey brown fine Sand, trace shell, slight H2S od	PASS may be present	x
	8.5	19/07/2017	8.6	4.4	2	4.2	Grey brown fine Sand, trace shell, slight H2S od	Uncertain	x
	9	25/07/2017	8.2	3.8	2	4.4	Dark grey brown sandy Silt, trace shell, slight H	Borderline PASS may be present	
	9.5	25/07/2017	8.7	5.2	2	3.5	Dark grey brown sandy Silt, trace shell	Limited net acidifying ability	
	10	25/07/2017	8.4	4.5	2	3.9	Grey sand, siliceious, slight H2S odour	Uncertain	x
	10.5	25/07/2017	8.6	5.2	2	3.4	Grey sand, siliceious	Limited net acidifying ability	
	11	25/07/2017	9.1	5.9	2	3.2	Grey gravel (sandstone) trace shell	Limited net acidifying ability	
	11.5	25/07/2017	9.5	5.6	1	3.9	Grey fine Sand	Unlikely ASS	
	12	25/07/2017	9.0	4.4	2	4.6	Grey fine Sand	Uncertain	x
	12.5	25/07/2017	8.7	2.6	3	6.1	Brown fine Sand	PASS may be present	
	13	25/07/2017	9.5	1.4	4	8.1	Brown fine Sand	PASS may be present	x
	13.5	25/07/2017	9.2	2.4	3	6.8	Brown fine Sand	PASS may be present	
	14	25/07/2017	9.3	1.5	4	7.8	Brown fine Sand	PASS may be present	
	14.5	25/07/2017	9.4	8.2	4	1.2	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	
	15	25/07/2017	9.2	5.7	4	3.5	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	x
	15.5	25/07/2017	8.6	7.2	4	1.4	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	
	16	25/07/2017	8.6	7.8	4	0.8	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	
	16.5	25/07/2017	8.5	6.5	3	2.0	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	
	17	25/07/2017	8.4	7.8	2	0.6	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	
	17.5	25/07/2017	8.6	5.6	4	3.0	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	
	18	25/07/2017	8.6	7.9	4	0.7	Grey mottled brown sandy Clay, silicious	Limited net acidifying ability	
	18.5	25/07/2017	8.2	6.0	2	2.2	Grey mottled brown sandy Silt	Limited net acidifying ability	
	19	25/07/2017	8.1	5.5	1	2.6	Brown silty Sand	Unlikely ASS	
	19.5	25/07/2017	8.2	5.4	1	2.8	Brown sandy Silt	Unlikely ASS	x
	20	25/07/2017	8.2	6.0	1	2.2	Brown silty Sand	Unlikely ASS	
	20.5	25/07/2017	8.2	5.7	1	2.5	Brown silty Sand	Unlikely ASS	
	21	25/07/2017	8.2	5.4	1	2.8	Brown silty Sand	Unlikely ASS	
	21.5	25/07/2017	8.2	5.4	2	2.8	Brown sandy Silt	Limited net acidifying ability	
	22	25/07/2017	9.7	5.4	1	4.3	Brown sandy Silt	Unlikely ASS	

Appendix D
Table D1
Edithvale CASS Field Results Summary Table

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID18-CASS07	0.1	1/08/2017	7.2	5.2	2	2.0	Dark brown silty Fill	Limited net acidifying ability	
	0.5	1/08/2017	5.9	4.5	3	1.4	Grey black, fine Sand	Uncertain	
	1	1/08/2017	6	4.4	2	1.6	Grey black, fine Sand	Uncertain	x
	1.5	1/08/2017	5.2	4.5	1	0.7	Grey pale, fine Sand	Borderline AASS maybe present	
	2	8/08/2017	7.2	5.1	1	2.1	Grey pale, fine Sand	Unlikely ASS	
	2.5	8/08/2017	6.7	4.8	1	1.9	Grey pale, fine Sand	Unlikely ASS	
	3	8/08/2017	5.5	3	2	2.5	Grey pale, fine Sand	Borderline AASS maybe present	x
	3.5	8/08/2017	4.6	2.6	2	2.0	Grey pale, fine Sand	Borderline AASS maybe present	
	4	8/08/2017	4.7	2.4	2	2.3	Grey pale, fine Sand	Borderline AASS maybe present	
	4.5	8/08/2017	5.8	2.4	2	3.4	Grey pale, fine Sand	PASS may be present	x
	5	8/08/2017	5.3	3	2	2.3	Brown pale, fine Sand	Borderline AASS maybe present	
	5.5	8/08/2017	5.4	2.8	2	2.6	Brown pale, fine Sand	Borderline AASS maybe present	
	6	8/08/2017	5.8	3.5	2	2.3	Dark grey fine to medium Sand	Borderline PASS may be present	x
	6.5	8/08/2017	6.3	4.2	2	2.1	Dark grey fine to medium Sand	Uncertain	
	7	8/08/2017	6.8	2	2	4.8	Grey pale, fine Sand	PASS may be present	x
	7.5	8/08/2017	6.1	2.5	2	3.6	Brown pale, fine Sand	PASS may be present	
	8	8/08/2017	6.2	1.7	2	4.5	Brown pale, fine Sand, slight H2S odour	PASS may be present	
	8.5	8/08/2017	6.4	2.4	2	4.0	Olive grey fine Sand,	PASS may be present	
	9	8/08/2017	6.3	1.7	2	4.6	Dark grey medium Sand	PASS may be present	x
	9.5	8/08/2017	7.7	2.2	4	5.5	Olive grey sandy Clay, slight H2S odour	PASS may be present	
	10	8/08/2017	7.9	2.5	3	5.4	Olive grey clayey Sand, trace shell	PASS may be present	
	10.5	8/08/2017	8.5	2.9	3	5.6	Green grey high plasticity Clay	PASS may be present	
	11	8/08/2017	9	2.6	4	6.4	Green grey high plasticity Clay	PASS may be present	
	11.5	8/08/2017	9.1	2.3	4	6.8	Greenish grey clayey Sand	PASS may be present	
	12	8/08/2017	8	2.4	2	5.6	Grey pale, fine Sand	PASS may be present	
	12.5	8/08/2017	8	2.2	2	5.8	Grey fine sandy Clay	PASS may be present	x
	13	9/08/2017	9.3	4.8	2	4.5	Grey brown Sand, fine to medium	Uncertain	x
	13.5	9/08/2017	9.8	5.9	2	3.9	Brown Sand	Limited net acidifying ability	
	14	9/08/2017	9.4	1.1	4	8.3	Brown Sand	PASS may be present	x
	14.5	9/08/2017	9.1	1.8	3	7.3	Dark grey mottled brown sandy Clay	PASS may be present	x
	15	9/08/2017	8.7	6.7	3	2.0	Dark grey sandy Silt	Limited net acidifying ability	x
	15.5	9/08/2017	9.2	8.4	3	0.8	Pale grey silty Sand	Limited net acidifying ability	
	16	9/08/2017	8.9	8.4	3	0.5	Grey mottled brown sandy Clay	Limited net acidifying ability	
	16.5	9/08/2017	8.3	8	3	0.3	Grey mottled brown sandy Clay	Limited net acidifying ability	
	17	9/08/2017	7.4	6.4	3	1.0	Orange reddish brown sandy Clay	Limited net acidifying ability	
	17.5	9/08/2017	8.5	8.3	3	0.2	Grey mottled brown sandy Clay	Limited net acidifying ability	
	18	9/08/2017	8.3	6	1	2.3	Grey mottled brown sandy Clay	Unlikely ASS	
	18.5	9/08/2017	8.8	6.2	2	2.6	Grey mottled brown sandy Clay	Limited net acidifying ability	
	19.5	9/08/2017	8.6	8.1	3	0.5	Grey mottles brown clayey Sand	Limited net acidifying ability	
	20	9/08/2017	7.6	5.6	2	2.0	Red brown medium Sand Ferricrete	Limited net acidifying ability	
	20.5	9/08/2017	7.2	5.2	1	2.0	Red mottles yellow silty Sand	Unlikely ASS	
	21	9/08/2017	7	5.4	1	1.6	Red mottles yellow silty Sand	Unlikely ASS	x
	21.5	9/08/2017	7.4	5.9	2	1.5	Red mottle brown silty Sand	Limited net acidifying ability	
	22	9/08/2017	7.2	5.6	2	1.6	Red mottle brown silty Sand	Limited net acidifying ability	x
ID18-CASS07	15	9/08/2017	9.2	2.8	3	6.4	Dark grey sandy Silt	PASS may be present	x
ID18-CASS07	21	9/08/2017	7.1	5.6	1	1.5	Red mottles yellow silty Sand	Unlikely ASS	x
ID18-CASS08	0.1	1/08/2017	7.3	4.9	2	2.4	Dark brown silty Fill, with gravel	Uncertain	
	0.5	1/08/2017	7.3	5.4	2	1.9	Grey fine Sand	Limited net acidifying ability	
	1	1/08/2017	7.3	5.2	2	2.1	Grey fine Sand	Limited net acidifying ability	
	1.5	1/08/2017	6.9	4.9	1	2.0	Grey fine Sand	Unlikely ASS	
	2	1/08/2017	9.1	5.4	1	3.7	Grey fine Sand	Unlikely ASS	
	2.5	1/08/2017	7.1	5	2	2.1	Grey brown fine Sand	Uncertain	
	3	1/08/2017	5.9	4.1	2	1.8	Grey brown fine Sand	Uncertain	x
	3.5	1/08/2017	5.9	3.7	2	2.2	Grey brown fine Sand	Borderline PASS may be present	
	4	1/08/2017	4.5	3.5	1	1.0	Dark brown black fine Sand	Borderline AASS maybe present	x
	4.5	1/08/2017	5.7	3.6	1	2.1	Grey brown fine Sand	Unlikely ASS	
	5	1/08/2017	5.7	3.4	2	2.3	Red brown, fine Sand, trace quartz	Borderline PASS may be present	
	5.5	1/08/2017	5.8	4	2	1.8	Red brown, fine Sand, trace quartz	Borderline PASS may be present	
	6	1/08/2017	5.8	4.5	2	1.3	Red brown, fine Sand, trace quartz	Uncertain	x
	6.3	1/08/2017	6.2	1.6	3	4.6	Red brown, fine Sand, trace shell @ 6.3	PASS may be present	x
	6.5	1/08/2017	7.5	5.6	2	1.9	Pale brown, fine Sand, trace shell @ 6.5	Limited net acidifying ability	
	7	1/08/2017	6.8	1.8	2	5.0	Pale brown, fine Sand, trace shell	PASS may be present	x
	7.5	1/08/2017	6.4	2.2	2	4.2	Grey fine to medium Sand	PASS may be present	
	8	1/08/2017	6.4	2.3	2	4.1	Grey fine to medium Sand	PASS may be present	
	8.5	1/08/2017	6.4	1.8	4	4.6	Grey black sandy Silt, sticky strong H2S odour	PASS may be present	
	9	1/08/2017	7.1	1.9	4	5.2	Grey black sandy Silt, sticky strong H2S odour	PASS may be present	
	9.5	1/08/2017	7.2	1.6	3	5.6	Grey black medium Sand	PASS may be present	
	10	1/08/2017	7.2	1.5	2	5.7	Grey black medium Sand, slight H2S odour	PASS may be present	
	10.5	1/08/2017	6.8	1.8	2	5.0	Grey black medium Sand, slight H2S odour	PASS may be present	x
	11	1/08/2017	8.3	2.2	4	6.1	Grey black medium Sand, slight H2S odour	PASS may be present	
	11.5	1/08/2017	8.6	3	2	5.6	Grey, fine silty Sand	Borderline PASS may be present	
	12	8/08/2017	8.8	5.6	1	3.2	Brown pale Sand, silicious	Unlikely ASS	
	12.5	8/08/2017	7.9	1.6	3	6.3	Dark brown fine Sand	PASS may be present	x
	13	8/08/2017	8.2	1.8	2	6.4	Brown fine Sand	PASS may be present	
	13.5	8/08/2017	8.7	2.1	2	6.6	Brown fine Sand	PASS may be present	
	14	8/08/2017	8.3	2.7	1	5.6	Brown fine Sand	Unlikely ASS	
	14.5	8/08/2017	8.5	2.7	2	5.8	Dark grey plastic Clay	PASS may be present	
	15	8/08/2017	9.1	2.4	3	6.7	Dark grey plastic sandy Clay	PASS may be present	x
	15.5	8/08/2017	8.8	3.6	3	5.2	Dark grey plastic sandy Clay	Borderline PASS may be present	
	16	8/08/2017	9.3	8.6	3	0.7	Brown sandy Clay	Limited net acidifying ability	x
	16.5	8/08/2017	8.8	8.4	3	0.4	Brown sandy Clay	Limited net acidifying ability	
	17	8/08/2017	8.5	6.6	3	1.9	Brown grey Sand with clay	Limited net acidifying ability	
	17.5	8/08/2017	8.7	8.3	3	0.4	Grey fine Sand	Limited net acidifying ability	
	18	8/08/2017	8	7.2	3	0.8	Grey fine Sand	Limited net acidifying ability	
	18.5	8/08/2017	8.4	7.6	3	0.8	Grey fine Sand	Limited net acidifying ability	
	19	8/08/2017	8.7	7.8	3	0.9	Grey mottled brown sandy Clay	Limited net acidifying ability	
	19.5	8/08/2017	8.1	5.4	1	2.7	Brown clayey Sand	Unlikely ASS	
	20	8/08/2017	8	7.2	3	0.8	Grey mottled brown sandy Clay	Limited net acidifying ability	
	20.5	8/08/2017	7.8	4.4	2	3.4	Grey mottled brown sandy Clay	Uncertain	x
	21	8/08/2017	8.1	7.3	3	0.8	Grey mottled brown sandy Silt	Limited net acidifying ability	
	21.5	8/08/2017	8.4	5.9	2	2.5	Grey mottled brown sandy Clay	Limited net acidifying ability	
	22	8/08/2017	7.4	5.4	2	2.0	Red brown silty sandy gravel, Ferricrete	Limited net acidifying ability	
DUP1_10817	10.5	1/08/2017	7.1	2	2	5.1	Grey black medium Sand, slight H2S odour	PASS may be present	x

Appendix D
Table D1
Edithvale CASS Field Results Summary Table

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID18-CASS09	2.0	31/07/2017	7.6	5	2	2.6	Grey fine Sand, loose	Uncertain	
	2.5	31/07/2017	6.8	4.9	2	1.9	Grey fine Sand, loose	Uncertain	
	3.0	31/07/2017	8.2	5.1	2	3.1	Grey fine Sand, loose	Limited net acidifying ability	
	3.5	31/07/2017	7	5.2	2	1.8	Grey fine Sand, loose	Limited net acidifying ability	
	4.0	31/07/2017	7.3	4.5	2	2.8	Grey fine Sand, loose	Uncertain	x
	4.5	31/07/2017	5.7	4.1	2	1.6	Yellow orange, round Sand, loose	Uncertain	
	5.0	31/07/2017	5	3.6	2	1.4	Yellow orange, round Sand, loose	Borderline AASS maybe present	x
	5.5	31/07/2017	5.9	3.2	2	2.7	Brown gravelly Sand, SA, loose	Borderline PASS may be present	
	6.0	31/07/2017	6.1	3.2	2	2.9	Brown fine Sand	Borderline PASS may be present	
	6.5	31/07/2017	6.8	4.2	2	2.6	Brown fine Sand	Uncertain	
	7.0	31/07/2017	6.7	3.2	2	3.5	Brown fine Sand	Borderline PASS may be present	x
	7.5	31/07/2017	6.6	3.1	2	3.5	Brown fine Sand	Borderline PASS may be present	
	8.0	31/07/2017	5.5	2.1	2	3.4	Brown fine Sand	Borderline AASS maybe present	
	8.5	31/07/2017	5.6	2.6	2	3.0	Brown fine Sand	PASS may be present	x
	9.0	31/07/2017	5.9	3.2	1	2.7	Brown fine Sand	Unlikely ASS	
	9.5	31/07/2017	7.7	1.5	4	6.2	Grey fine silty Sand, H2S odour	PASS may be present	
	10.0	31/07/2017	8	1.8	4	6.2	Olive grey, medium plasticity Clay, slight H2S odour, trace shell	PASS may be present	x
	10.5	31/07/2017	7.9	3.8	2	4.1	Grey fine Sand, loose	Borderline PASS may be present	
	11.0	31/07/2017	7.2	4.8	2	2.4	Grey, course, Sand, loose	Uncertain	x
	11.5	31/07/2017	8.6	5	2	3.6	Grey, course, Sand, loose	Uncertain	
	12.0	31/07/2017	8.4	2	3	6.4	Grey, course, Sand, loose	PASS may be present	x
	12.5	31/07/2017	7.7	4	3	3.7	Light brown Sand, loose	Borderline PASS may be present	
	13.0	3/08/2017	8	2.1	3	5.9	Light brown Sand, loose	PASS may be present	
	13.5	3/08/2017	8.4	1.5	2	6.9	Light brown Sand, loose	PASS may be present	
	14.0	3/08/2017	8.5	2.1	4	6.4	Light brown Sand, loose	PASS may be present	x
	14.5	3/08/2017	8.9	7.5	4	1.4	Grey sandy Clay	Limited net acidifying ability	x
	15.0	3/08/2017	8.9	8.2	4	0.7	Grey sandy Clay	Limited net acidifying ability	
	15.5	3/08/2017	8.7	7.3	2	1.4	Grey sandy Clay	Limited net acidifying ability	
	16.0	3/08/2017	8.7	5.5	2	3.2	Grey mottles brown sandy Clay	Limited net acidifying ability	
	16.5	3/08/2017	8.5	7.4	4	1.1	Grey mottled brown sandy Clay, trace clay	Limited net acidifying ability	
	17.0	3/08/2017	8.6	4.4	2	4.2	Grey mottled brown sandy Clay, trace clay	Uncertain	x
	17.5	3/08/2017	8.4	5	2	3.4	Grey mottled brown sandy Clay, trace clay	Uncertain	
	18.0	3/08/2017	8.4	4.8	2	3.6	Grey fine to medium Sand	Uncertain	
	18.5	3/08/2017	8.4	5.5	2	2.9	Grey fine to medium Sand	Limited net acidifying ability	
	19.0	3/08/2017	7.9	6.6	4	1.3	Grey fine to medium Sandy Clay	Limited net acidifying ability	
	19.5	3/08/2017	8.5	5.4	2	3.1	Brown Sand, trace ferricrete	Limited net acidifying ability	
	20.0	3/08/2017	7.7	4.6	2	3.1	Grey mottled brown Sand	Uncertain	x
	20.5	3/08/2017	8.4	2.6	2	5.8	Grey mottled brown silty Sand	PASS may be present	x
	21.0	3/08/2017	6.9	4.3	2	2.6	Yellow brown silty Sand	Uncertain	x
	21.5	3/08/2017	7.3	4.8	2	2.5	Yellow brown silty Sand	Uncertain	x
	22.0	3/08/2017	7	4.8	2	2.2	Yellow brown silty Sand	Uncertain	
ID18-CASS09	21	3/08/2017	7.5	5	2	2.5	Yellow brown silty Sand	Uncertain	x
ID18-CASS10	1.55	13/07/2017	6.1	4.9	1	1.2	Grey fine Sand	Unlikely ASS	
	2	13/07/2017	5.7	4.5	1	1.2	Grey fine Sand	Unlikely ASS	x
	2.5	13/07/2017	5.3	4.7	1	0.6	Grey mottled brown fine Sand	Borderline AASS maybe present	
	3	13/07/2017	5.2	4.6	1	0.6	Grey mottled brown fine Sand	Borderline AASS maybe present	
	3.5	13/07/2017	4.9	4.5	1	0.4	Grey mottled brown fine Sand	Borderline AASS maybe present	
	4	13/07/2017	5.1	4.5	1	0.6	Grey mottled brown fine Sand	Borderline AASS maybe present	
	4.5	13/07/2017	7.7	4.9	2	2.8	Brown fine Sand	Uncertain	
	5	13/07/2017	6.8	4.5	2	2.3	Brown fine Sand	Uncertain	x
	5.5	13/07/2017	6.5	4.6	1	1.9	Brown fine Sand	Unlikely ASS	
	6	13/07/2017	8.5	5.5	2	3.0	Dark brown fine Sand	Limited net acidifying ability	
	6.5	13/07/2017	10.1	5.7	1	4.4	Grey fine Sand	Unlikely ASS	
	7	13/07/2017	10	6.5	2	3.5	Grey fine Sand	Limited net acidifying ability	
	7.5	13/07/2017	10.1	5.8	1	4.3	Grey gravelly Sand	Unlikely ASS	
	8	13/07/2017	9.9	1.9	2	8.0	Grey Sand	PASS may be present	x
	8.5	13/07/2017	10.3	6.2	2	4.1	Grey Sand	Limited net acidifying ability	
	9	13/07/2017	8.1	2	4	6.1	Grey Sand	PASS may be present	
	9.5	13/07/2017	7.8	4.4	2	3.4	Dark brown Silt, some shell, H2S odour	Uncertain	
	10	13/07/2017	8.9	1.5	2	7.4	Grey brown Sand, H2S odour	PASS may be present	x
	10.5	13/07/2017	9.7	5.6	1	4.1	Grey brown Sand, H2S odour	Unlikely ASS	
	11	13/07/2017	9.9	5.6	2	4.3	Grey brown Sand, H2S odour	Limited net acidifying ability	
	11.5	13/07/2017	8.6	4.1	1	4.5	Grey brown Sand, H2S odour	Unlikely ASS	x
	20.5	12/07/2017	8.3	5.5	1	2.8	Grey brown Sand, H2S odour	Unlikely ASS	
	12	13/07/2017	8.4	5.4	1	3.0	Grey brown Sand, H2S odour	Unlikely ASS	
	12.5	13/07/2017	8.5	5.6	1	2.9	Grey brown Sand, H2S odour	Unlikely ASS	
	13	13/07/2017	8.3	4.8	1	3.5	Grey brown Sand, H2S odour	Unlikely ASS	
	13.5	13/07/2017	9.3	5.4	1	3.9	Grey brown Sand, H2S odour	Unlikely ASS	
	14	14/07/2017	9.1	4.2	2	4.9	Grey brown Sand, H2S odour	Uncertain	x
	14.5	14/07/2017	9.2	5.4	2	3.8	Grey brown sandy Silt with Clay	Limited net acidifying ability	
	15	14/07/2017	9.1	5.3	4	3.8	Grey brown sandy Silt with Clay	Limited net acidifying ability	
	15.5	14/07/2017	8.9	7.5	4	1.4	Grey brown sandy Silt with Clay	Limited net acidifying ability	
	16	14/07/2017	8.8	5.5	2	3.3	Grey brown silty Sand, slight odour	Limited net acidifying ability	x
	16.5	14/07/2017	8.4	5.3	2	3.1	Grey brown silty Sand	Limited net acidifying ability	
	17	14/07/2017	8.5	5.5	2	3.0	Grey brown silty Sand	Limited net acidifying ability	
	17.5	14/07/2017	8.2	5.5	2	2.7	Grey brown silty Sand	Limited net acidifying ability	
	18	14/07/2017	8.2	5.5	2	2.7	Grey brown silty Sand	Limited net acidifying ability	
	18.5	14/07/2017	8.1	5.6	4	2.5	Grey brown clayey Sand	Limited net acidifying ability	
	19	14/07/2017	7.5	7.7	4	-0.2	Grey brown clayey Sand	Limited net acidifying ability	
	19.5	14/07/2017	8	7.7	4	0.3	Grey brown clayey Sand	Limited net acidifying ability	
	20	14/07/2017	8	7.2	4	0.8	Grey brown clayey Sand	Limited net acidifying ability	
	20.5	14/07/2017	7.3	4.8	2	2.5	Grey Sand with Clay	Uncertain	
	21	14/07/2017	7.5	4.5	2	3.0	Grey Sand with Clay	Uncertain	x
	21.5	14/07/2017	7	5.6	2	1.4	Brown gravelly Sand	Limited net acidifying ability	
	22	14/07/2017	6.8	5.2	2	1.6	Brown gravelly Sand	Limited net acidifying ability	

Appendix D
Table D1
Edithvale CASS Field Results Summary Table

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID18-CASS11	1.55	10/07/2017	5	4.5	1	0.5	Grey, fine Sand	Borderline AASS maybe present	
	2	10/07/2017	4.7	4.5	1	0.2	Grey, fine Sand	Borderline AASS maybe present	
	2.5	10/07/2017	4.7	4.4	1	0.3	Grey, fine Sand	Borderline AASS maybe present	
	3	10/07/2017	4.8	4.3	1	0.5	Grey, fine Sand	Borderline AASS maybe present	
	3.5	10/07/2017	4.5	4.3	1	0.2	Grey, fine Sand	Borderline AASS maybe present	
	4	10/07/2017	4.3	4	1	0.3	Grey, fine Sand, mottled brown	Borderline AASS maybe present	x
	4.5	10/07/2017	4.6	3.7	1	0.9	Grey, fine Sand, trace gravel	Borderline AASS maybe present	
	5	11/07/2017	7	4.5	2	2.5	Dk brown Sand	Uncertain	
	5.5	11/07/2017	6.8	4.1	2	2.7	Dk brown Sand	Uncertain	x
	6	11/07/2017	6.5	4.5	1	2	Dk brown Sand	Unlikely ASS	
	6.5	11/07/2017	8.2	4.6	1	3.6	Fine brown Sand	Unlikely ASS	
	7	11/07/2017	7.6	2.9	2	4.7	Fine brown Sand	PASS may be present	x
	7.5	11/07/2017	6.2	2	2	4.2	Pale brown fine Sand	PASS may be present	
	8	11/07/2017	8.6	4.9	1	3.7	Pale brown fine Sand	Unlikely ASS	
	8.5	11/07/2017	8.3	3.4	2	4.9	Pale brown fine Sand	Borderline PASS may be present	
	9	11/07/2017	9.2	5.7	1	3.5	Pale brown fine Sand	Unlikely ASS	
	9.5	11/07/2017	9.3	2.3	3	7	Grey Sand, rotten egg odour	PASS may be present	
	10	11/07/2017	8.6	1.9	4	6.7	Clay with silt, dark grey, rotten egg odour	PASS may be present	x
	10.5	11/07/2017	8.2	2.2	2	6	dk grey clayey sandy silt, rotten egg odour	PASS may be present	
	11	11/07/2017	8.6	2.6	4	6	Clay with silt, dark grey, rotten egg odour	PASS may be present	x
	11.5	11/07/2017	8.2	2.3	4	5.9	Silty Sand, Trace shell fragments, rotten egg od	PASS may be present	
	12	11/07/2017	8.2	1.8	2	6.4	Silty Sand, Trace shell fragments, rotten egg od	PASS may be present	
	12.5	11/07/2017	8	4.5	2	3.5	Silty Sand, Trace shell fragments, rotten egg od	Uncertain	
	13	12/07/2017	8	4.8	3	3.2	Silty Sand, Trace shell fragments, rotten egg od	Uncertain	
	13.5	12/07/2017	8.7	1.8	2	6.9	Brown Sand, peppered black	PASS may be present	
	14	12/07/2017	8.8	1.8	4	7	grey-brown sandy silt	PASS may be present	x
	14.5	12/07/2017	9.5	5.8	4	3.7	grey-brown sandy silt	Limited net acidifying ability	
	15	12/07/2017	9.3	6	4	3.3	grey-brown sandy silt	Limited net acidifying ability	x
	15.5	12/07/2017	9.5	8.1	4	1.4	Grey sandy silt	Limited net acidifying ability	
	16	12/07/2017	9	7.6	4	1.4	Grey sandy silt	Limited net acidifying ability	
	16.5	12/07/2017	9.2	8.5	4	0.7	Grey sandy silt, trace clay	Limited net acidifying ability	
	17	12/07/2017	9.1	8.3	4	0.8	Clay, grey mottled yellow brown	Limited net acidifying ability	
	17.5	12/07/2017	9.3	5.8	2	3.5	Clay, grey mottled yellow brown	Limited net acidifying ability	
	18	12/07/2017	8.8	5.5	2	3.3	Sand, fine grey	Limited net acidifying ability	
	18.5	12/07/2017	9.1	5.7	2	3.4	Sand, medium grey	Limited net acidifying ability	
	19	12/07/2017	8.8	5.4	2	3.4	Sand, medium grey	Limited net acidifying ability	
	19.5	12/07/2017	8.1	4.5	2	3.6	Sandy Clay	Uncertain	x
ID18-CASS12	0.1	24/07/2017	5.5	3.7	2	1.8	Fill, dark brown, silty Sand	Borderline AASS maybe present	
	0.5	24/07/2017	4.6	3.2	2	1.4	Dark grey fine Sand	Borderline AASS maybe present	
	1	24/07/2017	4.8	3.4	2	1.4	Dark grey fine Sand	Borderline AASS maybe present	
	1.5	24/07/2017	4.6	3.5	2	1.1	Grey fine Sand	Borderline AASS maybe present	x
	2	24/07/2017	6.5	5	2	1.5	Grey fine Sand	Uncertain	
	2.5	24/07/2017	6.5	5	2	1.5	Grey fine Sand	Uncertain	
	3	24/07/2017	5.6	4.1	2	1.5	Grey brown fine Sand	Uncertain	x
	3.5	24/07/2017	5.1	3.2	2	1.9	Grey brown fine Sand	Borderline AASS maybe present	
	4	24/07/2017	4.8	3	2	1.8	Grey brown fine Sand	Borderline AASS maybe present	
	4.5	24/07/2017	4.4	2.7	2	1.7	Red brown fine Sand, trace iron staining	Borderline AASS maybe present	
	5	24/07/2017	4.4	3.4	2	1	Red brown fine Sand, trace iron staining	Borderline AASS maybe present	x
	5.5	24/07/2017	5.6	3.9	2	1.7	Red brown fine Sand, trace iron staining	Borderline PASS may be present	
	6	24/07/2017	5.5	3.6	2	1.9	Grey brown fine silty Sand	Borderline AASS maybe present	
	6.5	24/07/2017	5.3	7.8	2	-2.5	Grey brown fine silty Sand	Borderline AASS maybe present	
	7	24/07/2017	5.6	3.7	2	1.9	Dark brown fine to medium Sand	Borderline PASS may be present	x
	7.5	24/07/2017	5.7	3.1	2	2.6	Dark brown fine to medium Sand	Borderline PASS may be present	
	8	24/07/2017	5.7	2.6	2	3.1	Dark brown fine to medium Sand	PASS may be present	
	8.5	24/07/2017	5.9	3.5	2	2.4	Grey fine to medium Sand	Borderline PASS may be present	
	9	24/07/2017	6.3	4.3	2	2	Grey fine to medium Sand	Uncertain	x
	9.5	24/07/2017	7.9	4.2	2	3.7	Grey fine to medium Sand	Uncertain	
	10	24/07/2017	8.2	1.9	4	6.3	Black clayey Silt, H2S odour, trace shell	PASS may be present	
	10.5	24/07/2017	8.1	2	4	6.1	Black clayey Silt, H2S odour, trace shell	PASS may be present	x
	11	24/07/2017	7.6	4.6	2	3	Grey black Sand fine to medium	Uncertain	
	11.5	24/07/2017	8.3	2.4	2	5.9	Grey fine silty Sand, H2S odour	PASS may be present	
	12	24/07/2017	8.2	2.5	2	5.7	Grey fine silty Sand, H2S odour	PASS may be present	
	12.5	24/07/2017	8	3.8	2	4.2	Grey black Sand fine to medium, H2S odour	Borderline PASS may be present	
	13	24/07/2017	7.9	1.9	2	6	Grey black Sand fine to medium, H2S odour	PASS may be present	x
	13.5	24/07/2017	7.7	2.7	3	5	Grey black Sand fine to medium, H2S odour	PASS may be present	
	14	24/07/2017	8.3	2.5	2	5.8	Yellow brown Sand	PASS may be present	x
DUP1_240717	5	24/07/2017	4.7	2.7	2	2	Red brown fine Sand, trace iron staining	Borderline AASS maybe present	x
DUP2_240717	5	24/07/2017	5.2	3	4	2.2	Red brown fine Sand, trace iron staining	Borderline AASS maybe present	x
DUP3_240717	10	24/07/2017	8.3	1.9	4	6.4	Black clayey Silt, H2S odour, trace shell	PASS may be present	x
DUP4_240717	10	24/07/2017	7.5	1.7	4	5.8	Black clayey Silt, H2S odour, trace shell	PASS may be present	x
ID18-CASS13	0.1	24/07/2017	6.6	3.8	3	2.8	Fill, Dark grey brown silty Sand	Borderline PASS may be present	
	0.5	24/07/2017	6.4	4.4	2	2	Dark grey fine Sand	Uncertain	
	1	24/07/2017	5.9	4	2	1.9	Grey black fine Sand	Borderline PASS may be present	x
	1.5	24/07/2017	5.5	4.2	1	1.3	Grey fine Sand, powdery possible silt	Borderline AASS maybe present	
	2	21/07/2017	6.2	4.7	1	1.5	Grey fine Sand, powdery possible silt	Unlikely ASS	
	2.5	21/07/2017	5.9	4.8	1	1.1	Grey fine Sand, powdery possible silt	Unlikely ASS	
	3	21/07/2017	5.4	4.4	1	1	Grey fine Sand, powdery possible silt	Borderline AASS maybe present	x
	3.5	21/07/2017	4.8	3.1	2	1.7	Grey fine Sand, powdery possible silt	Borderline AASS maybe present	
	4	21/07/2017	4.2	2.7	2	1.5	Brown black fine Sand	Borderline AASS maybe present	
	4.5	21/07/2017	4.6	2.9	2	1.7	Red brown fine medium Sand	Borderline AASS maybe present	
	5	21/07/2017	5.2	2.9	2	2.3	Red brown fine medium Sand	Borderline AASS maybe present	x
	5.5	21/07/2017	5.2	3.7	2	1.5	Red brown fine medium Sand	Borderline AASS maybe present	
	6	21/07/2017	5.2	4.4	2	0.8	Red brown fine medium Sand	Borderline AASS maybe present	
	6.5	21/07/2017	5.4	4.3	2	1.1	Grey brown fine Sand	Borderline AASS maybe present	x
	7	21/07/2017	5.5	4.1	2	1.4	Grey brown fine Sand	Borderline AASS maybe present	
	7.5	21/07/2017	5.7	3.9	2	1.8	Grey brown medium Sand, minor quartz	Borderline PASS may be present	
	8	21/07/2017	6.6	1.8	1	4.8	Grey brown medium Sand, minor quartz	PASS may be present	x
	8.5	21/07/2017	6.4	2.2	2	4.2	Grey medium Sand, minor quartz	PASS may be present	
	9	21/07/2017	6.1	2.4	1	3.7	Grey medium Sand, minor quartz	Unlikely ASS	
	9.5	21/07/2017	6.2	1.9	1	4.3	Grey medium Sand, minor quartz	PASS may be present	
	10	21/07/2017	7.3	2	4	5.3	Black sandy Silt, sticky, strong H2S odour	PASS may be present	x
DUP1_210717	6.5	21/07/2017	5.6	4	2	1.6	Grey brown fine Sand	Borderline PASS may be present	x
DUP2_210717	6.5	21/07/2017	5.7	3.8	1	1.9	Grey brown fine Sand	Unlikely ASS	x

Appendix D
Table D1
Edithvale CASS Field Results Summary Table

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID18-CASS14	0.1	20/07/2017	6.1	3	2	3.1	Fill, dark brown grey silty Sand	Borderline PASS may be present	x
	0.5	20/07/2017	4.8	4.3	2	0.5	Dark grey fine Sand	Borderline AASS maybe present	
	1	20/07/2017	4.6	3.5	1	1.1	Dark grey fine Sand	Borderline AASS maybe present	
	1.5	20/07/2017	4.7	3.5	1	1.2	Dark grey fine Sand	Borderline AASS maybe present	x
	2	20/07/2017	7.6	4.1	1	3.5	Dark grey fine Sand	Unlikely ASS	
	2.5	20/07/2017	7.5	4.8	2	2.7	Dark grey fine Sand	Uncertain	x
	3	20/07/2017	5.6	5.3	2	0.3	Dark grey fine Sand	Limited net acidifying ability	
	3.5	20/07/2017	6.2	3.7	1	2.5	Dark grey fine Sand	Unlikely ASS	
	4	20/07/2017	4.4	3.9	2	0.5	Dark grey fine Sand	Borderline AASS maybe present	x
	4.5	20/07/2017	5	4.1	2	0.9	Dark brown grey fine Sand	Borderline AASS maybe present	
	5	20/07/2017	4.4	3.8	1	0.6	Dark brown red Sand, black mottles	Borderline AASS maybe present	
	5.5	20/07/2017	4.3	2.8	2	1.5	Dark brown red Sand, black mottles	Borderline AASS maybe present	
	6	20/07/2017	5.8	2.4	2	3.4	Dark brown red Sand	PASS may be present	x
	6.5	20/07/2017	6.8	4.2	2	2.6	Pale grey silty Sand	Uncertain	x
	7	20/07/2017	5.8	2.7	2	3.1	Pale grey silty Sand	PASS may be present	x
QC1_200717	Blank	20/07/2017	5.5	4.5	2	1.0	Graded gravel	Borderline AASS maybe present	
DUP1_200717	6.5	20/07/2017	5.9	4.2	2	1.7	Pale grey silty Sand	Uncertain	x
ID18-CASS15	0.1	20/07/2017	6	3.4	3	2.6	Fill, dark brown grey silty Sand	Borderline PASS may be present	x
	0.5	20/07/2017	6.4	6.1	1	0.3	Dark grey fine Sand	Unlikely ASS	
	1	20/07/2017	5.2	4.5	1	0.7	Pale grey fine Sand	Borderline AASS maybe present	
	1.5	20/07/2017	5.3	4.1	1	1.2	Grey fine Sand	Borderline AASS maybe present	x
	2	20/07/2017	6.4	5.5	2	0.9	Grey fine Sand	Limited net acidifying ability	
	2.5	20/07/2017	6	4.3	1	1.7	Grey fine Sand	Unlikely ASS	
	3	20/07/2017	7.3	4.9	1	2.4	Grey fine Sand	Unlikely ASS	
	3.5	20/07/2017	8.2	5	1	3.2	Grey fine Sand	Unlikely ASS	
	4	20/07/2017	7.1	4.7	2	2.4	Grey fine Sand	Uncertain	
	4.5	20/07/2017	6.3	4.7	1	1.6	Dark grey brown Sand	Unlikely ASS	
	5	20/07/2017	5.1	6.3	1	-1.2	Dark red brown Sand	Borderline AASS maybe present	x
ID18-CASS16	0.1	20/07/2017	5.6	3.8	2	1.8	Fill, dark grey brown silty sand	Borderline PASS may be present	x
	0.5	20/07/2017	6.7	4.9	1	1.8	Pale grey fine Sand	Unlikely ASS	
	1	20/07/2017	6.5	4.4	2	2.1	Pale grey fine Sand	Uncertain	x
	1.5	20/07/2017	6.4	4.6	2	1.8	Pale grey fine Sand	Uncertain	
	2	20/07/2017	6.2	4.8	2	1.4	Pale grey fine Sand	Uncertain	
	2.5	20/07/2017	9.1	6.1	2	3.0	Pale grey fine Sand	Limited net acidifying ability	
	3	20/07/2017	7.6	4.1	2	3.5	Pale grey fine Sand	Uncertain	x
	3.5	20/07/2017	8.9	4.9	1	4.0	Pale grey fine Sand	Unlikely ASS	
	4	20/07/2017	6.7	5.2	2	1.5	Pale grey fine Sand	Limited net acidifying ability	
	4.5	20/07/2017	7.1	4.9	1	2.2	Pale grey fine Sand	Unlikely ASS	
	5	20/07/2017	6.6	4.3	2	2.3	Dark red brown medium Sand	Uncertain	x
ID18-CASS17	0.1	26/07/2017	7	5.3	2	1.7	Black Topsoil, trace roots	Limited net acidifying ability	
	0.5	25/07/2017	5.3	4.2	2	1.1	Grey fine Sand	Borderline AASS maybe present	x
	0.5	26/07/2017	5.5	4.9	2	0.6	Grey fine Sand	Borderline AASS maybe present	
	1	26/07/2017	4.9	4.9	1	0.0	Grey fine Sand	Borderline AASS maybe present	
	1.5	26/07/2017	6.4	4.4	2	2.0	Grey fine Sand	Uncertain	x
	2	26/07/2017	5.5	3.8	2	1.7	Grey fine Sand	Borderline AASS maybe present	
	2.5	26/07/2017	5.2	3.8	2	1.4	Grey fine Sand	Borderline AASS maybe present	
	3	26/07/2017	6.1	4.3	1	1.8	Grey fine Sand	Borderline AASS maybe present	x
	3.5	26/07/2017	6.4	5.1	1	1.3	Brown fine Sand	Unlikely ASS	
	4	26/07/2017	6.1	5.1	1	1.0	Red brown fine to medium Sand	Unlikely ASS	
	4.5	26/07/2017	8	5.3	1	2.7	Grey brown fine to medium Sand, trace shell	Unlikely ASS	
	5	26/07/2017	7.2	5.8	2	1.4	Grey black fine to medium Sand, trace shell	Limited net acidifying ability	
	5.5	26/07/2017	6.4	2.2	2	4.2	Grey black fine to medium Sand, trace shell	PASS may be present	x
	6	26/07/2017	6.6	2.1	2	4.5	Grey fine Sand, trace shell	PASS may be present	
	6.5	26/07/2017	7.9	1.8	2	6.1	Grey fine Sand, abundant shell	PASS may be present	x
	7	26/07/2017	8	5.7	2	2.3	Grey fine Sand, trace shell, slight H2S odour	Limited net acidifying ability	x
ID18-CASS18	0.1	26/07/2017	6.8	5.5	2	1.3	Black Topsoil, trace roots	Limited net acidifying ability	
	0.5	26/07/2017	6.4	5.1	1	1.3	Grey black fine Sand	Unlikely ASS	
	1	26/07/2017	4.9	4.6	1	0.3	Grey black fine Sand	Borderline AASS maybe present	x
	1.5	26/07/2017	6.0	4.9	1	1.1	Grey fine Sand	Unlikely ASS	
	2	26/07/2017	5.7	4.7	1	1.0	Grey fine Sand	Unlikely ASS	
	2.5	26/07/2017	5.9	4.9	1	1.0	Grey fine Sand	Unlikely ASS	
	3	26/07/2017	6.0	5.0	1	1.0	Grey fine Sand	Unlikely ASS	
	3.5	26/07/2017	5.7	5.0	1	0.7	Grey mottle black fine Sand	Unlikely ASS	
	4	26/07/2017	5.9	4.9	1	1.0	Grey mottle black fine Sand	Unlikely ASS	x
	4.5	26/07/2017	5.8	3.7	2	2.1	Red brown fine Sand	Borderline PASS may be present	
	5	26/07/2017	5.7	3.9	2	1.8	Yellow brown fine Sand, trace shell, slight H2S	Borderline PASS may be present	x
	5.5	26/07/2017	5.9	1.7	2	4.2	Yellow brown fine Sand, trace shell, slight H2S	PASS may be present	x
	6	26/07/2017	5.9	3.8	2	2.1	Dark brown silty Sand, trace shell	Borderline PASS may be present	
	6.5	26/07/2017	5.9	4.9	2	1.0	Dark brown silty Sand, trace shell	Uncertain	x
	7	26/07/2017	6.2	4.0	1	2.2	Dark brown silty Sand, trace shell	Unlikely ASS	
DUP3_260717	5	26/07/2017	5.9	4.4	2	1.5	Yellow brown fine Sand, trace shell, slight H2S	Uncertain	x
ID18-CASS19	0.5	26/07/2017	6.2	4.7	1	1.5	Black fine Sand	Unlikely ASS	
	1	26/07/2017	5.5	4.8	1	0.7	Black fine Sand	Borderline AASS maybe present	x
	1.5	26/07/2017	4.3	4.7	1	-0.4	Grey fine Sand	Borderline AASS maybe present	
	2	26/07/2017	4.4	4.8	1	-0.4	Grey fine Sand	Borderline AASS maybe present	
	2.5	26/07/2017	4.4	5.0	1	-0.6	Brown fine Sand, minor black streaks	Borderline AASS maybe present	x
	3	26/07/2017	4.4	4.9	1	-0.5	Dark Brown fine Sand, minor black streaks	Borderline AASS maybe present	
	3.5	26/07/2017	4.6	5.0	1	-0.4	Yellow brown fine Sand	Borderline AASS maybe present	
	4	26/07/2017	5.5	4.9	1	0.6	Red brown fine Sand, iron staining	Borderline AASS maybe present	x
	4.5	26/07/2017	5.9	4.7	1	1.2	Red brown fine Sand, iron staining	Unlikely ASS	
	5	26/07/2017	6.1	4.8	2	1.3	Grey brown silty Sand	Uncertain	
	5.5	26/07/2017	5.9	4.6	2	1.3	Grey brown silty Sand	Uncertain	x
	6	26/07/2017	6.1	2.3	2	3.8	Grey brown silty Sand, black ironstone nodules	PASS may be present	x
	6.5	26/07/2017	6.5	5.1	1	1.4	Grey brown medium Sand	Unlikely ASS	x
	7	26/07/2017	6.4	5.0	1	1.4	Grey brown medium Sand	Unlikely ASS	
DUP2_260717	4	26/07/2017	5.3	4.8	1	0.5	Red brown fine Sand, iron staining	Borderline AASS maybe present	x
ID18-CASS20	0.1	26/07/2017	6.0	4.6	2	1.4	Topsoil, black Silty	Uncertain	
	1	26/07/2017	5.0	4.6	1	0.4	Dark grey fine Sand	Borderline AASS maybe present	x
	1.5	26/07/2017	6.6	5.0	2	1.6	Dark grey fine Sand	Uncertain	
	2	26/07/2017	4.5	4.3	1	0.2	Dark grey fine Sand	Borderline AASS maybe present	x
	2.5	26/07/2017	4.4	4.4	1	0.0	Dark grey fine Sand	Borderline AASS maybe present	
	3	26/07/2017	4.3	4.2	1	0.1	Dark grey fine Sand, black streaks	Borderline AASS maybe present	
	3.5	26/07/2017	4.2	3.7	1	0.5	Grey fine Sand	Borderline AASS maybe present	x
	4	26/07/2017	4.2	4.0	2	0.2	Red brown medium Sand	Borderline AASS maybe present	
	4.5	26/07/2017	5.0	4.8	2	0.2	Yellow brown fine to medium Sand	Borderline AASS maybe present	
	5	26/07/2017	4.9	4.7	2	0.2	yellow grey Silty Sand	Borderline AASS maybe present	
	5.5	26/07/2017	5.3	4.9	1	0.4	yellow grey Silty Sand	Borderline AASS maybe present	
	6	26/07/2017	5.5	4.8	1	0.7	Grey silty Sand	Borderline AASS maybe present	x
	6.5	26/07/2017	5.7	2.3	2	3.4	Grey silty Sand	PASS may be present	
	7	26/07/2017	5.6	1.6	2	4.0	Grey silty Sand	PASS may be present	x
DUP1_260717	2	26/07/2017	4.2	3.8	1	0.4	Dark grey fine Sand	Borderline AASS maybe present	x

Appendix D
Table D2
Edithvale Coastal Acid Sulfate Soils Analytical Results

	Location	CASS01	CASS01	CASS01	CASS01	CASS02	CASS02	CASS02	CASS03	CASS03	CASS03	CASS03	CASS03	CASS03	CASS03	CASS03	CASS03	CASS03	CASS03	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04
	Depth (mbgs)	0.5	1	3.5	4	0.1	4	5	3	4.5	6.5	8	10.5	11.5	13	16	18	20	22	0.5	1	2	3.5	5.5	7	8.1	9	10.5	11.5
	Field ID	ID18CAS S01_0.5	ID18CAS S01_1	ID18CAS S01_3.5	ID18CAS S01_4	ID18CAS S02_0.1	ID18CAS S02_4	ID18CAS S02_5	ID18CAS S03_3	ID18CAS S03_4.5	ID18CAS S03_6.5	ID18CAS S03_8	ID18CAS S03_10.5	ID18CAS S03_11.5	ID18-CASS03-	ID18-CASS03-	ID18-CASS03-	ID18_CA SS03_20.	ID18_CA SS03_22.	ID18CAS S04_0.5	ID18CAS S04_1	ID18CAS S04_2	ID18CAS S04_3.5	ID18CAS S04_5.5	ID18CAS S04_7	ID18CAS S04_8.1	ID18CAS S04_9	ID18-CASS04-	ID18CAS S04_11.5
	Date	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	14/08/2017	14/08/2017	14/08/2017	15/08/2017	15/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017
	Lab Report (Field)	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1710363	EM1710363	EM1710363	EM1710363	EM1710363	EM1710363	EM1710806	EM1710806	EM1710806	EM1710868	EM1710868	EM1710181	EM1710181	EM1710181	EM1710181	EM1710181	EM1710181	EM1710341	EM1710341	EM1711196	EM1710341
	Lab Report (CRS)	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1711196	EM1711196	EM1711196	EM1711196	EM1711196	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1711196	EM1711196	EM1711196	EM1711196
	Unit																												
Field Testing																													
pHF	pH Units	6.5	5	5.6	4.5	7	4.8	5.3	5.5	5.6	6.8	7.3	8.6	8.6	9.6	9.5	8.5	7.7	7.1	5.2	5.8	5.4	4.5	5.5	6.1	7.1	8.6	9.6	9.2
pHFox	pH Units	4.5	3.7	4.1	3.5	5	3.1	3.7	4.3	3.9	2.2	1.5	6.2	5.7	5.6	7.4	6.6	5.7	5.4	4.2	4.6	4.7	3	4.1	2.2	2.2	2.2	2.6	2.3
Reaction Rate*	-	3	1	2	1	2	2	2	1	2	2	2	1	2	2	4	2	2	2	2	1	1	2	2	2	4	4	4	2
Actual Acidity																													
pH (KCl)	pH Unit	8.1	5.6	5.8	5.2	6.6	5.0	5.3	5.7	6.0	5.9	5.0	9.0	8.9	9.2	7.2	6.5	6.3	6.4	5.6	6.8	5.9	5.6	5.2	5.7	4.9	6.4	6.4	5.9
Titratable Actual Acidity	mole H+/t	<2	<2	<2	<2	<2	5	2	<2	<2	<2	13	<2	<2	<2	<2	<2	<2	<2	4	<2	<2	<2	12	<2	20	<2	<2	<2
Titratable Actual Acidity (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02
Potential Acidity																													
Chromium Reducible Sulfur	%S	0.008	0.011	<0.005	0.006	0.010	0.006	0.006	<0.005	<0.005	0.009	0.366	0.145	<0.005	0.040	0.014	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.537	0.599	0.311	0.084
Chromium Reducible Sulphur (acidity units)	mole H+/t	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	228	90	<10	25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	335	373	194	52
Retained Acidity																													
KCl Extractable Sulfur	%S																												
HCl Extractable Sulfur	%S																												
Net Acid Soluble Sulfur	%S																												
Net Acid Soluble Sulfur (acidity units)	mole H+/t																												
Net Acid Soluble Sulfur (sulfur units)	%S																												
Acid Neutralising Capacity (ANC)																													
ANC - Back Titration	%CaCO3	0.62				1.29							29.2	0.19	2.5	0.35	0.09				0.22								
ANC (acidity units)	mole H+/t	125				258							5,840	38	499	71	17				43								
ANC (sulfur units)	%S	0.2				0.41							9.37	0.06	0.8	0.11	0.03				0.07								
Acid Base Accounting																													
ANC Fineness Factor	-	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	mole H+/t	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	241	90	<10	25	<10	<10	<10	<10	<10	<10	<10	<10	12	<10	354	374	194	54
Net Acidity excluding ANC (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.39	0.14	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.57	0.60	0.31	0.09
Liming Rate excluding ANC	kg CaCO3/t	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	18	7	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	26	28	14	4
Net Acidity including ANC (acidity units)	mole H+/t	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	241	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	12	<10	354	374	194	54
Net Acidity including ANC (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.39	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.57	0.60	0.31	0.09
Liming Rate including ANC	kg CaCO3/t	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	26	28	14	4

* - Primary sample (CASS 12_10) was inadvertantly omitted from analysis

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D2
Edithvale Coastal Acid Sulfate Soils Analytical Results

	Location	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06
	Depth (mbgs)	12	13	15	17	19	22	1.5	4.5	7	8	8.5	9	10.5	13.5	14.5	15	16.5	19	1.5	3.5	5	5.5	8	8.5	10	12	13	15
	Field ID	ID18CAS S04_12	ID18-CASS04-	ID18-CASS04-	ID18-CASS04-	ID18-CASS04-	ID18-CASS04-	ID18CAS S05_1.5	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS05_	ID18-CASS06_	ID18-CASS06_	ID18-CASS06_	ID18-CASS06_	ID18-CASS06_	ID18-CASS06_1	ID18-CASS06_	ID18-CASS06_	ID18_CA SS06_15.
	Date	3/08/2017	10/08/2017	10/08/2017	10/08/2017	11/08/2017	11/08/2017	1/08/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	18/07/2017	18/07/2017	18/07/2017	18/07/2017	18/07/2017	19/07/2017	19/07/2017	19/07/2017	19/07/2017	19/07/2017	19/07/2017	25/07/2017	25/07/2017	25/07/2017	26/07/2017
	Lab Report (Field)	EM1710341	EM1710670	EM1710670	EM1710670	EM1710732	EM1710732	EM1710181	EM1709323	EM1709323	EM1709323	EM1709323	EM1709323	EM1709378	EM1709421	EM1709421	EM1709421	EM1709421	EM1709421	EM1709495	EM1709495	EM1709495	EM1709495	EM1709495	EM1709495	EM1709805	EM1709805	EM1709805	EM1709882
	Lab Report (CRS)	EM1711196	EM1711196	EM1711196	EM1711196	EM1711196	EM1711282	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1709956	EM1709956	EM1709956	EM1709956	EM1709956	EM1709956	EM1710779	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710432	EM1710432	EM1710432	EM1710432
	Unit																												
Field Testing																													
pHF	pH Units	8.8	8.5	9.5	8.9	8.3	7.2	5.7	4.5	8	7.4	8.1	8.3	9.5	8	8.6	8.5	8	7.6	5.5	4.4	6.2	6	8.4	8.6	8.4	9	9.5	9.2
pHFox	pH Units	4.6	1.6	8.6	8.1	5.9	5.6	4.8	4	4.2	1.6	4.9	1.3	5.8	1.8	2.1	5.3	5.4	5.4	4.5	4.4	4.1	4.5	1.4	4.4	4.5	4.4	1.4	5.7
Reaction Rate*	-	2	4	3	4	2	2	1	1	2	2	2	4	2	2	4	2	2	1	1	1	1	2	2	2	2	2	4	4
Actual Acidity																													
pH (KCl)	pH Unit	6.0	4.8	6.7	6.6	6.5	6.4	5.4	5.4	5.2	4.9	6.4	7.6	6.5	6.7	5.6	6.2	5.9	6.1	5.6	5.3	5.2	5.2	6.5	5.1	6.0	6.3	5.6	5.5
Titratable Actual Acidity	mole H+/t	<2	12	<2	<2	<2	<2	<2	4	<2	8	<2	<2	<2	<2	3	<2	<2	<2	<2	<2	12	7	<2	3	<2	<2	<2	6
Titratable Actual Acidity (sulfur units)	%S	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Potential Acidity																													
Chromium Reducible Sulfur	%S	0.009	0.201	0.040	<0.005	<0.005	0.012	0.007	<0.005	0.058	0.067	0.115	0.386	0.082	0.105	0.250	0.022	0.010	0.018	<0.005	0.006	0.024	0.006	0.131	0.062	0.018	0.058	0.138	0.109
Chromium Reducible Sulphur (acidity units)	mole H+/t	<10	126	25	<10	<10	<10	<10	<10	36	42	72	240	51	65	156	13	<10	11	<10	<10	15	<10	82	38	11	36	86	68
Retained Acidity																													
KCl Extractable Sulfur	%S																												
HCl Extractable Sulfur	%S																												
Net Acid Soluble Sulfur	%S																												
Net Acid Soluble Sulfur (acidity units)	mole H+/t																												
Net Acid Soluble Sulfur (sulfur units)	%S																												
Acid Neutralising Capacity (ANC)																													
ANC - Back Titration	%CaCO3			0.45	0.53	0.04							0.81	0.51	0.3									0.22					
ANC (acidity units)	mole H+/t			90	106	<10							162	102	60									44					
ANC (sulfur units)	%S			0.14	0.17	0.01							0.26	0.16	0.1									0.07					
Acid Base Accounting																													
ANC Fineness Factor	-	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	mole H+/t	<10	138	25	<10	<10	<10	<10	<10	37	50	72	240	51	65	159	13	<10	11	<10	<10	27	11	82	41	11	36	86	74
Net Acidity excluding ANC (sulfur units)	%S	<0.02	0.22	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	0.08	0.11	0.38	0.08	0.10	0.26	0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	0.13	0.06	<0.02	0.06	0.14	0.12
Liming Rate excluding ANC	kg CaCO3/t	<1	10	2	<1	<1	<1	<1	<1	3	4	5	18	4	5	12	1	<1	<1	<1	<1	2	<1	6	3	<1	3	6	6
Net Acidity including ANC (acidity units)	mole H+/t	<10	138	<10	<10	<10	<10	<10	<10	37	50	72	132	<10	25	159	13	<10	11	<10	<10	27	11	53	41	11	36	86	74
Net Acidity including ANC (sulfur units)	%S	<0.02	0.22	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	0.08	0.11	0.21	<0.02	0.04	0.26	0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	0.08	0.06	<0.02	0.06	0.14	0.12
Liming Rate including ANC	kg CaCO3/t	<1	10	<1	<1	<1	<1	<1	<1	3	4	5	10	<1	2	12	1	<1	<1	<1	<1	2	<1	4	3	<1	3	6	6

* - Primary sample (CASS 12_10) was inadvertantly omitted from analysis

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D2
Edithvale Coastal Acid Sulfate Soils Analytical Results

Location		CASS06	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS08	CASS08	CASS08	CASS08	CASS08	CASS08	CASS08	CASS08	CASS08	CASS08	CASS09	CASS09	CASS09	CASS09
Depth (mbgs)		19.5	1	3	4.5	6	7	9	12.5	13	14	14.5	15	21	22	3	4	6	6.3	7	10.5	12.5	15	16	20.5	4	5	7	8.5
Field ID		ID18_CASS06_19.	ID18CASS07_1	ID18_CASS07_3.0	ID18_CASS07_4.5	ID18_CASS07_6.0	ID18_CASS07_7.0	ID18_CASS07_9.0	ID18_CASS07_12.	ID18-CASS07-	ID18-CASS07-	ID18-CASS07-	ID18-CASS07-	ID18-CASS07-	ID18-CASS07-	ID18CASS08_3	ID18CASS08_4	ID18CASS08_6	ID18-CASS08_	ID18CASS08_7	ID18CASS08_10.5	ID18-CASS08-	ID18-CASS08-	ID18-CASS08-	ID18-CASS08-	ID18_CASS09_4.0	ID18_CASS09_5.0	ID18_CASS09_7.0	ID18_CASS09_8.5
Date		26/07/2017	1/08/2017	8/08/2017	8/08/2017	8/08/2017	8/08/2017	8/08/2017	8/08/2017	9/08/2017	9/08/2017	9/08/2017	9/08/2017	9/08/2017	9/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	8/08/2017	8/08/2017	8/08/2017	8/08/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017
Lab Report (Field)		EM1709882	EM1710220	EM1710538	EM1710538	EM1710538	EM1710538	EM1710538	EM1710538	EM1710587	EM1710587	EM1710587	EM1710587	EM1710587	EM1710587	EM1710181	EM1710181	EM1710181	EM1710779	EM1710181	EM1710181	EM1710535	EM1710535	EM1710535	EM1710535	EM1710140	EM1710140	EM1710140	EM1710140
Lab Report (CRS)		EM1710432	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1711196	EM1711196	EM1711196	EM1711196	EM1711196	EM1711196	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779
	Unit																												
Field Testing																													
pHF	pH Units	8.2	5.2	5.5	5.8	5.8	6.8	6.3	8	9.3	9.4	9.1	8.7	7	7.2	5.9	4.5	5.8	6.2	6.8	6.8	7.9	9.1	9.3	7.8	7.3	5	6.7	5.6
pHFox	pH Units	5.4	4.5	3	2.4	3.5	2	1.7	2.2	4.8	1.1	1.8	6.7	5.4	5.6	4.1	3.5	4.5	1.6	1.8	1.8	1.6	2.4	8.6	4.4	4.5	3.6	3.2	2.6
Reaction Rate*	-	1	1	2	2	2	2	2	2	2	4	3	3	1	2	2	1	2	3	2	2	3	3	3	2	2	2	2	2
Actual Acidity																													
pH (KCl)	pH Unit	5.6	5.9	5.7	5.3	5.4	5.7	5.2	5.9	6.3	6.4	6.6	6.5	6.1	6.2	5.7	5.3	5.4	5.1	5.6	5.7	6.2	6.8	6.7	6.0	6.1	4.8	5.5	5.0
Titratable Actual Acidity	mole H+/t	<2	<2	<2	5	7	<2	6	<2	<2	<2	<2	<2	<2	<2	<2	5	5	16	<2	<2	<2	<2	<2	<2	<2	22	<2	17
Titratable Actual Acidity (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	0.03
Potential Acidity																													
Chromium Reducible Sulfur	%S	0.014	<0.005	<0.005	<0.005	<0.005	0.014	0.105	<0.005	0.025	0.142	0.194	0.024	0.015	<0.005	<0.005	<0.005	0.110	0.170	0.024	0.018	0.053	0.078	<0.005	<0.005	<0.005	<0.005	0.027	0.115
Chromium Reducible Sulphur (acidity units)	mole H+/t	<10	<10	<10	<10	<10	<10	66	<10	16	88	121	15	<10	<10	<10	<10	68	106	15	11	33	49	<10	<10	<10	<10	17	72
Retained Acidity																													
KCl Extractable Sulfur	%S																												
HCl Extractable Sulfur	%S																												
Net Acid Soluble Sulfur	%S																												
Net Acid Soluble Sulfur (acidity units)	mole H+/t																												
Net Acid Soluble Sulfur (sulfur units)	%S																												
Acid Neutralising Capacity (ANC)																													
ANC - Back Titration	%CaCO3											0.34	0.37										0.64	0.66					
ANC (acidity units)	mole H+/t											68	75										128	132					
ANC (sulfur units)	%S											0.11	0.12										0.2	0.21					
Acid Base Accounting																													
ANC Fineness Factor	-	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	mole H+/t	<10	<10	<10	<10	<10	<10	72	<10	16	88	121	15	10	<10	<10	<10	73	122	17	11	33	49	<10	<10	<10	22	18	89
Net Acidity excluding ANC (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.11	<0.02	0.02	0.14	0.19	0.02	<0.02	<0.02	<0.02	<0.02	0.12	0.20	0.03	<0.02	0.05	0.08	<0.02	<0.02	<0.02	0.03	0.03	0.14
Liming Rate excluding ANC	kg CaCO3/t	<1	<1	<1	<1	<1	<1	5	<1	1	7	9	1	<1	<1	<1	<1	5	9	1	<1	2	4	<1	<1	<1	2	1	7
Net Acidity including ANC (acidity units)	mole H+/t	<10	<10	<10	<10	<10	<10	72	<10	16	88	76	<10	10	<10	<10	<10	73	122	17	11	33	<10	<10	<10	<10	22	18	89
Net Acidity including ANC (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.11	<0.02	0.02	0.14	0.12	<0.02	<0.02	<0.02	<0.02	<0.02	0.12	0.20	0.03	<0.02	0.05	<0.02	<0.02	<0.02	<0.02	0.03	0.03	0.14
Liming Rate including ANC	kg CaCO3/t	<1	<1	<1	<1	<1	<1	5	<1	1	7	6	<1	<1	<1	<1	<1	5	9	1	<1	2	<1	<1	<1	<1	2	1	7

* - Primary sample (CASS 12_10) was inadvertantly omitted from analysis

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D2
Edithvale Coastal Acid Sulfate Soils Analytical Results

Location		CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS10	CASS10	CASS10	CASS10	CASS10	CASS10	CASS10	CASS10	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS12	CASS12
Depth (mbgs)		10	11	12	14	14.5	17	20	20.5	21	21.5	2	5	8	10	11.5	14	16	21	4	5.5	7	10	11	14	15	19.5	1.5	3
Field ID		ID18_CASS09_10	ID18_CASS09_11	ID18_CASS09_12	ID18-CASS09-	ID18-CASS09-	ID18-CASS09-	ID18-CASS09-	ID18-CASS09-	ID18-CASS09-	ID18-CASS09-	ID18-CASS10_	ID18-CASS10_	ID18-CASS10_	ID18-CASS10_	ID18-CASS10_	ID18-CASS10_	ID18-CASS10_	ID18-CASS10_	ID18 CASS11_	ID18-CASS11_	ID18-CASS11_	ID18-CASS11_	ID18-CASS11_	ID18-CASS11_	ID18-CASS11_	ID18-CASS11_	ID18CASS12_1.5	ID18CASS12_3
Date		31/07/2017	31/07/2017	31/07/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017	13/07/2017	14/07/2017	14/07/2017	14/07/2017	10/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	12/07/2017	12/07/2017	12/07/2017	24/07/2017	24/07/2017
Lab Report (Field)		EM1710140	EM1710140	EM1710140	EM1710339	EM1710339	EM1710339	EM1710339	EM1710339	EM1710339	EM1710339	EM1709193	EM1709193	EM1709193	EM1709193	EM1709193	EM1709269	EM1709269	EM1709269	EM1708968	EM1709034	EM1709034	EM1709034	EM1709034	EM1709146	EM1709146	EM1709146	EM1709733	EM1709733
Lab Report (CRS)		EM1710779	EM1710779	EM1710779	EM1711196	EM1711196	EM1711196	EM1711196	EM1711196	EM1711196	EM1711196	EM1709757	EM1709757	EM1709757	EM1709757	EM1709757	EM1709757	EM1709757	EM1709757	EM1709503	EM1709503	EM1709503	EM1709503	EM1709503	EM1709503	EM1709503	EM1709503	EM1710432	EM1710432
	Unit																												
Field Testing																													
pHF	pH Units	8	7.2	8.4	8.5	8.9	8.6	7.7	8.4	6.9	7.3	5.7	6.8	9.9	8.9	8.6	9.1	8.8	7.5	4.3	6.8	7.6	8.6	8.6	8.8	9.3	8.1	4.6	5.6
pHFox	pH Units	1.8	4.8	2	2.1	7.5	4.4	4.6	2.6	4.3	4.8	4.5	4.5	1.9	1.5	4.1	4.2	5.5	4.5	4	4.1	2.9	1.9	2.6	1.8	6	4.5	3.5	4.1
Reaction Rate*	-	4	2	3	4	4	2	2	2	2	2	1	2	2	2	1	2	2	2	1	2	2	4	4	4	4	2	2	2
Actual Acidity																													
pH (KCl)	pH Unit	4.5	5.9	5.7	5.4	6.4	6.2	6.0	5.9	6.0	6.0	7.7	5.6	5.3	6.4	6.4	6.1	6.2	6.0	6.6	5.7	5.7	7.4	6.4	6.4	6.4	6.6	5.6	5.7
Titratable Actual Acidity	mole H+/t	42	<2	<2	6	<2	<2	<2	<2	<2	<2	<2	10	8	<2	<2	3	<2	2	<2	5	4	<2	<2	<2	<2	<2	<2	<2
Titratable Actual Acidity (sulfur units)	%S	0.07	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Potential Acidity																													
Chromium Reducible Sulfur	%S	0.944	0.005	0.070	0.259	0.024	0.007	0.005	0.022	<0.005	0.006	<0.005	0.005	0.086	0.025	0.017	0.095	0.014	<0.005	0.007	0.005	0.020	1.180	0.065	0.160	0.015	0.025	0.020	0.009
Chromium Reducible Sulphur (acidity units)	mole H+/t	588	<10	44	162	15	<10	<10	13	<10	<10	<10	<10	54	15	10	59	<10	<10	<10	<10	12	737	41	100	<10	15	13	<10
Retained Acidity																													
KCl Extractable Sulfur	%S																												
HCl Extractable Sulfur	%S																												
Net Acid Soluble Sulfur	%S																												
Net Acid Soluble Sulfur (acidity units)	mole H+/t																												
Net Acid Soluble Sulfur (sulfur units)	%S																												
Acid Neutralising Capacity (ANC)																													
ANC - Back Titration	%CaCO3											0.47								0.01			1.66				0.02		
ANC (acidity units)	mole H+/t											94								<10			332				<10		
ANC (sulfur units)	%S											0.15								<0.01			0.53				<0.01		
Acid Base Accounting																													
ANC Fineness Factor	-	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	mole H+/t	630	<10	44	168	15	<10	<10	15	<10	<10	<10	14	62	15	10	62	<10	<10	<10	<10	16	737	41	100	<10	15	14	<10
Net Acidity excluding ANC (sulfur units)	%S	1.01	<0.02	0.07	0.27	0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	0.02	0.10	0.02	<0.02	0.10	<0.02	<0.02	<0.02	<0.02	0.02	1.18	0.06	0.16	<0.02	0.02	0.02	<0.02
Liming Rate excluding ANC	kg CaCO3/t	47	<1	3	12	1	<1	<1	1	<1	<1	<1	1	5	1	<1	5	<1	<1	<1	<1	1	55	3	7	<1	1	1	<1
Net Acidity including ANC (acidity units)	mole H+/t	630	<10	44	168	15	<10	<10	15	<10	<10	<10	14	62	15	10	62	<10	<10	<10	<10	16	515	41	100	<10	13	14	<10
Net Acidity including ANC (sulfur units)	%S	1.01	<0.02	0.07	0.27	0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	0.02	0.10	0.02	<0.02	0.10	<0.02	<0.02	<0.02	<0.02	0.02	0.82	0.06	0.16	<0.02	0.02	0.02	<0.02
Liming Rate including ANC	kg CaCO3/t	47	<1	3	12	1	<1	<1	1	<1	<1	<1	1	5	1	<1	5	<1	<1	<1	<1	1	39	3	7	<1	<1	1	<1

* - Primary sample (CASS 12_10) was inadvertantly omitted from analysis

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D2
Edithvale Coastal Acid Sulfate Soils Analytical Results

Location		CASS12	CASS12	CASS12	CASS12	CASS12	CASS12	CASS12	CASS13	CASS13	CASS13	CASS13	CASS13	CASS13	CASS14	CASS14	CASS14	CASS14	CASS14	CASS14	CASS14	CASS15	CASS15	CASS15	CASS16	CASS16	CASS16	CASS16	CASS17
Depth (mbgs)		5	7	9	10	10.5	13	14	1	3	5	6.5	8	10	0.1	1.5	2.5	4	6	6.5	7	0.1	1.5	5	0.1	1	3	5	0.5
Field ID		ID18CAS S12_5	ID18CAS S12_7	ID18CAS S12_9	DUP3_24 0717*	ID18CAS S12_10.5	ID18CAS S12_13	ID18CAS S12_14	ID18CASS 13_1	ID18CASS 13_3	ID18CAS S13_5	ID18CAS S13_6.5	ID18CAS S13_8	ID18CASS1 3_10	ID18CAS S14_0.1	ID18CAS S14_1.5	ID18CAS S14_2.5	ID18CAS S14_4.0	ID18CAS S14_6.0	ID18CAS S14_6.5	ID18CAS S14_7.0	ID18CAS S15_0.1	ID18CAS S15_1.5	ID18CAS S15_5.0	ID18CAS S16_0.1	ID18CAS S16_1.0	ID18CAS S16_3.0	ID18CAS S16_5.0	ID18CAS S17_0.5
Date		24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	26/07/2017
Lab Report (Field)		EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709899
Lab Report (CRS)		EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710370	EM1710779
	Unit																												
Field Testing																													
pHF	pH Units	4.4	5.6	6.3	8.3	8.1	7.9	8.3	5.9	5.4	5.2	5.4	6.6	7.3	6.1	4.7	7.5	4.4	5.8	6.8	5.8	6.0	5.3	5.1	5.6	6.5	7.6	6.6	5.5
pHFox	pH Units	3.4	3.7	4.3	1.9	2	1.9	2.5	4.0	4.4	2.9	4.3	1.8	2.0	3.0	3.5	4.8	3.9	2.4	4.2	2.7	3.4	4.1	6.3	3.8	4.4	4.1	4.3	4.9
Reaction Rate*	-	2	2	2	4	4	2	2	2	1	2	2	1	4	2	1	2	2	2	2	2	3	1	1	2	2	2	2	2
Actual Acidity																													
pH (KCl)	pH Unit	4.6	5.6	5.8	7.3	6.6	6.1	6.3	5.6	5.8	5.3	5.5	5.5	4.0	6.1	5.4	6.4	5.3	5.5	5.5	5.2	5.7	5.7	5.0	5.9	6.3	6.0	5.6	5.6
Titratable Actual Acidity	mole H+/t	45	<2	<2	<2	<2	<2	<2	<2	<2	4	4	<2	86	<2	<2	<2	<2	<2	<2	<2	<2	<2	15	<2	<2	<2	<2	2
Titratable Actual Acidity (sulfur units)	%S	0.07	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.14	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Potential Acidity																													
Chromium Reducible Sulfur	%S	0.008	0.009	0.006	1.580	0.530	0.090	0.090	0.006	<0.005	<0.005	<0.005	0.019	0.593	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	0.008	0.029
Chromium Reducible Sulphur (acidity units)	mole H+/t	<10	<10	<10	987	331	56	56	<10	<10	<10	<10	12	370	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	18
Retained Acidity																													
KCl Extractable Sulfur	%S													0.12															
HCl Extractable Sulfur	%S													0.32															
Net Acid Soluble Sulfur	%S													0.2															
Net Acid Soluble Sulfur (acidity units)	mole H+/t													94															
Net Acid Soluble Sulfur (sulfur units)	%S													0.15															
Acid Neutralising Capacity (ANC)																													
ANC - Back Titration	%CaCO3				1.79	0.56																							
ANC (acidity units)	mole H+/t				357	113																							
ANC (sulfur units)	%S				0.57	0.18																							
Acid Base Accounting																													
ANC Fineness Factor	-	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	mole H+/t	50	<10	<10	987	331	56	56	<10	<10	<10	<10	13	550	<10	<10	<10	<10	<10	<10	11	<10	<10	15	<10	<10	<10	<10	20
Net Acidity excluding ANC (sulfur units)	%S	0.08	<0.02	<0.02	1.58	0.53	0.09	0.09	<0.02	<0.02	<0.02	<0.02	0.02	0.88	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.03
Liming Rate excluding ANC	kg CaCO3/t	4	<1	<1	74	25	4	4	<1	<1	<1	<1	1	41	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	2
Net Acidity including ANC (acidity units)	mole H+/t	50	<10	<10	748	256	56	56	<10	<10	<10	<10	13	550	<10	<10	<10	<10	<10	<10	11	<10	<10	15	<10	<10	<10	<10	20
Net Acidity including ANC (sulfur units)	%S	0.08	<0.02	<0.02	1.20	0.41	0.09	0.09	<0.02	<0.02	<0.02	<0.02	0.02	0.88	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.03
Liming Rate including ANC	kg CaCO3/t	4	<1	<1	56	19	4	4	<1	<1	<1	<1	1	41	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	2

* - Primary sample (CASS 12_10) was inadvertantly omitted from analysis

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D2
Edithvale Coastal Acid Sulfate Soils Analytical Results

	Location		CASS17	CASS17	CASS17	CASS17	CASS17	CASS18	CASS18	CASS18	CASS18	CASS18	CASS19	CASS19	CASS19	CASS19	CASS19	CASS19	CASS20	CASS20	CASS20	CASS20	CASS20
	Depth (mbgs)		1.5	3	5.5	6.5	7	1	4	5	5.5	6.5	1	2.5	4	5.5	6	6.5	1	2	3.5	6	7
	Field ID		ID18CAS S17_1.5	ID18CAS S17_3	ID18CAS S17_5.5	ID18CAS S17_6.5	ID18CAS S17_7	ID18CAS S18_1	ID18CAS S18_4	ID18CAS S18_5	ID18CAS S18_5.5	ID18CAS S18_6.5	ID18CAS S19_1	ID18CAS S19_2.5	ID18CAS S19_4	ID18CAS S19_5.5	ID18CAS S19_6	ID18CAS S19_6.5	ID18CAS S20_1	ID18CAS S20_2	ID18CAS S20_3.5	ID18CAS S20_6	ID18CAS S20_7
	Date		26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017	26/07/2017
	Lab Report (Field)		EM1709899	EM1709899	EM1709899	EM1709899	EM1709899	EM1709883	EM1709883	EM1709883	EM1709883	EM1709883	EM1709883	EM1709883	EM1709883	EM1709883	EM1709883	EM1709883	EM1709848	EM1709848	EM1709848	EM1709848	EM1709848
	Lab Report (CRS)		EM1710779	EM1710779	EM1710779	EM1710779	EM1710779	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432	EM1710432
		Unit																					
Field Testing																							
pHF	pH Units		6.4	6.1	6.4	7.9	8.0	4.9	5.9	5.7	5.9	5.9	5.5	4.4	5.5	5.9	6.1	6.5	5.0	4.5	4.2	5.5	5.6
pHFox	pH Units		4.4	4.3	2.2	1.8	5.7	4.6	4.9	3.9	1.7	4.9	4.8	5.0	4.9	4.6	2.3	5.1	4.6	4.3	3.7	4.8	1.6
Reaction Rate*	-		2	1	2	2	2	1	1	2	2	2	1	1	1	2	2	1	1	1	1	1	2
Actual Acidity																							
pH (KCl)	pH Unit		8.6	6.0	5.2	9.1	6.6	5.4	6.4	5.5	5.2	5.9	5.4	5.6	5.6	5.0	5.0	5.7	5.6	5.6	5.4	5.7	5.3
Titratable Actual Acidity	mole H+/t		<2	<2	2	<2	<2	2	<2	2	6	<2	<2	2	2	5	4	<2	<2	3	2	<2	<2
Titratable Actual Acidity (sulfur units)	%S		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Potential Acidity																							
Chromium Reducible Sulfur	%S		<0.005	<0.005	0.005	<0.005	0.156	0.006	0.058	0.008	0.110	0.013	0.007	0.006	0.006	0.044	0.049	0.011	0.006	0.006	0.008	0.013	0.019
Chromium Reducible Sulphur (acidity units)	mole H+/t		<10	<10	<10	<10	97	<10	36	<10	69	<10	<10	<10	<10	28	30	<10	<10	<10	<10	<10	12
Retained Acidity																							
KCl Extractable Sulfur	%S																						
HCl Extractable Sulfur	%S																						
Net Acid Soluble Sulfur	%S																						
Net Acid Soluble Sulfur (acidity units)	mole H+/t																						
Net Acid Soluble Sulfur (sulfur units)	%S																						
Acid Neutralising Capacity (ANC)																							
ANC - Back Titration	%CaCO3		0.12			0.68	0.28																
ANC (acidity units)	mole H+/t		25			136	55																
ANC (sulfur units)	%S		0.04			0.22	0.09																
Acid Base Accounting																							
ANC Fineness Factor	-		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	mole H+/t		<10	<10	<10	<10	97	<10	36	<10	75	<10	<10	<10	<10	33	34	<10	<10	<10	<10	<10	13
Net Acidity excluding ANC (sulfur units)	%S		<0.02	<0.02	<0.02	<0.02	0.16	<0.02	0.06	<0.02	0.12	<0.02	<0.02	<0.02	<0.02	0.05	0.05	<0.02	<0.02	<0.02	<0.02	<0.02	0.02
Liming Rate excluding ANC	kg CaCO3/t		<1	<1	<1	<1	7	<1	3	<1	6	<1	<1	<1	<1	2	2	<1	<1	<1	<1	<1	<1
Net Acidity including ANC (acidity units)	mole H+/t		<10	<10	<10	<10	60	<10	36	<10	75	<10	<10	<10	<10	33	34	<10	<10	<10	<10	<10	13
Net Acidity including ANC (sulfur units)	%S		<0.02	<0.02	<0.02	<0.02	0.10	<0.02	0.06	<0.02	0.12	<0.02	<0.02	<0.02	<0.02	0.05	0.05	<0.02	<0.02	<0.02	<0.02	<0.02	0.02
Liming Rate including ANC	kg CaCO3/t		<1	<1	<1	<1	4	<1	3	<1	6	<1	<1	<1	<1	2	2	<1	<1	<1	<1	<1	<1

* - Primary sample (CASS 12_10) was inadvertantly omitted from analysis

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

AECOM GHD JOINT VENTURE

Appendix D
Table D3
Groundwater Field Measurements - Edithvale

Bore ID	Date	Aquifer	Total Depth (mbgl)	Screen Interval (mbgl)	SWL (mbgl)	Reduced Water Levels (mAHD)	pH (pH units)	EC (µS/cm)	Temp (°C)	DO (ppm)	ORP (±mV)	Corrected ORP (±mV)	Comments
ID18-BH01	18/07/2017	Quarternery	9.1	6.1 to 9.1	5.60	0.95	6.97	634	17.7	5.3	58	263	silty, brown, no sheen / odour
ID18-BH02	21/07/2017	Quarternery	10.5	7.0 to 10.0	5.73	0.71	6.75	731	17.7	2.4	-152	53	clear, no turbidity or sheen, slight organic odour
ID18-BH04	21/07/2017	Quarternery	14.0	11.0 to 14.0	5.69	0.86	7.36	321	17.5	3.0	-16	189	organic odour, no sheen, yellow, olive green sediment – small amount (amount a teaspoon)
ID18-BH09	19/07/2017	Quarternery	9.0	6.0 to 9.0	5.50	1.02	6.24	307	18.3	0.7	-100	105	
ID18-GWBH01	18/07/2017	Quarternery	8.0	5.0 to 8.0	4.08	0.68	7.28	387	16.7	0.4	9	214	light brown, low sediment load, no sheen
ID18-GWBH03	24/07/2017	Quarternery	6.0	3.0 to 6.0	5.45	1.04	5.01	393	17.7	2.2	80	285	water colour cleared by time to sample, was murky brown at start of pumping.
ID18-GWBH04	19/07/2017	Quarternery	5.5	2.5 to 5.5	1.03	1.30	6.33	472	16.5	4.5	-152	53	
ID18-BH06	24/07/2017	Upper Tertiary Aquifer	20.0	17.0 to 20.0	5.85	0.73	7.00	8094	14.8	0.1	-189	16	no sheen in pumped water, only on top of the water sitting around the pvc casing
ID18-BH07	18/07/2017	Upper Tertiary Aquifer	16.7	14.2 to 16.7	3.63	0.92	7.84	7351	18.0	-0.3	-267	-62	murky appearance – olive colour, organic odour
ID18-GWBH02	18/07/2017	Upper-Mid Tertiary Aquitard	28.0	21.0 to 28.0	2.95	0.56	8.52	21653	17.2	2.9	-167	38	clear, no sediment, no sheen
ID18-GWBH05	19/07/2017	Upper Tertiary Aquifer	14.0	11.0 to 14.0	1.31	1.07	7.54	2544	16.0	1.9	-89	116	

Appendix D
Table D4
Tabulated Analytical GW Results - Edithvale

													Quaternary																	Upper Tertiary Aquifer						
												Location_Code	ID18-BH01	ID18-BH01	ID18-BH02	ID18-BH02	ID18-BH02	ID18-BH02	ID18-BH04	ID18-BH04	ID18-BH04	ID18-BH04	ID18-BH09	ID18-BH09	ID18-BH09	ID18-GWBH01	ID18-GWBH03	ID18-GWBH04	ID18-GWBH04	ID18-BH06	ID18-BH06	ID18-BH06	ID18-BH07	ID18-BH07	ID18-GWBH02	ID18-GWBH05
												Sampled_Date_Time	1/12/2016	18/07/2017	1/12/2016	8/06/2017	21/07/2017	21/07/2017	1/12/2016	8/06/2017	21/07/2017	21/07/2017	1/12/2016	8/06/2017	19/07/2017	18/07/2017	24/07/2017	1/03/2017	19/07/2017	1/12/2016	8/06/2017	24/07/2017	30/11/2016	18/07/2017	18/07/2017	19/07/2017
												Lab_Report_Number	EM1614506	554862	EM1614506	549619	555367	EM1709670	EM1614506	549619	555367	EM1709670	EM1614506	549619	554985	554862	556779	EM1702345	554985	EM1614506	549619	556779	EM1614420	554862	554862	554985
Method	ChemName	output unit	EQL	PFAS NEMP 2017 Ecological - freshwater 95% species protection	PFAS NEMP 2017 Drinking Water	ADWG 2015 Aesthetic	ADWG 2015 Health	ANZECC 2000 FW 95%	ANZECC 2000 Irrigation - Long-term Trigger Values	ANZECC 2000 Irrigation - Short-term Trigger Values	ANZECC 2000 Stock Watering	NHMRC Recreational Guidelines 2008																								
Physical	Total Dissolved Solids	mg/L	10			600					4000		230	300	388	430	440	-	355	250	620	-	755	220	230	220	260	415	270	2160	3300	4100	3910	3300	12,000	1300
Cations	Calcium (Filtered)	mg/L	1								1000		27	41	47	51	59	-	57	38	37	-	19	13	13	55	18	27	28	28	43	48	67	72	910	35
	Magnesium (Filtered)	mg/L	1										4	11	8	8.4	9.2	-	7	3.8	3.9	-	4	3.5	3.6	4	5.8	9	6.7	20	49	64	34	59	270	25
	Potassium (Filtered)	mg/L	1										8	12	24	18	21	-	7	4.5	4.3	-	4	5	4.5	4.3	5.3	6	5.4	18	24	28	25	26	60	13
	Sodium (Filtered)	mg/L	1			180							26	57	47	49	60	-	32	24	23	-	116	25	31	17	39	58	47	788	1100	1400	1290	1500	4400	400
Anions	Bromide	mg/L	0.5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62	1.8
	Fluoride	mg/L	0.5				1.5		1	2	2	15	0.1	<0.5	<0.1	<0.5	<0.5	-	<0.1	<0.5	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	0.1	<0.5	0.9	<0.5	<0.5	1.1	0.8	<0.6	<0.6
	Chloride	mg/L	1			250							35	110	56	69	72	-	43	38	36	-	65	36	40	34	81	72	62	1030	1600	2100	1840	2100	6300	510
	Sulphate	mg/L	5			250	500				1000	5000	32	47	73	95	90	-	18	13	14	-	30	15	23	14	26	43	24	106	190	220	270	260	1200	<5
	Chloride:Sulphate Ratio (Calc)												1	2	1	1	1	-	2	3	3	-	2	2	2	2	3	2	3	10	8	10	7	8	5	102
	Sulphate as S	mg/L	5								333		-	16	-	-	30	-	-	-	<5	-	-	-	7.5	<5	8.7	-	8.1	-	-	74	-	86	400	<5
	Carbonate as CaCO3	mg/L	10										-	<10	-	<10	<10	-	-	<10	<10	-	-	<10	<10	<10	<10	-	<10	-	<10	<10	-	<10	<10	<10
Ionic Balance	Anions Total	meq/L	0.01										3.25	-	6.5	-	-	-	5.4	-	-	-	6.89	-	-	-	-	5.48	-	37.5	-	-	66.8	-	-	-
	Cations Total	meq/L	0.01										3.01	-	5.77	-	-	-	4.99	-	-	-	6.42	-	-	-	-	4.92	-	37.8	-	-	62.9	-	-	-
	Ionic Balance	%	0.01										3.83	-	5.94	-	-	-	3.97	-	-	-	3.52	-	-	-	-	5.46	-	0.38	-	-	3.02	-	-	-
Acidity and Alkalinity	Acidity (as CaCO3)	mg/L	10										-	11	-	-	40	-	-	-	13	-	-	-	34	<10	39	-	33	-	-	42	-	14	<10	<10
	Alkalinity (Hydroxide as CaCO3)	mg/L	10										<1	-	<1	<10	-	-	<1	<10	-	-	<1	<10	-	-	-	<1	-	<1	<10	-	<1	-	-	-
	Alkalinity (total as CaCO3)	mg/L	20										80	79	170	160	130	-	191	110	130	-	222	53	38	130	<20	128	110	312	420	560	465	440	69	460
	Bicarbonate Alkalinity as CaCO3	mg/L	20										80	79	170	160	130	-	191	110	130	-	222	53	38	130	<20	128	110	312	420	560	465	440	69	460
	Alkalinity:Sulfate Ratio (Calc)												3	2	2	2	1	-	11	8	9	-	7	4	2	9	1	3	5	3	2	3	2	2	0.1	92
Nutrients	Cyanide (Total)	mg/L	0.005				0.08	0.007				0.8	-	-	-	<0.005	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	<0.005	-	-	-	-	-
	Ammonia as N	mg/L	0.01					0.9					0.13	0.04	1.52	0.46	1	-	1.14	0.38	0.86	-	0.29	0.4	0.56	0.05	<0.01	2.15	1.6	0.54	0.66	1.2	1.61	1.3	3	0.97
	Total Kjeldahl Nitrogen	mg/L	0.2										-	0.3	-	1.3	1.6	-	-	1.1	1.2	-	-	1.5	0.6	1.2	0.5	3.3	2.6	-	1.6	1.8	-	2.7	3.4	2.1
	Nitrate (as N)	mg/L	0.02					7.2			90		0.33	3	0.01	<0.02	<0.02	-	0.03	<0.02	<0.02	-	0.01	<0.02	1	2.6	6.8	0.02	0.02	0.98	<0.02	0.44	0.04	1.4	0.03	<0.02
	Nitrite (as N)	mg/L	0.02								9.1		0.02	-	<0.01	<0.02	-	-	<0.01	<0.02	-	-	<0.01	<0.02	-	-	-	<0.01	-	<0.01	<0.02	-	<0.01	-	-	-
	Nitrate + Nitrite as N	mg/L	0.05										0.35	3.1	0.01	<0.05	<0.05	-	0.03	<0.05	<0.05	-	0.01	<0.05	1.1	2.6	6.9	0.02	<0.05	0.98	<0.05	0.46	0.04	1.4	<0.05	<0.05
	Nitrogen (Total)	mg/L	0.2						5	25			-	3.4	-	1.3	1.6	-	-	1.1	1.2	-	-	1.5	1.7	3.8	7.4	3.3	2.6	-	1.6	2.3	-	4.1	3.4	2.1
	Phosphate total (P)	µg/L	10										-	910	-	130	160	-	-	690	790	-	-	80	100	<50	<50	-	90	-	80	130	-	210	80	120
	Phosphorous filterable reactive (P)	µg/L	50										-	<50	-	-	80	-	-	-	670	-	-	-	<50	<50	<50	-	<50	-	-	<50	-	<50	<50	<50
	Phosphorous filterable reactive (P)	µg/L	50										-	<50	-	-	80	-	-	-	670	-	-	-	<50	<50	<50	-	<50	-	-	<50	-	<50	<50	<50
	Phosphorus (Total)	mg/L	0.01						0.05				0.47	-	0.23	-	-	-	0.58	-	-	-	0.32	-	-	-	-	-	-	0.1	-	-	0.23	-	-	-
Heavy Metal	Aluminium	mg/L	0.05			0.2		0.055	5	20	5		-	3.4	-	-	0.13	-	-	-	5.3	-	-	-	3.8	0.3	3.3	-	1.5	-	-	<0.05	-	1.1	<0.05	0.08
	Aluminium (Filtered)	mg/L	0.05			0.2		0.055	5	20	5		-	0.17	-	-	0.09	-	-	-	0.61	-	-	-	0.91	0.07	0.75	-	0.28	<0.05	-	<0.05	-	<0.05	<0.05	<0.05
	Arsenic (Filtered)	mg/L	0.001				0.01	0.013	0.1	2	0.5	0.1	0.01	0.011	0.002	0.002	0.002	-	0.004	0.005	0.005	-	0.034	0.043	0.041	<0.001	<0.001	0.002	<0.001	0.003	0.002	0.002	0.01	0.008	0.032	0.002
	Barium (Filtered)	mg/L	0.02				2					20	0.013	-	0.024	0.03	-	-	0.017	0.02	-	-	0.009	<0.02	-	-	-	0.016	-	0.039	0.06	-	0.088	-	-	-
	Beryllium (Filtered)	mg/L	0.001				0.06		0.1	0.5		0.6	<0.001	-	<0.001	<0.001	-	-	<0.001	<0.001	-	-	<0.001	<0.001	-	-	-	<0.001	-	<0.001	<0.001	-	<0.001	-	-	-
	Boron (Filtered)	mg/L	0.05				4	0.37	0.5	0.5	5	40	<0.05	-	0.06	0.11	-	-	<0.05	0.06	-	-	0.09	0.05	-	-	-	0.12	-	0.46	0.84	-	0.67	-	-	-
	Cadmium (Filtered)	mg/L	0.0002				0.002	0.0002	0.01	0.05	0.01	0.02	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	-	<0.0001	<0.0002	<0.0002	-	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002
	Chromium (III+VI) (Filtered)	mg/L	0.001					0.001	0.1	1	1		<0.001	<0.001	0.001	0.001	<0.001	-	<0.001	0.002	<0.001	-	0.01	0.004	0.004	<0.001	<0.001	0.002	0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001
	Chromium (hexavalent)	mg/L	0.001				0.05	0.001				0.5	-	-	-	<0.001	-	-	-	<0.001	-	-	-	<0.001	-	-	-	<0.01	-	-	<0.001	-	-	-	-	-
	Cobalt (Filtered)	mg/L	0.001						0.05	0.1	1		0.004	-	<0.001	<0.001	-	-	<0.001	<0.001	-	-	<0.001	<0.001	-	-	-	<0.001	-	<0.001	<0.001	-	<0.001	-	-	-
	Copper (Filtered)	mg/L	0.001			1	2	0.0014	0.2	5	0.5	20	0.001	-	<0.001	<0.001	-	-	<0.001	<0.001	-	-	<0.001	<0.001	-	-	-	<0.001	-	<0.001	<0.001	-	<0.001	-	-	-
	Iron	mg/L	0.05			0.3			0.2	10			-	23	-	-	3.6	-	-	-	3.1	-	-	-	25	2.8	2.8	-	3.1	-	-	3.6	-	3.6	0.12	1.7
	Iron (Filtered)	mg/L	0.05			0.3			0.2	10			-	1	-	-	3	-	-	-	0.42	-	-	-	14	0.3	0.44	-	1.3	-	-	3.1	-	1.6	<0.05	0.84
	Lead (Filtered)	mg/L	0.001				0.01	0.0034	2	5	0.1	0.1	<0.001	-	<0.001	<0.001	-	-	<0.001	<0.001	-	-	0.002	<0.001	-	-	-	<0.001	-	<0.001	<0.001	-	<0.001	-	-	-
	Manganese (Filtered)	mg/L	0.005			0.1	0.5	1.9	0.2	10		5	0.047	0.069	0.036	0.054	0.053	-	0.052	0.025	0.028	-	0.228	0.095	0.088	0.021	0.022	0.038	0.027	0.052	0.059	0.065	0.039	0.074	0.007	0.045
	Mercury (Filtered)	mg/L	0.0001				0.001	0.0006	0.002	0.002	0.002	0.01	<0.0001	-	<0.0001	<0.0001	-	-	<0.0001	<0.0001	-	-	<0.0001	<0.0001	-	-	-	<0.0001	-	<0.0001	<0.0001	-	<0.0001	-	-	-
	Molybdenum (Filtered)	mg/L	0.005				0.05		0.01	0.05	0.15	0.5	-	-	-	0.009	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	<0.005	-	-	-	-	-
	Nickel (Filtered)	mg/L	0.001				0.02	0.011	0.2	2	1	0.2	0.004	0.015	0.002	0.003	0.013	-	0.003	0.005	0.016	-	0.007	0.004	0.01	0.014	0.028	0.018	0.006	0.004	0.02	0.027	0.01	0.005	0.006	0.009
	Selenium (Filtered)	mg/L	0.001				0.01	0.011	0.02	0.05	0.02	0.1	<0.01	<0.001	<0.01	0.002	0.002	-	<0.01	0.003	0.003	-	<0.01	0.004	0.002	<0.001	0.001	<0.01	0.002	<0.01	0.006	0.001	<0.01	<0.001	0.002	<0.001
	Silver (Filtered)	mg/L	0.005				0.1	0.00005				1	-	-	-	<0.005	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	<0.005	-	-	-	-	-
	Tin (Filtered)	mg/L	0.005										-	-	-	<0.005	-	-	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	<0.005	-	-	-	-	-
	Vanadium (Filtered)	mg/L	0.01						0.1	0.5			<0.01	-	<0.01	-	-	-	<0.01	-	-	-	0.02	-	-	-	-	<0.01	-	0.01	-	-	0.01	-	-	-
	Zinc (Filtered)	mg/L	0.005			3		0.008	2	5	20		0.008	0.026	0.006	0.023	<0.005	-	<0.005	0.032	0.005	-	0.007	0.021	0.009	0.022	0.6	0.01	0.011	0.011	0.064	0.005	<0.005	<0.005	<0.005	0.074
Total Recoverable Hydrocarbons	C6-C10 minus BTEX (F1)	µg/L	20										-	-	-	<20	-	-	-	<20	-	-	-	<20	-	-	-	<20	-	-	<20	-	-	-	-	-
	C6 - C10 Fraction	µg/L	20										-	-	-	<20	-	-	-	<20	-	-	-	<20	-	-	-	<20	-	-	<20	-	-	-	-	-
	>C10-C16 minus Naphthalene (F2)	µg/L	50										-	-	-	<50	-	-	-	<50	-	-	-	<50	-	-	-	<100	-	-	<50	-	-	-	-	-
	>C10 - C16 Fraction	µg/L	50										-	-	-	<50	-	-	-	<50	-	-	-	<50	-	-	-	<100	-	-	<50	-	-	-	-	-
	>C16 - C34 Fraction (F3)	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	<100	-	-	-	-	-
	>C34 - C40 Fraction (F4)	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	<100	-	-	-	-	-
	>C10 - C40 (Sum of Total)	µg/L	100										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<100	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons	C6 - C 9 Fraction	µg/L	20										-	-	-	<20	-	-	-	<20	-	-	-	<20	-	-	-	<20	-	-	<20	-	-	-	-	-
	C10 - C14 Fraction	µg/L	50										-	-	-	<50	-	-	-	<50	-	-	-	<50	-	-	-	<50	-	-	<50	-	-	-	-	-
	C15 - C28 Fraction	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	<100	-	-	-	-	-
	C29 - C36 Fraction	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	<50	-	-	<100	-	-	-	-	-
	C10 - C36 (Sum of Total)	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	<50	-	-	<100	-	-	-	-	-
BTEX	Benzene	µg/L	1				1	950				10	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Toluene	µg/L	1			25	800					8000	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<2	-	-	<1	-	-	-	-	-
	Ethylbenzene	µg/L	1			3	300					3000	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<2	-	-	<1	-	-	-	-	-
	Xylene (o)	µg/L	1					350					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<2	-	-	<1	-	-	-	-	-
	Xylene (m & p)	µg/L	2										-	-	-	<2	-	-	-	<2	-	-	-	<2	-	-	-	<2	-	-	<2	-	-	-	-	-
	Xylene Total	µg/L	3			20	600					6000	-	-	-	<3	-	-	-	<3	-	-	-	<3	-	-	-	<2	-	-	<3	-	-	-	-	-
	BTEX (Sum of Total) - Lab Calc	µg/L	1										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
OCP	4,4-DDE	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	a-BHC	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Aldrin	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	b-BHC	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	chlordane	µg/L	1					0.08					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	d-BHC	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	4,4 DDD	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	4,4 DDT	µg/L	0.1				9	0.01				90	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Dieldrin	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Endosulfan I	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Endosulfan II	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Endosulfan sulphate	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Endrin	µg/L	0.1					0.02					-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Endrin aldehyde	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Endrin ketone	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	g-BHC (Lindane)	µg/L	0.1				10	0.2				100	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Heptachlor	µg/L	0.1				0.3	0.09				3	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Heptachlor epoxide	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Hexachlorobenzene	µg/L	0.1										-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Methoxychlor	µg/L	0.1				300					3000	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-	-
	Toxaphene	µg/L	10					0.2					-	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-	-	-	-	<10	-	-	-	-	-
PAH/Phenols	Pyrene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Acenaphthene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Acenaphthylene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Anthracene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Benz(a)anthracene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Benzo(a)pyrene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<0.5	-	-	<1	-	-	-	-	-
	Benzo(b+j)fluoranthene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Benzo(k)fluoranthene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Benzo(g,h,i)perylene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Chrysene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Dibenz(a,h)anthracene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Fluoranthene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Fluorene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Indeno(1,2,3-c,d)pyrene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Naphthalene	µg/L	1					16					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	Phenanthrene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	<1	-	-	-	-	-
	PAHs (Sum of total) - Lab calc	µg/L	1				0.01					0.1	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Polycylic aromatic hydrocarbons	µg/L	0.5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	µg/L	1										<1	-	<1	<10	-	-	<1	<10	-	-	<1	<10	-	-	-	<1	-	<1	<10	-	<1	-	-	-
	2,4,6-trichlorophenol	µg/L	1			2	20	20				200	<1	-	<1	<10	-	-	<1	<10	-	-	<1	<10	-	-	-	<1	-	<1	<10	-	<1	-	-	-
	2,4-dichlorophenol	µg/L	1			0.3	200	160				2000	<1	-	<1	<3	-	-	<1	<3	-	-	<1	<3	-	-	-	<1	-	<1	<3	-	<1	-	-	-
	2,4-dimethylphenol	µg/L	1										<1	-	<1	<3	-	-	<1	<3	-	-	<1	<3	-	-	-	<1	-	<1	<3	-	<1	-	-	-

Appendix D
Table D4
Tabulated Analytical GW Results - Edithvale

														Quaternary																	Upper Tertiary Aquifer						
													Location_Code	ID18-BH01	ID18-BH01	ID18-BH02	ID18-BH02	ID18-BH02	ID18-BH02	ID18-BH04	ID18-BH04	ID18-BH04	ID18-BH04	ID18-BH09	ID18-BH09	ID18-BH09	ID18-GWBH01	ID18-GWBH03	ID18-GWBH04	ID18-GWBH04	ID18-BH06	ID18-BH06	ID18-BH06	ID18-BH07	ID18-BH07	ID18-GWBH02	ID18-GWBH05
													Sampled_Date_Time	1/12/2016	18/07/2017	1/12/2016	8/06/2017	21/07/2017	21/07/2017	1/12/2016	8/06/2017	21/07/2017	21/07/2017	1/12/2016	8/06/2017	19/07/2017	18/07/2017	24/07/2017	1/03/2017	19/07/2017	1/12/2016	8/06/2017	24/07/2017	30/11/2016	18/07/2017	18/07/2017	19/07/2017
													Lab_Report_Number	EM1614506	554862	EM1614506	549619	555367	EM1709670	EM1614506	549619	555367	EM1709670	EM1614506	549619	554985	554862	556779	EM1702345	554985	EM1614506	549619	556779	EM1614420	554862	554862	554985
Method	ChemName	output unit	EQL	PFAS NEMP 2017 Ecological - freshwater 95% species protection	PFAS NEMP 2017 Drinking Water	ADWG 2015 Aesthetic	ADWG 2015 Health	ANZECC 2000 FW 95%	ANZECC 2000 Irrigation - Long-term Trigger Values	ANZECC 2000 Irrigation - Short-term Trigger Values	ANZECC 2000 Stock Watering	NHMRC Recreational Guidelines 2008																											
	2,4-dinitrophenol	µg/L	30					45					-	-	-	<30	-	-	-	<30	-	-	-	<30	-	-	-	-	-	-	<30	-	-	-	-	-
	2,6-dichlorophenol	µg/L	1										<1	-	<1	<3	-	-	<1	<3	-	-	<1	<3	-	-	-	<1	-	<1	<3	-	<1	-	-	-
	2-chlorophenol	µg/L	1			0.1	300	490				3000	<1	-	<1	<3	-	-	<1	<3	-	-	<1	<3	-	-	-	<1	-	<1	<3	-	<1	-	-	-
	2-methylphenol	µg/L	1										<1	-	<1	<3	-	-	<1	<3	-	-	<1	<3	-	-	-	<1	-	<1	<3	-	<1	-	-	-
	2-nitrophenol	µg/L	1										<1	-	<1	<10	-	-	<1	<10	-	-	<1	<10	-	-	-	<1	-	<1	<10	-	<1	-	-	-
	3-&4-methylphenol	µg/L	2										<2	-	<2	<6	-	-	<2	<6	-	-	72.4	<6	-	-	-	<2	-	<2	<6	-	<2	-	-	-
	4,6-Dinitro-2-methylphenol	µg/L	30										-	-	-	<30	-	-	-	<30	-	-	-	<30	-	-	-	-	-	-	<30	-	-	-	-	-
	4,6-Dinitro-o-cyclohexyl phenol	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	-	-	-
	4-chloro-3-methylphenol	µg/L	1										<1	-	<1	<10	-	-	<1	<10	-	-	<1	<10	-	-	-	<1	-	<1	<10	-	<1	-	-	-
	4-nitrophenol	µg/L	30										-	-	-	<30	-	-	-	<30	-	-	-	<30	-	-	-	-	-	-	<30	-	-	-	-	-
	Dinoseb	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	-	-	-
	Pentachlorophenol	µg/L	2				10	10				100	<2	-	<2	<10	-	-	<2	<10	-	-	<2	<10	-	-	-	<2	-	<2	<10	-	<2	-	-	-
	Phenol	µg/L	1					320					<1	-	<1	<3	-	-	<1	<3	-	-	1.4	<3	-	-	-	<1	-	<1	<3	-	<1	-	-	-
	tetrachlorophenols	µg/L	30										-	-	-	<30	-	-	-	<30	-	-	-	<30	-	-	-	-	-	-	<30	-	-	-	-	-
	Phenols (Total Halogenated)	µg/L	10										-	-	-	<10	-	-	-	<10	-	-	-	<10	-	-	-	-	-	-	<10	-	-	-	-	-
	Phenols (Total Non Halogenated)	µg/L	100										-	-	-	<100	-	-	-	<100	-	-	-	<100	-	-	-	-	-	-	<100	-	-	-	-	-
	Benzo(a)pyrene TEQ (zero) - Lab Calc	µg/L	0.5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-
	Phenolics Total	µg/L	50										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB	Arochlor 1016	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Arochlor 1221	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Arochlor 1232	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Arochlor 1242	µg/L	1					0.6					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Arochlor 1248	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Arochlor 1254	µg/L	1					0.03					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Arochlor 1260	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	PCBs (Total)	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
Volatile Organic Compounds	1,1,1,2-tetrachloroethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,1,1-trichloroethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,1,2,2-tetrachloroethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,1,2-trichloroethane	µg/L	1					6500					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,1-dichloroethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,1-dichloroethene	µg/L	1				30					300	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,1-dichloropropene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	1,2,4-trimethylbenzene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Isopropylbenzene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Styrene	µg/L	1			4	30					300	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,2,3-trichlorobenzene	µg/L	5					10					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,2,4-trichlorobenzene	µg/L	1					170					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	1,2-dibromo-3-chloropropane	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	1,2-dibromoethane	µg/L	1				1					10	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,2-dichlorobenzene	µg/L	1			1	1500	160				15000	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,2-dichloroethane	µg/L	1				3					30	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,2-dichloropropane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,3,5-trimethylbenzene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,3-dichlorobenzene	µg/L	1			20		260					-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,3-dichloropropane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	1,4-dichlorobenzene	µg/L	1			0.3	40	60				400	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	2,2-dichloropropane	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	2-butanone (MEK)	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
	2-chlorotoluene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	2-hexanone (MBK)	µg/L	50										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	-	-	-	-	-	-	-
	4-chlorotoluene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	4-methyl-2-pentanone (MIBK)	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
	Acetone	µg/L	1										-	-	-	1	-	-	-	1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Allyl chloride	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Bromobenzene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Bromochloromethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Bromodichloromethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Bromoform	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Bromomethane	µg/L	1				1					10	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
	Carbon disulfide	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Carbon tetrachloride	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Chlorobenzene	µg/L	1			10							-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Chlorodibromomethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Chloroethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
	Chloroform	µg/L	5										-	-	-	<5	-	-	-	<5	-	-	-	<5	-	-	-	<5	-	-	<5	-	-	-	-	-
	Chloromethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
	cis-1,2-dichloroethene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	cis-1,3-dichloropropene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	cis-1,4-Dichloro-2-butene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	Dibromomethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Dichlorodifluoromethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
	Dichloromethane	µg/L	1				4					40	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	-	-	-	<1	-	-	-	-	-
	Hexachlorobutadiene	µg/L	1				0.7					7	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	Iodomethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	n-butylbenzene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	n-propylbenzene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	Pentachloroethane	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	p-isopropyltoluene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	sec-butylbenzene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	TCE	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	tert-butylbenzene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	Tetrachloroethene	µg/L	1				50					500	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	trans-1,2-dichloroethene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	trans-1,3-dichloropropene	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<5	-	-	<1	-	-	-	-	-
	trans-1,4-Dichloro-2-butene	µg/L	5										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	µg/L	1										-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
	Vinyl acetate	µg/L	50										-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<50	-	-	-	-	-	-	-	-
	Vinyl chloride	µg/L	1				0.3					3	-	-	-	<1	-	-	-	<1	-	-	-	<1	-	-	-	<50	-	-	<1	-	-	-	-	-
Per- and Polyfluoroalkyl Substances (PFAS) by LCMS	10:2 Fluorotelomer sulfonic acid	µg/L	0.05										-	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	4:2 Fluorotelomer sulfonic acid	µg/L	0.05										-	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	PFHxS and PFOS (Sum of Total) - Lab Calc	µg/L	0.01		0.07								-	-	-	-	-	-	0.14	-	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluorobutane sulfonic acid	µg/L	0.02										-	-	-	-	-	-	<0.02	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.02										-	-	-	-	-	-	0.07	-	-	-	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluoropentanoic acid	µg/L	0.02										-	-	-	-	-	-	<0.02	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-
	8:2 Fluorotelomer sulfonic acid	µg/L	0.05										-	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-
	6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05										-	-	-	-	-	-	<0.05	-	-	-	0.13	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluorooctanoic acid (PFOA)	µg/L	0.01	220	0.56								-	-	-	-	-	-	0.03	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluorobutanoic acid	µg/L	0.1										-	-	-	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluorohepta noic acid	µg/L	0.02										-	-	-	-	-	-	<0.02	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluorohexanoic acid (PFHxA)	µg/L	0.02										-	-	-	-	-	-	0.02	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-
	Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	0.13									-	-	-	-	-	-	0.07	-	-	-	0.66	-	-	-	-	-	-	-	-	-	-	-	-	-
	PFAS (Sum of Total)(WA DER List)	µg/L	0.01										-	-	-	-	-	-	0.19	-	-	-	0.83	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix D
Table D5
Tabulated Soil PFAS Analytical Results - Edithvale

					Field ID	ID18CASS04_5	ID18CASS05_1.5	ID18CASS06_1	ID18CASS06_1.5	ID18CASS21_2	ID18CASS21_3	ID18CASS21_4	ID18CASS21_5	ID18CASS21_6	ID18CASS21_7
					Date	1/08/2017	1/08/2017	1/08/2017	1/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017	3/08/2017
					Lab Report Number	EM1710181	EM1710181	EM1710220	EM1710220	EM1710341	EM1710341	EM1710341	EM1710341	EM1710341	EM1710341
	Unit	EQL	PFAS NEMP 2017 Soil Health Based Screening Levels - Residential	PFAS NEMP 2017 Soil Health Based Screening Levels - Industrial/Commercial	PFAS NEMP 2017 Soil Health Based Screening Levels - Urban residential/public open spaces										
Perfluorodecanesulfonic acid (PFDS)	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluoroheptane sulfonic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
4:2 Fluorotelomer sulfonic acid	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
10:2 Fluorotelomer sulfonic acid	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
N-Methyl perfluorooctane sulfonamidoacetic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluorohexane sulfonic acid (PFHxS)	ng/kg	200	9,000	20,000,000		<200	600	300	500	<200	<200	<200	<200	<200	<200
Perfluorobutane sulfonic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluoropentanoic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
8:2 Fluorotelomer sulfonic acid	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
N-Ethyl perfluorooctane sulfonamide	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
N-Ethyl perfluorooctane sulfonamidoethanol	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
N-Methyl perfluorooctane sulfonamide	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
N-Methyl perfluorooctane sulfonamidoethanol	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
6:2 Fluorotelomer Sulfonate (6:2 FTS)	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
Perfluorooctanoic acid (PFOA)	ng/kg	200	100,000	100,000,000	29,000,000	<200	300	200	200	<200	<200	<200	<200	<200	<200
Perfluoropentane sulfonic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluorobutanoic acid	ng/kg	1,000				<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Perfluorodecanoic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluorododecanoic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluoroheptanoic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluorohexanoic acid (PFHxA)	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluorononanoic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluorooctane sulfonic acid (PFOS)	ng/kg	200	9,000	20,000,000	32,000,000	<200	1,500	300	600	<200	<200	<200	<200	<200	<200
Perfluorooctane sulfonamide (FOSA)	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluorotetradecanoic acid	ng/kg	500				<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
Perfluorotridecanoic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Perfluoroundecanoic acid	ng/kg	200				<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
PFAS (Sum of Total)	ng/kg	200				<200	2,400	800	1,300	<200	<200	<200	<200	<200	<200

AECOM GHD JOINT VENTURE

Appendix D
Table D6
Tabulated IWRG621 Analytical Results - Edithvale

					Location Code	ID18-CASS01	ID18-CASS01	ID18-CASS01	ID18-CASS02	ID18-CASS02	ID18-CASS02	ID18-CASS03	ID18-CASS03	ID18-CASS03	ID18-CASS04	ID18-CASS04	ID18-CASS04	ID18-CASS04	ID18-CASS05	ID18-CASS06	ID18-CASS08	ID18-CASS08	ID18-CASS08	ID18-CASS10
					Date	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	3/08/2017	3/08/2017	3/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	17/07/2017	19/07/2017	1/08/2017	1/08/2017	1/08/2017	13/07/2017
					Field ID	ID18CASS01_0.3	ID18CASS01_1	ID18CASS01_1.5	ID18CASS02_0.1	ID18CASS02_0.5	ID18CASS02_1.3	ID18CASS03_5	ID18CASS03_6.2	ID18CASS03_7	ID18CASS04_0.3	ID18CASS04_0.5	ID18CASS04_1	ID18CASS04_5	CASS05_1.5	CASS06_1.5	ID18CASS08_0.1	ID18CASS08_0.5	ID18CASS08_1.5	CASS10_1.55
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1710363	EM1710363	EM1710363	EM1710181	EM1710181	EM1710181	EM1710181	EM1709323	EM1709495	EM1710181	EM1710181	EM1710181	EM1709193
	Unit	EQL	EPAVic Cat B	EPAVic Cat C	EPAVic Fill																			
Inorganics																								
% Moisture	%	1				12.2	2.7	3.1	6	1.2	1.7	4.5	15.5	15.1	2.6	4.2	2.4	3.3	<1	<1	3.0	2.5	1.8	1.6
Cyanide (Total)	mg/kg	1	10000	2500	50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
pH (CaCl2)	pH Units	0.1				4	4	4.1	6.2	6.5	6.6	4.7	5.5	6.3	5.8	5.1	5.2	4.4	3.4	4.2	7.0	6.9	6.7	6.1
Metals																								
Arsenic	mg/kg	5	2000	500	20	18	8	6	<5	<5	13	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium	mg/kg	1	400	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2000	500	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	mg/kg	5	20000	5000	100	79	<5	<5	82	<5	<5	<5	<5	<5	21	6	<5	<5	<5	<5	48	18	<5	<5
Lead	mg/kg	5	6000	1500	300	94	<5	<5	307	<5	<5	<5	<5	<5	33	12	<5	<5	<5	<5	77	36	<5	<5
Mercury	mg/kg	0.1	300	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4000	1000	40	<2	<2	<2	<2	6	<2	<2	<2	<2	5	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nickel	mg/kg	2	12000	3000	60	6	<2	<2	13	<2	<2	<2	<2	<2	6	<2	<2	<2	<2	<2	33	17	<2	<2
Silver	mg/kg	2	720	180	10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Tin	mg/kg	5		500	50	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	mg/kg	5	140000	35000	200	41	<5	<5	111	<5	<5	<5	<5	<5	20	<5	<5	<5	<5	<5	63	21	<5	<5
TRH - NEPM 2013																								
C6-C10 minus BTEX (F1)	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C10 Fraction	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C10-C16 minus Naphthalene (F2)	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10 - C16 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16 - C34 Fraction (F3)	mg/kg	100				210	<100	<100	140	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34 - C40 Fraction (F4)	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10 - C40 (Sum of Total)	mg/kg	50				210	<50	<50	140	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH - NEPM 1999																								
C6 - C 9 Fraction	mg/kg	10	2600	650	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	mg/kg	100				130	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36 Fraction	mg/kg	100				110	<100	<100	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of Total)	mg/kg	50	40000	10000	1000	240	<50	<50	100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
PAH																								
Polycylic aromatic hydrocarbons	mg/kg	0.5				4.9	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.5				0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.5				0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	20	5	1	0.7	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	mg/kg	0.5				0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5				0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5				0.9	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix D
Table D6
Tabulated IWRG621 Analytical Results - Edithvale

					Location Code	ID18-CASS01	ID18-CASS01	ID18-CASS01	ID18-CASS02	ID18-CASS02	ID18-CASS02	ID18-CASS03	ID18-CASS03	ID18-CASS03	ID18-CASS04	ID18-CASS04	ID18-CASS04	ID18-CASS04	ID18-CASS05	ID18-CASS06	ID18-CASS08	ID18-CASS08	ID18-CASS08	ID18-CASS10
					Date	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	3/08/2017	3/08/2017	3/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	17/07/2017	19/07/2017	1/08/2017	1/08/2017	1/08/2017	13/07/2017
					Field ID	ID18CASS01_0.3	ID18CASS01_1	ID18CASS01_1.5	ID18CASS02_0.1	ID18CASS02_0.5	ID18CASS02_1.3	ID18CASS03_5	ID18CASS03_6.2	ID18CASS03_7	ID18CASS04_0.3	ID18CASS04_0.5	ID18CASS04_1	ID18CASS04_5	CASS05_1.5	CASS06_1.5	ID18CASS08_0.1	ID18CASS08_0.5	ID18CASS08_1.5	CASS10_1.55
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1710363	EM1710363	EM1710363	EM1710181	EM1710181	EM1710181	EM1710181	EM1709323	EM1709495	EM1710181	EM1710181	EM1710181	EM1709193
Benzo(a)pyrene TEQ (half LOR) - Lab Calc	mg/kg	0.5				1.2	0.6	0.6	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (LOR) - Lab Calc	mg/kg	0.5				1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Phenols																								
Phenols (non-halogenated) - Lab Calc	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenols(halogenated) - Lab Calc	mg/kg	0.03	320	10	1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,5,6-Tetrachlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4,5-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4,6-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4-dimethylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-dinitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,6-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-chlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-&4-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-chloro-3-methylphenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4-nitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Pentachlorophenol	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
VOCs																								
Chlorinated hydrocarbons	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TCE	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-dichloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOCs																								
4,6-Dinitro-2-methylphenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
BTEXN																								
Benzene	mg/kg	0.2	16	4	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OC Pesticides																								
Organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Other organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4-DDE	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
a-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Appendix D
Table D6
Tabulated IWRG621 Analytical Results - Edithvale

					Location Code	ID18-CASS01	ID18-CASS01	ID18-CASS01	ID18-CASS02	ID18-CASS02	ID18-CASS02	ID18-CASS03	ID18-CASS03	ID18-CASS03	ID18-CASS04	ID18-CASS04	ID18-CASS04	ID18-CASS04	ID18-CASS05	ID18-CASS06	ID18-CASS08	ID18-CASS08	ID18-CASS08	ID18-CASS10
					Date	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	21/07/2017	3/08/2017	3/08/2017	3/08/2017	1/08/2017	1/08/2017	1/08/2017	1/08/2017	17/07/2017	19/07/2017	1/08/2017	1/08/2017	1/08/2017	13/07/2017
					Field ID	ID18CASS01_0.3	ID18CASS01_1	ID18CASS01_1.5	ID18CASS02_0.1	ID18CASS02_0.5	ID18CASS02_1.3	ID18CASS03_5	ID18CASS03_6.2	ID18CASS03_7	ID18CASS04_0.3	ID18CASS04_0.5	ID18CASS04_1	ID18CASS04_5	CASS05_1.5	CASS06_1.5	ID18CASS08_0.1	ID18CASS08_0.5	ID18CASS08_1.5	CASS10_1.55
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1709681	EM1710363	EM1710363	EM1710363	EM1710181	EM1710181	EM1710181	EM1710181	EM1709323	EM1709495	EM1710181	EM1710181	EM1710181	EM1709193
Aldrin + Dieldrin	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
b-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
chlordane	mg/kg	0.03	16	4		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (cis)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (trans)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
d-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4 DDD	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4,4 DDT	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDT+DDE+DDD - Lab Calc	mg/kg	0.05	50	50		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan I	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan II	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan sulphate	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin aldehyde	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
g-BHC (Lindane)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor epoxide	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobenzene	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methoxychlor	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
PCBs																									
PCBs (Total)	mg/kg	0.1	0	0	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MAH																									
Styrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MAH (Sum of Total)	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Herbicides																									
Dinoseb	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorinated Hydrocarbons																									
Other chlorinated hydrocarbons - Lab Calc	mg/kg	0.01	50	10		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-trichloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2,2-tetrachloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-trichloroethane	mg/kg	0.04				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-dichloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon tetrachloride	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.4				<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Hexachlorobutadiene	mg/kg	0.02	11	2.8		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl chloride	mg/kg	0.02	4.8	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Major Ions																									
Fluoride	mg/kg	40	40000	10000	450	40	<40	<40	70	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40	150	70	<40	<40

AECOM GHD JOINT VENTURE

Appendix D
Table D6
Tabulated IWRG621 Analytical Results - Edithvale

					Location Code	ID18-CASS11	ID18-CASS12	ID18-CASS12	ID18-CASS12	ID18-CASS13	ID18-CASS13	ID18-CASS13	ID18-CASS14	ID18-CASS14	ID18-CASS14	ID18-CASS15	ID18-CASS15	ID18-CASS15	ID18-CASS16	ID18-CASS16	ID18-CASS16
					Date	10/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017
					Field ID	CASS11_1.55	ID18CASS12_0.1	ID18CASS12_0.5	ID18CASS12_1.5	ID18CASS13_0.1	ID18CASS13_0.3	ID18CASS13_0.5	ID18CASS14_0.1	ID18CASS14_0.5	ID18CASS14_1.5	ID18CASS15_0.1	ID18CASS15_0.3	ID18CASS15_0.9	ID18CASS16_0.1	ID18CASS16_0.3	ID18CASS16_1.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report	EM1708968	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564
	Unit	EQL	EPAVic Cat B	EPAVic Cat C	EPAVic Fill																	
Inorganics																						
% Moisture	%	1				2.2	3	1.8	1.4	9.3	2.5	1.9	5	2.1	2	4.1	1.6	2.5	4	3.8	2.4
Cyanide (Total)	mg/kg	1	10000	2500	50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
pH (CaCl2)	pH Units	0.1				6.8	4.9	4.1	4.4	5.5	5.8	5.6	5.5	4.5	4.2	5.2	5.4	5.4	5.2	6.1	6.5
Metals																					
Arsenic	mg/kg	5	2000	500	20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium	mg/kg	1	400	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2000	500	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	mg/kg	5	20000	5000	100	<5	48	<5	<5	80	28	8	59	<5	<5	84	16	<5	59	54	<5
Lead	mg/kg	5	6000	1500	300	<5	96	5	<5	174	35	5	116	<5	<5	118	7	<5	110	98	<5
Mercury	mg/kg	0.1	300	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4000	1000	40	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nickel	mg/kg	2	12000	3000	60	<2	3	<2	<2	8	8	<2	9	<2	<2	8	<2	<2	8	35	<2
Silver	mg/kg	2	720	180	10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Tin	mg/kg	5		500	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	mg/kg	5	140000	35000	200	<5	38	<5	<5	65	22	5	57	<5	<5	49	6	<5	44	46	<5
TRH - NEPM 2013																					
C6-C10 minus BTEX (F1)	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C10 Fraction	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C10-C16 minus Naphthalene (F2)	mg/kg	50				90	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10 - C16 Fraction	mg/kg	50				90	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16 - C34 Fraction (F3)	mg/kg	100				<100	<100	<100	<100	120	<100	<100	160	<100	<100	120	<100	<100	250	180	<100
>C34 - C40 Fraction (F4)	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10 - C40 (Sum of Total)	mg/kg	50				90	<50	<50	<50	120	<50	<50	160	<50	<50	120	<50	<50	250	180	<50
TRH - NEPM 1999																					
C6 - C 9 Fraction	mg/kg	10	2600	650	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	mg/kg	50				80	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	140	120	<100
C29 - C36 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	100	<100	<100	<100	<100	<100	170	<100	<100
C10 - C36 (Sum of Total)	mg/kg	50	40000	10000	1000	80	<50	<50	<50	<50	<50	<50	100	<50	<50	<50	<50	<50	310	120	<50
PAH																					
Polycylic aromatic hydrocarbons	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	5.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.6	28	<0.5
Pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	5.2	<0.5
Acenaphthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	<0.5
Benz(a)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	2.4	<0.5
Benzo(a)pyrene	mg/kg	0.5	20	5	1	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1.9	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5
Chrysene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	5.6	<0.5
Fluorene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5
Naphthalene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	4	<0.5
Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	2.6	<0.5

AECOM GHD JOINT VENTURE

Appendix D
Table D6
Tabulated IWRG621 Analytical Results - Edithvale

					Location Code	ID18-CASS11	ID18-CASS12	ID18-CASS12	ID18-CASS12	ID18-CASS13	ID18-CASS13	ID18-CASS13	ID18-CASS14	ID18-CASS14	ID18-CASS14	ID18-CASS15	ID18-CASS15	ID18-CASS15	ID18-CASS16	ID18-CASS16	ID18-CASS16
					Date	10/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017
					Field ID	CASS11_1.55	ID18CASS12_0.1	ID18CASS12_0.5	ID18CASS12_1.5	ID18CASS13_0.1	ID18CASS13_0.3	ID18CASS13_0.5	ID18CASS14_0.1	ID18CASS14_0.5	ID18CASS14_1.5	ID18CASS15_0.1	ID18CASS15_0.3	ID18CASS15_0.9	ID18CASS16_0.1	ID18CASS16_0.3	ID18CASS16_1.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report	EM1708968	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564
Benzo(a)pyrene TEQ (half LOR) - Lab Calc	mg/kg	0.5				0.6	0.6	0.6	0.6	0.6	1.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.9	2.8	0.6
Benzo(a)pyrene TEQ (LOR) - Lab Calc	mg/kg	0.5				1.2	1.2	1.2	1.2	1.2	1.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3	1.2
Phenols																					
Phenols (non-halogenated) - Lab Calc	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenols(halogenated) - Lab Calc	mg/kg	0.03	320	10	1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,5,6-Tetrachlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4,5-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4,6-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4-dimethylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-dinitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,6-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-chlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-&4-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-chloro-3-methylphenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4-nitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Pentachlorophenol	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
VOCs																					
Chlorinated hydrocarbons	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TCE	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-dichloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOCs																					
4,6-Dinitro-2-methylphenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
BTEXN																					
Benzene	mg/kg	0.2	16	4	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OC Pesticides																					
Organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Other organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4-DDE	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
a-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Appendix D
Table D6
Tabulated IWRG621 Analytical Results - Edithvale

					Location Code	ID18-CASS11	ID18-CASS12	ID18-CASS12	ID18-CASS12	ID18-CASS13	ID18-CASS13	ID18-CASS13	ID18-CASS14	ID18-CASS14	ID18-CASS14	ID18-CASS15	ID18-CASS15	ID18-CASS15	ID18-CASS16	ID18-CASS16	ID18-CASS16
					Date	10/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	24/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017
					Field ID	CASS11_1.55	ID18CASS12_0.1	ID18CASS12_0.5	ID18CASS12_1.5	ID18CASS13_0.1	ID18CASS13_0.3	ID18CASS13_0.5	ID18CASS14_0.1	ID18CASS14_0.5	ID18CASS14_1.5	ID18CASS15_0.1	ID18CASS15_0.3	ID18CASS15_0.9	ID18CASS16_0.1	ID18CASS16_0.3	ID18CASS16_1.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report	EM1708968	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709733	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564	EM1709564
Aldrin + Dieldrin	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
b-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
chlordane	mg/kg	0.03	16	4		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (cis)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (trans)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
d-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4 DDD	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4,4 DDT	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDT+DDE+DDD - Lab Calc	mg/kg	0.05	50	50		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan I	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan II	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan sulphate	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin aldehyde	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
g-BHC (Lindane)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor epoxide	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobenzene	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methoxychlor	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
PCBs																					
PCBs (Total)	mg/kg	0.1	0	0	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MAH																					
Styrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MAH (Sum of Total)	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Herbicides																					
Dinoseb	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorinated Hydrocarbons																					
Other chlorinated hydrocarbons - Lab Calc	mg/kg	0.01	50	10		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-trichloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2,2-tetrachloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-trichloroethane	mg/kg	0.04				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-dichloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon tetrachloride	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.4				<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Hexachlorobutadiene	mg/kg	0.02	11	2.8		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl chloride	mg/kg	0.02	4.8	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Major Ions																					
Fluoride	mg/kg	40	40000	10000	450	<40	<40	<40	<40	<40	70	<40	<40	<40	<40	<40	<40	<40	40	70	<40

Appendix D
Table D7
Tabulated ASLP Analytical Results - Edithvale

				Location Code	ID18-CASS01	ID18-CASS04	ID18-CASS08	ID18-CASS12	ID18-CASS13	ID18-CASS13	ID18-CASS14	ID18-CASS15	ID18-CASS16	ID18-CASS16
				Date	21/07/2017	1/08/2017	1/08/2017	24/07/2017	24/07/2017	24/07/2017	20/07/2017	20/07/2017	20/07/2017	20/07/2017
				Field ID	ID18CASS01_0.3	ID18CASS04_0.3	ID18CASS08_0.1	ID18CASS12_0.1	ID18CASS13_0.1	ID18CASS13_0.3	ID18CASS14_0.1	ID18CASS15_0.1	ID18CASS16_0.1	ID18CASS16_0.3
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Nur	EM1711636	EM1711636	EM1711636	EM1711636	EM1711636	EM1711636	EM1711636	EM1711636	EM1711636	EM1711636
				Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
	Unit	EQL	IWRG 621 Category B Leached	IWRG 621 Category C Leached										
Inorganics														
pH (Final)	pH Units	0.1			4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
pH (Initial)	pH Units	0.1			5.5	6.6	8.0	6.1	6.8	6.6	6.5	6.3	6.0	6.9
pH (aqueous extract)	pH Units	0.1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
pH (after HCL)	pH Units	0.1			1.4	1.4	1.4	1.4	1.5	1.3	1.4	1.4	1.4	1.4
Metals														
Lead (filtered)	mg/L	0.1	4	1		<0.1	<0.1	<0.1	0.1		0.2	<0.1	<0.1	
PAH														
Benzo(a)pyrene	µg/L	0.5	4	1	<0.5					<0.5				<0.5

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID46 CASS01	0.1	14/7/17	6.2	4.0	2	2.2	Fill, dark brown silty Sand	Borderline PASS may be present	
	0.5	14/7/17	5.2	3.6	2	1.6	Dark grey fine Sand	Borderline AASS maybe present	x
	1.0	14/7/17	4.8	4.1	2	0.7	Dark grey fine Sand	Borderline AASS maybe present	
	1.5	14/7/17	5.3	4.0	2	1.3	Grey fine Sand	Borderline AASS maybe present	
	2.0	14/7/17	6.3	5.0	2	1.3	Grey fine Sand	Uncertain	
	2.5	14/7/17	6.0	5.0	2	1.0	Grey fine Sand	Uncertain	
	3.0	14/7/17	5.5	4.6	2	0.9	Grey fine Sand	Borderline AASS maybe present	
	3.5	14/7/17	5.4	4.6	2	0.8	Grey fine Sand	Borderline AASS maybe present	x
	4.0	14/7/17	5.2	3.6	2	1.6	Red medium Sand	Borderline AASS maybe present	x
	4.5	14/7/17	5.5	4.3	2	1.2	Yellow brown Sand	Borderline AASS maybe present	
	5.0	14/7/17	5.7	4.6	2	1.1	Yellow brown Sand	Uncertain	x
DUP2_14717	4.0	14/7/17	5.5	4.4	2	1.1	Red medium Sand	Borderline AASS maybe present	x
ID46 CASS02	0.1	14/7/17	6.3	4.2	2	2.1	Grey brown silty Sand, Fill	Uncertain	
	0.5	14/7/17	6.2	4.6	2	1.6	Grey fine Sand	Uncertain	x
	1.0	14/7/17	5.3	4.2	2	1.1	Grey fine Sand	Borderline AASS maybe present	
	1.5	14/7/17	5.6	4.5	2	1.1	Grey fine Sand	Uncertain	x
	2.0	14/7/17	5.6	4.7	2	0.9	Grey fine Sand	Unlikely ASS	
	2.5	14/7/17	5.2	3.7	2	1.5	Grey fine Sand	Borderline AASS maybe present	
	3.0	14/7/17	4.8	4.2	2	0.6	Grey fine Sand	Borderline AASS maybe present	x
	3.5	14/7/17	4.6	3.0	2	1.6	Grey fine Sand	Uncertain	
	4.0	14/7/17	6.8	4.8	2	2.0	Brown black Sand	Uncertain	
	4.2	14/7/17	6.8	4.8	2	2.0	Brown black Sand. Iron staining	Unlikely ASS	
	4.5	14/7/17	5.7	5.0	2	0.7	Brown black Sand	Limited net acidifying ability	
	5.0	14/7/17	5.9	5.1	2	0.8	Yellow brown Sand	Borderline PASS may be present	x
DUP1_14717	3.0	14/7/17	5.6	3.6	2	2.0	Grey fine Sand	Borderline PASS may be present	x
ID46-CASS03	0.1	11/7/17	6.4	4.5	2	1.9	Fill, brown black silty Sand	Uncertain	x
	0.5	11/7/17	6.2	4.8	2	1.4	Grey Sand	Uncertain	
	1	11/7/17	6.9	5.1	1	1.8	Grey Sand	Unlikely ASS	
	1.5	11/7/17	6.5	5	1	1.5	Grey Sand	Unlikely ASS	
	2	11/7/17	9.1	5.5	2	3.6	Grey Sand	Limited net acidifying ability	
	2.5	11/7/17	6.2	5.2	2	1.0	Grey Sand	Limited net acidifying ability	
	3	11/7/17	4.6	3.8	1	0.8	Dark grey brown fine Sand	Borderline AASS maybe present	x
	3.5	11/7/17	4.7	4.4	1	0.3	Dark grey brown fine Sand	Borderline AASS maybe present	
	4	11/7/17	5.7	4.4	2	1.3	Dark grey brown fine Sand	Uncertain	
	4.5	11/7/17	6.5	5.1	2	1.4	Orange brown Sand	Limited net acidifying ability	
	5	11/7/17	6.8	5.1	1	1.7	Grey Sand	Unlikely ASS	
	5.5	11/7/17	7.4	2.1	2	5.3	Grey Sand, trace shell	PASS may be present	x
	6	11/7/17	8.4	5.5	1	2.9	Grey Sand, trace shell	Unlikely ASS	
	6.5	11/7/17	9	5.8	2	3.2	Grey Sand, trace shell	Limited net acidifying ability	
	7	11/7/17	8.8	5.5	2	3.3	Grey fine Sand	Limited net acidifying ability	x
ID46-CASS04	0.1	11/7/17	6.5	4.2	2	2.3	Fill, black, dark grey silty sand	Uncertain	
	0.5	11/7/17	5.8	3.3	3	2.5	Grey black Sand	Borderline PASS may be present	x
	1	11/7/17	4.3	2.8	2	1.5	Grey black Sand	Borderline AASS maybe present	x
	1.5	11/7/17	4.7	3.1	2	1.6	Pale grey Sand	Borderline AASS maybe present	
	2	11/7/17	5.8	3.9	2	1.9	Pale grey Sand	Borderline PASS may be present	x
	2.5	11/7/17	5.9	4.8	2	1.1	Pale grey Sand	Uncertain	
	3	11/7/17	5.5	3.4	2	2.1	Pale grey Sand	Borderline AASS maybe present	
	3.5	11/7/17	4.5	2.7	2	1.8	Pale grey Sand	Borderline AASS maybe present	
	4	11/7/17	4.6	2.4	3	2.2	Dk brown Sand	Borderline AASS maybe present	x
	4.5	11/7/17	5.1	4.4	2	0.7	Orange brown Sand	Borderline AASS maybe present	
	5	11/7/17	6.2	4.6	2	1.6	Fine grain Sand, pale orange brown	Uncertain	
	5.5	11/7/17	6.2	2.2	3	4	Grey silty Sand	PASS may be present	x
	6	11/7/17	8.6	6.2	2	2.4	Grey silty Sand, with shell fragments	Limited net acidifying ability	
	6.5	11/7/17	8.5	6.1	2	2.4	Grey Sand, with shell	Limited net acidifying ability	
	7	11/7/17	8.5	6.2	2	2.3	Grey Sand, with shell	Limited net acidifying ability	
	7.5	11/7/17	8.3	3.5	2	4.8	Grey Sand, with shell	Borderline PASS may be present	
	8	11/7/17	7.4	2.2	4	5.2	Grey Sand, with shell	PASS may be present	x
	8.5	11/7/17	7.8	2.3	3	5.5	Grey Sand, with shell	PASS may be present	
	9	11/7/17	8.2	5.4	1	2.8	Grey Sand, with shell	Unlikely ASS	
	9.5	11/7/17	8	2.4	4	5.6	Silty Clay, dark grey, slight H2S odour	PASS may be present	
	10	11/7/17	7.1	2.3	4	4.8	Silty Clay, dark grey, slight H2S odour	PASS may be present	x
QC2_ALS	2	11/7/17	6.1	3.6	1	2.5	Pale grey Sand	Borderline PASS may be present	x

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID46-CASS05	0.1	27/7/17	5.3	3.8	2	1.5	Dark grey brown silty Fill	Borderline AASS maybe present	
	0.5	27/7/17	4.6	4.2	1	0.4	Grey black fine Sand	Borderline AASS maybe present	
	1	27/7/17	4.3	4.5	1	-0.2	Grey fine Sand	Borderline AASS maybe present	
	1.5	27/7/17	4.6	4.4	1	0.2	Grey fine Sand	Borderline AASS maybe present	x
	2	27/7/17	7.4	5.4	1	2	Grey fine Sand	Unlikely ASS	
	2.5	27/7/17	5.8	4.8	1	1	Grey fine Sand	Unlikely ASS	
	3	27/7/17	4.4	3.9	1	0.5	Grey fine Sand	Borderline AASS maybe present	
	3.5	27/7/17	4.3	3.4	1	0.9	Grey fine Sand	Borderline AASS maybe present	x
	4	27/7/17	6	4.5	1	1.5	Grey fine Sand	Unlikely ASS	
	4.5	27/7/17	6.1	5	1	1.1	Dark red brown fine Sand, trace shell	Unlikely ASS	x
	5	27/7/17	6.7	5.6	1	1.1	Yellow brown fine Sand	Unlikely ASS	
	5.5	27/7/17	9	5.9	1	3.1	Yellow grey silty Sand	Unlikely ASS	
	6	27/7/17	9	5.9	1	3.1	Grey sand, abundant shell	Unlikely ASS	
	6.5	27/7/17	9	6.1	1	2.9	Grey sand, abundant shell	Unlikely ASS	
	7	27/7/17	8.8	6	1	2.8	Grey sand, abundant shell	Unlikely ASS	
	7.5	27/7/17	7.9	2.3	1	5.6	Grey silty Sand	PASS may be present	x
	8	28/7/17	8.7	1.7	1	7	Grey silty Sand	PASS may be present	
	8.5	28/7/17	8.6	1.8	2	6.8	Grey silty Sand, trace shell	PASS may be present	x
	9	28/7/17	8.6	1.6	3	7	Grey silty Sand, trace shell	PASS may be present	
	9.5	28/7/17	8.7	5.6	1	3.1	Grey silty Sand, trace shell	Unlikely ASS	
	10	28/7/17	8.2	1.2	3	7	Grey black clayey Silt	PASS may be present	x
	10.5	28/7/17	8.1	1.4	3	6.7	Black sticky Clay, trace shell, H2S odour	PASS may be present	
	11	28/7/17	8.3	1.7	1	6.6	Dark grey fine Sand	Unlikely ASS	
	11.5	28/7/17	8.9	4.5	4	4.4	Grey black Clay, stiff, hard	Uncertain	x
	12	28/7/17	8.5	7.6	4	0.9	Grey blue silty Clay, stiff, hard	Limited net acidifying ability	
	12.5	28/7/17	8.1	5.6	2	2.5	Red brwon sandstone, rock fragments	Limited net acidifying ability	
	13	28/7/17	8.9	6	1	2.9	Brown sandy Silt	Unlikely ASS	
	13.5	31/7/17	8.6	3.7	2	4.9	Orange brown Ferricrete	Borderline PASS may be present	x
	14	31/7/17	9.2	2.2	2	7	Orange brown mottled dark brown Sand	PASS may be present	x
	14.5	31/7/17	9.2	5	2	4.2	Grey fine Sand, trace shell	Uncertain	x
	15	31/7/17	8.6	5.1	2	3.5	Dark grey Sand, siliceous	Limited net acidifying ability	x
	15.5	31/7/17	8.3	5.2	2	3.1	Dark grey sandy Clay, fine Sand	Limited net acidifying ability	
	16	31/7/17	8.6	5.5	2	3.1	Dark grey sandy Clay, fine Sand	Limited net acidifying ability	
	16.5	31/7/17	8.9	5.5	2	3.4	Grey silty Sand	Limited net acidifying ability	
	17	31/7/17	8.7	5.9	2	2.8	Grey silty Sand	Limited net acidifying ability	
ID46-CASS05-QC1	14.5	31/7/17	9	3.8	2	5.2	Grey fine Sand, trace shell	Borderline PASS may be present	x
DUP1_280717	10	28/7/17	8.2	1.8	3	6.4	Grey black clayey Silt	PASS may be present	x
ID46-CASS06	0.1	27/7/17	5.8	5	2	0.8	Grey brown silty Fill, crushed rock	Unlikely ASS	
	0.5	27/7/17	6.5	5.1	2	1.4	Dark grey fine Sand	Limited net acidifying ability	
	1	27/7/17	5.7	4.7	2	1	Dark grey fine Sand	Uncertain	
	1.5	27/7/17	5.2	4.8	1	0.4	Dark grey fine Sand	Borderline AASS maybe present	x
	2	27/7/17	5.6	4.9	1	0.7	Grey brown fine Sand	Unlikely ASS	
	2.5	27/7/17	4.3	4.3	1	0	Grey brown fine Sand	Borderline AASS maybe present	
	3	27/7/17	4.2	4.6	1	-0.4	Grey brown fine Sand	Borderline AASS maybe present	
	3.5	27/7/17	5.1	4.2	2	0.9	Brown black fine Sand	Borderline AASS maybe present	x
	4	27/7/17	6	4.7	2	1.3	Black fine Sand	Uncertain	x
	4.5	27/7/17	5.6	4.8	2	0.8	Yellow brown fine Sand	Unlikely ASS	
	5	27/7/17	5.3	4.9	1	0.4	Yellow brown fine Sand	Borderline AASS maybe present	x
	5.5	27/7/17	5.9	5.2	1	0.7	Yellow brown fine Sand	Unlikely ASS	
	6	27/7/17	8	5.5	1	2.5	Yellow brown fine Sand	Unlikely ASS	
	6.5	27/7/17	8.6	2.7	2	5.9	Grey fine Sand, trace shell	PASS may be present	x
	7	27/7/17	8.6	5.8	2	2.8	Grey fine Sand, trace shell	Limited net acidifying ability	
	7.5	27/7/17	8.6	5.5	1	3.1	Grey fine Sand, abundant shell	Unlikely ASS	
	8	27/7/17	8.2	5.5	1	2.7	Grey silty Sand	Unlikely ASS	
	8.5	27/7/17	8.3	5.8	1	2.5	Grey silty Sand	Unlikely ASS	x
	9	27/7/17	8.7	5.4	1	3.3	Dark grey silty Sand, trace shell,	Unlikely ASS	
	9.5	27/7/17	8.3	3	2	5.3	Dark grey silty Sand, trace shell, slight H2S odour	Borderline PASS may be present	
	10	27/7/17	8.2	2.2	4	6	Grey black silty Sand, trace shell, slight H2S odour	PASS may be present	
	10.5	27/7/17	8.2	2	4	6.2	Black Clay, sticky, trace shell	PASS may be present	x
	11	27/7/17	7.9	1.6	3	6.3	Black Clay, sticky, trace shell	PASS may be present	x
	11.5	27/7/17	7.9	1.8	4	6.1	Grey clayey Silt, hard	PASS may be present	x
	12	27/7/17	8.7	7.2	4	1.5	Grey clayey Silt, hard	Limited net acidifying ability	x
	12.5	27/7/17	8.6	7.2	4	1.4	Grey black fine Sand	Limited net acidifying ability	
	13	27/7/17	8.6	5.5	2	3.1	Grey black fine Sand	Limited net acidifying ability	
	13.5	27/7/17	8.5	5.3	2	3.2	Dark grey brown Sandy Clay	Limited net acidifying ability	
	14	1/8/17	9.1	5.4	2	3.7	Pale grey brown Sand	Limited net acidifying ability	x
	14.5	1/8/17	9.4	5.8	2	3.6	Dark grey sandy Clay, fine Sand	Limited net acidifying ability	
	15	1/8/17	9.3	7.6	4	1.7	Grey pale sandy Silt, siliceous	Limited net acidifying ability	
	15.5	1/8/17	9.4	6	2	3.4	Grey pale sandy Clay, siliceous	Limited net acidifying ability	
	16	1/8/17	9.4	5.5	2	3.9	Grey pale sandy Silt, siliceous	Limited net acidifying ability	
	16.5	1/8/17	9.4	8.3	4	1.1	Grey pale sandy Silt, siliceous	Limited net acidifying ability	
	17	1/8/17	9.4	8.2	4	1.2	Grey pale sandy Silt, siliceous	Limited net acidifying ability	
	17.5	1/8/17	9.2	5.7	2	3.5	Grey pale sandy Silt, siliceous	Limited net acidifying ability	
	18	1/8/17	9	5.5	2	3.5	Dark grey sandy Silt	Limited net acidifying ability	
	18.5	1/8/17	9.1	5.6	2	3.5	Dark grey sandy Silt	Limited net acidifying ability	
	19	1/8/17	9.1	7.5	4	1.6	Dark grey sandy Silt	Limited net acidifying ability	
	19.5	1/8/17	9	5.6	2	3.4	Dark grey sandy Clay, fine sand	Limited net acidifying ability	
	20	1/8/17	9.1	5.8	4	3.3	Dark grey sandy Clay, fine sand	Limited net acidifying ability	
	20.5	1/8/17	9.1	5.4	2	3.7	Dark grey siliceous Sand	Limited net acidifying ability	x
DUP1_270717	1.5	27/7/17	5.1	4.6	1	0.5	Dark grey fine Sand	Borderline AASS maybe present	x
DUP4_2707017	8.5	27/7/17	8.6	5.7	2	2.9	Grey silty Sand	Limited net acidifying ability	x
DUP5_270717	10.5	27/7/17	8.5	2.1	4	6.4	Black Clay, sticky, trace shell	PASS may be present	x

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID46-CASS07	0.1	18/7/17	6.2	4.8	2	1.4	Fill, dark grey Silty Sand	Uncertain	
	0.5	18/7/17	7	5	2	2	Pale grey fine Sand	Uncertain	x
	1	18/7/17	6.4	5	2	1.4	Pale grey fine Sand	Uncertain	
	1.5	18/7/17	6.4	4.9	1	1.5	Pale grey fine Sand	Unlikely ASS	
	2	19/7/17	8.5	5.4	1	3.1	Pale grey fine Sand	Unlikely ASS	
	2.5	19/7/17	5	4.6	1	0.4	Pale grey fine Sand	Borderline AASS maybe present	x
	3	19/7/17	6.3	4.8	1	1.5	Black grey Sand	Unlikely ASS	
	3.5	19/7/17	5.7	4.7	1	1	Grey brown fine Sand	Unlikely ASS	
	4	19/7/17	5	4.2	1	0.8	Red brown, medium Sand	Borderline AASS maybe present	
	4.5	19/7/17	5.1	4.2	1	0.9	Red brown, medium Sand	Borderline AASS maybe present	x
	5	19/7/17	5.4	4.7	1	0.7	Red brown, medium Sand	Borderline AASS maybe present	
	5.5	19/7/17	6.6	5	1	1.6	Grey brown fine Sand, trace shell	Unlikely ASS	
	6	19/7/17	8.4	6	1	2.4	Grey brown fine Sand, trace shell	Unlikely ASS	
	6.5	19/7/17	8.7	5.8	2	2.9	Grey brown fine Sand, trace shell	Limited net acidifying ability	
	7	19/7/17	8.9	6	1	2.9	Grey brown fine Sand, abundant shell	Unlikely ASS	
	7.4	19/7/17	8.2	4.8	2	3.4	Grey black Sand, some shell	Uncertain	
	8	19/7/17	8.6	5.6	2	3	Grey Sand	Limited net acidifying ability	
	8.5	19/7/17	8.1	2.2	2	5.9	Grey Sand	PASS may be present	x
	9	19/7/17	8.8	5.7	2	3.1	Grey Sand	Limited net acidifying ability	
	9.5	19/7/17	8.9	5.8	2	3.1	Grey Sand	Limited net acidifying ability	
	10	19/7/17	8.9	5.6	2	3.3	Grey Sand	Limited net acidifying ability	
	10.5	19/7/17	8.3	2	4	6.3	Black sticky silty Clay, H2S odour, trace shell	PASS may be present	x
	11	19/7/17	8.3	1.4	2	6.9	Grey Sand with silt, trace shell	PASS may be present	
	11.5	19/7/17	8.3	2.1	4	6.2	Grey Sand with silt, trace shell	PASS may be present	x
	12	19/7/17	9.2	8	4	1.2	Grey silty Clay, sticky	Limited net acidifying ability	
	12.5	19/7/17	8.8	7.8	4	1	Grey silty Clay, sticky	Limited net acidifying ability	
	13	19/7/17	8.3	5.2	2	3.1	Brown silty Sand	Limited net acidifying ability	x
	13.5	19/7/17	8.4	5.9	2	2.5	Yellow brown fine Sand	Limited net acidifying ability	
	14	19/7/17	8.4	2.1	4	6.3	Yellow brown fine Sand	PASS may be present	
	14.5	19/7/17	8.2	2.1	4	6.1	Grey black Sand	PASS may be present	
	15	19/7/17	9	2.1	4	6.9	Grey black Sand	PASS may be present	x
	15.5	20/7/17	9.5	6.5	4	3	Grey black silty Sand	Limited net acidifying ability	
	16	20/7/17	9.5	8.6	4	0.9	Grey brown fine to medium Sand	Limited net acidifying ability	
	16	21/7/17	9.1	7.2	4	1.9	Grey brown fine to medium Sand	Limited net acidifying ability	
	16.5	21/7/17	9.4	5.8	2	3.6	Grey brown fine to medium Sand, trace shell	Limited net acidifying ability	x
	17	21/7/17	9.1	7.9	4	1.2	Grey Clay, with sand, highly plastic	Limited net acidifying ability	x
	17.5	21/7/17	9.2	8.1	4	1.1	Grey Clay, with sand, highly plastic	Limited net acidifying ability	
	18	21/7/17	9.3	8.0	4	1.3	Grey Clay, with sand, highly plastic	Limited net acidifying ability	
	18.5	21/7/17	9.0	7.7	4	1.3	Grey Clay, with sand, highly plastic	Limited net acidifying ability	
	19	21/7/17	9.2	7.7	4	1.5	Grey Clay, with sand, highly plastic	Limited net acidifying ability	
D46_CASS07_QC2	17	21/7/17	9.0	8.6	4	0.4	Grey Clay, with sand, highly plastic	Limited net acidifying ability	x
D46_CASS07_QC3	17	21/7/17	9.1	8.0	4	1.1	Grey Clay, with sand, highly plastic	Limited net acidifying ability	x
DUP1_190717	11.5	19/7/17	8.1	1.6	2	6.5	Grey Sand with silt, trace shell	PASS may be present	x
ID46-CASS08	0.1	28/7/17	7.1	4.7	2	2.4	Black, silty Fill, crushed rock	Uncertain	x
	0.5	28/7/17	7.6	5.1	2	2.5	Grey black fine Sand	Limited net acidifying ability	
	1	28/7/17	7.2	5.3	1	1.9	Grey black fine Sand	Unlikely ASS	
	1.5	28/7/17	6.6	4.8	1	1.8	Grey fine Sand	Unlikely ASS	x
	2	28/7/17	7.5	5.3	1	2.2	Grey fine Sand	Unlikely ASS	
	2.5	28/7/17	6.3	5	1	1.3	Grey fine Sand	Unlikely ASS	
	3	28/7/17	7.3	5.2	1	2.1	Grey brown fine Sand	Unlikely ASS	
	3.5	28/7/17	7.9	5.5	1	2.4	Dark brown fine Sand	Unlikely ASS	
	4	28/7/17	7.4	5.2	1	2.2	Dark brown fine Sand	Unlikely ASS	
	4.5	28/7/17	8.1	5.5	1	2.6	Red brown fine to medium Sand	Unlikely ASS	
	5	28/7/17	6.6	5	1	1.6	Red brown fine to medium Sand	Unlikely ASS	x
	5.5	28/7/17	6.4	5.2	1	1.2	Grey brown fine Sand	Unlikely ASS	
	6	28/7/17	8.9	6.2	1	2.7	Grey brown fine Sand	Unlikely ASS	
	6.5	28/7/17	9.1	6.3	1	2.8	Grey fine silty Sand, trace shell	Unlikely ASS	
	7	28/7/17	8.9	6.3	1	2.6	Grey fine silty Sand, trace shell	Unlikely ASS	x
	7.5	28/7/17	9.2	6.2	1	3	Grey fine silty Sand	Unlikely ASS	
	8	28/7/17	8.6	6	1	2.6	Grey fine silty Sand, trace shell	Unlikely ASS	
	8.5	28/7/17	8.8	6.3	1	2.5	Grey fine silty Sand, trace shell	Unlikely ASS	
	9	28/7/17	8.1	5.8	1	2.3	Grey black silty Sand	Unlikely ASS	
	9.5	28/7/17	8.7	5.9	1	2.8	Grey black silty Sand	Unlikely ASS	x
	10	28/7/17	8.4	1.5	3	6.9	Grey black silty Sand	PASS may be present	x
	10.5	28/7/17	8.5	2.1	3	6.4	Black, sticky Clay, trace shell, slight H2S odour	PASS may be present	
	11	28/7/17	8.5	2.4	3	6.1	Black, sticky Clay, trace shell, slight H2S odour	PASS may be present	
	11.5	28/7/17	8.2	1.9	3	6.3	Grey black fine Sand,	PASS may be present	x
	12	28/7/17	9.4	2.6	2	6.8	Dark blue grey Clay, hard, stiff	PASS may be present	
	12.5	28/7/17	8.6	8.2	4	0.4	Dark blue grey Clay, hard, stiff	Limited net acidifying ability	x
	13	28/7/17	8.8	8.4	4	0.4	Dark blue grey Clay, hard, stiff	Limited net acidifying ability	
	13.5	28/7/17	8.7	8.1	4	0.6	Grey fine silty Sand	Limited net acidifying ability	
	14	28/7/17	8.7	5.7	1	3	Grey fine silty Sand	Unlikely ASS	
	14.5	4/8/17	7.4	1.7	2	5.7	Grey fine Sand, siliceous	PASS may be present	x
	15	4/8/17	9.1	8.5	4	0.6	Grey Clay, trace sand	Limited net acidifying ability	x
	15.5	4/8/17	9.4	9	4	0.4	Grey sandy Clay, fine sand	Limited net acidifying ability	
	16	4/8/17	8.9	7.8	4	1.1	Grey sandy Clay, fine sand	Limited net acidifying ability	
	16.5	4/8/17	9.2	8.7	4	0.5	Grey sandy Clay, fine sand	Limited net acidifying ability	
	17	4/8/17	9.1	8.1	4	1	Grey mottled brown sandy Clay	Limited net acidifying ability	
	17.5	4/8/17	9	8.8	2	0.2	Grey mottled brown sandy Clay	Limited net acidifying ability	
	18	4/8/17	9.4	9	4	0.4	Grey mottled brown sandy Clay	Limited net acidifying ability	
	18.5	4/8/17	9.3	8.6	4	0.7	Grey fine Sand	Limited net acidifying ability	
	19	4/8/17	9.2	5.4	2	3.8	Grey fine Sand	Limited net acidifying ability	
	19.5	4/8/17	9	5.2	2	3.8	Grey sandy Silt, fine sand	Limited net acidifying ability	
	20	4/8/17	8.7	4.8	2	3.9	Grey mottled brown Sand, siliceous	Uncertain	x
	20.5	4/8/17	8.9	5.3	2	3.6	Grey fine Sand siliceous	Limited net acidifying ability	
	21	4/8/17	8.3	6.3	4	2	Grey mottled black Clay	Limited net acidifying ability	
	21.5	4/8/17	8.6	4.8	2	3.8	Grey mottled black Clay	Uncertain	x
	22	4/8/17	8.4	6.9	4	1.5	Grey mottled black Clay	Limited net acidifying ability	
DUP2_280717	7	28/7/17	8.7	6.2	1	2.5	Grey fine silty Sand, trace shell	Unlikely ASS	x
DUP3_280717	10	28/7/17	8.6	7.9	4	0.7	Grey black silty Sand	Limited net acidifying ability	x

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID46-CASS09	2	31/7/17	6.5	4.8	2	1.7	Yellow grey fine Sand	Uncertain	
	2.5	31/7/17	5.8	4.5	2	1.3	Yellow grey fine Sand	Uncertain	x
	3	31/7/17	6.1	5.0	2	1.1	Yellow grey fine Sand	Uncertain	
	3.5	31/7/17	5.7	3.9	2	1.8	Yellow grey fine Sand	Borderline PASS may be present	x
	4	31/7/17	7.0	5.0	2	2	Grey fine Sand	Uncertain	
	4.5	31/7/17	7.3	5.2	2	2.1	Grey fine Sand	Limited net acidifying ability	
	5	31/7/17	7.1	5.1	2	2	Light brown fine Sand	Limited net acidifying ability	
	5.5	31/7/17	6.7	4.9	2	1.8	Light brown fine Sand	Uncertain	x
	6	31/7/17	7.4	5.0	2	2.4	Light grey fine Sand, trace shell	Uncertain	
	6.5	31/7/17	8.4	5.7	1	2.7	Light grey fine Sand, trace shell	Unlikely ASS	x
	7	31/7/17	8.4	6.0	2	2.4	Light grey fine Sand, trace shell	Limited net acidifying ability	
	7.5	31/7/17	8.7	6.2	2	2.5	Light grey fine Sand, trace shell	Limited net acidifying ability	
	8	31/7/17	8.8	5.8	1	3	Light grey fine Sand, trace shell	Unlikely ASS	x
	8.5	31/7/17	8.7	6.0	1	2.7	Light grey fine Sand, trace shell	Unlikely ASS	
	9	31/7/17	8.6	5.9	2	2.7	Light grey fine Sand, trace shell	Limited net acidifying ability	
	9.5	31/7/17	6.8	5.0	2	1.8	Light grey fine Sand	Uncertain	
	10	31/7/17	8.4	2.2	2	6.2	Light grey fine Sand	PASS may be present	x
	10.5	31/7/17	8.4	2.1	4	6.3	Olive grey sandy Clay	PASS may be present	
	11	31/7/17	8.5	2.0	4	6.5	Olive grey sandy Clay	PASS may be present	x
	11.5	31/7/17	7.9	5.0	2	2.9	Dark grey fine Sand, trace shell	Uncertain	x
	12	31/7/17	7.7	1.8	2	5.9	Dark grey fine Sand, trace shell	PASS may be present	x
	12.5	31/7/17	7.3	2.2	4	5.1	Olive grey sandy Clay	PASS may be present	
	13	31/7/17	8.7	2.3	2	6.4	Olive grey sandy Clay	PASS may be present	x
	13.5	31/7/17	8.6	8.3	4	0.3	Olive grey sandy Clay	Limited net acidifying ability	
	14	31/7/17	8.3	5.4	2	2.9	Olive grey sandy Clay	Limited net acidifying ability	
	14.5	31/7/17	8.6	5.1	4	3.5	Olive grey sandy Clay	Limited net acidifying ability	
	14.5	7/8/17	8.6	1.8	2	6.8	Brown fine Sand	PASS may be present	x
	15	7/8/17	8.2	2.2	4	6	Dark grey fine Sand	PASS may be present	
	15.5	7/8/17	8.7	3.2	1	5.5	Dark grey fine sandy Clay	Unlikely ASS	
	16	7/8/17	8.4	2	4	6.4	Pale grey sandy Clay	PASS may be present	x
	16.5	7/8/17	8.6	1.8	4	6.8	Grey fine Sand	PASS may be present	
	17	7/8/17	8.8	2.4	4	6.4	Grey brown fine Sand	PASS may be present	x
	17.5	7/8/17	8.5	4.5	1	4	Grey brown fine Sand	Unlikely ASS	x
	18	7/8/17	8.5	5.2	1	3.3	Grey brown fine Sand	Unlikely ASS	
	18.5	7/8/17	8.9	4.3	2	4.6	Grey sandy Clay, fine sand	Uncertain	x
	19	7/8/17	8.8	5.7	2	3.1	Dark grey Clay, medium plasticity	Limited net acidifying ability	
	19.5	7/8/17	8.8	6.5	4	2.3	Dark grey Clay, medium plasticity	Limited net acidifying ability	
	20	7/8/17	9	5.5	2	3.5	Dark grey Clay, medium plasticity	Limited net acidifying ability	
	20.5	7/8/17	8.7	7.4	4	1.3	Grey mottles black Clay, timber fragments/roots	Limited net acidifying ability	
	21	7/8/17	8.7	6.9	4	1.8	Grey mottles black Clay, timber fragments/roots	Limited net acidifying ability	
	21.5	7/8/17	9	5.5	2	3.5	Grey fine Sand,	Limited net acidifying ability	
	22	7/8/17	8.4	4.7	2	3.7	Grey fine Sand,	Uncertain	
ID46-CASS10	0.1	18/7/17	6.5	5.2	2	1.3	Fill, brown black silty Sand	Limited net acidifying ability	
	0.5	18/7/17	7.7	5	3	2.7	Grey fine Sand	Uncertain	
	1	18/7/17	7.8	5.2	2	2.6	Grey fine Sand	Limited net acidifying ability	
	1.5	18/7/17	7	5	1	2	Dark brown fine Sand	Unlikely ASS	
	2	18/7/17	5.6	4.5	2	1.1	Dark brown fine Sand	Uncertain	x
	2.5	18/7/17	5.4	4.3	2	1.1	Dark brown, mottle black brown fine Sand	Borderline AASS maybe present	
	3	18/7/17	5.1	4	2	1.1	Dark brown fine Sand	Borderline AASS maybe present	
	3.5	18/7/17	4.8	4.1	2	0.7	Dark brown fine Sand	Borderline AASS maybe present	
	4	18/7/17	4.7	4.4	2	0.3	Yellow brown fine Sand	Borderline AASS maybe present	x
	4.2	18/7/17	4.3	4.2	1	0.1	Dark red brown medium Sand	Borderline AASS maybe present	
	4.5	18/7/17	4.7	4.4	1	0.3	Yellow brown fine Sand	Borderline AASS maybe present	
	5	18/7/17	4.7	4.3	1	0.4	Yellow brown fine Sand	Borderline AASS maybe present	x
	5.5	18/7/17	6.7	5	1	1.7	Grey brown fine silty Sand, trace shell	Unlikely ASS	
	6	18/7/17	8.2	5.6	1	2.6	Grey brown fine silty Sand, trace shell	Unlikely ASS	
	6.5	18/7/17	8.8	6.1	2	2.7	Grey fine Sand, trace shell	Limited net acidifying ability	x
	7	18/7/17	8.8	5.8	2	3	Grey fine silty Sand, trace shell	Limited net acidifying ability	x
	7.5	18/7/17	8.6	5.8	2	2.8	Grey fine silty Sand, abundance shell	Limited net acidifying ability	
	8	18/7/17	8.7	5.9	2	2.8	Dark grey olive green silty Sand	Limited net acidifying ability	
	8.5	18/7/17	9.3	6.1	1	3.2	Grey, medium Sand, abundance Shell	Unlikely ASS	
	9	18/7/17	9	5.5	1	3.5	Black sticky silty Sand	Unlikely ASS	
	9.5	18/7/17	8.7	4.9	1	3.8	Grey black silty Sand, trace shell	Unlikely ASS	
	10	18/7/17	8.7	5.4	2	3.3	Grey black sandy Silt, slight H2S odour	Limited net acidifying ability	x
	10.5	18/7/17	8.6	2.2	4	6.4	Grey black Clay, H2S odour, trace shell	PASS may be present	x
	11	18/7/17	8.6	1.4	4	7.2	Black silty Sand, H2S odour	PASS may be present	
	11.5	18/7/17	8.6	1.8	2	6.8	Dark grey fine Sand	PASS may be present	
	12	18/7/17	9.3	1.9	4	7.4	Grey sandy Silt	PASS may be present	x
	12.5	18/7/17	9.3	6.3	2	3	Dark grey clayey Silt, trace sand	Limited net acidifying ability	x
	13	18/7/17	9.2	6.2	2	3	Dark grey clayey Silt, trace sand	Limited net acidifying ability	
	13.5	18/7/17	8.9	5.8	1	3.1	Grey brown sandy Silt	Unlikely ASS	
	14	18/7/17	8.8	5.7	2	3.1	Grey fine Sand	Limited net acidifying ability	
	14.5	24/7/17	8.6	6.3	2	2.3	Grey mottled brown Sand, trace shell	Limited net acidifying ability	x
	15	24/7/17	7.8	5.4	2	2.4	Sandy Gravel, ferricrete, with shell	Limited net acidifying ability	
	15.5	24/7/17	8.3	5.2	2	3.1	Brown Sand, fine to medium	Limited net acidifying ability	x
	16	24/7/17	8.4	6.0	2	2.4	Sandy Gravel, ferricrete, with shell	Limited net acidifying ability	
	16.5	24/7/17	9.3	6.7	4	2.6	Grey Clay, trace sand	Limited net acidifying ability	
	17	24/7/17	8.7	7.9	4	0.8	Grey clayey Sand	Limited net acidifying ability	
	17.5	24/7/17	8.7	8.0	4	0.7	Grey Clay, trace sand	Limited net acidifying ability	
	18	24/7/17	8.6	8.1	4	0.5	Grey sandy Clay, fine sand	Limited net acidifying ability	
	18.5	24/7/17	8.2	8.2	4	0	Grey Clay, trace sand	Limited net acidifying ability	
	19	24/7/17	8.7	8.5	4	0.2	Grey Clay, trace sand	Limited net acidifying ability	
	19.5	24/7/17	8.6	8.2	4	0.4	Grey clayey Sand	Limited net acidifying ability	
	20	24/7/17	8.8	7.9	4	0.9	Grey sandy Clay, fine sand	Limited net acidifying ability	
DUP1 180717	6.5	18/7/17	8.3	5.6	1	2.7	Grey fine Sand, trace shell	Unlikely ASS	x
DUP2 180717	10.5	18/7/17	9	2.4	4	6.6	Grey black Clay, H2S odour, trace shell	PASS may be present	x
QC1 180717	Blank	18/7/17	6.1	4.9	1	1.2	Graded Sand	Unlikely ASS	
ID46-CASS10_QC1	14.5	24/7/17	8.3	2.7	4	5.6	Grey mottled brown Sand, trace shell	PASS may be present	x

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID46 CASS11	0.1	17/7/17	6.5	4.9	2	1.6	Fill, Dark grey brown silty Sand	Uncertain	
	0.5	17/7/17	6.5	5	2	1.5	Grey black fine Sand	Uncertain	
	1	17/7/17	6.4	4.3	2	2.1	Grey black fine Sand	Uncertain	x
	1.5	17/7/17	5.2	4.4	2	0.8	Pale grey fine Sand	Borderline AASS maybe present	
	2	17/7/17	5.2	4.5	1	0.7	Pale grey fine Sand	Borderline AASS maybe present	
	2.5	17/7/17	4.8	4.7	1	0.1	Pale grey fine Sand	Borderline AASS maybe present	
	3	17/7/17	4.8	4.1	1	0.7	Pale grey fine Sand	Borderline AASS maybe present	x
	3.5	17/7/17	4.6	5	1	-0.4	Grey brown fine Sand	Borderline AASS maybe present	
	4	17/7/17	5.2	4.9	1	0.3	Orange brown med Sand	Borderline AASS maybe present	
	4.5	17/7/17	5.8	5	1	0.8	Yellow brown Sand	Unlikely ASS	
	5	17/7/17	6	5.3	1	0.7	Yellow brown Sand	Unlikely ASS	
	5.5	17/7/17	6	5.1	1	0.9	Yellow brown Sand , trace shell	Unlikely ASS	
	6	17/7/17	8.8	5.2	1	3.6	Yellow brown Sand , trace shell	Unlikely ASS	
	6.5	17/7/17	9	5.6	1	3.4	Yellow brown Sand , trace shell	Unlikely ASS	
	7	17/7/17	8.8	5.8	1	3.0	Dark grey Sand, trace shell	Unlikely ASS	x
	7.5	17/7/17	9.2	6.1	1	3.1	Dark grey Sand, trace shell	Unlikely ASS	
	8	17/7/17	8.9	6	2	2.9	Dark grey Sand, trace shell	Limited net acidifying ability	
	8.5	17/7/17	9.1	5.9	2	3.2	Grey silty Sand, trace large shells (2m)	Limited net acidifying ability	
	9	17/7/17	8.8	4.9	2	3.9	Greyblack Sand, trace shells	Uncertain	
	9.5	17/7/17	8.9	1.3	4	7.6	Clayey silt, slight H2S odour	PASS may be present	x
	10	17/7/17	8.5	2.6	3	5.9	Clayey silt, slight H2S odour	PASS may be present	
	10.5	17/7/17	8.6	5.1	4	3.5	Clayey silt, slight H2S odour, trace shell	Limited net acidifying ability	x
	11	17/7/17	8.1	5.3	2	2.8	Sandy silt, trace large shell (>1cm)	Limited net acidifying ability	
	11.5	17/7/17	8.8	1.9	4	6.9	Grey black Sand	PASS may be present	
	12	17/7/17	9.4	6.2	2	3.2	Grey black Sand	Limited net acidifying ability	x
	12.5	17/7/17	9.1	8	4	1.1	Dark grey sandy Silt	Limited net acidifying ability	
	13	17/7/17	9.1	6.8	2	2.3	Grey fine Sand	Limited net acidifying ability	
	13.5	17/7/17	8.9	5.6	2	3.3	Grey fine Sand	Limited net acidifying ability	
	14	17/7/17	8.9	5.4	2	3.5	Grey fine Sand	Limited net acidifying ability	x
	14.5	17/7/17	8.6	2	4	6.6	Grey fine Sand	PASS may be present	
	15	17/7/17	8.8	5.2	2	3.6	Grey brown fine Sand	Limited net acidifying ability	
	15.5	17/7/17	8.7	5.2	2	3.5	Grey black sandy Silt (sticky)	Limited net acidifying ability	x
	16	17/7/17	8.9	4	1	4.9	Grey black sandy Silt (sticky)	Unlikely ASS	
	16.5	17/7/17	8.7	7	4	1.7	Grey black sandy Silt (sticky)	Limited net acidifying ability	x
	17	17/7/17	8.9	7.6	4	1.3	Dark grey Clayey Silt, trace sand	Limited net acidifying ability	
	17.5	17/7/17	8.8	7.8	4	1.0	Dark grey Clayey Silt, trace sand	Limited net acidifying ability	
	18	17/7/17	9	7.8	4	1.2	Dark grey Clayey Silt, trace sand	Limited net acidifying ability	
	18.5	17/7/17	8.8	8.1	4	0.7	Dark grey sandy Silt	Limited net acidifying ability	
	19	17/7/17	8.6	5.6	4	3.0	Grey black Clay, sticky	Limited net acidifying ability	
	19.5	17/7/17	8.5	5.2	2	3.3	Grey fine Sand	Limited net acidifying ability	x
	20	17/7/17	8.4	4.5	2	3.9	Grey fine Sand	Uncertain	x
QC1_170717	16.5	17/7/17	8.8	2.4	3	6.4	Grey black sandy Silt (sticky)	PASS may be present	x
ID46-CASS12	0.1	14/7/17	6.5	5	2	1.5	Fill, black silty Sand	Uncertain	
	0.5	14/7/17	7.3	5.1	2	2.2	Grey fine Sand	Limited net acidifying ability	
	1.0	14/7/17	5.2	4.3	2	0.9	Grey fine Sand	Borderline AASS maybe present	x
	1.5	14/7/17	5.4	4.5	2	0.9	Grey fine Sand	Borderline AASS maybe present	
	2	12/7/17	5.6	4.9	1	0.7	Pale grey Sand	Unlikely ASS	
	2.5	12/7/17	4.9	4.6	1	0.3	Pale grey Sand	Borderline AASS maybe present	
	3	12/7/17	4.7	4.3	1	0.4	Pale grey Sand	Borderline AASS maybe present	x
	3.5	12/7/17	5.5	4.8	1	0.7	Pale grey Sand	Borderline AASS maybe present	
	4	12/7/17	6.1	5	1	1.1	Pale grey Sand	Unlikely ASS	
	4.2	12/7/17	8.2	5.5	2	2.7	Pale grey Sand	Limited net acidifying ability	
	4.5	12/7/17	6.3	5.1	1	1.2	Pale grey Sand	Unlikely ASS	
	5	12/7/17	6.2	5.3	1	0.9	Yellow brown Sand	Unlikely ASS	
	5.5	12/7/17	8.7	5.8	1	2.9	Yellow brown Sand	Unlikely ASS	
	6	12/7/17	8.9	5.8	1	3.1	Grey silty Sand	Unlikely ASS	x
	6.5	12/7/17	9.1	6.1	1	3	Grey silty Sand, shell fragments	Unlikely ASS	
	7	12/7/17	9	6	1	3	Brown yellow Sand	Unlikely ASS	
	7.5	12/7/17	9.1	6	1	3.1	Brown yellow Sand	Unlikely ASS	
	8	12/7/17	9	6.2	1	2.8	Brown yellow Sand, trace shells	Unlikely ASS	
	8.5	12/7/17	9.1	2.2	2	6.9	Grey fine Sand	PASS may be present	x
	9	12/7/17	8.9	5.3	2	3.6	Grey fine Sand	Limited net acidifying ability	
	9.5	12/7/17	8.9	5.8	2	3.1	Grey fine Sand	Limited net acidifying ability	
	10	12/7/17	9	3	4	6	Black clayey silt, H2S odour	Borderline PASS may be present	x
	10.5	12/7/17	9	4.5	4	4.5	Black clayey silt, H2S odour	Uncertain	
	11	12/7/17	8.4	5.6	4	2.8	Black clayey silt, H2S odour	Limited net acidifying ability	
	11.5	12/7/17	9.2	2.4	2	6.8	Black clayey silt, H2S odour	PASS may be present	
	12	12/7/17	9.6	2	4	7.6	Black clayey silt, H2S odour	PASS may be present	x
	12.5	12/7/17	9.5	6.1	2	3.4	Black clayey silt, H2S odour	Limited net acidifying ability	
	13	12/7/17	9.4	4.2	2	5.2	Dk grey, fine Sand	Uncertain	
	13.5	12/7/17	9.3	5.9	1	3.4	Dk grey, fine Sand	Unlikely ASS	
	14	12/7/17	9	5.3	1	3.7	Dk grey, fine Sand	Unlikely ASS	
	14.5	12/7/17	8.5	2.3	4	6.2	Black silty Clay, shell fragments	PASS may be present	x
	15	12/7/17	9.2	5.1	2	4.1	Dark grey Sand	Limited net acidifying ability	
	15.5	12/7/17	9	5.2	2	3.8	Dark grey Sand	Limited net acidifying ability	
	16	12/7/17	8.8	5	2	3.8	Grey sandy Silt	Uncertain	
	16.5	12/7/17	8.8	5.3	2	3.5	Grey Sand	Limited net acidifying ability	
	17	12/7/17	8.7	5.3	2	3.4	Grey Sand	Limited net acidifying ability	
ID46-CASS13	0.1	11/7/17	6	4.7	2	1.3	Fill, dark grey black silty Sand	Uncertain	
	0.5	11/7/17	4.9	4.4	2	0.5	Grey black fine Sand	Borderline AASS maybe present	
	1.0	11/7/17	4.9	4.4	2	0.5	Grey black fine Sand	Borderline AASS maybe present	x
	1.5	11/7/17	4.9	4.6	2	0.3	Grey fine Sand	Borderline AASS maybe present	
	2.0	11/7/17	5.9	4.7	1	1.2	Grey fine Sand	Unlikely ASS	
	2.5	11/7/17	5.1	5	1	0.1	Grey fine Sand	Borderline AASS maybe present	
	3.0	11/7/17	4.7	4.7	1	0.0	Grey brown fine Sand	Borderline AASS maybe present	
	3.5	11/7/17	5.6	4.9	1	0.7	Grey brown fine Sand	Unlikely ASS	
	4.0	11/7/17	5.6	5.1	1	0.5	Grey brown fine Sand	Unlikely ASS	
	4.5	11/7/17	5.4	5	1	0.4	Grey brown fine Sand	Borderline AASS maybe present	
	5.0	11/7/17	5.9	5.1	1	0.8	Black brown silty Sand	Unlikely ASS	x
	5.5	11/7/17	8.7	5.8	1	2.9	Yellow brown fine Sand, trace shell	Unlikely ASS	
	6.0	11/7/17	9.1	5.9	1	3.2	Yellow brown fine Sand, trace shell	Unlikely ASS	
	6.5	11/7/17	9.1	5.9	1	3.2	Yellow brown fine Sand, trace shell	Unlikely ASS	
	7.0	11/7/17	9.1	6	1	3.1	Grey silty Sand, trace shell	Unlikely ASS	
	7.5	11/7/17	9.1	6.1	1	3.0	Grey fine Sand, trace shell	Unlikely ASS	
	8.0	11/7/17	9.1	5.5	1	3.6	Grey fine Sand, trace shell	Unlikely ASS	x
	8.5	11/7/17	8.8	2.1	4	6.7	Grey fine Sand, trace shell	PASS may be present	
	9.0	11/7/17	9.1	4.2	3	4.9	Black clayey silt, H2S odour, minor shell	Uncertain	x
	9.5	11/7/17	8.8	2.8	1	6.0	Grey fine Sand	Potential PASS	
	10.0	11/7/17	8.9	4.6	3	4.3	Black grey silty Clay, H2S odour, some shell	Uncertain	x
QC1_ALS	9.0	11/7/17	8.8	2.4	3	6.4	Black clayey silt, H2S odour, minor shell	PASS may be present	x
QC1_E	9.0	11/7/17	9.2	3.7	1	5.5	Black clayey silt, H2S odour, minor shell	Unlikely ASS	x

Bore ID	Sample depth	Sample Date	pH_F	pH_{FOX}	Reaction Rate	Delta pH	Texture	Interpretation	Further Testing
ID46-CASS14	0.1	10/7/17	6.2	4.7	1	1.5	Fill, Silt	Unlikely ASS	
	0.5	10/7/17	6.6	5.2	1	1.4	Pale Grey Sand	Unlikely ASS	
	1	10/7/17	5.7	4.7	1	1	Pale Grey Sand	Unlikely ASS	
	1.5	10/7/17	5.1	4.5	1	0.6	Pale Grey Sand	Borderline AASS maybe present	
	2	10/7/17	5.8	4.6	1	1.2	Pale Grey Sand	Unlikely ASS	
	2.5	10/7/17	5.7	4.4	1	1.3	Light brown Sand	Unlikely ASS	
	3	10/7/17	5.1	4.3	1	0.8	Light brown Sand	Borderline AASS maybe present	
	3.5	10/7/17	4.6	3.7	2	0.9	Light brown Sand	Borderline AASS maybe present	x
	4	10/7/17	4.8	3.9	2	0.9	Light brown Sand	Borderline AASS maybe present	
	4.5	10/7/17	5.1	4.5	1	0.6	Dark brown Sand	Borderline AASS maybe present	
	5	10/7/17	5.4	4.7	1	0.7	Pale brown silty Sand	Borderline AASS maybe present	
	5.5	10/7/17	8.4	5.7	1	2.7	Pale brown silty Sand	Unlikely ASS	
	6	10/7/17	8.6	5.7	1	2.9	Pale brown silty Sand	Unlikely ASS	x
	6.5	10/7/17	8.8	5.9	1	2.9	Pale brown silty Sand, with trace shell	Unlikely ASS	
	7	10/7/17	8.7	6	1	2.7	Dark Brown Silty Clay, trace shell	Unlikely ASS	
ID46-CASS15	0.1	10/7/17	6.4	4.5	3	1.9	Fill, black Sily	Uncertain	
	0.5	10/7/17	4	3.1	2	0.9	Dark grey fine Sand	Unlikely ASS	
	1	10/7/17	4.7	3	3	1.7	Dark grey fine Sand	Borderline AASS maybe present	x
	1.5	10/7/17	4.6	3.8	2	0.8	Yellow gravelly Sand	Borderline AASS maybe present	
	2	10/7/17	5.2	4.3	1	0.9	Black asphalt	Borderline AASS maybe present	x
	2.5	10/7/17	4.7	4.4	1	0.3	Pale grey Sand	Borderline AASS maybe present	
	3	10/7/17	4.5	3.4	2	1.1	Pale grey Sand	Borderline AASS maybe present	
	3.5	10/7/17	4.6	3.7	1	0.9	Pale grey Sand	Borderline AASS maybe present	
	4	10/7/17	5.1	4.1	1	1	Dark brown orange Sand	Borderline AASS maybe present	
	4.5	10/7/17	4.8	4.4	1	0.4	Dark brown orange Sand	Borderline AASS maybe present	
	5	10/7/17	4.7	4.3	1	0.4	Dark brown orange Sand	Borderline AASS maybe present	
ID46-CASS16	0.1	10/7/17	6.8	5.1	2	1.7	Fill, Silty Sand	Limited net acidifying ability	x
	0.5	10/7/17	5.2	4.4	2	0.8	Grey black Sand	Borderline AASS maybe present	
	1	10/7/17	5.4	4.6	1	0.8	Grey black Sand	Borderline AASS maybe present	
	1.5	10/7/17	5.2	4.6	1	0.6	Pale grey Sand	Borderline AASS maybe present	
	2	10/7/17	4.7	4.6	1	0.1	Pale grey Sand	Borderline AASS maybe present	
	2.5	10/7/17	5.4	4.7	1	0.7	Pale grey Sand	Borderline AASS maybe present	
	3	10/7/17	5.5	4.6	1	0.9	Pale grey Sand	Borderline AASS maybe present	
	3.5	10/7/17	5.3	4.4	1	0.9	Pale brown Sand	Borderline AASS maybe present	
	4	10/7/17	5.2	4.6	1	0.6	Pale brown Sand	Borderline AASS maybe present	
	4.5	10/7/17	5.3	4.6	1	0.7	Pale brown Sand	Borderline AASS maybe present	
	5	10/7/17	5.6	4.7	1	0.9	Pale brown Sand	Unlikely ASS	
ID46-CASS17	0.1	25/7/17	8.5	6.1	2	2.4	Black topsoil	Limited net acidifying ability	
	1.5	25/7/17	8.6	6.0	2	2.6	Grey fine Sand	Limited net acidifying ability	
	2	25/7/17	5.9	4.9	1	1	Grey fine Sand	Unlikely ASS	
	2.5	25/7/17	5.5	4.7	1	0.8	Grey fine Sand, black mottles	Borderline AASS maybe present	x
	3	25/7/17	5.3	4.5	1	0.8	Grey fine Sand, black mottles	Borderline AASS maybe present	
	3.5	25/7/17	5.2	4.8	1	0.4	Grey fine Sand, black mottles	Borderline AASS maybe present	
	4	25/7/17	4.5	4.3	2	0.2	Red brown, fine Sand	Borderline AASS maybe present	x
	4.5	25/7/17	5.8	4.9	2	0.9	Red brown, fine Sand	Unlikely ASS	
	5	25/7/17	7.3	5.3	1	2	Red brown, fine Sand	Unlikely ASS	
	5.5	25/7/17	8.3	5.9	2	2.4	Red brown, fine Sand, trace shell	Limited net acidifying ability	x
	6	25/7/17	7.5	5.9	2	1.6	Red brown, fine Sand, trace shell	Limited net acidifying ability	
	6.4	25/7/17	8.6	5.6	2	3	Red brown, fine Sand, trace shell	Limited net acidifying ability	x
	7	25/7/17	8.3	6.1	2	2.2	Red brown, fine Sand, trace shell	Limited net acidifying ability	
ID46-CASS18	0.1	25/7/17	7.2	5.4	1	1.8	Black Topsoil	Unlikely ASS	
	0.5	25/7/17	8.1	5.4	2	2.7	Grey black fine Sand	Limited net acidifying ability	
	1	25/7/17	7.6	5.5	1	2.1	Grey black fine Sand	Unlikely ASS	x
	1.5	25/7/17	6.8	5.3	1	1.5	Grey fine Sand	Unlikely ASS	
	2	25/7/17	4.6	5.5	2	-0.9	Grey fine Sand	Borderline AASS maybe present	
	2.5	25/7/17	4.4	4.6	1	-0.2	Grey brown fine Sand	Borderline AASS maybe present	x
	3	25/7/17	4.3	4.0	1	0.3	Grey brown fine Sand	Borderline AASS maybe present	
	3.5	25/7/17	4.6	3.4	1	1.2	Grey brown fine Sand	Borderline AASS maybe present	x
	4	25/7/17	4.9	4.0	1	0.9	Grey brown medium Sand	Borderline AASS maybe present	
	4.5	25/7/17	5.9	4.1	1	1.8	Red brown fine to medium Sand	Unlikely ASS	x
	5	25/7/17	6.2	5.0	2	1.2	Yellow brown fine to medium Sand	Uncertain	x
	5.5	25/7/17	6.5	5.2	2	1.3	Yellow brown fine to medium Sand	Limited net acidifying ability	
	6	25/7/17	8.4	5.2	1	3.2	Yellow brown fine to medium Sand, trace shell	Unlikely ASS	
	6.5	25/7/17	8.7	5.6	1	3.1	Gret fine Sand, trace shell	Unlikely ASS	
	7	25/7/17	8.8	5.8	2	3.0	Gret fine Sand, trace shell	Limited net acidifying ability	
DUP3_250717	1	25/7/17	7.6	6.0	1	1.6	Grey black fine Sand	Unlikely ASS	x
ID46-CASS19	0.1	25/7/17	8.8	5.9	3	2.9	Topsoil, silty Sand	Limited net acidifying ability	
	0.5	25/7/17	7.9	5.4	2	2.5	Grey fine Sand	Limited net acidifying ability	x
	1	25/7/17	7.4	5.3	1	2.1	Grey fine Sand	Unlikely ASS	
	1.5	25/7/17	7.1	5.2	1	1.9	Grey fine Sand	Unlikely ASS	
	2	25/7/17	6.4	5.0	1	1.4	Grey fine Sand	Unlikely ASS	
	2.5	25/7/17	5.7	5.0	1	0.7	Brown fine Sand	Unlikely ASS	
	3	25/7/17	6.1	5.1	1	1.0	Brown fine Sand	Unlikely ASS	
	3.5	25/7/17	7.2	5.0	2	2.2	Yellow brown fine Sand	Uncertain	x
	4	25/7/17	7.5	5.2	1	2.3	Yellow brown fine Sand	Unlikely ASS	
	4.5	25/7/17	6.7	5.4	2	1.3	Dark brown medium Sand	Limited net acidifying ability	
	5	25/7/17	8.5	5.2	2	3.3	Dark brown medium Sand	Limited net acidifying ability	
	5.5	25/7/17	8.7	5.8	1	2.9	Dark brown medium Sand, trace shell	Unlikely ASS	
	6.2	25/7/17	8.9	5.9	1	3.0	Dark brown medium Sand, trace shell	Unlikely ASS	
	6.5	25/7/17	8.8	6.0	2	2.8	Dark brown medium Sand, trace shell	Limited net acidifying ability	x
	7	25/7/17	8.8	6.1	2	2.7	Dark brown medium Sand, trace shell	Limited net acidifying ability	
DUP2_250717	6.5	25/7/17	8.7	5.9	2	2.8	Dark brown medium Sand, trace shell	Limited net acidifying ability	x
ID46-CASS20	0.1	25/7/17	8.0	5.3	2	2.7	Grey black fine Sand	Limited net acidifying ability	
	2	25/7/17	7.1	5.1	1	2.0	Grey fine Sand	Unlikely ASS	x
	2.5	25/7/17	6.8	5.2	1	1.6	Grey fine Sand	Unlikely ASS	
	3	25/7/17	6.5	5.2	1	1.3	Dark brown fine Sand	Unlikely ASS	x
	3.5	25/7/17	8.6	6.0	2	2.6	Grey brown Sand, trace shell	Limited net acidifying ability	
	4	25/7/17	8.8	5.7	1	3.1	Grey brown Sand, trace shell	Unlikely ASS	
	4.5	25/7/17	8.9	5.8	1	3.1	Yellow brown Sand, trace shell	Unlikely ASS	
	5	25/7/17	8.9	5.9	2	3.0	Yellow brown Sand, trace shell	Limited net acidifying ability	
	5.5	25/7/17	9.0	6.0	1	3.0	Yellow brown Sand, trace shell	Unlikely ASS	
	6	25/7/17	8.8	5.9	2	2.9	Yellow brown Sand, trace shell	Limited net acidifying ability	
DUP1_250717	2	25/7/17	7.4	5.3	2	2.1	Grey fine Sand	Limited net acidifying ability	x

Appendix D
Table D9
Coastal Acid Sulfate Soils Analytical Results - Bonbeach

Location		CASS01	CASS01	CASS01	CASS01	CASS02	CASS02	CASS02	CASS02	CASS03	CASS03	CASS03	CASS03	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04	CASS04	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05	CASS05
Depth (mbgs)		0.5	3.5	4	5	0.5	1.5	3	5	0.1	3	5.5	7	0.5	1	2	4	5.5	8	10	1.5	3.5	4.5	7.5	8.5	10	11.5	13.5	14	14.5
Sample ID		ID46 CASS01_ 0.5	ID46 CASS01_ 3.5	ID46 CASS01_ 4	ID46 CASS01_ 5	ID46 CASS02_ 0.5	ID46 CASS02_ 1.5	ID46 CASS02_ 3	ID46 CASS02_ 5	ID46-CASS03_ 0.1	ID46-CASS03_ 3.0	ID46-CASS03_ 5.5	ID46-CASS03_ 7.0	ID46CASS04_0.5	ID46CASS04_1	ID46CASS04_2	ID46CASS04_4	ID46CASS04_5.5	ID46CASS04_8	ID46CASS04_10	ID46CASS05_1.5	ID46CASS05_3.5	ID46CASS05_4.5	ID46CASS05_7.5	ID46CASS05_8.5	ID46CASS05_10	ID46CASS05_11.5	ID46_CASS05-13.5	ID46_CASS05-14.0	ID46_CASS05-14.5
Sampling Date		14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	28/07/2017	28/07/2017	28/07/2017	31/07/2017	31/07/2017	31/07/2017
Lab Report Field		EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709078	EM1709078	EM1709078	EM1709078	EM1709036	EM1709036	EM1709036	EM1709036	EM1709036	EM1709036	EM1709036	EM1709978	EM1709978	EM1709978	EM1709978	EM1709978	EM1709978	EM1709978	EM1710089	EM1710089	EM1710089
Lab Report CRS		EM1709951	EM1709951	EM1709951	EM1709951	EM1709951	EM1709951	EM1709951	EM1709951	EM1709754	EM1709754	EM1709754	EM1709754	EM1709500	EM1709500	EM1709500	EM1709500	EM1709500	EM1709500	EM1709500	EM1710774	EM1710774	EM1710774	EM1710774	EM1710774	EM1710774	EM1710774	EM1712277	EM1712277	EM1712277
	Unit																													
Field Testing																														
pHF	pH Units	5.2	5.4	5.2	5.7	6.2	5.6	4.8	5.9	6.4	4.6	7.4	8.8	5.8	4.3	5.8	4.6	6.2	7.4	7.1	4.6	4.3	6.1	7.9	8.6	8.2	8.9	8.6	9.2	9.2
pHFox	pH Units	3.6	4.6	3.6	4.6	4.6	4.5	4.2	5.1	4.5	3.8	2.1	5.5	3.3	2.8	3.9	2.4	2.2	2.2	2.3	4.4	3.4	5.0	2.3	1.8	1.2	4.5	3.7	2.2	5.0
Reaction Rate*	-	2	2	2	2	2	2	2	2	2	1	2	2	3	2	2	3	3	4	4	1	1	1	1	2	3	4	2	2	2
Actual Acidity																														
pH (KCl)	pH Unit	5.1	5.5	4.8	5.5	6.1	5.8	5.6	5.7	5.7	5.7	5.9	9.3	8.3	9.0	9.2	5.5	6.1	6.6	8.8	6.0	5.6	5.7	5.7	7.4	7.2	6.8	6.8	5.5	8.2
Titratable Actual Acidity (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Titratable Actual Acidity	mole H+/t	4	<2	11	3	<2	<2	<2	<2	20	5	<2	<2	<2	<2	<2	12	<2	<2	<2	<2	2	<2	<2	<2	<2	<2	<2	<2	<2
Potential Acidity																														
Chromium Reducible Sulfur	%S	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	0.022	0.036	<0.005	<0.005	<0.005	<0.005	0.039	0.050	0.320	0.008	0.006	<0.005	0.027	0.074	0.258	0.028	0.037	0.118	0.141
Chromium Reducible Sulphur (acidity units)	mole H+/t	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	14	22	<10	<10	<10	<10	24	31	199	<10	<10	<10	17	46	161	18	23	74	88
Retained Acidity																														
KCl Extractable Sulfur	%S																													
HCl Extractable Sulfur	%S																													
Net Acid Soluble Sulfur	%S																													
Net Acid Soluble Sulfur (acidity units)	mole H+/t																													
Net Acid Soluble Sulfur (sulfur units)	%S																													
Acid Neutralising Capacity (ANC)																														
ANC - Back Titration	%CaCO3												0.32	2.54	1.17	0.28			0.08	1.38					0.24	0.33	0.55	0.69		0.55
ANC (acidity units)	mole H+/t												64	507	234	57			17	276					47	65	110	138		110
ANC (sulfur units)	%S												0.10	0.81	0.37	0.09			0.03	0.44					0.08	0.10	0.18	0.22		0.18
Acid Base Accounting																														
ANC Fineness Factor	-	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	mole H+/t	<10	<10	11	<10	<10	<10	<10	<10	28	<10	14	22	<10	<10	<10	15	25	31	199	<10	<10	<10	17	46	161	18	23	76	88
Net Acidity excluding ANC (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	0.02	0.04	<0.02	<0.02	<0.02	0.02	0.04	0.05	0.32	<0.02	<0.02	<0.02	0.03	0.07	0.26	0.03	0.04	0.12	0.14
Liming Rate excluding ANC	kg CaCO3/t	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	1	2	<1	<1	<1	1	2	2	15	<1	<1	<1	1	3	12	1	2	6	6
Net Acidity including ANC (acidity units)	mole H+/t	<10	<10	11	<10	<10	<10	<10	<10	28	<10	14	<10	<10	<10	<10	15	25	20	15	<10	<10	<10	17	14	117	<10	<10	76	14
Net Acidity including (sulfur units)	%S	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.04	0.03	0.02	<0.02	<0.02	<0.02	0.03	0.02	0.19	<0.02	<0.02	0.12	0.02
Liming Rate including ANC	kg CaCO3/t	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	1	<1	<1	<1	<1	1	2	2	1	<1	<1	<1	1	1	9	<1	<1	6	1

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D9
Coastal Acid Sulfate Soils Analytical Results - Bonbeach

Locati		CASS05	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS06	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS07	CASS08	CASS08	CASS08	CASS08	CASS08	CASS08	CASS08
Depth (mbg		15	1.5	3.5	4	5	6.5	8.5	10.5	11	11.5	12	14	20.5	0.5	2.5	4.5	8.5	10.5	11.5	13	15	16.5	17	0.1	1.5	5	7	9.5	10
Sample		ID46_CASS05-15.0	ID46CASS06_1.5	ID46CASS06_3.5	ID46CASS06_4.0	ID46CASS06_5	ID46CASS06_6.5	ID46CASS06_8.5	ID46CASS06_10.5	ID46CASS06_11	ID46CASS06_11.5	ID46CASS06_12	ID46-CASS06-14.0	ID46-CASS06-20.5	ID46CASS07_0.5	ID46CASS07_2.5	ID46CASS07_4.5	ID46CASS07_8.5	ID46CASS07_10.5	ID46CASS07_11.5	ID46CASS07_13	ID46CASS07_15	ID46_CASS07_16.5	ID46_CASS07_17	ID46CASS08_0.1	ID46CASS08_1.5	ID46CASS08_5	ID46CASS08_7	ID46CASS08_9.5	ID46CASS08_10
Sampling Da		31/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	1/08/2017	1/08/2017	18/07/2017	19/07/2017	19/07/2017	19/07/2017	19/07/2017	19/07/2017	19/07/2017	19/07/2017	21/07/2017	21/07/2017	28/07/2017	28/07/2017	28/07/2017	28/07/2017	28/07/2017	28/07/2017
Lab Report Fie		EM171008	EM170989	EM170994	EM171043	EM170994	EM170994	EM170994	EM170994	EM170994	EM170994	EM170994	EM171016	EM171016	EM170945	EM170945	EM170945	EM170949	EM170949	EM170949	EM170949	EM170949	EM170966	EM170966	EM171004	EM171004	EM171004	EM171004	EM171004	EM171004
Lab Report CR		EM171227	EM171077	EM171043	EM171043	EM171043	EM171043	EM171043	EM171043	EM171043	EM171043	EM171043	EM171077	EM171077	EM171036	EM171036	EM171036	EM170995	EM170995	EM170995	EM170995	EM170995	EM171036	EM171036	EM171077	EM171077	EM171077	EM171077	EM171077	EM171077
	Unit																														
Field Testing																															
pHF	**pH Units**	8.6	5.2	5.1		5.3	8.6	8.3	8.2	7.9	7.9	8.7	9.1	9.1	7.0	5.0	5.1	8.1	8.3	8.3	8.3	9.0	9.4	9.1	7.1	6.6	6.6	8.9	8.7	8.4
pHFox	**pH Units**	5.1	4.8	4.2		4.9	2.7	5.8	2.0	1.6	1.8	7.2	5.4	5.4	5.0	4.6	4.2	2.2	2.0	2.1	5.2	2.1	5.8	7.9	4.7	4.8	5.0	6.3	5.9	1.5
Reaction Rate*	**-**	2	1	2		1	2	1	4	3	4	4	2	2	2	1	1	2	4	4	2	4	2	4	2	1	1	1	1	3
Actual Acidity																															
pH (KCl)	**pH Unit**	6.6	6.0	5.2	5.7	6.0	9.5	8.6	6.3	6.1	5.8	6.4	6.8	6.3	6.3	5.7	5.3	5.8	6.2	5.2	6.2	4.6	9.4	7.2	5.7	6.0	5.6	9.2	9.0	8.4
Titratable Actual Acidity (sulfur units)	**%S**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Titratable Actual Acidity	**mole H+/t**	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	6	<2	<2	3	<2	13	<2	<2	<2	<2	<2	<2	<2	<2
Potential Acidity																															
Chromium Reducible Sulfur	**%S**	0.022	0.006	<0.005	<0.005	<0.005	0.014	0.025	1.010	0.086	0.141	0.035	0.057	0.014	0.006	<0.005	<0.005	0.025	0.621	0.063	0.040	0.210	0.009	0.025	0.015	<0.005	0.008	0.007	0.132	0.136
Chromium Reducible Sulphur (acidity units)	**mole H+/t**	13	<10	<10	<10	<10	<10	16	630	54	88	22	35	<10	<10	<10	<10	15	387	39	25	131	<10	16	<10	<10	<10	<10	82	85
Retained Acidity																															
KCl Extractable Sulfur	**%S**																														
HCl Extractable Sulfur	**%S**																														
Net Acid Soluble Sulfur	**%S**																														
Net Acid Soluble Sulfur (acidity units)	**mole H+/t**																														
Net Acid Soluble Sulfur (sulfur units)	**%S**																														
Acid Neutralising Capacity (ANC)																															
ANC - Back Titration	**%CaCO3**	0.65					6.10	0.40					0.17										1.42	0.62				0.80	2.94	0.31
ANC (acidity units)	**mole H+/t**	130					1,220	80					34										283	124				159	587	61
ANC (sulfur units)	**%S**	0.21					1.95	0.13					0.06										0.45	0.20				0.25	0.94	0.10
Acid Base Accounting																															
ANC Fineness Factor	**-**	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	**mole H+/t**	13	<10	<10	<10	<10	<10	16	630	54	88	22	35	<10	<10	<10	<10	15	387	42	25	144	<10	16	<10	<10	<10	<10	82	85
Net Acidity excluding ANC (sulfur units)	**%S**	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	1.01	0.09	0.14	0.04	0.06	<0.02	<0.02	<0.02	<0.02	0.02	0.62	0.07	0.04	0.23	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	0.13	0.14
Liming Rate excluding ANC	**kg CaCO3/t**	1	<1	<1	<1	<1	<1	1	47	4	7	2	3	<1	<1	<1	<1	1	29	3	2	11	<1	1	<1	<1	<1	<1	6	6
Net Acidity including ANC (acidity units)	**mole H+/t**	<10	<10	<10	<10	<10	<10	<10	630	54	88	22	12	<10	<10	<10	<10	15	387	42	25	144	<10	<10	<10	<10	<10	<10	<10	44
Net Acidity including (sulfur units)	**%S**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	1.01	0.09	0.14	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.62	0.07	0.04	0.23	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.07
Liming Rate including ANC	**kg CaCO3/t**	<1	<1	<1	<1	<1	<1	<1	47	4	7	2	<1	<1	<1	<1	<1	1	29	3	2	11	<1	<1	<1	<1	<1	<1	<1	3

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D9
Coastal Acid Sulfate Soils Analytical Results - Bonbeach

	Unit																														
Location		CASS08	CASS08	CASS08	CASS08	CASS08	CASS08	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS09	CASS10	CASS10	CASS10	CASS10	CASS10	CASS10	CASS10	CASS10
Depth (mbg		11.5	12.5	14.5	15	20	21.5	2.5	3.5	5.5	6.5	8	10	11	11.5	12	13	14.5	16	17	17.5	18.5	2	4	5	6.5	7	10	10.5	12
Sample		ID46CASS08_11.5	ID46CASS08_12.5	ID46-CASS08-14.5	ID46-CASS08-15.0	ID46-CASS08-20.0	ID46-CASS08-21.5	ID46_CASS09_2.5	ID46_CASS09_3.5	ID46_CASS09_5.5	ID46_CASS09_6.5	ID46_CASS09_8.0	ID46_CASS09_10.0	ID46_CASS09_11.0	ID46_CASS09_11.5	ID46_CASS09_12.0	ID46_CASS09_13.0	ID46-CASS09-14.5	ID46-CASS09-16.0	ID46-CASS09-17.0	ID46-CASS09-17.5	ID46-CASS09-18.5	ID46CASS10_2	ID46CASS10_4	ID46CASS10_5	ID46CASS10_6.5	ID46CASS10_7	ID46CASS10_10	ID46CASS10_10.5	ID46CASS10_12
Sampling Da		28/07/2017	28/07/2017	4/08/2017	4/08/2017	4/08/2017	4/08/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017	31/07/2017	7/08/2017	7/08/2017	7/08/2017	7/08/2017	7/08/2017	18/07/2017	18/07/2017	18/07/2017	18/07/2017	18/07/2017	18/07/2017	18/07/2017	18/07/2017
Lab Report Fie		EM171004	EM171004	EM171042	EM171042	EM171042	EM171042	EM171014	EM171014	EM171014	EM171014	EM171014	EM171014	EM171014	EM171014	EM171014	EM171014	EM171047	EM171047	EM171047	EM171047	EM171047	EM170937	EM170937	EM170937	EM170941	EM170941	EM170941	EM170941	EM170941
Lab Report CR		EM171077	EM171077	EM171077	EM171077	EM171077	EM171077	EM171128	EM171128	EM171128	EM171128	EM171128	EM171128	EM171128	EM171128	EM171128	EM171128	EM171077	EM171077	EM171077	EM171077	EM171077	EM171036	EM171036	EM171036	EM171036	EM171036	EM171036	EM171036	EM171036
Field Testing																															
pHF	**pH Units**	8.2	8.6	7.4	9.1	8.7	8.6	5.8	5.7	6.7	8.4	8.8	8.4	8.5	7.9	7.7	8.7	8.6	8.4	8.8	8.5	8.9	5.6	4.7	4.7	8.8	8.8	8.7	8.6	9.3
pHFox	**pH Units**	1.9	8.2	1.7	8.5	4.8	4.8	4.5	3.9	4.9	5.7	5.8	2.2	2.0	5.0	1.8	2.3	1.8	2.0	2.4	4.5	4.3	4.5	4.4	4.3	6.1	5.8	5.4	2.2	1.9
Reaction Rate*	**-**	3	4	2	4	2	2	2	2	2	1	1	2	4	2	2	2	2	4	4	1	2	2	2	1	2	2	2	4	4
Actual Acidity																															
pH (KCl)	**pH Unit**	6.0	6.5	5.8	6.9	6.4	6.5	5.8	5.3	5.7	9.3	9.4	9.3	7.8	7.7	7.1	6.0	6.5	4.6	6.4	6.1	6.4	5.9	5.0	5.4	9.4	9.4	7.0	7.8	6.2
Titratable Actual Acidity (sulfur units)	**%S**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Titratable Actual Acidity	**mole H+/t**	<2	<2	<2	<2	<2	<2	<2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	19	<2	<2	<2	<2	11	<2	<2	<2	<2	<2	<2
Potential Acidity																															
Chromium Reducible Sulfur	**%S**	0.118	0.012	0.056	0.036	0.011	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.020	0.743	0.009	0.093	0.098	0.097	0.354	0.011	0.005	0.017	0.023	0.010	<0.005	<0.005	<0.005	0.100	0.547	0.328
Chromium Reducible Sulphur (acidity units)	**mole H+/t**	73	<10	35	23	<10	<10	<10	<10	<10	<10	<10	13	463	<10	58	61	60	221	<10	<10	11	14	<10	<10	<10	<10	62	341	204
Retained Acidity																															
KCl Extractable Sulfur	**%S**																														
HCl Extractable Sulfur	**%S**																														
Net Acid Soluble Sulfur	**%S**																														
Net Acid Soluble Sulfur (acidity units)	**mole H+/t**																														
Net Acid Soluble Sulfur (sulfur units)	**%S**																														
Acid Neutralising Capacity (ANC)																															
ANC - Back Titration	**%CaCO3**		0.23		0.93		0.56				0.82	1.03	0.33	1.95	0.17	0.20		0.03								0.97	0.90	0.38	0.88	
ANC (acidity units)	**mole H+/t**		46		186		112				165	206	67	390	34	40		<10								194	180	76	176	
ANC (sulfur units)	**%S**		0.07		0.30		0.18				0.26	0.33	0.11	0.62	0.05	0.06		<0.01								0.31	0.29	0.12	0.28	
Acid Base Accounting																															
ANC Fineness Factor	**-**	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	**mole H+/t**	74	<10	37	23	<10	<10	<10	<10	<10	<10	<10	13	463	<10	58	63	60	240	<10	<10	12	15	17	<10	<10	<10	62	341	205
Net Acidity excluding ANC (sulfur units)	**%S**	0.12	<0.02	0.06	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.74	<0.02	0.09	0.10	0.10	0.38	<0.02	<0.02	<0.02	0.02	0.03	<0.02	<0.02	<0.02	0.10	0.55	0.33
Liming Rate excluding ANC	**kg CaCO3/t**	6	<1	3	2	<1	<1	<1	<1	<1	<1	<1	<1	35	<1	4	5	4	18	<1	<1	<1	1	1	<1	<1	<1	5	26	15
Net Acidity including ANC (acidity units)	**mole H+/t**	74	<10	37	<10	<10	<10	<10	<10	<10	<10	<10	<10	203	<10	31	63	56	240	<10	<10	12	15	17	<10	<10	<10	12	224	205
Net Acidity including (sulfur units)	**%S**	0.12	<0.02	0.06	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.32	<0.02	0.05	0.10	0.09	0.38	<0.02	<0.02	<0.02	0.02	0.03	<0.02	<0.02	<0.02	<0.02	0.36	0.33
Liming Rate including ANC	**kg CaCO3/t**	6	<1	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	15	<1	2	5	4	18	<1	<1	<1	1	1	<1	<1	<1	<1	17	15

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D9
Coastal Acid Sulfate Soils Analytical Results - Bonbeach

	Unit																													
Location		CASS10	CASS10	CASS10	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS11	CASS12	CASS12	CASS12	CASS12	CASS12	CASS12	CASS12	CASS13	CASS13	CASS13	CASS13	CASS13	CASS14	CASS14	CASS15
Depth (mbg		12.5	14.5	15.5	1	3	7	9.5	10.5	12	14	15.5	16.5	19.5	20	1	3	6	8.5	10	12	14.5	1	5	8	9	10	3.5	6	1
Sample		ID46CASS10_12.5	ID46-CASS10_14.5	ID46_CASS10_15.5	ID46CASS11_1	ID46CASS11_3	ID46CASS11_7	ID46CASS11_9.5	ID46CASS11_10.5	ID46CASS11_12	ID46CASS11_14	ID46CASS11_15.5	ID46CASS11_16.5	ID46CASS11_19.5	ID46CASS11_20	ID46CASS12_1	ID46CASS12_3	ID46CASS12_6	ID46CASS12_8.5	ID46CASS12_10	ID46CASS12_12	ID46CASS12_14.5	ID46CASS13_1	ID46CASS13_5	ID46CASS13_8	ID46CASS13_9	ID46CASS13_10	ID46CASS14_3.5	ID46CASS14_6.0	ID46CASS15_1.0
Sampling Da		18/07/2017	24/07/2017	24/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	17/07/2017	14/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017	12/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017	10/07/2017	10/07/2017	10/07/2017
Lab Report Fie		EM1709416	EM1709732	EM1709732	EM1709375	EM1709324	EM1709324	EM1709324	EM1709324	EM1709324	EM1709324	EM1709324	EM1709324	EM1709375	EM1709375	EM1709278	EM1709145	EM1709145	EM1709145	EM1709175	EM1709175	EM1709175	EM1709081	EM1709081	EM1709081	EM1709081	EM1709081	EM1709015	EM1709015	EM1708967
Lab Report CR		EM1710368	EM1711284	EM1711284	EM1710368	EM1709754	EM1709754	EM1709754	EM1709754	EM1709754	EM1709754	EM1709754	EM1709754	EM1710368	EM1710368	EM1709951	EM1709500	EM1709500	EM1709500	EM1709500	EM1709500	EM1709500	EM1709951	EM1709951	EM1709951	EM1709951	EM1709951	EM1709500	EM1709500	EM1709500
Field Testing																														
pHF	**pH Units**	9.3	8.6	8.3	6.4	4.8	8.8	8.9	8.6	9.4	8.9	8.7	8.7	8.5	8.4	5.2	4.7	8.9	9.1	9.0	9.6	8.5	4.9	5.9	9.1	9.1	8.9	4.6	8.6	4.7
pHFox	**pH Units**	6.3	6.3	5.2	4.3	4.1	5.8	1.3	5.1	6.2	5.4	5.2	7.0	5.2	4.5	4.3	4.3	5.8	2.2	3.0	2.0	2.3	4.4	5.1	5.5	4.2	4.6	3.7	5.7	3.0
Reaction Rate*	**-**	2	2	2	2	11	1	4	4	2	2	2	4	2	2	2	1	1	2	4	4	4	2	1	1	3	3	2	1	3
Actual Acidity																														
pH (KCl)	**pH Unit**	7.3	8.6	6.3	9.2	5.9	9.7	8.3	8.6	7.5	6.6	6.3	6.2	6.8	6.1	5.8	6.7	9.5	9.1	7.8	7.1	8.2	5.3	5.7	9.1	8.0	8.1	5.4	9.3	4.0
Titratable Actual Acidity (sulfur units)	**%S**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.07
Titratable Actual Acidity	**mole H+/t**	<2	<2	<2	<2	8	<2	<2	<2	<2	<2	<2	<2	<2	<2	2	<2	<2	<2	<2	<2	<2	3	3	<2	<2	<2	8	<2	43
Potential Acidity																														
Chromium Reducible Sulfur	**%S**	0.046	0.187	0.009	0.015	<0.005	<0.005	0.392	0.476	0.036	0.009	0.006	0.025	0.017	0.013	0.013	<0.005	0.012	0.121	0.692	0.851	0.430	0.011	0.006	0.067	0.332	0.333	0.060	0.033	0.012
Chromium Reducible Sulphur (acidity units)	**mole H+/t**	29	117	<10	<10	<10	<10	245	297	22	<10	<10	16	10	<10	<10	<10	<10	75	432	531	268	<10	<10	42	207	208	37	21	<10
Retained Acidity																														
KCl Extractable Sulfur	**%S**																													<0.02
HCl Extractable Sulfur	**%S**																													<0.02
Net Acid Soluble Sulfur	**%S**																													<0.02
Net Acid Soluble Sulfur (acidity units)	**mole H+/t**																													<10
Net Acid Soluble Sulfur (sulfur units)	**%S**																													<0.02
Acid Neutralising Capacity (ANC)																														
ANC - Back Titration	**%CaCO3**	0.79	1.98		0.94		2.49	1.31	2.58	0.49	0.40			0.46			0.04	1.82	0.31	1.34	0.61	0.65			0.63	0.93	0.60		1.71	
ANC (acidity units)	**mole H+/t**	158	396		188		498	262	516	98	81			91			<10	363	62	268	122	131			127	186	120		341	
ANC (sulfur units)	**%S**	0.25	0.63		0.30		0.80	0.42	0.83	0.16	0.13			0.15			0.01	0.58	0.10	0.43	0.20	0.21			0.20	0.30	0.19		0.55	
Acid Base Accounting																														
ANC Fineness Factor	**-**	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	**mole H+/t**	29	117	<10	<10	<10	<10	245	297	22	<10	<10	16	10	<10	10	<10	<10	75	432	531	268	<10	<10	42	207	208	46	21	51
Net Acidity excluding ANC (sulfur units)	**%S**	0.05	0.19	<0.02	<0.02	<0.02	<0.02	0.39	0.48	0.04	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.12	0.69	0.85	0.43	<0.02	<0.02	0.07	0.33	0.33	0.07	0.03	0.08
Liming Rate excluding ANC	**kg CaCO3/t**	2	9	<1	<1	<1	<1	18	22	2	<1	<1	1	<1	<1	<1	<1	<1	6	32	40	20	<1	<1	3	16	16	3	2	4
Net Acidity including ANC (acidity units)	**mole H+/t**	<10	<10	<10	<10	<10	<10	70	<10	<10	<10	<10	16	<10	<10	10	<10	<10	34	253	450	181	<10	<10	<10	83	127	46	<10	51
Net Acidity including (sulfur units)	**%S**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.11	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	0.41	0.72	0.29	<0.02	<0.02	<0.02	0.13	0.20	0.07	<0.02	0.08
Liming Rate including ANC	**kg CaCO3/t**	<1	<1	<1	<1	<1	<1	5	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	2	19	34	14	<1	<1	<1	6	10	3	<1	4

mbgs - meter below ground surface

Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D9
Coastal Acid Sulfate Soils Analytical Results - Bonbeach

Locati		CASS15	CASS16	CASS17	CASS17	CASS17	CASS17	CASS18	CASS18	CASS18	CASS18	CASS18	CASS19	CASS19	CASS19	CASS20	CASS20
Depth (mbg		2	0.1	2.5	4	5.5	6.4	1	2.5	3.5	4.5	5	0.5	3.5	6.5	2	3
Sample		ID46 CASS15_ 2.0	ID46 CASS16_ 0.1	ID46CAS S17_2.5	ID46CAS S17_4	ID46CAS S17_5.5	ID46CAS S17_6.4	ID46CAS S18_1	ID46CAS S18_2.5	ID46CAS S18_3.5	ID46CAS S18_4.5	ID46CAS S18_5	ID46CAS S19_0.5	ID46CAS S19_3.5	ID46CAS S19_6.5	ID46CAS S20_2	ID46CAS S20_3
Sampling Dat		10/07/2017	10/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017	25/07/2017
Lab Report Fie		EM170896	EM170896	EM1709848	EM1709848	EM1709848	EM1709848	EM1709803	EM1709803	EM1709803	EM1709803	EM1709803	EM1709803	EM1709803	EM1709803	EM1709803	EM1709803
Lab Report CR		EM170950	EM170950	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431	EM1710431
	Unit																
Field Testing																	
pHF	**pH Units**	5.2	6.8	5.5	4.5	8.3	8.6	7.6	4.4	4.6	5.9	6.2	7.9	7.2	8.8	7.1	6.5
pHFox	**pH Units**	4.3	5.1	4.7	4.3	5.9	5.6	5.5	4.6	3.4	4.1	5.0	5.4	5.0	6.0	5.1	5.2
Reaction Rate*	**-**	1	2	1	2	2	2	1	1	1	1	2	2	2	2	1	1
Actual Acidity																	
pH (KCl)	**pH Unit**	6.4	7.1	5.9	5.9	9.1	9.3	7.1	5.5	5.5	5.9	6.0	6.9	5.8	9.2	6.4	6.2
Titratable Actual Acidity (sulfur units)	**%S**	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Titratable Actual Acidity	**mole H+/t**	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Potential Acidity																	
Chromium Reducible Sulfur	**%S**	0.008	0.013	0.016	0.036	0.016	0.014	0.006	0.005	<0.005	<0.005	<0.005	<0.005	0.007	0.010	<0.005	0.008
Chromium Reducible Sulphur (acidity units)	**mole H+/t**	<10	<10	10	22	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Retained Acidity																	
KCl Extractable Sulfur	**%S**																
HCl Extractable Sulfur	**%S**																
Net Acid Soluble Sulfur	**%S**																
Net Acid Soluble Sulfur (acidity units)	**mole H+/t**																
Net Acid Soluble Sulfur (sulfur units)	**%S**																
Acid Neutralising Capacity (ANC)																	
ANC - Back Titration	**%CaCO3**		3.58			0.41	0.35	0.29					0.27		0.06		
ANC (acidity units)	**mole H+/t**		716			82	70	59					55		12		
ANC (sulfur units)	**%S**		1.15			0.13	0.11	0.09					0.09		0.02		
Acid Base Accounting																	
ANC Fineness Factor	**-**	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Net Acidity excluding ANC (acidity units)	**mole H+/t**	<10	<10	10	22	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Net Acidity excluding ANC (sulfur units)	**%S**	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Liming Rate excluding ANC	**kg CaCO3/t**	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Net Acidity including ANC (acidity units)	**mole H+/t**	<10	<10	10	22	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Net Acidity including (sulfur units)	**%S**	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Liming Rate including ANC	**kg CaCO3/t**	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

mbgs - meter below ground surface
Exceeds DSE 2010 Action Criteria (0.03%S)

Appendix D
Table D10
Tabulated Groundwater Field Measurements - Bonbeach

Bore ID	Date	Aquifer	Total Depth (mbgl)	Screen Interval (mbgl)	SWL (mbgl)	Reduced Water Levels (mAHD)	pH (pH units)	EC (µS/cm)	Temp (°C)	DO (ppm)	ORP (±mV)	Corrected ORP (±mV)	Comments
ID46-BH08	25/07/2017	Quarternery	14.0	11.0 to 14.0	4.12	0.70	8.29	883	17.6	4.1	-158	47	very organic odour, grey, moderate turbidity
ID46-BH10	26/07/2017	Quarternery	9.7	6.7 to 9.7	3.08	0.91	9.67	521	16.2	1.0	-222	-17	clear, no sheen or sediment, pale yellow/brown
ID46-GWBH02	24/07/2017	Quarternery	8.0	5.0 to 8.0	5.42	0.72	7.68	626	18.8	1.7	-160	45	organic odour, murky
ID46-GWBH04	25/07/2017	Quarternery	9.0	6.0 to 9.0	2.96	0.05	7.87	489	18.6	1.5	-157.4	48	pale grey-brown, low/mod turbidity, no sheen or odour
ID46-GWBH05	26/07/2017	Quarternery	9.0	6.0 to 9.0	5.92	0.05	7.61	616	17.0	0.2	-217	-12	pale grey, moderate turbidity, no sheen, organic odour
ID46-BH01	21/07/2017	Upper Tertiary Aquifer	10.0	7.0 to 10.0	4.78	1.06	8.02	543	17.7	3.2	-155	50	
ID46-BH03	25/07/2017	Upper Tertiary Aquifer	16.2	13.2 to 16.2	5.06	0.87	11.36	1738	16.0	3.3	-240	-35	clear/pale grey, low turbidity, no sheen or odour
ID46-BH05	25/07/2017	Upper Tertiary Aquifer	14.7	11.7 to 14.7	5.01	0.90	9.79	1119	17.4	3.8	-235	-30	
ID46-BH06	24/07/2017	Upper Tertiary Aquifer	17.5	14.5 to 17.5	5.37	0.80	12.68	9447	14.0	0.3	-261	-56	sheen (white/particles) on surface, disperses with water movement, parameters stabilised, SWL was starting to stabilise, sample taken
ID46-GWBH01	26/07/2017	Upper-Mid Tertiary Aquitard	38.5	35.8 to 38.5	5.47	-0.23	12.74	8949	15.9	3.2	-169	36	unable to minimise drawdown at lowest pressure and discharge (D:R = 2:58); clear, low turbidity with silty layer on surface.
ID46-GWBH03	24/07/2017	Upper Tertiary Aquifer	15.9	12.5 to 15.5	4.32	0.48	7.37	4285	16.4	0.8	-189	16	organic odour; black sediment (organic matter?) suspended. Only visible when sample bottles filled.
ID46-GWBH06	27/07/2017	Upper Tertiary Aquifer	20.7	17.0 to 20.7	1.64	0.02	7.21	8401	14.6	3.6	-61	144	dark grey, silty – fine particles suspended in water, cannot see through, no strong odour present. Parameters not stable, samples taken for practicality purposes

Appendix C
Table C11
Tabulated Analytical GW Results - Bonbeach

										Aquifer	Quaternary										
										Location	ID46-BH08			ID46-BH10			ID46-GWBH02	ID46-GWBH04	ID46-GWBH05	
										Sample ID	ID46-BH08	ID46-BH08	ID46-BH08	ID46-BH10	ID46-BH10	ID46-BH10	ID46-GWBH02	ID46-GWBH04	ID46-GWBH05	ID46-GWBH05
										Sampled_Date	25/11/16	8/6/17	25/7/17	25/11/16	8/6/17	26/7/17	24/7/17	25/7/17	1/3/17	26/7/17
										Lab_Report	EM16142	549788	555967	EM16142	549619	555967	556779	555967	EM17023	555967
Method_Type	ChemName	output unit	EQL	ADWG 2015 Aesthetic	ADWG 2015 Health	ANZECC 2000 FW 95%	ANZECC 2000 Irrigation - Long-term Trigger	ANZECC 2000 Irrigation - Short-term Trigger	ANZECC 2000 Stock Watering	NHMRC Recreational Guidelines 2008											
Physical	Total Dissolved Solids	mg/L	10	600					4000		609	520	510	1840	400	310	410	300	440	370
Cations	Calcium (Filtered)	mg/L	1						1000		16	47	71	765	60	45	66	82	64	90
	Magnesium (Filtered)	mg/L	1								1	11	18	<1	3.6	3.4	6.6	5.2	6	8.1
	Potassium (Filtered)	mg/L	1								9	9.4	13	25	7	6.1	6.7	6.2	5	6.2
	Sodium (Filtered)	mg/L	1	180							130	86	96	130	60	52	34	32	45	49
Anions	Bromide	mg/L	0.5								-	-	-	-	-	-	-	-	-	-
	Fluoride	mg/L	0.5		1.5		1	2	2	15	1.1	0.9	0.5	0.2	<0.5	<0.5	<0.5	<0.5	0.2	<0.5
	Chloride	mg/L	1	250							128	96	110	123	92	63	71	42	56	51
	Sulphate	mg/L	5	250	500				1000	5000	36	46	43	164	64	54	73	46	31	22
	Chloride:Sulphate Ratio (Calc)										4	2	3	1	1	1	1	1	2	2
	Sulphate as S	mg/L	5						333		-	-	14	-	-	18	24	15	-	7.5
	Carbonate as CaCO3	mg/L	10								-	<10	<10	-	<10	44	<10	<10	-	<10
Ionic Balance	Anions Total	meq/L	0.01								7.46	-	-	49.6	-	-	-	-	6.5	-
	Cations Total	meq/L	0.01								6.76	-	-	44.5	-	-	-	-	5.88	-
	Ionic Balance	%	0.01								4.86	-	-	5.5	-	-	-	-	5.06	-
Acidity and Alkalinity	Acidity (as CaCO3)	mg/L	10								-	-	<10	-	-	<10	<10	<10	-	13
	Alkalinity (Hydroxide as CaCO3)	mg/L	10								<1	<10	-	1980	<10	-	-	-	<1	-
	Bicarbonate Alkalinity as CaCO3	mg/L	20								59	200	530	<1	150	71	150	130	214	230
	Alkalinity (total as CaCO3)	mg/L	20								155	200	540	2140	150	110	150	130	214	230
	Alkalinity and sulfate ratio (calc)										4	4	13	13	2	2	2	3	7	10
Nutrients	Cyanide (Total)	mg/L	0.005		0.08	0.007				0.8	-	<0.005	-	-	<0.005	-	-	-	-	-
	Ammonia as N	mg/L	0.01			0.9					1.11	1.2	1.7	0.93	0.47	0.73	0.5	0.7	1.48	1.5
	Total Kjeldahl Nitrogen	mg/L	0.2								-	1.9	2.4	-	1.3	1.3	2.8	1	2.6	1.9
	Nitrate (as N)	mg/L	0.02			7.2			90		0.03	<0.02	<0.02	0.02	<0.02	<0.02	2.1	0.04	0.02	<0.02
	Nitrite (as N)	mg/L	0.02						9.1		<0.01	<0.02	-	<0.01	<0.02	-	-	-	<0.01	-
	Nitrate + Nitrite as N	mg/L	0.05								0.03	<0.05	<0.05	0.02	<0.05	<0.05	2.1	0.08	0.02	0.2
	Nitrogen (Total)	mg/L	0.2				5	25			-	1.9	2.4	-	1.3	1.3	4.9	1.1	2.6	2.1
	Phosphate total (P)	µg/L	10								-	150	1200	-	<50	100	70	80	-	160
	Phosphorous filterable reactive (P)	µg/L	50								-	-	<50	-	-	<50	<50	<50	-	60
	Phosphorous filterable reactive (P)	µg/L	50								-	-	<50	-	-	<50	<50	<50	-	60
	Phosphorus (Total)	mg/L	0.01				0.05				0.25	-	-	<0.01	-	-	-	-	-	-
Heavy Metal	Aluminium	mg/L	0.05	0.2		0.055	5	20	5		-	-	72	-	-	1.2	0.42	3.2	-	1.9
	Aluminium (Filtered)	mg/L	0.05	0.2		0.055	5	20	5		-	-	0.91	-	-	0.33	<0.05	<0.05	-	<0.05
	Arsenic (Filtered)	mg/L	0.001		0.01	0.013	0.1	2	0.5	0.1	0.009	0.006	0.006	<0.001	0.003	0.003	0.003	0.003	<0.001	<0.001
	Barium (Filtered)	mg/L	0.02		2					20	0.02	0.04	-	0.317	<0.02	-	-	-	0.02	-
	Beryllium (Filtered)	mg/L	0.001		0.06		0.1	0.5		0.6	<0.001	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-
	Boron (Filtered)	mg/L	0.05		4	0.37	0.5	0.5	5	40	0.21	0.21	-	<0.05	0.17	-	-	-	0.08	-
	Cadmium (Filtered)	mg/L	0.0002		0.002	0.0002	0.01	0.05	0.01	0.02	<0.0001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0001	<0.0002
	Chromium (III+VI) (Filtered)	mg/L	0.001			0.001	0.1	1	1		<0.001	<0.001	0.003	0.029	<0.001	<0.001	<0.001	<0.001	0.001	0.002
	Chromium (hexavalent)	mg/L	0.001		0.05	0.001				0.5	-	<0.001	-	-	<0.001	-	-	-	<0.01	-
	Cobalt (Filtered)	mg/L	0.001				0.05	0.1	1		<0.001	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-
	Copper (Filtered)	mg/L	0.001	1	2	0.0014	0.2	5	0.5	20	0.001	<0.001	-	0.004	<0.001	-	-	-	<0.001	-
	Iron	mg/L	0.05	0.3			0.2	10			-	-	79	-	-	0.47	1.2	5.5	-	2.8
	Iron (Filtered)	mg/L	0.05	0.3			0.2	10			-	-	1.4	-	-	<0.05	0.2	0.3	-	0.25
	Lead (Filtered)	mg/L	0.001		0.01	0.0034	2	5	0.1	0.1	<0.001	<0.001	-	0.009	0.002	-	-	-	<0.001	-
	Manganese (Filtered)	mg/L	0.005	0.1	0.5	1.9	0.2	10		5	<0.001	0.014	0.028	<0.001	<0.005	<0.005	0.009	0.021	0.021	0.023
	Mercury (Filtered)	mg/L	0.0001		0.001	0.0006	0.002	0.002	0.002	0.01	<0.0001	<0.0001	-	<0.0001	<0.0001	-	-	-	<0.0001	-
	Molybdenum (Filtered)	mg/L	0.005		0.05		0.01	0.05	0.15	0.5	-	0.012	-	-	<0.005	-	-	-	-	-
	Nickel (Filtered)	mg/L	0.001		0.02	0.011	0.2	2	1	0.2	<0.001	0.006	0.004	0.042	0.011	0.004	0.004	0.001	0.024	0.01
	Selenium (Filtered)	mg/L	0.001		0.01	0.011	0.02	0.05	0.02	0.1	<0.01	0.002	<0.001	<0.01	0.005	0.001	<0.001	<0.001	<0.01	0.003
	Silver (Filtered)	mg/L	0.005		0.1	0.00005				1	-	<0.005	-	-	<0.005	-	-	-	-	-
	Tin (Filtered)	mg/L	0.005								-	<0.005	-	-	<0.005	-	-	-	-	-
	Vanadium (Filtered)	mg/L	0.01				0.1	0.5			0.02	-	-	<0.01	-	-	-	-	<0.01	-
	Zinc (Filtered)	mg/L	0.005	3		0.008	2	5	20		<0.005	0.078	0.012	<0.005	0.13	<0.005	<0.005	<0.005	0.034	<0.005
Total Recoverable Hydrocarbons	C6-C10 minus BTEX (F1)	µg/L	20								-	<20	-	-	<20	-	-	-	<20	-
	C6 - C10 Fraction	µg/L	20								-	<20	-	-	<20	-	-	-	<20	-
	>C10-C16 minus Naphthalene (F2)	µg/L	50								-	<50	-	-	<50	-	-	-	<100	-
	>C10 - C16 Fraction	µg/L	50								-	<50	-	-	<50	-	-	-	<100	-
	>C16 - C34 Fraction (F3)	µg/L	100								-	<100	-	-	<100	-	-	-	<100	-
	>C34 - C40 Fraction (F4)	µg/L	100								-	<100	-	-	<100	-	-	-	<100	-
	>C10 - C40 (Sum of Total)	µg/L	100								-	-	-	-	-	-	-	-	<100	-
Total Petroleum Hydrocarbons	C6 - C 9 Fraction	µg/L	20								-	<20	-	-	<20	-	-	-	<20	-
	C10 - C14 Fraction	µg/L	50								-	<50	-	-	<50	-	-	-	<50	-
	C15 - C28 Fraction	µg/L	100								-	<100	-	-	<100	-	-	-	<100	-
	C29 - C36 Fraction	µg/L	100								-	<100	-	-	<100	-	-	-	<50	-
	C10 - C36 (Sum of Total)	µg/L	100								-	<100	-	-	<100	-	-	-	<50	-
BTEX	Benzene	µg/L	1		1	950				10	-	<1	-	-	<1	-	-	-	<1	-
	Toluene	µg/L	1	25	800					8000	-	<1	-	-	<1	-	-	-	<2	-
	Ethylbenzene	µg/L	1	3	300					3000	-	<1	-	-	<1	-	-	-	<2	-
	Xylene (o)	µg/L	1			350					-	<1	-	-	<1	-	-	-	<2	-
	Xylene (m & p)	µg/L	2								-	<2	-	-	<2	-	-	-	<2	-
	Xylene Total	µg/L	3	20	600					6000	-	<3	-	-	<3	-	-	-	<2	-
	BTEX (Sum of Total) - Lab Calc	µg/L	1								-	-	-	-	-	-	-	-	<1	-
OCP	4,4-DDE	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	a-BHC	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Aldrin	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	b-BHC	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	chlordane	µg/L	1			0.08					-	<1	-	-	<1	-	-	-	-	-
	d-BHC	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	4,4 DDD	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	4,4 DDT	µg/L	0.1		9	0.01				90	-	<0.1	-	-	<0.1	-	-	-	-	-
	Dieldrin	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Endosulfan I	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Endosulfan II	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Endosulfan sulphate	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Endrin	µg/L	0.1			0.02					-	<0.1	-	-	<0.1	-	-	-	-	-
	Endrin aldehyde	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Endrin ketone	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	g-BHC (Lindane)	µg/L	0.1		10	0.2				100	-	<0.1	-	-	<0.1	-	-	-	-	-
	Heptachlor	µg/L	0.1		0.3	0.09				3	-	<0.1	-	-	<0.1	-	-	-	-	-
	Heptachlor epoxide	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Hexachlorobenzene	µg/L	0.1								-	<0.1	-	-	<0.1	-	-	-	-	-
	Methoxychlor	µg/L	0.1		300					3000	-	<0.1	-	-	<0.1	-	-	-	-	-
	Toxaphene	µg/L	10			0.2					-	<10	-	-	<10	-	-	-	-	-
PAH/Phenols	Pyrene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Acenaphthene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Acenaphthylene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Anthracene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Benz(a)anthracene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Benzo(a)pyrene	µg/L	1								-	<1	-	-	<1	-	-	-	<0.5	-
	Benzo[b+j]fluoranthene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Benzo(k)fluoranthene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Benzo(g,h,i)perylene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Chrysene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Dibenz(a,h)anthracene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Fluoranthene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Fluorene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Indeno(1,2,3-c,d)pyrene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	Naphthalene	µg/L	1			16					-	<1	-	-	<1	-	-	-	<1	-
	Phenanthrene	µg/L	1								-	<1	-	-	<1	-	-	-	<1	-
	PAHs (Sum of total) - Lab calc	µg/L	1		0.01					0.1	-	<1	-	-	<1	-	-	-	-	-
	Polycylic aromatic hydrocarbons	µg/L	0.5								-	-	-	-	-	-	-	-	<0.9	-
	2,4,5-trichlorophenol	µg/L	1								-	<10	-	-	<10	-	-	-	<1	-
	2,4,6-trichlorophenol	µg/L	1	2	20	20				200	-	<10	-	-	<10	-	-	-	<1	-
	2,4-dichlorophenol	µg/L	1	0.3	200	160				2000	-	<3	-	-	<3	-	-	-	<1	-

Appendix C
Table C11
Tabulated Analytical GW Results - Bonbeach

										Aquifer	Quaternary									
										Location	ID46-BH08			ID46-BH10			ID46-GWBH02	ID46-GWBH04	ID46-GWBH05	
										Sample ID	ID46-BH08	ID46-BH08	ID46-BH08	ID46-BH10	ID46-BH10	ID46-BH10	ID46-GWBH02	ID46-GWBH04	ID46-GWBH05	ID46-GWBH05
										Sampled_Date	25/11/16	8/6/17	25/7/17	25/11/16	8/6/17	26/7/17	24/7/17	25/7/17	1/3/17	26/7/17
										Lab_Report	EM16142	549788	555967	EM16142	549619	555967	556779	555967	EM17023	555967
Method_Type	ChemName	output unit	EQL	ADWG 2015 Aesthetic	ADWG 2015 Health	ANZECC 2000 FW 95%	ANZECC 2000 Irrigation - Long-term Trigger	ANZECC 2000 Irrigation - Short-term Trigger	ANZECC 2000 Stock Watering	NHMRC Recreational Guidelines 2008										
	2,4-dimethylphenol	µg/L	1								-	<3	-	-	<3	-	-	-	<1	-
	2,4-dinitrophenol	µg/L	30			45					-	<30	-	-	<30	-	-	-	-	-
	2,6-dichlorophenol	µg/L	1								-	<3	-	-	<3	-	-	-	<1	-
	2-chlorophenol	µg/L	1	0.1	300	490				3000	-	<3	-	-	<3	-	-	-	<1	-
	2-methylphenol	µg/L	1								-	<3	-	-	<3	-	-	-	<1	-
	2-nitrophenol	µg/L	1								-	<10	-	-	<10	-	-	-	<1	-
	3-&4-methylphenol	µg/L	2								-	<6	-	-	<6	-	-	-	<2	-
	4,6-Dinitro-2-methylphenol	µg/L	30								-	<30	-	-	<30	-	-	-	-	-
	4,6-Dinitro-o-cyclohexyl phenol	µg/L	100								-	<100	-	-	<100	-	-	-	-	-
	4-chloro-3-methylphenol	µg/L	1								-	<10	-	-	<10	-	-	-	<1	-
	4-nitrophenol	µg/L	30								-	<30	-	-	<30	-	-	-	-	-
	Dinoseb	µg/L	100								-	<100	-	-	<100	-	-	-	-	-
	Pentachlorophenol	µg/L	2		10	10				100	-	<10	-	-	<10	-	-	-	<2	-
	Phenol	µg/L	1			320					-	<3	-	-	<3	-	-	-	<1	-
	tetrachlorophenols	µg/L	30								-	<30	-	-	<30	-	-	-	-	-
	Phenols (Total Halogenated)	µg/L	10								-	<10	-	-	<10	-	-	-	-	-
	Phenols (Total Non Halogenated)	µg/L	100								-	<100	-	-	<100	-	-	-	-	-
	Benzo(a)pyrene TEQ (zero) - Lab Calc	µg/L	0.5								-	-	-	-	-	-	-	-	<0.9	-
	Phenolics Total	µg/L	50								<50	-	-	<50	-	-	-	-	-	-
PCB	Arochlor 1016	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
	Arochlor 1221	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
	Arochlor 1232	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
	Arochlor 1242	µg/L	1			0.6					-	<1	-	-	<1	-	-	-	-	-
	Arochlor 1248	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
	Arochlor 1254	µg/L	1			0.03					-	<1	-	-	<1	-	-	-	-	-
	Arochlor 1260	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
	PCBs (Total)	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
Volatile Organic Compounds	1,1,1,2-tetrachloroethane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,1,1-trichloroethane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,1,2,2-tetrachloroethane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,1,2-trichloroethane	µg/L	1			6500					-	<1	-	-	<1	-	-	-	<5	-
	1,1-dichloroethane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,1-dichloroethene	µg/L	1		30					300	-	<1	-	-	<1	-	-	-	<5	-
	1,1-dichloropropene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	1,2,4-trimethylbenzene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Isopropylbenzene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Styrene	µg/L	1	4	30					300	-	<1	-	-	<1	-	-	-	<5	-
	1,2,3-trichlorobenzene	µg/L	5			10					-	-	-	-	-	-	-	-	<5	-
	1,2,3-trichloropropane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,2,4-trichlorobenzene	µg/L	1			170					-	<1	-	-	<1	-	-	-	<5	-
	1,2-dibromo-3-chloropropane	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	1,2-dibromoethane	µg/L	1		1					10	-	<1	-	-	<1	-	-	-	<5	-
	1,2-dichlorobenzene	µg/L	1	1	1500	160				15000	-	<1	-	-	<1	-	-	-	<5	-
	1,2-dichloroethane	µg/L	1		3					30	-	<1	-	-	<1	-	-	-	<5	-
	1,2-dichloropropane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,3,5-trimethylbenzene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,3-dichlorobenzene	µg/L	1	20		260					-	<1	-	-	<1	-	-	-	<5	-
	1,3-dichloropropane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	1,4-dichlorobenzene	µg/L	1	0.3	40	60				400	-	<1	-	-	<1	-	-	-	<5	-
	2,2-dichloropropane	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	2-butanone (MEK)	µg/L	1								-	<1	-	-	<1	-	-	-	<50	-
	2-chlorotoluene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	2-hexanone (MBK)	µg/L	50								-	-	-	-	-	-	-	-	<50	-
	4-chlorotoluene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	4-methyl-2-pentanone (MIBK)	µg/L	1								-	<1	-	-	<1	-	-	-	<50	-
	Acetone	µg/L	1								-	<1	-	-	1	-	-	-	-	-
	Allyl chloride	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
	Bromobenzene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Bromochloromethane	µg/L	1								-	<1	-	-	<1	-	-	-	-	-
	Bromodichloromethane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Bromoform	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Bromomethane	µg/L	1		1					10	-	<1	-	-	<1	-	-	-	<50	-
	Carbon disulfide	µg/L	1								-	<5	-	-	<1	-	-	-	<5	-
	Carbon tetrachloride	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Chlorobenzene	µg/L	1	10							-	<1	-	-	<1	-	-	-	<5	-
	Chlorodibromomethane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Chloroethane	µg/L	1								-	<1	-	-	<1	-	-	-	<50	-
	Chloroform	µg/L	5								-	<5	-	-	<5	-	-	-	<5	-
	Chloromethane	µg/L	1								-	<1	-	-	<1	-	-	-	<50	-
	cis-1,2-dichloroethene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	cis-1,3-dichloropropene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	cis-1,4-Dichloro-2-butene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	Dibromomethane	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	Dichlorodifluoromethane	µg/L	1								-	<1	-	-	<1	-	-	-	<50	-
	Dichloromethane	µg/L	1		4					40	-	<1	-	-	<1	-	-	-	-	-
	Hexachlorobutadiene	µg/L	1		0.7					7	-	<1	-	-	<1	-	-	-	<5	-
	Iodomethane	µg/L	1								-	<5	-	-	4	-	-	-	<5	-
	n-butylbenzene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	n-propylbenzene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	Pentachloroethane	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	p-isopropyltoluene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	sec-butylbenzene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	TCE	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	tert-butylbenzene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	Tetrachloroethene	µg/L	1		50					500	-	<1	-	-	<1	-	-	-	<5	-
	trans-1,2-dichloroethene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	trans-1,3-dichloropropene	µg/L	1								-	<1	-	-	<1	-	-	-	<5	-
	trans-1,4-Dichloro-2-butene	µg/L	5								-	-	-	-	-	-	-	-	<5	-
	Trichlorofluoromethane	µg/L	1								-	<1	-	-	<1	-	-	-	<50	-
	Vinyl acetate	µg/L	50								-	-	-	-	-	-	-	-	<50	-
	Vinyl chloride	µg/L	1		0.3					3	-	<1	-	-	<1	-	-	-	<50	-

Appendix C
Table C11
Tabulated Analytical GW Results - Bonbeach

										Aquifer	Upper Tertiary Aquifer													
										Location	ID46-BH01		ID46-BH03			ID46-BH05			ID46-BH06		ID46-GWBH01	ID46-GWBH03	ID46-GWBH06
										Sample ID	ID46-BH01	ID46-BH01	ID46-BH03	ID46-BH03	ID46-BH03	ID46-BH05	ID46-BH05	ID46-BH05	ID46-BH06	ID46-BH06	ID46-GWBH01	ID46-GWBH03	ID46-GWBH06
										Sampled_Date	1/12/16	21/7/17	25/11/16	7/6/17	25/7/17	25/11/16	8/6/17	25/7/17	6/12/16	24/7/17	26/7/17	24/7/17	27/7/17
										Lab_Report	EM16145	555367	EM16142	549619	556779	EM16142	549619	555967	EM16147	556779	555967	556779	556244
Method_Type	ChemName	output unit	EQL	ADWG 2015 Aesthetic	ADWG 2015 Health	ANZECC 2000 FW 95%	ANZECC 2000 Irrigation - Long-term Trigger	ANZECC 2000 Irrigation - Short-term Trigger	ANZECC 2000 Stock Watering	NHMRC Recreational Guidelines 2008														
Physical	Total Dissolved Solids	mg/L	10	600					4000		314	360	1690	780	870	989	490	640	2560	2100	1900	2400	4700
Cations	Calcium (Filtered)	mg/L	1						1000		25	58	172	130	110	206	53	41	979	560	890	100	170
	Magnesium (Filtered)	mg/L	1								2	7	<1	0.5	1.7	<1	2.9	1.6	<1	<0.5	<5	37	140
	Potassium (Filtered)	mg/L	1								5	6.3	9	8.8	12	17	7.9	7.2	95	12	42	17	12
	Sodium (Filtered)	mg/L	1	180							57	45	96	83	200	146	110	170	170	140	220	820	1700
Anions	Bromide	mg/L	0.5								-	-	-	-	-	-	-	-	-	-	<25	-	<25
	Fluoride	mg/L	0.5		1.5		1	2	2	15	0.2	<0.5	0.5	<0.5	<0.5	0.6	0.8	1.2	0.2	<0.5	<0.5	0.8	<0.5
	Chloride	mg/L	1	250							58	55	154	160	360	143	170	220	35	290	57	860	2600
	Sulphate	mg/L	5	250	500				1000	5000	46	31	36	44	31	99	60	64	207	20	10	280	-
	Chloride:Sulphate Ratio (Calc)										1	2	4	4	12	1	3	3	0	15	6	3	30
	Sulphate as S	mg/L	5						333		-	10	-	-	10	-	-	21	-	6.8	<5	94	86
	Carbonate as CaCO3	mg/L	10								-	<10	-	<10	160	-	91	100	-	100	74	<10	<10
Ionic Balance	Anions Total	meq/L	0.01								4.85	-	14.4	-	-	20.5	-	-	59.6	-	-	-	-
	Cations Total	meq/L	0.01								4.14	-	13	-	-	17.1	-	-	58.7	-	-	-	-
	Ionic Balance	%	0.01								7.93	-	5.24	-	-	9.1	-	-	0.82	-	-	-	-
Acidity and Alkalinity	Acidity (as CaCO3)	mg/L	10								-	<10	-	-	<10	-	-	<10	-	<10	<10	19	23
	Alkalinity (Hydroxide as CaCO3)	mg/L	10								<1	-	151	<10	-	614	<10	-	2600	-	-	-	-
	Bicarbonate Alkalinity as CaCO3	mg/L	20								9	160	<1	310	81	<1	33	99	<1	<20	<20	440	390
	Alkalinity (total as CaCO3)	mg/L	20								113	160	467	310	240	720	120	200	2720	2100	1900	440	390
	Alkalinity and sulfate ratio (calc)										2	5	13	7	8	7	2	3	13	105	190	2	5
Nutrients	Cyanide (Total)	mg/L	0.005		0.08	0.007				0.8	-	-	-	<0.005	-	-	<0.005	-	-	-	-	-	-
	Ammonia as N	mg/L	0.01			0.9					1.7	1.8	2.18	0.4	1.6	1.81	1.5	1.3	3.69	3.9	2.8	0.94	1.9
	Total Kjeldahl Nitrogen	mg/L	0.2								-	2.2	-	2.5	2.6	-	2.2	2.2	-	4.4	3	1.2	2.2
	Nitrate (as N)	mg/L	0.02			7.2			90		0.02	0.05	2.48	<0.02	0.38	0.09	<0.02	<0.02	0.06	1.1	0.29	0.65	<0.02
	Nitrite (as N)	mg/L	0.02						9.1		<0.01	-	<0.01	<0.02	-	0.33	<0.02	-	<0.01	-	-	-	-
	Nitrate + Nitrite as N	mg/L	0.05								0.02	0.08	2.48	<0.05	0.38	0.42	<0.05	<0.05	0.06	1.1	0.34	0.65	<0.05
	Nitrogen (Total)	mg/L	0.2				5	25			-	2.3	-	2.5	3	-	2.2	2.2	-	5.5	3.3	1.9	2.2
	Phosphate total (P)	µg/L	10								-	110	-	60	140	-	90	140	-	<50	<50	80	130
	Phosphorous filterable reactive (P)	µg/L	50								-	<50	-	-	<50	-	-	<50	-	<50	<50	<50	<50
	Phosphorous filterable reactive (P)	µg/L	50								-	<50	-	-	<50	-	-	<50	-	<50	<50	<50	<50
	Phosphorus (Total)	mg/L	0.01				0.05				0.02	-	0.2	-	-	0.06	-	-	<0.01	-	-	-	-
Heavy Metal	Aluminium	mg/L	0.05	0.2		0.055	5	20	5		-	0.15	-	-	1.6	-	-	1.9	-	<0.05	0.34	0.25	38
	Aluminium (Filtered)	mg/L	0.05	0.2		0.055	5	20	5		-	0.08	-	-	0.63	-	-	0.43	-	<0.05	0.18	<0.05	<0.05
	Arsenic (Filtered)	mg/L	0.001		0.01	0.013	0.1	2	0.5	0.1	0.004	0.002	<0.001	0.011	0.012	0.002	0.009	0.012	0.001	<0.001	<0.001	0.009	0.013
	Barium (Filtered)	mg/L	0.02		2					20	0.005	-	<0.001	0.11	-	0.073	0.02	-	1.03	-	-	-	-
	Beryllium (Filtered)	mg/L	0.001		0.06		0.1	0.5		0.6	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	-	-	-	-
	Boron (Filtered)	mg/L	0.05		4	0.37	0.5	0.5	5	40	0.08	-	<0.05	0.13	-	0.05	0.27	-	<0.05	-	-	-	-
	Cadmium (Filtered)	mg/L	0.0002		0.002	0.0002	0.01	0.05	0.01	0.02	<0.0001	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002
	Chromium (III+VI) (Filtered)	mg/L	0.001			0.001	0.1	1	1		<0.001	<0.001	<0.001	<0.001	<0.001	0.011	0.001	<0.001	0.006	<0.001	0.036	<0.001	<0.001
	Chromium (hexavalent)	mg/L	0.001		0.05	0.001				0.5	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
	Cobalt (Filtered)	mg/L	0.001				0.05	0.1	1		<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	-	-	-	-
	Copper (Filtered)	mg/L	0.001	1	2	0.0014	0.2	5	0.5	20	<0.001	-	<0.001	<0.001	-	0.003	<0.001	-	0.011	-	-	-	-
	Iron	mg/L	0.05	0.3			0.2	10			-	0.48	-	-	0.65	-	-	2.4	-	<0.05	0.29	2.5	8.4
	Iron (Filtered)	mg/L	0.05	0.3			0.2	10			-	0.27	-	-	<0.05	-	-	<0.05	-	<0.05	<0.05	1.4	2.6
	Lead (Filtered)	mg/L	0.001		0.01	0.0034	2	5	0.1	0.1	<0.001	-	<0.001	<0.001	-	0.003	<0.001	-	0.005	-	-	-	-
	Manganese (Filtered)	mg/L	0.005	0.1	0.5	1.9	0.2	10		5	0.001	0.027	<0.001	<0.005	<0.005	<0.001	<0.005	<0.005	0.004	<0.005	<0.005	0.091	0.1
	Mercury (Filtered)	mg/L	0.0001		0.001	0.0006	0.002	0.002	0.002	0.01	<0.0001	-	0.0002	<0.0001	-	<0.0001	<0.0001	-	<0.0001	-	-	-	-
	Molybdenum (Filtered)	mg/L	0.005		0.05		0.01	0.05	0.15	0.5	-	-	-	<0.005	-	-	0.007	-	-	-	-	-	-
	Nickel (Filtered)	mg/L	0.001		0.02	0.011	0.2	2	1	0.2	0.004	0.005	<0.001	0.022	0.018	0.014	0.004	0.007	0.003	0.015	0.002	0.1	0.11
	Selenium (Filtered)	mg/L	0.001		0.01	0.011	0.02	0.05	0.02	0.1	<0.01	0.004	<0.01	0.029	0.03	<0.01	0.015	0.009	<0.01	0.002	0.001	0.003	<0.001
	Silver (Filtered)	mg/L	0.005		0.1	0.00005				1	-	-	-	<0.005	-	-	<0.005	-	-	-	-	-	-
	Tin (Filtered)	mg/L	0.005								-	-	-	<0.005	-	-	<0.005	-	-	-	-	-	-
	Vanadium (Filtered)	mg/L	0.01				0.1	0.5			0.01	-	<0.01	-	-	0.02	-	-	<0.01	-	-	-	-
	Zinc (Filtered)	mg/L	0.005	3		0.008	2	5	20		<0.005	<0.005	<0.005	0.04	<0.005	<0.005	0.01	<0.005	0.033	0.008	0.021	<0.005	0.008
Total Recoverable Hydrocarbons	C6-C10 minus BTEX (F1)	µg/L	20								-	-	-	<20	-	-	<20	-	-	-	-	-	-
	C6 - C10 Fraction	µg/L	20								-	-	-	40	-	-	<20	-	-	-	-	-	-
	>C10-C16 minus Naphthalene (F2)	µg/L	50								-	-	-	<50	-	-	<50	-	-	-	-	-	-
	>C10 - C16 Fraction	µg/L	50								-	-	-	<50	-	-	<50	-	-	-	-	-	-
	>C16 - C34 Fraction (F3)	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
	>C34 - C40 Fraction (F4)	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
	>C10 - C40 (Sum of Total)	µg/L	100								-	-	-	-	-	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons	C6 - C 9 Fraction	µg/L	20								-	-	-	40	-	-	<20	-	-	-	-	-	-
	C10 - C14 Fraction	µg/L	50								-	-	-	<50	-	-	<50	-	-	-	-	-	-
	C15 - C28 Fraction	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
	C29 - C36 Fraction	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
	C10 - C36 (Sum of Total)	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
BTEX	Benzene	µg/L	1		1	950				10	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Toluene	µg/L	1	25	800					8000	-	-	-	25	-	-	<1	-	-	-	-	-	-
	Ethylbenzene	µg/L	1	3	300					3000	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Xylene (o)	µg/L	1			350					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Xylene (m & p)	µg/L	2								-	-	-	<2	-	-	<2	-	-	-	-	-	-
	Xylene Total	µg/L	3	20	600					6000	-	-	-	<3	-	-	<3	-	-	-	-	-	-
	BTEX (Sum of Total) - Lab Calc	µg/L	1								-	-	-	-	-	-	-	-	-	-	-	-	-
OCP	4,4-DDE	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	a-BHC	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Aldrin	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	b-BHC	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	chlordane	µg/L	1			0.08					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	d-BHC	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	4,4 DDD	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	4,4 DDT	µg/L	0.1		9	0.01				90	-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Dieldrin	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Endosulfan I	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Endosulfan II	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Endosulfan sulphate	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Endrin	µg/L	0.1			0.02					-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Endrin aldehyde	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Endrin ketone	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	g-BHC (Lindane)	µg/L	0.1		10	0.2				100	-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Heptachlor	µg/L	0.1		0.3	0.09				3	-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Heptachlor epoxide	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Hexachlorobenzene	µg/L	0.1								-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Methoxychlor	µg/L	0.1		300					3000	-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-
	Toxaphene	µg/L	10			0.2					-	-	-	<10	-	-	<10	-	-	-	-	-	-
PAH/Phenols	Pyrene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Acenaphthene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Acenaphthylene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Anthracene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Benz(a)anthracene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Benzo(a)pyrene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Benzo[b+j]fluoranthene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Benzo(k)fluoranthene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Benzo(g,h,i)perylene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Chrysene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Dibenz(a,h)anthracene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Fluoranthene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Fluorene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Indeno(1,2,3-c,d)pyrene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Naphthalene	µg/L	1			16					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Phenanthrene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	PAHs (Sum of total) - Lab calc	µg/L	1		0.01					0.1	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Polycylic aromatic hydrocarbons	µg/L	0.5								-	-	-	-	-	-	-	-	-	-	-	-	-
	2,4,5-trichlorophenol	µg/L	1								<1	-	-	<10	-	-	<10	-	<1	-	-	-	-
	2,4,6-trichlorophenol	µg/L	1	2	20	20				200	<1	-	-	<10	-	-	<10	-	<1	-	-	-	-
	2,4-dichlorophenol	µg/L	1	0.3	200	160				2000	<1	-	-	<3	-	-	<3	-	<1	-	-	-	-

Appendix C
Table C11
Tabulated Analytical GW Results - Bonbeach

										Aquifer	Upper Tertiary Aquifer												
										Location	ID46-BH01		ID46-BH03			ID46-BH05			ID46-BH06		ID46-GWBH01	ID46-GWBH03	ID46-GWBH06
										Sample ID	ID46-BH01	ID46-BH01	ID46-BH03	ID46-BH03	ID46-BH03	ID46-BH05	ID46-BH05	ID46-BH05	ID46-BH06	ID46-BH06	ID46-GWBH01	ID46-GWBH03	ID46-GWBH06
										Sampled_Date	1/12/16	21/7/17	25/11/16	7/6/17	25/7/17	25/11/16	8/6/17	25/7/17	6/12/16	24/7/17	26/7/17	24/7/17	27/7/17
										Lab_Report	EM16145	555367	EM16142	549619	556779	EM16142	549619	555967	EM16147	556779	555967	556779	556244
Method_Type	ChemName	output unit	EQL	ADWG 2015 Aesthetic	ADWG 2015 Health	ANZECC 2000 FW 95%	ANZECC 2000 Irrigation - Long-term Trigger	ANZECC 2000 Irrigation - Short-term Trigger	ANZECC 2000 Stock Watering	NHMRC Recreational Guidelines 2008													
	2,4-dimethylphenol	µg/L	1								<1	-	-	<3	-	-	<3	-	<1	-	-	-	-
	2,4-dinitrophenol	µg/L	30			45					-	-	-	<30	-	-	<30	-	-	-	-	-	-
	2,6-dichlorophenol	µg/L	1								<1	-	-	<3	-	-	<3	-	<1	-	-	-	-
	2-chlorophenol	µg/L	1	0.1	300	490				3000	<1	-	-	<3	-	-	<3	-	<1	-	-	-	-
	2-methylphenol	µg/L	1								<1	-	-	<3	-	-	<3	-	<1	-	-	-	-
	2-nitrophenol	µg/L	1								<1	-	-	<10	-	-	<10	-	<1	-	-	-	-
	3-&4-methylphenol	µg/L	2								<2	-	-	41	-	-	<6	-	<2	-	-	-	-
	4,6-Dinitro-2-methylphenol	µg/L	30								-	-	-	<30	-	-	<30	-	-	-	-	-	-
	4,6-Dinitro-o-cyclohexyl phenol	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
	4-chloro-3-methylphenol	µg/L	1								<1	-	-	<10	-	-	<10	-	<1	-	-	-	-
	4-nitrophenol	µg/L	30								-	-	-	<30	-	-	<30	-	-	-	-	-	-
	Dinoseb	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
	Pentachlorophenol	µg/L	2		10	10				100	<2	-	-	<10	-	-	<10	-	<2	-	-	-	-
	Phenol	µg/L	1			320					4.1	-	-	45	-	-	5	-	1.6	-	-	-	-
	tetrachlorophenols	µg/L	30								-	-	-	<30	-	-	<30	-	-	-	-	-	-
	Phenols (Total Halogenated)	µg/L	10								-	-	-	<10	-	-	<10	-	-	-	-	-	-
	Phenols (Total Non Halogenated)	µg/L	100								-	-	-	<100	-	-	<100	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (zero) - Lab Calc	µg/L	0.5								-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenolics Total	µg/L	50								-	-	340	-	-	<50	-	-	-	-	-	-	-
PCB	Arochlor 1016	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Arochlor 1221	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Arochlor 1232	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Arochlor 1242	µg/L	1			0.6					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Arochlor 1248	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Arochlor 1254	µg/L	1			0.03					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Arochlor 1260	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	PCBs (Total)	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
Volatile Organic Compounds	1,1,1,2-tetrachloroethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,1,1-trichloroethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,1,2,2-tetrachloroethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,1,2-trichloroethane	µg/L	1			6500					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,1-dichloroethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,1-dichloroethene	µg/L	1		30					300	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,1-dichloropropene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,4-trimethylbenzene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Isopropylbenzene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Styrene	µg/L	1	4	30					300	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,2,3-trichlorobenzene	µg/L	5			10					-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2,3-trichloropropane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,2,4-trichlorobenzene	µg/L	1			170					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,2-dibromo-3-chloropropane	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	1,2-dibromoethane	µg/L	1		1					10	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,2-dichlorobenzene	µg/L	1	1	1500	160				15000	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,2-dichloroethane	µg/L	1		3					30	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,2-dichloropropane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,3,5-trimethylbenzene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,3-dichlorobenzene	µg/L	1	20		260					-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,3-dichloropropane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	1,4-dichlorobenzene	µg/L	1	0.3	40	60				400	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	2,2-dichloropropane	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	2-butanone (MEK)	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	2-chlorotoluene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	2-hexanone (MBK)	µg/L	50								-	-	-	-	-	-	-	-	-	-	-	-	-
	4-chlorotoluene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	4-methyl-2-pentanone (MIBK)	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Acetone	µg/L	1								-	-	-	14	-	-	8	-	-	-	-	-	-
	Allyl chloride	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Bromobenzene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Bromochloromethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Bromodichloromethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Bromoform	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Bromomethane	µg/L	1		1					10	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Carbon disulfide	µg/L	1								-	-	-	<1	-	-	2	-	-	-	-	-	-
	Carbon tetrachloride	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Chlorobenzene	µg/L	1	10							-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Chlorodibromomethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Chloroethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Chloroform	µg/L	5								-	-	-	<5	-	-	<5	-	-	-	-	-	-
	Chloromethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	cis-1,2-dichloroethene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	cis-1,3-dichloropropene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	cis-1,4-Dichloro-2-butene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibromomethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Dichlorodifluoromethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Dichloromethane	µg/L	1		4					40	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Hexachlorobutadiene	µg/L	1		0.7					7	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Iodomethane	µg/L	1								-	-	-	<1	-	-	4	-	-	-	-	-	-
	n-butylbenzene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	n-propylbenzene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	Pentachloroethane	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	p-isopropyltoluene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	sec-butylbenzene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	TCE	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	tert-butylbenzene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	Tetrachloroethene	µg/L	1		50					500	-	-	-	<1	-	-	<1	-	-	-	-	-	-
	trans-1,2-dichloroethene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	trans-1,3-dichloropropene	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	trans-1,4-Dichloro-2-butene	µg/L	5								-	-	-	-	-	-	-	-	-	-	-	-	-
	Trichlorofluoromethane	µg/L	1								-	-	-	<1	-	-	<1	-	-	-	-	-	-
	Vinyl acetate	µg/L	50								-	-	-	-	-	-	-	-	-	-	-	-	-
	Vinyl chloride	µg/L	1		0.3					3	-	-	-	<1	-	-	<1	-	-	-	-	-	-

AECOM GHD JOINT VENTURE

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS01	ID46-CASS01	ID46-CASS01	ID46-CASS02	ID46-CASS02	ID46-CASS02	ID46-CASS03	ID46-CASS03	ID46-CASS03	ID46-CASS04
					Date	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
					Field ID	ID46 CASS01_0.1	ID46 CASS01_0.5	ID46 CASS01_1.3	ID46 CASS02_0.1	ID46 CASS02_0.3	ID46 CASS02_0.7	ID46-CASS03_0.5	ID46-CASS03_1.5	ID46-CASS03_2.5	ID46CASS04_0.3
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709078	EM1709078	EM1709078	EM1709036
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
	Unit	EQL	EPAVic Cat B	EPAVic Cat C	EPAVic Fill										
Inorganics															
% Moisture	%	1				12.3	3.0	1.8	10.4	7.0	2.0	9.5	1.4	<1.0	4.9
Cyanide (Total)	mg/kg	1	10000	2500	50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
pH (CaCl2)	pH Units	0.1				5.5	4.0	3.9	5.7	5.7	5.0	5.4	5.8	5.3	6.1
Metals															
Arsenic	mg/kg	5	2000	500	20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium	mg/kg	1	400	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2000	500	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	mg/kg	5	20000	5000	100	199	6	<5	222	93	<5	41	8	<5	34
Lead	mg/kg	5	6000	1500	300	370	7	<5	98	56	<5	44	5	<5	70
Mercury	mg/kg	0.1	300	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4000	1000	40	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nickel	mg/kg	2	12000	3000	60	24	<2	<2	13	11	<2	3	<2	<2	10
Silver	mg/kg	2	720	180	10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Tin	mg/kg	5		500	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	mg/kg	5	140000	35000	200	176	8	<5	92	91	<5	43	8	<5	38
TRH - NEPM 2013															
C6-C10 minus BTEX (F1)	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C10 Fraction	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C10-C16 minus Naphthalene (F2)	mg/kg	50				50	<50	<50	110	<50	<50	70	<50	<50	<50
>C10 - C16 Fraction	mg/kg	50				50	<50	<50	110	<50	<50	70	<50	<50	<50
>C16 - C34 Fraction (F3)	mg/kg	100				490	120	<100	1,910	560	<100	250	<100	<100	<100
>C34 - C40 Fraction (F4)	mg/kg	100				110	<100	<100	420	160	<100	<100	<100	<100	<100
>C10 - C40 (Sum of Total)	mg/kg	50				650	120	<50	2,440	720	<50	320	<50	<50	<50
TRH - NEPM 1999															
C6 - C 9 Fraction	mg/kg	10	2600	650	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	mg/kg	50				<50	<50	<50	60	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	mg/kg	100				310	<100	<100	1,130	320	<100	150	<100	<100	<100
C29 - C36 Fraction	mg/kg	100				290	<100	<100	1,100	350	<100	160	<100	<100	<100
C10 - C36 (Sum of Total)	mg/kg	50	40000	10000	1000	600	<50	<50	2,290	670	<50	310	<50	<50	<50
PAH															
Polycylic aromatic hydrocarbons	mg/kg	0.5				55.8	<0.5	<0.5	0.8	22.4	<0.5	<0.5	<0.5	<0.5	1.8
Pyrene	mg/kg	0.5				14.4	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	<0.5	<0.5	0.6
Acenaphthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5				2.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.5				5.5	<0.5	<0.5	<0.5	2.7	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	20	5	1	2.6	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5				0.8	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	mg/kg	0.5				4.8	<0.5	<0.5	<0.5	2.7	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5				15.7	<0.5	<0.5	<0.5	3.0	<0.5	<0.5	<0.5	<0.5	0.6
Fluorene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				0.8	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5				3.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5				3.8	<0.5	<0.5	<0.5	3.8	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (half LOR) - Lab Calc	mg/kg	0.5				4.1	0.6	0.6	0.6	4.0	0.6	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (LOR) - Lab Calc	mg/kg	0.5				4.3	1.2	1.2	1.2	4.3	1.2	1.2	1.2	1.2	1.2
Phenols															

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS01	ID46-CASS01	ID46-CASS01	ID46-CASS02	ID46-CASS02	ID46-CASS02	ID46-CASS03	ID46-CASS03	ID46-CASS03	ID46-CASS04
					Date	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
					Field ID	ID46 CASS01_0.1	ID46 CASS01_0.5	ID46 CASS01_1.3	ID46 CASS02_0.1	ID46 CASS02_0.3	ID46 CASS02_0.7	ID46-CASS03_0.5	ID46-CASS03_1.5	ID46-CASS03_2.5	ID46CASS04_0.3
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709078	EM1709078	EM1709078	EM1709036
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Phenols (non-halogenated) - Lab Calc	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenols(halogenated) - Lab Calc	mg/kg	0.03	320	10	1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,5,6-Tetrachlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4,5-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4,6-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4-dimethylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-dinitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,6-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-chlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-&4-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-chloro-3-methylphenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4-nitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Pentachlorophenol	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
VOCs															
Chlorinated hydrocarbons	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TCE	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-dichloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOCs															
4,6-Dinitro-2-methylphenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
BTEXN															
Benzene	mg/kg	0.2	16	4	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OC Pesticides															
Organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Other organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4-DDE	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
a-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin + Dieldrin	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
b-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
chlordane	mg/kg	0.03	16	4		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (cis)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (trans)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
d-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4 DDD	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4,4 DDT	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDT+DDE+DDD - Lab Calc	mg/kg	0.05	50	50		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan I	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan II	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan sulphate	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS01	ID46-CASS01	ID46-CASS01	ID46-CASS02	ID46-CASS02	ID46-CASS02	ID46-CASS03	ID46-CASS03	ID46-CASS03	ID46-CASS04
					Date	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	14/07/2017	11/07/2017	11/07/2017	11/07/2017	11/07/2017
					Field ID	ID46 CASS01_0.1	ID46 CASS01_0.5	ID46 CASS01_1.3	ID46 CASS02_0.1	ID46 CASS02_0.3	ID46 CASS02_0.7	ID46-CASS03_0.5	ID46-CASS03_1.5	ID46-CASS03_2.5	ID46CASS04_0.3
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709278	EM1709078	EM1709078	EM1709078	EM1709036
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Endrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin aldehyde	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
g-BHC (Lindane)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor epoxide	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobenzene	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methoxychlor	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
PCBs															
PCBs (Total)	mg/kg	0.1	0	0	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MAH															
Styrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MAH (Sum of Total)	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Herbicides															
Dinoseb	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorinated Hydrocarbons															
Other chlorinated hydrocarbons - Lab Calc	mg/kg	0.01	50	10		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-trichloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2,2-tetrachloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-trichloroethane	mg/kg	0.04				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-dichloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon tetrachloride	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.4				<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Hexachlorobutadiene	mg/kg	0.02	11	2.8		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl chloride	mg/kg	0.02	4.8	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Major Ions															
Fluoride	mg/kg	40	40000	10000	450	100	<40	<40	50	50	<40	<40	<40	<40	40

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS04	ID46-CASS05	ID46-CASS05	ID46-CASS05	ID46-CASS06	ID46-CASS06	ID46-CASS06	ID46-CASS07	ID46-CASS07	ID46-CASS07	ID46-CASS08
					Date	11/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	18/07/2017	18/07/2017	18/07/2017	28/07/2017
					Field ID	ID46CASS04_5	ID46CASS05_0.1	ID46CASS05_0.5	ID46CASS05_2	ID46CASS06_0.1	ID46CASS06_0.3	ID46CASS06_1	ID46CASS07_0.1	ID46CASS07_0.7	ID46CASS07_0.9	ID46CASS08_0.1
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709036	EM1709978	EM1709978	EM1709978	EM1709899	EM1709899	EM1709899	EM1709453	EM1709453	EM1709453	EM1710043
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
	Unit	EQL	EPAVic Cat B	EPAVic Cat C	EPAVic Fill											
Inorganics																
% Moisture	%	1				15.4	7.3	3.2	<1	6	1.9	<1	2.7	2	2.9	4.5
Cyanide (Total)	mg/kg	1	10000	2500	50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
pH (CaCl2)	pH Units	0.1				5.6	4.7	3.5	6.3	4.9	5.8	5.3	5.2	6.3	5.9	5.7
Metals																
Arsenic	mg/kg	5	2000	500	20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5
Cadmium	mg/kg	1	400	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2000	500	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	mg/kg	5	20000	5000	100	<5	71	<5	<5	24	16	<5	12	<5	<5	52
Lead	mg/kg	5	6000	1500	300	<5	54	<5	<5	63	17	6	29	<5	7	68
Mercury	mg/kg	0.1	300	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4000	1000	40	<2	<2	<2	<2	<2	<2	5	<2	<2	<2	<2
Nickel	mg/kg	2	12000	3000	60	<2	5	<2	<2	3	14	<2	2	<2	<2	35
Silver	mg/kg	2	720	180	10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Tin	mg/kg	5		500	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	mg/kg	5	140000	35000	200	5	34	<5	<5	27	24	<5	22	<5	21	117
TRH - NEPM 2013																
C6-C10 minus BTEX (F1)	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C10 Fraction	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C10-C16 minus Naphthalene (F2)	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10 - C16 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16 - C34 Fraction (F3)	mg/kg	100				<100	160	<100	<100	<100	<100	<100	<100	<100	<100	100
>C34 - C40 Fraction (F4)	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10 - C40 (Sum of Total)	mg/kg	50				<50	160	<50	<50	<50	<50	<50	<50	<50	<50	100
TRH - NEPM 1999																
C6 - C 9 Fraction	mg/kg	10	2600	650	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36 Fraction	mg/kg	100				<100	120	<100	<100	<100	<100	<100	<100	<100	<100	100
C10 - C36 (Sum of Total)	mg/kg	50	40000	10000	1000	<50	120	<50	<50	<50	<50	<50	<50	<50	<50	100
PAH																
Polycylic aromatic hydrocarbons	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	20	5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.4
Benzo(a)pyrene TEQ (half LOR) - Lab Calc	mg/kg	0.5				0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	<1.4
Benzo(a)pyrene TEQ (LOR) - Lab Calc	mg/kg	0.5				1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	<1.4
Phenols																

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS04	ID46-CASS05	ID46-CASS05	ID46-CASS05	ID46-CASS06	ID46-CASS06	ID46-CASS06	ID46-CASS07	ID46-CASS07	ID46-CASS07	ID46-CASS08
					Date	11/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	18/07/2017	18/07/2017	18/07/2017	28/07/2017
					Field ID	ID46CASS04_5	ID46CASS05_0.1	ID46CASS05_0.5	ID46CASS05_2	ID46CASS06_0.1	ID46CASS06_0.3	ID46CASS06_1	ID46CASS07_0.1	ID46CASS07_0.7	ID46CASS07_0.9	ID46CASS08_0.1
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709036	EM1709978	EM1709978	EM1709978	EM1709899	EM1709899	EM1709899	EM1709453	EM1709453	EM1709453	EM1710043
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Phenols (non-halogenated) - Lab Calc	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenols(halogenated) - Lab Calc	mg/kg	0.03	320	10	1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
2,3,5,6-Tetrachlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
2,4,5-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.07
2,4,6-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.07
2,4-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
2,4-dimethylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-dinitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<12
2,6-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.14
2-chlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
2-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-&4-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<12
4-chloro-3-methylphenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
4-nitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<12
Pentachlorophenol	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
VOCs																
Chlorinated hydrocarbons	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TCE	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-dichloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOCs																
4,6-Dinitro-2-methylphenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<12
BTEXN																
Benzene	mg/kg	0.2	16	4	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OC Pesticides																
Organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Other organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
4,4-DDE	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.07
a-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Aldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Aldrin + Dieldrin	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
b-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
chlordane	mg/kg	0.03	16	4		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Chlordane (cis)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Chlordane (trans)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
d-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
4,4 DDD	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.07
4,4 DDT	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.07
DDT+DDE+DDD - Lab Calc	mg/kg	0.05	50	50		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.07
Dieldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Endosulfan I	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Endosulfan II	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Endosulfan sulphate	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS04	ID46-CASS05	ID46-CASS05	ID46-CASS05	ID46-CASS06	ID46-CASS06	ID46-CASS06	ID46-CASS07	ID46-CASS07	ID46-CASS07	ID46-CASS08
					Date	11/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	27/07/2017	18/07/2017	18/07/2017	18/07/2017	28/07/2017
					Field ID	ID46CASS04_5	ID46CASS05_0.1	ID46CASS05_0.5	ID46CASS05_2	ID46CASS06_0.1	ID46CASS06_0.3	ID46CASS06_1	ID46CASS07_0.1	ID46CASS07_0.7	ID46CASS07_0.9	ID46CASS08_0.1
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709036	EM1709978	EM1709978	EM1709978	EM1709899	EM1709899	EM1709899	EM1709453	EM1709453	EM1709453	EM1710043
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Endrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Endrin aldehyde	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
g-BHC (Lindane)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Heptachlor	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Heptachlor epoxide	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Hexachlorobenzene	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
Methoxychlor	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.07
PCBs																
PCBs (Total)	mg/kg	0.1	0	0	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2
MAH																
Styrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MAH (Sum of Total)	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Herbicides																
Dinoseb	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<12
Chlorinated Hydrocarbons																
Other chlorinated hydrocarbons - Lab Calc	mg/kg	0.01	50	10		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-trichloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2,2-tetrachloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-trichloroethane	mg/kg	0.04				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-dichloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon tetrachloride	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.4				<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Hexachlorobutadiene	mg/kg	0.02	11	2.8		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl chloride	mg/kg	0.02	4.8	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Major Ions																
Fluoride	mg/kg	40	40000	10000	450	<40	<40	<40	<40	60	60	<40	40	<40	<40	160

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS08	ID46-CASS08	ID46-CASS09	ID46-CASS10	ID46-CASS10	ID46-CASS10	ID46-CASS11	ID46-CASS11	ID46-CASS11	ID46-CASS12
					Date	28/07/2017	28/07/2017	31/07/2017	18/07/2017	18/07/2017	18/07/2017	17/07/2017	17/07/2017	17/07/2017	14/07/2017
					Field ID	ID46CASS08_0.5	ID46CASS08_1.5	ID46_CASS09_2.0	ID46CASS10_0.1	ID46CASS10_0.5	ID46CASS10_2.2	ID46CASS11_0.1	ID46CASS11_0.3	ID46CASS11_1	ID46 CASS12_0.1
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1710043	EM1710043	EM1710144	EM1709416	EM1709416	EM1709416	EM1709379	EM1709379	EM1709379	EM1709278
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
	Unit	EQL	EPAVic Cat B	EPAVic Cat C	EPAVic Fill										
Inorganics															
% Moisture	%	1				5.8	4.1	<1.0	5.4	7.6	1.5	4.4	3.3	3	5.2
Cyanide (Total)	mg/kg	1	10000	2500	50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
pH (CaCl2)	pH Units	0.1				6.5	6	5.0	6.2	7.5	5	5.3	6.3	5.5	5.6
Metals															
Arsenic	mg/kg	5	2000	500	20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium	mg/kg	1	400	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2000	500	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	mg/kg	5	20000	5000	100	42	<5	<5	62	56	<5	35	<5	<5	40
Lead	mg/kg	5	6000	1500	300	55	<5	<5	139	71	<5	50	12	<5	59
Mercury	mg/kg	0.1	300	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4000	1000	40	<2	<2	<2	<2	<2	<2	5	<2	<2	<2
Nickel	mg/kg	2	12000	3000	60	11	<2	<2	6	22	<2	3	<2	<2	4
Silver	mg/kg	2	720	180	10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Tin	mg/kg	5		500	50	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Zinc	mg/kg	5	140000	35000	200	49	<5	<5	72	136	<5	23	9	<5	45
TRH - NEPM 2013															
C6-C10 minus BTEX (F1)	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C10 Fraction	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C10-C16 minus Naphthalene (F2)	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10 - C16 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16 - C34 Fraction (F3)	mg/kg	100				140	<100	<100	<100	120	<100	<100	<100	<100	<100
>C34 - C40 Fraction (F4)	mg/kg	100				170	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10 - C40 (Sum of Total)	mg/kg	50				310	<50	<50	<50	120	<50	<50	<50	<50	<50
TRH - NEPM 1999															
C6 - C 9 Fraction	mg/kg	10	2600	650	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36 Fraction	mg/kg	100				160	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of Total)	mg/kg	50	40000	10000	1000	160	<50	<50	<50	<50	<50	<50	<50	<50	<50
PAH															
Polycylic aromatic hydrocarbons	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	15.9	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	3.1	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	20	5	1	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5				<1.3	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (half LOR) - Lab Calc	mg/kg	0.5				<1.3	0.6	0.6	0.6	2.1	0.6	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (LOR) - Lab Calc	mg/kg	0.5				<1.3	1.2	1.2	1.2	2.3	1.2	1.2	1.2	1.2	1.2
Phenols															

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS08	ID46-CASS08	ID46-CASS09	ID46-CASS10	ID46-CASS10	ID46-CASS10	ID46-CASS11	ID46-CASS11	ID46-CASS11	ID46-CASS12
					Date	28/07/2017	28/07/2017	31/07/2017	18/07/2017	18/07/2017	18/07/2017	17/07/2017	17/07/2017	17/07/2017	14/07/2017
					Field ID	ID46CASS08_0.5	ID46CASS08_1.5	ID46_CASS09_2.0	ID46CASS10_0.1	ID46CASS10_0.5	ID46CASS10_2.2	ID46CASS11_0.1	ID46CASS11_0.3	ID46CASS11_1	ID46 CASS12_0.1
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1710043	EM1710043	EM1710144	EM1709416	EM1709416	EM1709416	EM1709379	EM1709379	EM1709379	EM1709278
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Phenols (non-halogenated) - Lab Calc	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenols(halogenated) - Lab Calc	mg/kg	0.03	320	10	1	<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,5,6-Tetrachlorophenol	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4,5-trichlorophenol	mg/kg	0.05				<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4,6-trichlorophenol	mg/kg	0.05				<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4-dichlorophenol	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4-dimethylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-dinitrophenol	mg/kg	5				<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,6-dichlorophenol	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05				<0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-chlorophenol	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-&4-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5				<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-chloro-3-methylphenol	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4-nitrophenol	mg/kg	5				<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
Pentachlorophenol	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
VOCs															
Chlorinated hydrocarbons	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TCE	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-dichloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOCs															
4,6-Dinitro-2-methylphenol	mg/kg	5				<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
BTEXN															
Benzene	mg/kg	0.2	16	4	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OC Pesticides															
Organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Other organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4-DDE	mg/kg	0.05				<0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
a-BHC	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin + Dieldrin	mg/kg	0.03	4.8	1.2		<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
b-BHC	mg/kg	0.03				EM1710043	EM1710043	EM1710144	EM1709416	EM1709416	EM1709416	EM1709379	EM1709379	EM1709379	EM1709278
chlordane	mg/kg	0.03	16	4		soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Chlordane (cis)	mg/kg	0.03													
Chlordane (trans)	mg/kg	0.03													
d-BHC	mg/kg	0.03													
4,4 DDD	mg/kg	0.05				5.8	4.1	<1.0	5.4	7.6	1.5	4.4	3.3	3	5.2
4,4 DDT	mg/kg	0.05				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
DDT+DDE+DDD - Lab Calc	mg/kg	0.05	50	50		6.5	6	5.0	6.2	7.5	5	5.3	6.3	5.5	5.6
Dieldrin	mg/kg	0.03													
Endosulfan I	mg/kg	0.03				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Endosulfan II	mg/kg	0.03				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Endosulfan sulphate	mg/kg	0.03				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS08	ID46-CASS08	ID46-CASS09	ID46-CASS10	ID46-CASS10	ID46-CASS10	ID46-CASS11	ID46-CASS11	ID46-CASS11	ID46-CASS12
					Date	28/07/2017	28/07/2017	31/07/2017	18/07/2017	18/07/2017	18/07/2017	17/07/2017	17/07/2017	17/07/2017	14/07/2017
					Field ID	ID46CASS08_0.5	ID46CASS08_1.5	ID46_CASS09_2.0	ID46CASS10_0.1	ID46CASS10_0.5	ID46CASS10_2.2	ID46CASS11_0.1	ID46CASS11_0.3	ID46CASS11_1	ID46 CASS12_0.1
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1710043	EM1710043	EM1710144	EM1709416	EM1709416	EM1709416	EM1709379	EM1709379	EM1709379	EM1709278
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Endrin	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin aldehyde	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
g-BHC (Lindane)	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor	mg/kg	0.03	4.8	1.2		<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor epoxide	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobenzene	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methoxychlor	mg/kg	0.03				<0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
PCBs															
PCBs (Total)	mg/kg	0.1	0	0	2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MAH															
Styrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MAH (Sum of Total)	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Herbicides															
Dinoseb	mg/kg	5				<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorinated Hydrocarbons															
Other chlorinated hydrocarbons - Lab Calc	mg/kg	0.01	50	10		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-trichloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2,2-tetrachloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-trichloroethane	mg/kg	0.04				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-dichloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon tetrachloride	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.4				<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Hexachlorobutadiene	mg/kg	0.02	11	2.8		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl chloride	mg/kg	0.02	4.8	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Major Ions															
Fluoride	mg/kg	40	40000	10000	450	120	<40	<40	100	90	<40	<40	<40	<40	70

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS12	ID46-CASS12	ID46-CASS13	ID46-CASS13	ID46-CASS14	ID46-CASS14	ID46-CASS14	ID46-CASS15	ID46-CASS15	ID46-CASS15
					Date	14/07/2017	14/07/2017	11/07/2017	11/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017
					Field ID	ID46 CASS12_0.3	ID46 CASS12_1	ID46 CASS13_0.3	ID46 CASS13_3	ID46 CASS14_0.3	ID46 CASS14_1.5	ID46 CASS14_4.0	ID46 CASS15_0.1	ID46 CASS15_0.5	ID46 CASS15_1.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709278	EM1709278	EM1709081	EM1709081	EM1709015	EM1709015	EM1709015	EM1708967	EM1708967	EM1708967
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
	Unit	EQL	EPAVic Cat B	EPAVic Cat C	EPAVic Fill										
Inorganics															
% Moisture	%	1				6.5	4.4	4.7	1.3	2.8	1.7	2.5	12.1	21.0	3.0
Cyanide (Total)	mg/kg	1	10000	2500	50	<1	<1	<1	<1	<1	<1	<1	1	<1	<1
pH (CaCl2)	pH Units	0.1				7.3	4.8	3.9	4.3	5.8	4.7	4.6	5.6	3.6	3.6
Metals															
Arsenic	mg/kg	5	2000	500	20	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cadmium	mg/kg	1	400	100	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2000	500	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	mg/kg	5	20000	5000	100	18	7	<5	<5	14	<5	<5	199	36	7
Lead	mg/kg	5	6000	1500	300	47	9	<5	<5	8	<5	<5	126	18	<5
Mercury	mg/kg	0.1	300	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4000	1000	40	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nickel	mg/kg	2	12000	3000	60	19	<2	<2	<2	<2	<2	<2	24	4	<2
Silver	mg/kg	2	720	180	10	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Tin	mg/kg	5		500	50	<5	<5	<5	<5	<5	<5	<5	8	<5	<5
Zinc	mg/kg	5	140000	35000	200	54	8	8	<5	9	<5	<5	199	32	<5
TRH - NEPM 2013															
C6-C10 minus BTEX (F1)	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C10 Fraction	mg/kg	10				<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>C10-C16 minus Naphthalene (F2)	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10 - C16 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16 - C34 Fraction (F3)	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	200	180	<100
>C34 - C40 Fraction (F4)	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10 - C40 (Sum of Total)	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	200	180	<50
TRH - NEPM 1999															
C6 - C 9 Fraction	mg/kg	10	2600	650	100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100	150	140	<100
C10 - C36 (Sum of Total)	mg/kg	50	40000	10000	1000	<50	<50	<50	<50	<50	<50	<50	150	140	<50
PAH															
Polycylic aromatic hydrocarbons	mg/kg	0.5				1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	11.1	<0.5	<0.5
Pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5
Acenaphthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	20	5	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5
Chrysene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5
Fluorene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5
Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5				0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5
Benzo(a)pyrene TEQ (half LOR) - Lab Calc	mg/kg	0.5				0.9	0.6	0.6	0.6	0.6	0.6	0.6	1.6	0.6	0.6
Benzo(a)pyrene TEQ (LOR) - Lab Calc	mg/kg	0.5				1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.2	1.2
Phenols															

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS12	ID46-CASS12	ID46-CASS13	ID46-CASS13	ID46-CASS14	ID46-CASS14	ID46-CASS14	ID46-CASS15	ID46-CASS15	ID46-CASS15
					Date	14/07/2017	14/07/2017	11/07/2017	11/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017
					Field ID	ID46 CASS12_0.3	ID46 CASS12_1	ID46 CASS13_0.3	ID46 CASS13_3	ID46 CASS14_0.3	ID46 CASS14_1.5	ID46 CASS14_4.0	ID46 CASS15_0.1	ID46 CASS15_0.5	ID46 CASS15_1.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709278	EM1709278	EM1709081	EM1709081	EM1709015	EM1709015	EM1709015	EM1708967	EM1708967	EM1708967
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Phenols (non-halogenated) - Lab Calc	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenols(halogenated) - Lab Calc	mg/kg	0.03	320	10	1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,5,6-Tetrachlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4,5-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4,6-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4-dimethylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2,4-dinitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2,6-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-chlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
3-&4-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-chloro-3-methylphenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4-nitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Pentachlorophenol	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
VOCs															
Chlorinated hydrocarbons	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TCE	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-dichloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOCs															
4,6-Dinitro-2-methylphenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
BTEXN															
Benzene	mg/kg	0.2	16	4	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OC Pesticides															
Organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Other organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4-DDE	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
a-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin + Dieldrin	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
b-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
chlordane	mg/kg	0.03	16	4		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (cis)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (trans)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
d-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4 DDD	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4,4 DDT	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDT+DDE+DDD - Lab Calc	mg/kg	0.05	50	50		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan I	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan II	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan sulphate	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS12	ID46-CASS12	ID46-CASS13	ID46-CASS13	ID46-CASS14	ID46-CASS14	ID46-CASS14	ID46-CASS15	ID46-CASS15	ID46-CASS15
					Date	14/07/2017	14/07/2017	11/07/2017	11/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017
					Field ID	ID46 CASS12_0.3	ID46 CASS12_1	ID46 CASS13_0.3	ID46 CASS13_3	ID46 CASS14_0.3	ID46 CASS14_1.5	ID46 CASS14_4.0	ID46 CASS15_0.1	ID46 CASS15_0.5	ID46 CASS15_1.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1709278	EM1709278	EM1709081	EM1709081	EM1709015	EM1709015	EM1709015	EM1708967	EM1708967	EM1708967
					Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
Endrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin aldehyde	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
g-BHC (Lindane)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor epoxide	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobenzene	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methoxychlor	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
PCBs															
PCBs (Total)	mg/kg	0.1	0	0	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MAH															
Styrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MAH (Sum of Total)	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Herbicides															
Dinoseb	mg/kg	5				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chlorinated Hydrocarbons															
Other chlorinated hydrocarbons - Lab Calc	mg/kg	0.01	50	10		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-trichloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2,2-tetrachloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-trichloroethane	mg/kg	0.04				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-dichloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon tetrachloride	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.4				<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Hexachlorobutadiene	mg/kg	0.02	11	2.8		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl chloride	mg/kg	0.02	4.8	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Major Ions															
Fluoride	mg/kg	40	40000	10000	450	110	50	420	110	<40	<40	170	60	40	150

AECOM GHD JOINT VENTURE

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS15	ID46-CASS15	ID46-CASS16	ID46-CASS16	ID46-CASS16	ID46-CASS16	ID46-CASS16
					Date	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017
					Field ID	ID46 CASS15_1.5	ID46 CASS15_2.0	ID46 CASS16_0.1	ID46 CASS16_0.5	ID46 CASS16_1.0	ID46 CASS16_1.5	ID46 CASS16_2.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1708967	EM1708967	EM1708963	EM1708963	EM1708963	EM1708963	EM1708963
					Matrix Type	soil	soil	soil	soil	soil	soil	soil
	Unit	EQL	EPAVic Cat B	EPAVic Cat C	EPAVic Fill							
Inorganics												
% Moisture	%	1				2.5	<1.0	17.1	5.0	2.3	2.4	1.2
Cyanide (Total)	mg/kg	1	10000	2500	50	<1	<1	<1	<1	<1	<1	<1
pH (CaCl2)	pH Units	0.1				4.0	5.1	6.3	4.4	4.3	4.2	4.8
Metals												
Arsenic	mg/kg	5	2000	500	20	<5	<5	<5	<5	<5	<5	<5
Cadmium	mg/kg	1	400	100	3	<1	<1	<1	<1	<1	<1	<1
Chromium (hexavalent)	mg/kg	0.5	2000	500	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper	mg/kg	5	20000	5000	100	<5	<5	91	10	<5	<5	<5
Lead	mg/kg	5	6000	1500	300	<5	<5	206	<5	<5	<5	<5
Mercury	mg/kg	0.1	300	75	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	2	4000	1000	40	<2	<2	3	<2	<2	<2	<2
Nickel	mg/kg	2	12000	3000	60	<2	<2	16	<2	<2	<2	<2
Silver	mg/kg	2	720	180	10	<2	<2	<2	<2	<2	<2	<2
Tin	mg/kg	5		500	50	<5	<5	<5	<5	<5	<5	<5
Zinc	mg/kg	5	140000	35000	200	<5	<5	94	16	5	<5	<5
TRH - NEPM 2013												
C6-C10 minus BTEX (F1)	mg/kg	10				<10	<10	<10	<10	<10	<10	<10
C6 - C10 Fraction	mg/kg	10				<10	<10	<10	<10	<10	<10	<10
>C10-C16 minus Naphthalene (F2)	mg/kg	50				<50	<50	<50	<50	<50	<50	<50
>C10 - C16 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50
>C16 - C34 Fraction (F3)	mg/kg	100				<100	<100	110	<100	<100	<100	<100
>C34 - C40 Fraction (F4)	mg/kg	100				<100	<100	<100	<100	<100	<100	<100
>C10 - C40 (Sum of Total)	mg/kg	50				<50	<50	110	<50	<50	<50	<50
TRH - NEPM 1999												
C6 - C 9 Fraction	mg/kg	10	2600	650	100	<10	<10	<10	<10	<10	<10	<10
C10 - C14 Fraction	mg/kg	50				<50	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100
C29 - C36 Fraction	mg/kg	100				<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of Total)	mg/kg	50	40000	10000	1000	<50	<50	<50	<50	<50	<50	<50
PAH												
Polycylic aromatic hydrocarbons	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.5	20	5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (zero) - Lab Calc	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (half LOR) - Lab Calc	mg/kg	0.5				0.6	0.6	0.6	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (LOR) - Lab Calc	mg/kg	0.5				1.2	1.2	1.2	1.2	1.2	1.2	1.2
Phenols												

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS15	ID46-CASS15	ID46-CASS16	ID46-CASS16	ID46-CASS16	ID46-CASS16	ID46-CASS16
					Date	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017
					Field ID	ID46 CASS15_1.5	ID46 CASS15_2.0	ID46 CASS16_0.1	ID46 CASS16_0.5	ID46 CASS16_1.0	ID46 CASS16_1.5	ID46 CASS16_2.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1708967	EM1708967	EM1708963	EM1708963	EM1708963	EM1708963	EM1708963
					Matrix Type	soil	soil	soil	soil	soil	soil	soil
Phenols (non-halogenated) - Lab Calc	mg/kg	1				<1	<1	<1	<1	<1	<1	<1
Phenols(halogenated) - Lab Calc	mg/kg	0.03	320	10	1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,5,6-Tetrachlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4,5-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4,6-trichlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2,4-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,4-dimethylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1
2,4-dinitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5
2,6-dichlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2,3,4,5 & 2,3,4,6-Tetrachlorophenol	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-chlorophenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
2-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1
2-nitrophenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1
3-&4-methylphenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1
4,6-Dinitro-o-cyclohexyl phenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5
4-chloro-3-methylphenol	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4-nitrophenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5
Pentachlorophenol	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenol	mg/kg	1				<1	<1	<1	<1	<1	<1	<1
VOCs												
Chlorinated hydrocarbons	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TCE	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-dichloroethene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOCs												
4,6-Dinitro-2-methylphenol	mg/kg	5				<5	<5	<5	<5	<5	<5	<5
BTEXN												
Benzene	mg/kg	0.2	16	4	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (o)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
OC Pesticides												
Organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Other organochlorine pesticides - Lab Calc	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4-DDE	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
a-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aldrin + Dieldrin	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
b-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
chlordane	mg/kg	0.03	16	4		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (cis)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlordane (trans)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
d-BHC	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
4,4 DDD	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4,4 DDT	mg/kg	0.05				<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DDT+DDE+DDD - Lab Calc	mg/kg	0.05	50	50		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan I	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan II	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan sulphate	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Appendix D
Table D12
Tabulated IWRG621 Analytical Results - Bonbeach

					Location Code	ID46-CASS15	ID46-CASS15	ID46-CASS16	ID46-CASS16	ID46-CASS16	ID46-CASS16	ID46-CASS16
					Date	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017	10/07/2017
					Field ID	ID46 CASS15_1.5	ID46 CASS15_2.0	ID46 CASS16_0.1	ID46 CASS16_0.5	ID46 CASS16_1.0	ID46 CASS16_1.5	ID46 CASS16_2.0
					Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Lab Report Number	EM1708967	EM1708967	EM1708963	EM1708963	EM1708963	EM1708963	EM1708963
					Matrix Type	soil	soil	soil	soil	soil	soil	soil
Endrin	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Endrin aldehyde	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
g-BHC (Lindane)	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor	mg/kg	0.03	4.8	1.2		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Heptachlor epoxide	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobenzene	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Methoxychlor	mg/kg	0.03				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
PCBs												
PCBs (Total)	mg/kg	0.1	0	0	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MAH												
Styrene	mg/kg	0.5				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MAH (Sum of Total)	mg/kg	0.2				<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Herbicides												
Dinoseb	mg/kg	5				<5	<5	<5	<5	<5	<5	<5
Chlorinated Hydrocarbons												
Other chlorinated hydrocarbons - Lab Calc	mg/kg	0.01	50	10		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-trichloroethane	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2,2-tetrachloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-trichloroethane	mg/kg	0.04				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-dichloroethane	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-dichlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon tetrachloride	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorobenzene	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	mg/kg	0.02				<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-dichloroethene	mg/kg	0.01				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.4				<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Hexachlorobutadiene	mg/kg	0.02	11	2.8		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl chloride	mg/kg	0.02	4.8	1.2		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Major Ions												
Fluoride	mg/kg	40	40000	10000	450	<40	40	140	40	<40	<40	<40

Appendix D
Table D13
Tabulated ASLP Analytical Results - Bonbeach

				Location Code	ID46-CASS01	ID46-CASS01	ID46-CASS02	ID46-CASS03	ID46-CASS05	ID46-CASS06	ID46-CASS07	ID46-CASS08	ID46-CASS10	ID46-CASS10	ID46-CASS11
				Date	14/07/2017	14/07/2017	14/07/2017	11/07/2017	27/07/2017	27/07/2017	18/07/2017	28/07/2017	18/07/2017	18/07/2017	17/07/2017
				Field ID	ID46CASS01_0.1	ID46CASS02_0.1	ID46CASS02_0.3	ID46CASS03_0.5	ID46CASS05_0.1	ID46CASS06_0.1	ID46CASS07_0.1	ID46CASS08_0.1	ID46CASS10_0.1	ID46CASS10_0.5	ID46CASS11_0.1
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	EM1711638	EM1711638	EM1711638	EM1711638	EM1711638	EM1711638	EM1711638	EM1711638	EM1711638	EM1711638	EM1711638
				Matrix Type	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil	soil
	Unit	EQL	IWRG 621 Category B Leached	IWRG 621 Category C Leached											
Inorganics															
pH (Final)	pH Units	0.1			5.1	5.0	5.1	4.9	5.0	4.9	4.9	4.9	5.0	5.0	5.0
pH (Initial)	pH Units	0.1			6.1	6.5	6.7	7.8	6.5	6.4	6.8	7.1	6.5	8.6	7.2
pH (aqueous extract)	pH Units	0.1			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
pH (after HCL)	pH Units	0.1			1.4	1.3	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.4	1.4
Metals															
Copper (filtered)	mg/L	0.1	800	200	0.1	0.2									
Lead (filtered)	mg/L	0.1	4	1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PAH															
Benzo(a)pyrene	µg/L	0.5	4	1	<0.5		<0.5							<0.5	

Appendix D
Table D13
Tabulated ASLP Analytical Results - Bonbeach

				Location Code	ID46-CASS12	ID46-CASS12	ID46-CASS15	ID46-CASS16
				Date	14/07/2017	14/07/2017	10/07/2017	10/07/2017
				Field ID	ID46CASS12_0.1	ID46CASS12_0.3	ID46CASS15_0.1	ID46CASS16_0.1
				Sample Type	Normal	Normal	Normal	Normal
				Lab Report Number	EM1711638	EM1711638	EM1711638	EM1711638
				Matrix Type	soil	soil	soil	soil
	Unit	EQL	IWRG 621 Category B Leached	IWRG 621 Category C Leached				
Inorganics								
pH (Final)	pH Units	0.1			5.0	4.9	4.9	5.0
pH (Initial)	pH Units	0.1			7.2	6.9	6.8	7.7
pH (aqueous extract)	pH Units	0.1			5.0	5.0	5.0	5.0
pH (after HCL)	pH Units	0.1			1.5	1.5	1.5	1.6
Metals								
Copper (filtered)	mg/L	0.1	800	200			<0.1	
Lead (filtered)	mg/L	0.1	4	1	<0.1		<0.1	<0.1
PAH								
Benzo(a)pyrene	µg/L	0.5	4	1		<0.5	<0.5	