

Appendix 6
2006 Surface Water Quality Data
Vangorda Creek Drainage

Table 1 Surface Water Routine Parameters

STATION	DATE	ALK-T mg/L	COND µS/cm	HARD mg/L	NH3 mg/L	SO4-D mg/L	TSS mg/L	TEMP °C	PH-F
LCD	08-Jun-06			520	0.09	815		13.6	6.6
LCD	18-Sep-06			2010	0.83	3620		4.5	6.5
MOOESP	07-Feb-06	273	1750	831		819		2.5	7.8
MOOESP	13-Feb-06	267	1520	940		166		2	7.9
MOOESP	17-May-06	245	1530	827		703		1.6	8
MOOESP	05-Jun-06	273	1620			698		2.7	7.7
MOOESP	19-Jun-06	255	1520			612		6	7.8
MOOESP	10-Jul-06	272	1560			630		4.3	7.5
MOOESP	18-Jul-06	281		863		623		4.6	7.5
MOOESP	08-Aug-06	288	1560			675		5	7.6
MOOESP	22-Aug-06	293	1620	956		658		5.8	7.8
MOOESP	11-Sep-06	289	1520	905		676		5	7.8
MOOESP	26-Sep-06	291	1560	861		655		2.5	7.6
MOOESP	16-Oct-06	308	1560	939		713		0.8	7.6
MOOESP	23-Oct-06	308	1580	929		734		1.3	7.6
	average	280	1575	895		643		3.4	7.7
	minimum	245	1520	827		166		0.8	7.5
	maximum	308	1750	956		819		6	8
	N > DL	13	12	9	0	13	0	13	13
	median	281	1560	905		675		2.7	7.7
V1	20-Mar-06	45.4	121	59	< 0.01	10.8	< 1	0.8	8.1
V1	05-Jun-06	14.8	35	13	< 0.01	3.62	3	1.2	8.3
V1	06-Sep-06	26.2	73	29	< 0.01	9.71	< 1	4.1	8.1
	average	28.2	75.5	32.5	0.01	8.46	1.5	2.6	8.2
	minimum	14.8	35	13	< 0.01	3.62	< 1	0.8	8.1
	maximum	45.4	121	59	< 0.01	10.8	3	4.1	8.3
	N > DL	4	4	4	0	4	1	4	4
	median	26.2	73	29	0.01	9.71	1	2.65	8.1
V2	23-Jan-06		2300	1410	0.01	1110	1	1.2	7.6
V2	07-Feb-06	279	1270	719		554	< 1	0.4	8
V2	17-May-06		1900	1010	< 0.01	939	4	1.2	8.3
V2	05-Jun-06	292	1910	1020		860	< 1	3	8.1
V2	19-Jun-06	284	1900	1110	< 0.01	850	< 1	3.7	8
V2	10-Jul-06	321	2150	1190		1000	< 1	5.7	8
V2	18-Jul-06	321	2070	1210	< 0.01		< 1	5.6	8
V2	08-Aug-06	341	2100	1300		1060	< 1	8	8
V2	22-Aug-06	344	2220	1290	< 0.01	1040	< 1	5	8.2
V2	11-Sep-06	345	2120	1250	0.01	1020	< 1	4.6	8.1
V2	26-Sep-06	343	2170	1210		980	< 1	2.6	8
V2	16-Oct-06	354	1930	1250	0.04	902	< 1	1.6	8.1
V2	23-Oct-06	356	2170	1190		978	< 1	1.6	8.2

V2	13-Nov-06	344	1840	1150	< 0.01	923	2	0.6	8
V2	21-Nov-06	356	1860	1120		948	2	0.7	8
V2	05-Dec-06	364	1980	1240		1000	3	3	8.3
V2	14-Dec-06	359	1910	1230	< 0.01	953	< 1	0.2	8.2
	average	334	1988	1171	0.013	945	1.4	2.9	8.1
	minimum	279	1270	719	< 0.01	554	< 1	0.2	7.6
	maximum	364	2300	1410	0.04	1110	4	8	8.3
	N > DL	15	17	17	3	16	5	17	17
	median	344	1980	1210	0.01	965.5	1	2.6	8
V2A	25-Apr-06	223	1150	632	< 0.01	475	1	0.9	8.1
V2A	17-May-06	160	898	479	< 0.01	381	4	3.6	8.5
V2A	05-Jun-06	322	1880	1010		812	1	7.3	8.4
V2A	19-Jun-06	307	1710	1070	< 0.01	741	1	12.1	8.3
V2A	10-Jul-06	347	1940	1060		850	16	6.4	8.3
V2A	18-Jul-06	359	1990	1180	0.06		1	7.8	8.3
V2A	08-Aug-06	370	2010	1210		937	2	5.7	8.3
V2A	22-Aug-06	369	2090	1240	< 0.01	931	< 1	5.7	8.5
V2A	11-Sep-06	352	1890	1220	< 0.01	891	< 1	5.2	8.4
V2A	26-Sep-06	354	1880	1080		826	< 1	0.6	8.4
V2A	16-Oct-06	358	1710	1040	< 0.01	782	< 1	0.3	8.2
V2A	23-Oct-06	354	1800	1020		808	< 1	-0.5	8.4
	average	323	1746	1020	0.02	767	3	4.6	8.3
	minimum	160	898	479	< 0.01	381	< 1	-0.5	8.1
	maximum	370	2090	1240	0.06	937	16	12.1	8.5
	N > DL	12	12	12	1	11	7	12	12
	median	353	1880	1065	0.01	812	1	5.45	8.35
V4	29-May-06		296	154	< 0.01	22.5	5	2.9	8.3
V4	01-Aug-06		563	290	< 0.01	48.1	1	8.3	8.2
V4	26-Sep-06		597	301	0.04	50.5	< 1	8.3	8.2
	average		485	248	0.02	40.4	2.3	6.5	8.2
	minimum		296	154	< 0.01	22.5	< 1	2.9	8.2
	maximum		597	301	0.04	50.5	5	8.3	8.3
	N > DL	0	3	3	1	3	2	3	3
	median		563	290	0.01	48.1	1	8.3	8.2
V5	24-Jan-06	257	737	403	< 0.01	153	2	-0.6	8.2
V5	13-Feb-06	267	754	416	0.01	174	2	0.7	8
V5	17-May-06	89.5	245	136	< 0.01	35.7	169	0.6	8.4
V5	19-Jun-06	97.6	258	150	< 0.01	35.4	63	4.6	8.1
V5	17-Jul-06	142	337	190	< 0.01		47	6.7	8.1
V5	21-Aug-06	177	428	252	< 0.01	62.9	249	4.6	7.9
V5	11-Sep-06	182	453	220	< 0.01	65.9	19	4.5	8.3
V5	16-Oct-06	233	554	304	< 0.01	92.4	5	-0.1	8.3
V5	14-Nov-06	275	641	352	< 0.01	115	7	-0.1	7.9
V5	13-Dec-06	285	718	372	< 0.01	136	2	-0.2	8.3
	average	201	513	280	0.01	96.7	57	2.1	8.2
	minimum	89.5	245	136	< 0.01	35.4	2	-0.6	7.9
	maximum	285	754	416	0.01	174	249	6.7	8.4
	N > DL	10	10	10	1	9	10	10	10
	median	207.5	503.5	278	0.01	92.4	13	0.65	8.15
V6A	05-Jun-06	33.8	99	47	< 0.01	13.6	7	3.8	8.1

V6A	06-Sep-06	64.3	168	75	< 0.01	20.1	1	4.5	8.1
	average	54.1	145	66	0.01	17.9	3	4.3	8.1
	minimum	33.8	99	47	< 0.01	13.6	1	3.8	8.1
	maximum	64.3	168	75	< 0.01	20.1	7	4.5	8.1
	N > DL	3	3	3	0	3	3	3	3
	median	64.3	168	75	0.01	20.1	1	4.5	8.1
V8	24-Jan-06	207	673	384	< 0.01	166	< 1	-0.1	8.1
V8	13-Feb-06	214	694	381	< 0.01	191	< 1	1	8
V8	24-Mar-06	231	781	402	< 0.01	204	< 1	1.3	7.8
V8	24-Apr-06	222	737	356	< 0.01	184	< 1	2.1	8.2
V8	17-May-06	89.1	272	143	< 0.01	51.9	54	0.8	8.5
V8	19-Jun-06	76.6	220	118	< 0.01	35	24	5.5	8
V8	17-Jul-06	101	271	143	< 0.01		12	7.7	8.1
V8	21-Aug-06	214	580	309	< 0.005	85	< 5	5.5	8.1
V8	11-Sep-06	119	339	166	< 0.01	58.7	4	5.2	8.4
V8	16-Oct-06	160	434	230	< 0.01	84	11	-0.3	8
V8	14-Nov-06	212	585	312	< 0.01	130	1	-1	8
V8	13-Dec-06	222	633	328	< 0.01	144	< 1	-0.5	8.2
	average	172	518	273	0.010	121.2	10	2.3	8.1
	minimum	76.6	220	118	0.005	35	1	-1	7.8
	maximum	231	781	402	0.01	204	54	7.7	8.5
	N > DL	12	12	12	12	11	12	12	12
	median	209.5	582.5	310.5	0.01	130	2.5	1.15	8.1
V14	08-Jun-06		3390	1960	0.02	2030	2	6.1	7.3
V14	18-Sep-06		1740	945	0.02	836	2	3.6	8
V15	23-Jan-06	426	3660	2230	< 0.01	1820	2	2.1	8.2
V15	07-Feb-06	407	3500	1840		1850	13	1.9	7.7
V15	13-Feb-06	434	3490	2240	< 0.01	2090	< 1	2.3	7.4
V15	07-Mar-06	430	3570		< 0.01	1850	< 1	2.8	7.4
V15	24-Mar-06	431	3530	2140	< 0.01	1940	< 1	1.6	7.3
V15	08-Apr-06	443	3920	2240		1960	< 1	4	7.7
V15	25-Apr-06	439	4200	1840	< 0.01	1940	< 1	2.5	7.5
V15	17-May-06	352	3150	1640	0.04	1600	< 1	2.7	7.6
V15	05-Jun-06	444	3410	1900		1730	< 1	4.7	7.2
V15	19-Jun-06	448	3510	2090	< 0.01	1810	< 1	7.3	7.3
V15	10-Jul-06	483	4180	2220		1910	< 1	5.5	7.4
V15	18-Jul-06	492	3920	2210	< 0.01		< 1	6.7	7.4
V15	08-Aug-06	513	3410	2190		1820	< 1	4.8	7.3
V15	22-Aug-06	520	3760	2170	0.02	1870	< 1	5.9	7.9
V15	11-Sep-06	521	3170	1880	0.02	1850	2	5.2	7.3
V15	26-Sep-06	515	3370	2020		1770	< 1	2.7	7.3
V15	16-Oct-06	559	3070	2130	0.01	1700	< 1	2.4	7.4
V15	23-Oct-06	546	3710	2010		1740	< 1	1.3	7.4
V15	13-Nov-06	548	3230	2200	< 0.01	1780	< 1		
V15	21-Nov-06	544	3070	2080		1830	< 1	0.5	7.5
V15	05-Dec-06	522	4090	2050		1770	< 1	1	7.5
V15	14-Dec-06	528	3980	2170	< 0.01	1780	< 1	1.4	7.4
	average	479	3586	2071	0.014	1829	2	3.3	7.5
	minimum	352	3070	1640	< 0.01	1600	< 1	0.5	7.2
	maximum	559	4200	2240	0.04	2090	13	7.3	8.2

	N > DL	22	22	21	4	21	3	21	21
	median	487.5	3520	2130	0.01	1820	1	2.7	7.4
V16	08-Jun-06		1530	837	0.02	684	153	3	8.4
V16	18-Sep-06		4080	2260	0.01	2270	7	5.3	7.3
V17A	08-Jun-06	25.8	69	31	< 0.01	7.77	4	3.4	7.8
V17A	18-Sep-06	42	107	48	0.01	12.9	1	3.2	8.1
V19	08-Jun-06		130	66	0.01	3.4	< 1	3.7	8.1
V19	18-Sep-06		246	125	0.02	3.65	< 1	4.3	7.5
V20	08-Jun-06		150	72	< 0.01	6.98	< 1	4.8	8.2
V22	20-Mar-06		1810	839	0.38	947	1	1.5	7.1
V22	05-Jun-06		845	376	0.11	504	34	9.4	6.4
V22	06-Sep-06		1420	620	0.19	857	4	9.8	6.7
V22	16-Oct-06							-0.1	6.9
V22	13-Nov-06							-0.6	7.4
V22	05-Dec-06		1030	484	0.11	525	1	-0.6	7.6
V22	14-Dec-06							-0.5	7.3
	average		1305	588	0.20	738	9	3.6	7.0
	minimum		845	376	0.11	504	1	-0.6	6.4
	maximum		1810	839	0.38	947	34	9.8	7.6
	N > DL	0	5	5	5	5	5	8	8
	median		1420	620	0.19	857	4	0.7	7
V23	20-Mar-06		1060	530	0.04	451	< 1	1.5	8
V23	05-Jun-06		487	257	< 0.01	211	6	5	7.8
V23	09-Jun-06		939	494	0.07	407	15	10	8.4
V23	16-Oct-06							1	7.9
V23	13-Nov-06							0.6	8
V23	05-Dec-06		1040	528	0.09	433	1	0	8.1
V23	14-Dec-06							-1.8	8.2
	average		893	461	0.06	382	8	3.3	8.1
	minimum		487	257	< 0.01	211	< 1	-1.8	7.8
	maximum		1060	530	0.09	451	15	10	8.4
	N > DL	0	5	5	4	5	4	8	8
	median		939	494	0.07	407	6	1.25	8.05
V25BSP	17-May-06	48.2	328	155	< 0.01	128	11	1.9	8.3
V25BSP	19-Jun-06	63.1	334	171	< 0.01	111	< 1	15.1	8
V25BSP	17-Jul-06	72.2	430	221	< 0.01		2	15.1	7.9
V25BSP	22-Aug-06	80.5	640	339	< 0.01	278	< 1	10.4	7.9
V25BSP	11-Sep-06	85.2	719	363	0.03	316	< 1	7.3	8
V25BSP	16-Oct-06	83.5	765	400	< 0.01	346	< 1	0	7.9
	average	72.1	536	275	0.013	236	3	8.3	8
	minimum	48.2	328	155	< 0.01	111	< 1	0	7.9
	maximum	85.2	765	400	0.03	346	11	15.1	8.3
	N > DL	6	6	6	1	5	2	6	6
	median	76.35	535	280	0.01	278	1	8.85	7.95
V27	29-May-06		129	55	0.02	25.3	3	3.2	8.2
V27	01-Aug-06		235	110	< 0.01	56.4	< 1	9.4	7.9
V27	26-Sep-06		221	94	< 0.01	52	< 1	9.4	7.9
	average		195	86	0.01	44.6	2	7.3	8.0
	minimum		129	55	< 0.01	25.3	< 1	3.2	7.9
	maximum		235	110	0.02	56.4	3	9.4	8.2

	N > DL	0	3	3	1	3	1	3	3
	median		221	94	0.01	52	1	9.4	7.9

V30	08-Jun-06				4.64	4520		9.9	6.1
V30	18-Sep-06				5.28	4750		3.5	6.5
V31	08-Jun-06				3.82	8500		7.9	6.1
V32	08-Jun-06				3.55	53900		11.5	3.5
V32	18-Sep-06				7.1	65900		3.8	3.1
V33	08-Jun-06				2.37	43800		7.9	5.9
V33	18-Sep-06				0.81	58400		4.9	5.9
VGMAIN	13-Feb-06	178	637	339	0.01	193	1	0.9	8.1
VGMAIN	24-Mar-06	181	684	342	0.01	190	1	1.5	7.9
VGMAIN	24-Apr-06	181	683	328	0.01	202	1	1.3	8.3
VGMAIN	17-May-06	85.4	279	142	0.01	60.8	10	0.5	8.5
VGMAIN	19-Jun-06	62.2	192	109	0.01	32.9	3	5.5	7.9
VGMAIN	18-Jul-06	80.4	233	119	0.01		1	9.4	8.2
VGMAIN	21-Aug-06	94.6	289	151	0.01	58.2	1	5.7	7.8
VGMAIN	11-Sep-06	88.8	277	124	0.01	53.5	1	5.1	8.4
VGMAIN	16-Oct-06	131	389	197	0.01	83.8	1	-0.3	8.2
VGMAIN	14-Nov-06	172	533	284	0.01	132	1	-0.4	8
VGMAIN	13-Dec-06	180	572	286	0.01	143	1	-0.1	8.3
	average	130	433	220	0.01	114.9	2	2.6	8.1
	minimum	62.2	192	109	0.01	32.9	1	-0.4	7.8
	maximum	181	684	342	0.01	202	10	9.4	8.5
	N > DL	11	11	11	11	10	11	11	11
	median	131	389	197	0.01	107.9	1	1.3	8.2

Statistics only generated where there are more than 2 values in a data set

average	average of values, including values less than detection limit as set to DL value if it is the DL value will be shown without the < symbol
minimum	lowest value and will be least DL value if these are present in the data set
maximum	highest vale
N > DL	number of values measured that are above detection limits

median | the median value of the data set - if it is a DL value will be shown without the < symbol

NOTE:

Detection Limit values used as the DL value in statistics contrasts with conversion to 0 for charts