

LORIS H HASSALL TRADING PTY LTD

SOIL ANALYSIS 2019

EPA ID LOCATION: 4

EPA LICENSE NUMBER: 12765



*Not Tested (NT) No Sample (NS)

ANALYSIS	IRRIGATION BAY 1					IRRIGATION BAY 2					IRRIGATION BAY 3					IRRIGATION BAY 4				
	0-10 cm	10-30 cm	30-60 cm	60-90 cm	AVE	0-10 cm	10-30 cm	30-60 cm	60-90 cm	AVE	0-10 cm	10-30 cm	30-60 cm	60-90 cm	AVE	0-10 cm	10-30 cm	30-60 cm	60-90 cm	AVE
pH - pH units	5.43	6.03	7.47	7.55	6.62	6.2	5.77	7.1	7.99	6.77	5.72	5.33	5.35	6.3	5.68	7.09	5.51	5.31	5.85	5.94
Electrical Conductivity µS/cm	650	250	460	630	497.50	2460	650	320	670	1025.00	1740	660	640	750	947.50	6880	2130	1540	1610	3040.00
TKN-N - mg/kg	2660	560	480	310	1002.50	3240	570	390	330	1132.50	2440	840	360	630	1067.50	4200	1030	420	530	1545.00
Available Phosphorus (Colwell P) - mg/kg	60	13	6.8	7.4	21.80	81	22	9.5	9.3	30.45	83	35	12	24	38.50	97	31	14	20	40.50
Emerson Aggregate Class - Class	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Permeability - mm/hr	5-20	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	20-60	0	60-120	20-60	20-60	20-60
Exchangeable Calcium - mg/kg	952	440	632	612	659.00	1236	770	574	886	866.50	7.68	456	550	754	441.92	1190	384	460	988	755.50
Exchangeable Magnesium - mg/kg	90.5	0	0	0	22.63	66.6	54.2	0	0	30.20	43.3	18.9	68.7	162	73.23	56.5	16.8	42.9	177	73.30
Exchangeable Potassium - mg/kg	315	30	30	30	125.00	317	211	30	30	264.00	250	92.8	240	343	194.27	362	161	224	437	249.00
Exchangeable Sodium - mg/kg	748	586	1450	1560	1086.00	1900	589	892	1510	1222.75	1550	644	900	1460	1138.50	6410	1950	1560	2230	3037.50
Available Nitrate - mg/kg	120	7.1	3.4	15.7	36.55	213	36.6	8.8	13.3	67.93	169	27.9	27.1	59	70.75	212	64.6	35.2	51.2	90.75
Total Nitrogen - %	0.278	0.057	0.048	0.033	0.10	0.346	0.061	0.04	0.034	0.12	0.261	0.087	0.039	0.069	0.11	0.441	0.109	0.046	0.058	0.16
Cadmium - mg/kg	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Organic Carbon - %	2.52	0.6	0.32	0.24	0.92	3.02	0.75	0.31	0.24	1.08	2.03	0.57	0.27	0.28	0.79	3.35	0.79	0.35	0.29	1.20
Total Phosphorus - mg/kg	323	107	10	123	140.75	392	131	133	103	189.75	649	173	190	271	320.75	734	240	194	208	344.00
Total Sulfur (LECO) - %	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Available Phosphorus (Bray P) - mg/kg	47.3	2.2	0.8	0.8	12.78	60.3	9	0.8	0.8	17.73	75	12.3	0.8	1	22.28	137.5	16.6	0.8	1	38.98
Exchangeable Aluminium - mg/kg	2.7	2.7	2.7	2.7	2.70	2.7	2.7	2.7	2.7	2.70	2.7	2.7	2.7	2.7	2.70	3	2.7	2.7	0.29	2.17
SAR - SAR Units	6.6	1.9	3.1	3.1	3.68	8.9	7.2	2.1	3.1	5.33	15	7.7	0	14	9.18	37	24	30	28	29.75
Chloride - mg/kg	1080	426	954	1810	1067.50	2850	708	776	1960	1573.50	1890	794	690	897	1067.75	9600	3000	2040	1700	4085.00
CEC - cmol/kg	7.45	3.16	5.41	5.84	5.47	9.52	5.93	4.08	7.33	6.72	7.07	3.84	6.23	10.2	6.84	14.5	5.13	6.09	13	9.68
ESP - %of ECEC	14.9	29.4	41.6	47.6	33.38	20.8	17.9	29.7	39.6	27.00	31.1	29.7	36.4	41.4	34.65	49.5	51.3	46.5	41.9	47.30

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ANALYSIS	IRRIGATION BAY 5					IRRIGATION BAY 6					IRRIGATION BAY 7				
	0-10 cm	10-30 cm	30-60 cm	60-90 cm	AVE	0-10 cm	10-30 cm	30-60 cm	60-90 cm	AVE	0-10 cm	10-30 cm	30-60 cm	60-90 cm	AVE
pH - pH units	5.41	5.16	5.16	6.23	5.49	5.33	5.29	5.73	8.72	6.27	6.49	5.73	7.22	8.06	6.88
Electrical Conductivity µS/cm	2500	850	1040	1270	1415.00	3830	1110	1200	1410	1887.50	1420	1520	1080	880	1225.00
TKN-N - mg/kg	5510	2000	690	400	2150.00	5210	900	570	410	1772.50	4110	2870	620	340	1985.00
Available Phosphorus (Colwell P) - mg/kg	186	224	30	14	113.50	144	49	15	8.6	54.15	106	30	7.2	5.3	37.13
Emerson Aggregate Class - Class	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Permeability - mm/hr	60-120	20-60	20-60	20-60	20-60	60-120	20-60	20-60	20-60	20-60	60-120	60-120	5-20	20-60	20-60
Exchangeable Calcium - mg/kg	1122	468	974	1042	901.50	1240	496	1020	1574	1082.50	1690	776	954	882	1075.50
Exchangeable Magnesium - mg/kg	53.6	15	90.2	171	82.45	45	5.2	32.3	371	113.38	104	109	756	942	477.75
Exchangeable Potassium - mg/kg	398	220	330	378	316.00	406	204	215	374	275.00	527	231	188	197	315.33
Exchangeable Sodium - mg/kg	2080	1060	1860	2450	1862.50	3410	1260	1960	2630	2315.00	2530	1260	2000	1910	1925.00
Available Nitrate - mg/kg	361	35	65.5	106	141.88	618	84.2	108	87.8	224.50	442	186	28.6	50.8	176.85
Total Nitrogen - %	0.587	0.204	0.076	0.051	0.23	0.583	0.098	0.068	0.05	0.20	0.456	0.306	0.065	0.039	0.22
Cadmium - mg/kg	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Organic Carbon - %	4.56	1.88	0.44	0.28	1.79	4.21	1.21	0.63	0.22	1.57	3.93	1.39	0.31	0.25	1.47
Total Phosphorus - mg/kg	1060	853	124	10	511.75	876	195	10	10	272.75	567	142	10	10	182.25
Total Sulfur (LECO) - %	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Available Phosphorus (Bray P) - mg/kg	157.7	108.2	2.2	0.8	67.23	92.7	12.9	5.8	0.8	28.05	58.6	10.1	0.8	0.8	17.58
Exchangeable Aluminium - mg/kg	2.7	21.3	5.7	2.7	8.10	2.7	5.9	2.7	2.7	3.50	2.7	2.7	2.7	2.7	2.70
SAR - SAR Units	15	15	23	31	21.00	17	12	8.5	26	15.88	12	10	10	19	12.75
Chloride - mg/kg	2050	999	1120	1310	1369.75	3420	1140	1270	1350	1795.00	2140	1480	1140	929	1422.25
CEC - cmol/kg	9.67	5.64	11.8	14.5	10.40	11.6	5.71	10.7	19.5	11.88	15.1	6.94	17.3	18.4	14.44
ESP - %of ECEC	26.6	42.2	44.7	48	40.38	34.5	45.5	44	39.3	40.83	29.3	22.8	33.5	31.4	29.25