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Appendix 1: Chemical and Bacteriological Results of the first sampling campaign in John Laing and Misisi Compounds (November 2003)

Location	pH	Conductivity (µS cm ⁻¹)	Chloride (mg/l)	Nitrate (as NO ₃ -N mg/l)	Nitrite (as NO ₂ -N mg/l)	Ammonia (as NH ₄ -N mg/l)	Sulphate (mg/l)	Total Phosphates (mg/l)	TC (No/100ml)	FC (No/100ml)
Islamic Borehole - 4	7	1236	7	10.2	0.84	0.3	55.6	2.89	26	6
Shallow well	7.2	1345	174	10.8	0.37	0.18	49.5	2.79	TNTC*	TNTC
Islamic Borehole -2	7.3	1401	79	3.8	0.068	0.09	28.4	2.99	12	5
Shallow well near Islamic borehole - 2	7.3	1446	6	11.6	1.058	0.28	30.9	3.01	TNTC	TNTC
Shallow well in depression	8.1	1063	80	16.1	2.625	1.78	28	4.98	TNTC	TNTC
Mutenje Bar	8.2	1177	81	18.8	0.873	0.1	27.5	5.38	120	66
Near Dollose	7.2	1408	100	24.9	0.868	2.59	35.9	5.55	TNTC	TNTC
Near Tafimbwa Lubilo School	8.1	1044	70	19.3	0.554	1.91	17.4	4	TNTC	TNTC
Near Chanda Bar	8.2	765	39	11.8	0.265	<0.01	11.5	4.07	TNTC	TNTC
Yellow House	8.4	652	44	10.8	0.69	<0.01	5.8	3.48	400	160
Kapumuleni Mini Mart	8.2	1371	110	18.1	1.46	3.88	26.6	4.13	TNTC	TNTC
Kampasa Bar (Salvation Army BH1)	7.2	1120	77	16.3	0.23	0.15	57.5	5.49	0	0
Kampasa Bar (Salvation Army BH1) – Dup.	7.2	1107	79	16.8	0.28	0.19	54.2	6.13	0	0
Near Twiza	8.2	1489	125	23.6	1.344	1.95	34.9	4.54	250	47
Near Twiza 2	8.2	1962	149	20	2.804	4.08	45.4	4.52	300	122
Near Twiza 3	8.5	1686	144	18.3	0.32	2.12	33.9	4.25	0	0
Near Salvation Army, with reeds	8.1	1228	84	17.3	0.314	0.35	38.3	6.03	TNTC	TNTC
Salvation Army Bolehole 2	8.1	1225	80	17.8	0.173	0.37	37.8	5.91	0	0
Political borehole	7.4	679	44	-	0.019	0.03	-	-	0	0
Near new saloon and barbershop	7.1	1413	157	38.8	1.677	6.13	9	1.78	TNTC	TNTC
In caverns	6.8	10.43	92	38.8	0.579	0.44	19	1.67	TNTC	TNTC
Bambe Grocery	7.2	1056	103	39.53	0.541	0.47	18	1.67	TNTC	TNTC
Chairman's place	6.2	610	28	15.5	2.24	0.71	42.5	1.05	TNTC	TNTC
Misisi Bole hole	6.7	771	45	16.5	0.4	1.08	60.1	1.04	26	5
Mr. Mwiinga's well	6.8	1340	107	15.4	0.8	3.96	74.6	1.52	TNTC	TNTC
From Tank; mass media	7	679	20	8		0	21	2	20	3
Near kalingalinga Bus stop	7	711	25	12		0	53	1	0	0
International School	7	676	19	8		0	20	2	0	0
International School C	7	632	20	8			20	2	0	0
International School 6E	7	690	18	8			23	2	0	0
Mass Media 3	7	683	18	8		0	25	2	0	0

* TNTC = Too Numerous To Count. For this campaign, anything above 500 counts / 100 ml constituted a count of Too Numerous To Count.

Appendix 2: Chemical and Bacteriological Results of the second sampling campaign in John Laing and Misisi Compounds (November 2003)

Location	pH	Conductivity ($\mu\text{S cm}^{-1}$)	Chlorides (mg/l)	Nitrate (as $\text{NO}_3\text{-N}$ mg/l)	Nitrite (as $\text{NO}_2\text{-N}$ mg/l)	Ammonia (as $\text{NH}_4\text{-N}$ mg/l)	Sulphate (mg/l)	Total Phosphates (mg/l)	TC (No/100ml)	FC (No/100ml)
Pa Thole	8	1149	252	15.5	0.58	1.84	76.6	0.2	110	77
Behind Tembo Battery Charging	8.6	548	72	27	0.002	0.07	13.7	0.48	105	71
Near Twiza 1	8.7	654	97	14	0.072	0.56	24.4	0.39	280	195
Near Twiza 3	8.6	724	95	11.8	0.108	0.64	27.5	0.44	220	180
Near Salvation army with reeds.	8.4	468	55	28.7	0.489	0.47	19.5	1.12	285	240
Pali Ba Nkhoma	8.2	688	75	29.7	0.042	0.12	47	0.28	85	56
Mr. Sakala's place. Dry in dry Season.	7	616	45	9.1	0.182	0.2	92.7	8.9	105	78
B33 Covered well	7.44	822	118	6.8	<0.001	0.06	38.9	<0.01	100	20
Islamic borehole 4	7.3	846	125	13.3	<0.001	0.1	37.8	0.12	18	3
Islamic borehole 2	7.3	787	90	8.4	<0.001	0.07	26.3	0.22	7	0
Shallow well near Islamic borehole 2 in depression.	8.3	478	75	7	0.506	0.13	23	<0.01	35	20
Mutenje Banda (Bar)	8.2	387	33	2.9	0.168	0.41	9.8	0.22	100	60
Behind Kenny & Co. In depression, well submerged.	9.1	442	61	2.1	0.075	0.11	103.5	<0.01	150	90
Political borehole	7.4	547	45	10.4	<0.001	0.18	6.9	<0.01	9	1
Near New Barbershop -Cretus Mwamba	8.3	392	21	7.5	0.017	0.21	6.7	<0.01	88	30
Mr. Phiri's place; opposite Modiba	7.7	538	65	9.5	0.002	0.14	6.6	<0.01	100	85
Modiba's well. Not protected	7.4	155	10	8.5	0.026	0.1	8.9	0.73	65	32
Near Tafimbwa Lubilo School	7.6	754	80	6.2	0.062	0.38	24.6	0.38	120	95
Tricon School	7.9	899	75	6.1	0.041	0.6	25.9	0.12	82	20
Pali ba Mwape	7.9	537	50	7.1	0.341	0.29	7.5	<0.01	120	97
Pa Malato	7.5	447	50	8	0.08	0.14	8.9	0.44	185	100
Near Chanda Bar Block Making	7.5	447	37	6.8	0.031	<0.01	12.3	0.01	50	25
Ndanji Grocery	7.4	588	30	6.6	0.031	0.2	10.8	<0.01	80	35
Yellow House	8.2	547	55	11.6	0.025	0.31	10.6	0.1	65	30
Shalo EKupumuleni Mini Mart	7.6	460	42	10.3	0.037	0.07	13.3	<0.01	92	40
Kampasa Bar (Salvation Army BH1)	7.3	773	65	9.8	0.007	0.32	23.4	0.08	48	12
Salvation Army Bolehole 2	7	829	68	9.5	0.009	0.78	31.5	0.26	38	7
Near Dolose	8.1	724	119	4.51	0.636	0.07	26.9	0.85	18000	12000
C3/047 - Open well which is likely to collect water	8.4	744	115	7.3	0.044	0.05	33	0.51	18000	11000
Near New Hope Nursery School	8.6	271	20	7.1	0.021	0.05	4.7	0.43	26000	16000
Very near Pacheche pacheche	8.4	517	76	7.1	0.586	0.68	10.1	0.87	18000	11000

Appendix 2 (contd): Chemical and Bacteriological Results of the second sampling campaign in John Laing and Misisi Compounds (November 2003)

Very near Pacheche pacheche (covered)	8.3	404	49	6.2	0.001	<0.01	6.1	0.36	10000	4000
C1097 Near Choice Grocery	8.6	278	76	6.3	0.1	0.03	3.5	0.9	13000	9000
C6/045 near Sandambongo Pache Pache Grocery	8.1	724	103	4.5	0.607	0.06	28.3	0.89	14000	9000
Bambe Grocery	8.5	656	115	6.2	0.002	0.031	42.9	0.3	14000	11000
Bambe Grocery (Duplicate)	8	674	118	6.5	0.002	0.08	38.3	0.31	17000	9000
Mr. Phiri's Place, (Take off shoes before get to well)	8.4	826	140	5.2	0.19	0.07	65.9	0.42	18000	11000
Near Mr. Phiri's place	8.2	256	20	4.6	0.143	0.49	23.5	1.65	18000	12000
Mr. Mawele's well. Protected & for domestic purposes	7.9	582	86	7.7	0.003	0.02	33.5	0.71	9000	5000
Mr. Chingala's place place	7.4	762	94	10.7	0.037	0.05	64.3	<0.01	800	380
Amake Saidi	7.6	705	62	11.4	0.076	0.29	46.8	<0.01	1980	800
Chairman's place	7.3	659	52	20	0.145	0.14	10.8	1.8	5300	3000
Behind Two white houses	7.3	976	97	15.9	0.496	10.9	35.3	2.4	9000	4000
(World wide ...) Misisi Bole hole	7.1	1092	90	27.3	0.24	1.81	23.3	1.88	800	200
Opposite near Total filling Station	7.2	1293	140	38.1	0.239	0.34	37.9	0.87	8200	5000
Mr. Chileshe's well, (Covered)	7.1	1724	155	28.4	0.089	0.13	58.1	1.97	6500	5000
Pali ba Jacki. Well open, with leaves inside.	7.3	1219	141	45.9	0.381	0.34	40.9	2.1	10000	8800
Mr. Mwiinga's well (a break-through of toilet matter to well. Water smells	7.3	1233	83	2.92	0.19	29.2	21.5	17.8	8000	6000
Mr. Isaac Lungu's place	7.2	2480	600	38.8	0.483	0.54	122.4	2.24	8000	4500
Mr. Phiri's place	7.4	1231	140	36.1	0.162	0.26	40.8	1.98	5600	3500
Kadukankanu Grocery (Well protected well)	7.2	844	75	1.97	0.088	0.22	42.3	1.97	7800	3500
Mrs Phiri's place. Well protected. Batch chlorinated. One 750ml bottle per month	7.1	1307	225	31.9	0.66	0.19	53.9	2.11	8000	5200

Appendix 3: Chemical and Bacteriological Results of the third sampling campaign in John Laing and Misisi Compounds (November 2003)

LOCATION	pH	Conductivity ($\mu\text{S}/\text{cm}$)	Chlorides (mg/l)	Nitrate (mg/l)	Nitrite (mg/l)	Ammonia (mg/l)	Sulphate (mg/l)	Total Phosphates (mg/l)	TC (N ^o /100ml)	FC (N ^o /100ml)
Shallow well	7.5	1,210	104	28.2	0.17	0.049	25.9	1.89	275	200
Shallow well near Islamic borehole - 2	8.0	1,345	110	19.1	0.15	0.514	19.6	3	460	300
Shallow well in depression	7.0	1,079	85	23.9	0.16	12.2	57.7	0.94	21,600	11,400
Near Dollose	7.4	1,375	93	23.1	0.05	2.24	24.6	1.03	625	500
Near Tafimbwa Lubilo School	7.4	1,038	72	27.9	0.08	1.363	13.2	1.48	355	290
Near Chanda Bar	7.6	823	45	24.7	1.18	0.283	10.5	1.29	310	100
Kapumuleni Mini Mart	7.3	1,342	108	18.31	0.957	15.98	72.6	0.4	13,300	9,900
Near Salvation Army, with reeds	6.9	1,278	95	21.4	0.35	0.259	50.3	3.51	400	275
Near new saloon and barbershop	7.1	1,585	121	23	0.4	2.56	26	1.51	450	420
In caverns	7.2	1,242	85	20.2	0.24	0.509	29.2	2.45	300	210
Bambe Grocery	7.1	1,369	105	19.7	0.23	0.274	50.6	2.29	500	385
Chairman's place	7.1	786	31	22	0.113	3.09	33.1	1.35	9000	3200
Chairman's place (Duplicate)	7.0	784	34	22.3	0.123	3.16	32.4	1.31	14600	7400
Mr. Mwiinga's well	7.1	1,706	123	21.6	0.57	14.84	89.9	1.46	8600	5300
International School 6F	7.3	897	32	3.74	0.004	0.001	10.4	<0.01	0	0
Mass Media III	7	902	25	5.51	0.003	0.054	21.7	0.2	2	0
Mass Media II	7.2	886	36	7.77	0.002	0.053	26.9	<0.01	TNTC	0
Mass Media I	7.3	836	27	6.25	0.005	0.17	19.4	<0.01	3	0
Mass Media V	7.1	937	32	9.96	0.013	0.385	30.9	0.4	0	0
International School 6D	7.3	882	48	3.68	0.004	0.006	60.6	<0.01	3	0
International School 6C	7.2	840	100	4.06	0.004	0.018	15.9	<<0.01	0	0

TNTC = Too Numerous To Count

Appendix 4: Types of water points in the project areas

