

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION		Dubalevu, Sigatoka Valley	WELL No.	Pumping Well 4 (90/15)
Site ID		D2	COLLECTOR'S No	AL 09/01
DATE COLLECTED		01/09/2009	LAB No.	15161
DATE SUBMITTED		04/09/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED		25/09/2009		
GEOLOGY		Recent Alluvium		
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
	River	☐	Spring	☐
	Surface	☐	Depth	30 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	25 microS/cm	pH	6.5
Eh	mv	D.O.	0.2 mg/L
Temp	27 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	37.35	1.863765	Bicarbonate HCO ₃	195.2	3.20128
Magnesium Mg	12.247	1.007928	Carbonate CO ₃	0	0
Sodium Na	13.088	0.569328	Sulphate SO ₄	0	0
Potassium K	0.6422	0.01644	Chloride Cl	4.43	0.124926
Manganese Mn	0	0			
Iron Fe	0	0			
		3.457461			3.326206

TDS	Evap. (180 °C)	207	IONIC BALANCE	1.9%	
	Sum of Ions	263			
TOTAL HARDNESS (Calc.) CaCO ₃			144	pH	6.68
Silica(mg/L)			43.9	Sp. Cond.	292 microS/cm

COMMENTS:
 All the results are within WHO guidelines for drinking water, except pH which is lower than the recommended range of 6.5-8.5 for drinking purposes.

Site D2 - Well 90/15

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
 LABORATORY
M. N. N. N.
 LABORATORY MANAGER

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu Agricultural Station	WELL No.	Private Borehole MPI
SITE ID	DB	COLLECTOR'S No	AL 09/02
DATE COLLECTED	01/09/2009	LAB No.	15162
DATE SUBMITTED	04/09/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	25/09/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐ 20 m		

STATUS

SITE ANALYSIS/TREATMENT			
Sp. Cond.	360 microS/cm	pH	6.5
Eh	mv	D.O.	0.2 mg/L
Temp	27 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	48.45	2.417655	Bicarbonate HCO ₃	292.8	4.80192
Magnesium Mg	21.132	1.739164	Carbonate CO ₃	0	0
Sodium Na	25.801	1.122344	Sulphate SO ₄	2	0.0416
Potassium K	0.6647	0.017016	Chloride Cl	10.19	0.287358
Manganese Mn	0	0			
Iron Fe	0	0			
		5.296178			5.130678

TDS	Evap. (180 °C)	316	IONIC BALANCE	1.6%
	Sum of Ions	401		
TOTAL HARDNESS (Calc.) CaCO ₃		208	pH	7.59
Silica(mg/L)		29.2	Sp. Cond.	446 microS/cm

COMMENTS:

All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

SITE ID- DB MPI STATION

MINERAL RESOURCES DEPARTMENT
LABORATORY
LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

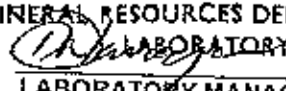
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu Wall Field		WELL No.	Pumping Well 3 (90/16)
SITE	D3		COLLECTOR'S No	AL 09/03
DATE COLLECTED	01/09/2009		LAB No.	15163
DATE SUBMITTED	04/09/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	25/09/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	☒ HDW	River	☐ Spring
	Flowing	☐ Pumpod	☒ Surface	☐ Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	260 microS/cm	pH	6.5
Eh	mv	D.O.	0.3 mg/L
Temp	27 °C	HCO ₃	mg/L
Filtored		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	40.38	2.014962	Bicarbonate HCO ₃	222.65	3.65146
Magnesium Mg	13.208	1.087018	Carbonate CO ₃	0	0
Sodium Na	13.305	0.578768	Sulphate SO ₄	0	0
Potassium K	1.4013	0.035873	Chloride Cl	4.43	0.124926
Manganese Mn	0.065	0.002366			
Iron Fe	0	0			
		3.718987			3.776386

TDS	Evap. (180 °C)	223	IONIC BALANCE	0.8%
	Sum of Ions	295		
TOTAL HARDNESS (Calc.) CaCO ₃		155	pH	6.96
Silica(mg/L)		50.2	Sp. Cond.	314 microS/cm

COMMENTS:	
All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
SITE LD - D3 (90/16)	
MINERAL RESOURCES DEPARTMENT  LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalavu Well Field	WELL No.	Pumping Well 2 (89/15)
SITE	D4	COLLECTOR'S No	AL 09/04
DATE COLLECTED	01/09/2009	LAB No.	15164
DATE SUBMITTED	04/09/09	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	25/09/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		35 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	310 microS/cm	pH	6.3
Eh	mv	D.O.	0.3 mg/L
Temp	26 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS				
		mg/L	e.p.m		mg/L	e.p.m	
Calcium	Ca	46.94	2.342306	Bicarbonate	HCO ₃	262.3	4.30172
Magnesium	Mg	15.84	1.303632	Carbonate	CO ₃	0	0
Sodium	Na	15.995	0.695783	Sulphate	SO ₄	0	0
Potassium	K	1.2361	0.031644	Chloride	Cl	5.98	0.168636
Manganese	Mn	0.144	0.005242				
Iron	Fe	0	0				
			4.378606				4.470356

TDS	Evap. (180 °C)	260	IONIC BALANCE	1.0%
	Sum of Ions	348		
TOTAL HARDNESS (Calc.) CaCO ₃		182	pH	6.84
Silica(mg/L)		48.2	Sp. Cond.	367 microS/cm

COMMENTS:

All the results are within WHO guidelines for drinking water, except Manganese which is slightly higher than the recommended value of 0.1mg/l for drinking purposes.

SITE ID - 804 (89/15)

MINERAL RESOURCES DEPARTMENT
LABORATORY
[Signature]
LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L.

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bitalavu, Sigatoka Valley	WELL No.	Ashok Kumar Kristina's BH
SITE	B8	COLLECTOR'S No	AL 09/10
DATE COLLECTED	06/10/2009	LAB No.	15175
DATE SUBMITTED	09/10/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	29/10/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS				ANIONS			
		mg/L	e.p.m			mg/L	e.p.m
Calcium	Ca	34.2	1.70658	Bicarbonate	HCO ₃	166.73	2.734372
Magnesium	Mg	10.528	0.866454	Carbonate	CO ₃	0	0
Sodium	Na	11.648	0.506688	Sulphate	SO ₄	8	0.1664
Potassium	K	0.9898	0.025339	Chloride	Cl	9.75	0.27495
Manganese	Mn	0.074	0.002694				
Iron	Fe	0.156	0.008377				
			3.116132				3.175722

TDS	Evap. (180 °C)	180	IONIC BALANCE	0.9%
	Sum of Ions	242		
TOTAL HARDNESS (Calc.) CaCO ₃		129	pH	6.73
Silica(mg/L)		50	Sp. Cond.	289 microS/cm

COMMENTS:
All the above results are within WHO guidelines for drinking water except pH which is slightly lower than the recommended range of 6.8 - 8.5 for drinking purposes.

MINERAL RESOURCES DEPARTMENT
LABORATORY
NOTE: Brown sediments were noticed at the bottom of the water sample.
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

SITE B - B8

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Biltooru, Sigatoka Valley	WELL No.	Shiju Kamal Prasad's BH
SITE ID	B10	COLLECTOR'S No	AL 09/11
DATE COLLECTED	06/10/2009	LAB No.	15176
DATE SUBMITTED	09/10/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	29/10/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtred		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	47.44	2.367256	Bicarbonate HCO ₃	298.87	4.868608
Magnesium Mg	11.579	0.952952	Carbonate CO ₃	0	0
Sodium Na	41.618	1.810383	Sulphate SO ₄	7	0.1456
Potassium K	0.4501	0.011523	Chloride Cl	6.65	0.18753
Manganese Mn	0	0			
Iron Fe	0.0235	0.001262			
		5.143375			5.201798

TDS	Evap. (180 °C)	290	IONIC BALANCE	0.6%
	Sum of Ions	412		
TOTAL HARDNESS (Calc.) CaCO ₃		166	pH	7.18
Silica(mg/L)		44.4	Sp. Cond.	469 microS/cm

COMMENTS:
All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY

[Signature]
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L.

Site - L1 - B10

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION		Bilalpur, Sigatoka Valley	WELL No.	Sunil Prasad's BH
Site Id		B II	COLLECTOR'S No	AL 09/12
DATE COLLECTED		06/10/2009	LAB No.	15177
DATE SUBMITTED		09/10/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED		29/10/2009		
GEOLOGY		Recent Alluvium		
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
			River	☐
			Spring	☐
			Surface	☐
			Depth	☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	51.99	2.594301	Bicarbonate HCO ₃	284.3	4.33452
Magnesium Mg	18.058	1.486009	Carbonate CO ₃	0	0
Sodium Na	19.29	0.839115	Sulphate SO ₄	8	0.1664
Potassium K	0.3815	0.009766	Chloride Cl	13.29	0.374778
Manganese Mn	0	0			
Iron Fe	0.0205	0.001101			
		4.930292			4.875698

TDS	Evap. (180 °C)	287	IONIC BALANCE	0.6%
	Sum of ions	375		
TOTAL HARDNESS (Calc.) CaCO ₃		204	pH	7.1
Silica(mg/L)		55.9	Sp. Cond.	463 microS/cm

COMMENTS:

All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY

[Signature]
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site Id - B II

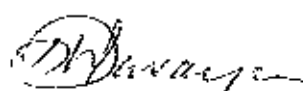
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dhulevi, Sigaloka Valley		WELL No.	Mahen's Export
SITE ID	B9		COLLECTOR'S No	AL 09/13
DATE COLLECTED	06/10/2009		LAB No.	15178
DATE SUBMITTED	09/10/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	29/10/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐	Depth ☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	69.65	3.475535	Bicarbonate HCO ₃	370.07	6.069148
Magnesium Mg	26.424	2.174695	Carbonate CO ₃	0	0
Sodium Na	47.354	2.059899	Sulphate SO ₄	72	1.4976
Potassium K	0.4289	0.01098	Chloride Cl	24.82	0.699924
Manganese Mn	0	0			
Iron Fe	0.0215	0.001155			
		7.722264			8.266672

TDS	Evap. (180 °C)	450	IONIC BALANCE	3.4%
	Sum of Ions	611		
TOTAL HARDNESS (Calc.) CaCO ₃		283	pH	7.23
Silica(mg/L)		50.4	Sp. Cond.	729 microS/cm

COMMENTS:	
All the results are within WHO guidelines for drinking water. However If water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT LABORATORY	 LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

SITE ID - B9

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bitalovu, Sigatoka Valley		WELL No.	Hardeo Mohit Kumar's BH
SITE ID	B3		COLLECTOR'S No	AL 09/14
DATE COLLECTED	06/10/2009		LAB No.	15179
DATE SUBMITTED	09/10/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	29/10/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐	Depth ☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	54.51	2.720049	Bicarbonate HCO ₃	292.8	4.80192
Magnesium Mg	19.623	1.614973	Carbonate CO ₃	0	0
Sodium Na	35.627	1.549775	Sulphate SO ₄	24	0.4992
Potassium K	0.5532	0.014162	Chloride Cl	32.79	0.924678
Manganese Mn	0	0			
Iron Fe	0.0225	0.001208			
		5.900167			6.225798

TDS	Evap. (180 °C)	353	IONIC BALANCE	2.7%
	Sum of ions	460		
TOTAL HARDNESS (Calc.) CaCO ₃		217	pH	7.25
Silica(mg/L)		44	Sp. Cond.	570 microS/cm

COMMENTS:	
All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT	
Note: Brown sediments was deposited at the bottom of the water sample.	LABORATORY
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	LABORATORY MANAGER

SITE ID-B3 (Manoj Kumar)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION		Dubokavu, Sigatoka Valley	WELL No.	Pumping Well 4 (90/15)
SITE ID		D2	COLLECTOR'S No	AL 09/15
DATE COLLECTED		08/10/2009	LAB No.	15180
DATE SUBMITTED		09/10/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED		29/10/2009		
GEOLOGY		Recent Alluvium		
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
			River	☐
			Surface	☐
			Spring	☐
			Depth	☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Ek	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	30.28	1.510972	Bicarbonate HCO ₃	178.93	2.934452
Magnesium Mg	9.61	0.790903	Carbonate CO ₃	0	0
Sodium Na	12.79	0.556365	Sulphate SO ₄	2	0.0416
Potassium K	0.6693	0.017134	Chloride Cl	2.22	0.062604
Manganese Mn	0	0			
Iron Fe	0.0325	0.001745			
		2.877119			3.038656

TDS	Evap. (180 °C)	168	IONIC BALANCE	2.7%
	Sum of Ions	237		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	6.69
Silica(mg/L)			Sp. Cond.	271 microS/cm

COMMENTS:

All the results are within WHO guidelines for drinking water except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site ID - D2 (90/15)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu, Sigatoka Valley	WELL No.	Pumping Well 3 (90/16)
SITE ID	D3	COLLECTOR'S No	AL 09/16
DATE COLLECTED	06/10/2009	LAB No.	15181
DATE SUBMITTED	09/10/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	29/10/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	37.35	1.883765	Bicarbonate HCO ₃	211.47	3.468108
Magnesium Mg	11.206	0.922254	Carbonate CO ₃	0	0
Sodium Na	13.226	0.575331	Sulphate SO ₄	0	0
Potassium K	1.5011	0.038428	Chloride Cl	3.55	0.10011
Manganese Mn	0.079	0.002876			
Iron Fe	0.166	0.008914			
		3.411568			3.568218

TDS	Evap. (180 °C)	193	IONIC BALANCE	2.2%
	Sum of Ions	279		
TOTAL HARDNESS (Calc.) CaCO ₃		139	pH	6.9
Silica(mg/L)		49.3	Sp. Cond.	312 microS/cm

COMMENTS:

All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site ID - D3 (90/16)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubaleva, Sigatoka Valley	WELL No.	Pumping Well 2 (89/15)
SITE ID	D4	COLLECTOR'S No	AL 09/17
DATE COLLECTED	06/10/2009	LAB No.	15182
DATE SUBMITTED	09/10/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	29/10/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	45.43	2.266957	Bicarbonate HCO ₃	260	4.264
Magnesium Mg	13.87	1.141501	Carbonate CO ₃	0	0
Sodium Na	16.37	0.712095	Sulphate SO ₄	0	0
Potassium K	1.3545	0.034675	Chloride Cl	3.1	0.08742
Manganese Mn	0.0935	0.003403			
Iron Fe	0.047	0.002524			
		4.161156			4.35142

TDS	Evap. (180 °C)	231	IONIC BALANCE	2.2%
	Sum of Ions	340		
TOTAL HARDNESS (Calc.) CaCO ₃		171	pH	6.88
Silica(mg/L)		43.7	Sp. Cond.	373 microS/cm

COMMENTS:
All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY

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LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

SITE ID - D4 (89/15)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (1), Sigayoka valley		WELL No.	Kamal Kishore Water Pjt 8H
SITE	Nb 2		COLLECTOR'S No	AL 09/20
DATE COLLECTED	27/10/2009		LAB No.	15193
DATE SUBMITTED	28/10/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	☒	HDW	
	Flowing		Pumped	☒
			River	
			Spring	
			Surface	
			Depth	

SITE ANALYSIS/TREATMENT	
Sp. Cond.	653 microS/cm
pH	8.3
Eh	mv
D.O.	0.61 mg/L
Temp	27.5 °C
HCO ₃	mg/L
Filtered	
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	90.64	4.522936	Bicarbonate HCO ₃	341.6	5.60224
Magnesium Mg	7.349	0.604823	Carbonate CO ₃	0	0
Sodium Na	16.467	0.716315	Sulphate SO ₄	2	0.0416
Potassium K	0.685	0.017536	Chloride Cl	7.53	0.212346
Manganese Mn	0	0			
Iron Fe	0	0			
		5.861609			5.856186

TDS	Evap. (180 °C)	330	IONIC BALANCE	0.0%
	Sum of Ions	406		
TOTAL HARDNESS (Calc.) CaCO ₃		257	pH	7.15
Silica(mg/L)		46	Sp. Cond.	533 microS/cm

COMMENTS:
All the results are with in WHO Guidelines for Drinking water.
MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site LP - Nb2

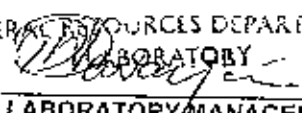
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (2) Sigatoka valley		WELL No.	Pranesh Singh Water Pjct B
Site Id	Nb 3		COLLECTOR'S No	AL 09/21
DATE COLLECTED	27/10/2009		LAB No.	15194
DATE SUBMITTED	28/10/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
	River	☐	Spring	☐
	Surface	☐	Depth	☐

SITE ANALYSIS/TREATMENT				
Sp. Cond.	455	microS/cm	pH	8.2
Eh		mv	D.O.	0.49 mg/L
Temp	27.4	°C	HCO ₃	mg/L
Filtered			Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	65.74	3.280426	Bicarbonate HCO ₃	305	5.002
Magnesium Mg	9.41	0.774443	Carbonate CO ₃	0	0
Sodium Na	25.57	1.112295	Sulphate SO ₄	4	0.0832
Potassium K	0.6248	0.015995	Chloride Cl	12.41	0.349982
Manganese Mn	0	0			
Iron Fe	0	0			
		5.183159			5.435162

TDS	Evap. (180 °C)	305	IONIC BALANCE	2.4%	
	Sum of Ions	423			
TOTAL HARDNESS (Calc.) CaCO ₃			203	pH	7.27
Silica(mg/L)			4.1	Sp. Cond.	493 microS/cm

COMMENTS:	
All the results are with in WHO Guidelines for Drinking water.	
MINERAL RESOURCES DEPARTMENT  LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L, & SULPHAT E = 0.1 mg/L	

Site Id - Nb 3

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (2) Sigatoka valley		WELL No.	Ram Deos 8H
site id	Nb6		COLLECTOR'S No	AL 09/22
DATE COLLECTED	27/10/2009		LAB No.	15195
DATE SUBMITTED	28/10/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	☒	HDW	
	Flowing		Pumped	☒
			River	
			Spring	
			Surface	
			Depth	

SITE ANALYSIS/TREATMENT			
Sp. Cond.	455 microS/cm	pH	8.2
Eh	niv	D.O.	0.49 mg/L
Temp	27.4 °C	HCO ₃	mg/L
Filtored		Acidified	

CATIONS				ANIONS			
		mg/L	e.p.m			mg/L	e.p.m
Calcium	Ca	68.72	3.429128	Bicarbonate	HCO ₃	239.93	3.934852
Magnesium	Mg	9.404	0.773949	Carbonate	CO ₃	0	0
Sodium	Na	25.524	1.110294	Sulphate	SO ₄	5	0.104
Potassium	K	0.6303	0.016136	Chloride	Cl	22.15	0.62463
Manganese	Mn	0	0				
Iron	Fe	0	0				
			5.329507				4.663482

TDS	Evap. (180 °C)	252	IONIC BALANCE	6.7%
	Sum of ions	371		
TOTAL HARDNESS (Calc.) CaCO ₃		210	pH	6.85
Silica(mg/L)		41.6	Sp. Cond.	410 microS/cm

COMMENTS:	
All the results are with in WHO Guidelines for Drinking water.	
 MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.1 mg/L	

site id - Nb6

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	stb 1b	Nabiti (2) Sigatoka valley	WELL No.	Community Project B11
DATE COLLECTED	27/10/2009	Nb1	COLLECTOR'S No	AL 09/23
DATE SUBMITTED	28/10/2009		LAB No.	15196
DATE ANALYSED	02/12/2009		ANALYSIS Rqd.	Full + Silica
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	☒	HOW	
	Flowing		Pumped	☒
			Surface	
			Depth	

SITE ANALYSIS/TREATMENT			
Sp. Cond.	527 microS/cm	pH	8.2
Eh	mv	D.O.	0.38 mg/L
Temp	28 °C	HCO ₃	mg/L
Filtred		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	86.05	4.323835	Bicarbonate HCO ₃	353.8	5.80232
Magnesium Mg	10.999	0.905218	Carbonate CO ₃	0	0
Sodium Na	25.52	1.11012	Sulphate SO ₄	9	0.1872
Potassium K	0.9798	0.025083	Chloride Cl	18.17	0.512394
Manganese Mn	0	0			
Iron Fe	0	0			
		6.364256			6.501914

TDS	Evap. (180 °C)	358	IONIC BALANCE	1.1%
	Sum of ions	505		
TOTAL HARDNESS (Calc.) CaCO ₃		262	pH	7.21
Silica(mg/L)		32.7	Sp. Cond.	584 microS/cm

COMMENTS:

All the results are with in WHO Guidelines for Drinking water.

MINERAL RESOURCES DEPARTMENT
LABORATORY
[Signature]
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site 1b - Nb1

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabiru (1) Sigatoka Valley		WELL No.	Nabiru Indian School BH
SITE ID	Nb 4		COLLECTOR'S No	AL 09/24
DATE COLLECTED	27/10/2009		LAB No.	15197
DATE SUBMITTED	28/10/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐	Depth ☐

SITE ANALYSIS/TREATMENT	
Sp. Cond.	466 microS/cm
pH	8.33
Eh	mv
D.O.	0.43 mg/L
Temp	28 °C
HCO ₃	mg/L
Filtred	
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	62.75	3.131225	Bicarbonate HCO ₃	359.9	5.90236
Magnesium Mg	12.508	1.029408	Carbonate CO ₃	0	0
Sodium Na	31.419	1.366727	Sulphate SO ₄	0	0
Potassium K	1.0385	0.026586	Chloride Cl	7.09	0.199938
Manganese Mn	0	0			
Iron Fe	0	0			
		5.553946			6.102298

TDS	Evap. (180 °C)	323	IONIC BALANCE	4.7%
	Sum of Ions	475		
TOTAL HARDNESS (Calc.) CaCO ₃	208	pH	7.24	
Silica(mg/L)	32.9	Sp. Cond.	521 microS/cm	

COMMENTS:

All the results are with in WHO Guidelines for Drinking water.

SITE ID - Nb4

MINERAL RESOURCES DEPARTMENT
LABORATORY
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (1) Sigatoka Valley	WELL No.	MRO OH 89/29 (Anil Prasad)
Site ID	Nb5	COLLECTOR'S No	AL 09/25
DATE COLLECTED	27/10/2009	LAB No.	15198
DATE SUBMITTED	28/10/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT	
Sp. Cond.	191 microS/cm
pH	7.3
Eh	mv
D.O.	0.26 mg/L
Temp	29.5 °C
HCO ₃	mg/L
Filtered	
Acidified	

CATIONS			ANIONS		
	mg/L	a.p.m		mg/L	a.p.m
Calcium Ca	22.31	1.113289	Bicarbonate HCO ₃	114.68	1.880752
Magnesium Mg	7.099	0.584248	Carbonate CO ₃	0	0
Sodium Na	12.41	0.539835	Sulphate SO ₄	1	0.0208
Potassium K	0.4045	0.010355	Chloride Cl	7.53	0.212346
Manganese Mn	0	0			
Iron Fe	0	0			
	2.247707				2.113898

TDS	Evap. (180 °C)	129	IONIC BALANCE	3.1%
	Sum of Ions	165		
TOTAL HARDNESS (Calc.) CaCO ₃		85	pH	6.57
Silica(mg/L)		42.4	Sp. Cond.	209 microS/cm

COMMENTS:	All the results are within WHO Guidelines for drinking water except for pH which is lower than WHO Guideline value. (WHO Value for pH is between 6.5-8.5) MINERAL RESOURCES DEPARTMENT <i>Anil Prasad</i> LABORATORY/MANAGER
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L.	

Site ID - Nb5 (Anil Prasad)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	site 1b Dubslavu, Sigatoka Valley.	WELL No.	Pumping well 4 (90/15)
DATE COLLECTED	03/11/2009	COLLECTOR'S No	AI 09/26
DATE SUBMITTED	05/11/2009	LAB No.	15200
DATE ANALYSED	02/12/2009	ANALYSIS Rqd.	Full + Silica
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		40m.

SITE ANALYSIS/TREATMENT	
Sp. Cond.	294 microS/cm
pH	6.07
Eh	mv
D.O.	mg/L
Temp	26.2 °C
HCO ₃	mg/L
Filtered	
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	32.87	1.640213	Bicarbonate HCO ₃	186.05	3.05122
Magnesium Mg	10.798	0.888758	Carbonate CO ₃	0	0
Sodium Na	16.725	0.727538	Sulphate SO ₄	0	0
Potassium K	0.0338	0.000865	Chloride Cl	3.1	0.08742
Manganese Mn	0	0			
Iron Fe	0	0			
		3.257373			3.13864

TDS	Evap. (180 °C)	189	IONIC BALANCE	1.9%
	Sum of ions	250		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	6.64
Silica(mg/L)			Sp. Cond.	305 microS/cm

COMMENTS:

All the results are with in WHO Guidelines for drinking water except for pH which is Lower then WHO Guideline value. (WHO Value for pH is between 6.8-8.5)

MINERAL RESOURCES DEPARTMENT
LABORATORY
LABORATORY/MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

sta 1b - D2 (90/15)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu, Sigatoka Valley.		WELL No.	Pumping 3 (90/16)
SITE ID	D3		COLLECTOR'S No	AL 09/27
DATE COLLECTED	03/11/2009		LAB No.	15199
DATE SUBMITTED	05/11/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
	River	☐	Spring	☐
	Surface	☐	Depth	☐

SITE ANALYSIS/TREATMENT				
Sp. Cond.	279	microS/cm	pH	6.04
Eh		mv	D.O.	
Temp	27.4	°C	HCO ₃	
Filtered			Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	34.86	1.739514	Bicarbonate HCO ₃	213.5	3.5014
Magnesium Mg	11.008	0.905958	Carbonate CO ₃	0	0
Sodium Na	21.408	0.931248	Sulphate SO ₄	0	0
Potassium K	1.5751	0.040323	Chloride Cl	4.21	0.118722
Manganese Mn	0	0			
Iron Fe	0	0			
		3.617043			3.620122

TDS	Evap. (180 °C)	191	IONIC BALANCE	0.0%
	Sum of Ions	287		
TOTAL HARDNESS (Calc.) CaCO ₃		132	pH	6.8
Silica(mg/L)		51.2	Sp. Cond.	209 microS/cm

COMMENTS:	
All the results are with in WHO Guidelines for drinking water except for pH which is Lower then WHO Guideline value. (WHO Value for pH is between 6.8-8.5)	
 MINERAL RESOURCES DEPARTMENT LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

SITE ID - D3 (90/16)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu, Sigatoka Valley.		WELL No.	Pumping Well 2 (89/15)
SITE ID	b4		COLLECTOR'S No	AL 09/28
DATE COLLECTED	03/11/2009		LAB No.	15201
DATE SUBMITTED	05/11/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐	Depth 43m

SITE ANALYSIS/TREATMENT

Sp. Cond.	341 microS/cm	pH	6.6
Eh	mv	D.O.	mg/L
Temp	26.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS

	mg/L	e.p.m
Calcium Ca	45.81	2.285919
Magnesium Mg	14.119	1.161994
Sodium Na	21.049	0.915632
Potassium K	1.3867	0.0355
Manganese Mn	0.15	0.00546
Iron Fe	0.0405	0.002175
		4.406679

ANIONS

	mg/L	e.p.m
Bicarbonate HCO ₃	274.5	4.5018
Carbonate CO ₃	0	0
Sulphate SO ₄	0	0
Chloride Cl	3.55	0.10011
		4.60191

TDS	Evap. (180 °C)	242	IONIC BALANCE	2.2%
	Sum of Ions	361		
TOTAL HARDNESS (Calc.) CaCO ₃		173	pH	6.89
Silica(mg/L)		43.2	Sp. Cond.	391 microS/cm

COMMENTS:

All the results are within WHO Guidelines for Drinking Water

MINERAL RESOURCES DEPARTMENT
LABORATORY
[Signature]
LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site ID - b4 (89/15)

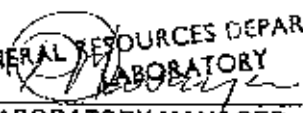
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Raurongo, Sigatoka Valley	WELL No.	Aml Grand BH
Site ID	D1	COLLECTOR'S No	AL 09/29
DATE COLLECTED	03/11/2009	LAB No.	15202
DATE SUBMITTED	05/11/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		30m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	389 microS/cm	pH	6.3
Eh	mv	D.O.	mg/L
Temp	27.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	47.81	2.385719	Bicarbonate HCO ₃	298.9	4.90196
Magnesium Mg	17.894	1.472676	Carbonate CO ₃	0	0
Sodium Na	28.121	1.223264	Sulphate SO ₄	0	0
Potassium K	0.7797	0.01996	Chloride Cl	8.42	0.237444
Manganese Mn	0	0			
Iron Fe	0	0			
		5.101619			5.139404

TDS	Evap. (180 °C)	276	IONIC BALANCE	0.4%
	Sum of Ions	402		
TOTAL HARDNESS (Calc.) CaCO ₃		193	pH	7.38
Silica(mg/L)		28.11	Sp. Cond.	446 microS/cm

COMMENTS:	
All the results are within WHO Guidelines for Drinking Water	
 MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L, & SULPHATE = 0.4 mg/L	

SITE ID - D1

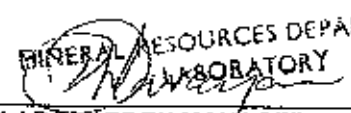
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalovu, Sigatoka Valley	WELL No.	Agricultural Station BH
Site ID	D8	COLLECTOR'S No	AL 09/30
DATE COLLECTED	03/11/2009	LAB No.	15203
DATE SUBMITTED	05/11/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐ 30m		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	396 microS/cm	pH	6.8
Eh	mv	D.O.	mg/L
Temp	27 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	43.82	2.186618	Bicarbonate HCO ₃	286.7	4.70188
Magnesium Mg	18.464	1.519587	Carbonate CO ₃	0	0
Sodium Na	30.052	1.307262	Sulphate SO ₄	2	0.0416
Potassium K	0.9002	0.023045	Chloride Cl	8.86	0.249852
Manganese Mn	0	0			
Iron Fe	0	0			
		5.036512			4.993332

TDS	Evap. (180 °C)	282	IONIC BALANCE	0.4%
	Sum of Ions	391		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.43
Silica(mg/L)			Sp. Cond.	457 microS/cm

COMMENTS:	
All the results are within WHO Guidelines for Drinking Water	
 MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER	
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

SITE ID - D8 (MPL station)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu, Sigatoka Valley	WELL No.	Sigatoka River	Jubartata
DATE COLLECTED	03/11/2009	COLLECTOR'S No	AL 09/31	meander
DATE SUBMITTED	05/11/2009	LAB No.	15204	
DATE ANALYSED	02/12/2009	ANALYSIS Rqd.	Full + Silica	
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	NDW	River	Spring
	Flowing	Pumped	Surface	Depth
				30m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	212 microS/cm	pH	7.2
Eh	mv	D.O.	mg/L
Temp	27 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	27.09	1.351791	Bicarbonate HCO ₃	125.05	2.05082
Magnesium Mg	6.696	0.551081	Carbonate CO ₃	0	0
Sodium Na	16.483	0.717011	Sulphate SO ₄	6	0.1248
Potassium K	1.6154	0.041354	Chloride Cl	18.83	0.531006
Manganese Mn	0	0			
Iron Fe	0	0			
		2.661237			2.706626

TDS	Evap. (180 °C)	152	IONIC BALANCE	0.8%
	Sum of Ions	202		
TOTAL HARDNESS (Calc.) CaCO ₃		95	pH	7.94
Silica(mg/L)		24.1	Sp. Cond.	246 microS/cm

COMMENTS:

All the results are within WHO Guidelines for Drinking Water

MINERAL RESOURCES DEPARTMENT
LABORATORY
LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

SITE LD - D 10 (Jubartata meander)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka	WELL No.	Sigatoka River	Bilalevu
SITE ID	B15	COLLECTOR'S No	AL 09/32	meander
DATE COLLECTED	03/11/2009	LAB No.	15205	
DATE SUBMITTED	05/11/2009	ANALYSIS Rqd.	Full + Silica	
DATE ANALYSED	02/12/2009			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐			
	Flowing ☐ Pumped ☒ Surface ☐ Depth			20m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	254 microS/cm	pH	6.4
Eh	mv	D.O.	mg/L
Temp	27.3 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	32.27	1.610273	Bicarbonate HCO ₃	155.55	2.55102
Magnesium Mg	0.915	0.816005	Carbonate CO ₃	0	0
Sodium Na	15.542	0.676077	Sulphate SO ₄	5	0.104
Potassium K	0.9563	0.024481	Chloride Cl	13.29	0.374778
Manganese Mn	0.047	0.001711			
Iron Fe	0.021	0.001128			
		3.129674			3.029798

TDS	Evap. (180 °C)	177	IONIC BALANCE	1.6%	
	Sum of Ions	233			
TOTAL HARDNESS (Calc.) CaCO ₃			121	pH	6.51
Silica(mg/L)			47.6	Sp. Cond.	286 microS/cm

COMMENTS:

All the results are with in WHO Guideline Values except for pH which is lower than WHO guideline values. WHO guidelines value for pH (Between 6.8-8.5)

MINERAL RESOURCES DEPARTMENT
LABORATORY
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

SITE ID - Bilalevu meander

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalovo, Sigatoka	WELL No.	Oxbow Lake @ Makena Export
SITE ID	B14	COLLECTOR'S No	AL 09/33
DATE COLLECTED	04/11/2009	LAB No.	15206
DATE SUBMITTED	04/11/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	136 microS/cm	pH	7.3
Eh	mv	D.O.	mg/L
Temp	26.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	13.55	0.676145	Bicarbonate HCO ₃	103.7	1.70068
Magnesium Mg	0.199	0.510178	Carbonate CO ₃	0	0
Sodium Na	12.927	0.562325	Sulphate SO ₄	0	0
Potassium K	1.8549	0.047485	Chloride Cl	3.1	0.08742
Manganese Mn	0	0			
Iron Fe	0	0			
		1.796133			1.7881

TDS	Evap. (180 °C)	100.1	IONIC BALANCE	0.2%
	Sum of Ions	141		
TOTAL HARDNESS (Calc.) CaCO ₃	59	pH	7.65	
Silica(mg/L)	20.3	Sp. Cond.	161.5 microS/cm	

COMMENTS:
All the results are within WHO guideline for Drinking water.
 MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

SITE ID - B14 (Oxbow Lakes)

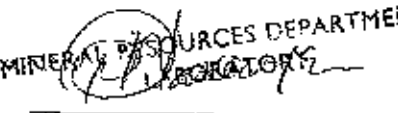
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bitalavu, Sigatoka Valley.		WELL No.	Tone water Project BH
DATE COLLECTED	04/11/2009		COLLECTOR'S No	AL 09/34
DATE SUBMITTED	04/11/2009		LAB No.	15207
DATE ANALYSED	02/12/2009		ANALYSIS Rqd.	Full + Silica
GEOLOGY	Cici Sandstone.			
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☒
	Flowing ☐	Pumped ☒	Surface ☐	Depth ☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	419 microS/cm	pH	6.9
Eh	mv	D.O.	mg/L
Temp	27.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	53.78	2.683622	Bicarbonate HCO ₃	292.8	4.80192
Magnesium Mg	13.392	1.102162	Carbonate CO ₃	0	0
Sodium Na	31.519	1.371077	Sulphate SO ₄	2	0.0416
Potassium K	0.4767	0.012204	Chloride Cl	11.08	0.312456
Manganese Mn	0	0			
Iron Fe	0	0			
		5.169064			5.155976

TDS	Evap. (180 °C)	288	IONIC BALANCE	0.1%
	Sum of Ions	405		
TOTAL HARDNESS (Calc.) CaCO ₃		189	pH	7.45
Silica(mg/L)		39.9	Sp. Cond.	466 microS/cm

COMMENTS:	 MINERAL RESOURCES DEPARTMENT LABORATORY
All the results are within WHO guideline for Drinking water.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

SITE 10-B2

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dilalevu, Sigatoka Valley.	WELL No.	Tubakeli
Site ID	B1	COLLECTOR'S No	AL 09/35
DATE COLLECTED	04/11/2009	LAB No.	15208
DATE SUBMITTED	04/11/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009		
GEOLOGY	Cici Sandstone.		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☒ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Doph ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	410 microS/cm	pH	7.1
Eh	mv	D.O.	mg/L
Temp	27.1 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	56.77	2.832823	Bicarbonate HCO ₃	298.9	4.90196
Magnesium Mg	8.01	0.659223	Carbonate CO ₃	0	0
Sodium Na	34.368	1.495008	Sulphate SO ₄	2	0.0416
Potassium K	0.9908	0.025364	Chloride Cl	7.98	0.225036
Manganese Mn	0	0			
Iron Fe	0	0			
		5.012418			5.168596

TDS	Evap. (180 °C)	265	IONIC BALANCE	1.5%
	Sum of Ions	409		
TOTAL HARDNESS (Calc.) CaCO ₃			175	pH
Silica(mg/L)			29.9	Sp. Cond.
				461 microS/cm

COMMENTS:	
All the results are with in WHO guideline for Drinking water.	
MINERAL RESOURCES DEPARTMENT  LABORATORY MANAGER	
NOTE : DEFLECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site ID - B1

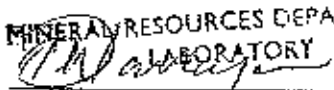
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Tavuto, Sigatoka Valley.		WELL No.	Bulatale Store BH.
Site ID	B6		COLLECTOR'S No	AL 09/36
DATE COLLECTED	04/11/2009		LAB No.	15209
DATE SUBMITTED	04/11/2009		ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	02/12/2009			
GEOLOGY	Cici Sandstone.			
SOURCE				
TYPE	Borehole	☒	HDW	
	Flowing		Pumped	☒
	River	☒	Spring	
	Surface		Depth	

SITE ANALYSIS/TREATMENT				
Sp. Cond.	491	microS/cm	pH	6.8
Ek		mv	D.O.	
Temp	27.7	°C	HCO ₃	
Filtered			Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	44.82	2.236518	Bicarbonate HCO ₃	231.8	3.80152
Magnesium Mg	11.856	0.975749	Carbonate CO ₃	0	0
Sodium Na	30.699	1.335407	Sulphate SO ₄	5	0.104
Potassium K	0.8464	0.021668	Chloride Cl	11.08	0.312456
Manganese Mn	0	0			
Iron Fe	0	0			
		4.569341			4.217976

TDS	Evap. (180 °C)	251	IONIC BALANCE	4.0%
	Sum of Ions	336		
TOTAL HARDNESS (Calc.) CaCO ₃			161	pH
Silica(mg/L)			29	Sp. Cond.
				405 microS/cm

COMMENTS:	
All the results are with In WHO Guideline Values except for pH which is lower than WHO guideline values. WHO guidelines value for pH (Between 6.8-8.5)	
MINERAL RESOURCES DEPARTMENT  LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site ID - B6

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

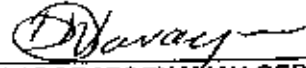
LOCATION	Bilalevi, Sigatoka Valley	WELL No.	Mr Austin Kerby (1)
Site Id	B5	COLLECTOR'S No	AL 09/37
DATE COLLECTED	08/12/2009	LAB No.	15219
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth 23 m		

(Tavito)

SITE ANALYSIS/TREATMENT			
Sp. Cond.	512 microS/cm	pH	6.92
Eh	mv	D.O.	mg/L
Temp	26.7 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	3.984	0.198802	Bicarbonate HCO ₃	390.4	6.40256
Magnesium Mg	0.254	0.020904	Carbonate CO ₃	0	0
Sodium Na	170.24	7.40544	Sulphate SO ₄	5	0.104
Potassium K	0.5703	0.0146	Chloride Cl	20.38	0.574716
Manganese Mn	0	0			
Iron Fe	0	0			
		7.639745			7.081276

TDS	Evap. (180 °C)	372	IONIC BALANCE	3.8%
	Sum of Ions	591		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.97
Silica(mg/L)			Sp. Cond.	601 microS/cm

COMMENTS:	
All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.02%.	 LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

SITE ID - B5 (TAVITO)

MINERAL RESOURCES DEPARTMENT
LABORATORY

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bifalevu, Sigatoka Valley	WELL No.	Mr Austin Korby (2)
SITE ID	B4	COLLECTOR'S No	AL 09/38
DATE COLLECTED	08/12/2009	LAB No.	15220
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

(Waiwai)

SITE ANALYSIS/TREATMENT			
Sp. Cond.	448 microS/cm	pH	6.9
Eh	mv	D.O.	mg/L
Temp	27.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	78.684	3.926332	Bicarbonate HCO ₃	335.5	5.5022
Magnesium Mg	13.7	1.12751	Carbonate CO ₃	0	0
Sodium Na	28.94	1.25889	Sulphate SO ₄	2	0.0416
Potassium K	1.1881	0.030415	Chloride Cl	13.29	0.374778
Manganese Mn	0	0			
Iron Fe	0	0			
		6.343147			5.918578

TDS	Evap. (180 °C)	344	IONIC BALANCE	3.5%
	Sum of Ions	473		
TOTAL HARDNESS (Calc.) CaCO ₃		253	pH	7.8
Silica(mg/L)		27.1	Sp. Cond.	556 microS/cm

COMMENTS:

All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Salinity measured on field was 0.01%.

W. Waiwai
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
LABORATORY

SITE ID - B4

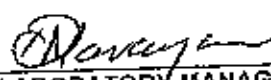
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dilalevu, Sigatoka Valley	WELL No.	Bulatale Stone BH
Site ID	B6	COLLECTOR'S No	AL 09/39
DATE COLLECTED	08/12/2009	LAB No.	15222
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒	HDW ☐	River ☐
	Flowing ☐	Pumped ☒	Surface ☐
			Spring ☐
			Depth ☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	318 microS/cm	pH	5.9
Eh	mv	D.O.	mg/L
Temp	27 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
		mg/L			mg/L
Calcium	Ca	39.44	Bicarbonate	HCO ₃	195.2
Magnesium	Mg	11.56	Carbonate	CO ₃	0
Sodium	Na	27.812	Sulphate	SO ₄	6
Potassium	K	0.763	Chloride	Cl	19.5
Manganese	Mn	0			
Iron	Fe	0			
		4.148799			3.87598

TDS	Evap. (180 °C)	242	IONIC BALANCE	3.4%
	Sum of Ions	300		
TOTAL HARDNESS (Calc.) CaCO ₃		146	pH	6.72
Silica(mg/L)		29.3	Sp. Cond	393 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water, except pH which is slightly lower than the recommended value of 6.8-8.5.	
Note: Salinity measured on field was 0.01%.	
 LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

MINERAL RESOURCES DEPARTMENT
LABORATORY

SITE ID - B6

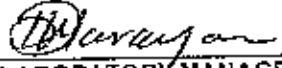
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Shir Shankar BH
Site ID	B7	COLLECTOR'S No	AL 09/40
DATE COLLECTED	08/12/2009	LAB No.	15221
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Clci Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth 50 m		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	383 microS/cm	pH	7.1
Eh	mv	D.O.	mg/L
Temp	27.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	54.98	2.743502	Bicarbonate HCO ₃	268.4	4.40176
Magnesium Mg	8.793	0.723664	Carbonate CO ₃	0	0
Sodium Na	32.067	1.394915	Sulphate SO ₄	3	0.0624
Potassium K	1.1399	0.029181	Chloride Cl	17.73	0.499986
Manganese Mn	0	0			
Iron Fe	0	0			
		4.891262			4.964146

TDS	Evap. (180 °C)	293	IONIC BALANCE	0.7%
	Sum of Ions	386		
TOTAL HARDNESS (Calc.) CaCO₃	173	pH	8.05	
Silica(mg/L)	252	Sp. Cond.	473 microS/cm	

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%	
 LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

MINERAL RESOURCES DEPARTMENT
LABORATORY

SITE ID - B7

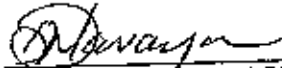
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Manoj Kumar BH
Site ID	B3	COLLECTOR'S No	AL 09/41
DATE COLLECTED	08/12/2009	LAB No.	15223
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	485 microS/cm	pH	7.5
Eh	mv	D.O.	mg/L
Temp	27.1 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	56.57	2.822843	Bicarbonate HCO ₃	276.5	4.5346
Magnesium Mg	20.891	1.719329	Carbonate CO ₃	0	0
Sodium Na	35.485	1.543598	Sulphate SO ₄	18	0.3744
Potassium K	0.5437	0.013919	Chloride Cl	38.99	1.099518
Manganese Mn	0	0			
Iron Fe	0	0			
		6.099689			6.008518

TDS	Evap. (180 °C)	370	IONIC BALANCE	0.8%	
	Sum of Ions	447			
TOTAL HARDNESS (Calc.) CaCO ₃			227	pH	7.5
Silica(mg/L)			473	Sp. Cond.	597 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%	 LABORATORY MANAGER
Brown substance noticed settled at the bottom of the water sample.	
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

MINERAL RESOURCES DEPARTMENT
LABORATORY

Site ID - B3 (Manoj Kumar)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalpur, Sigatoka Valley	WELL No.	Ashok Kumar BH
Site Id	B8	COLLECTOR'S No	AL 09/42
DATE COLLECTED	08/12/2009	LAB No.	15224
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		20 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	244 microS/cm	pH	5.9
Eh	mv	D.O.	mg/L
Temp	27.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	31.0752	1.550652	Bicarbonate HCO ₃	146.4	2.40096
Magnesium Mg	10.523	0.866043	Carbonate CO ₃	0	0
Sodium Na	16.125	0.701438	Sulphate SO ₄	5	0.104
Potassium K	0.9005	0.023053	Chloride Cl	9.74	0.274668
Manganese Mn	0.046	0.001674			
Iron Fe	0.073	0.00392			
		3.14678			2.779628

TDS	Evap. (180 °C)	184	IONIC BALANCE	6.2%
	Sum of Ions	220		
TOTAL HARDNESS (Calc.) CaCO ₃		121	pH	6.56
Silica(mg/L)		49.0	Sp. Cond.	297 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water, except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.	
MINERAL RESOURCES DEPARTMENT	
LABORATORY	
LABORATORY MANAGER	
NOTE: DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

Site Id - B8

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Shir Kamal Prasad 8H
Site ID	B10	COLLECTOR'S No	AL 09/43
DATE COLLECTED	08/12/2009	LAB No.	15225
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	421 microS/cm	pH	7.2
Eh	mv	D.O.	mg/L
Temp	26.8 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	47.14	2.352286	Bicarbonate HCO ₃	317.2	5.20208
Magnesium Mg	13.14	1.081422	Carbonate CO ₃	0	0
Sodium Na	46.915	2.040803	Sulphate SO ₄	8	0.1664
Potassium K	0.537	0.013747	Chloride Cl	8.86	0.249852
Manganese Mn	0.044	0.001602			
Iron Fe	0	0			
		5.489859			5.618332

TDS	Evap. (180 °C)	321	IONIC BALANCE	1.2%	
	Sum of ions	442			
TOTAL HARDNESS (Calc.) CaCO ₃			172	pH	7.42
Silica(mg/L)			40.4	Sp. Cond.	518 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT	
LABORATORY <i>Praveen</i>	
LABORATORY MANAGER	
Note: Salinity measured on field was 0.01%	
NOTE: DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

Site ID : B10

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalavu, Sigatoka Valley	WELL No.	Pumping Well 3 (90/16)
Site Id	D3	COLLECTOR'S No	AL 09/44
DATE COLLECTED	08/12/2009	LAB No.	15226
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		40 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	270 microS/cm	pH	6.9
Eh	mv	D.O.	mg/L
Temp	27.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	37.45	1.868755	Bicarbonate HCO ₃	195.2	3.20128
Magnesium Mg	11.598	0.954515	Carbonate CO ₃	0	0
Sodium Na	16.287	0.708485	Sulphate SO ₄	0	0
Potassium K	1.4093	0.036078	Chloride Cl	6.65	0.18753
Manganese Mn	0.069	0.002512			
Iron Fe	0	0			
		3.570345			3.36881

TDS	Evap. (180 °C)	202	IONIC BALANCE	2.6%
	Sum of Ions	269		
TOTAL HARDNESS (Calc.) CaCO ₃		141	pH	6.89
Silica(mg/L)		50.5	Sp. Cond.	327 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Salinity measured on field was 0.01%

Dharan
LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
LABORATORY

Site Id- D3 (90/16)

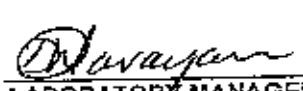
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Rautoglu, Sigatoka Valley	WELL No.	Arat Chand BH
Site Id	D1	COLLECTOR'S No	AL 09/45
DATE COLLECTED	10/12/2009	LAB No.	15227
DATE SUBMITTED	11/12/2009	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	18/01/2010		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	374 microS/cm	pH	7.7
Eh	mv	D.O.	mg/L
Temp	27.3 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	47.41	2.365759	Bicarbonate HCO ₃	274.5	4.5018
Magnesium Mg	19.002	1.563885	Carbonate CO ₃	0	0
Sodium Na	25.374	1.103639	Sulphate SO ₄	0	0
Potassium K	0.7327	0.018757	Chloride Cl	11.96	0.337272
Manganese Mn	0	0			
Iron Fe	0	0			
		5.052019			4.839072

TDS	Evap. (180 °C)	285	IONIC BALANCE	2.2%	
	Sum of Ions	379			
TOTAL HARDNESS (Calc.) CaCO ₃			197	pH	7.52
Silica(mg/L)			28.7	Sp. Cond.	481 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01% There was about 4cm space left in the sample. NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	
 LABORATORY MANAGER	

MINERAL RESOURCES DEPARTMENT
LABORATORY

Site Id: D1.

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Qalimaro, Sigatoka Valley	WELL No.	Fractured Rock Spring
DATE COLLECTED	27/01/2010	COLLECTOR'S No	AL 10/01
DATE SUBMITTED	29/01/2010	LAB No.	15231
DATE ANALYSED	26/02/2010	ANALYSIS Rqd.	Full + Silica
GEOLOGY	Qalimaro Limestone		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Depth

Matantavuni

SITE ANALYSIS/TREATMENT	
Sp. Cond.	390 microS/cm
pH	7.15
Eh	mv
D.O.	0.49 mg/L
Temp	24.9 °C
HCO ₃	mg/L
Filtered	Acidified

CATIONS			ANIONS		
		mg/L		mg/L	e.p.m
Calcium	Ca	76.83	Bicarbonate HCO ₃	274.5	4.5018
Magnesium	Mg	3.507	Carbonate CO ₃	0	0
Sodium	Na	12.75	Sulphate SO ₄	0	0
Potassium	K	0.8662	Chloride Cl	5.32	0.150024
Manganese	Mn	0			
Iron	Fe	0			
		4.699243			4.651824

TDS	Evap. (180 °C)	281	IONIC BALANCE	0.5%
	Sum of Ions	374		
TOTAL HARDNESS (Calc.) CaCO ₃		206	pH	7.19
Silica(mg/L)		17.8	Sp. Cond.	422 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes, then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT	
LABORATORY	
NOTE: Salinity measured on field was 0.01%.	LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

SITE LD - Q3 (Matantavuni Spring)

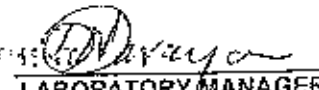
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (I), Sigatoka Valley	WELL No.	Karnal Kishore DH
Site Id	Nb2	COLLECTOR'S No	AL 10/02
DATE COLLECTED	27/01/2010	LAB No.	15232
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full + Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Tari Formation		
SOURCE			
TYPE	Borehole ☒ Flowing ☐ Pumped ☒	River ☐ Spring ☐ Surface ☐ Depth ☐	

SITE ANALYSIS/TREATMENT			
Sp. Cond.	437 microS/cm	pH	6.9
Eh	mv	D.O.	0.51 mg/L
Temp	27.9 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	66.94	4.338306	Bicarbonate HCO ₃	329.4	5.40216
Magnesium Mg	6.275	0.516433	Carbonate CO ₃	0	0
Sodium Na	18.95	0.737325	Sulphate SO ₄	1	0.0208
Potassium K	0.7089	0.018148	Chloride Cl	7.53	0.212346
Manganese Mn	0	0			
Iron Fe	0	0			
		5.610211			5.635306

TDS	Evap. (180 °C)	324	IONIC BALANCE	0.2%
	Sum of Ions	449		
TOTAL HARDNESS (Calc.) CaCO ₃		243	pH	7.15
Silica(mg/L)		36.8	Sp. Cond.	524 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	MINERAL RESOURCES DEPARTMENT LABORATORY
	 LABORATORY MANAGER
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id - Nb2

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabilu (1), Sigatoka Valley	WELL No.	Anil Prasad Bh
Site Id	Nb5	COLLECTOR'S No	AL 10/03
DATE COLLECTED	27/01/2010	LAB No.	15233
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
Flowing	☐	Pumped	☒
Surface	☐	Depth	20 m

SITE ANALYSIS/TREATMENT		pH	6.5
Sp. Cond.	182 microS/cm	D.O.	0.26 mg/L
Eh	mv	HCO ₃	mg/L
Temp	27 °C	Acidified	
Filtered			

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	23.85	1.190115	Bicarbonate HCO ₃	122	2.0008
Magnesium Mg	6.765	0.55676	Carbonate CO ₃	0	0
Sodium Na	12.78	0.55593	Sulphate SO ₄	0	0
Potassium K	0.4637	0.011871	Chloride Cl	4.87	0.137334
Manganese Mn	0	0			
Iron Fe	0	0			
		2.314675			2.138134

TDS	Evap. (180 °C)	136	IONIC BALANCE	4.0%
	Sum of Ions	171		
TOTAL HARDNESS (Calc.) CaCO ₃	87	pH	6.57	
Silica(mg/L)	34.6	Sp. Cond.	220 microS/cm	

COMMENTS:

All the above results are within WHO guidelines for drinking water except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.

Note: Salinity measured on field as stated was 0.00%.

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site Id - Nb5

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabilu (2), Sigtoka Valley	WELL No.	Pramend Chand t/H
Site	Nb 3	COLLECTOR'S No	AL 10/04
DATE COLLECTED	27/01/2010	LAB No.	15234
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
TYPE			
Flowing	☐	Pumped	☒
Surface	☐	Depth	25 m

SITE ANALYSIS/TREATMENT		pH	6.9
Sp. Cond.	388 microS/cm	D.O.	0.39 mg/L
Eh	mv	HCO ₃	mg/L
Temp	28 °C	Acidified	
Filtered			

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	65.711	3.278979	Bicarbonate HCO ₃	298.9	4.90196
Magnesium Mg	7.425	0.611078	Carbonate CO ₃	0	0
Sodium Na	24.964	1.085934	Sulphate SO ₄	3	0.0624
Potassium K	0.6439	0.016484	Chloride Cl	10.64	0.300048
Manganese Mn	0	0			
Iron Fe	0	0			
		4.992474			5.264408

TDS	Evap. (180 °C)	293	IONIC BALANCE	2.7%
	Sum of ions	411		
TOTAL HARDNESS (Calc.) CaCO ₃		195	pH	7.16
Silica(mg/L)		28.6	Sp. Cond.	474 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes, then further bacterial count test is advised.

Note: Salinity measured on field as stated was 0.01%.

MINERAL RESOURCES DEPARTMENT

LABORATORY

LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site 12 - Nb 3 (Pramend Singh)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabtu (2), Sigatoka Valley	WELL No.	Community BH
Site Id	Nb1	COLLECTOR'S No	AL 10/05
DATE COLLECTED	27/01/2010	LAB No.	15235
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
Flowing	☐	Pumped	☒
Surface	☐	Depth	23 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	477 microS/cm	pH	6.9
Eh	nv	D.O.	0.3 mg/L
Temp	28.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	81.89	4.086311	Bicarbonate HCO ₃	323.3	5.30212
Magnesium Mg	8.385	0.690086	Carbonate CO ₃	0	0
Sodium Na	28.801	1.257194	Sulphate SO ₄	9	0.1872
Potassium K	0.9698	0.024827	Chloride Cl	16.4	0.46248
Manganese Mn	0	0			
Iron Fe	0	0			
		6.058417			5.9518

TDS	Evap. (180 °C)	355	IONIC BALANCE	0.9%
	Sum of Ions	469		
TOTAL HARDNESS (Calc.) CaCO ₃		239	pH	7.44
Silica(mg/L)		30.3	Sp. Cond.	572 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Salinity measured on field as stated was 0.01%.

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site Id - Nb 1

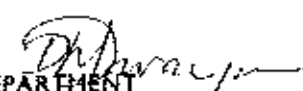
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilatevu, Sigatoka Valley		WELL No.	Ashok Kumar BH
Site Id	NB 88		COLLECTOR'S No	AL 10/06
DATE COLLECTED	28/01/2010		LAB No.	15236
DATE SUBMITTED	29/01/2010		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	28/02/2010			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole	☒ v	HDW	☐
	Flowing	☐	Pumped	☒ v
	River	☐	Spring	☐
	Surface	☐	Depth	20 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	245 microS/cm	pH	6.6
Eh	mv	D.O.	0.44 mg/L
Temp	27.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	29.92	1.493008	Bicarbonate HCO ₃	146.4	2.40096
Magnesium Mg	8.607	0.708356	Carbonate CO ₃	0	0
Sodium Na	15.988	0.695478	Sulphate SO ₄	5	0.104
Potassium K	0.9242	0.02366	Chloride Cl	6.65	0.18753
Manganese Mn	0	0			
Iron Fe	0.063	0.003383			
		2.923885			2.69249

TDS	Evap. (180 °C)	174	IONIC BALANCE	4.1%
	Sum of Ions	214		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	6.52
Silica(mg/L)			Sp. Cond.	281 microS/cm

COMMENTS: All the above results are within WHO guidelines for drinking water, except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes. Note: The water sample was brownish in colour and there was space of 1cm below the lid. Note: Salinity of water measured on field as stated was 0.00%. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L		 MINERAL RESOURCES DEPARTMENT LABORATORY MANAGER
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Site Id - NB 88

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Sigatoka River (Bilalevu)
Site Id	B15	COLLECTOR'S No	AL 10/07 Meander
DATE COLLECTED	Not Specified	LAB No.	15237
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole	HOW	River ☒ Spring
	Flowing	Pumped	Surface ☒ Depth

SITE ANALYSIS/TREATMENT		pH	7.45
Sp. Cond.	144 microS/cm	D.O.	0.39 mg/L
Eh	mv	HCO ₃	mg/L
Temp	31.4 °C	Acidified	
Filtered			

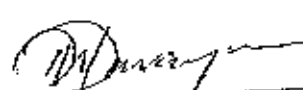
CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	21.03	1.049397	Bicarbonate HCO ₃	102.46	1.660672
Magnesium Mg	4.088	0.336442	Carbonate CO ₃	0	0
Sodium Na	13.413	0.583466	Sulphate SO ₄	3	0.0624
Potassium K	1.696	0.043418	Chloride Cl	3.99	0.112518
Manganese Mn	0	0			
Iron Fe	0	0			
		2.012723			1.85559

TDS	Evap. (180 °C)	116.7	IONIC BALANCE	4.1%
	Sum of Ions	150		
TOTAL HARDNESS (Calc.) CaCO ₃		69	pH	7.91
Silica(mg/L)		21.2	Sp. Cond.	188.3 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY


LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site Id - B15 (Bilalevu meander)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Ravinotogo, Sigatoka Valley	WELL No.	Ami Chand BH
Site Id :	D1	COLLECTOR'S No	AL 10/08
DATE COLLECTED	28/01/2010	LAB No.	15238
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	365 microS/cm	pH	7.6
Eh	mv	D.O.	0.32 mg/L
Temp	28 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	47.51	2.370749	Bicarbonate HCO ₃	298.9	4.90196
Magnesium Mg	15.303	1.259437	Carbonate CO ₃	0	0
Sodium Na	28.465	1.238228	Sulphate SO ₄	0	0
Potassium K	0.7882	0.020178	Chloride Cl	9.31	0.262542
Manganese Mn	0	0			
Iron Fe	0	0			
		4.888591			5.164502

TDS	Evap. (180 °C)	279	IONIC BALANCE	2.7%
	Sum of Ions	400		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.92
Silica(mg/L)			Sp. Cond.	450 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT

NOTE: Salinity of the sample measured on field as stated: LABORATORY

[Signature]
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site Id : D1 (Ami Chand, Ravinotogo, Dubalem)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubofevu, Sigatoka Valley	WELL No.	Agricultural Station	MPI
St 1A	D8	COLLECTOR'S No	AL 10/09	
DATE COLLECTED	28/01/2010	LAB No.	15239	
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica	
DATE ANALYSED	26/02/2010			
GEOLOGY	Recent Alluvium			
SOURCE				
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐			
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐			

SITE ANALYSIS/TREATMENT			
Sp. Cond.	363 microS/cm	pH	7.5
Eh	mv	D.O.	0.49 mg/L
Temp	28.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	43.27	2.159173	Bicarbonate HCO ₃	280.8	4.60184
Magnesium Mg	14.962	1.231373	Carbonate CO ₃	0	0
Sodium Na	28.66	1.24671	Sulphate SO ₄	1	0.0208
Potassium K	1.0373	0.026555	Chloride Cl	9.31	0.262542
Manganese Mn	0	0			
Iron Fe	0	0			
		4.66381			4.885182

TDS	Evap. (180 °C)	275	IONIC BALANCE	2.3%
	Sum of Ions	379		
TOTAL HARDNESS (Calc.) CaCO ₃	170	pH	7.46	
Silica(mg/L)	28.9	Sp. Cond.	445 microS/cm	

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT LABORATORY Note: Salinity of sample as measured on field was 0.01%. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L. <i>[Signature]</i> LABORATORY MANAGER	

Site - D8 (MPI station)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Duhalevu, Sigatoka Valley	WELL No.	Pumping Well 3 (90/16)
site Id	D3	COLLECTOR'S No	AL 10/10
DATE COLLECTED	28/01/2010	LAB No.	15240
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	272 microS/cm	pH	7.2
Eh	mv	D.O.	0.48 mg/L
Temp	30.7 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS				ANIONS			
		mg/L	e.p.m			mg/L	e.p.m
Calcium	Ca	36.6	1.82634	Bicarbonate	HCO ₃	207.4	3.40136
Magnesium	Mg	9.891	0.814029	Carbonate	CO ₃	0	0
Sodium	Na	17.037	0.74111	Sulphate	SO ₄	0	0
Potassium	K	1.5828	0.04052	Chloride	Cl	3.99	0.112518
Manganese	Mn	0.077	0.002803				
Iron	Fe	0	0				
			3.424801				3.513878

TDS	Evap. (180 °C)	197	IONIC BALANCE	1.3%
	Sum of Ions	277		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.09
Silica(mg/L)			Sp. Cond.	318 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field as stated was 0.01%.	
MINERAL RESOURCES DEPARTMENT LABORATORY	
LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

site Id - D3 (90/16)

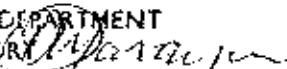
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Gubalevu, Sigatoka Valley	WELL No.	Pumping Well 2 (89/15)
Site Id	b4	COLLECTOR'S No	AL 10/11
DATE COLLECTED	28/01/2010	LAB No.	15241
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	315 microS/cm	pH	6.9
Eh	mv	D.O.	0.18 mg/L
Temp	27.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	43.67	2.179133	Bicarbonate HCO ₃	256.2	4.20168
Magnesium Mg	11.66	0.959618	Carbonate CO ₃	0	0
Sodium Na	20.873	0.907976	Sulphate SO ₄	0	0
Potassium K	1.3704	0.035082	Chloride Cl	2.22	0.062604
Manganese Mn	0.139	0.00506			
Iron Fe	0	0			
		4.086868			4.264284

TDS	Evap. (180 °C)	239	IONIC BALANCE	2.1%
	Sum of Ions	336		
TOTAL HARDNESS (Calc.) CaCO ₃		157	pH	6.84
Silica(mg/L)		57.67544	Sp. Cond.	386 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water, except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.	
MINERAL RESOURCES DEPARTMENT LABORATORY  LABORATORY MANAGER	
Note: Salinity measured on field as stated was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

Site Id - b4 (89/15)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabaka, Sigatoka Valley	WELL No.	Oxbow Lake
Site La	Na3	COLLECTOR'S No	AL 10/12
DATE COLLECTED	28/01/2010	LAB No.	15242
DATE SUBMITTED	29/01/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	26/02/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole	HDW	River ☒ Spring
	Flowing	Pumped	Surface ☒ Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	63 microS/cm	pH	7.27
Eh	mv	D.O.	0.22 mg/L
Temp	32 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	8.49	0.423651	Bicarbonate HCO ₃	46.36	0.760304
Magnesium Mg	1.647	0.135548	Carbonate CO ₃	0	0
Sodium Na	6.715	0.292103	Sulphate SO ₄	0	0
Potassium K	2.9014	0.074276	Chloride Cl	2.22	0.082604
Manganese Mn	0	0			
Iron Fe	0	0			
		0.925577			0.822908

TDS	Evap. (180 °C)	52.8	IONIC BALANCE	5.9%
	Sum of Ions	68		
TOTAL HARDNESS (Calc.) CaCO ₃		28	pH	7.15
Silica(mg/L)		9.7	Sp. Cond.	85.2 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

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LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site La - Na3 (Oxbow Lake, Nabaka)

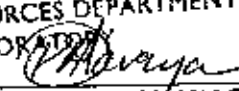
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabaka, Sigatoka Valley	WELL No.	Qalitaka Creek
site	Na 2	COLLECTOR'S No	AL 10/13
DATE COLLECTED	02/02/2010	LAB No.	15244
DATE SUBMITTED	03/02/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	25/03/2010		
GEOLOGY	Cicl Sandstone		
SOURCE			
TYPE	Borehole	HDW	River ☒ Spring
	Flowing	Pumped	Surface ☒ Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	147 microS/cm	pH	7.06
Eh	mv	D.O.	0.56 mg/L
Temp	27.1 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	22.02	1.098798	Bicarbonate HCO ₃	102.48	1.680672
Magnesium Mg	4.377	0.360227	Carbonate CO ₃	0	0
Sodium Na	11.422	0.496857	Sulphate SO ₄	0	0
Potassium K	0.9885	0.025254	Chloride Cl	2.22	0.062604
Manganese Mn	0	0			
Iron Fe	0	0			
		1.981137			1.743276

TDS	Evap. (180 °C)	110.6	IONIC BALANCE	6.4%	
	Sum of Ions	144			
TOTAL HARDNESS (Calc.) CaCO ₃			73	pH	7.79
Silica(mg/L)			19.9	Sp. Cond.	178.8 microS/cm

COMMENTS: All the above results are within WHO guideline for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: The water sample was about 1cm below the lid when brought to the Lab.	MINERAL RESOURCES DEPARTMENT LABORATORY  LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

Site Id - Na 2 (Qalitaka Creek)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Bulatale Store BH
✓ Id	B6	COLLECTOR'S No	AL 10/14
DATE COLLECTED	02/02/2010	LAB No.	15245
DATE SUBMITTED	03/02/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	25/03/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	393 microS/cm	pH	6.81
Eh	mv	D.O.	0.41 mg/L
Temp	29.1 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	40.88	2.039912	Bicarbonate HCO ₃	219.6	3.60144
Magnesium Mg	11.167	0.919044	Carbonate CO ₃	0	0
Sodium Na	28.312	1.231572	Sulphate SO ₄	7	0.1456
Potassium K	0.8574	0.021949	Chloride Cl	14.62	0.412284
Manganese Mn	0	0			
Iron Fe	0	0			
		4.212478			4.159324

TDS	Evap. (180 °C)	259	IONIC BALANCE	0.6%
	Sum of Ions	322		
TOTAL HARDNESS (Calc.) CaCO ₃		148	pH	6.6
Silica(mg/L)		25.4	Sp. Cond.	418 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.

Note: Salinity measured on field as stated was 0.01%.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

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LABORATORY
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LABORATORY MANAGER

Site Id - B6 (Bulatale Store)

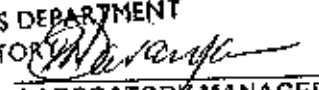
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Shiu Shankar BH
Site Id	B7	COLLECTOR'S No	AL 10/15
DATE COLLECTED	02/02/2010	LAB No.	15246
DATE SUBMITTED	03/02/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	25/03/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	376 microS/cm	pH	7.3
Eh	mv	D.O.	0.4 mg/L
Temp	28.3 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	51.9	2.58981	Bicarbonate HCO ₃	256.2	4.20168
Magnesium Mg	7.178	0.590749	Carbonate CO ₃	0	0
Sodium Na	31.093	1.352546	Sulphate SO ₄	3	0.0624
Potassium K	1.196	0.030618	Chloride Cl	11.08	0.312456
Manganese Mn	0	0			
Iron Fe	0	0			
		4.563723			4.576536

TDS	Evap. (180 °C)	282	IONIC BALANCE	0.1%
	Sum of Ions	362		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.78
Silica(mg/L)			Sp. Cond.	455 microS/cm

COMMENTS: All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised. Note: Salinity measured on field as stated was 0.01%. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L		MINERAL RESOURCES DEPARTMENT LABORATORY  LABORATORY MANAGER
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Site Id - B7 (Shiu Shankar)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilafewa, Sigatoka Valley	WELL No.	Arjun Singh BH
Site ID	B12	COLLECTOR'S No	AL 10/16
DATE COLLECTED	02/02/2010	LAB No.	15247
DATE SUBMITTED	03/02/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	25/03/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	279 microS/cm	pH	6.7
Eh	mv	D.O.	0.19 mg/L
Temp	29.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	37.74	1.883226	Bicarbonate HCO ₃	201.3	3.30132
Magnesium Mg	11.612	0.955668	Carbonate CO ₃	0	0
Sodium Na	14.97	0.651195	Sulphate SO ₄	2	0.0416
Potassium K	0.9408	0.024079	Chloride Cl	3.99	0.112518
Manganese Mn	0.172	0.006261			
Iron Fe	0	0			
		3.520429			3.455438

TDS	Evap. (180°C)	216	IONIC BALANCE	0.9%	
	Sum of Ions	273			
TOTAL HARDNESS (Calc.) CaCO ₃			142	pH	6.76
Silica(mg/L)			5.17	Sp. Cond.	350 microS/cm

COMMENTS:
 All the results are within WHO guidelines for drinking water except Manganese which is higher than the recommended value of 0.1mg/l and pH which is lower than the recommended range of 6.8-8.5.

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LABORATORY
[Signature]
LABORATORY MANAGER

Note: Salinity measured on field as stated was 0.01%.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site ID - B12 (Arjun Lal)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalavu, Sigatoka Valley	WELL No.	Oxbow Lake at Mahen's E.
DATE COLLECTED	02/02/2010	COLLECTOR'S No	AL 10/17
DATE SUBMITTED	03/02/2010	LAB No.	15248
DATE ANALYSED	25/03/2010	ANALYSIS Rqd.	Full plus Silica
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Spring
			Depth

SITE ANALYSIS/TREATMENT	
Sp. Cond.	133 microS/cm
Eh	mv
Temp	30 °C
Filtered	
pH	7.3
D.O.	0.19 mg/L
HCO ₃	mg/L
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	14.15	0.706085	Bicarbonate HCO ₃	92.72	1.520608
Magnesium Mg	5.277	0.434297	Carbonate CO ₃	0	0
Sodium Na	12.49	0.543315	Sulphate SO ₄	1	0.0208
Potassium K	2.1728	0.055624	Chloride Cl	5.76	0.162432
Manganese Mn	0	0			
Iron Fe	0	0			
		1.739321			1.70384

TDS	Evap. (180 °C)	101.9	IONIC BALANCE	1.0%
	Sum of ions	134		
TOTAL HARDNESS (Calc.) CaCO ₃		57	pH	7.45
Silica(mg/L)		2.12	Sp. Cond.	164.4 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Water was slightly brownish in color with some brown deposits at the bottom. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	MINERAL RESOURCES DEPARTMENT LABORATORY <i>[Signature]</i> LABORATORY MANAGER

Site 10 - B14 (Oxbow Lake, Bilalavu)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Mahen's Export BH
site	B9	COLLECTOR'S No.	AL 10/18
DATE COLLECTED	02/02/2010	LAB No.	15249
DATE SUBMITTED	03/02/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	25/03/2010		
GEOLOGY			
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT	
Sp. Cond.	638 microS/cm
Eh	mv
Temp	28.5 °C
Filtered	
pH	7
D.O.	0.38 mg/L
HCO ₃	mg/L
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	67.62	3.374238	Bicarbonate HCO ₃	378.2	6.20248
Magnesium Mg	26.891	2.130829	Carbonate CO ₃	0	0
Sodium Na	48.075	2.004263	Sulphate SO ₄	64	1.3312
Potassium K	0.4893	0.012526	Chloride Cl	26.14	0.737148
Manganese Mn	0	0			
Iron Fe	0	0			
		7.521856			8.270828

TDS	Evap. (180 °C)	473	IONIC BALANCE	4.7%
	Sum of Ions	608		
TOTAL HARDNESS (Calc.) CaCO ₃		275	pH	7.29
Silica(mg/L)		453	Sp. Cond.	763 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Salinity measured on field as stated was 0.02%.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L.

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[Signature]
LABORATORY MANAGER

site 1b - B9 (Mahen's Export)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Bilalevu Community B11
	Bilalevu, Community BH at Sunil Prasad	COLLECTOR'S No	AL 10/19
DATE COLLECTED	05/02/2010	LAB No.	15250
DATE SUBMITTED	08/02/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	25/03/2010		
GEOLOGY	Tari Sandstone		
SOURCE			
TYPE	Borehole ☒	HDW ☐	River ☐ Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐ Depth ☐

SITE ANALYSIS/TREATMENT

Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	42.46	2.118754	Bicarbonate HCO ₃	244	4.0018
Magnesium Mg	15.581	1.282316	Carbonate CO ₃	0	0
Sodium Na	22.244	0.967614	Sulphate SO ₄	5	0.104
Potassium K	0.2936	0.007518	Chloride Cl	10.19	0.287358
Manganese Mn	0	0			
Iron Fe	0	0			
		4.3762			4.392958

TDS	Evap. (180 °C)	268	IONIC BALANCE	0.2%	
	Sum of Ions	340			
TOTAL HARDNESS (Calc.) CaCO ₃			170	pH	7.14
Silica(mg/L)			58.6	Sp. Cond.	433 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY
LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site - B11 (Sunil Prasad)

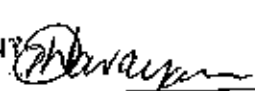
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Site 1b	Ullalevu, Sigatoka Valley	WELL No.	Shiu Kamal Prasad BH
		B 10	COLLECTOR'S No	AL 10/20
DATE COLLECTED		05/02/2010	LAB No.	15251
DATE SUBMITTED		08/02/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED		25/03/2010		
GEOLOGY		Tari Sandstone		
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
			Surface	☐
			Depth	☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtored		Acidified	

CATIONS			ANIONS		
		mg/L		mg/L	e.p.m
Calcium	Ca	40.89	Bicarbonate HCO ₃	317.2	5.20208
Magnesium	Mg	11.594	Carbonate CO ₃	0	0
Sodium	Na	46.652	Sulphate SO ₄	7	0.1456
Potassium	K	0.5532	Chloride Cl	6.65	0.18753
Manganese	Mn	0			
Iron	Fe	0			
		5.046821			6.53521

TDS	Evap. (180 °C)	310	IONIC BALANCE	4.6%
	Sum of Ions	431		
TOTAL HARDNESS (Calc.) CaCO ₃		150	pH	7.81
Silica(mg/L)		397	Sp. Cond.	501 microS/cm

COMMENTS:	
All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT LABORATORY	 LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

site 1b - B 10 (Shiu Prasad)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Tavuto Settlement, Bilalovu, Sigatoka (B5)	WELL No.	Austin Karby (t)
DATE COLLECTED	10/02/2010	COLLECTOR'S No	AL 10/21
DATE SUBMITTED	11/02/2010	LAB No.	15252
DATE ANALYSED	05/02/2010	ANALYSIS Rqd.	
GEOLOGY			
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	514 microS/cm	pH	7.3
Eh	mv	D.O.	mg/L
Temp	26.8 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	3.23	0.161177	Bicarbonate HCO ₃	345.67	5.668988
Magnesium Mg	0.1164	0.00958	Carbonate CO ₃	0	0
Sodium Na	142.92	6.21702	Sulphate SO ₄	5	0.104
Potassium K	0.4006	0.010255	Chloride Cl	14.62	0.412284
Manganese Mn	0	0			
Iron Fe	0	0			
		6.398032			6.185272

TDS	Evap. (180 °C)	363	IONIC BALANCE	1.7%	
	Sum of Ions	512			
TOTAL HARDNESS (Calc.) CaCO ₃			9	pH	7.42
Silica(mg/L)			22.9	Sp. Cond.	585 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes, then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT LABORATORY <i>W. W. W. W.</i> LABORATORY MANAGER	
Note: Salinity of the sample measured on field as stated was 0.02%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

site 1d - B5 (Tavuto)

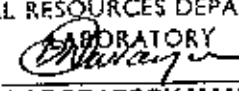
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Tovuto Settlement, Bilelevi		WELL No.	Austin Karby (2)
	Sigatoka (B4)		COLLECTOR'S No	AL 10/22
DATE COLLECTED	10/02/2010		LAB No.	15253
DATE SUBMITTED	11/02/2010		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	0502/10			
GEOLOGY				
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
	River	☐	Spring	☐
	Surface	☐	Depth	☐

SITE ANALYSIS/TREATMENT				
Sp. Cond.	473	microS/cm	pH	7.1
Eh		mv	D.O.	
Temp	27	°C	HCO ₃	
Filtered			Acidified	

CATIONS			ANIONS		
		mg/L		mg/L	e.p.m
Calcium	Ca	74.62	Bicarbonate HCO ₃	341.6	5.60224
Magnesium	Mg	13.401	Carbonate CO ₃	0	0
Sodium	Na	26.122	Sulphate SO ₄	1	0.0208
Potassium	K	1.0986	Chloride Cl	5.78	0.162432
Manganese	Mn	0			
Iron	Fe	0			
		5.826271			5.785472

TDS	Evap. (180°C)	333	IONIC BALANCE	0.4%
	Sum of Ions	462		
TOTAL HARDNESS (Calc.) CaCO ₃		233	pH	7.14
Silica(mg/L)		5.826271	Sp. Cond.	538 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT  LABORATORY MANAGER	
Note: Salinity of the water sample measured on field as stated was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L, & SULPHATE E = 0.4 mg/L	

Site 1.2 - B4 (Waiwani)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bifalevu, Sigatoka Valley	WELL No.	Ashok Kumar's BH
Site Id	B8	COLLECTOR'S No	AL 10/23
DATE COLLECTED	25/03/2010	LAB No.	15268
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		20 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	201 microS/cm	pH	6.4
Eh	mv	D.O.	0.14 mg/L
Temp	27.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	30.67	1.530433	Bicarbonate HCO ₃	146.4	2.40096
Magnesium Mg	9.65	0.794195	Carbonate CO ₃	0	0
Sodium Na	16.186	0.704091	Sulphate SO ₄	4	0.0832
Potassium K	1.0595	0.027123	Chloride Cl	5.76	0.162432
Manganese Mn	0	0			
Iron Fe	0.065	0.003491			
		3.059333			2.646592

TDS	Evap. (180 °C)	175	IONIC BALANCE	7.2%
	Sum of Ions	214		
TOTAL HARDNESS (Calc.) CaCO ₃		116	pH	6.7
Silica(mg/L)		50.2	Sp. Cond.	283 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.	
Note: Brown deposits noticed at the bottom of the sample after some time.	MINERAL RESOURCES DEPARTMENT LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id - B8 (Ashok Kumar)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalovu, Sigatoka Valley	WELL No.	Sigatoka River Meander
Site Id	B15	COLLECTOR'S No	AL 10/24
DATE COLLECTED	25/03/2010	LAB No.	15269
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Tari Formation		
SOURCE			
TYPE	Borehole	HDW	River ☒ Spring
	Flowing	Pumped	Surface ☒ Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	113 microS/cm	pH	6.94
Eh	mv	D.O.	0.11 mg/L
Temp	27.4 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS				ANIONS			
		mg/L	e.p.m			mg/L	e.p.m
Calcium	Ca	16.51	0.823849	Bicarbonate	HCO ₃	82.96	1.360544
Magnesium	Mg	3.631	0.298831	Carbonate	CO ₃	0	0
Sodium	Na	11.626	0.505731	Sulphate	SO ₄	1	0.0208
Potassium	K	1.5231	0.038991	Chloride	Cl	1.77	0.049914
Manganese	Mn	0	0				
Iron	Fe	0.503	0.027011				
			1.694414				1.431258

TDS	Evap. (180 °C)	91.2	IONIC BALANCE	8.4%	
	Sum of Ions	120			
TOTAL HARDNESS (Calc.) CaCO ₃			56	pH	7.57
Silica(mg/L)			23.1	Sp. Cond.	147.2 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water, except Iron which is higher than the recommended value of 0.3mg/l for drinking purposes.

Note: Brown deposits noticed at the bottom of the sample after some time.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
LABORATORY
[Signature]
LABORATORY MANAGER

Site Id - B15 (Bilalovu Meander)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Qalimare, Sigatoka Valley	WELL No.	Nacula Spring
DATE COLLECTED	26/03/2010	COLLECTOR'S No	AL 10/25
DATE SUBMITTED	01/04/2010	LAB No.	15270
DATE ANALYSED	29/04/2010	ANALYSIS Rqd.	Full plus Silica
GEOLOGY	Qalimare Sandstone		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Spring
			Depth

SITE ANALYSIS/TREATMENT	
Sp. Cond.	313 microS/cm
Eh	mv
Temp	25.6 °C
Filtered	
pH	7.41
D.O.	0.12 mg/L
HCO ₃	mg/L
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	80.6	4.02194	Bicarbonate HCO ₃	260.27	4.268428
Magnesium Mg	3.578	0.294469	Carbonate CO ₃	0	0
Sodium Na	11.546	0.502251	Sulphate SO ₄	0	0
Potassium K	0.5089	0.013028	Chloride Cl	3.99	0.112518
Manganese Mn	0	0			
Iron Fe	0.023	0.001235			
		4.832923			4.380946

TDS	Evap. (180 °C)	248	IONIC BALANCE	4.9%
	Sum of Ions	361		
TOTAL HARDNESS (Calc.) CaCO ₃		216	pH	7.19
Silica(mg/L)		25	Sp. Cond.	400 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER	
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id - Q2 (Nacula Spring)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Qalimare, Sigatoka Valley	WELL No.	Matankwai Spring Koroma
Site Id	Q3 Q1 (Koroma)	COLLECTOR'S No	AL 10/26
DATE COLLECTED	26/03/2010	LAB No.	15271
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Qalimare Limestone		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Spring
			Depth

SITE ANALYSIS/TREATMENT	
Sp. Cond.	249 microS/cm
Eh	mv
Temp	24.1 °C
Filtered	
pH	7.7
D.O.	0.14 mg/L
HCO ₃	mg/L
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	60.94	3.040906	Bicarbonate HCO ₃	203.33	3.334612
Magnesium Mg	3.01	0.247723	Carbonate CO ₃	0	0
Sodium Na	11.842	0.515127	Sulphate SO ₄	0	0
Potassium K	0.4682	0.011986	Chloride Cl	3.99	0.112518
Manganese Mn	0	0			
Iron Fe	0	0			
		3.815742			3.44713

TDS	Evap. (180 °C)	203	IONIC BALANCE	5.1%
	Sum of Ions	284		
TOTAL HARDNESS (Calc.) CaCO ₃		165	pH	8.04
Silica(mg/L)		14.1	Sp. Cond.	328 microS/cm

COMMENTS:
All the results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
[Signature]
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Q1 (Koroma Spring)
Site Id - Q3 (Matankwai Spring)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Qalimare, Sigatoka Valley	WELL No.	Matanitu Spring
	Q3	COLLECTOR'S No	AL 10/27+
DATE COLLECTED	26/03/2010	LAB No.	15272
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Qalimare Limestone		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Spring
			Depth

Matanitu Spring

SITE ANALYSIS/TREATMENT			
Sp. Cond.	303 microS/cm	pH	7.29
Eh	mv	D.O.	0.14 mg/L
Temp	24.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS				ANIONS			
		mg/L	e.p.m			mg/L	e.p.m
Calcium	Ca	74.7	3.72753	Bicarbonate	HCO ₃	252.13	4.134932
Magnesium	Mg	3.704	0.304839	Carbonate	CO ₃	0	0
Sodium	Na	12.868	0.559758	Sulphate	SO ₄	0	0
Potassium	K	0.8421	0.021558	Chloride	Cl	4.65	0.13113
Manganese	Mn	0	0				
Iron	Fe	0.026	0.001396				
			4.615081				4.266062

TDS	Evap. (180 °C)	243	IONIC BALANCE	3.9%
	Sum of Ions	349		
TOTAL HARDNESS (Calc.) CaCO ₃			202	pH
Silica(mg/L)			27.9	Sp. Cond.
				392 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	
MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER	

Site Lb - Q3 (Matanitu Spring)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabalu, Sigatoka Valley	WELL No.	Kamat Kishor BH
site <u>Ld</u>	<u>Nb2</u>	COLLECTOR'S No	At 10/28
DATE COLLECTED	26/03/2010	LAB No.	15273
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
Flowing	☐	Pumped	☒
Surface	☐	Depth	☐

SITE ANALYSIS/TREATMENT	
Sp. Cond.	400 microS/cm
pH	7.24
Eh	mv
D.O.	0.09 mg/L
Temp	27.9 °C
HCO ₃	mg/L
Filtered	Acidified

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	90.43	4.512457	Bicarbonate HCO ₃	329.4	5.40216
Magnesium Mg	7.084	0.581367	Carbonate CO ₃	0	0
Sodium Na	18.04	0.78474	Sulphate SO ₄	1	0.0208
Potassium K	0.731	0.018714	Chloride Cl	5.76	0.162432
Manganese Mn	0	0			
Iron Fe	0	0			
		5.897278			5.585392

TDS	Evap. (180 °C)	319	IONIC BALANCE	2.7%
	Sum of Ions	452		
TOTAL HARDNESS (Calc.) CaCO ₃		255	pH	7.23
Silica(mg/L)		46.7	Sp. Cond.	515 microS/cm

COMMENTS:
 All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Salinity measured on field was 0.01%.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
 LABORATORY
 LABORATORY MANAGER

site Ld - Nb2

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (t), Sigatoka Valley	WELL No.	And Prasad
DATE COLLECTED	26/03/2010	COLLECTOR'S No	AL 10/29
DATE SUBMITTED	01/04/2010	LAB No.	15274
DATE ANALYSED	29/04/2010	ANALYSIS Rqd.	Full plus Silica
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	184 microS/cm	pH	6.9
Eh	mv	D.O.	0.23 mg/L
Temp	29.1 °C	HCO ₃	mg/L
Filtored		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	23.59	1.177141	Bicarbonate HCO ₃	128.1	2.10084
Magnesium Mg	7.492	0.616592	Carbonate CO ₃	0	0
Sodium Na	14.584	0.634404	Sulphate SO ₄	0	0
Potassium K	0.4496	0.01151	Chloride Cl	3.99	0.112518
Manganese Mn	0	0			
Iron Fe	0.023	0.001235			
		2.440881			2.213358

TDS	Evap. (180 °C)	138	IONIC BALANCE	4.9%
	Sum of Ions	178		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	6.82
Silica(mg/L)			Sp. Cond.	223 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacteriological count test is advised.	
MINERAL RESOURCES DEPARTMENT	
LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L.	

site 1d - Nb 5

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (2), Sigatoka Valley	WELL No.	Pramend Singh
Site	Nb 3	COLLECTOR'S No	AL 10/30
DATE COLLECTED	26/03/2010	LAB No.	15275
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	300 microS/cm	pH	6.78
Eh	mv	D.O.	0.19 mg/L
Temp	28.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	51.11	2.550389	Bicarbonate HCO ₃	195.2	3.20128
Magnesium Mg	7.514	0.618402	Carbonate CO ₃	0	0
Sodium Na	22.41	0.974835	Sulphate SO ₄	4	0.0832
Potassium K	0.6803	0.017416	Chloride Cl	9.31	0.262542
Manganese Mn	0	0			
Iron Fe	0.022	0.001181			
		4.162223			3.547022

TDS	Evap. (180 °C)	228	IONIC BALANCE	8.0%
	Sum of Ions	290		
TOTAL HARDNESS (Calc.) CaCO ₃			159	pH 6.6
Silica(mg/L)			34.3	Sp. Cond. 369 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.	
Note: Salinity measured on field was 0.01%.	MINERAL RESOURCES DEPARTMENT LABORATORY <i>P. Prasad</i> LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id : Nb 3

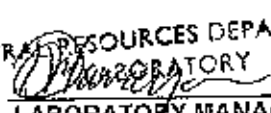
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu (2), Sigatoka Valley		WELL No.	Nabitu Indian School BH
DATE COLLECTED	26/03/2010	COLLECTOR'S No	AL 10/31	
DATE SUBMITTED	01/04/2010	LAB No.	15276	
DATE ANALYSED	29/04/2010	ANALYSIS Rqd.	Full plus Silica	
GEOLOGY	Takaro Sandstone			
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐	Depth ☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	406 microS/cm	pH	7.08
Eh	mv	D.O.	0.14 mg/L
Temp	27.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	68.8	3.43312	Bicarbonate HCO ₃	329.4	5.40216
Magnesium Mg	13.232	1.088994	Carbonate CO ₃	0	0
Sodium Na	35.284	1.534854	Sulphate SO ₄	0	0
Potassium K	1.1057	0.028306	Chloride Cl	7.53	0.212346
Manganese Mn	0	0			
Iron Fe	0	0			
		6.085274			5.614506

TDS	Evap. (180 °C)	321	IONIC BALANCE	4.0%
	Sum of Ions	455		
TOTAL HARDNESS (Calc.) CaCO ₃	226	pH	7.2	
Silica(mg/L)	33.3	Sp. Cond.	519 microS/cm	

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	
 MINERAL RESOURCES DEPARTMENT LABORATORY MANAGER	

Site Id - Nb 4 (Nabitu school)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nahito, Sigatoka Valley	WELL No.	Nabitu Community BH
DATE COLLECTED	26/03/2010	COLLECTOR'S No	AL 10/32
DATE SUBMITTED	01/04/2010	LAB No.	15277
DATE ANALYSED	29/04/2010	ANALYSIS Rqd.	Full plus Silica
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	397 microS/cm	pH	7.3
Eh	mv	D.O.	0.26 mg/L
Temp	27.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	72.73	3.829227	Bicarbonate HCO ₃	329.4	5.40216
Magnesium Mg	7.872	0.647866	Carbonate CO ₃	0	0
Sodium Na	38.584	1.678404	Sulphate SO ₄	8	0.1664
Potassium K	0.9514	0.024356	Chloride Cl	13.29	0.374778
Manganese Mn	0	0			
Iron Fe	0	0			
		5.979852			5.943338

TDS	Evap. (180 °C)	334	IONIC BALANCE	0.3%
	Sum of Ions	471		
TOTAL HARDNESS (Calc.) CaCO ₃		214	pH	7.28
Silica(mg/L)		32	Sp. Cond.	539 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	
 MINERAL RESOURCES DEPARTMENT LABORATORY MANAGER	

Site Ld - N61

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Bulatale Stone BH
Site Id	B6	COLLECTOR'S No	AL 10/33
DATE COLLECTED	27/03/2010	LAB No.	15278
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒	HDW ☐	River ☐ Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐ Depth ☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	349 microS/cm	pH	6.9
En	mv	D.O.	0.48 mg/L
Temp	26.8 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	46.2	2.30538	Bicarbonate HCO ₃	235.87	3.868268
Magnesium Mg	12.804	1.053769	Carbonate CO ₃	0	0
Sodium Na	32.278	1.404093	Sulphate SO ₄	8	0.1664
Potassium K	1.0297	0.02636	Chloride Cl	13.74	0.387468
Manganese Mn	0	0			
Iron Fe	0	0			
		4.789603			4.422136

TDS	Evap. (180 °C)	270	IONIC BALANCE	4.0%	
	Sum of ions	350			
TOTAL HARDNESS (Calc.) CaCO ₃			168	pH	6.4
Silica(mg/L)			29.5	Sp. Cond.	437 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water, except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.

Note: Salinity measured on field was 0.01%.

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
LABORATORY
[Signature]
LABORATORY MANAGER

Site Id - B6

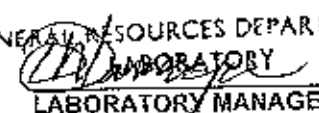
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dilewa, Sigatoka Valley		WELL No.	Sunit Prasad
site	B11		COLLECTOR'S No	AL 10/34
DATE COLLECTED	27/03/2010		LAB No.	15279
DATE SUBMITTED	01/04/2010		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010			
GEOLOGY	Takaro Sandstone			
SOURCE				
TYPE	Borehole	☒	HDW	☐
	Flowing	☐	Pumped	☒
	River	☐	Spring	☐
	Surface	☐	Dopth	☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	343 microS/cm	pH	7.2
Eh	mv	D.O.	0.35 mg/L
Temp	28.7 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	50.13	2.501487	Bicarbonate HCO ₃	252.13	4.134932
Magnesium Mg	17.214	1.416712	Carbonate CO ₃	0	0
Sodium Na	24.434	1.082879	Sulphate SO ₄	7	0.1456
Potassium K	0.3072	0.007864	Chloride Cl	11.08	0.312458
Manganese Mn	0	0			
Iron Fe	0	0			
		4.988943			4.592988

TDS	Evap. (180 °C)	274	IONIC BALANCE	4.1%
	Sum of Ions	362		
TOTAL HARDNESS (Calc.) CaCO ₃		196	pH	7.07
Silica(mg/L)		59.2	Sp. Cond.	442 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
MINERAL RESOURCES DEPARTMENT  LABORATORY MANAGER	
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

Site 1d - B11

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Vunavewa, Sigatoka Valley	WELL No.	Mataukaba Dam
Site Ld	V1	COLLECTOR'S No	AL 10/36
DATE COLLECTED	29/03/2010	LAB No.	15281
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Tari Formation		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surfact
			Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	229 microS/cm	pH	7.7
Eh	mv	D.O.	0.14 mg/L
Temp	25 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	47.16	2.354282	Bicarbonate HCO ₃	187.07	3.067948
Magnesium Mg	4.454	0.366564	Carbonate CO ₃	8.13	0.270729
Sodium Na	20.986	0.912891	Sulphate SO ₄	0	0
Potassium K	0.7773	0.019899	Chloride Cl	1.33	0.037506
Manganese Mn	0	0			
Iron Fe	0	0			
		3.653636			3.376183

TDS	Evap. (180 °C)	183	IONIC BALANCE	3.9%
	Sum of Ions	270		
TOTAL HARDNESS (Calc.) CaCO ₃		136	pH	8.47
Silica(mg/L)		28.9	Sp. Cond.	296 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Ld - V1 (Mataukaba Spring)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Manua, Sigatoka Valley	WELL No.	Navala Dam
<i>Site Id</i>	<i>M1</i>	COLLECTOR'S No	AI 10/37
DATE COLLECTED	29/03/2010	LAB No.	15282
DATE SUBMITTED	01/04/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	29/04/2010		
GEOLOGY	Dakadaka Basalt		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Spring
			Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	355 microS/cm	pH	7.6
Eh	mv	D.O.	0.18 mg/L
Temp	25.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
		mg/L		mg/L	e.p.m
Calcium	Ca	62.91	Bicarbonate HCO ₃	317.2	5.20208
Magnesium	Mg	15.044	Carbonate CO ₃	0	0
Sodium	Na	25.804	Sulphate SO ₄	0	0
Potassium	K	0.6938	Chloride Cl	2.22	0.062604
Manganese	Mn	0			
Iron	Fe	0.031			
		5.51923			5.264684

TDS	Evap. (180 °C)	285	IONIC BALANCE	2.4%
	Sum of Ions	424		
TOTAL HARDNESS (Calc.) CaCO ₃		219	pH	8.06
Silica(mg/L)		42.6	Sp. Cond.	460 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L MINERAL RESOURCES DEPARTMENT LABORATORY <i>[Signature]</i> LABORATORY MANAGER	

Site Id - M1 (Navala Dam)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabaka, Sigaloka Valley	WELL No.	Jamini Jay
Site Id	Na 4	COLLECTOR'S No	AL 10/39
DATE COLLECTED	17/05/2010	LAB No.	15309
DATE SUBMITTED	19/05/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	28/05/2010		
GEOLOGY			
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
Flowing	☐	Pumped	☒
Surface	☐	Depth	☐

SITE ANALYSIS/TREATMENT	
Sp. Cond.	257 microS/cm
pH	7.7
Eh	mv
D.O.	mg/L
Temp	27 °C
HCO ₃	mg/L
Filtered	Acidified

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	36.56	1.624344	Bicarbonate HCO ₃	183	3.0012
Magnesium Mg	11.054	0.909744	Carbonate CO ₃	0	0
Sodium Na	18.841	0.819584	Sulphate SO ₄	3	0.0624
Potassium K	1.2369	0.031665	Chloride Cl	7.09	0.199938
Manganese Mn	0.088	0.003203			
Iron Fe	0	0			
		3.58854			3.263538

TDS	Evap. (180 °C)	203	IONIC BALANCE	4.7%
	Sum of Ions	261		
TOTAL HARDNESS (Calc.) CaCO ₃		137	pH	6.51
Silica(mg/L)		41.3	Sp. Cond.	329 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.

[Signature]
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site Id - Na 4 (Jamini Jay)

MINERAL RESOURCES DEPARTMENT
LABORATORY

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	site 1d	Nabin, Sigatoka Valley	WELL No.	Kamal Kishor BH
DATE COLLECTED	18/05/2010	Nb2	COLLECTOR'S No	AL 10/40
DATE SUBMITTED	19/05/2010		LAB No.	15310
DATE ANALYSED	28/05/2010		ANALYSIS Rqd.	Full plus Silica
GEOLOGY		Tari Formation		
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐	Depth 40 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	408 microS/cm	pH	7.6
Eh	mv	D.O.	0.06 mg/L
Temp	27.7 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	98.32	4.806368	Bicarbonate HCO ₃	341.6	5.60224
Magnesium Mg	8.391	0.690579	Carbonate CO ₃	0	0
Sodium Na	14.271	0.620789	Sulphate SO ₄	1	0.0208
Potassium K	0.6059	0.015511	Chloride Cl	6.65	0.18753
Manganese Mn	0	0			
Iron Fe	0	0			
		6.133247			5.81057

TDS	Evap. (180 °C)	328	IONIC BALANCE	2.7%
	Sum of Ions	469		
TOTAL HARDNESS (Calc.) CaCO ₃		275	pH	7.01
Silica(mg/L)		46.2	Sp. Cond.	530 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Salinity of sample measured on field was 0.01%.

MINERAL RESOURCES DEPARTMENT

LABORATORY LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site 1d - Nb2

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu, Sagatoka Valley	WELL No.	Anil Prasad BH
Site Id	Nb 5	COLLECTOR'S No	AL 10/41
DATE COLLECTED	18/05/2010	LAB No.	15311
DATE SUBMITTED	19/05/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	28/05/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		38 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	185 microS/cm	pH	7.24
Eh	mv	D.O.	0.08 mg/L
Temp	28 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	25.95	1.294905	Bicarbonate HCO ₃	134.2	2.20068
Magnesium Mg	8.719	0.717574	Carbonate CO ₃	0	0
Sodium Na	10.826	0.470931	Sulphate SO ₄	1	0.0208
Potassium K	0.3753	0.009608	Chloride Cl	4.87	0.137334
Manganese Mn	0	0			
Iron Fe	0.046	0.00247			
		2.495488			2.359014

TDS	Evap. (180 °C)	143	IONIC BALANCE	2.8%
	Sum of Ions	186		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	6.56
Silica(mg/L)			Sp. Cond.	231 microS/cm

COMMENTS:

All the results are within WHO guidelines for drinking water, except pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.

MINERAL RESOURCES DEPARTMENT
LABORATORY

W. V. V. V.
LABORATORY MANAGER

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site Id - Nb 5

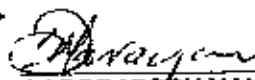
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabiku, Sigatoka Valley	WELL No.	Ram Dea BH
Site Id	Nb 6	COLLECTOR'S No	AL 10/42
DATE COLLECTED	18/05/2010	LAB No.	15312
DATE SUBMITTED	19/05/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	28/05/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		40 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	301 microS/cm	pH	7.12
Eh	mv	D.O.	0.3 mg/L
Temp	27.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	45.21	2.255979	Bicarbonate HCO ₃	201.3	3.30132
Magnesium Mg	5.958	0.490343	Carbonate CO ₃	0	0
Sodium Na	33.226	1.445331	Sulphate SO ₄	8	0.1664
Potassium K	0.4688	0.012001	Chloride Cl	15.51	0.437362
Manganese Mn	0	0			
Iron Fe	0	0			
		4.203655			3.905102

TDS	Evap. (180 °C)	243	IONIC BALANCE	3.7%
	Sum of Ions	310		
TOTAL HARDNESS (Calc.) CaCO ₃		137	pH	8.86
Silica(mg/L)		38.7	Sp. Cond.	393 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%	MINERAL RESOURCES DEPARTMENT LABORATORY
	 LABORATORY MANAGER
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id - Nb 6

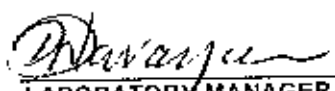
MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabiga, Sigatoka Valley	WELL No.	Pramod Singh
Site Id	Nb 3	COLLECTOR'S No	AL 10/43
DATE COLLECTED	18/05/2010	LAB No.	15313
DATE SUBMITTED	19/05/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	28/05/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
Flowing	☐	Pumped	☒
Surface	☐	Depth	☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	368 microS/cm	pH	7.06
Eh	mv	D.O.	0.9 mg/L
Temp	27.6 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	64.87	3.237013	Bicarbonate HCO ₃	265.35	4.35174
Magnesium Mg	10.206	0.839954	Carbonate CO ₃	0	0
Sodium Na	21.153	0.920166	Sulphate SO ₄	3	0.0624
Potassium K	0.5548	0.014198	Chloride Cl	11.08	0.312456
Manganese Mn	0	0			
Iron Fe	0	0			
		5.01132			4.726596

TDS	Evap. (180 °C)	287	IONIC BALANCE	2.9%
	Sum of Ions	376		
TOTAL HARDNESS (Calc.) CaCO ₃	204	pH	6.83	
Silica(mg/L)	34.3	Sp. Cond.	483 microS/cm	

COMMENTS: All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT LABORATORY	 LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id : Nb 3

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu, Sigatoka Valley	WELL No.	Nabitu Indian School
Site ID	Nb4	COLLECTOR'S No	AL 10/44
DATE COLLECTED	18/05/2010	LAB No.	15314
DATE SUBMITTED	19/05/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	28/05/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	416 microS/cm	pH	7.36
Ek	mv	D.O.	0.15 mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	77.65	3.874735	Bicarbonate HCO ₃	353.8	5.80232
Magnesium Mg	15.566	1.281082	Carbonate CO ₃	0	0
Sodium Na	24.675	1.073363	Sulphate SO ₄	0	0
Potassium K	0.948	0.024269	Chloride Cl	9.31	0.262542
Manganese Mn	0	0			
Iron Fe	0	0			
		6.253448			6.064862

TDS	Evap. (180°C)	337	IONIC BALANCE	1.5%
	Sum of Ions	482		
TOTAL HARDNESS (Calc.) CaCO ₃		258	pH	7.17
Silica(mg/L)		34.65	Sp. Cond.	544 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
MINERAL RESOURCES DEPARTMENT LABORATORY	 LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.1 mg/L	

Site ID: Nb4

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabitu, Sigatoka Valley	WELL No.	Nabitu Community FH
Site Id	Nb 1	COLLECTOR'S No	AL 10/45
DATE COLLECTED	18/05/2010	LAB No.	15315
DATE SUBMITTED	19/05/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	28/05/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	425 microS/cm	pH	7.04
Eh	mv	D.O.	0.05 mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	74.7	3.72753	Bicarbonate HCO ₃	329.4	5.40216
Magnesium Mg	17.812	1.465928	Carbonate CO ₃	0	0
Sodium Na	26.187	1.139135	Sulphate SO ₄	8	0.1664
Potassium K	0.8325	0.021312	Chloride Cl	13.74	0.387468
Manganese Mn	0	0			
Iron Fe	0	0			
		6.353904			5.956028

TDS	Evap. (180 °C)	342	IONIC BALANCE	3.2%
	Sum of Ions	471		
TOTAL HARDNESS (Calc.) CaCO ₃		260	pH	7.16
Silica(mg/L)		31.4	Sp. Cond.	552 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY

[Signature]
LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Site Id - Nb 1

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	Sunil Prasad BH
Site Id	B11	COLLECTOR'S No	AL 10/46
DATE COLLECTED	01/08/2010	LAB No.	15324
DATE SUBMITTED	18/06/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	08/07/2010		
GEOLOGY	Tarl Formation		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		45 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	381 microS/cm	pH	8.5
Eh	mv	D.O.	0.6 mg/L
Temp	27.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	54.06	2.897594	Bicarbonate HCO ₃	27.15	4.4528
Magnesium Mg	20.892	1.719412	Carbonate CO ₃	0	0
Sodium Na	20.481	0.890924	Sulphate SO ₄	6	0.1248
Potassium K	0.2435	0.005234	Chloride Cl	13.74	0.387468
Manganese Mn	0	0			
Iron Fe	0	0			
		5.314183			4.984868

TDS	Evap. (180 °C)	305	IONIC BALANCE	3.4%
	Sum of Ions	387		
TOTAL HARDNESS (Calc.) CaCO ₃	221	pH	7.06	
Silica(mg/L)	58.7	Sp. Cond.	493 microS/cm	

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	
LABORATORY MANAGER	

Site Id : B11

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Qailmare, Sigatoka Valley	WELL No.	Kororua Spring
sta 1b	Q1	COLLECTOR'S No	AL 10/47
DATE COLLECTED	16/06/2010	LAB No.	15325
DATE SUBMITTED	18/06/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	08/07/2010		
GEOLOGY	Qailmare Limestone		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Spring
			Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	255 microS/cm	pH	8.5
Eh	mv	D.O.	mg/L
Temp	23.4 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS				ANIONS			
		mg/L	e.p.m			mg/L	e.p.m
Calcium	Ca	57.99	2.893701	Bicarbonate	HCO ₃	204.4	3.35216
Magnesium	Mg	3.975	0.327143	Carbonate	CO ₃	8.1	0.20313
Sodium	Na	13.389	0.582422	Sulphate	SO ₄	0	0
Potassium	K	0.3714	0.009508	Chloride	Cl	4.87	0.137334
Manganese	Mn	0	0				
Iron	Fe	0	0				
			3.812773				3.692624

TDS	Evap. (180 °C)	197	IONIC BALANCE	1.6%
	Sum of Ions	291		
TOTAL HARDNESS (Calc.) CaCO ₃			181	pH
Silica(mg/L)			20.6	Sp. Cond.
				318 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

Site 1a - Q1

18 microS/cm
1.6%
318 microS/cm

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Qalimare, Sigatoka Valley	WELL No.	Nacula Spring
Site Id	Q2	COLLECTOR'S No	AL 10/48
DATE COLLECTED	16/06/2010	LAB No.	15326
DATE SUBMITTED	18/06/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	08/07/2010		
GEOLOGY	Qalimare Limestone		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Spring
			Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	314 microS/cm	pH	7.2
Eh	mv	D.O.	0.17 mg/L
Tomp	25.3 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	76.67	3.825533	Bicarbonate HCO ₃	265.4	4.35256
Magnesium Mg	3.703	0.304757	Carbonate CO ₃	0	0
Sodium Na	7.828	0.340518	Sulphate SO ₄	0	0
Potassium K	0.2783	0.007124	Chloride Cl	4.87	0.137334
Manganese Mn	0	0			
Iron Fe	0	0			
		4.478232			4.489894

TDS	Evap. (180 °C)	252	IONIC BALANCE	0.1%
	Sum of Ions	359		
TOTAL HARDNESS (Calc.) CaCO ₃	207	pH	7.16	
Silica(mg/L)	13.4	Sp. Cond.	408 microS/cm	

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	LABORATORY MANAGER

Site Id - Q2

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilelevu, Sigatoka Valley		WELL No.	Sigatoka River Meander	
site L6	B15		COLLECTOR'S No	AL 10/50	
DATE COLLECTED	16/06/2010		LAB No.	15328	
DATE SUBMITTED	18/06/2010		ANALYSIS Rqd.	Full plus Silica	
DATE ANALYSED	08/07/2010				
GEOLOGY	Recent Alluvium				
SOURCE					
TYPE	Borehole		HDW		River
	Flowing	✓	Pumped		Surface
					Spring
					Depth

SITE ANALYSIS/TREATMENT					
Sp. Cond.	184	microS/cm	pH	7.9	
Eh		mv	D.O.	0.25	mg/L
Temp	26.7	°C	HCO ₃		mg/L
Filtered			Acidified		

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	27.72	1.383228	Bicarbonate HCO ₃	122.61	2.010804
Magnesium Mg	6.685	0.550176	Carbonate CO ₃	3.97	0.132201
Sodium Na	12.507	0.544055	Sulphate SO ₄	5	0.104
Potassium K	1.6938	0.043381	Chloride Cl	5.76	0.162432
Manganese Mn	0	0			
Iron Fe	0	0			
		2.520819			2.409437

TDS	Evap. (180 °C)	144	IONIC BALANCE	2.3%
	Sum of Ions	186		
TOTAL HARDNESS (Calc.) CaCO ₃			97	pH
Silica(mg/L)			19.6	Sp. Cond.
				233 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

site L2 : B15

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Mavua, Sigatoka Valley	WELL No.	Navofa Spring
Site Id	M1	COLLECTOR'S No	AL 10/49
DATE COLLECTED	18/08/2010	LAB No.	15327
DATE SUBMITTED	18/08/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	08/07/2010		
GEOLOGY	Tari Formation		
SOURCE			
TYPE	Borehole	HDW	River
	Flowing	Pumped	Surface
			Depth
			Spring

SITE ANALYSIS/TREATMENT			
Sp. Cond.	392 microS/cm	pH	7.6
Eh	mv	D.O.	0.2 mg/L
Temp	24.1 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	70.28	3.506972	Bicarbonate HCO ₃	341.6	5.60224
Magnesium Mg	17.408	1.432678	Carbonate CO ₃	9.15	0.304695
Sodium Na	22.165	0.984178	Sulphate SO ₄	0	0
Potassium K	0.4423	0.011323	Chloride Cl	2.66	0.075012
Manganese Mn	0	0			
Iron Fe	0	0			
		5.915151			5.981947

TDS	Evap. (180 °C)	311	IONIC BALANCE	0.6%
	Sum of Ions	464		
TOTAL HARDNESS (Calc.) CaCO ₃			247	pH
Silica(mg/L)			22.5	Sp. Cond.
				502 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Salinity measured on field was 0.01%.	
LABORATORY MANAGER	
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

Site Id: M1

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu, Sigatoka Valley	WELL No.	BH 10/13
Site Id	B 17	COLLECTOR'S No	AL 10/52
DATE COLLECTED	26/08/2010	LAB No.	15385
DATE SUBMITTED	26/08/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	11/11/2010		
GEOLOGY	Takaro Conglomerate		
SOURCE			
Borehole	☒	HOW	
TYPE		River	☐
		Spring	☐
Flowing	☐	Pumped	☒
		Surface	☐
		Depth	31.8 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	401 microS/cm	pH	7.8
Eh	mv	D.O.	0.18 mg/L
Temp	21 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	60.15	3.001485	Bicarbonate HCO ₃	366	6.0024
Magnesium Mg	14.333	1.179806	Carbonate CO ₃	0	0
Sodium Na	44.732	1.945842	Sulphate SO ₄	4	0.0832
Potassium K	0.6457	0.01653	Chloride Cl	7.53	0.212346
Manganese Mn	0.849	0.030904			
Iron Fe	0	0			
		6.174366			6.297946

TDS	Evap. (180 °C)	324	IONIC BALANCE	1.0%
	Sum of Ions	498		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.36
Silica(mg/L)			Sp. Cond.	524 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.	
1st hr Pump Test sample	MINERAL RESOURCES DEPARTMENT LABORATORY
	LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id - B 17 (well 10/13)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Harit Rom, Dikolevu, Sigatoka Valley	WELL No.	BH 10/13
Sample Id	B 17	COLLECTOR'S No	AL 10/53
DATE COLLECTED	26/08/2010	LAB No.	15386
DATE SUBMITTED	31/08/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	11/11/2010		
GEOLOGY	Takaro Conglomerate		
SOURCE			
TYPE	Borehole ☒	HDW ☐	River ☐
	Flowing ☐	Pumped ☒	Surface ☐
			Spring ☐
			Depth 31.8

SITE ANALYSIS/TREATMENT			
Sp. Cond.	410 microS/cm	pH	7.8
Eh	mv	D.O.	0.18 mg/L
Temp	26.7 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	50.45	2.517455	Bicarbonate HCO ₃	302.97	4.968708
Magnesium Mg	13.16	1.083068	Carbonate CO ₃	0	0
Sodium Na	43.98	1.91313	Sulphate SO ₄	5	0.104
Potassium K	0.6066	0.015503	Chloride Cl	7.53	0.212346
Manganese Mn	0.251	0.009136			
Iron Fe	0	0			
		5.538293			5.285054

TDS	Evap. (180 °C)	305	IONIC BALANCE	2.3%
	Sum of Ions	424		
TOTAL HARDNESS (Calc.) CaCO ₃		180	pH	7.26
Silica(mg/L)		27.1	Sp. Cond.	492 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water except Manganese, which is higher than the recommended value of 0.1mg/l for drinking purposes.	
6th hr pump test sample	MINERAL RESOURCES DEPARTMENT LABORATORY
	LABORATORY MANAGER
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L	

sa Site Id: B 17

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilalevu Sigatoka Valley	WELL No.	BH 10/15
Site Id	B19	COLLECTOR'S No	AL 10/54
DATE COLLECTED	31/08/2010	LAB No.	15389
DATE SUBMITTED	14/09/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY	Recent Alluvium		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		35 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	299 microS/cm	pH	6.4
Eh	mv	D.O.	mg/L
Temp	27.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	40.6	2.02594	Bicarbonate HCO ₃	202.52	3.321328
Magnesium Mg	14.75	1.213925	Carbonate CO ₃	0	0
Sodium Na	10.65	0.463275	Sulphate SO ₄	7	0.1456
Potassium K	1.3892	0.035052	Chloride Cl	9.97	0.281154
Manganese Mn	0.515	0.018746			
Iron Fe	0	0			
		3.756938			3.748082

TDS	Evap. (180 °C)	239	IONIC BALANCE	0.1%
	Sum of ions	287		
TOTAL HARDNESS (Calc.) CaCO ₃		162	pH	6.9
Silica(mg/L)		50.4	Sp. Cond.	387 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water except Manganese, which is higher than the recommended value of 0.1mg/l for drinking purposes.

Salinity measured on field was 0.01%.

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

LABORATORY MANAGER

Site Id: B19 (10/15)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu Sigatoka Valley	WELL No.	BH 10/08
site Id	D6	COLLECTOR'S No	AL 10/55
DATE COLLECTED	16/09/2010	LAB No.	15391
DATE SUBMITTED	20/09/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY	Clci Sandstone		
SOURCE			
TYPE	Borehole	☒ HDW	☐ Spring
	Flowing	☐ Pumped	☒ Surface
			Depth 26 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	299 microS/cm	pH	6.59
Eh	_____ mv	D.O.	0.28 mg/L
Temp	26.4 °C	HCO ₃	_____ mg/L
Filtered	_____	Acidified	_____

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	42.14	2.102786	Bicarbonate HCO_3	244	4.0016
Magnesium Mg	7.539	0.62046	Carbonate CO_3	0	0
Sodium Na	25.872	1.125432	Sulphate SO_4	0	0
Potassium K	0.6216	0.015913	Chloride Cl	4.87	0.137334
Manganese Mn	0	0			
Iron Fe	0	0			
		3.864591			4.138934

TDS	Evap. (180 °C)	244	IONIC BALANCE	3.4%
	Sum of Ions	325		
TOTAL HARDNESS (Calc.) CaCO ₃		136	pH	7.24
Silica(mg/L)		29.8	Sp. Cond.	394 microS/cm

COMMENTS:

COMMENTS:
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then bacterial count test is advised.

Note: Some sediments were noticed at the bottom of the sample.

Slightly measured on field was 0.01%. (2nd hour pump test).

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

LABORATORY MANAGER

Site Ld - D6 (10/08)

LABORATORY MANAGER

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	site ID	Dubalevu Sigatoka Valley	WELL No.	BH 10/08
		D6	COLLECTOR'S No	AL 10/56
DATE COLLECTED		17/09/2010	LAB No.	15392
DATE SUBMITTED		20/09/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED		02/11/2010		
GEOLOGY		Cici Sandstone		
SOURCE				
TYPE	Borehole	☒ HDW	River	☐ Spring
	Flowing	☐ Pumped	☒ Surface	Depth 26 m

SITE ANALYSIS/TREATMENT	
Sp. Cond.	287 microS/cm
pH	7.2
Eh	mv
D.O.	0.71 mg/L
Temp	°C
HCO ₃	mg/L
Filtered	
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	42.91	2.141209	Bicarbonate HCO ₃	256.2	4.20168
Magnesium Mg	7.142	0.587787	Carbonate CO ₃	0	0
Sodium Na	26.319	1.144877	Sulphate SO ₄	1	0.0208
Potassium K	0.6422	0.01844	Chloride Cl	3.1	0.08742
Manganese Mn	0	0			
Iron Fe	0	0			
		3.890312			4.3099

TDS	Evap. (180 °C)	231	IONIC BALANCE	5.1%
	Sum of Ions	337		
TOTAL HARDNESS (Calc.) CaCO ₃		137	pH	7.57
Silica(mg/L)		29.3	Sp. Cond.	373 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: There was some sediments noticed at the bottom of the sample.

Salinity measured on field was 0.01%. (12 hours after pump stoppage)

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

[Signature]
LABORATORY MANAGER

MINERAL RESOURCES DEPARTMENT
LABORATORY

site ID: D6

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Raunotogo Sigatoka Valley	WELL No.	Raunotogo Meander
Site 1b	D9	COLLECTOR'S No	AL 10/57
DATE COLLECTED	17/09/2010	LAB No.	15393
DATE SUBMITTED	20/09/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY			
SOURCE			
Borehole	HDW	River	v Spring
TYPE	Flowing	Pumped	Surface v Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	189 microS/cm	pH	7.34
Eh	mv	D.O.	0.18 mg/L
Temp	28.1 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	25.28	1.261472	Bicarbonate HCO ₃	134.3	2.20252
Magnesium Mg	6.041	0.497174	Carbonate CO ₃	0	0
Sodium Na	15.24	0.66294	Sulphate SO ₄	9	0.1872
Potassium K	1.8104	0.046346	Chloride Cl	10.19	0.287358
Manganese Mn	0	0			
Iron Fe	0	0			
		2.467933			2.677078

TDS	Evap. (180 °C)	154	IONIC BALANCE	4.1%
	Sum of Ions	202		
TOTAL HARDNESS (Calc.) CaCO ₃	88	pH	7.96	
Silica(mg/L)	27.8	Sp. Cond.	249 microS/cm	

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Note: Some slight sediments were noticed at the bottom of the sample.	
Salinity of sample as measured on field was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	
 LABORATORY MANAGER	

Site 1b - D9 (Raunotogo Meander)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabaka, Sigatoka Valley	WELL No.	Tubairata Meander
site Id	D10	COLLECTOR'S No	AL 10/58
DATE COLLECTED	17/09/2010	LAB No.	15394
DATE SUBMITTED	20/09/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY	Takaro Sandstone		
SOURCE			
TYPE	Borehole ☐ HDW ☐ River ☒ Spring ☐		
	Flowing ☐ Pumped ☐ Surface ☒ Depth ☐		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	189 microS/cm	pH	7.2
Eh	mv	D.O.	0.2 mg/L
Temp	29.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
		mg/L		mg/L	e.p.m
Calcium	Ca	26.81	Bicarbonate HCO ₃	140.3	2.30092
Magnesium	Mg	6.131	Carbonate CO ₃	0	0
Sodium	Na	14.419	Sulphate SO ₄	7	0.1456
Potassium	K	1.898	Chloride Cl	8.42	0.237444
Manganese	Mn	0			
Iron	Fe	0			
		2.518184			2.683964

TDS	Evap. (180 °C)	158	IONIC BALANCE	3.2%
	Sum of Ions	205		
TOTAL HARDNESS (Calc.) CaCO ₃		92	pH	7.81
Silica(mg/L)		22.4	Sp. Cond.	252 microS/cm

COMMENTS:

All the above results are within HWO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Some slight sediments was noticed at the bottom of the sample.

Salinity of sample as measured on field was 0.01%.

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

LABORATORY MANAGER

site Id: D10 (Tubairata Meander)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabaka Sigatoka Valley		WELL No.	Galitaka Creek
Site Id	Na2		COLLECTOR'S No	AL 10/59
DATE COLLECTED	17/09/2010		LAB No.	15395
DATE SUBMITTED	20/09/2010		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010			
GEOLOGY	Takaro Conglomerate			
SOURCE				
Borehole	_____	HDW	River	☒ Spring
Flowing	_____	Pumped	Surface	☒ Depth

SITE ANALYSIS/TREATMENT		pH	7.6
Sp. Cond.	176 microS/cm	D.O.	0.22 mg/L
Eh	_____ mv	HCO ₃	_____ mg/L
Temp	29.9 °C	Acidified	_____
Filtered	_____		

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	27.58	1.376242	Bicarbonate HCO ₃	152.5	2.501
Magnesium Mg	6.495	0.534539	Carbonate CO ₃	0	0
Sodium Na	10.763	0.468191	Sulphate SO ₄	0	0
Potassium K	1.1309	0.028951	Chloride Cl	4.87	0.137334
Manganese Mn	0	0			
Iron Fe	0	0			
		2.407922			2.638334

TDS	Evap. (180 °C)	146	IONIC BALANCE	4.6%
	Sum of ions	203		
TOTAL HARDNESS (Calc.) CaCO ₃		96	pH	7.64
Silica(mg/L)		22.5	Sp. Cond.	236 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: Slight sediments were noticed at the bottom of the sample.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L

Davay
LABORATORY MANAGER

Site Id - Na2 (Galitaka Creek)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubofiewu, Sigatoka Valley	WELL No.	Tubairata Village BH
DATE COLLECTED	24/09/2010	COLLECTOR'S No	AL 10/60
DATE SUBMITTED	27/09/2010	LAB No.	15401
DATE ANALYSED	20/11/2010	ANALYSIS Rqd.	Full plus Silica
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		35 m

SITE ANALYSIS/TREATMENT		pH	7.2
Sp. Cond.	404 microS/cm	D.O.	0.2 mg/L
Eh	mv	HCO ₃	mg/L
Temp	28.7 °C	Acidified	
Filtered			

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	76.61	3.822839	Bicarbonate HCO ₃	305	5.002
Magnesium Mg	9.117	0.750329	Carbonate CO ₃	0	0
Sodium Na	23.374	1.016769	Sulphate SO ₄	5	0.104
Potassium K	1.0729	0.027466	Chloride Cl	9.31	0.262542
Manganese Mn	0	0			
Iron Fe	0	0			
		5.617403			5.368542

TDS	Evap. (180 °C)	332	IONIC BALANCE	2.3%
	Sum of Ions	429		
TOTAL HARDNESS (Calc.) CaCO ₃		229	pH	7.45
Silica(mg/L)		34.8	Sp. Cond.	538 microS/cm

COMMENTS:
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Solinity of sample as measured on field was 0.01%.
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Duvayen
LABORATORY MANAGER
MINERAL RESOURCES DEPARTMENT
LABORATORY

Site 1.2 - D7 (Tubairata village)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabaka Sigatoka Valley	WELL No.	Janmin Jai Bit
site Id	Na 4	COLLECTOR'S No	AL 10/61
DATE COLLECTED	24/09/2010	LAB No.	15396
DATE SUBMITTED		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY	Takaro Conglomerate		
SOURCE			
TYPE	Borehole ☒	HDW ☐	River ☐ Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐ Depth ☐ 40 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	327 microS/cm	pH	7.4
Eh	mv	D.O.	0.51 mg/L
Temp	7.4 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	49.79	2.484521	Bicarbonate HCO ₃	274.5	4.5018
Magnesium Mg	11.014	0.906452	Carbonate CO ₃	0	0
Sodium Na	29.305	1.274768	Sulphate SO ₄	1	0.0208
Potassium K	1.3697	0.035064	Chloride Cl	8.42	0.237444
Manganese Mn	0.237	0.008627			
Iron Fe	0	0			
		4.709432			4.760044

TDS	Evap. (180 °C)	275	IONIC BALANCE	0.5%	
	Sum of ions	376			
TOTAL HARDNESS (Calc.) CaCO ₃			170	pH	7.5
Silica(mg/L)			37.8	Sp. Cond.	445 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.	
Salinity measured on field was 0.01%. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHAT E = 0.4 mg/L.	
LABORATORY MANAGER MINERAL RESOURCES DEPARTMENT	

site Id : Na 4

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Nabaka Siligatoka Valley	WELL No.	Nabaka Lake
Site Id	Na 3	COLLECTOR'S No	AL 10/62
DATE COLLECTED	24/09/2010	LAB No.	15397
DATE SUBMITTED		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY	Takaro Conglomerate		
SOURCE			
Borehole	HDW	River	✓ Spring
TYPE	Flowing	Pumped	✓ Surface Depth

SITE ANALYSIS/TREATMENT			
Sp. Cond.	82 microS/cm	pH	7.4
Eh	mv	D.O.	0.2 mg/L
Temp	29 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	15.32	0.764468	Bicarbonate HCO ₃	68.32	1.120448
Magnesium Mg	2.531	0.208301	Carbonate CO ₃	0	0
Sodium Na	4.629	0.201362	Sulphate SO ₄	0	0
Potassium K	4.3379	0.11105	Chloride Cl	3.99	0.112518
Manganese Mn	0	0			
Iron Fe	0	0			
		1.285181			1.232966

TDS	Evap. (180 °C)	70.8	IONIC BALANCE	2.1%
	Sum of Ions	99		
TOTAL HARDNESS (Calc.) CaCO ₃		49	pH	7.42
Silica(mg/L)		7.9	Sp. Cond.	114.5 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
 LABORATORY MANAGER	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id : Na3

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Sirulaya Sigatoka Valley	WELL No.	Paras Ram BH
Site Id	S1	COLLECTOR'S No	AI 10/64
DATE COLLECTED	24/09/2010	LAB No.	15399
DATE SUBMITTED	27/09/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY	Takaro Conglomerate		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☐ Surface ☐ Depth		18.5 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	304 microS/cm	pH	7.5
Eh	mv	D.O.	0.6 mg/L
Temp	27.9 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
		mg/L		mg/L	e.p.m
Calcium	Ca	49.03	Bicarbonate HCO ₃	247.05	4.05162
Magnesium	Mg	8.222	Carbonate CO ₃	0	0
Sodium	Na	23.745	Sulphate SO ₄	3	0.0624
Potassium	K	0.8561	Chloride Cl	3.1	0.08742
Manganese	Mn	0			
Iron	Fe	0			
		4.013491			4.20144

TDS	Evap. (180 °C)	244	IONIC BALANCE	2.3%
	Sum of Ions	333		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.88
Silica(mg/L)			Sp. Cond.	394 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
Safety measured on field was 0.01%. NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	
 LABORATORY MANAGER	

Site Id- S1 (Paras Ram)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Simlaga, Sigatoka Valley	WELL No.	Hari Chand BH
site Id	S2	COLLECTOR'S No	AL 10/63
DATE COLLECTED	24/09/2010	LAB No.	15398
DATE SUBMITTED	27/09/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	02/11/2010		
GEOLOGY	Takaro Conglomerate		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☐ Surface ☐ Depth 40 m		

SITE ANALYSIS/TREATMENT			
Sp. Cond.	588 microS/cm	pH	7.1
Eh	mv	D.O.	0.3 mg/L
Temp	27.4 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	34.47	1.720053	Bicarbonate HCO ₃	341.6	5.60224
Magnesium Mg	18.4	1.51432	Carbonate CO ₃	0	0
Sodium Na	30	1.305	Sulphate SO ₄	4	0.0832
Potassium K	0.62	0.015872	Chloride Cl	22.6	0.63732
Manganese Mn	0	0			
Iron Fe	0	0			
		4.555245			6.32276

TDS	Evap. (180 °C)	484	IONIC BALANCE	16.2%
	Sum of Ions	452		
TOTAL HARDNESS (Calc.) CaCO ₃	162	pH	7.53	
Silica(mg/L)	26.8	Sp. Cond.	779 microS/cm	

COMMENTS:	
The above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.	
NOTE: Despite repeated analysis for all the elements, there is a high percentage error.	
Salinity measured on field was 0.02%.	MINERAL RESOURCES DEPARTMENT
NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	LABORATORY MANAGER

site Id: S2 (Hari Chandra)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu, Sigatoka Valley	WELL No.	10/07
Site Id	D5	COLLECTOR'S No	AL 10/65
DATE COLLECTED	12/1/2010	LAB No.	15419
DATE SUBMITTED	12/6/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/2/2011		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		34 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	238 microS/cm	pH	7.2
Eh	mv	D.O.	mg/L
Temp	26.7 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	40.1	2.00099	Bicarbonate HCO ₃	207.4	3.40136
Magnesium Mg	11.588	0.953692	Carbonate CO ₃	0	0
Sodium Na	18.418	0.801183	Sulphate SO ₄	3	0.0624
Potassium K	0.3677	0.009413	Chloride Cl	10.19	0.287358
Manganese Mn	0.023	0.000837			
Iron Fe	0	0			
		3.766116			3.751118

TDS	Evap. (180 °C)	211	IONIC BALANCE	0.2%
	Sum of Ions	291		
TOTAL HARDNESS (Calc.) CaCO ₃			148	pH 6.99
Silica(mg/L)			31	Sp. Cond. 341 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY

[Signature]
LABORATORY MANAGER

Note: 1st Hour Pump Test sample.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site Id - D5 (well 10/07)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu, Sigatoka Valley	WELL No.	10/07
site Id	D85	COLLECTOR'S No	AL 10/66
DATE COLLECTED	12/2/2010	LAB No.	15420
DATE SUBMITTED	12/6/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/2/2011		
GEOLOGY	Cici Sandstone		
SOURCE			
TYPE	Borehole ☒	HDW ☐	River ☐ Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐ Depth ☐

SITE ANALYSIS/TREATMENT			
Sp. Cond.	248 microS/cm	pH	7.2
Eh	mv	D.O.	mg/L
Temp	25.2 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	40.1	2.00099	Bicarbonate HCO ₃	195.2	3.20128
Magnesium Mg	11.324	0.931965	Carbonate CO ₃	0	0
Sodium Na	19.47	0.846945	Sulphate SO ₄	4	0.0832
Potassium K	0.3741	0.009577	Chloride Cl	7.53	0.212346
Manganese Mn	0	0			
Iron Fe	0	0			
		3.789477			3.496826

TDS	Evap. (180 °C)	207	IONIC BALANCE	4.0%
	Sum of Ions	278		
TOTAL HARDNESS (Calc.) CaCO ₃			147	pH 7.54
Silica(mg/L)			30.2	Sp. Cond. 335 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

Note: 16th Hour Pump Test sample.

NOTE: DETECTION LIMITS: AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

LABORATORY MANAGER

Site Id: D85

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Dubalevu, Sigatoka Valley	WELL No.	10 / 07
Site La	D5 D5	COLLECTOR'S No	AL 10/67
DATE COLLECTED	12/15/2010	LAB No.	15425
DATE SUBMITTED	12/23/2010	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/3/2011		
GEOLOGY	Cici Sandstone		
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
Flowing	☐	Pumped	☒
Surface	☐	Depth	34 m

SITE ANALYSIS/TREATMENT	
Sp. Cond.	250 microS/cm
pH	6.9
Eh	mv
D.O.	0.04 mg/L
Temp	26.1 °C
HCO ₃	mg/L
Filtered	
Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	36.95	1.843805	Bicarbonate HCO ₃	189.1	3.10124
Magnesium Mg	11.344	0.933611	Carbonate CO ₃	0	0
Sodium Na	19.478	0.847293	Sulphate SO ₄	3	0.0624
Potassium K	0.3321	0.008502	Chloride Cl	13.29	0.374778
Manganese Mn	0	0			
Iron Fe	0	0			
		3.633211			3.538418

TDS	Evap. (180 °C)	209	IONIC BALANCE	1.3%
	Sum of Ions	273		
TOTAL HARDNESS (Calc.) CaCO ₃	139	pH	7.22	
Silica(mg/L)	32.3	Sp. Cond.	338 microS/cm	

COMMENTS:

All the above results are within WHO guidelines for drinking water. However if water is to be used for drinking purposes then further bacterial count test is advised.

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

site : D5

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bilatevu, Sigatoka Valley		WELL No.	BH 10/12
	B16		COLLECTOR'S No	AL 11/01
DATE COLLECTED	1/6/2011		LAB No.	15426
DATE SUBMITTED	1/6/2011		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/6/2011			
GEOLOGY	Takaro Rudite & Conglomerate			
SOURCE				
TYPE	Borehole	☒ HDW	River	☐ Spring
	Flowing	☐ Pumped	☒ Surface	Depth 42 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	256 microS/cm	pH	8.4
Eh	mv	D.O.	0.1 mg/L
Temp	26 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	37.74	1.883226	Bicarbonate HCO ₃	189.1	3.10124
Magnesium Mg	8.524	0.701525	Carbonate CO ₃	0	0
Sodium Na	28.992	1.261152	Sulphate SO ₄	10	0.208
Potassium K	0.7745	0.019827	Chloride Cl	15.06	0.424692
Manganese Mn	0.149	0.005424			
Iron Fe	0	0			
		3.871154			3.733932

TDS	Evap. (180 °C)	218	IONIC BALANCE	1.8%
	Sum of Ions	290		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.48
Silica(mg/L)			Sp. Cond.	353 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water, except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.	
1st hr pump test sample	MINERAL RESOURCES DEPARTMENT LABORATORY
	LABORATORY MANAGER
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/l.	

Site Id: B16

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Tubakoli, Bilalevu, Sigatoka Valley	WELL No.	BH 10/12
site Lb	B16	COLLECTOR'S No	AL 11/02
DATE COLLECTED	1/12/2011	LAB No.	16427
DATE SUBMITTED	1/14/2011	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/3/2011		
GEOLOGY	Takaro Conglomerate		
SOURCE			
Borehole	☒	HDW	☐
River	☐	Spring	☐
Flowing	☐	Pumped	☒
Surface	☐	Depth	42.5 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	261 microS/cm	pH	8.4
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	36.95	1.843805	Bicarbonate HCO ₃	207.4	3.40136
Magnesium Mg	8.514	0.700702	Carbonate CO ₃	0	0
Sodium Na	27.346	1.189551	Sulphate SO ₄	11	0.2288
Potassium K	0.7636	0.019548	Chloride Cl	15.06	0.424692
Manganese Mn	0.183	0.006661			
Iron Fe	0	0			
		3.760268			4.054852

TDS	Evap. (180 °C)	219	IONIC BALANCE	3.8%
	Sum of Ions	307		
TOTAL HARDNESS (Calc.) CaCO ₃			127	pH 7.68
Silica(mg/L)			25.8	Sp. Cond. 354 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water, except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.

12th hrs pump test sample

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

Salinity measured on field was 0.01%.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

site 1a: B16

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Tubakoti, Bilatevu, Sigatoka Valley		WELL No.	BH 10/12
site ID	B16		COLLECTOR'S No	AL 11/03
DATE COLLECTED	1/13/2011		LAB No.	15428
DATE SUBMITTED	1/14/2011		ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/3/2011			
GEOLOGY	Takaro Conglomerate			
SOURCE				
TYPE	Borehole	☒ v	HDW	☐
	Flowing	☐	Pumped	☒ v
			Surface	☐
			Spring	☐
			Depth	42.5 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	262 microS/cm	pH	8.8
Eh	mv	D.O.	mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	36.16	1.804384	Bicarbonate HCO ₃	207.4	3.40136
Magnesium Mg	8.512	0.700538	Carbonate CO ₃	0	0
Sodium Na	27.407	1.192205	Sulphate SO ₄	9	0.1872
Potassium K	0.7737	0.019807	Chloride Cl	15.06	0.424692
Manganese Mn	0.155	0.005642			
Iron Fe	0	0			
		3.722575			4.013252

TDS	Evap. (180 °C)	218	IONIC BALANCE	3.8%
	Sum of Ions	304		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.59
Silica(mg/L)			Sp. Cond.	353 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water, except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.	
20th hr pump test sample	LABORATORY MANAGER
Salinity measured on field was 0.01%.	
NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

site ID: B16

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bila Rd, Bilelevu, Sigatoka Valley	WELL No.	10/14
site Ld	B18	COLLECTOR'S No	AL 11/04
DATE COLLECTED	1/18/2011	LAB No.	15429
DATE SUBMITTED	1/19/2011	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/3/2011		
GEOLOGY	Tari Formation		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		55 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	380 microS/cm	pH	8.4
Eh	mv	D.O.	0.17 mg/L
Temp	26 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	36.16	1.804384	Bicarbonate HCO ₃	280.6	4.60184
Magnesium Mg	18.036	1.484363	Carbonate CO ₃	0	0
Sodium Na	48.47	2.108445	Sulphate SO ₄	0	0
Potassium K	1.473	0.037709	Chloride Cl	23.92	0.674544
Manganese Mn	1.478	0.053799			
Iron Fe	0	0			
		5.4887			5.276384

TDS	Evap. (180 °C)	306	IONIC BALANCE	2.0%
	Sum of Ions	410		
TOTAL HARDNESS (Calc.) CaCO ₃	165	pH	7.08	
Silica(mg/L)	52.6	Sp. Cond.	494 microS/cm	

COMMENTS:

All the above results are within WHO guidelines for drinking water, except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.

Note: water sample was grayish in color with grey sediments settled at the bottom. (4th hour pumping test sample).

Salinity measured on field was 0.01%.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

site Ld: B18 (10/14)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bila Rd, Bilalevu, Sigatoka Valley	WELL No.	10 / 14
site id	B18	COLLECTOR'S No	AL 11/05
DATE COLLECTED	1/19/2011	LAB No.	15430
DATE SUBMITTED	1/19/2011	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/3/2011		
GEOLOGY	Tari Formation		
SOURCE			
TYPE	Borehole ☒ HDW ☐ River ☐ Spring ☐		
	Flowing ☐ Pumped ☒ Surface ☐ Depth		55 m
Sp. Cond.	350 microS/cm	pH	8.4
Eh	mv	D.O.	0.17 mg/L
Temp	°C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	28.3	1.41217	Bicarbonate HCO ₃	274.5	4.5018
Magnesium Mg	18.17	1.495391	Carbonate CO ₃	0	0
Sodium Na	48.498	2.109663	Sulphate SO ₄	1	0.0208
Potassium K	1.3946	0.035702	Chloride Cl	23.92	0.674544
Manganese Mn	1.058	0.038511			
Iron Fe	0	0			
		5.091437			5.197144

TDS	Evap. (180 °C)	304	IONIC BALANCE	1.0%
	Sum of Ions	397		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.14
Silica(mg/L)			Sp. Cond.	491 microS/cm

COMMENTS:
 All the above results are within WHO guidelines for drinking water, except Manganese which is higher than the recommended value of 0.1mg/l for drinking purposes.
 Note: Water sample was slightly greyish in color with gray sediments settled at the bottom. (20th Hour pumping test sample)
 Salinity measured on field was 0.01%.
 NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

MINERAL RESOURCES DEPARTMENT
 LABORATORY
 LABORATORY MANAGER

site id: B18

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bila Rd, Bitalevu, Sigatoka Valley		WELL No.	10 / 15
DATE COLLECTED	1/19/2011		COLLECTOR'S No	AL 11/06
DATE SUBMITTED	1/24/2011		LAB No.	15431
DATE ANALYSED	2/3/2011		ANALYSIS Rqd.	Full plus Silica
GEOLOGY	Tari Sandstone			
SOURCE				
TYPE	Borehole ☒	HDW ☐	River ☐	Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐	Depth 35 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	299 microS/cm	pH	8.3
Eh	mv	D.O.	0.22 mg/L
Temp	28 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	43.24	2.157676	Bicarbonate HCO ₃	219.6	3.60144
Magnesium Mg	19.036	1.566663	Carbonate CO ₃	0	0
Sodium Na	12.422	0.540357	Sulphate SO ₄	6	0.1248
Potassium K	1.1651	0.029827	Chloride Cl	15.06	0.424692
Manganese Mn	0.4	0.01456			
Iron Fe	0	0			
		4.309082			4.150932

TDS	Evap. (180 °C)	241	IONIC BALANCE	1.9%
	Sum of Ions	317		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	6.67
Silica(mg/L)			Sp. Cond.	389 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water except Manganese which is higher than the recommended value of 0.1mg/l and pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.	
MINERAL RESOURCES DEPARTMENT LABORATORY	LABORATORY MANAGER
Salinity measured on field was 0.01%. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

Site Id: B19 (10/15)

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bila Rd, Bilalevu, Sigatoka Valley	WELL No.	10/15
site 1b	B19	COLLECTOR'S No	AL 11/07
DATE COLLECTED	1/19/2011	LAB No.	15432
DATE SUBMITTED	1/24/2011	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/3/2011		
GEOLOGY	Tari Formation		
SOURCE			
TYPE	Borehole	☒ v	HDW
	Flowing	☐	Pumped
		☒ v	Surface
			Depth
			35 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	microS/cm	pH	7.8
Eh	mv	D.O.	0.22 mg/L
Temp	27.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	39.31	1.961569	Bicarbonate HCO ₃	213.5	3.5014
Magnesium Mg	18.916	1.556787	Carbonate CO ₃	0	0
Sodium Na	12.334	0.536529	Sulphate SO ₄	17	0.1456
Potassium K	1.1303	0.028936	Chloride Cl	15.06	0.424692
Manganese Mn	0.492	0.017909			
Iron Fe	0	0			
		4.101729			4.071892

TDS	Evap. (180 °C)	243	IONIC BALANCE	0.4%
	Sum of Ions	308		
TOTAL HARDNESS (Calc.) CaCO ₃		176	pH	6.57
Silica(mg/L)		50.1	Sp. Cond.	392 microS/cm

COMMENTS:	
All the above results are within WHO guidelines for drinking water except Manganese which is higher than the recommended value of 0.1mg/l and pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.	
MINERAL RESOURCES DEPARTMENT LABORATORY LABORATORY MANAGER	
Salinity measured on field was 0.01%. NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L	

site 1d - B19

MINERAL RESOURCES DEPARTMENT - WATER ANALYSIS

LOCATION	Bila Rd, Bilalevu, Sigatoka Valley	WELL No.	10 / 15
	Site Ld: B19	COLLECTOR'S No	AL 11/08
DATE COLLECTED	1/19/2011	LAB No.	15433
DATE SUBMITTED	1/24/2011	ANALYSIS Rqd.	Full plus Silica
DATE ANALYSED	2/3/2011		
GEOLOGY	Tari Sandstone		
SOURCE			
TYPE	Borehole ☒	HDW ☐	River ☐ Spring ☐
	Flowing ☐	Pumped ☒	Surface ☐ Depth ☐ 35 m

SITE ANALYSIS/TREATMENT			
Sp. Cond.	299 microS/cm	pH	7.8
Eh	mv	D.O.	0.55 mg/L
Temp	27.5 °C	HCO ₃	mg/L
Filtered		Acidified	

CATIONS			ANIONS		
	mg/L	e.p.m		mg/L	e.p.m
Calcium Ca	47.17	2.353783	Bicarbonate HCO ₃	213.6	3.5014
Magnesium Mg	18.94	1.558762	Carbonate CO ₃	0	0
Sodium Na	12.198	0.530613	Sulphate SO ₄	7	0.1456
Potassium K	1.1302	0.028933	Chloride Cl	22.15	0.62463
Manganese Mn	0.488	0.017763			
Iron Fe	0	0			
		4.489854			4.27163

TDS	Evap. (180 °C)	241	IONIC BALANCE	2.5%
	Sum of Ions	323		
TOTAL HARDNESS (Calc.) CaCO ₃			pH	7.657
Silica(mg/L)			Sp. Cond.	389 microS/cm

COMMENTS:

All the above results are within WHO guidelines for drinking water except Manganese which is higher than the recommended value of 0.1mg/l and pH which is lower than the recommended range of 6.8-8.5 for drinking purposes.

MINERAL RESOURCES DEPARTMENT
LABORATORY

LABORATORY MANAGER

Salinity measured on field was 0.01%.

NOTE : DETECTION LIMITS : AAS = 0.02 mg/L & SULPHATE = 0.4 mg/L

Site Ld: B19