Environmental Assessment Document

Project No: PPTA 8306-RMI

Date: February 2015

Status: Draft Final Report

Republic of the Marshall Islands **Ebeye Water Supply and Sanitation Project**

Initial Environmental Examination

APPENDIX E: Water Quality Test Data

Prepared by Kwajalein Atoll Joint Utilities Resources Inc. for the Asian Development Bank

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P.O. BOX 5223 Ebeye, Marshall Islands 96970 Phone: (692) 329-3787/4787 Fax: (692) 329-3787 email: ebeyeepa@ntamar.net

EBEYE WQM (BACTERIAL) MONTHLY REPORT January 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	7	4	3	
Hotels/Apts.	3	3	0	
2. BW/ICED WATER SOURCES	8	8	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	12	12	0	
Bakeries	9	6	3	
Take Outs/Delis	4	3	1	
4. PRIVATE WATER SOURCES	15	9	6	NM
5. COASTAL WATERS				NM
6.				
7. TOTAL for the month	58	52	13	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto WQM Lab Technician	Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT February, 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	21	16	5	
Hotels/Apts.	2	2	0	
2. BW/ICED WATER SOURCES	10	10	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	12	10	2	
Bakeries	6	6	0	
Take Outs/Delis	10	6	4	
4. PRIVATE WATER SOURCES	17	10	7	NM
5. COASTAL WATERS	10	9	1	NM
6.				
7. TOTAL for the month	88	69	19	

Extra Activities:		
-		
Respectfully submitted,		
Nathaniel Matauto WOM Lab Technician	3-16-12 Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT March 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	5	5	0	
Hotels/Apts.	4	4	0	
2. BW/ICED WATER SOURCES	5	5	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	3	2	1	
Bakeries	6	5	1	
Take Outs/Delis	1	1	0	
4. PRIVATE WATER SOURCES	24	13	11	NM
5. COASTAL WATERS	0	0	0	NM
6.				
7. TOTAL for the month	48	35	13	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto	March 29,2012	
WOM Lab Technician	Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT April 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	6	6	0	
School	6	2	4	
2. BW/ICED WATER SOURCES	8	4	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	3	3	0	
Bakeries	10	7	3	
Take Outs/Delis	6	6	0	
4. PRIVATE WATER SOURCES	15	8	7	NM
5. COASTAL WATERS	0	0	0	NM
6.				
7. TOTAL for the month	54	36	14	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto WQM Lab Technician	<u>5-4-2012</u> Date	
W QIVI Lab Technician	Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT May 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	6	6	0	
EPA tab	4	4	0	
2. BW/ICED WATER SOURCES	0	0	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	0	0	0	
Bakeries	0	0	0	
Take Outs/Delis	0	0	0	
4. PRIVATE WATER SOURCES	0	0	0	NM
5. COASTAL WATERS	0	0	0	NM
6.				
7. TOTAL for the month				

Extra Activities:	
The public tab has a	n average of 0.3 FAC for the month of May 2012.
•	•
Respectfully submitted,	
Nathaniel Matauto	<u>6-11-2012</u>
WQM Lab Technician	Date



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EBEYE WQM (BACTERIAL) MONTHLY REPORT June 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				OJ
KAJUR	6	6	0	
EPA tab	4	4	0	
2. BW/ICED WATER SOURCES	0	0	0	OJ
3. FOOD ESTABLISHMENTS				OJ
Restaurant Kitchen tap	0	0	0	
Bakeries	0	0	0	
Take Outs/Delis	0	0	0	
4. PRIVATE WATER SOURCES	0	0	0	OJ
5. COASTAL WATERS	0	0	0	OJ
6.				
7. TOTAL for the month				

Extra Activities:					
The public tab has an average of 0.3 FAC for the month of June 2012.					
EPA tab has an average of 0.4 FAC for the month of June 2012.					
Respectfully submitted	1,				
Nathaniel Matauto WQM Lab Technician		7-2-2012 Date			



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EBEYE WQM (BACTERIAL) MONTHLY REPORT July 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	6	6	0	
Hotels/Apts.	2	2	0	
2. BW/ICED WATER SOURCES	10	8	2	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	3	3	0	
Bakeries	12	10	2	
Take Outs/Delis	6	6	0	
4. PRIVATE WATER SOURCES	25	20	5	NM
5. COASTAL WATERS	0	0	0	NM
6.				
7. TOTAL for the month	64	55	9	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto	<u>7-25-12</u>	
WOM Lah Technician	Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT August, 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	8	7	1	
Hotels/Apts.	6	4	2	
2. BW/ICED WATER SOURCES	8	8	2	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	6	3	3	
Bakeries	14	10	4	
Take Outs/Delis	6	4	2	
4. PRIVATE WATER SOURCES	20	14	5	NM
5. COASTAL WATERS	10	6	4	NM
6.				
7. TOTAL for the month	78	56	23	

Extra Activities:						
Coastal samples were conducted once due: only 1 10ml cylinder and no						
pipettor. Pipettor with 10 tubes are being order by Abraham Hicking.						
Respectfully submitted,						
Nothanial Matauta	9 20 12					
Nathaniel Matauto WOM Lab Trabaician	8-29-12 Data					
WQM Lab Technician	Date					



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EBEYE WQM (BACTERIAL) MONTHLY REPORT September 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	4	4	0	
Hotels/Apts.	4	4	0	
2. BW/ICED WATER SOURCES	8	8	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	6	6	0	
Bakeries	14	10	4	
Take Outs/Delis	6	3	3	
4. PRIVATE WATER SOURCES	4	2	2	NM
5. COASTAL WATERS	0	0	0	NM
6.				
7. TOTAL for the month	46	37	9	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto WQM Lab Technician	9-27-12 Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT October 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	10	10	0	
Hotels/Apts.	3	3	3	
2. BW/ICED WATER SOURCES	6	6	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	7	5	2	
Bakeries	7	4	3	
Take Outs/Delis	8	8	0	
4. PRIVATE WATER SOURCES	13	7	6	NM
5. COASTAL WATERS	10	3	7	NM
6.				
7. TOTAL for the month	64	46	21	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto WQM Lab Technician	<u>11-2-12</u> Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT November, 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	8	7	1	
Hotels/Apts.	3	3	3	
2. BW/ICED WATER SOURCES	12	10	2	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	9	5	4	
Bakeries	16	13	3	
Take Outs/Delis	4	4	0	
4. PRIVATE WATER SOURCES	25	14	11	NM
5. COASTAL WATERS	10	7	3	NM
6.				
7. TOTAL for the month	87	63	27	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto WQM Lab Technician	<u>11-30-12</u> Date	



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EBEYE WQM (BACTERIAL) MONTHLY REPORT December 2012

Water Group (Name)	Total No. of Tests/Samples	Total No. of Safe	Total No. of Unsafe	Comments/Initial
1. PUBLIC WATER SUPPLIES:				NM
KAJUR	10	10	0	
Hotels/Apts.	3	3	3	
2. BW/ICED WATER SOURCES	6	6	0	NM
3. FOOD ESTABLISHMENTS				NM
Restaurant Kitchen tap	4	4	0	
Bakeries	7	5	2	
Take Outs/Delis	5	5	0	
4. PRIVATE WATER SOURCES	10	5	5	NM
5. COASTAL WATERS	10	3	7	NM
6.				
7. TOTAL for the month	55	41	17	

Extra Activities:		
Respectfully submitted,		
Nathaniel Matauto WQM Lab Technician	<u>12-29-12</u> Date	



Enterolert Form: Revised Jan 24, 2013

Republic of Marshall Islands Environmental Protection Agency Water Quality Laboratory P.O. Box 5223, Ebeye, Marshall Islands MH96970 Phone: (692) 329-3787/4787 Fax: (692)329-3787

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

						F		for Quanti-		
	S	ample Collect	ion Record					Enterococo	31	
Lab	Location	Туре	Date	Time	Temp. °C		os (+) ells	MPN (diluted)	MPN (actual x 10)	Comments
1	TOBINLE	(0451124	4-16-14	1540		4-11-173 NH D'13	4-7-15	21	210	
2	NID CORROCK	(OKY)	4-16-14	1545		4-17-M	4-17-14 WP 2	4	60	
					-					
	Negative Blank C	Control	4-16-14	1605		-	-	_	-	
	Sampler: North	an	Recei	ved by:		Date/Tin	ne:		_ Lab analyst: 🗘	athan
	Incubation start da				S	tandard for	Marine R	ecreational	Enterolert Lot #:	ETEM
	Expected read ou							PN/100mL		23 JUN 2014
	Actual read out da	ate/time: 4-17	-14/-16	05					*After adding Er	nterolert to samples an
	Date approved b	y Lab Manager	s	ignature:		-3			*Did you prepar	a completely dissolved (Y/N) e the negative blank for
	Enterolert Form	Pavisad Ian	1 2013						comparison?	(Y/N) ×



Republic of Marshall Islands **Environmental Protection Agency** Water Quality Laboratory P.O. Box 5223, Ebeye, Marshall Islands MH96970 Phone: (692) 329-3787/4787 Fax: (692)329-3787

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

	Sa	mple Collecti	on Record			F		for Quanti- Enterococo		
Lab	Location	Туре	Date	Time	Temp. °C	1	os (+) ells	MPN (diluted)	MPN (actual x 10)	Comments
"			-			Large	Small	(diluted)	X 10)	
1	BEACH PARK	COASTAL	2-27-14	1330		4	0	4	40	
2	BATIEN WETO	CODSTOL	2-29-14	1326		5	3	8	90	
3	LOLE WETD	COASTOL	2-27-14	1341		4	3	7	70	
9	MONNIN WETO	COASTAL	2-27-14	1351		7	4	12	120	
5	Beye DOCK	CODSTAL	2-27-14	1401		21	6	34	340	
6	EDKOJANA WKTO	COASTAL	2-27-14	1415		30	13	66	660	
1	POBILLE WETO	COASTAL	2-27-14	1424		36	4	68	680	
8	DUTFALL 1	COMSTAL	2-27-14			48	11	190	1900	
9	OUTFALL I	COASTAL	2-27-14	1437		47	13	180	1800	
10	DUMPSITE	CODSTOL	2-27-14	1448		48	20	210	2700	
	Negative Blank Co	ntrol	2-27-14	1459		_	-		-	

Sampler: Nathan	Received by:	Date/Time:	Lab analyst: Nathan
Incubation start date/time: 2-27-1	4 / 1600		

Standard for Marine Recreational Water Quality is 104MPN/100mL

Expected read out date/time: 2 -26 H / 1504 Actual read out date/time: 2-28-14/ 1509

Date approved by Lab Manager: ___ Signature:

Enterolert Form: Revised Jan 24, 2013

Enterolert Lot # EJ524

Expiration Date: 22 JUN 2014

*After adding Enterolert to samples and shaking, is media completely dissolved in all samples? (Y/N) Y Did you prepare the negative blank for comparison? (Y/N) Y



Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

elxweepa@nbunai.net

STATE STREET STATE OF THE STREET

Table Location Type Date Time Temp. Most M							4	Result	Results for Quanti-tray 2000	anti-tr	ay 200	0		
Location Type Date Time Tim		Sampl	e Collection	Record			Tot	al coli	form	E-co	i,			
TRIPLETILE CHAIN O1-03-12 0805	Lab #		Type	Date	Time	Temp.	# bo	(+) s()	MPN/ 100		(+) s()	MPN /100	FAC (mg/L)	Comments
TRIPLETILE OFFICE OFFICE OF COLOR O I CI O O O O O. I T-5 WHOLESALE BOTH 01-03-12 CB21 O I CI O O O O O I T-5 WHOLESALE BOTH 01-03-12 CB21 O I CI O O O O O O O O O O O O O O O O							Large	Small	1	Large	1	mL m		
T-5 wholesale Both 01-03-13 CB16 1 0 1 C 0 0 0 0.1 T-5 testread Dain 01-03-13 CB24 0 1 C 0 0 0 0 0.2 T-5 w-Ctestion Guan 29-23-13 CB24 0 0 0 0 0 0 0 0 0 LUCKY STRE ICE DAIN 01-03-13 CB37 0 0 0 0 0 0 0 0 TICKY STRE ICE DAIN 01-03-13 CB10 0 1 1 0 0 0 0 0 TICKY STRE ICE DAIN 01-03-13 CB10 0 1 1 0 0 0 0 0 0 TICKY MARKET BOTH 01-03-13 CB12 0 0 1 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	-	TRIPLETICE	DAIN	01-03-12	2080		0	-	1	0	1	0	0.2	
T-J FEST FEWD GIVAN 29-3-12 (0824 O 1 41 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N	T-9 WHOLESALE	HL08	01-03-13	3180		-	0	-	0	0	0	0.1	
T-5 W-CTEMON GUANA \$2-2-12 0826 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	M	T-J FASTFOOD	Dein	01-03-12	780		0	-	7	0	0	0	0.7	
LUCKY STACE ICE DAMIN 01-03-15 06274 O <th< td=""><td>4</td><td>T-9 W-CTESTION</td><td>GUDAN</td><td>51-03-13</td><td>0826</td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>FILTSR</td></th<>	4	T-9 W-CTESTION	GUDAN	51-03-13	0826		0	0	0	0	0	0	0	FILTSR
LUCKY - STAR BOTH 01-03-13 0840 O 4 4 0 2 3 0 TISH MARKET PATH 01-03-13 0901 O 1 1 O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5	LUCKY STAR ICE	DANN	01-03-13	4280		0	0	0	0	0	٥	0	TICKER
THEM MARKET BOTH 01-03-13 0901 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 0 1 0	J	LUCKY - STAR	BOTH	01-03-13	0840		0	7	4	0	M	M	0.5	
Litaki Pret. C-10 01-03-13 Oq1S 0 3 3 0 1 1 0 T-5 BUTZHER BOTH 01-03-13 0920 0 4 4 0 2 2 2 EPA TAP C-10 01-03-13 0920 0 0 0 0 0 0 0 0	1	TISH MARKET	PROTE TENE	-	1060		0	_	_	0	_	=	2.0	
T-T BUTZHER BATH 01-08-12 0829 0 4 4 0 2 2 2 = PA TEP C.W 01-03-13 0920 0 0 0 0 0 0 0 0 0	00	LITAKI PEST.	C-10	SI-EQ-10	2915		0	M	N	0	1	_	D:4	
EPA TEP C.W 01-03-13 0920 0 0 0 0 0 0 0 0	6	T-T BUTZHER	Вотя	61-03-12	0829		0	1	7	0	7	7	0.1	
	2	SPA TAP	3-5		0200		0	0	0	0	0	0	0.2	

Received by: Sampler: Nothan

Incubation start date/time: 01-03-13 / 1130

Expected read out date/time: 01-04-12 / 1130 Actual read out date/time: 01-04-13/ 1159 Signature: Date approved by Lab Manager:

Colilert-24 Form: Revised Jan. 24, 2013

Colliert Q-Tray 2000 Comparator Expiration Date: NAPCH 12 2.04

Lab analyst: Cothan

Date/Time:

Coliler Lot#: 4H444

Expiration Date: 14 UAN 2013

*After adding Colilert to samples and shaking, are all samples lighter yellow than comparator? (VN) / *After adding Colilert to samples and shaking, is media completely dissolved in all samples? (YIN)



REPUBLIC OF THE MARSHALL ISLANDS

ENVIRONMENTAL PROTECTION AUTHORITY

P.O. BOX 5223 Ebeye, Marshall Islands 96970 Phone: (692) 329-3787/4787 Fax: (692) 329-3787 email: ebeyeepa@ntamar.net

UTILIZING THE HYDROGEN SULFIDE (H2S) TEST

							Test Re	sults (P/A)*	
ab. No.	Date	Time	Name/Site	Source	Weto	FAC	24hrs.	48hrs	Comments/Tech Initial
1	1-10-13	0845	EPA TOP	P-TONK		0	_	_	
2	1-10-13	1039	JOBBRIK	D- TANK	BOOL	0	A-	P	
3	1-10-13	1044	POWER PLANT	P-TANK	BOUT	0	A	P	
4	1-10-13	1051	PUBLIC TAP	2.0	EOKOUNA	0	A	A	
5	1-10-12	1007	LUCKY STAR	P-TANK	N-KOBOK	0.3	_	A	
6	1-17-13	1049	TRIPLE J	P-TANK	MK	0.4	A	A	
7	1-17-13	1055	FISH MARKET	CEMENT	MK	04	A	-	
8	1-17-12	1059	BUOJ WETO #1	cw		0	4	P	
9	1-17-13	1135	BUOJ WETO #2	cw		0	-	P	
10	1-17-12	135	TISEN TEN	cw	MID.C	0	P	P	
	NE CONTRACTOR	1	Total No. of tests		- 1			-	V 50

P = Presence of Pathogens (Kijkij)

A = Absence of Pathogens (E jab kijkij)

Standard for Safe Drinking Water is ABSENCE OF PATHOGENS.



World to a 10 pathodrate programmer No. THE RESERVE WAS THE RESERVE ADMINISTRAL ebousine electrique de la companie d

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

	-					E	Results for Quanti-tray 2000	for Qu	anti-tr.	ay 200	0		
	Sample	Sample Collection Record	Kecord			Tot	Total coliform	orm	E-coli	li.			
Lab #	# Location	Type	Date	Time	Temp.	# pos (+)	pos (+)	MPN/ 100	# bo	# pos (+)	MPN /100	FAC (mg/L)	Comments
						Large	Small	II.	Large	Small	mL		
-	AG EDFERY	RAIN	81-11-10	Daoi		S	4	-	0	0	0	1.0	
N	ANEJ BAKORY	Perin	01-14-13	21 00		4	W	N	0	_	_	0	
M	PUBLIC TAP	12.0	01-14-13	IOOI		0	0	0	0	0	0	2.0	
1	HOSPITZE MITTER P.O.	KN 12.0	01-14-13	[014		0	_	_	0	0	0	0	FILTER
n	PATRICK BING	0-2	01-14-13	1021		0	4	ī	S	2 th	2	0	
										21-14-19			
													20
S	Sampler: Nathan	R	Received by:			Date/Time:	Ö		1		Lab ar	Lab analyst: Nathan	athan
7	Incubation start date/time:01-14-13 / 1100	1 21-13	0011							[1	1 1 1 1 1 1 1	2000
Ш	Expected read out date/time: 01-K-13 / 1100	01-K-13	/ 1100	1	Colifert	Colilert Q-Tray 2000	Colilert Q-Tray 2000 Comparator	parator			Expirati	Expiration Date: 14 (A)	THE COLOR
X	Actual read out date/time: 0L 13-13 / 110S	121-517	1105		and a	on Date.	1		7		*Affer	*Affer adding	
D	Date approved by Lab Manager:	ager:	Signature:							7	shaking, are	y, are all sai	Shaking, are all samples lighter yellow than
O	Colilert-24 Form: Revised Jan. 24, 2013	Jan. 24, 20	13								*After	adding Co	*After adding Colliert to samples and shaking is media completely discolved in all
											samples?	S? (V/N)	N) Y



Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colifort-24 Method.

elxyvxqaininianini

							Results	Results for Quanti-tray 2000	anti-tra	y 200	0		
	Sample	Sample Collection Record	Record			Tol	Total coliform	orm	E-coli				
Lab #	Location	Type	Date	Time	Temp.	# bc	# pos (+) wells	MPN/ 100	# pos (+)	(+) s	MPN /100	FAC (mg/L)	Comments
						Large	Small	mL	Large	Small	mL		
-	AGB BAKERY	BOTH	1-17-13 1305	1305		0)	2	#		_	_	2	
7	ST BAKERY	BOTH	1-17-13	1315		7	N	و		7	_	3	
M	DANELLA BAKCRY 4.0	0.4	1-17-13	1319		0	7	B		0	0	0	
4	JINNA BAKERY	poin	1-11-13	1327		10	_	7		W	-	7	
S	ANET BAFERY	BOTH	1-17-13	1335		N	(V)	14		0	0	-0	
u	KALIEN BAKERY	RAIN	1-17-13	1347		0	1	1		0	_	_	
1	DIY REST	PAHH	1-17-13	1401		1	n	1		_	0	_	
00	T-J FASTFOOD	pain	1-11-13	1+16		0	0	0		0	0	0	
5	LITAK! REST	BOTH	1-11-13	1427		0	0	0		0	0	0	
10	MAMA'S STOPE	#10g	1-11-13	1439		1	4	+		0	_		

Sampler: Nathan Received by:

Incubation start date/time: 01-17-13 / 1505

Actual read out date/time: OI-18-13 / 150S

Date approved by Lab Manager: Signature:

Colilert Q-Tray 2000 Comparator Expiration Date: 13 MAR 2014

Lab analyst: Nottan

Date/Time:

Colilert Lot #: OT Nov 2018
Expiration Date: F X Y Y Y Y Y

*After adding Colilert to samples and shaking, are all samples lighter yellow than comparator? (Y/N) *After adding Colilert to samples and shaking, is media completely dissolved in all samples? (Y/N)



P.O. Box 5223, Ebeye, Marshall Islands MH96970 Phone: (692) 329-3787/4787 Fax: (692)329-3787 **Environmental Protection Agency** Republic of Marshall Islands Water Quality Laboratory

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

		Comments												
tray 2000		MPN (actual	(01 x	20	70	40	30	340	010	520	(\$00	3000	2900	0
Results for Quanti-tray 2000	Enterococci	MPN	(diluted)	7	4	4	2	39	8	29	150	200	290	1
esults f	ш	pos (+) wells	Small	0	1	0	_	V	N	15	1.1	2	ñ	1
2		# pos (+)	Large	4	W	1	U	7	7	30	46	48	40	1
		Temp. °C												
		Time		13 1330	341	13 1347	1355	10%	404	416	430	24.35	1447	1500
	on Record	Date		01-30-13	01-30-12	01-30-13	01-20-13	01-30-13	01-30-12	01-30-13	01-30-12	01-30-13	01-30-13	01-34-13
	Sample Collection Record	Туре		COPSTALL	COPSTDL 01-30-12 1341	(ODSTAL 01-30-	1005 Tal	COPSTEM 01-30-13 1401	COPSTON 01-30-12 1409	COPSTAL 01-30-13 1416	CONSTRA 01-30-13 1430	COASTON 01-30-12 1235	COMSTRA	
	Sar	Location		PARK	DEAD	WETO	WETO	DOCK	ED KOJAJA WETA	TOBIKLE WETD	4	THE	172	Negative Blank Control
		P		SEACH PAPK	BETEN WET	LOLE WETO	4 MOMNIN WETD	EBEVE DOCK	ED KOTA	TOBIKU	OUTFALL I	OUTED IL	DUMPSITE	Negativ
		Lab #		_	И	61)	+	h	U	1	Ø	0	0	

Date/Time: Received by: Incubation start date/time: +soom/ 1500 Sampler: Nathan

Expected read out date/time: 01-31-13/ 1500

Actual read out date/time: OF31-15 / (S10

Signature: Date approved by Lab Manager:

Enterolert Form: Revised Jan 24, 2013

Enteroler Lot #. 2+0%

Standard for Marine Recreational Water Quality is 104MPN/100mL

Lab analyst: Nathan

Expiration Date: On Oct 2012

*After adding Enterolert to samples and shaking, is media completely dissolved in all samples?

*Did you prepare the negative blank for comparison?

(Y/N)



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BARPER AND PROPERTY OF SERVICES

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colifort-24 Method.

		Comments										Lab analyst: Tathan
		FAC (mg/L)		0	0							Jalyst:
0		MPN /100	E E	С	0	90	1	30	0	_		Lab ar
ay 200	!!	# bos (+)	Small	0	0	M	_	4	0	_		
anti-tr	E-coli		Large	C	0	S	0	20	0	0		
Results for Quanti-tray 2000	orm	MPN/ 100	m.	0	0	0	22	15		3		
Results	Total coliform	# pos (+)	Small	0	0	_	0	N		2		ne.
œ	Tot	e we	Large	D	0	0	2	=	0	0		Date/Time:
		Temp.										
		Time		1400	1406	14/15	1427	1425	1445	1455		
	Record	Date		2-18-13	2-18-13	2-18-13	2-19-13	2-18-12	2-18-13	2-18-13 1455		Received by:
	Sample Collection Record	Type		72.0	20.0	BOTH	PAIN	RAIN	CW	BOTH		ď
	Sample	Location		HOSPITAL KITCHEN	HOSPITAL DUMP	DIY COMPANY	SATO MAIRE	ANDRI UERICHO	LUCKY STAR	TISH MARKET		Sampler: Nathan
		Lab #		-	7	8	4	5	٩	1		S

Incubation start date/time: 2-18-12 / 1505
Expected read out date/time: 2-14-15 / 1505

Actual read out date/time: 2-19-18 / 1530

Date approved by Lab Manager: Signature:

Colilert Q-Tray 2000 Comparator Expiration Date: 12 MMP 2014

Colilert Lot #: KH 214

Expiration Date: 01 Nov 2013

*After adding Colilert to samples and shaking, are all samples lighter yellow than comparator? (Y/N) *After adding Colilert to samples and shaking, is media completely dissolved in all samples? (Y/N) **



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STATUS STATE STATE STATES STATES

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

			-			E	Results for Quanti-tray 2000	for Qu	anti-tr.	ay 200	0			
	Samp	Sample Collection Record	Record			Tot	Total coliform	orm	E-coli	j,				
Lab#	Location	Type	Date	Time	Temp.	# bo	# pos (+) wells	MPN/ 100	# bo	# pos (+)	MPN /100	FAC (mg/L)	Comments	
						Large	Small	II.	Large	Small	mL			
-	DIY CONDANY	cua rew	2-21-13	1004		e	_	7	0	N	m			
4	LUCKY STAR	-m	22213	1018		ع	+	17	0	0	0			
N	ITISH MARKET	CUD/RIM		JH01		4	7	9		0	_			
4	TJ BUTCHER	CE	2-27-13	1052		2	-	7	2	0	2			
S	TJ W-STATION	GUAM	2-27-13	1056		0	С	0	C	0	0		W LISHT	
0	TJ FASTFOOD	Cus	2-34-13	1059		0	7	3	0	-	_			
1	LITAKI REST	CW/PW	2-27-13	100		7	N	7	0	2	2			
Ø	PUBLIC TRP	R.0	2-24-13	1112		0	0	0	O	0	0	0.3		
												,		
Ø	Sampler. Nathan		Received by:			Date/Time_	.e.				Lab ar	Lab analyst: Nathan	athan	
-I	Incubation start date/time: 2-24-13 / 1130	1-24-13 /	1130									7		
Ш́	Expected read out date/time: 2-28-12 / 1120	2-28-12	1 1120	1	Coliler	Q-Tray 2	Colilert Q-Tray 2000 Comparator	parator			Collect	Connect Lot # KT A 1	Conject Lot #: FAT A 1	
Ä	Actual read out date/time: 2-28-12 / 1/45	2-38-121	1145		Expirati	on Date:	5	APPR 2	7.0		*After	adding Co	*Affer adding Collier to samples and	7
Ď	Date approved by Lab Manager:	nager:	Signature:	4:							shaking	g, are all sa	shaking, are all samples lighter yellow than	2 5
											comparator ?		(NIN)	

Colilert-24 Form: Revised Jan. 24, 2013

snaking, are all samples lighter yellow than comparator? (Y/N) X-After adding Colliert to samples and shaking, is media completely dissolved in all samples? (Y/N)



P.O. Box 5223, Ebeye, Marshall Islands MH96970 Phone: (692) 329-3787/4787 Fax: (692)329-3787 Environmental Protection Agency Republic of Marshall Islands Water Quality Laboratory

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

		Comments												
tray 2000		MPN (actual	x 10)	20	30	20%	200	130	011	20	40	01	1500	
Results for Quanti-tray 2000	Enterococci	MPN	(diluted)	N	w	4	300	2	1.1	1	1	_	150	
esults f	Ш	# pos (+)	Small		0	0	1	A	S	0	٥	0	b	
oc		od#	Large	7	2	7	S	0)	01	И	1	-	70	
		Temp. °C												
		Time		200	1306	1304	1215	1328	1231	13-45	1041	1404	1430	
	on Record	Date		02-27-13 (200	02-23-15	21-22-13	62-12-12 1215	02-27-13 1328	1251 13-12-10	51-22-20	1041 81-22-60	02-2343		
	Sample Collection Record	Type		UMSTAL	LOMETEL	(opsure	LOBSTAL	(BASTH)	WASTRA	COMSTAN	CONSTAL	CONTRA	COASTEL	ntrol
	Sa	Location		BEACH PARK	BATEN WOTO	tore war	MONNIN WOOD	EBEYE DICK	EDUCTASA WED	PHIKE WED	OUTPALL 1	oursan I	DUMPSIRE	Negative Blank Control
		Lab #		-	N	8	4	S	9	7	00	9	10	

Lab analyst: Nathan Standard for Marine Recreational Water Quality is 104MPN/100mL Date/Time: Received by: Incubation start date/time: 02-23/3 / 1500 Sampler: Nathan

Expected read out date/time: 62-28-13 / 1500

Actual read out date/time: 02 - 26-18 / 15 28

Signature: Date approved by Lab Manager:

Enterolert Form: Revised Jan 24, 2013

Enterolert Lot #: 24226

OCT 2013 Expiration Date: 02 "After adding Enterolert to samples and shaking, is media completely dissolved in





Sample Collection and Analytical Record: Total Coliform and E-coli in Drinking Water by Colilert-24 Method

	FAC Comments	(mg/L)									Collert Lot #: K+f Z/4 Expiration Date: O1 KM 2013	bus salumes of trailing positions and	shaking, are all samples lighter yellow	*After adding Collert to samples and shaking, is media completely dissolved
	ш	_	mL	+	+						Coli	*	shak	*Afte
Negation 101	E-coli		Small			1				1				
-	E	# pos (+)	Large	of							25			
1	L.	100 100	-								MATA		Date:	
-	Total coliform		Small	70							2		oiration	
	Tota	# pos (+)	Large	40							E-2		ator Exp	
		Time		1030							Lab analyst: NATHAN MATAUTO		Comparator Expiration Date:	
	_		Date	3-14-13							Lab			Signafure:
	Sample Collection Record	Ė.	adkı	-							573	NOS 1 1105	15-13 / 11/	
	Sample Coll		Location	HOES W (FRONT) R-WARR	11000						Sampler: NATANTO MATAUTO	Incubation start date/time: 3-14-13 / 110	Expected read out date/time: 31513 / 1105	Actual read out date/time:
			Lab#	-							Sample	Incubati	Expecte	Actual

Last updated: 20 May 2009 FAS Lab Cert

Sample Collection and Analytical Record

Total Coliform and E-coli in Drinking Water by Colilert-24 Method

FAC	(mg/L)		0						
000	II	MPN		E					
-tray 2	E-coli	# pos (+) MPN wells	ч	M				1	
Juant		1		7 2	1				
s for (liform	MPN		48 72400					
Results for Quanti-tray 2000	Total coliform	# pos (+)	S	200					
	To	# pos	1	49					
	4 hrs)	Time	(304						
Incubation (35 ± 0.5 °C)	End (24 hrs)	Date	8-3-13						
ubation	t	Time	(200						
Ju	Start	Date	8-2-13						
		Time	1150						
puo	5	Date	8-07-13						
Sample Collection Becord		Type	R-WATER						
Sample Col		Location	KALMEN KOROK						
		Lab #	-						

* After adding Colilert to samples and shaking, are samples lighter yellow than comparator? (Y/N) * After adding Colilert and shaking, is Colilert completely dissolved? (Y/N) *

Colliert Media: Lot #: KH214 Expiration Date:

Expiration Date: 67 NOV 2019

Date approved by Lab Manager:

Signature:



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Fig. 500 Sept. Sep

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

						Cannes	200	nesults for edaliti-tray zood	y 400			
Sampl	Sample Collection Record	Record			Tot	Total coliform	orm	E-coli			1	
Location	Type	Date	Time	Temp.	# bo	# pos (+) wells	MPN/ 100	# pos (+)	(+ <u>s</u>	MPN /100	FAC (mg/L)	Comments
					Large	Small	ш	Large	Small	E E		
BEACH RAPK	COMSTAL	8-6-13	1120		0	_	-	0	0	0		
BATEN WETD	CORSTAL	8-5-13	1126		٥	0	0	0	-	_		
LOVE WETD	COASTAL 8-5-13		1121		0	0	0	0		_		
NOWN WELL	COMSTAL 8-5-13	8-5-13	137		7	-	2	31	0	75	0	
ebeye Dock	COASTAL BS-13	B-S-13	1143		0	0	0	Simila		32		
ECKOJAJA WETO	CONSTAL 8-5-13	8-5-13	1150		0	0	0	N	0	2		
TORNKLE LIDETY	COASTPL 8-5-13	8-5-13	1153		0	_	-	N	0	1		
OUTFALL #1	COASTAL	8-5-13	1155		٥	O	0	1	0	-		
WITH #2	CONCIDAL 8-5-13	8-5-13	11.59		0	0	0	1	0	4		
EBEYE DUNKIRE	COASTAL	8-5-13	1205		0	0	0	0	0	0		
BLO NK	1	1						8	A			

Sampler: NATHAN	Received by:	Date/Time:
Incubation start date/time: @ S - 18 / 1645	5-18/ 1645	
Expected read out date/time: 8-6-13 / 1845	-6-13 / 1845	Colilert Q-Tray 2000 Comparator
Actual read out date/time:		Expiration Date.
Date approved by Lab Manager:	r: Signature:	

Colilert-24 Form: Revised Jan. 24, 2013

Dallalyst. CHASA

Colliert Lot #: CH 926
Expiration Date: O2 OCT 2013

*After adding Colilert to samples and shaking, are all samples lighter yellow than comparator?

*After adding Colilert to samples and shaking, is media completely dissolved in all samples?

(Y/N)



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Pkvær(002);229;335//456="Pav(602);239-3785="Pav(602);239-3785" Pav(602);239-3785"

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

						F	Results	Results for Quanti-tray 2000	anti-tr	ay 200	0		
	Sample	Sample Collection Record	Record			Tot	Total coliform	form	E-coli	!!			
Lab #	Location	Type	Date	Time	Temp.	# bo	# pos (+)	MPN/ 100	# bo	# pos (+) wells	MPN /100	FAC (mg/L)	Comments
						Large	Small	m L	Large	Small	mL		
_	TT 1CE		8-6-13	5000		49	48	21 WHX 84	2	0	න	0	41172R
N	TJ PESTROOM		8.6.13	91100		49	4	>2400 g	5	7	12	0	
n	TJ BUTCHER		8-6-13	0200		48	48	>2400 20	20	_	26	0	
4	TJ FASTFOOD		8-6-13	0200		44	20	120	N	0	7	0	
S	MAMA STOPE		8-6-13	5460		3	2	74	T	0	Ť.	0	
٥	LUCKY STAPA BUTSTIER	4	8-6-18	0200		-	-	_	0	0	0	8.5	
1	LUCKY STAR ICE		8-6-13	6953		0	0	Э	0	0	0	0	FILTER.
0	DY KITCHEN		8-6-13	1001		49	48	72400	٩	d	21	0	
0	LYSAKO CRISTIRI WASA	20	8-6-13	1015		49	40	NHW N	_	0	_	0	
0	LYSAKO CREHMENT		8.6.13	2501	1	4936" 36	36	810	0	9	0	0	
=	DIY DRINKING WARR	2	8-6-13	1031		25	4	39	0	0	0	0	

Sampler: Nathan/T-FORCE Received by:

Incubation start date/time: 1500gicts 3 6 15 1500

Expected read out date/time: 8-7-15 / 1630 Actual read out date/time: 8-7-15 / 1630

Date approved by Lab Manager: Signature:

Collect Q-Tray 2000 Comparator Expiration Date: 12 Marcit 241

Colifert Lot #: 14244

Lab analyst: Nathran

Date/Time:

Expiration Date: 67 Nov 2013

*After adding Colifert to samples and shaking, are all samples lighter yellow than

comparator? (Y/N) X
*After adding Collilert /to samples and shaking, is media completely dissolved in all samples? (Y/N)



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Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

						Y.	Results	Results for Quanti-tray 2000	anti-tra	ay 200	0		
	Sample	Sample Collection Record	Record			Tot	Total coliform	orm	E-coli	į		0	
Lab #	Location	Type	Date	Time	Temp.	# po	# pos (+) wells	MPN/ 100	# bo	# pos (+)	MPN /100	(mg/L)	Comments
						Large	Small	mL	Large	Small	mL		
Z	Litaki ICE		8-6-13	1155		49	48	48 72400 0	0	0	0	0	
3	LITAKI KIRKEN		8-6-18	1200		0	0	0	0	0	0	0	
I	CP STORE		8-6-18	1309		40	S	160	20	-	36		
SI	DAR		8-6-12	1320		14	1	001	0	0	0		
_2	DINEG #1		6-6-12	134		0	٥	0	9	0	0		
14	ANET KITCHEN		1	1345		44		18 >240g	37	e.	15		
	RALİK STOPE	ice	AS TO A MAN	1145									
	parik 16-5		8-7-13	1151		W	0		0	0			.4
	LASÍ TAFT		8-7-13			49	48		12 de	0			
	WHITNEY D		8-7-13			49 48	48		40 39	Na			

Sampler: Notice / T-FCPCE Received by:

Incubation start date/time: 25-6-12 / 1500 Expected read out date/time: 20-7-13 / 1630

Date approved by Lab Manager: ______Signature:

Actual read out date/time: 05-7-15/ [630

Colliert Q-Tray 2000 Comparator Expiration Date: 12 Norch 2614

Colilert Lot #: K#214
Expiration Date: 07 NoV 2012

Lab analyst: Nathan

Date/Time:

*After adding Colllert to samples and shaking, are all samples lighter yellow than comparator? (Y/N)

*After adding Coliler to samples and shaking, is media completely dissolved in all samples? (YIN)



REPUBLICATIVE NARSHALL SLANDS ENVIRONMENTAL PROTECTION ALTHORIN

Phones (seed) 329-19787/4787* Faul (seed) 189-19787* Emili-ebeneepa@ntannar.net Charling Canada Canada P.C. Bragger

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

		Comments						Cha	214	Expiration Date: 07 NOV 0.013	Colilert to samples and	s lighter yellow	*After adding Coliler, to samples and shaking, is media completely dissolved in all
		FAC (mg/L)		2.0				Lab analyst: Nathown	Colifer of # X + V1	ion Date: 01	*After adding Colik	g, are all sample rator? (Y/N)	*After adding Colile shaking, is media com
0		MPN /100	III					Lab a	Coliler	Expiral	*After	shaking, are comparator?	*After ac shaking, is
Results for Quanti-tray 2000	ili	# pos (+) wells	Small						I				
uanti-tı	E-coli		Large							ator	T		
for Q	form	100 100			-					mparato			
Results	Total coliform	# pos (+) wells	Small					me:		Colifert Q-Tray 2000 Comparator			
	To	bd #	Large					Date/Time:		t Q-Tray			
		Temp.								Coliler	2		
		Time		1.436									
	cord	Date						Received by:	135			Signature:	
	Sample Collection Record	Type		D-WARR O-19-13				Rece	3-19-13/16	18.20.13		lager:	d Jan. 24, 2013
	Sample	Location		PUBLIC TAP				Sampler: Dathan	Incubation start date/lime: 8 · 14 - 19 / 1435	Expected read out date/time: 8-20.13 /	Actual read out date/time:	Date approved by Lab Manager:	Colilert-24 Form: Revised Jan. 24, 2013
		Lab#		-				Sal	Inc	EXI	Act	Dai	ပိ



P.O. Box 5223, Ebeye, Marshall Islands MH96970 Phone: (692) 329-3787/4787 Fax: (692)329-3787 Environmental Protection Agency Republic of Marshall Islands Water Quality Laboratory

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

						2	esults	Results for Quanti-tray 2000	tray 2000	
	Š	Sample Collection Record	ion Record					Filter ococci		
Lab	Location	Туре	Date	Time	Temp. °C	m d #	# pos (+)	MPN	MPN (actual	Comments
1						Large	Small	(alluted)	(01 ×	
_	BEACH PORK	CORTE	9-9-13	044S		7	0	N	0	
4	BATEN WETD	CONCTAL	9-9-13	1560		W	_	W	8	
2	Love werd	COPPETTAL	9-9-13	1001		46		150	1500	
4	MONNIN WETO	COPATIBL	9-9-13	1007		0	-	_	10	
N	Dock	COMSTAL	9-9-13	1013		W	٥	M)	2,	
9	CONDIANT WELD	COMSTAL	9-9-13	1019		5	2	20	200	
1	TOBIKUE WETD	COASTAL	9-9-13	1023		-	0	_	01	
00	OTFELLI	CONSTRA	9-9-13	1035		7	0	7	20	
6	OUTFALL 2	COPPETITION	8-6-6	1037		-	O	-	0)	
0.1	DUMPSITE	CORSTAN	6-6-13	1047		7	-	S	20	
	Negative Blank Control	ontrol								

Received by: LAWA Incubation start date/time: 9-9-13 / 1520 Sampler: NARHAN M

Actual read out date/time: 4-11-13/ 1624 1 1520 Expected read out date/time: 4-10 - 13

Date approved by Lab Manager: LAWA Signature: (1)

Water Quality is 104MPN/100mL Standard for Marine Recreational

Date/Time: 9/19 1500 Lab analyst: NATHEN M

Expiration Date: 03 OCT 2013 Enteroler Lot #: JH426

shaking, is media completely dissolved in all samples?
*Did you prepare the negative blank for comparison?

(Y/N) *After adding Enteroler to samples and

Enterolert Form: Revised Jan 24, 2013



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Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method,

-	Sam	Sample Collection Record	Record			Tot	Total coliform	orm	E-coli	otal coliform E-coli			
Lab#	Location	Type	Date	Time	Temp.	# po	# pos (+) wells	MPN/ 100	# pos (+) wells	s (+)	MPN /100	FAC (mg/L)	Comments
-	DANA	a show .)	10-14-12	0051		Large	Small		Large	Small	Ē	0	
N	DIANA	C-WARER	2 - h-01	1815		0	٥		0	0		17:0	
W	3 JILUNICAR L	C-WATER	10-14-13	1530		0	3		0	0		4.0	
4	JILUNKAP L	C-WATER	10-1413	1835		0	0		0	0		4:0	
N	PAUL KUNTAK	C-WATER 10-14-12	10-14.13	154		0	0		0	0		5.0	
3	Kasek	C. WATER 10-14-13	10-14-13	1000		0	O		0	0		4.0	
-	NACKSOU	C-100 Marze 10-13-12	10-13-12	5000		0	0		0	0		0.3	
N	A START	C-WOTER 10-15-13		2160		3	0		0	0		0.3	

Received by: KAWA Sampler: NATHON MATAUTO

Date/Time: 10 [/1/13 1 fm Incubation start date/time: '> i4-12 / 1540

Colliert Q-Tray 2000 Comparator Expiration Date: 13 HAP 2011

Expiration Date: COI NOV 2013 Coliler Lot# 7±17

Lab analyst: NOTHEN

shaking, is media completely dissolved in all samples? (Y/N) shaking, are all samples lighter yellow than *After adding Colilert to samples *After adding Colilert to samples (NIN) comparator?

Colilert-24 Form: Revised Jan. 24, 2013

Date approved by Lab Manager: P/1/13 Signature: Whym

Expected read out date/fime: 10 14-13 / 1540

Actual read out date/time: 10 - 15 - 12 / 1600



PER YEAR OF THE DIAMETER AND STATEMENT OF THE PROPERTY OF THE

Protection of the contract of (344年) 化原因剂 (数百年) 以 最大學的

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

						4	Results	Results for Quanti-tray 2000	anti-tra	y 200	0		
	Sample	Sample Collection Record	Record			Tot	Total coliform	orm	E-coli				
Lab#	Location	Type	Date	Time	Temp.	# po	# pos (+)	MPN/ 100	# pos (+) wells	s (+)	MPN /100	FAC (mg/L)	Comments
	And the second second by the former conjecture on the second seco	The state of the s		The state of the s		Large	Smail	=	Large	Small	Ш		
-	DIY REST	B-WORED	10-16-13	SHIP		49	48	72400	0	0	0	٥	
7	LUCKY STAPE ILE	P-21-01 CL37200-9	10-16-13	08/30		0	0	0	0	0	0	0	FILTER
W	LUCKY STOP BUTHER	PS OTH	10-16-13	0434		0	0	C	0	0	0	0	
+	TI ICE WATER	R-WOMER 10-16-13	10-16-13	1601		0	0	0	0	0	0	0	FILTER
S	IJ PRATPZKO	Both	10-16-13	1046		0	0	0	0	٥	0	0 0	
1	LT BUTCHER	BOTH	10-16-13	1050		0	0	0	0	0	0	4.0	
4	TO WATERION	GUEM	10-16-13	1056		0	0	0	0	0	0	0	W LIGHT
00	FISHMARKET	BOTH	10-16-13	1106		11	5	27	0	0	0	0.1	
5	LITAKI PEST	E-01-01 AZMM-0	10-16-13	1607		0	0	0	0	0	0	40	
10	KAUVA R.O		10-16-13	1120		0	0	0	0	0	0	0	
1	KAJUR P. TAP		10-16-13	1124		_	0	_	0	0	0	17.0	

Received by: Sampler: NATHEN MATERIA

Date/Time:

Incubation start date/time: ID-16-13 / 1355

Expected read out date/time: 10-16-13 / 135 S 1 1445 Actual read out date/time: 10 i7

Signature: Date approved by Lab Manager:

Colliert Q-Tray 2000 Comparator Expiration Date: 13, NIAR 2614

Lab analyst: NIPITHAN

Expiration Date: 07 NOV 70B Collier Lot # K#214

shaking, are all samples lighter yellow than *After adding Colilert to samples and shaking, is media completely dissolved in all samples? (YIN) "After adding Colilert to samples (N/N) comparator?



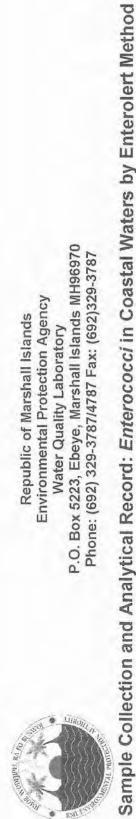
MARY DESCRIPTION OF THE STATE O

Participant of the first of the factor of th

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

13 145 2 0 2 2 0 2 1320 49 72400 49 72400 37: Date/Time:	C-WASP 10-16-13 1330 49 49 7400 5 0	P-WMER 10-18-13 1474 5 0 S 0 0 0	Type Date Time Comp. # pos (+) MPN/	MPN (mg/L) 1100 mL O O O O O C O O Lab analyst: NARTH	MPN 7100 mL Lab at Collier Collier	os (+) MPNV # pos (+) ells mL small mL Large Small 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	# poo #	# pos (+) MPN/ 100 o.C Large Small nl. Large nl. Large small nl. Large n	Total coliform t pos (+) MP wells ml 2 0 2 3 0 2 4 48 724 Afrime:	Total We we Large Large A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Temp. °C	Time 1230	M	Sample Collection Record Type Date P-WMER 10-16-1 C-WMER 10-16-1 C-WMER 10-16-1 A-WHER 10	Sample Collection Record # Location Type Date R-CTBRE IC R-WATCH ID-16-13 R-CTBRE ID R-WATCH ID-16-13 R-CTBRE ID R-WATCH ID-16-13 Received by Incubation start date/time: 10-16-13 / 1855
	The state of the s	C-WYSE 10-16-13 1330 49 49 7400 5 0	P-WPRP D-16-13 12/S 2 0 2 0 0 P-WPRP D-16-13 12/S 14/S P-WPRP D-16-13 12/S 14/S P-WPRP D-16-13 12/S 44 48 > 2400 S 0 S												
R-WARR 10-16-13 1125 2 0 2 0 0 0	R-WATCR 10-18-13 1479 5 0 5 0 0 0		Small Large Small	0	0	0	٥	7	0	4		IZIS		1	14E
	2-WATER 10-16-13 1125 2 0 2 0 0 0 0 0 0 0 0 0 0 0	2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				1	Large	1	Small	Large			trifoto de la constitución de la	the first transfer and the second sec	The state of the s
Type Date Time C Large Small mL Large Small mL	Type Date Time Temp. # pos (+) wells wells MPN/ wells mL # pos (+) MPN (mg/L) PAC P-WPKER IO-16-13 IL4IS 2 0 2 0	Type Date Time Temp. o.C # pos (+) MPN/ wells 100 wells 1100 wel				li	E-co	form	al colf	Tot			Record	e Collection F	Sampl

shaking, is media completely dissolved in all (N/N) samples?



P.O. Box 5223, Ebeye, Marshall Islands MH96970 Phone: (692) 329-3787/4787 Fax: (692)329-3787 Environmental Protection Agency Republic of Marshall Islands Water Quality Laboratory

		Comments								No. of the last of
ray 2000		MPN (actual	(01 ×	8	20					Lab analyst: CPTHAN
Results for Quanti-tray 2000	Enterococci	NAM	(alluted)	8	۵					
esuits r	ш	# pos (+)	Small	4	_					
2		od #	Large	7	4					Date/Time:
		Temp. °C								
		Time		1630	1241					d by:
	n Record	Date		10-25-15 1630	10-25-13					Received by:
	Sample Collection Record	Type							itrol	7
	San	Location		TREATMENT PLANT CASTUMER	DONG PLANT				Negative Blank Control	Sampler: NATHON
		Lab #		-	N					

Expiration Date: 23 GON 2014 51524 Enterolert Lot #: Standard for Marine Recreational Water Quality is 104MPN/100mL SIL 000 Incubation start date/time: 10-25-12/ 17 12 Expected read out date/time: 10 - 25 - 13 / Actual read out date/time: $10 - \mathcal{U} - 4$

Signature: Date approved by Lab Manager:

shaking, is media completely dissolved in all samples? (Y/N) × *Did you prepare the negative blank for comparison? (Y/N) × *After adding Enteroler to samples and

Enterolert Form: Revised Jan 24, 2013



P.O. Box 5223, Ebeye, Marshall Islands MH96970 Phone: (692) 329-3787/4787 Fax: (692)329-3787 Environmental Protection Agency Republic of Marshall Islands Water Quality Laboratory

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

		Comments												S. Her
tray 2000		MPN (actual	(DL X	2500	2000	4400	2400	10 10 36 13 100 NIN	40	1500	20	100	O	ob analyst
Results for Quanti-tray 2000	Enterococci	NAM	(dilluted)	250	200	440	240	-	4	150	2	0	i, p	Date/Time: (0/30 1500
esuits 1		# pos (+)	Small	q	M	24	21	-	4	II	0	1	ф	10/30
Ľ		m b b	Large	4.	48	44	40	0	ĺΝ	40	8	æ	P)ate/Time
		Temp. °C												
		Time		1310	1317	1326	(335	1341	1352	1401	1421	1435	1625	Received by: KAWA
	on Record	Date		0-25-12 1310	81-82-01	10-28-18	10-28-13	10-28-13	D-28-12	10-28-15 1401	10-28-15 1421	10-28-13	10-28-12 1625	Receive
	Sample Collection Record	Type		COMSTAN	COPPETENCE	COMETAL	COPSTAL	COMSTAN	COPSTAL	COPETAL	COPSTAL	COPSTAL	ntrol	Ç
	Sa	Location		BEALT PARRE	BATEN WETO	1970	MICHONOM	About Dock	COKOTATA	TOBIKLE	CONTRACT I	DUMP SIR	Negative Blank Control	Sampler: Nathan
		Lab #		_	0	M	4	n	2	1	00	9		

Standard for Marine Recreational Water Quality is 104MPN/100mL

Expiration Date: 23 JUN 2014 Enterolert Lot #: EX 524

*After adding Enterolert to samples and shaking, is media completely dissolved in *Did you prepare the negative blank for (N/A) all samples? comparison?

Enterolert Form: Revised Jan 24, 2013

Date approved by Lab Manager: KAMA Signature: (INTIM

Expected read out date/time: 10-29-13/ 162-S

Actual read out date/time: 10-30-13, OG 20



FOR SECURITY STATE OF THE SECOND SECURITY SECOND SE

Sample Collection and Analytical Record: Total Coliform and E.coli in Drinking Water by Colilert-24 Method.

	Comments										HAN	168	APP 2014	Collier to samples and	comparator? (Y/N)	*After adding Coliler to samples and shaking is media completely dissolved in all
FAC (mg/L) mL											Lab analyst: NOTHAN	Collect of # BJ4168	Expiration Date: 13	*After adding Collik		*After adding Colik shakina is media con
2	MPN /100		c	5	250	0	0	0	٥		Lab ar	Colifert	Expirat	*After	comparator?	*After
tal coliform E-coli	# bos (+) wells	Small	0	-	20	0	0	0	0		-	I				
E-coli		Large	0	7	4.8	0	0	٥	0		1500		- 1			
form	100 100	INF	0	1300	72460	0	-	0	36		15 13		mparator			
Total coliform	# pos (+)	Small	0	45	20	0	٥	0	8		ne: ///		Colilert Q-Tray 2000 Comparator Expiration Date:			
Tot	aw w	Large	0	49	40	0	-	0	7		Date/Time:		Colilert Q-Tray 2 Expiration Date:			
	Temp.												Coliler			
	Time	-	1001	2101	1016	1019	1630	1645	1050		Lnach		F			
ecord	Date			11-11-13	21-11-11	11-11-13	11-11-12 1030	11-11-02	11-11-13		Received by:	00	1100		Signature:	~
Sample Collection Record	Type		C-WATER	C-WARER	#1 #0 C-WAREK	C-WATER	C-WAISE	C-WARER	C-wores		Rec	-11-13 / 11	11-12-13/		iger:	lan 24 2013
Sample	Location		KEBELDAK (MID) C-WATER 11-11-13	ATRIUM (TOBINCE)#8 C-10APER 11 -11-13	11 # 1 #9	KEVINSIN (TOBIKLE) C-WATER 11-11-13	WAYNE LARI	WAYNE (LOKANIUK)	PERMEN C (BUD)		Sampler: NATHAN	Incubation start date/time: 11-11-13 / 1100	Expected read out date/time: 11-12-15 / 1100		Date approved by Lab Manager:	Colilert-24 Form: Revised Jan 24 2013
	Lab#		-	7	N	4	S	3	-		Sal	Inc	Act Act		Dat	ပိ



P.O. Box 5223, Ebeye, Marshall Islands MH96970 Environmental Protection Agency Republic of Marshall Islands Water Quality Laboratory

Phone: (692) 329-3787/4787 Fax: (692)329-3787

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

		Comments												
tray 2000	TI.	MPN (actual x 10)		310	340	160	0009	160	970	810	0005	0011	1	
Results for Quanti-tray 2000 Enterococci	Enterococc	MPN	(allutea)	31	39	76	69	160	94	2	3	011	Ī	
esults i		pos (+) wells	Small	W	S	17	10	77	0	J	20	2	1	6
Re		# pos (+)	Large	\bar{h}	24	13	20	7	36	34	42	30	1	
		Temp, °C												
	n Record	Time	1	1305	1311	1330	1341	1346	1357	1901	1409	1430		Received by: KAWIR
		Date		11-12-13	11-12-13 1311	11-12-13	1-12-13	11-12-13	11-17-13 1257	11-12-13	11-12-13	11-12-13	11-12-13	
Sample Collection Record		Type		(COMSTRAL	COASTAL 11-12	COPSTAL	CORSTAL	CORSTAL	COMSTAL	COPSTA-L	COASTAL	CORSTAL	ıtrol	
		Location		P. EACH POPUK	BARN WETO	Love werd	MONDIN WETO	DCCK	EDKUTATA WETO COASTAL	TOBIKLE WETO	OUTPALL	DUMPSITE	Negative Blank Control	
		Lab #	‡	-	N	10	4	5	0	1	00	9		

Standard for Marine Recreational Water Quality is 104MPN/100mL

Expiration Date: 23 JUN 204 Enterolert Lot #:

*After adding Enterolert to samples and shaking, is media completely dissolved in all samples?
*Did you prepare the negative blank for comparison?

(Y/N)

Date approved by Lab Manager: KMWM Signature: 10

Expected read out date/time: 11 18-13 / 16.25

Actual read out date/time: 11-14-12/

Incubation start date/time: 11-12-13 / 1625

Enterolert Form: Revised Jan 24, 2013



Republic of Marshall Islands **Environmental Protection Agency** Water Quality Laboratory

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

					R	esults	for Quanti-	tray 2000		
	Sample Co	llection Reco	ord				Enterococo			
Lab#	Location	Туре	Date	Time		s (+) ells	MPN	MPN (actual	Comments	
		7.00			Large	Small	(diluted)	x 10)		
0649	#1 Beach Park	COASTAL	8-15-11	900	19	1	25	250		
0650	#2 Batien	COATTAL	8-15-11	900	5	1	6	60		
0651	#3 Lole	COATTAL	8-15-11	900	3	0	3	30		
0652	# 4 Mon Nin	COASTAL	8-15-11	900	6	0	6	60		
0653	#5 Ebaye Doch	COASTAL	P-15-11	900	0	0	0	0		
0654	#6 Eokwojanjer	COASTAL	8-15-11	900	1	0	1	10	· 1/1	
0655	#7 Tolikle	COASTAL	8-15-11	900	49	20	490	4900		
1656	#8 Outful #1	COASTAL	8-15-11	900	17	2	23	230		
0657	#9 Outful#2	COATTAL	8-15-11	900	8	2	11	110		
0658	#10 Riblic Dump	COASTAL	8-15-11	900	2	0	2	20		
	Negative Blank Control			1900	_	-	-	NEGATIVE	F	

Sampler: NATHAN M.

Incubation start date/time: 8-15-11 1 1930 Expected read out date/time: 8 - 16 - 11 1 193 0

Actual read out date/time: 8-16-11 / 1930

Last updated: Nov. 5, 2010 FAS Lab Cert

Date approved by Lab Manager: 8/17/11 Signature: The Son Meling

Lab analyst: DOUELAS

Enterolert Lot #: HF8/08

Expiration Date: 04 Nov 2011

*After adding Enterolert to samples and shaking, is media completely dissolved (Y/N) in all samples?

*Did you prepare the negative blank for comparison? (Y/N)



Republic of Marshall Islands **Environmental Protection Agency** Water Quality Laboratory

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

	Sample Co	ollection Reco	rd *		R		for Quanti- Enterococo	Comments	
Lab#	Location	Туре	Date	Time .			MPN (diluted)	MPN (actual x 10)	Comments
			1.74		Large	Small	0	0	
	BEACH PARK BATIEN	COASTAL	1-20-12	1400	49	18	310	3100	
	LOLE	COASTAL			37	5	73	730	
	MONNIN	COASTAL	1-20-12		49	44	1600	16000	
	EBEYE DOCK	COASTAL	1-20-12	1418	0	0	0	0	
	EOKWOSAJAR	COASTAL	1-20-12	1420	49	25	460	4600	
	TOBIKLE	COASTAL	1-20-12	1425	45	13	150	1500	
	OUTFALLI	COASTAL	1-20-12	1430	11	2	13	130	
	OUTHALL I	COASTAL	1-20-12	1435	29	7	53	530	
San	Dump SITE	COASTAL	1-20-12	1445	49	16	280	2800	7
	Negative Blank Co	1-21-12	1000	-	-	-	NEGATIVE		

Lab analyst: ABE Sampler: NATHANIncubation start date/time: $\frac{121-12M}{121-12}$ | 123.0 Expected read out date/time: /-22-/2 / /23 o

Actual read out date/time: /-22-/2/ /530

Date approved by Lab Manager: /-22-/2 Signature: Quralan / Keling

Enterolert Lot #: JG 728 Expiration Date: 08 OCT /2

*After adding Enterolert to samples and shaking, is media completely dissolved

in all samples? (Y/N) *Did you prepare the negative blank for comparison? (Y/N) _______ comparison?

Last updated: Nov. 5, 2010 FAS Lab Cert

* Samples put in cooler of ICE - Represented overnight.



Republic Marshall Islands **Environmental Protection Agency** Water Quality Laboratory

P.O. Box 1322, Majuro, Marshall Islands MH96960 Phone: (692) 625-3035 Fax: (692)625-5202

Sample Collection and Analytical Record: Enterococci in Coastal Waters by Enterolert Method

		lection Reco	rd				for Quanti- Enterococo		
Lab#	Location	Туре	Date	Time		s (+)	MPN (diluted)	MPN (actual	Comments
					Large	Small		x 10)	
0178-12 E	BEYE DUMP	COASTAL	2-10-12	1335	0	0	0	0	
0179-12 0	UTFALL I	COAPTAL	2-10-12	1345	2	0	2	20 *	Serface samples
0180-12 0	NATALL I	COASTAL	2-10-12	13.47	0	0	0	0 *	Serface samples Surface samples
0181-12 7	TOBIKLE LAGN	COASTAL	2-10-12	1350	0	0	0	0	
0182-12 E	EOKWOJAJA	CONSTAL	2-10-12	1355	1	0	1,	10	
0183-12 E	BEYE DOCK	COASTAL	2-10-12	1357	0	0	0	0	17
0184-12 1	YONNIN LACN.	COASTAL	2-10-12	1400	0	0	0	0	
0185-12	LOLE LACK.	COASTAL	2-10-12	1405	1	0	1	10	
0186-12 1	BATIEN LACN.	COATTAL	2-10-12	1410	0	0	0	0	10
0/87-12 B	EACH PARK	WASTAL	2-10-12	1415	0	0	0	0	
Negative Blank Control			2-11-12		-	-	-	NECATIVE	P1/-

Incubation start date/time: 2-//-/2 / /200

Expected read out date/time: 2-/2-/1 / /20 0

Actual read out date/time: 2-/2-/1 / 230

Date approved by Lab Manager: 2-/2-/2 Signature:

Standard for Marine Water Quality is 104MPN/100mL

Expiration Date: 08 Oct. 2012

*After adding Enterolert to samples and shaking, is media completely dissolved in all samples? (Y/N)

*Did you prepare the negative blank for (Y/N) comparison?