

Alpha Test Plan
USB BASIC v1.3

Tester Name:	
Date Completed:	
Environment(s) Tested:	AquaLite S2 + Micro Expander Option

E1

Setup

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-1.0.0	AL S2 + MX	Setup AquaLite v1.36						
E-1.0.1	AL S2 + MX		Download & install AquaLite v1.36 from https://aquarius.je/aqualite (unzip files)	AquaLite v1.36 is downloaded and installed on your system.				
E-1.0.2	AL S2 + MX			System should boot into "BASIC Press RETURN key to start" flashing screen. Menubar should say AquaLite v1.36 .				
E-1.0.3	ALS2 + MX		Within AquaLite v1.36, go to menu option Tool > Options, select the Peripherals tab, and make sure Micro Expander is checked. Click Ok.	System should beep and reboot.				
E-1.0.4	AL S2 + MX		l '	The "About USB BASIC" screen should be displayed. Release Date should show "Alpha 2023-05-09".				
E-1.0.5	AL S2 + MX		Press any key to exit the About screen.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-1.0.6	AL S2 + MX		Note: This screen is the starting point for most tests in this plan.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-1.1.0	AL S2 + MX	Test legacy commands						
E-1.1.1.1	AL S2 + MX	Test CALL xx	From the USB BASIC command screen type CALL \$8000 and hit	The cursor should move down one row, and the system should freeze.				
			RETURN					
E-1.1.1.2	AL S2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				1
				the next line with a cursor below.				
E-1.1.1.3	AL S2 + MX		From the USB BASIC command screen type CALL -32768 and hit	The cursor should move down one row, and the system should freeze.				1 1
			RETURN					
E-1.1.1.4	AL S2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				1
				the next line with a cursor below.				
E-1.1.1.5	AL S2 + MX		From the USB BASIC command screen type CALL 32768 (NO minus	The cursor should move down one row, and the system should freeze.				1
			sign!) and hit RETURN					
E-1.1.1.6	AL S2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-1.1.2	AL S2 + MX	Test CAT	From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the USB folder				
				within the AquaLite program folder, followed by Ok beneath. Note				
				that the contents can vary from system to system.				1
E-1.1.3.1	AL S2 + MX	Test CD	From the USB BASIC command screen type CD and hit RETURN	The cursor should move down one row, and a / character should be				
E-1.1.3.1	AL SZ + IVIX	lest CD	From the USB BASIC command screen type CD and nit RETURN	displayed, followed by Ok beneath.				1
E-1.1.3.2	AL S2 + MX		From the USB BASIC command screen type CD"ROMS" and hit	The cursor should move down one row and display Ok beneath.				++
E-1.1.5.2	AL 32 + IVIX		RETURN	The cursor should move down one row and display ok beneath.				1
E-1.1.4	AL S2 + MX	Test DIR	From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB >				
E-1.1.4	AL 32 + IVIX	lest DIK	From the OSB BASIC command screen type DIR and the RETORN	ROMS folder within the AquaLite program folder, followed by Ok				
				beneath. Note that the RETURN/ENTER key may have to be pressed				
				one or more times to scroll through the full list of contents.				
				one of more times to scroll through the full list of contents.				
E-1.1.5.1	AL S2 + MX	Test CLS	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan				
			,,	background.]
E-1.1.5.2	AL S2 + MX		From the USB BASIC command screen type CLS 8 and hit RETURN	System should clear the screen and show Ok in black letters on a grey				
				background.				1 !
E-1.1.5.3	AL S2 + MX		From the USB BASIC command screen type CLS \$7D and hit RETURN	System should clear the screen and show Ok in white letters on a dark				
				green background.				
E-1.1.5.4	AL S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan				
				background.			1	

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-1.1.6.1	AL S2 + MX	Test SAVE a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				i '
E-1.1.6.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE 20 CLS 30 PRINT "Hello"	System should show each line typed, and move down to the empty line beneath.				
E-1.1.6.3	AL S2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-1.1.6.4	AL S2 + MX		From the USB BASIC command screen type SAVE "TEST01.BAS" and hit RETURN	The cursor should move down one row and display Ok beneath. In the USB > ROMS folder within the AquaLite program folder, there should be a new file named TEST01.BAS.				
E-1.1.6.5	AL S2 + MX		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file should be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-1.1.7.1	AL S2 + MX	Test LOAD a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-1.1.7.2	AL S2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should display NO PROGRAM LINES with Ok beneath.				
E-1.1.7.3	AL S2 + MX		From the USB BASIC command screen type LOAD "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-1.1.7.4	AL S2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program listed in test E- 1.1.6.2 and display Ok beneath.				
E-1.1.8.1	AL S2 + MX	Test RUN a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-1.1.8.2	AL S2 + MX		From the USB BASIC command screen type RUN "TEST01.BAS" and hit RETURN	System should clear the screen, print Hello at the top, and display Ok beneath.				
E-1.1.9.1	AL S2 + MX	Test DEL	From the USB BASIC command screen type DEL "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-1.1.9.2	AL S2 + MX		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TEST01.BAS" file SHOULD NOT be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-1.1.10.1	ALS2 + MX	Test SAVE a BIN file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-1.1.10.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE BIN 20 POKE \$8000,97,98,99,100 30 PRINT "Done"	System should show each line typed, and move down to the empty line beneath.				
E-1.1.10.3	AL S2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-1.1.10.4	AL S2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print Done and display Ok beneath the program listing.				
E-1.1.10.5	AL S2 + MX		From the USB BASIC command screen type CD "/" and hit RETURN	System should display Ok beneath.				
E-1.1.10.6	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: SAVE "POKE.BIN", \$8000, 4	System should display Ok beneath.				
E-1.1.10.7	AL S2 + MX		From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB folder within the Aqualite program folder, and the file named "POKE.BIN" should be listed in the contents. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll past the full list of contents.				
E-1.1.11.1	AL S2 + MX	Test LOAD a BIN file	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-1.1.11.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: LOAD "POKE.BIN", \$3242	System should display abcd in the middle of the screen, with Ok beneath the text you just typed.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-1.1.12.1	AL S2 + MX	Test RUN a ROM file	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-1.1.12.2	AL S2 + MX		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-1.1.12.3	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: RUN "SNAFU.ROM"	System should load the SNAFU game ROM and display the SNAFU title screen.				
E-1.1.12.4	AL S2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-1.1.13.1	AL S2 + MX	Test DEBUG	From the USB BASIC command screen type DEBUG and hit RETURN	The AQUBUG screen should pop up with white text on a blue background.				
E-1.1.13.2	AL S2 + MX		On the AQUBUG screen type the letter Q	System should return to the USB BASIC command screen, showing the DEBUG command with Ok beneath.				
E-1.1.14.1	AL S2 + MX	Test HEX\$	From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (12288)	System should display 3000 on the next line with Ok beneath.				
E-1.1.14.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (-123)	System should display FF85 on the next line with Ok beneath.				
E-1.1.14.3	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (65535)	System should display FFFF on the next line with Ok beneath.				
E-1.1.15	AL S2 + MX	Test JOY	From the USB BASIC command screen type the code below and try to type RETURN and the 1 key at about the same time (maybe a slight delay before the 1 key): PRINT JOY (0)	System should display 64 on the next line with Ok beneath. If you weren't able to get it to work exactly right, a 0 might be displayed instead of the 64. Try a couple of times to get it to work, if you can.				
E-1.1.16	AL S2 + MX	Test IN	From the USB BASIC command screen type the code below and hit RETURN: PRINT IN (\$FF)	System should display 247 on the next line with Ok beneath.				
E-1.1.17.1	AL S2 + MX	Test PSG	From the USB BASIC command screen type the code below and hit RETURN: PSG 8,15,0,148,1,1,7,56	System should play a Db4 tone continuously.				
E-1.1.17.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PSG 8,0,7,0	System should stop playing the tone.				
E-1.1.18.1	AL S2 + MX	Test OUT	From the USB BASIC command screen type the code below and hit RETURN: PSG 8,15,0,148,1,1,7,56	System should play a Db4 tone continuously and print Ok beneath.				
E-1.1.18.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: OUT 247,8 OUT \$56,0	System should print Ok after each RETURN, and then should stop playing the tone after the second.				
E-1.1.19.1	AL S2 + MX	Test EDIT	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-1.1.19.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: 10 REM Testing EDIT	System should show each line typed, and move down to the empty line beneath.				
E-1.1.19.3	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: EDIT 10	System should list the previously entered line 10 with a blue cursor and white text positioned over the R in the REM command.				
E-1.1.19.4	AL S2 + MX		Within the line 10 edit with the cursor on the R of REM, press the SPACE bar to insert a space between the line number 10 and the REM statement.	System should display line 10 with a SPACE between the 10 and the REM command.				
E-1.1.19.5	AL S2 + MX		Within the line 10 edit with the cursor on the R of REM, CTRL +/ eleven times so the cursor is on top of the SPACE after the word Testing.	System should list the previously entered line 10 with a blue cursor and white text positioned over the SPACE after the word Testing.				
E-1.1.19.6	AL S2 + MX		Within the line 10 edit with the cursor on the SPACE between the word Testing and EDIT, press the DELETE/BACKSPACE key three times to delete the letters "ing" at the end of the word Testing.	System should list the previously entered line 10 with a blue cursor and white text positioned over the SPACE before the word EDIT.				
E-1.1.19.7	AL S2 + MX		Within the line 10 edit with the cursor on the SPACE between the word Test and EDIT, press CTRL + P eight times so the cursor is over the letter R in REM, and then hit RETURN/ENTER.	The cursor should go to the line beneath line 10, and should NOT display Ok beneath.				
E-1.1.19.8	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN: LIST 10	System should display a blank line, then list line 10 again, with Ok beneath.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-1.1.20.1	AL S2 + MX	Test LOCATE	From the USB BASIC command screen type the code below and hit RETURN after each line: 10 CLS 20 LOCATE 20,12 30 PRINT CHR\$(KEY(0))	System should show each line typed, and move down to the empty line beneath.				
E-1.1.20.2	AL S2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should move the cursor to the middle of the screen.				
E-1.1.20.3	AL S2 + MX			System should display a "g" in the middle of the screen, then go to the next line and print Ok beneath.				
E-1.1.20.4	AL S2 + MX			The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-1.1.21.1	AL S2 + MX	Test CTRL + C	RETURN. Stay on the AquaLite menu.	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There should NOT be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-1.1.21.2	AL S2 + MX			The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-1.1.21.3	AL S2 + MX		, , ,	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There SHOULD be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-1.1.21.4	AL S2 + MX			A blank screen with "Break", followed by "Ok" on the next line with a cursor below.				
			PLEASE CONTINUE	EVEN IF ALL TESTS IN THIS SECTION DID NOT PAS	S.			

New Comm			_					
Test No		Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-1.2.0	AL S2 + MX	Test NEW commands						
E-1.2.1.1	AL S2 + MX	Test POKE auto-increment	From the AquaLite menu, select File > Hard Reset, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				1
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				1
				the next line with a cursor below.				1
E-1.2.1.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	The screen should print abcd in a row towards the middle bottom of				
			RETURN:	the screen.				
			POKE 12945,97,98,99,100					<u> </u>
E-1.2.2.1	AL S2 + MX	Test POKE range	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-1.2.2.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	The screen should print aaaaaaaaa (nine letter a's) in a row towards				
			RETURN:	the middle bottom of the screen.				į .
			POKE \$3291 TO \$3299,97					
E-1.2.3.1	AL S2 + MX	Test POKE step	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
								<u> </u>
E-1.2.3.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	The screen should print aaa (three letter a's) in a downward line at the				
			RETURN:	middle bottom of the screen.				į .
			POKE \$3291,97,STEP 40,97,STEP 40,97					<u> </u>
E-1.2.4.1	AL S2 + MX	Test POKE strings	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-1.2.4.2	AL S2 + MX	1	From the USB BASIC command screen type the code below and hit	The screen should print the words Hubba Bubba stacked on top of				
			RETURN:	each other at the middle bottom of the screen.				į .
			POKE \$3291, "Hubba", STEP 40, "Bubba"					
E-1.2.5.1	AL S2 + MX	Test COPY	From the AquaLite menu, select File > Hard Reset, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				į .
				the next line with a cursor below.				
E-1.2.5.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	The text at the top of the screen ("Copyright © 1982 by Microsoft, Inc				
			RETURN:	S2" & "USB BASIC v1.3" should be duplicated in the middle of the				
			COPY \$3000,\$3000+440,120	screen, with the Ok beneath the COPY command near the top.				
								<u> </u>
E-1.2.6.1	AL S2 + MX	Test ATN	From the AquaLite menu, select File > Hard Reset, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-1.2.6.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	System should display .785398 on the next line with Ok beneath.				į .
			RETURN:					
			PRINT ATN(1)					
E-1.2.7.1	AL S2 + MX	Test DEC	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
]						
E-1.2.7.2	AL S2 + MX	1	From the USB BASIC command screen type the code below and hit	System should display 22015 on the next line with Ok beneath.			l	1
			RETURN:					1
			PRINT DEC("55FF")			1		
E-1.2.8.1	AL S2 + MX	Test DEEK	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .			l	1
]						
E-1.2.8.2	AL S2 + MX	1	From the USB BASIC command screen type the code below and hit	System should display 6B4F on the next line with Ok beneath. (\$4F is			1	
		1	RETURN:	the "O" character and \$6B is the "k" character from the top left of the			l	1
			PRINT HEX\$ (DEEK (12288+41))	screen.)				

E-1,2,9,2 AL :	L S2 + MX	Test DOKE	DOKE 12288+41,\$6948	System should clear the screen and show Ok . System should display Hi at the top left of the screen and show Ok		
E-1.2.10.1 ALS	L S2 + MX	Test KEY	RETURN: DOKE 12288+41,\$6948			
E-1.2.10.1 ALS	L S2 + MX	Test KEY	RETURN: DOKE 12288+41,\$6948			
E-1.2.10.2 AL S		Test KEY		beneath the DOKE command line. (\$48 is the "H" character and \$69 is		l
E-1.2.10.2 AL S		Test KEY		the "i" character.)		
	L S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .		
E-1.2.10.3 AL S			From the USB BASIC command screen type the code below and hit RETURN after each line:	System should show each line typed, and move down to the empty line beneath.		l
E-1.2.10.3 AL 5			10 CLS 42	illie beneatri.		l
E-1.2.10.3 ALS			20 LOCATE 20,12 30 PRINT CHR\$(KEY(0))			
	L S2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should clear the screen to GREEN letters on a PURPLE		
				background and move the GREEN cursor to the middle of the screen, waiting for input.		
E-1.2.10.4 ALS	L S2 + MX		With the cursor in the middle of the screen, press the M key (without the SHIFT key pressed).	System should display a "m" in the middle of the screen, then go to the next line and print Ok beneath.		
E-1.2.11.1 ALS	L S2 + MX	Test SDTM	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .		
E-1.2.11.2 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should display Ok beneath. (Note: On AquaLite, there is no		
			RETURN:	way to actually SET the DateTime, so it will stay set to the hosting		l
510110			SDTM "230517010101"	computer's system clock.)		
E-1.2.11.3 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit RETURN:	System should display SN Error beneath.		l
			SDTM "kkk"			
E-1.2.12.1 ALS	L S2 + MX	Test DTM\$	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .		
E-1.2.12.2 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current date and time,		
			RETURN: PRINT DTM\$(0)	formatted YYMMDDHHMMSSCC, with Ok beneath.		
E-1.2.12.3 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current date and time,		
			RETURN: PRINT DTM\$(1)	formatted YYYY-MM-DD HH:MM:SS, with Ok beneath. Note that the Century is assumed to be 20, and the hours are in 24 hour format.		l
E-1.2.12.4 AL	L S2 + MX			System should display a string with the current date, formatted YYYY-		l
			RETURN: PRINT LEFT\$ (DTM\$ (1),10)	MM-DD, with Ok beneath. Note that the Century is assumed to be 20.		l
E-1.2.12.5 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current time, formatted		
			RETURN: PRINT RIGHT(DTM\$(1),8))	HH:MM:SS, with Ok beneath. Note that the hours are in 24 hour		l
E-1.2.13.1 ALS	L S2 + MX	Test VER	From the USB BASIC command screen type CLS and hit RETURN	format. System should clear the screen and show Ok .		
			·			
E-1.2.13.2 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit RETURN:	System should display 0103, with Ok beneath.		l
			PRINT HEX\$(VER(0))			l
E-1.2.13.3 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should display 1, with Ok beneath.		
			RETURN: PRINT VAL(LEFT\$(HEX\$(VER(0)),2))			l
E-1.2.13.4 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should display 3, with Ok beneath.		
			RETURN:			l
E-1.2.14.1 ALS	L S2 + MX	Test DEF FN / FN	PRINT VAL (RIGHT\$ (HEX\$ (VER (0)), 2)) From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.		
						
	LS2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .		 <u></u>
E-1.2.14.3 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty		
			RETURN after each line: 10 DEF FN A(X) = X+7	line beneath.		l
			20 PRINT FN A(9)			l
			30 PRINT FN A(20)			
	LS2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print 16 on one line, 27 beneath it, with Ok beneath the 27.		
E-1.2.14.5 AL	L S2 + MX		From the USB BASIC command screen type the code below and hit	System should print 14, with Ok beneath.		
			RETURN: PRINT FN A(7)			l

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-1.2.15.1	AL S2 + MX	Test & Operator	From the Aqualite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-1.2.15.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 AS="ABCDEFG" 20 COPY DEEK (6AS+2),\$3291,PEEK (6AS) 30 PRINT "A\$ length =" + STR\$(PEEK (6A\$))	System should show each line typed, and move down to the empty line beneath.				
E-1.2.15.3	AL S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-1.2.15.4	AL S2 + MX]	From the USB BASIC command screen type RUN and hit RETURN	System should print A\$ length = 7 with Ok beneath, and should print ABCDEFG near the middle bottom of the screen.				
E-1.2.16	AL S2 + MX	TESTING COMPLETE	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
				TESTING IS COMPLETE				



Alpha Test Plan
USB BASIC v1.3

Tester Name:	
Date Completed:	
nment(s) Tested:	AquaLite Aquarius II + Micro Expander Option

E2

Setup

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-2.0.0	AL A2 + MX	Setup AquaLite v1.36						
E-2.0.1	AL A2 + MX		Download & install AquaLite v1.36 from https://aquarius.je/aqualite (unzip files)	AquaLite v1.36 is downloaded and installed on your system.				
E-2.0.2	AL A2 + MX		Launch AquaLite v1.36. (aqualite.exe)	System should boot into "BASIC Press RETURN key to start" flashing screen. Menubar should say AquaLite v1.36 .			1	
E-2.0.3	AL A2 + MX		Within AquaLite v1.36, go to menu option Tool > Options, select the Hardware tab, and make sure Aquarius II is selected in the Model section. Click Ok.	System should beep and reboot.				
E-2.0.4	AL A2 + MX		Within AquaLite v1.36, go to menu option Tool > Options, select the Peripherals tab, and make sure Micro Expander is checked. Click Ok.	System should beep and reboot.				
E-2.0.5	AL A2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.0.6	AL A2 + MX		Press the A key within the emulator.	The "About USB BASIC" screen should be displayed. Release Date should show "Alpha 2023-05-09".				
E-2.0.7	AL A2 + MX	1	Press any key to exit the About screen.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.			í T	
E-2.0.8	AL A2 + MX		Press RETURN/ENTER key to go to the USB BASIC command screen . Note: This screen is the starting point for most tests in this plan.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Tim
E-2.1.0	AL A2 + MX	Test legacy commands						
E-2.1.1.1	AL A2 + MX	Test CALL xx	From the USB BASIC command screen type CALL \$8000 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-2.1.1.2	AL A2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.1.3	AL A2 + MX		From the USB BASIC command screen type CALL -32768 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-2.1.1.4	AL A2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.1.5	AL A2 + MX]	From the USB BASIC command screen type CALL 32768 (NO minus sign!) and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-2.1.1.6	AL A2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.2	AL A2 + MX	Test CAT	From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the USB folder within the AquaLite program folder, followed by Ok beneath. Note that the contents can vary from system to system.				
E-2.1.3.1	AL A2 + MX	Test CD	From the USB BASIC command screen type CD and hit RETURN	The cursor should move down one row, and a / character should be displayed, followed by Ok beneath.				
E-2.1.3.2	AL A2 + MX		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-2.1.4	AL A2 + MX	Test DIR	From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB > ROMS folder within the Aqualite program folder, followed by Ok beneath. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				

Test No				Expected Results				Date/Time
E-2.1.5.1	AL A2 + MX	Description Test CLS	Process From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
			7,60	background.				<u> </u>
E-2.1.5.2	AL A2 + MX		From the USB BASIC command screen type CLS 8 and hit RETURN	System should clear the screen and show Ok in black letters on a grey background.				1
E-2.1.5.3	AL A2 + MX		From the USB BASIC command screen type CLS \$7D and hit RETURN	System should clear the screen and show Ok in white letters on a dark green background.				
E-2.1.5.4	AL A2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan background.				1
E-2.1.6.1	AL A2 + MX	Test SAVE a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-2.1.6.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE 20 CLS 30 PRINT "Hello"	System should show each line typed, and move down to the empty line beneath.				
E-2.1.6.3	AL A2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-2.1.6.4	AL A2 + MX		From the USB BASIC command screen type SAVE "TEST01.BAS" and hit RETURN	The cursor should move down one row and display Ok beneath. In the USB > ROMS folder within the AquaLite program folder, there should be a new file named TESTO1.BAS.				
E-2.1.6.5	AL A2 + MX		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TEST01.BAS" file should be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-2.1.7.1	AL A2 + MX	Test LOAD a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-2.1.7.2	AL A2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should display NO PROGRAM LINES with Ok beneath.				
E-2.1.7.3	AL A2 + MX	-	From the USB BASIC command screen type LOAD "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-2.1.7.4	AL A2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program listed in test E- 2.1.6.2 and display Ok beneath.				
E-2.1.8.1	AL A2 + MX	Test RUN a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-2.1.8.2	AL A2 + MX		From the USB BASIC command screen type RUN "TEST01.BAS" and hit RETURN	System should clear the screen, print Hello at the top, and display Ok beneath.				
E-2.1.9.1	AL A2 + MX	Test DEL	From the USB BASIC command screen type DEL " TEST01.BAS " and hit RETURN	System should display Ok beneath.				
E-2.1.9.2	AL A2 + MX		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file SHOULD NOT be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-2.1.10.1	AL A2 + MX	Test SAVE a BIN file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-2.1.10.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE BIN 20 PORE \$8000, 97, 98, 99,100 30 PRINT "Done"	System should show each line typed, and move down to the empty line beneath.				
E-2.1.10.3	AL A2 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-2.1.10.4	AL A2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print Done and display Ok beneath the program listing.				
E-2.1.10.5	AL A2 + MX		From the USB BASIC command screen type CD "/" and hit RETURN	System should display Ok beneath.				
E-2.1.10.6	AL A2 + MX	1	From the USB BASIC command screen type the code below and hit RETURN: SAVE "POKE.BIN", \$8000, 4	System should display Ok beneath.				
E-2.1.10.7	AL A2 + MX		From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB folder within the AquaLite program folder, and the file named "POKE.BIN" should be listed in the contents. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll past the full list of contents.				
E-2.1.11.1		Test LOAD a BIN file	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.11.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: LOAD "POKE.BIN", \$3242	System should display abcd in the middle of the screen, with Ok beneath the text you just typed.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-2.1.12.1	AL A2 + MX	Test RUN a ROM file	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.12.2	AL A2 + MX		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-2.1.12.3	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: RUN "SNAFU.ROM"	System should load the SNAFU game ROM and display the SNAFU title screen.				
E-2.1.12.4	AL A2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.13.1	AL A2 + MX	Test DEBUG	From the USB BASIC command screen type DEBUG and hit RETURN	The AQUBUG screen should pop up with white text on a blue background.				
E-2.1.13.2	AL A2 + MX		On the AQUBUG screen type the letter Q	System should return to the USB BASIC command screen, showing the DEBUG command with Ok beneath.				
E-2.1.14.1	AL A2 + MX	Test HEX\$	From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (12288)	System should display 3000 on the next line with Ok beneath.				
E-2.1.14.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (-123)	System should display FF85 on the next line with Ok beneath.				
E-2.1.14.3	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (65535)	System should display FFFF on the next line with Ok beneath.				
E-2.1.15	AL A2 + MX	Test JOY	From the USB BASIC command screen type the code below and try to type RETURN and the 1 key at about the same time (maybe a slight delay before the 1 key): PRINT JOY (0)	System should display 64 on the next line with Ok beneath. If you weren't able to get it to work exactly right, a 0 might be displayed instead of the 64. Try a couple of times to get it to work, if you can.				
E-2.1.16	AL A2 + MX	Test IN	From the USB BASIC command screen type the code below and hit RETURN: PRINT IN (\$FF)	System should display 247 on the next line with Ok beneath.				
E-2.1.17.1	AL A2 + MX	Test PSG	From the USB BASIC command screen type the code below and hit RETURN: PSG 8,15,0,148,1,1,7,56	System should play a Db4 tone continuously.				
E-2.1.17.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PSG 8,0,7,0	System should stop playing the tone.				
E-2.1.18.1	AL A2 + MX	Test OUT	From the USB BASIC command screen type the code below and hit RETURN: PSG 8,15,0,148,1,1,7,56	System should play a Db4 tone continuously and print Ok beneath.				
E-2.1.18.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: OUT 247,8 OUT \$F6,0	System should print Ok after each RETURN, and then should stop playing the tone after the second.				
E-2.1.19.1	AL A2 + MX	Test EDIT	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.19.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: 10 REM Testing EDIT	System should show each line typed, and move down to the empty line beneath.				
E-2.1.19.3	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: EDIT 10	System should list the previously entered line 10 with a blue cursor and white text positioned over the R in the REM command.				
E-2.1.19.4	AL A2 + MX		Within the line 10 edit with the cursor on the R of REM, press the SPACE bar to insert a space between the line number 10 and the REM statement.	System should display line 10 with a SPACE between the 10 and the REM command.				
E-2.1.19.5	AL A2 + MX		Within the line 10 edit with the cursor on the R of REM, CTRL + / eleven times so the cursor is on top of the SPACE after the word Testing.	System should list the previously entered line 10 with a blue cursor and white text positioned over the SPACE after the word Testing.				
E-2.1.19.6	AL A2 + MX		Within the line 10 edit with the cursor on the SPACE between the word Testing and EDIT, press the DELETE/BACKSPACE key three times to delete the letters "ing" at the end of the word Testing.	System should list the previously entered line 10 with a blue cursor and white text positioned over the SPACE before the word EDIT.				
E-2.1.19.7	AL A2 + MX		Within the line 10 edit with the cursor on the SPACE between the word Test and EDIT, press CTRL + P eight times so the cursor is over the letter R in REM, and then hit RETURN/ENTER.	The cursor should go to the line beneath line 10, and should NOT display Ok beneath.				
E-2.1.19.8	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: LIST 10	System should display a blank line, then list line 10 again, with Ok beneath.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-2.1.20.1	AL A2 + MX	Test LOCATE	From the USB BASIC command screen type the code below and hit RETURN after each line: 10 CLS 20 LOCATE 20,12 30 PRINT CHR\$ (KEY(0))	System should show each line typed, and move down to the empty line beneath.				
E-2.1.20.2	AL A2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should move the cursor to the middle of the screen.				
E-2.1.20.3	AL A2 + MX	1	With the cursor in the middle of the screen, press the G key.	System should display a "g" in the middle of the screen, then go to the next line and print Ok beneath.				
E-2.1.20.4	AL A2 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.21.1	AL A2 + MX	Test CTRL + C	From the AquaLite menu, select File > Hard Reset. Do NOT hit RETURN. Stay on the AquaLite menu.	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There should NOT be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-2.1.21.2	AL A2 + MX		Hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.1.21.3	AL A2 + MX			The "Aquarius MX USB BASIC v1.3" screen should be displayed. There SHOULD be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-2.1.21.4	AL A2 + MX		Press CTRL + C.	A blank screen with "Break", followed by "Ok" on the next line with a cursor below.				
			PLEASE CONTINUE	EVEN IF ALL TESTS IN THIS SECTION DID NOT PAS	S.			

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-2.2.0	AL A2 + MX	Test NEW commands						
E-2.2.1.1	AL A2 + MX	Test POKE auto-increment	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.2.1.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: POKE 12945, 97, 98, 99, 100	The screen should print abcd in a row towards the middle bottom of the screen.				
E-2.2.2.1	AL A2 + MX	Test POKE range	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-2.2.2.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291 TO \$3299,97	The screen should print aaaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen.				
E-2.2.3.1	AL A2 + MX	Test POKE step	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-2.2.3.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291,97,STEP 40,97,STEP 40,97	The screen should print aaa (three letter a's) in a downward line at the middle bottom of the screen.				
E-2.2.4.1	AL A2 + MX	Test POKE strings	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-2.2.4.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291, "Hubba", STEP 40, "Bubba"	The screen should print the words Hubba Bubba stacked on top of each other at the middle bottom of the screen.				
E-2.2.5.1	AL A2 + MX	Test COPY	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.2.5.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: COPY \$3000,\$3000+440,120	The text at the top of the screen ("Copyright © 1982 by Microsoft, Inc 52" & "USB BASIC v1.3" should be duplicated in the middle of the screen, with the Ok beneath the COPY command near the top.				
E-2.2.6.1	AL A2 + MX	Test ATN	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.2.6.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT ATN (1)	System should display .785398 on the next line with Ok beneath.				
E-2.2.7.1	AL A2 + MX	Test DEC	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-2.2.7.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT DEC ("55FF")	System should display 22015 on the next line with Ok beneath.				
E-2.2.8.1	AL A2 + MX	Test DEEK	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-2.2.8.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (DEEK (12288+41))	System should display 684F on the next line with Ok beneath. (\$4F is the "O" character and \$6B is the "k" character from the top left of the screen.)				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-2.2.9.1	AL A2 + MX	Test DOKE	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-2.2.9.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should display Hi at the top left of the screen and show Ok				ı l
			RETURN:	beneath the DOKE command line. (\$48 is the "H" character and \$69 is				ı l
E-2.2.10.1	AL A2 + MX	Test KEY	DOKE 12288+41,\$6948 From the USB BASIC command screen type CLS and hit RETURN	the "i" character.) System should clear the screen and show Ok .				
E-2.2.10.1	AL AZ + MX	TEST KEY	From the USB BASIC command screen type CLS and nit RETURN	System should clear the screen and show Ok .				ı l
E-2.2.10.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				$\overline{}$
			RETURN after each line:	line beneath.				ı
			10 CLS 42					ı l
			20 LOCATE 20,12					ı l
			30 PRINT CHR\$(KEY(0))					
E-2.2.10.3	AL A2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should clear the screen to GREEN letters on a PURPLE				ı l
				background and move the GREEN cursor to the middle of the screen,				1
500404			1001.01	waiting for input.				
E-2.2.10.4	AL A2 + MX		With the cursor in the middle of the screen, press the M key (without the SHIFT key pressed).	System should display a "m" in the middle of the screen, then go to the next line and print Ok beneath.				ı l
E-2.2.11.1	AL A2 + MX	Test SDTM	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .		1		
L 2.2.11.1	ALAZ I WA	TCSC SDTWI	From the 636 basic command screen type 626 and the Reform	System should clear the screen and show ok.				ı l
E-2.2.11.2	AL A2 + MX	1	From the USB BASIC command screen type the code below and hit	System should display Ok beneath. (Note: On AquaLite, there is no				
			RETURN:	way to actually SET the DateTime, so it will stay set to the hosting				_i [
			SDTM "230517010101"	computer's system clock.)				, I
E-2.2.11.3	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should display SN Error beneath.				
			RETURN:					ı l
			SDTM "kkk"					
E-2.2.12.1	AL A2 + MX	Test DTM\$	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				ı l
		4						
E-2.2.12.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN:	System should display a string with the current date and time, formatted YYMMDDHHMMSSCC, with Ok beneath.				ı l
			PRINT DTM\$(0)	formatted YYMINDDHHIMINISSCC, With Ok beneath.				ı l
E-2.2.12.3	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current date and time,				
L LILILLIS	712712 - 14171		RETURN:	formatted YYYY-MM-DD HH:MM:SS, with Ok beneath. Note that the				ı l
			PRINT DTM\$(1)	Century is assumed to be 20, and the hours are in 24 hour format.				ı l
								1
E-2.2.12.4	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current date, formatted YYYY-				1
			RETURN:	MM-DD, with Ok beneath. Note that the Century is assumed to be 20.				ı l
500405			PRINT LEFT\$(DTM\$(1),10)					
E-2.2.12.5	AL A2 + MX		From the USB BASIC command screen type the code below and hit RETURN:	System should display a string with the current time, formatted				ı l
			PRINT RIGHT (DTM\$ (1), 8))	HH:MM:SS, with Ok beneath. Note that the hours are in 24 hour format.				ı l
E-2.2.13.1	AL A2 + MX	Test VER	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
L L.L.13.1	712712 - 1417	TOSC VEN	rom the oss share command street type ozs and me herom	System should dear the screen and show ox .				ı l
E-2.2.13.2	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should display 0103, with Ok beneath.				
			RETURN:					ı l
			PRINT HEX\$ (VER(0))					1
E-2.2.13.3	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should display 1, with Ok beneath.				, 7
			RETURN: PRINT VAL(LEFT\$(HEX\$(VER(0)),2))					_i [
E-2.2.13.4	AL A2 + MX	1		System should display 2 with Ok hannath		 		
t-2.2.13.4	AL AZ + IVIX		From the USB BASIC command screen type the code below and hit RETURN:	System should display 3, with Ok beneath.				, I
			PRINT VAL(RIGHT\$(HEX\$(VER(0)),2))					i I
E-2.2.14.1	AL A2 + MX	Test DEF FN / FN	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.		1		
			7,5	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				i I
E-2.2.14.2	AL A2 + MX	1	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				$\overline{}$
]				<u> </u>		I
E-2.2.14.3	AL A2 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line:	line beneath.				_i [
			10 DEF FN A(X) = X+7 20 PRINT FN A(9)					ı I
			20 PRINT FN A(9) 30 PRINT FN A(20)					, I
E-2.2.14.4	AL A2 + MX	1		Custom should print 16 on one line 27 honouth it with Other and the		 		
t-2.2.14.4	AL AZ + IVIX		From the USB BASIC command screen type RUN and hit RETURN	System should print 16 on one line, 27 beneath it, with Ok beneath the				_i [
E-2.2.14.5	AL A2 + MX	1	From the USB BASIC command screen type the code below and hit	System should print 14, with Ok beneath.				$\overline{}$
L 2.2.17.J	ALAZ I WIA		RETURN:	System should print 14, with ox benedul.				ı I
			PRINT FN A(7)					ı I
		1	PRINT FN A(7)					ш

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-2.2.15.1	AL S2 + MX	Test & Operator	From the Aqualite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-2.2.15.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 A\$="ABCDEFG" 20 COPY DEEK (&A\$+2),\$3291,PEEK (&A\$) 30 PRINT "A\$ length =" + STR\$ (PEEK (&A\$))	System should show each line typed, and move down to the empty line beneath.				
E-2.2.15.3	AL S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-2.2.15.4	AL S2 + MX]	From the USB BASIC command screen type RUN and hit RETURN	System should print A\$ length = 7 with Ok beneath, and should print ABCDEFG near the middle bottom of the screen.				
E-2.2.16	AL A2 + MX	TESTING COMPLETE	From the Aqualite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
				TESTING IS COMPLETE				



Alpha Test Plan
USB BASIC v1.3

_	
Tester Name:	
Date Completed:	
onment(s) Tested:	Aqualite S1 + Micro Expander Option

Setup

E3

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.0.0	AL S1 + MX	Setup AquaLite v1.36						
E-3.0.1	AL S1 + MX		Download & install AquaLite v1.36 from https://aquarius.je/aqualite	AquaLite v1.36 is downloaded and installed on your system.				
			(unzip files)					
E-3.0.2	AL S1 + MX		Launch AquaLite v1.36. (aqualite.exe)	System should boot into "BASIC Press RETURN key to start" flashing				
				screen. Menubar should say AquaLite v1.36.				
E-3.0.3	ALS1 + MX		Within AquaLite v1.36, go to menu option Tool > Options, select the	System should beep and reboot.				
			Hardware tab, and make sure Aquarius I is selected in the Model					
			section, and select Aquarius S1 ROM in the ROM section. Click Ok.					
E-3.0.4	ALS1 + MX		Within AquaLite v1.36, go to menu option Tool > Options, select the	System should beep and reboot.				
			Peripherals tab, and make sure Micro Expander is checked. Click Ok.					
E-3.0.5	AL S1 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-3.0.6	ALS1 + MX		Press the A key within the emulator.	The "About USB BASIC" screen should be displayed. Release Date				
				should show "Alpha 2023-05-09".				
E-3.0.7	ALS1 + MX		Press any key to exit the About screen.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-3.0.8	ALS1 + MX	1	Press RETURN/ENTER key to go to the USB BASIC command screen.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			Note: This screen is the starting point for most tests in this plan.	line with a cursor below.				
	·	DO N	IOT CONTINUE IF ANY TESTS IN THIS SECTION DID	NOT PASSI CONTACT THE TESTING COORDINATO	R Sean Harrington sph@1stage com	·	·	

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.1.0	ALS1 + MX	Test legacy commands						
E-3.1.1.1	AL S1 + MX	Test CALL xx	From the USB BASIC command screen type CALL \$8000 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-3.1.1.2	AL S1 + MX		From the Aqualite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.1.3	AL S1 + MX		From the USB BASIC command screen type CALL -32768 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-3.1.1.4	AL S1 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.1.5	AL S1 + MX		From the USB BASIC command screen type CALL 32768 (NO minus sign!) and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-3.1.1.6	AL S1 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.2	AL S1 + MX	Test CAT	From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the USB folder within the Aqualite program folder, followed by Ok beneath. Note that the contents can vary from system to system.				
E-3.1.3.1	AL S1 + MX	Test CD	From the USB BASIC command screen type CD and hit RETURN	The cursor should move down one row, and a / character should be displayed, followed by Ok beneath.				
E-3.1.3.2	AL S1 + MX		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-3.1.4	AL S1 + MX	Test DIR	From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB > ROMS folder within the Aqualite program folder, followed by Ok beneath. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.1.5.1	AL S1 + MX	Test CLS	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan background.				
E-3.1.5.2	AL S1 + MX	•	From the USB BASIC command screen type CLS 8 and hit RETURN	System should clear the screen and show Ok in black letters on a grey background.				
E-3.1.5.3	AL S1 + MX		From the USB BASIC command screen type CLS \$7D and hit RETURN	System should clear the screen and show Ok in white letters on a dark green background.				
E-3.1.5.4	AL S1 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan background.				
E-3.1.6.1	AL S1 + MX	Test SAVE a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-3.1.6.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE 20 CLS 30 PRINT "Hello"	System should show each line typed, and move down to the empty line beneath.				
E-3.1.6.3	AL S1 + MX	•	From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok heneath.				
E-3.1.6.4	AL S1 + MX		From the USB BASIC command screen type SAVE "TEST01.BAS" and hit RETURN	The cursor should move down one row and display Ok beneath. In the USB > ROMS folder within the AquaLite program folder, there should be a new file named TESTO1.BAS.				
E-3.1.6.5	AL S1 + MX		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file should be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-3.1.7.1	AL S1 + MX	Test LOAD a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-3.1.7.2	AL S1 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should display NO PROGRAM LINES with Ok beneath.				
E-3.1.7.3	AL S1 + MX		From the USB BASIC command screen type LOAD "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-3.1.7.4	AL S1 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program listed in test E- 3.1.6.2 and display Ok beneath.				
E-3.1.8.1	AL S1 + MX	Test RUN a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-3.1.8.2	AL S1 + MX		From the USB BASIC command screen type RUN "TEST01.BAS" and hit RETURN	System should clear the screen, print Hello at the top, and display Ok beneath.				
E-3.1.9.1	AL S1 + MX	Test DEL	From the USB BASIC command screen type DEL "TESTO1.BAS" and hit RETURN	System should display Ok beneath.				
E-3.1.9.2	AL S1 + MX		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file SHOULD NOT be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-3.1.10.1	ALS1 + MX	Test SAVE a BIN file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-3.1.10.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE BIN 20 POKE \$8000, 97,98,99,100 30 PRINT "Done"	System should show each line typed, and move down to the empty line beneath.				
E-3.1.10.3	ALS1 + MX		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-3.1.10.4	ALS1 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print Done and display Ok beneath the program listing.				
E-3.1.10.5	ALS1 + MX		From the USB BASIC command screen type CD "/" and hit RETURN	System should display Ok beneath.				
E-3.1.10.6	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: SAVE "POKE.BIN", \$8000, 4	System should display Ok beneath.				
E-3.1.10.7	ALS1 + MX		From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB folder within the AquaLite program folder, and the file named "POKE.BIN" should be listed in the contents. Note that the RETURN/PENTER key may have to be pressed one or more times to scroll past the full list of contents.				
E-3.1.11.1		Test LOAD a BIN file	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.11.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: LOAD "POKE.BIN", \$3242	System should display abcd in the middle of the screen, with Ok beneath the text you just typed.				
		1	DOND FUNDIN, 93242	L	l .	1		

Test No	Environment	Description	Process	Expected Results Actu	ual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.1.12.1	AL S1 + MX	Test RUN a ROM file	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.12.2	ALS1 + MX		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-3.1.12.3	AL S1 + MX		REFORM From the USB BASIC command screen type the code below and hit RETURN: RUN "SNAFU.ROM"	System should load the SNAFU game ROM and display the SNAFU title screen.				
E-3.1.12.4	AL S1 + MX	•	From the Aqualite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.13.1	ALS1 + MX	Test DEBUG	From the USB BASIC command screen type DEBUG and hit RETURN	The AQUBUG screen should pop up with white text on a blue background.				
E-3.1.13.2	AL S1 + MX		On the AQUBUG screen type the letter Q	System should return to the USB BASIC command screen, showing the DEBUG command with Ok beneath.				
E-3.1.14.1	AL S1 + MX	Test HEX\$	From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (12288)	System should display 3000 on the next line with Ok beneath.				
E-3.1.14.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEXS (-123)	System should display FF85 on the next line with Ok beneath.				
E-3.1.14.3	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEXS (65535)	System should display FFFF on the next line with Ok beneath.				
E-3.1.15	ALS1+MX	Test JOY	From the USB BASIC command screen type the code below and try to type RETURN and the 1 key at about the same time (maybe a slight delay before the 1 key): PRINT JOY(0)	System should display 64 on the next line with Ok beneath. If you weren't able to get it to work exactly right, a 0 might be displayed instead of the 64. Try a couple of times to get it to work, if you can.				
E-3.1.16	ALS1 + MX	Test IN	From the USB BASIC command screen type the code below and hit RETURN: PRINT IN (SFF)	System should display 247 on the next line with Ok beneath.				
E-3.1.17.1	AL S1 + MX	Test PSG	From the USB BASIC command screen type the code below and hit RETURN: PSG 8,15,0,148,1,1,7,56	System should play a Db4 tone continuously.				
E-3.1.17.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: PSG 8,0,7,0	System should stop playing the tone.				
E-3.1.18.1	AL S1 + MX	Test OUT	From the USB BASIC command screen type the code below and hit RETURN: PSG 8,15,0,148,1,1,7,56	System should play a Db4 tone continuously and print Ok beneath.				
E-3.1.18.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: OUT 247,8 OUT \$F6,0	System should print Ok after each RETURN, and then should stop playing the tone after the second.				
E-3.1.19.1	AL S1 + MX	Test EDIT	From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.19.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: 10 REM Testing EDIT	System should show each line typed, and move down to the empty line beneath.				
E-3.1.19.3	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: EDIT 10	System should list the previously entered line 10 with a blue cursor and white text positioned over the R in the REM command.				
E-3.1.19.4	ALS1 + MX		Within the line 10 edit with the cursor on the R of REM, press the SPACE bar to insert a space between the line number 10 and the REM statement.	System should display line 10 with a SPACE between the 10 and the REM command.				
E-3.1.19.5	ALS1 + MX		Within the line 10 edit with the cursor on the R of REM, CTRL + / eleven times so the cursor is on top of the SPACE after the word Testing.	System should list the previously entered line 10 with a blue cursor and white text positioned over the SPACE after the word Testing.				
E-3.1.19.6	ALS1 + MX		Within the line 10 edit with the cursor on the SPACE between the word Testing and EDIT, press the DELETE/BACKSPACE key three times to delete the letters "ing" at the end of the word Testing.	System should list the previously entered line 10 with a blue cursor and white text positioned over the SPACE before the word EDIT.				
E-3.1.19.7	AL S1 + MX		Within the line 10 edit with the cursor on the SPACE between the word Test and EDIT, press CTRL + P eight times so the cursor is over the letter R in REM, and then hit RETURN/ENTER.	The cursor should go to the line beneath line 10, and should NOT display Ok beneath.				
E-3.1.19.8	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN: LIST 10	System should display a blank line, then list line 10 again, with Ok beneath.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.1.20.1	AL S1 + MX	Test LOCATE	From the USB BASIC command screen type the code below and hit RETURN after each line: 10 CLS 20 LOCATE 20,12 30 PRINT CHR\$ (KEY(0))	System should show each line typed, and move down to the empty line beneath.				
E-3.1.20.2	AL S1 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should move the cursor to the middle of the screen.				
E-3.1.20.3	ALS1 + MX			System should display a "g" in the middle of the screen, then go to the next line and print Ok beneath.				
E-3.1.20.4	AL S1 + MX		From the AquaLite menu, select File > Hard Reset, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-3.1.21.1	ALS1 + MX	Test CTRL + C	RETURN. Stay on the AquaLite menu.	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There should NOT be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-3.1.21.2	ALS1 + MX			The "USB BASIC v1.3" should be shown, followed by "Ok" on the next line with a cursor below.				
E-3.1.21.3	ALS1 + MX		1 '	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There SHOULD be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-3.1.21.4	ALS1 + MX			A blank screen with "Break", followed by "Ok" on the next line with a cursor below.				
			PLEASE CONTINUE I	EVEN IF ALL TESTS IN THIS SECTION DID NOT PAS	S.			

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.2.0	AL S1 + MX	Test NEW commands						
E-3.2.1.1	AL S1 + MX	Test POKE auto-increment	From the AquaLite menu, select File > Hard Reset, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
2 3.2.1.1	712.02 - 1117	reser one date merement	RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-3.2.1.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	The screen should print abcd in a row towards the middle bottom of				
2 3.2.1.2	712.02 - 1117		RETURN:	the screen.				
			POKE 12945,97,98,99,100	the screen.				
E-3.2.2.1	AL S1 + MX	Test POKE range	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
E-3.2.2.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	The screen should print aaaaaaaaa (nine letter a's) in a row towards				
			RETURN:	the middle bottom of the screen.				
			POKE \$3291 TO \$3299,97	the middle bottom of the streeth				
E-3.2.3.1	AL S1 + MX	Test POKE step	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
2 3.2.3.1	712.52	reser one step	Trom the 655 brote command streem type 625 and menteronic	System should dear the street and show on				1
E-3.2.3.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	The screen should print aaa (three letter a's) in a downward line at the				
			RETURN:	middle bottom of the screen.				
			POKE \$3291,97,STEP 40,97,STEP 40,97	initial contains of the sarcein				1
E-3.2.4.1	AL S1 + MX	Test POKE strings	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
E-3.2.4.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	The screen should print the words Hubba Bubba stacked on top of				
2 3.2.4.2	712.02 - 1117		RETURN:	each other at the middle bottom of the screen.				
			POKE \$3291, "Hubba", STEP 40, "Bubba"	eden other at the middle bottom of the screen.				1
E-3.2.5.1	AL S1 + MX	Test COPY	From the AquaLite menu, select File > Hard Reset, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-3.2.5.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	The text at the top of the screen ("USB BASIC v1.3" should be				
			RETURN:	duplicated in the middle of the screen, with the Ok beneath the COPY				
			COPY \$3000,\$3000+440,120	command near the top.				1
E-3.2.6.1	AL S1 + MX	Test ATN	From the AquaLite menu, select File > Hard Reset, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-3.2.6.2	AL S1 + MX	1	From the USB BASIC command screen type the code below and hit	System should display .785398 on the next line with Ok beneath.				
			RETURN:					
			PRINT ATN(1)					
E-3.2.7.1	AL S1 + MX	Test DEC	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-3.2.7.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display 22015 on the next line with Ok beneath.				
			RETURN:					
			PRINT DEC("55FF")					
E-3.2.8.1	AL S1 + MX	Test DEEK	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
l						<u> </u>		<u> </u>
E-3.2.8.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display 6B4F on the next line with Ok beneath. (\$4F is				
			RETURN:	the "O" character and \$6B is the "k" character from the top left of the				
			PRINT HEX\$ (DEEK (12288+41))	screen.)				
E-3.2.9.1	AL S1 + MX	Test DOKE	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-3.2.9.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display Hi at the top left of the screen and show Ok				
			RETURN:	beneath the DOKE command line. (\$48 is the "H" character and \$69 is			l	
			DOKE 12288+41,\$6948	the "i" character.)		<u> </u>		

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.2.10.1	ALS1 + MX	Test KEY	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-3.2.10.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
E-3.2.10.2	AL 31 + IVIX		RETURN after each line:	line beneath.				
			10 CLS 42					
			20 LOCATE 20,12 30 PRINT CHR\$(KEY(0))					
E-3.2.10.3	AL S1 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should clear the screen to GREEN letters on a PURPLE				
2 3.2.10.3	712.51		Troil the obs state command screen type 2002 and menter only	background and move the GREEN cursor to the middle of the screen,				
				waiting for input.				
E-3.2.10.4	ALS1 + MX		With the cursor in the middle of the screen, press the M key (without the SHIFT key pressed).	System should display a "m" in the middle of the screen, then go to the next line and print Ok beneath.				
E-3.2.11.1	ALS1 + MX	Test SDTM	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
				7,				
E-3.2.11.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display Ok beneath. (Note: On AquaLite, there is no				
			RETURN: SDTM "230517010101"	way to actually SET the DateTime, so it will stay set to the hosting computer's system clock.)				
E-3.2.11.3	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display SN Error beneath.				
			RETURN:					
5 2 2 4 2 4	ALCA - NAV	T+ DTA	SDTM "kkk"	Contain the old also the arrange and the oral				<u> </u>
E-3.2.12.1	ALS1 + MX	Test DTM\$	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-3.2.12.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current date and time,				
			RETURN:	formatted YYMMDDHHMMSSCC, with Ok beneath.				
E-3.2.12.3	AL S1 + MX		PRINT DTM\$ (0) From the USB BASIC command screen type the code below and hit	System should display a string with the current date and time,				
L-3.2.12.3	AL 31 + IVIX		RETURN:	formatted YYYY-MM-DD HH:MM:SS, with Ok beneath. Note that the				
			PRINT DTM\$(1)	Century is assumed to be 20, and the hours are in 24 hour format.				
E-3.2.12.4	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current date, formatted YYYY-				ļ
E-3.2.12.4	AL 31 + IVIX		RETURN:	MM-DD, with Ok beneath. Note that the Century is assumed to be 20.				
			PRINT LEFT\$ (DTM\$ (1),10)	,				
E-3.2.12.5	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display a string with the current time, formatted				
			RETURN: PRINT RIGHT(DTM\$(1),8))	HH:MM:SS, with Ok beneath. Note that the hours are in 24 hour format.				
E-3.2.13.1	ALS1 + MX	Test VER	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-3.2.13.2	AL S1 + MX		From the USB BASIC command screen type the code below and hit RETURN:	System should display 0103, with Ok beneath.				
			PRINT HEX\$(VER(0))					
E-3.2.13.3	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display 1, with Ok beneath.				
			RETURN: PRINT VAL(LEFT\$(HEX\$(VER(0)),2))					
E-3.2.13.4	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should display 3, with Ok beneath.				_
			RETURN:					
			PRINT VAL(RIGHT\$(HEX\$(VER(0)),2))					
E-3.2.14.1	ALS1 + MX	Test DEF FN / FN	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-3.2.14.2	ALS1 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-3.2.14.3	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 DEF FN A(X) = X+7	line beneath.				
			20 PRINT FN A(9)]
			30 PRINT FN A(20)					ļļ
E-3.2.14.4	ALS1 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print 16 on one line, 27 beneath it, with Ok beneath th	e]
E-3.2.14.5	AL S1 + MX		From the USB BASIC command screen type the code below and hit	System should print 14, with Ok beneath.				\vdash
			RETURN:					
			PRINT FN A(7)					

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-3.2.15.1	AL S2 + MX	Test & Operator	From the AquaLite menu, select File > Hard Reset, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-3.2.15.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 A\$="ABCDEFG" 20 COPY DEER(&A\$+2),\$3291,PEEK(&A\$) 30 PRINT "A\$ length =" + STR\$(PEEK(&A\$))	line beneath.				
E-3.2.15.3	AL S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-3.2.15.4	AL S2 + MX	1	From the USB BASIC command screen type RUN and hit RETURN	System should print A\$ length = 7 with Ok beneath, and should print				
				ABCDEFG near the middle bottom of the screen.				
E-3.2.16	ALS1 + MX	TESTING COMPLETE	From the AquaLite menu, select File > Hard Reset, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
				TESTING IS COMPLETE				



Alpha Test Plan	Tester Name:	
USB BASIC v1.3	Date Completed:	
E4	Environment(s) Tested:	Hardware S2 + Aquarius MX with RTC

Setup

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.0.0	HW S2 + MX RTC	Setup Hardware MX + RTC						
E-4.0.1	HW S2 + MX RTC		Download & update MX EPROM to v1.3 (64k)	MX ROM is updated to v1.3				
E-4.0.2	HW S2 + MX RTC		Ensure hardware update to RTC socket has been completed.	MX board should be ready to use RTC unit.				
E-4.0.3	HW S2 + MX RTC		Remove 32k RAM and replace with Dallas DS1244Y DIP RTC unit.	MX board should have the RTC installed in place of RAM.				
E-4.0.4	HW S2 + MX RTC		Install MX unit and boot Aquarius.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-4.0.5	HW S2 + MX RTC		Press the A key within the emulator.	The "About USB BASIC" screen should be displayed. Release Date				
				should show "Alpha 2023-05-09".				
E-4.0.6	HW S2 + MX RTC		Press any key to exit the About screen.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-4.0.7	HW S2 + MX RTC		Press RETURN/ENTER key to go to the USB BASIC command screen.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			Note: This screen is the starting point for most tests in this plan.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
		DO NO	T CONTINUE IF ANY TESTS IN THIS SECTION DID I	NOT PASS! CONTACT THE TESTING COORDINATOR	R, Sean Harrington sph@1stage.com.			

DO NOT CONTINUE IF ANY TESTS IN THIS SECTION DID NOT PASS! CONTACT THE TESTING COORDINATOR, Sean Harrington spn@1stage.com

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.1.0	HW S2 + MX RTC	Test legacy commands						
E-4.1.1.1	HW S2 + MX RTC	Test CALL xx	From the USB BASIC command screen type CALL \$8000 and hit	The cursor should move down one row, and the system should freeze.				T
			RETURN					
E-4.1.1.2	HW S2 + MX RTC		Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
		1		the next line with a cursor below.				
E-4.1.1.3	HW S2 + MX RTC		From the USB BASIC command screen type CALL -32768 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-4.1.1.4	HW S2 + MX RTC	1	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-4.1.1.5	HW S2 + MX RTC		From the USB BASIC command screen type CALL 32768 (NO minus sign!) and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-4.1.1.6	HW S2 + MX RTC	Ī	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				1
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-4.1.2	HW S2 + MX RTC	Test CAT	From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the USB stick.				
				Note that the contents can vary from system to system.				
E-4.1.3.1	HW S2 + MX RTC	Test CD	From the USB BASIC command screen type CD and hit RETURN	The cursor should move down one row, and a / character should be				+ 1
		1		displayed, followed by Ok beneath.				
E-4.1.3.2	HW S2 + MX RTC		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-4.1.4	HW S2 + MX RTC	Test DIR	From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB				
				stick. Note that the RETURN/ENTER key may have to be pressed one				
				or more times to scroll through the full list of contents.				
E-4.1.5.1	HW S2 + MX RTC	Test CLS	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan				\vdash
		1		background.				1
E-4.1.5.2	HW S2 + MX RTC		From the USB BASIC command screen type CLS 8 and hit RETURN	System should clear the screen and show Ok in black letters on a grey background.				
E-4.1.5.3	HW S2 + MX RTC	7	From the USB BASIC command screen type CLS \$7D and hit RETURN	System should clear the screen and show Ok in white letters on a dark				
				green background.				
E-4.1.5.4	HW S2 + MX RTC		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan				
				background.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.1.6.1		Test SAVE a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-4.1.6.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 REM Testing SAVE	line beneath.				
			20 CLS					
			30 PRINT "Hello"					
E-4.1.6.3	HW S2 + MX RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok				
				beneath.				
E-4.1.6.4	HW S2 + MX RTC		From the USB BASIC command screen type SAVE "TEST01.BAS"	The cursor should move down one row and display Ok beneath. In the				
			and hit RETURN	USB drive, there should be a new file named TEST01.BAS.				1
E-4.1.6.5	HW S2 + MX RTC		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and				
			··	the "TEST01.BAS" file should be lised among those files. Note that the				
				RETURN/ENTER key may have to be pressed one or more times to				1
				scroll through the full list of contents.				
E-4.1.7.1	HW S2 + MX RTC	Test LOAD a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				-
L	SE : WIX RIC							/
E-4.1.7.2	HW S2 + MX RTC		From the USB BASIC command screen type LIST and hit RETURN	System should display NO PROGRAM LINES with Ok beneath.				
								<u> </u>
E-4.1.7.3	HW S2 + MX RTC		From the USB BASIC command screen type LOAD "TEST01.BAS"	System should display Ok beneath.				
54474	LINAV CO . NAV DTC		and hit RETURN	Contains the old the confliction of the contains the cont				ļ
E-4.1.7.4	HW S2 + MX RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program listed in test E- 4.1.6.2 and display Ok beneath.				
E-4.1.8.1	HW S2 + MX RTC	Test RUN a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
E-4.1.8.2	HW S2 + MX RTC		From the USB BASIC command screen type RUN "TEST01.BAS"	System should clear the screen, print Hello at the top, and display Ok				
			and hit RETURN	beneath.				
E-4.1.9.1	HW S2 + MX RTC	Test DEL	From the USB BASIC command screen type DEL "TEST01.BAS"	System should display Ok beneath.				
E-4.1.9.2	HW S2 + MX RTC		and hit RETURN From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and				-
L-4.1.5.2	TIW 32 + WIX RTC		From the OSB BASIC Command Screen type CAT and the RETORN	the "TEST01.BAS" file SHOULD NOT be lised among those files. Note				
				that the RETURN/ENTER key may have to be pressed one or more				
				times to scroll through the full list of contents.				
5 4 4 4 9 4		T . C. 11 (5 D 11 (5)	E di uso passo					
E-4.1.10.1	HW S2 + MX RTC	Test SAVE a BIN file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-4.1.10.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line:	line beneath.				
			10 REM Testing SAVE BIN					
			20 POKE \$8000,97,98,99,100 30 PRINT "Done"					
E-4.1.10.3	HW S2 + MX RTC			Custom should show all three lines in the program and display Ok				
L-4.1.1U.3	11VV 32 TIVIA RIC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.		1		
E-4.1.10.4	HW S2 + MX RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print Done and display Ok beneath the program listing.				
E-4.1.10.5	HW S2 + MX RTC		From the USB BASIC command screen type CD "/" and hit RETURN	System should display Ok beneath.]		
E-4.1.10.6	LIM CO . MAY DOO		From the LICE DACIC command command to the said balance	Custom should display Ok happath				\vdash
E-4.1.10.6	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN:	System should display Ok beneath.				
			SAVE "POKE.BIN", \$8000, 4					
E-4.1.10.7	HW S2 + MX RTC		From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB				
				drive, and the file named "POKE.BIN" should be listed in the contents.		1		
				Note that the RETURN/ENTER key may have to be pressed one or				
				more times to scroll past the full list of contents.		1		
E-4.1.11.1	HW S2 + MX RTC	Test LOAD a BIN file	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				++
	52 - 1150 1110		RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
			, ,	the next line with a cursor below.				
E-4.1.11.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display abcd in the middle of the screen, with Ok				
			RETURN:	beneath the text you just typed.		1		
			LOAD "POKE.BIN", \$3242			l		

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.1.12.1	HW S2 + MX RTC	Test RUN a ROM file	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-4.1.12.2	HW S2 + MX RTC		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-4.1.12.3	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should load the SNAFU game ROM and display the SNAFU title				
			RETURN: RUN "SNAFU.ROM"	screen.				
E-4.1.12.4	HW S2 + MX RTC		Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-4.1.13.1	HW S2 + MX RTC	Test DEBUG	From the USB BASIC command screen type DEBUG and hit RETURN	The AQUBUG screen should pop up with white text on a blue background.				
E-4.1.13.2	HW S2 + MX RTC		On the AQUBUG screen type the letter Q	System should return to the USB BASIC command screen, showing the DEBUG command with Ok beneath.				
E-4.1.14.1	HW S2 + MX RTC	Test HFX\$	From the USB BASIC command screen type the code below and hit	System should display 3000 on the next line with Ok beneath.				
			RETURN: PRINT HEX\$(12288)					
E-4.1.14.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display FF85 on the next line with Ok beneath.				
L 4.1.14.2	11W 32 1 WX KTC		RETURN: PRINT HEX\$ (-123)	System should display 1105 on the next line with ox beneath.				
E-4.1.14.3	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display FFFF on the next line with Ok beneath.				
L-4.1.14.3	11VV 32 ₹ IVIA R IC		RETURN: PRINT HEXS (65535)	System should display fiff on the next line with Ox beneath.				
E-4.1.15	HW S2 + MX RTC	Test IOV		System should display 64 on the next line with Ok beneath. If you				
L-4.1.13	11VV 32 → IVIA RIC	1636301	type RETURN and the 1 key at about the same time (maybe a slight	weren't able to get it to work exactly right, a 0 might be displayed				
			delay before the 1 key): PRINT JOY (0)	instead of the 64. Try a couple of times to get it to work, if you can.				
E-4.1.16	HW S2 + MX RTC	Test IN	From the USB BASIC command screen type the code below and hit	System should display 247 on the next line with Ok beneath.				
2 4.1.10	TIW 32 TWARTE	resenv	RETURN: PRINT IN (\$FF)	System should display 247 on the next line with ox beneath.				
E-4.1.17.1	HW S2 + MX RTC	Test PSG	From the USB BASIC command screen type the code below and hit	System should play a Db4 tone continuously.				
L 4.1.17.1	11W 32 1 WX KTC	icse i so	RETURN: PSG 8,15,0,148,1,1,7,56	System should play a 554 tone continuously.				
E-4.1.17.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should stop playing the tone.				
E-4.1.17.2	HW 32 + WIX KTC		RETURN:	system should stop playing the tone.				
E-4.1.18.1	HW S2 + MX RTC	Toot OUT	PSG 8,0,7,0 From the USB BASIC command screen type the code below and hit	System should play a Db4 tone continuously and print Ok beneath.				
E-4.1.18.1	HW 52 + MX KIC	rest OUT	RETURN:	System should play a Db4 tone continuously and print Ok beneath.				
			PSG 8,15,0,148,1,1,7,56					
E-4.1.18.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should print Ok after each RETURN, and then should stop				
			RETURN after each line:	playing the tone after the second.				
			OUT \$F6,0					
E-4.1.19.1	HW S2 + MX RTC	Test EDIT	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-4.1.19.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN: 10 REM Testing EDIT	line beneath.				
E-4.1.19.3	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit	System should list the previously entered line 10 with a blue cursor		İ		
			RETURN: EDIT 10	and white text positioned over the R in the REM command.				
E-4.1.19.4	HW S2 + MX RTC		Within the line 10 edit with the cursor on the R of REM, press the	System should display line 10 with a SPACE between the 10 and the				
			SPACE bar to insert a space between the line number 10 and the REM statement.	REM command.				
E-4.1.19.5	HW S2 + MX RTC		Within the line 10 edit with the cursor on the R of REM, CTRL + /	System should list the previously entered line 10 with a blue cursor				
			eleven times so the cursor is on top of the SPACE after the word Testing.	and white text positioned over the SPACE after the word Testing.				
E-4.1.19.6	HW S2 + MX RTC		Within the line 10 edit with the cursor on the SPACE between the	System should list the previously entered line 10 with a blue cursor				
			word Testing and EDIT, press the DELETE/BACKSPACE key three times to delete the letters "ing" at the end of the word Testing.	and white text positioned over the SPACE before the word EDIT.				
E 4 4 40 E								
E-4.1.19.7	HW S2 + MX RTC		Within the line 10 edit with the cursor on the SPACE between the word Test and EDIT, press CTRL + P eight times so the cursor is over	The cursor should go to the line beneath line 10, and should NOT display Ok beneath.				
			the letter R in REM, and then hit RETURN/ENTER.	uispiay Ok belieatii.				
E 4 4 4 0 0	HW S2 + MX RTC		From the LICE DACIC command course through helps	Custom should display a blank line that But But II a 40 and a 111 Cl				
	■ □ vv 52 + IVIX R I C	I	From the USB BASIC command screen type the code below and hit	System should display a blank line, then list line 10 again, with Ok				
E-4.1.19.8			RETURN:	beneath.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.1.20.1	HW S2 + MX RTC	Test LOCATE	From the USB BASIC command screen type the code below and hit RETURN after each line: 10 CLS 20 LOCATE 20,12 30 PRINT CHR\$ (KEY(0))	System should show each line typed, and move down to the empty line beneath.				
E-4.1.20.2	HW S2 + MX RTC	-	From the USB BASIC command screen type RUN and hit RETURN	System should move the cursor to the middle of the screen.				
E-4.1.20.3	HW S2 + MX RTC	-	With the cursor in the middle of the screen, press the G key.	System should display a "g" in the middle of the screen, then go to the next line and print Ok beneath.				
E-4.1.20.4	HW S2 + MX RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-4.1.21.1	HW S2 + MX RTC	Test CTRL + C	Power off and then back on the Aquarius, Do NOT hit RETURN. Stay on the Aqualite menu.	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There should NOT be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-4.1.21.2	HW S2 + MX RTC		Hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-4.1.21.3	HW S2 + MX RTC		Press the RST (reset) key on the Aquarius. <i>Do NOT hit RETURN. Stay on the AquaLite menu.</i>	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There SHOULD be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-4.1.21.4	HW S2 + MX RTC		Press CTRL + C.	A blank screen with "Break", followed by "Ok" on the next line with a cursor below.				
			PLEASE CONTINUE	EVEN IF ALL TESTS IN THIS SECTION DID NOT PAS	S.			

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.2.0	HW S2 + MX RTC	Test NEW commands						
E-4.2.1.1		Test POKE auto-increment	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-4.2.1.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE 12945, 97, 98, 99, 100	The screen should print abcd in a row towards the middle bottom of the screen.				
E-4.2.2.1	HW S2 + MX RTC	Test POKE range	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-4.2.2.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291 TO \$3299,97	The screen should print aaaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen.				
E-4.2.3.1	HW S2 + MX RTC	Test POKE step	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-4.2.3.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291,97,STEP 40,97,STEP 40,97	The screen should print aaa (three letter a's) in a downward line at the middle bottom of the screen.				
E-4.2.4.1	HW S2 + MX RTC	Test POKE strings	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-4.2.4.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291, "Hubba", STEP 40, "Bubba"	The screen should print the words Hubba Bubba stacked on top of each other at the middle bottom of the screen.				
E-4.2.5.1	HW S2 + MX RTC	Test COPY	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-4.2.5.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: COPY \$3000,\$3000+440,120	The text at the top of the screen ("Copyright © 1982 by Microsoft, Inc S2" & "USB BASIC v1.3" should be duplicated in the middle of the screen, with the Ok beneath the COPY command near the top.				
E-4.2.6.1	HW S2 + MX RTC	Test ATN	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-4.2.6.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT ATN (1)	System should display .785398 on the next line with Ok beneath.				
E-4.2.7.1	HW S2 + MX RTC	Test DEC	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-4.2.7.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT DEC ("55FF")	System should display 22015 on the next line with Ok beneath.				
E-4.2.8.1	HW S2 + MX RTC	Test DEEK	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-4.2.8.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (DEEK (12288+41))	System should display 684F on the next line with Ok beneath. (\$4F is the "O" character and \$6B is the "k" character from the top left of the screen.)				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.2.9.1	HW S2 + MX RTC	Test DOKE	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-4.2.9.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN:	System should display Hi at the top left of the screen and show Ok beneath the DOKE command line. (\$48 is the "H" character and \$69 is				
E-4.2.10.1	HW S2 + MX RTC	Test KEY	DOKE 12288+41,\$6948 From the USB BASIC command screen type CLS and hit RETURN	the "i" character.) System should clear the screen and show Ok .				
E-4.2.10.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 CLS 42 20 LOCATE 20,12 30 PRINT CHRS (KEY(0))	System should show each line typed, and move down to the empty line beneath.				
E-4.2.10.3	HW S2 + MX RTC		From the USB BASIC command screen type RUN and hit RETURN	System should clear the screen to GREEN letters on a PURPLE background and move the GREEN cursor to the middle of the screen, waiting for input.				
E-4.2.10.4	HW S2 + MX RTC		With the cursor in the middle of the screen, press the M key (without the SHIFT key pressed).	System should display a "m" in the middle of the screen, then go to the next line and print Ok beneath.				
E-4.2.11.1	HW S2 + MX RTC	Test SDTM	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-4.2.11.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN, replacing "YYMMDDHHMMSS" with the current DateTime settings: SDTM "YYMMDDHHMMSS"	System should display Ok beneath.				
E-4.2.11.3	HW S2 + MX RTC		Power off and then back on the Aquarius.	The "Aquarius MX USB BASIC v1.3" screen should be displayed with the correct date and time shown at the bottom of the screen, with seconds ticking by.				
E-4.2.12.1	HW S2 + MX RTC	Test DTM\$	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				7
E-4.2.12.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT DTM\$ (0)	System should display a string with the current date and time, formatted YYMMDDHHMMSSCC, with Ok beneath.				
E-4.2.12.3	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT DTM\$ (1)	System should display a string with the current date and time, formatted YYYY-MM-DD HH:MM:SS, with Ok beneath. Note that the Century is assumed to be 20, and the hours are in 24 hour format.				
E-4.2.12.4	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT LEFT\$ (DTM\$ (1),10)	System should display a string with the current date, formatted YYYY-MM-DD, with Ok beneath. Note that the Century is assumed to be 20.				
E-4.2.12.5	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT RIGHT (DTM\$ (1),8))	System should display a string with the current time, formatted HH:MM:SS, with Ok beneath. Note that the hours are in 24 hour format.				
E-4.2.13.1	HW S2 + MX RTC	Test VER	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-4.2.13.2	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (VER (0))	System should display 0103, with Ok beneath.				
E-4.2.13.3	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT VAL(LEFT\$(HEX\$(VER(0)),2))	System should display 1, with Ok beneath.				
E-4.2.13.4	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT VAL(RIGHT\$(HEX\$(VER(0)),2))	System should display 3, with Ok beneath.				
E-4.2.14.1	HW S2 + MX RTC	Test DEF FN / FN	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-4.2.14.2	HW S2 + MX RTC		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-4.2.14.3	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 DEF FN A(X) = X+7 20 PRINT FN A(9) 30 PRINT FN A(20)	System should show each line typed, and move down to the empty line beneath.				
E-4.2.14.4	HW S2 + MX RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print 16 on one line, 27 beneath it, with Ok beneath the 27.				
E-4.2.14.5	HW S2 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT FN A (7)	System should print 14, with Ok beneath.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-4.2.15.1	AL S2 + MX	Test & Operator	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-4.2.15.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 A\$="ABCDEFG" 20 COPY DEEK(&A\$+2),\$3291,PEEK(&A\$) 30 PRINT "A\$ length =" + STR\$(PEEK(&A\$))	System should show each line typed, and move down to the empty line beneath.				
E-4.2.15.3	AL S2 + MX]	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-4.2.15.4	AL S2 + MX]	From the USB BASIC command screen type RUN and hit RETURN	System should print A\$ length = 7 with Ok beneath, and should print ABCDEFG near the middle bottom of the screen.				
E-4.2.16	HW S2 + MX RTC	TESTING COMPLETE	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
				TESTING IS COMPLETE				



Alpha Test Plan	Tester Name:	
USB BASIC v1.3	Date Completed:	
E5	Environment(s) Tested:	Hardware S2 + Aquarius MX NO RTC

Setup

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.0.0	HW S2 + NO RTC	Setup Hardware MX + RTC						
E-5.0.1	HW S2 + NO RTC		Download & update MX EPROM to v1.3 (64k)	MX ROM is updated to v1.3				
E-5.0.2	HW S2 + NO RTC		Install MX unit and boot Aquarius.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-5.0.3	HW S2 + NO RTC		Press the A key within the emulator.	The "About USB BASIC" screen should be displayed. Release Date				
				should show "Alpha 2023-05-09".				i
E-5.0.4	HW S2 + NO RTC	1	Press any key to exit the About screen.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-5.0.5	HW S2 + NO RTC		Press RETURN/ENTER key to go to the USB BASIC command screen.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			Note: This screen is the starting point for most tests in this plan.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
		DO NO	OT CONTINUE IF ANY TESTS IN THIS SECTION DID	NOT PASS! CONTACT THE TESTING COORDINATO	R, Sean Harrington sph@1stage.com.			

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.1.0	HW S2 + NO RTC	Test legacy commands						
E-5.1.1.1	HW S2 + NO RTC	Test CALL xx	From the USB BASIC command screen type CALL \$8000 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-5.1.1.2	HW S2 + NO RTC		Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-5.1.1.3	HW S2 + NO RTC		From the USB BASIC command screen type CALL -32768 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-5.1.1.4	HW S2 + NO RTC	1	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-5.1.1.5	HW S2 + NO RTC		From the USB BASIC command screen type CALL 32768 (NO minus sign!) and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-5.1.1.6	HW S2 + NO RTC	1	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-5.1.2	HW S2 + NO RTC	Test CAT	From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the USB stick,				
				followed by Ok beneath. Note that the contents can vary from system				
				to system.				
E-5.1.3.1	HW S2 + NO RTC	Test CD	From the USB BASIC command screen type CD and hit RETURN	The cursor should move down one row, and a / character should be				
				displayed, followed by Ok beneath.				
E-5.1.3.2	HW S2 + NO RTC		From the USB BASIC command screen type CD"ROMS" and hit	The cursor should move down one row and display Ok beneath.				
			RETURN					
E-5.1.4	HW S2 + NO RTC	Test DIR	From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB				
				stick, followed by Ok beneath. Note that the RETURN/ENTER key may				
				have to be pressed one or more times to scroll through the full list of				
				contents.				
E-5.1.5.1	HW S2 + NO RTC	Test CLS	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan				
				background.				
E-5.1.5.2	HW S2 + NO RTC		From the USB BASIC command screen type CLS 8 and hit RETURN	System should clear the screen and show Ok in black letters on a grey				
				background.				1
E-5.1.5.3	HW S2 + NO RTC		From the USB BASIC command screen type CLS \$7D and hit RETURN	System should clear the screen and show Ok in white letters on a dark				
			5 1 100 0100	green background.				1
E-5.1.5.4	HW S2 + NO RTC		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan				
				background.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.1.6.1	HW S2 + NO RTC	Test SAVE a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-5.1.6.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE 20 CLS 30 PRINT "Hello"	System should show each line typed, and move down to the empty line beneath.				
E-5.1.6.3	HW S2 + NO RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-5.1.6.4	HW S2 + NO RTC		From the USB BASIC command screen type SAVE "TEST01. BAS" and hit RETURN	The cursor should move down one row and display Ok beneath. In the USB stick, there should be a new file named TEST01.BAS.				
E-5.1.6.5	HW S2 + NO RTC		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file should be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-5.1.7.1	HW S2 + NO RTC	Test LOAD a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-5.1.7.2	HW S2 + NO RTC		From the USB BASIC command screen type LIST and hit RETURN	System should display NO PROGRAM LINES with Ok beneath.				
E-5.1.7.3	HW S2 + NO RTC		From the USB BASIC command screen type LOAD "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-5.1.7.4	HW S2 + NO RTC	1	From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program listed in test E- 5.1.6.2 and display Ok beneath.				
E-5.1.8.1	HW S2 + NO RTC	Test RUN a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-5.1.8.2	HW S2 + NO RTC		From the USB BASIC command screen type RUN "TEST01.BAS" and hit RETURN	System should clear the screen, print Hello at the top, and display Ok beneath.				
E-5.1.9.1	HW S2 + NO RTC	Test DEL	From the USB BASIC command screen type DEL "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-5.1.9.2	HW S2 + NO RTC		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file SHOULD NOT be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-5.1.10.1	HW S2 + NO RTC	Test SAVE a BIN file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-5.1.10.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE BIN 20 POKE \$8000,97,98,99,100 30 PRINT "Done"	System should show each line typed, and move down to the empty line beneath.				
E-5.1.10.3	HW S2 + NO RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-5.1.10.4	HW S2 + NO RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print Done and display Ok beneath the program listing.				
E-5.1.10.5	HW S2 + NO RTC		From the USB BASIC command screen type CD "/" and hit RETURN	System should display Ok beneath.				
E-5.1.10.6	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: SAVE "POKE.BIN", \$8000, 4	System should display Ok beneath.				
E-5.1.10.7	HW S2 + NO RTC		From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB stick, and the file named "POKE.BIN" should be listed in the contents. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll past the full list of contents.				
E-5.1.11.1	HW S2 + NO RTC	Test LOAD a BIN file	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-5.1.11.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: LOAD "POKE.BIN", \$3242	System should display abcd in the middle of the screen, with Ok beneath the text you just typed.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.1.12.1	HW S2 + NO RTC	Test RUN a ROM file	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-5.1.12.2	HW S2 + NO RTC		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-5.1.12.3	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit	System should load the SNAFU game ROM and display the SNAFU title				
			RETURN: RUN "SNAFU.ROM"	screen.				
E-5.1.12.4	HW S2 + NO RTC		Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				
				the next line with a cursor below.				
E-5.1.13.1	HW S2 + NO RTC	Test DEBUG	From the USB BASIC command screen type DEBUG and hit RETURN	The AQUBUG screen should pop up with white text on a blue background.				
E-5.1.13.2	HW S2 + NO RTC		On the AQUBUG screen type the letter Q	System should return to the USB BASIC command screen, showing the DEBUG command with Ok beneath.				
E-5.1.14.1	HW S2 + NO RTC	Test HEX\$	From the USB BASIC command screen type the code below and hit	System should display 3000 on the next line with Ok beneath.				
		,	RETURN: PRINT HEX\$(12288)					
E-5.1.14.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display FF85 on the next line with Ok beneath.				
£ 5.1.14.2	11W 32 1 NO KIE		RETURN: PRINT HEX\$ (-123)	System should display 1105 on the next line with ox beneath.				
E-5.1.14.3	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display FFFF on the next line with Ok beneath.	 			
E-3.1.14.3	11VV 32 + NU KIC		RETURN:	Dystem should display FFFF on the next line with Ok beneath.				
E-5.1.15	HW S2 + NO RTC	Tort IOV	PRINT HEX\$ (65535)	System should display 64 on the next line with Oli honooth 15				
E-3.1.15	11VV 32 + NU KIC	I EST JOI	From the USB BASIC command screen type the code below and try to type RETURN and the 1 key at about the same time (maybe a slight	System should display 64 on the next line with Ok beneath. If you weren't able to get it to work exactly right, a 0 might be displayed				
			delay before the 1 key): PRINT JOY (0)	instead of the 64. Try a couple of times to get it to work, if you can.				
E-5.1.16	HW S2 + NO RTC	Test IN	From the USB BASIC command screen type the code below and hit	System should display 247 on the next line with Ok beneath.	+			-
L-3.1.10	11W 32 + NO RTC	i est iiv	RETURN: PRINT IN (\$FF)	System should display 247 on the next line with ox beneath.				
E-5.1.17.1	HW S2 + NO RTC	Tost DSG	From the USB BASIC command screen type the code below and hit	System should play a Db4 tone continuously.				
L-3.1.17.1	11W 32 + NO RTC	rest rad	RETURN:	System should play a bu4 tone continuously.				
F F 4 47 2	HW S2 + NO RTC		PSG 8,15,0,148,1,1,7,56	Contains the state of the state of the state of				
E-5.1.17.2	HW S2 + NO RIC		From the USB BASIC command screen type the code below and hit RETURN:	System should stop playing the tone.				
E-5.1.18.1	LINA CO - NO DEC	T+ OUT	PSG 8,0,7,0	Control of the state of the sta				
E-5.1.18.1	HW S2 + NO RTC	lest OUT	From the USB BASIC command screen type the code below and hit RETURN:	System should play a Db4 tone continuously and print Ok beneath.				
			PSG 8,15,0,148,1,1,7,56					
E-5.1.18.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit	System should print Ok after each RETURN, and then should stop				
			RETURN after each line:	playing the tone after the second.				
			OUT \$F6,0					
E-5.1.19.1	HW S2 + NO RTC	Test EDIT	Power off and then back on the Aquarius, and then hit the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-5.1.19.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN: 10 REM Testing EDIT	line beneath.				
E-5.1.19.3	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit	System should list the previously entered line 10 with a blue cursor				
			RETURN: EDIT 10	and white text positioned over the R in the REM command.				
E-5.1.19.4	HW S2 + NO RTC		Within the line 10 edit with the cursor on the R of REM, press the	System should display line 10 with a SPACE between the 10 and the				
			SPACE bar to insert a space between the line number 10 and the REM statement.	REM command.				
E-5.1.19.5	HW S2 + NO RTC		Within the line 10 edit with the cursor on the R of REM, CTRL + /	System should list the previously entered line 10 with a blue cursor				
			eleven times so the cursor is on top of the SPACE after the word Testing.	and white text positioned over the SPACE after the word Testing.				
E-5.1.19.6	HW S2 + NO RTC		Within the line 10 edit with the cursor on the SPACE between the	System should list the previously entered line 10 with a blue cursor	 			
			word Testing and EDIT, press the DELETE/BACKSPACE key three times to delete the letters "ing" at the end of the word Testing.	and white text positioned over the SPACE before the word EDIT.				
551105								
E-5.1.19.7	HW S2 + NO RTC		Within the line 10 edit with the cursor on the SPACE between the word Test and EDIT, press CTRL + P eight times so the cursor is over	The cursor should go to the line beneath line 10, and should NOT display Ok beneath.				1
			the letter R in REM, and then hit RETURN/ENTER.	uispiay Ok belieatii.				
			From the USB BASIC command screen type the code below and hit	Custom should display a blank line that But But II a 40 and a 111 Cl				
E E 1 10 0				System should display a blank line, then list line 10 again, with Ok				1
E-5.1.19.8	HW S2 + NO RTC		RETURN:	beneath.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.1.20.1	HW S2 + NO RTC	Test LOCATE	From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line:	line beneath.				1
			10 CLS					1
			20 LOCATE 20,12					1
			30 PRINT CHR\$(KEY(0))					<u> </u>
E-5.1.20.2	HW S2 + NO RTC		From the USB BASIC command screen type RUN and hit RETURN	System should move the cursor to the middle of the screen.				1
	HW S2 + NO RTC							├
E-5.1.20.3	HW S2 + NO RIC		With the cursor in the middle of the screen, press the G key.	System should display a "g" in the middle of the screen, then go to the next line and print Ok beneath.				i
E-5.1.20.4	HW S2 + NO RTC		Device off and the or head, and the America and the orbits the	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				+
E-5.1.20.4	HW 52 + NO RIC		Power off and then back on the Aquarius, and then hit the					i
			RETURN/ENTER key to go to USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				i
E-5.1.21.1	HW S2 + NO RTC	T+ CTDL - C	Developed the section of the Associate Developed to the DETURN CASE.	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There				—
E-5.1.21.1	HW 52 + NO RIC	Test CIRL + C	Power off and then back on the Aquarius, Do NOT hit RETURN. Stay					i
			on the AquaLite menu.	should NOT be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				i
E-5.1.21.2	HW S2 + NO RTC		Hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be		1		
E-5.1.21.2	HW 52 + NO RIC		HIT THE RETURN/ENTER KEY TO GO TO USB BASIC.	displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				i
				the next line with a cursor below.				i
E-5.1.21.3	HW S2 + NO RTC		Press the RST (reset) key on the Aquarius. Do NOT hit RETURN. Stay	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There		1		
E-3.1.21.3	HW 32 + NO RIC		on the Aqualite menu.	SHOULD be an option near the bottom that says " <ctrl+c> Warm</ctrl+c>				i
			on the Aqualite menu.	Start"				i
E-5.1.21.4	HW S2 + NO RTC		Press CTRL + C.	A blank screen with "Break", followed by "Ok" on the next line with a		1		-
L 3.1.21.4	11W 32 1 NO RTC		i ress erke v e.	cursor below.				i
E-5.1.21.1	HW S2 + NO RTC	Test CTRL + C	Power off and then back on the Aquarius, Do NOT hit RETURN. Stay	The "Aguarius MX USB BASIC v1.3" screen should be displayed. There				
			on the AquaLite menu.	should NOT be an option near the bottom that says " <ctrl+c> Warm</ctrl+c>				i
			, , , , , , , , , , , , , , , , , , , ,	Start"				i
E-5.1.21.2	HW S2 + NO RTC		Hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be				
				displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on				i
				the next line with a cursor below.				i
E-5.1.21.3	HW S2 + NO RTC	1	Press the RST (reset) key on the Aquarius. Do NOT hit RETURN. Stay	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There				
			on the AquaLite menu.	SHOULD be an option near the bottom that says " <ctrl+c> Warm</ctrl+c>		1		1
				Start"		1		1
E-5.1.21.4	HW S2 + NO RTC	1	Press CTRL + C.	A blank screen with "Break", followed by "Ok" on the next line with a				
				cursor below.				1
			PLEASE CONTINUE I	EVEN IF ALL TESTS IN THIS SECTION DID NOT PAS	S.			

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.2.0	HW S2 + NO RTC	Test NEW commands						
E-5.2.1.1	HW S2 + NO RTC	Test POKE auto-increment	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-5.2.1.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE 12945, 97, 98, 99, 100	The screen should print abcd in a row towards the middle bottom of the screen.				
E-5.2.2.1	HW S2 + NO RTC	Test POKE range	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-5.2.2.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291 TO \$3299,97	The screen should print aaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen.				
E-5.2.3.1	HW S2 + NO RTC	Test POKE step	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-5.2.3.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291,97,STEP 40,97,STEP 40,97	The screen should print aaa (three letter a's) in a downward line at the middle bottom of the screen.				
E-5.2.4.1	HW S2 + NO RTC	Test POKE strings	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-5.2.4.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: POKE \$3291,"Hubba", STEP 40,"Bubba"	The screen should print the words Hubba Bubba stacked on top of each other at the middle bottom of the screen.				
E-5.2.5.1	HW S2 + NO RTC	Test COPY	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-5.2.5.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: COPY \$3000,\$3000+440,120	The text at the top of the screen ("Copyright © 1982 by Microsoft, Inc 52" & "USB BASIC v1.3" should be duplicated in the middle of the screen, with the Ok beneath the COPY command near the top.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.2.6.1	HW S2 + NO RTC	Test ATN	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-5.2.6.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT ATN (1)	System should display .785398 on the next line with Ok beneath.				
E-5.2.7.1	HW S2 + NO RTC	Test DEC	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.7.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT DEC ("55FFF")	System should display 22015 on the next line with Ok beneath.				
E-5.2.8.1	HW S2 + NO RTC	Test DEEK	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.8.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (DEEK (12288+41))	System should display 6B4F on the next line with Ok beneath. (\$4F is the "O" character and \$6B is the "k" character from the top left of the screen.)				
E-5.2.9.1	HW S2 + NO RTC	Test DOKE	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.9.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: DOKE 12288+41,56948	System should display Hi at the top left of the screen and show Ok beneath the DOKE command line. (\$48 is the "H" character and \$69 is the "i" character.)				
E-5.2.10.1	HW S2 + NO RTC	Test KEY	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.10.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 CLS 42 20 LOCATE 20,12 30 PRINT CHR\$ (KEY(0))	System should show each line typed, and move down to the empty line beneath.				
E-5.2.10.3	HW S2 + NO RTC		From the USB BASIC command screen type RUN and hit RETURN	System should clear the screen to GREEN letters on a PURPLE background and move the GREEN cursor to the middle of the screen, waiting for input.				
E-5.2.10.4	HW S2 + NO RTC		With the cursor in the middle of the screen, press the M key (without the SHIFT key pressed).	System should display a "m" in the middle of the screen, then go to the next line and print Ok beneath.				
E-5.2.11.1	HW S2 + NO RTC	Test SDTM	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.11.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN, replacing ""YMMDDHHMMSS" with the current DateTime settings: SDTM ""YMMDDHHMMSS"	System should display Ok beneath.				
E-5.2.11.3	HW S2 + NO RTC		Power off and then back on the Aquarius	The "Aquarius MX USB BASIC v1.3" screen should be displayed with NO DATE AND TIME shown at the bottom of the screen.				
E-5.2.12.1	HW S2 + NO RTC	Test DTM\$	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.12.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT DTM\$ (0)	System should print a blank line with Ok beneath.				
E-5.2.12.3	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT DTM\$ (1)	System should print a blank line with Ok beneath.				
E-5.2.13.1	HW S2 + NO RTC	Test VER	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.13.2	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT HEX\$ (VER(0))	System should display 0103, with Ok beneath.				
E-5.2.13.3	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT VAL(LEFT\$(HEX\$(VER(0)),2))	System should display 1, with Ok beneath.				
E-5.2.13.4	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT VAL (RIGHT\$ (HEX\$ (VER (0)), 2))	System should display 3, with Ok beneath.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-5.2.14.1	HW S2 + NO RTC	Test DEF FN / FN	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-5.2.14.2	HW S2 + NO RTC		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.14.3	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 DEF FN A(X) = X+7 20 PRINT FN A(9) 30 PRINT FN A(20)	System should show each line typed, and move down to the empty line beneath.				
E-5.2.14.4	HW S2 + NO RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print 16 on one line, 27 beneath it, with Ok beneath the 27.				
E-5.2.14.5	HW S2 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN: PRINT FN A (7)	System should print 14, with Ok beneath.				
E-5.2.15.1	AL S2 + MX	Test & Operator	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-5.2.15.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 A\$="ABCDEFG" 20 COPY DEEK(&A\$+2),\$3291,PEEK(&A\$) 30 PRINT "A\$ length =" + STR\$(PEEK(&A\$))	System should show each line typed, and move down to the empty line beneath.				
E-5.2.15.3	AL S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-5.2.15.4	AL S2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print A\$ length = 7 with Ok beneath, and should print ABCDEFG near the middle bottom of the screen.				
E-5.2.16	HW S2 + NO RTC	TESTING COMPLETE	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "Copyright © 1982 by Microsoft, Inc S2" screen should be displayed with "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
				TESTING IS COMPLETE				



Alpha Test Plan
USB BASIC v1.3

Tester Name:	
Date Completed:	
Environment(s) Tested:	Hardware S1 + Aquarius MX with RTC

E6

Setup

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.0.0	HW S1 + MX RTC	Setup Hardware MX + RTC						
E-6.0.1	HW S1 + MX RTC		Download & update MX EPROM to v1.3 (64k)	MX ROM is updated to v1.3				
E-6.0.2	HW S1 + MX RTC		Ensure hardware update to RTC socket has been completed.	MX board should be ready to use RTC unit.				
E-6.0.3	HW S1 + MX RTC		Remove 32k RAM and replace with Dallas DS1244Y DIP RTC unit.	MX board should have the RTC installed in place of RAM.				
E-6.0.4	HW S1 + MX RTC		Install MX unit and boot Aquarius.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-6.0.5	HW S1 + MX RTC		Press the A key within the emulator.	The "About USB BASIC" screen should be displayed. Release Date				ĺ
				should show "Alpha 2023-05-09".				l
E-6.0.6	HW S1 + MX RTC		Press any key to exit the About screen.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-6.0.7	HW S1 + MX RTC		Press RETURN/ENTER key to go to the USB BASIC command screen.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				ĺ
			Note: This screen is the starting point for most tests in this plan.	line with a cursor below.				l
								l
		DO NO	T CONTINUE IF ANY TESTS IN THIS SECTION DID I	NOT PASS! CONTACT THE TESTING COORDINATO	R, Sean Harrington sph@1stage.com.		·	

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.1.0	HW S1 + MX RTC	Test legacy commands						
E-6.1.1.1	HW S1 + MX RTC	Test CALL xx	From the USB BASIC command screen type CALL \$8000 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-6.1.1.2	HW S1 + MX RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-6.1.1.3	HW S1 + MX RTC		From the USB BASIC command screen type CALL -32768 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-6.1.1.4	HW S1 + MX RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-6.1.1.5	HW S1 + MX RTC		From the USB BASIC command screen type CALL 32768 (NO minus sign!) and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-6.1.1.6	HW S1 + MX RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-6.1.2	HW S1 + MX RTC	Test CAT	From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the USB stick, followed by Ok beneath. Note that the contents can vary from system to system.				
E-6.1.3.1	HW S1 + MX RTC	Test CD	From the USB BASIC command screen type CD and hit RETURN	The cursor should move down one row, and a / character should be displayed, followed by Ok beneath.				
E-6.1.3.2	HW S1 + MX RTC		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-6.1.4	HW S1 + MX RTC	Test DIR	From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB stick, followed by Ok beneath. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-6.1.5.1	HW S1 + MX RTC	Test CLS	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan background.				
E-6.1.5.2	HW S1 + MX RTC	1	From the USB BASIC command screen type CLS 8 and hit RETURN	System should clear the screen and show Ok in black letters on a grey background.				
E-6.1.5.3	HW S1 + MX RTC	1	From the USB BASIC command screen type CLS \$7D and hit RETURN	System should clear the screen and show Ok in white letters on a dark green background.				
E-6.1.5.4	HW S1 + MX RTC	1	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan background.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.1.6.1	HW S1 + MX RTC	Test SAVE a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-6.1.6.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE 20 CLS 30 PRINT "Hello"	System should show each line typed, and move down to the empty line beneath.				
E-6.1.6.3	HW S1 + MX RTC		From the USB BASIC command screen type LIST and hit RETURN	Contains the old show all these lines in the annual state of the lines of				
				System should show all three lines in the program and display Ok beneath.				
E-6.1.6.4	HW S1 + MX RTC		From the USB BASIC command screen type SAVE "TEST01.BAS" and hit RETURN	The cursor should move down one row and display Ok beneath. In the USB stick, there should be a new file named TEST01.BAS.				
E-6.1.6.5	HW S1 + MX RTC		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file should be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-6.1.7.1	HW S1 + MX RTC	Test LOAD a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-6.1.7.2	HW S1 + MX RTC		From the USB BASIC command screen type LIST and hit RETURN	System should display NO PROGRAM LINES with Ok beneath.				
E-6.1.7.3	HW S1 + MX RTC		From the USB BASIC command screen type LOAD "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-6.1.7.4	HW S1 + MX RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program listed in test E- 6.1.6.2 and display Ok beneath.				
E-6.1.8.1	HW S1 + MX RTC	Test RUN a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-6.1.8.2	HW S1 + MX RTC		From the USB BASIC command screen type RUN "TEST01.BAS" and hit RETURN	System should clear the screen, print Hello at the top, and display Ok beneath.				
E-6.1.9.1	HW S1 + MX RTC	Test DEL	From the USB BASIC command screen type DEL "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-6.1.9.2	HW S1 + MX RTC		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and the "TESTO1.BAS" file SHOULD NOT be lised among those files. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-6.1.10.1	HW S1 + MX RTC	Test SAVE a BIN file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-6.1.10.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN after each line: 10 REM Testing SAVE BIN 20 POKE \$8000, 97,98,99,100 30 PRINT "Done"	System should show each line typed, and move down to the empty line beneath.				
E-6.1.10.3	HW S1 + MX RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok beneath.				
E-6.1.10.4	HW S1 + MX RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print Done and display Ok beneath the program listing.				
E-6.1.10.5	HW S1 + MX RTC		From the USB BASIC command screen type CD "/" and hit RETURN	System should display Ok beneath.				
E-6.1.10.6	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: SAVE "POKE.BIN", \$8000, 4	System should display Ok beneath.				
E-6.1.10.7	HW S1 + MX RTC		From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB stick, and the file named "POKE.BIN" should be listed in the contents. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll past the full list of contents.				
E-6.1.11.1	HW S1 + MX RTC	Test LOAD a BIN file	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-6.1.11.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN: LOAD "POKE.BIN", \$3242	System should display abcd in the middle of the screen, with Ok beneath the text you just typed.				

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.1.12.1	HW S1 + MX RTC	Test RUN a ROM file	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-6.1.12.2	HW S1 + MX RTC		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-6.1.12.3	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should load the SNAFU game ROM and display the SNAFU title				
			RETURN: RUN "SNAFU.ROM"	screen.				
E-6.1.12.4	HW S1 + MX RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-6.1.13.1	HW S1 + MX RTC	Test DEBUG	From the USB BASIC command screen type DEBUG and hit RETURN	The AQUBUG screen should pop up with white text on a blue background.				
E-6.1.13.2	HW S1 + MX RTC		On the AQUBUG screen type the letter Q	System should return to the USB BASIC command screen, showing the DEBUG command with Ok beneath.				
E-6.1.14.1	HW S1 + MX RTC	Test HFX\$	From the USB BASIC command screen type the code below and hit	System should display 3000 on the next line with Ok beneath.				
			RETURN: PRINT HEX\$(12288)					
E-6.1.14.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display FF85 on the next line with Ok beneath.				
			RETURN: PRINT HEX\$(-123)					
E-6.1.14.3	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display FFFF on the next line with Ok beneath.				
			RETURN: PRINT HEX\$(65535)					
E-6.1.15	HW S1 + MX RTC	Test JOY	From the USB BASIC command screen type the code below and try to	System should display 64 on the next line with Ok beneath. If you				
			type RETURN and the 1 key at about the same time (maybe a slight	weren't able to get it to work exactly right, a 0 might be displayed				
			delay before the 1 key): PRINT JOY(0)	instead of the 64. Try a couple of times to get it to work, if you can.				
E-6.1.16	HW S1 + MX RTC	Test IN	From the USB BASIC command screen type the code below and hit	System should display 247 on the next line with Ok beneath.				
			RETURN: PRINT IN (\$FF)					
E-6.1.17.1	HW S1 + MX RTC	Test PSG	From the USB BASIC command screen type the code below and hit	System should play a Db4 tone continuously.				
			RETURN: PSG 8,15,0,148,1,1,7,56					
E-6.1.17.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should stop playing the tone.				
			RETURN: PSG 8,0,7,0					
E-6.1.18.1	HW S1 + MX RTC	Test OUT	From the USB BASIC command screen type the code below and hit	System should play a Db4 tone continuously and print Ok beneath.				\vdash
			RETURN: PSG 8,15,0,148,1,1,7,56					
E-6.1.18.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should print Ok after each RETURN, and then should stop				
			RETURN after each line:	playing the tone after the second.				
			OUT 247,8 OUT \$F6,0					
E-6.1.19.1	HW S1 + MX RTC	Test FDIT	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				\vdash
	HW S1 + MX RTC		RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-6.1.19.2	HW SI + IVIX RTC		From the USB BASIC command screen type the code below and hit RFTURN:	System should show each line typed, and move down to the empty line beneath.				
			10 REM Testing EDIT					
E-6.1.19.3	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should list the previously entered line 10 with a blue cursor				
			RETURN: EDIT 10	and white text positioned over the R in the REM command.				
E-6.1.19.4	HW S1 + MX RTC		Within the line 10 edit with the cursor on the R of REM, press the	System should display line 10 with a SPACE between the 10 and the				
			SPACE bar to insert a space between the line number 10 and the REM statement.	REM command.				
E-6.1.19.5	HW S1 + MX RTC		Within the line 10 edit with the cursor on the R of REM, CTRL + /	System should list the previously entered line 10 with a blue cursor				
			eleven times so the cursor is on top of the SPACE after the word	and white text positioned over the SPACE after the word Testing.				
E-6.1.19.6	HW S1 + MX RTC		Testing. Within the line 10 edit with the cursor on the SPACE between the	System should list the previously entered line 10 with a blue cursor				
c-0.1.13.p	1144 2T + IAIV KIC		word Testing and EDIT, press the DELETE/BACKSPACE key three times	and white text positioned over the SPACE before the word EDIT.				
			to delete the letters "ing" at the end of the word Testing.					
E-6.1.19.7	HW S1 + MX RTC		Within the line 10 edit with the cursor on the SPACE between the	The cursor should go to the line beneath line 10, and should NOT				
			word Test and EDIT, press CTRL + P eight times so the cursor is over	display Ok beneath.				/
			the letter R in REM, and then hit RETURN/ENTER.					
E-6.1.19.8	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display a blank line, then list line 10 again, with Ok				\vdash
			RETURN:	beneath.				
		I	LIST 10					

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.1.20.1	HW S1 + MX RTC	Test LOCATE	From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line:	line beneath.				
			10 CLS					
			20 LOCATE 20,12					
			30 PRINT CHR\$(KEY(0))					L
E-6.1.20.2	HW S1 + MX RTC		From the USB BASIC command screen type RUN and hit RETURN	System should move the cursor to the middle of the screen.				
								L
E-6.1.20.3	HW S1 + MX RTC		With the cursor in the middle of the screen, press the G key.	System should display a "g" in the middle of the screen, then go to the				
				next line and print Ok beneath.				
E-6.1.20.4	HW S1 + MX RTC		Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				<u> </u>
E-6.1.21.1	HW S1 + MX RTC	Test CTRL + C	Power off and then back on the Aquarius, Do NOT hit RETURN. Stay	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There				
			on the AquaLite menu.	should NOT be an option near the bottom that says " <ctrl+c> Warm</ctrl+c>				
				Start"				<u> </u>
E-6.1.21.2	HW S1 + MX RTC		Hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" should be shown, followed by "Ok" on the next				
				line with a cursor below.				<u> </u>
E-6.1.21.3	HW S1 + MX RTC		Press the RST (reset) key on the Aquarius. Do NOT hit RETURN. Stay	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There				
			on the AquaLite menu.	SHOULD be an option near the bottom that says " <ctrl+c> Warm</ctrl+c>				
				Start"				<u> </u>
E-6.1.21.4	HW S1 + MX RTC		Press CTRL + C.	A blank screen with "Break", followed by "Ok" on the next line with a				
				cursor below.				<u> </u>
			PLEASE CONTINUE	EVEN IF ALL TESTS IN THIS SECTION DID NOT PAS	S.			

T NI-								
Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.2.0	HW S1 + MX RTC	Test NEW commands						
E-6.2.1.1	HW S1 + MX RTC	Test POKE auto-increment	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				1
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-6.2.1.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	The screen should print abcd in a row towards the middle bottom of				ı l
			RETURN:	the screen.				ı l
			POKE 12945,97,98,99,100					
E-6.2.2.1	HW S1 + MX RTC	Test POKE range	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-6.2.2.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	The screen should print aaaaaaaaa (nine letter a's) in a row towards				
			RETURN:	the middle bottom of the screen.				ı l
			POKE \$3291 TO \$3299,97					ı l
E-6.2.3.1	HW S1 + MX RTC	Test POKE step	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-6.2.3.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	The screen should print aaa (three letter a's) in a downward line at the				
			RETURN:	middle bottom of the screen.				ı l
			POKE \$3291,97,STEP 40,97,STEP 40,97					ı l
E-6.2.4.1	HW S1 + MX RTC	Test POKE strings	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok.				
E-6.2.4.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	The screen should print the words Hubba Bubba stacked on top of				
-			RETURN:	each other at the middle bottom of the screen.				1
			POKE \$3291, "Hubba", STEP 40, "Bubba"					ı l
E-6.2.5.1	HW S1 + MX RTC	Test COPY	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				ı l
E-6.2.5.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	The text at the top of the screen ("USB BASIC v1.3" should be				í
			RETURN:	duplicated in the middle of the screen, with the Ok beneath the COPY				1
			COPY \$3000,\$3000+440,120	command near the top.				ı l
E-6.2.6.1	HW S1 + MX RTC	Test ATN	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				í
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-6.2.6.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display .785398 on the next line with Ok beneath.				1
			RETURN:					1
			PRINT ATN(1)					
E-6.2.7.1	HW S1 + MX RTC	Test DEC	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				1
E-6.2.7.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display 22015 on the next line with Ok beneath.				
			RETURN:					ı
			PRINT DEC("55FF")					1
E-6.2.8.1	HW S1 + MX RTC	Test DEEK	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				1
E-6.2.8.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display 6B4F on the next line with Ok beneath. (\$4F is	+			
L-0.2.0.2	1144 21 + IVIN KIC		RETURN:	the "O" character and \$6B is the "k" character from the top left of the				, ,
			PRINT HEX\$ (DEEK (12288+41))	screen.)				, ,
E-6.2.9.1	HW S1 + MX RTC	Test DOKE	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-6.2.9.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display Hi at the top left of the screen and show Ok		i		
- 0.2.3.2	52 - 1151 1110		RETURN:	beneath the DOKE command line. (\$48 is the "H" character and \$69 is				, J
			DOKE 12288+41,\$6948	the "i" character.)				, I

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.2.10.1	HW S1 + MX RTC	Test KEY	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-6.2.10.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 CLS 42	line beneath.				
			20 LOCATE 20,12					
			30 PRINT CHR\$(KEY(0))					ļ l
E-6.2.10.3	HW S1 + MX RTC		From the USB BASIC command screen type RUN and hit RETURN	System should clear the screen to GREEN letters on a PURPLE				
				background and move the GREEN cursor to the middle of the screen,				
				waiting for input.				
E-6.2.10.4	HW S1 + MX RTC		With the cursor in the middle of the screen, press the M key (without	System should display a "m" in the middle of the screen, then go to the next line and print Ok beneath.				
E-6.2.11.1	HW S1 + MX RTC	Test SDTM	the SHIFT key pressed). From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
C 0.2.11.1	TIW SI TIWATITE	resessivi	Trom the 636 BASIC command screen type 626 and the Revolution	System should clear the screen and show ok .				
E-6.2.11.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display Ok beneath.				†
			RETURN, replacing "YYMMDDHHMMSS" with the current DateTime					ļ l
			settings:					
5 6 2 4 4 2			SDTM "YYMMDDHHMMSS"					ļ!
E-6.2.11.3	HW S1 + MX RTC		Power off and then back on the Aquarius.	The "Aquarius MX USB BASIC v1.3" screen should be displayed with the correct date and time shown at the bottom of the screen, with			1	
				seconds ticking by.				
E-6.2.12.1	HW S1 + MX RTC	Test DTM\$	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				†
E-6.2.12.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display a string with the current date and time,				l
			RETURN:	formatted YYMMDDHHMMSSCC, with Ok beneath.				ļ l
E-6.2.12.3	HW S1 + MX RTC		PRINT DTM\$(0)	Control of all all and a section with the account data and all and				ļ
E-0.2.12.3	HW SI + IVIX KIC		From the USB BASIC command screen type the code below and hit RETURN:	System should display a string with the current date and time, formatted YYYY-MM-DD HH:MM:SS, with Ok beneath. Note that the				
			PRINT DTM\$(1)	Century is assumed to be 20, and the hours are in 24 hour format.				
				,				
E-6.2.12.4	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display a string with the current date, formatted YYYY-				1
			RETURN:	MM-DD, with Ok beneath. Note that the Century is assumed to be 20.				
E-6.2.12.5	HW S1 + MX RTC		PRINT LEFT\$ (DTM\$ (1),10) From the USB BASIC command screen type the code below and hit	System should display a string with the current time, formatted				
L-0.2.12.3	TIW 31 + WIX RTC		RETURN:	HH:MM:SS, with Ok beneath. Note that the hours are in 24 hour				
			PRINT RIGHT(DTM\$(1),8))	format.				
E-6.2.13.1	HW S1 + MX RTC	Test VER	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				1
E-6.2.13.2	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit RETURN:	System should display 0103, with Ok beneath.				
			PRINT HEX\$ (VER(0))					
E-6.2.13.3	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display 1, with Ok beneath.				†
			RETURN:					
			PRINT VAL(LEFT\$(HEX\$(VER(0)),2))					
E-6.2.13.4	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should display 3, with Ok beneath.				
			RETURN: PRINT VAL(RIGHT\$(HEX\$(VER(0)),2))					
E-6.2.14.1	HW S1 + MX RTC	Test DEF FN / FN	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.		1		\vdash
							1	
E-6.2.14.2	HW S1 + MX RTC		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
						ļ		<u> </u>
E-6.2.14.3	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty			1	
			RETURN after each line: 10 DEF FN A(X) = X+7	line beneath.				
			20 PRINT FN A(9)					
			30 PRINT FN A(20)					
E-6.2.14.4	HW S1 + MX RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print 16 on one line, 27 beneath it, with Ok beneath the	e			
				27.		<u> </u>		<u> </u>
E-6.2.14.5	HW S1 + MX RTC		From the USB BASIC command screen type the code below and hit	System should print 14, with Ok beneath.				
			RETURN: PRINT FN A(7)					
	1	l .		I .		1		

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-6.2.15.1	AL S2 + MX	Test & Operator	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-6.2.15.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 AS="ABCDEFG" 20 COPY DEEK (&AS+2),\$3291,PEEK (&AS) 30 PRINT "A\$ length =" + STR\$(PEEK (&A\$))	line beneath.				
E-6.2.15.3	AL S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-6.2.15.4	AL S2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print A\$ length = 7 with Ok beneath, and should print ABCDEFG near the middle bottom of the screen.				
E-6.2.16	HW S1 + MX RTC	TESTING COMPLETE	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
				TESTING IS COMPLETE				



Alpha Test Plan	Tester Name:	
USB BASIC v1.3	Date Completed:	
F7	Environment(s) Tested:	Hardware S1 + Aquarius MX NO RTC

Setup

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-7.0.0	HW S1 + NO RTC	Setup Hardware MX + RTC						
E-7.0.1	HW S1 + NO RTC		Download & update MX EPROM to v1.3 (64k)	MX ROM is updated to v1.3				
E-7.0.2	HW S1 + NO RTC		Install MX unit and boot Aquarius.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-7.0.3	HW S1 + NO RTC		Press the A key within the emulator.	The "About USB BASIC" screen should be displayed. Release Date				
				should show "Alpha 2023-05-09".				
E-7.0.4	HW S1 + NO RTC		Press any key to exit the About screen.	The "Aquarius MX USB BASIC v1.3" screen should be displayed.				
E-7.0.5	HW S1 + NO RTC		Press RETURN/ENTER key to go to the USB BASIC command screen.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next				
			Note: This screen is the starting point for most tests in this plan.	line with a cursor below.				
		DO NO	T CONTINUE IF ANY TESTS IN THIS SECTION DID I	NOT PASS! CONTACT THE TESTING COORDINATO	R, Sean Harrington sph@1stage.com.			

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-7.1.0	HW S1 + NO RTC	Test legacy commands						
E-7.1.1.1	HW S1 + NO RTC	Test CALL xx	From the USB BASIC command screen type CALL \$8000 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-7.1.1.2	HW S1 + NO RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-7.1.1.3	HW S1 + NO RTC		From the USB BASIC command screen type CALL -32768 and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-7.1.1.4	HW S1 + NO RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-7.1.1.5	HW S1 + NO RTC		From the USB BASIC command screen type CALL 32768 (NO minus sign!) and hit RETURN	The cursor should move down one row, and the system should freeze.				
E-7.1.1.6	HW S1 + NO RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-7.1.2	HW S1 + NO RTC	Test CAT	From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the USB stick, followed by Ok beneath. Note that the contents can vary from system to system.				
E-7.1.3.1	HW S1 + NO RTC	Test CD	From the USB BASIC command screen type CD and hit RETURN	The cursor should move down one row, and a / character should be displayed, followed by Ok beneath.				
E-7.1.3.2	HW S1 + NO RTC		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-7.1.4	HW S1 + NO RTC	Test DIR	From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB stick, followed by Ok beneath. Note that the RETURN/ENTER key may have to be pressed one or more times to scroll through the full list of contents.				
E-7.1.5.1	HW S1 + NO RTC	Test CLS	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan background.				
E-7.1.5.2	HW S1 + NO RTC		From the USB BASIC command screen type CLS 8 and hit RETURN	System should clear the screen and show Ok in black letters on a grey background.				
E-7.1.5.3	HW S1 + NO RTC]	From the USB BASIC command screen type CLS \$7D and hit RETURN	System should clear the screen and show Ok in white letters on a dark green background.				
E-7.1.5.4	HW S1 + NO RTC		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok in black letters on a cyan background.				

E-7.1.6.1		Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
	HW S1 + NO RTC	Test SAVE a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-7.1.6.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 REM Testing SAVE	line beneath.				
			20 CLS					
			30 PRINT "Hello"					
E-7.1.6.3	HW S1 + NO RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok				
				beneath.				
E-7.1.6.4	HW S1 + NO RTC		From the USB BASIC command screen type SAVE "TEST01.BAS" and hit RETURN	The cursor should move down one row and display Ok beneath. In the USB stick, there should be a new file named TEST01.BAS.				
			and nit Kelokin	OSB Stick, there should be a new file flamed TESTOT.BAS.				
E-7.1.6.5	HW S1 + NO RTC		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and				
				the "TEST01.BAS" file should be lised among those files. Note that the				
				RETURN/ENTER key may have to be pressed one or more times to				
				scroll through the full list of contents.				
E-7.1.7.1	HW S1 + NO RTC	Test LOAD a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
			· ·					
E-7.1.7.2	HW S1 + NO RTC		From the USB BASIC command screen type LIST and hit RETURN	System should display NO PROGRAM LINES with Ok beneath.				
E-7.1.7.3	HW S1 + NO RTC		Form the UCD DACIC commend on the Ton Daniel Dacie	Contains about distriction Of the seconds				
E-7.1.7.3	HW SI + NO RIC		From the USB BASIC command screen type LOAD "TEST01.BAS" and hit RETURN	System should display Ok beneath.				
E-7.1.7.4	HW S1 + NO RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program listed in test E-				
				7.1.6.2 and display Ok beneath.				
E-7.1.8.1	HW S1 + NO RTC	Test RUN a BASIC file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-7.1.8.2	HW S1 + NO RTC		5 1 150 0 150					
E-7.1.8.2	HW SI + NO RIC		From the USB BASIC command screen type RUN "TEST01.BAS" and hit RETURN	System should clear the screen, print Hello at the top, and display Ok beneath.				
E-7.1.9.1	HW S1 + NO RTC	Test DEI	From the USB BASIC command screen type DEL "TEST01.BAS"	System should display Ok beneath.				
			and hit RETURN					
E-7.1.9.2	HW S1 + NO RTC		From the USB BASIC command screen type CAT and hit RETURN	System should display a brief listing of the contents of the folder, and				
				the "TEST01.BAS" file SHOULD NOT be lised among those files. Note				
				that the RETURN/ENTER key may have to be pressed one or more				
				times to scroll through the full list of contents.				
E-7.1.10.1	HW S1 + NO RTC	Test SAVE a BIN file	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-7.1.10.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 REM Testing SAVE BIN	line beneath.				
			20 POKE \$8000,97,98,99,100					
			30 PRINT "Done"					
E-7.1.10.3	HW S1 + NO RTC		From the USB BASIC command screen type LIST and hit RETURN	System should show all three lines in the program and display Ok				
F 7 1 40 4	104/61 - NO 570		From the LICE DACIC command course to a pure and bit personal	beneath.				
E-7.1.10.4	HW S1 + NO RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print Done and display Ok beneath the program listing.				
E-7.1.10.5	HW S1 + NO RTC		From the USB BASIC command screen type CD "/" and hit RETURN	System should display Ok beneath.				
			,, ,					
E-7.1.10.6	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display Ok beneath.				
			RETURN: SAVE "POKE.BIN", \$8000, 4					
E-7.1.10.7	HW S1 + NO RTC		From the USB BASIC command screen type DIR and hit RETURN	System should display a detailed listing of the contents of the USB				
_ /.1.20./	51 . 140 1.10			stick, and the file named "POKE.BIN" should be listed in the contents.				
				Note that the RETURN/ENTER key may have to be pressed one or				
				more times to scroll past the full list of contents.				
F 7 1 11 1	LIM S1 - NO STC	Took I OAD a DIN file	Dougs off and then heat on the Associate and then hit the	The "HISD DASIC of 2" on the next line followed by "Old on the next	 			1
E-7.1.11.1	UM 21 + NO KLC	Test LOAD a BIN file	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-7.1.11.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display abcd in the middle of the screen, with Ok				
			RETURN:	beneath the text you just typed.				
			LOAD "POKE.BIN", \$3242	1		1		1

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-7.1.12.1		Test RUN a ROM file	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next		ì		
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
	HW S1 + NO RTC		From the USB BASIC command screen type CD"ROMS" and hit RETURN	The cursor should move down one row and display Ok beneath.				
E-7.1.12.3	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN:	System should load the SNAFU game ROM and display the SNAFU title screen.				
			RUN "SNAFU.ROM"	screen.				
E-7.1.12.4	HW S1 + NO RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-7.1.13.1	HW S1 + NO RTC	Test DEBUG	From the USB BASIC command screen type DEBUG and hit RETURN	The AQUBUG screen should pop up with white text on a blue background.				
E-7.1.13.2	HW S1 + NO RTC		On the AQUBUG screen type the letter Q	System should return to the USB BASIC command screen, showing the DEBUG command with Ok beneath.				
E-7.1.14.1	HW S1 + NO RTC	Test HEX\$	From the USB BASIC command screen type the code below and hit	System should display 3000 on the next line with Ok beneath.				
			RETURN: PRINT HEX\$(12288)					
E-7.1.14.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display FF85 on the next line with Ok beneath.				
			RETURN: PRINT HEX\$(-123)					
E-7.1.14.3	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display FFFF on the next line with Ok beneath.				
			RETURN: PRINT HEX\$(65535)					
E-7.1.15	HW S1 + NO RTC	Test JOY	From the USB BASIC command screen type the code below and try to	System should display 64 on the next line with Ok beneath. If you		Ì		
			type RETURN and the 1 key at about the same time (maybe a slight delay before the 1 key):	weren't able to get it to work exactly right, a 0 might be displayed instead of the 64. Try a couple of times to get it to work, if you can.				
			PRINT JOY(0)	instead of the 64. Try a couple of times to get it to work, if you can.				
E-7.1.16	HW S1 + NO RTC	Test IN	From the USB BASIC command screen type the code below and hit	System should display 247 on the next line with Ok beneath.				
			RETURN: PRINT IN(\$FF)					
E-7.1.17.1	HW S1 + NO RTC	Test PSG	From the USB BASIC command screen type the code below and hit	System should play a Db4 tone continuously.				
			RETURN: PSG 8,15,0,148,1,1,7,56					
E-7.1.17.2	HW S1 + NO RTC	1	From the USB BASIC command screen type the code below and hit	System should stop playing the tone.				
			RETURN:					
E-7.1.18.1	HW S1 + NO RTC	Test OUT	PSG 8, 0, 7, 0 From the USB BASIC command screen type the code below and hit	System should play a Db4 tone continuously and print Ok beneath.				
			RETURN: PSG 8,15,0,148,1,1,7,56					
E-7.1.18.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should print Ok after each RETURN, and then should stop				
			RETURN after each line: OUT 247,8	playing the tone after the second.				
			OUT 247,8 OUT \$F6,0					
E-7.1.19.1	HW S1 + NO RTC	Test EDIT	Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-7.1.19.2	HW S1 + NO RTC	1	From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty		i		T
			RETURN: 10 REM Testing EDIT	line beneath.				
E-7.1.19.3	HW S1 + NO RTC	1	From the USB BASIC command screen type the code below and hit	System should list the previously entered line 10 with a blue cursor				
ļ			RETURN: EDIT 10	and white text positioned over the R in the REM command.				1
E-7.1.19.4	HW S1 + NO RTC	1	Within the line 10 edit with the cursor on the R of REM, press the	System should display line 10 with a SPACE between the 10 and the				
			SPACE bar to insert a space between the line number 10 and the REM statement.	REM command.				
E-7.1.19.5	HW S1 + NO RTC	1	Within the line 10 edit with the cursor on the R of REM, CTRL + /	System should list the previously entered line 10 with a blue cursor				
			eleven times so the cursor is on top of the SPACE after the word	and white text positioned over the SPACE after the word Testing.				
E-7.1.19.6	HW S1 + NO RTC		Testing. Within the line 10 edit with the cursor on the SPACE between the	System should list the previously entered line 10 with a blue cursor				
			word Testing and EDIT, press the DELETE/BACKSPACE key three times	and white text positioned over the SPACE before the word EDIT.				
			to delete the letters "ing" at the end of the word Testing.					
E-7.1.19.7	HW S1 + NO RTC	1	Within the line 10 edit with the cursor on the SPACE between the	The cursor should go to the line beneath line 10, and should NOT				
	1		word Test and EDIT, press CTRL + P eight times so the cursor is over	display Ok beneath.				
			the letter R in REM, and then hit RETURN/ENTER.					
E-7.1.19.8	HW S1 + NO RTC	1	From the USB BASIC command screen type the code below and hit	System should display a blank line, then list line 10 again, with Ok		Ì		
			RETURN:	beneath.				1

Test No	Environment	Description	Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-7.1.20.1	HW S1 + NO RTC	Test LOCATE	From the USB BASIC command screen type the code below and hit RETURN after each line: 10 CLS 20 LOCATE 20,12 30 PRINT CHR\$(KEY(0))	System should show each line typed, and move down to the empty line beneath.				
E-7.1.20.2	HW S1 + NO RTC		From the USB BASIC command screen type RUN and hit RETURN	System should move the cursor to the middle of the screen.				
E-7.1.20.3	HW S1 + NO RTC		With the cursor in the middle of the screen, press the G key.	System should display a "g" in the middle of the screen, then go to the next line and print Ok beneath.				
E-7.1.20.4	HW S1 + NO RTC		Power off and then back on the Aquarius, and then hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with a cursor below.				
E-7.1.21.1	HW S1 + NO RTC	Test CTRL + C	Power off and then back on the Aquarius, Do NOT hit RETURN. Stay on the AquaLite menu.	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There should NOT be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-7.1.21.2	HW S1 + NO RTC		Hit the RETURN/ENTER key to go to USB BASIC.	The "USB BASIC v1.3" should be shown, followed by "Ok" on the next line with a cursor below.				
E-7.1.21.3	HW S1 + NO RTC		Press the RST (reset) key on the Aquarius. Do NOT hit RETURN. Stay on the AquaLite menu.	The "Aquarius MX USB BASIC v1.3" screen should be displayed. There SHOULD be an option near the bottom that says " <ctrl+c> Warm Start"</ctrl+c>				
E-7.1.21.4	HW S1 + NO RTC		Press CTRL + C.	A blank screen with "Break", followed by "Ok" on the next line with a cursor below.				
PLEASE CONTINUE EVEN IF ALL TESTS IN THIS SECTION DID NOT PASS.								

Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
then hit the The "USB BASIC v1.3" on the next line, followed by "Ok" on the	next			i
				<u> </u>
·	m of			l
the screen.				i
LS and hit RETURN System should clear the screen and show Ok.				1
ne code below and hit The screen should print aaaaaaaaa (nine letter a's) in a row tow	ards			
the middle bottom of the screen.				i
				i
LS and hit RETURN System should clear the screen and show Ok.				
ne code below and hit The screen should print aaa (three letter a's) in a downward line	at the			
middle bottom of the screen.				i
				i
LS and hit RETURN System should clear the screen and show Ok.				
	of			i
				ĺ
				1
	next			1
				i
	COPY			1
				i .
	next			1
ne code below and hit System should display .785398 on the next line with Ok beneath	l.			i
				i
LS and hit RETURN System should clear the screen and show Ok .				1
e code below and hit System should display 22015 on the next line with Ok beneath.				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				1
				i
LS and hit RETURN System should clear the screen and show Ok .				
, and the second				i
e code below and hit System should display 6B4F on the next line with Ok beneath. (S	4F is			
				1
screen.)				1
ne code below and hit System should display Hi at the top left of the screen and show	Dk Dk			
				i
**				1
C tth C C tth C C C tth C C C	the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print aaaaaaaa (nine letter a's) in a row tow the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The code below and hit 40,97 CLS and hit RETURN System should print aaa (three letter a's) in a downward line middle bottom of the screen. System should clear the screen and show Ok. The screen should print aaa (three letter a's) in a downward line middle bottom of the screen. System should clear the screen and show Ok. The code below and hit The screen should print the words Hubba Bubba stacked on top each other at the middle bottom of the screen. The "USB BASIC v1.3" on the next line, followed by "Ok" on the riline with a cursor below. The "USB BASIC v1.3" on the next line, followed by "Ok" on the riline with a cursor below. The "USB BASIC v1.3" on the next line, followed by "Ok" on the riline with a cursor below. The "USB BASIC v1.3" on the next line, followed by "Ok" on the riline with a cursor below. System should display .785398 on the next line with Ok beneath the code below and hit System should display 22015 on the next line with Ok beneath. CLS and hit RETURN System should display 22015 on the next line with Ok beneath. (Stem and hit RETURN) System should display 684F on the next line with Ok beneath. (Stem and hit RETURN) System should display 684F on the next line with Ok beneath. (Stem and hit RETURN) System should clear the screen and show Ok. System should clear the screen and show Ok.	the code below and hit The screen should print abcd in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The code below and hit The screen should print aaaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The code below and hit The screen should print aaa (three letter a's) in a downward line at the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print the words Hubba Bubba stacked on top of each other at the middle bottom of the screen. The "USB BASIC V.1.3" on the next line, followed by "Ok" on the next line with a cursor below. The text at the top of the screen ("USB BASIC V.1.3" should be duplicated in the middle of the screen, with the Ok beneath the COPY command near the top. In the "USB BASIC V.1.3" on the next line, followed by "Ok" on the next line with a cursor below. The text at the top of the screen, with the Ok beneath the COPY command near the top. In the "USB BASIC V.1.3" on the next line, followed by "Ok" on the next line with a cursor below. The "USB BASIC V.1.3" on the next line, followed by "Ok" on the next line with a cursor below. The code below and hit System should display .785398 on the next line with Ok beneath. CLS and hit RETURN System should clear the screen and show Ok. System should display 22015 on the next line with Ok beneath. CLS and hit RETURN System should display 22015 on the next line with Ok beneath. System should display 684F on the next line with Ok beneath. System should display 684F on the next line with Ok beneath. System should display 684F on the next line with Ok beneath (S4F is the "Character and 568 is the "K" character from the top left of the screen. System should display 684F on the next line with Ok beneath (S4F is the Character and 568 is the "K" character and show Ok beneath the DOKE command line. (S48 is the "H" character and show Ok	The screen should print abcd in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print abaaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print abaaaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print aba (three letter a's) in a downward line at the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print the words Hubba Bubba stacked on top of each other at the middle bottom of the screen. The "USB BASIC V.1.3" on the next line, followed by "Ok" on the next line with a cursor below. The text at the top of the screen ("USB BASIC V.1.3" should be duplicated in the middle of the screen, with the Ok beneath the COPY command near the top. The text at the top of the screen, with the Ok beneath the COPY command near the top. The TUSB BASIC V.1.3" on the next line, followed by "Ok" on the next line with a cursor below. The text at the top of the screen, with the Ok beneath. CLS and hit RETURN System should display .785398 on the next line with Ok beneath. CLS and hit RETURN System should display 22015 on the next line with Ok beneath. CLS and hit RETURN System should display 22015 on the next line with Ok beneath. CLS and hit RETURN System should display 22015 on the next line with Ok beneath. CLS and hit RETURN System should display 684F on the next line with Ok beneath. System should display 684F on the next line with Ok beneath. System should display 684F on the next line with Ok beneath. System should display 684F on the next line with Ok beneath. System should display 684F on the next line with Ok beneath. System should display Hit at the top left of the screen and show Ok beneath the OOK ecommand line. (548 is the "H" character an	The screen should print abcd in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print abaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print abaaaaaaaa (nine letter a's) in a row towards the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print abaa (three letter a's) in a downward line at the middle bottom of the screen. CLS and hit RETURN System should clear the screen and show Ok. The screen should print the words Hubba Bubba Stacked on top of each other at the middle bottom of the screen. The screen should print the words Hubba Bubba Stacked on top of each other at the middle bottom of the screen. The screen should print the words Hubba Bubba Stacked on top of each other at the middle bottom of the screen. The screen should print the words Hubba Bubba Stacked on top of each other at the middle bottom of the screen. The screen should biba " The screen should print the words Hubba Bubba Stacked on top of each other at the middle bottom of the screen. The screen should biba " The screen should biba Bubba Stacked on top of each other at the middle bottom of the screen. The screen should biba Bubba Stacked on top of each other at the middle bottom of the screen. The screen should biba Bubba Stacked on top of each other each time with a cursor below. The code below and hit the "USB BASIC v1.3" on the next line, followed by "Ok" on the next line with of which each the screen and show Ok. The screen should display SB4F on the next line with Ok beneath. System should display SB4F on the next line with Ok beneath. System should display SB4F on the next line with Ok beneath. System should display SB4F on the next line with Ok beneath. System should display SB4F on the next line with Ok beneath. System should display SB4F on the next line with

Test No	Environment		Process	Expected Results	Actual Results ("As Expected" ok)	Pass/Fail	Initials	Date/Time
E-7.2.10.1	HW S1 + NO RTC	Test KEY	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-7.2.10.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
L-7.2.10.2	TIW 31 + NO KIC		RETURN after each line:	line beneath.				
			10 CLS 42					
			20 LOCATE 20,12 30 PRINT CHR\$(KEY(0))					
E-7.2.10.3	HW S1 + NO RTC			Contain the Idelegation of COSEN Latters are DUDDLE				
E-7.2.10.3	HW SI + NO RIC		From the USB BASIC command screen type RUN and hit RETURN	System should clear the screen to GREEN letters on a PURPLE background and move the GREEN cursor to the middle of the screen,				
				waiting for input.				
E-7.2.10.4	HW S1 + NO RTC		With the cursor in the middle of the screen, press the M key (without	System should display a "m" in the middle of the screen, then go to				
			the SHIFT key pressed).	the next line and print Ok beneath.				
E-7.2.11.1	HW S1 + NO RTC	Test SDTM	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-7.2.11.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display Ok beneath.				
			RETURN, replacing "YYMMDDHHMMSS" with the current DateTime					
			settings:					
E-7.2.11.3	HW S1 + NO RTC		SDTM "YYMMDDHHMMSS" Power off and then back on the Aquarius.	The "Aquarius MX USB BASIC v1.3" screen should be displayed with				
E-7.2.11.3	HW SI + NO RIC		Power off and then back on the Aquarius.	NO DATE AND TIME shown at the bottom of the screen.				
				NO DATE AND TIME SHOWN at the sociolin of the serecti.				
E-7.2.12.1	HW S1 + NO RTC	Test DTM\$	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-7.2.12.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit RETURN:	System should print a blank line with Ok beneath.				
			PRINT DTM\$(0)					
E-7.2.12.3	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should print a blank line with Ok beneath.				
			RETURN:					
			PRINT DTM\$(1)					
E-7.2.13.1	HW S1 + NO RTC	Test VER	From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-7.2.13.2	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display 0103, with Ok beneath.				
C 7.12.125.12	51 . 110 1110		RETURN:	System should display 6165, with ox benedan.				
			PRINT HEX\$(VER(0))					
E-7.2.13.3	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display 1, with Ok beneath.				
			RETURN: PRINT VAL(LEFT\$(HEX\$(VER(0)),2))					
E-7.2.13.4	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should display 3, with Ok beneath.				
			RETURN:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
			PRINT VAL(RIGHT\$(HEX\$(VER(0)),2))					
E-7.2.14.1	HW S1 + NO RTC	Test DEF FN / FN	From the USB BASIC command screen type NEW and hit RETURN	System should display Ok beneath.				
E-7.2.14.2	HW S1 + NO RTC		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
C / IZ.IZ.II.	51 - 110 1110		Tom the obs broke command streem type obs and meneromy	System should dear the server and show ox .				
E-7.2.14.3	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 DEF FN A(X) = X+7	line beneath.				
			10 DEF FN A(X) = X+7 20 PRINT FN A(9)					
			30 PRINT FN A(20)					
E-7.2.14.4	HW S1 + NO RTC		From the USB BASIC command screen type RUN and hit RETURN	System should print 16 on one line, 27 beneath it, with Ok beneath the	2			
				27.				
E-7.2.14.5	HW S1 + NO RTC		From the USB BASIC command screen type the code below and hit	System should print 14, with Ok beneath.				
			RETURN: PRINT FN A(7)					
E-7.2.15.1	AL S2 + MX	Test & Operator	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next	<u> </u>			
			RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
E-7.2.15.2	AL S2 + MX		From the USB BASIC command screen type the code below and hit	System should show each line typed, and move down to the empty				
			RETURN after each line: 10 A\$="ABCDEFG"	line beneath.				
			20 COPY DEEK(&A\$+2),\$3291,PEEK(&A\$)					
	<u> </u>		30 PRINT "A\$ length =" + STR\$(PEEK(&A\$))			<u> </u>		<u></u>
E-7.2.15.3	AL S2 + MX		From the USB BASIC command screen type CLS and hit RETURN	System should clear the screen and show Ok .				
E-7.2.15.4	AL S2 + MX		From the USB BASIC command screen type RUN and hit RETURN	System should print A\$ length = 7 with Ok beneath, and should print ABCDEFG near the middle bottom of the screen.				
E-7.2.16	HW S1 + NO RTC	TESTING COMPLETE	Power off and then back on the Aquarius, and then hit the	The "USB BASIC v1.3" on the next line, followed by "Ok" on the next		1		1
L /.L.10	51 . 110 1.10		RETURN/ENTER key to go to USB BASIC.	line with a cursor below.				
			, , ,	TESTING IS COMPLETE		•		•