

Waters Corporation - Test Record

Part Number: <u>186015001</u>	Product: <u>Acquity_BSM</u>
Operator: <u>927989</u>	Start Time: <u>12/20/2017, 16:37:</u>
Serial Number: <u>M17UPB364A</u>	End Time: <u>12/21/2017, 08:03:</u>
Test System: <u>TE82943-13</u>	Order: <u>N/A</u>
Test Software: <u>2.1</u>	Location: <u>Flextronics, SG</u>

TMD: TMD010401

Firmware: 1.65.273 (Feb 27 2015 08:36:20)

Name	LSL	Measurement	USL	Unit	Outcome
Test Electrical Safety					PASS
Test Loader Download					PASS
Test Reboot Firmware for Pump B Download					PASS
Test Firmware Version					PASS
Test Serial Number					PASS
Test Alarms at Bootup					PASS
Test Switch2 Output ON					PASS
Test Switch2 Output OFF					PASS
Test Switch3 Output ON					PASS
Test Switch3 Output OFF					PASS
Test Run Stopped Output ON					PASS
Test Run Stopped Output OFF					PASS
Test Switch1 Output ON					PASS
Test Switch1 Output OFF					PASS
Test Gradient Start Input SHORT					PASS
Test Gradient Start Input OPEN					PASS
Test Stop Flow Input SHORT					PASS
Test Stop Flow Input OPEN					PASS
Test Auxiliary1 Input SHORT					PASS
Test Auxiliary1 Input OPEN					PASS
Test Auxiliary2 Input SHORT					PASS
Test Auxiliary2 Input OPEN					PASS
Test Analog Output2 set to 2.0 VDC	1.9	2	2.1	VDC	PASS
Test Analog Output2 set to 0.0 VDC	-0.1	0	0.1	VDC	PASS
Test Analog Output1 set to 2.0 VDC	1.9	2	2.1	VDC	PASS
Test Analog Output1 set to 0.0 VDC	-0.1	0	0.1	VDC	PASS
Test Leak Detect Connected					PASS
Test Leak Detect Disconnected					PASS
Test Leak Detect Input Low					PASS
Test Leak Detect Input High					PASS
Test Alarms Recheck					PASS
Test Seal Wash Pump Prime/Flow	2	3.3	5	ml/min	PASS
Test Pump A Input 2 Prime with IPA	115	161	280	PSI	PASS
Test Pump B Input 2 Prime with IPA	115	142.8	280	PSI	PASS
Test Pump A Input 1 Prime with MeOH	15	43.7	85	PSI	PASS
Test Pump B Input 1 Prime with MeOH	15	38.7	85	PSI	PASS
Test Degasser Pressure	0	0.71	1.3	PSI	PASS
Test Degasser Switch Setting					PASS
Test Static Leak Pump A - Accumulator Decay Rate	1	90.8	200	psig/min	PASS
Test Static Leak Pump A - Accumulator Compression Stroke	1	26	30	%	PASS
Test Static Leak Pump A - Accumulator Inferred Leak Rate	0.01	0.13	0.8	uL/min	PASS
Test Static Leak Pump A - Accum. Highest Pressure	14000	14006	15000	psig	PASS

Achieved

Test Static Leak Pump A - Primary Decay Rate	1	71.1	200	psig/min	PASS
Test Static Leak Pump A - Primary Compression Stroke	1	27	30	%	PASS
Test Static Leak Pump A - Primary Inferred Leak Rate	0.01	0.1	0.8	uL/min	PASS
Test Static Leak Pump A - Primary Highest Pressure Achieved	12000	12008	13000	psig	PASS
Test Static Leak Pump B - Accumulator Decay Rate	1	106	200	psig/min	PASS
Test Static Leak Pump B - Accumulator Compression Stroke	1	27	30	%	PASS
Test Static Leak Pump B - Accumulator Inferred Leak Rate	0.01	0.13	0.8	uL/min	PASS
Test Static Leak Pump B - Accum. Highest Pressure Achieved	14000	14011	15000	psig	PASS
Test Static Leak Pump B - Primary Decay Rate	1	71.9	200	psig/min	PASS
Test Static Leak Pump B - Primary Compression Stroke	1	25	30	%	PASS
Test Static Leak Pump B - Primary Inferred Leak Rate	0.01	0.1	0.8	uL/min	PASS
Test Static Leak Pump B - Primary Highest Pressure Achieved	12000	12016	13000	psig	PASS
Test Flow Rate Accuracy Pump A 2ml/min	1.98	2.012	2.02	ml/min	PASS
Test Pump A Pressure Ripple	0	4	15	PSI	PASS
Test Flow Rate Accuracy Pump A 0.5ml/min	0.495	0.505	0.505	ml/min	PASS
Test Flow Rate Accuracy Pump B 2ml/min	1.98	2.014	2.02	ml/min	PASS
Test Pump B Pressure Ripple	0	3	15	PSI	PASS
Test Flow Rate Accuracy Pump B 0.5ml/min	0.495	0.501	0.505	ml/min	PASS
Test Flow Rate Accuracy Pump A&B 1.0ml+1.0ml/min	1.98	2.011	2.02	ml/min	PASS
Test High Pressure Flow Pump A&B	9000	10623	14500	PSI	PASS
Test Dynamic Leak Manifold to Filter Tube	0	0.1	1	ul/min	PASS
Test Serial Number Re-verification					PASS
Test Fans					PASS
Test LEDs					PASS

Acquity BSM Final Test Overall Result - PASS

Signed:

Date:

END OF DATA