==== Shimadzu LabSolutions System Check ====

Instrument Name   : MARXLAB-HPLC

Date Tested: 7/12/2022 10:17:22 PM
Perfomer: CJMarx
System Check Summary: Pass
Software Version: 5.82

Instrument Name	LC-20AD			
Link Address	3			
Date Checked	7/13/2022 2:06 PM			
Serial Number	L20105459442			
Unit ID				
ROM Version	V2.10			
ROM Check				Pass
RAM Check				Pass
Optical I/F Check				Pass
Leak Sensor Check	T000000(hr)			Pass
Leak Sensor Level	T000000(hr)			
	125			
Total Operating Time (hr)	13426			
L Seal Delivered (L)	12	90	(13%)	Pass
R Seal Delivered (L)	12	90	(13%)	Pass
Total Revolutions	614139			
Flow Compensation Factor	T000000(hr)			
	6.37			
Press. Sensor Compensation Factor 1	T000000(hr)			
	900			
Press. Sensor Compensation Factor 5	T000000(hr)			
	5404			
Flow Rate Accuracy Check(%)	T000000(hr)			
	0.10			Pass
Pulsation Check(MPa)	T003559(hr)			
	0.04	0.20		Pass
Maintenance Log No.1	T003558(hr)	R SEAL REPLACED		
Maintenance Log No.2	T003558(hr)	L SEAL REPLACED		
Operation Log No.1	T000000(hr)	INITIALIZE PARAM		
Error Log No.1	6/29/2022 10:06 AM	ERROR P-MAX		
Error Log No.2	6/23/2022 2:51 AM	ERROR P-MAX		
Error Log No.3	6/23/2022 2:48 AM	ERROR P-MAX		
Error Log No.4	6/9/2022 3:31 AM	ERROR P-MAX		
Error Log No.5	6/9/2022 3:30 AM	ERROR P-MAX		
Error Log No.6	6/9/2022 3:28 AM	ERROR P-MAX		
Error Log No.7	6/9/2022 3:26 AM	ERROR P-MAX		
Error Log No.8	6/9/2022 3:21 AM	OPEN DRAIN VALVE		
Error Log No.9	6/2/2022 4:35 AM	OPEN DRAIN VALVE		
Error Log No.10	3/25/2022 10:27 PM	ERROR P-MAX		
Instrument Name	RID-20A			
Link Address	6			
Date Checked	7/13/2022 2:06 PM			
Serial Number	L21465402031			
Unit ID				
ROM Version	V1.01			
ROM Check				Pass
RAM Check				Pass
Optical I/F Check				Pass
Leak Sensor Check	T000000(hr)			Pass
Leak Sensor Level	T000000(hr)			
	161			
Total Operating Time (hr)	13761			
Lamp Operating Time (hr)	13761	20000		Pass
Lamp Energy	7/13/2022 2:06 PM			
	7207	6000		Pass
Span Factor(Anal.,SPAN A)	T000000(hr)			
	1.01			
Span Factor(Prep.,SPAN P)	T000000(hr)			
	0.81			
Span Factor(L-Prep.,SPAN L)	T000000(hr)			
	0.81			
Operation Log No.1	T000000(hr)	INITIALIZE PARAM		
Instrument Name	CTO-20A			
Link Address	5			
Date Checked	7/13/2022 2:06 PM			
Serial Number	L20205452911			
Unit ID				
ROM Version	V2.02			
ROM Check				Pass
RAM Check				Pass
Optical I/F Check				Pass
Leak Sensor Check	T000000(hr)			Pass
Leak Sensor Level	T000000(hr)			
	14490			

Total Operating Time (hr)	13466			
Rotary Valve L	NONE			
Rotary Valve R	NONE			
Column Management Device	NONE			
Temperature Accuracy Check	T000000(hr)			Pass
Temperature Stability Check	T000000(hr)			Pass
Temperature1 Calibration	T000000(hr)			
	40.1 (at 40.0)			
Temperature2 Calibration	T000000(hr)			
	59.7 (at 60.0)			
Operation Log No.1	T000000(hr)	INITIALIZE PARAM		
Error Log No.1	7/27/2019 4:06 AM	ERR LEAK DETECT		
Error Log No.2	11/17/2016 2:52 AM	ERR LEAK DETECT		
Error Log No.3	T000000(hr)	ERR LEAK DETECT		

Instrument Name	SIL-20ACHT			
Link Address	1			
Date Checked	7/13/2022 2:29 PM			
Serial Number	L20355457049			
Unit ID				
ROM Version	V2.05			
ROM Check				Pass
RAM Check				Pass
Optical I/F Check				Pass
Leak Sensor Check	T000000(hr)			Pass
Leak Sensor Level	T000000(hr)			
	162			
Total Operating Time (hr)	13529			
Rack Position Adjustment	T000000(hr)			
Injection Port Adjustment	T003640(hr)			
Injection Compensation Factor	T000000(hr)			
	1.00			
Max Injection Volume	100			
Needle Seal Used	718	40000	(1%)	Pass
High Pressure Valve Rotations(Rotor)	720	100000	(0%)	Pass
Low Pressure Valve Rotations(Rotor)	5082	60000	(8%)	Pass
External Rinse Pump Operating Time(sec)	0	0	(--%)	Pass
Position Sensor Check	T000000(hr)			Pass
Operation Log No.1	T000000(hr)	INITIALIZE PARAM		
Maintenance Log No.1	T003639(hr)	LPVSEAL REPLACED		
Maintenance Log No.2	T003639(hr)	HPVSEAL REPLACED		
Maintenance Log No.3	T003639(hr)	N-SEAL REPLACED		
Error Log No.1	T003640(hr)	ERR LEAK DETECT		
Error Log No.2	10/25/2019 8:20 AM	NO VIAL 1		
Error Log No.3	10/10/2019 8:59 PM	NO VIAL 38		
Error Log No.4	10/10/2019 8:58 PM	NO VIAL 37		
Error Log No.5	10/10/2019 8:57 PM	NO VIAL 36		
Error Log No.6	9/4/2019 6:20 PM	NO VIAL 1		
Error Log No.7	8/29/2019 10:14 PM	NO VIAL 62		
Error Log No.8	8/28/2019 8:49 PM	NO VIAL 1		
Error Log No.9	8/18/2019 12:01 PM	NO VIAL 16		
Error Log No.10	8/17/2019 7:22 PM	NO VIAL 22		

Instrument Name	FRC-10A			
Link Address	2			
Serial Number				
Unit ID				
ROM Version	V5.03			
ROM Check				Pass
RAM Check				Pass

Instrument Name	CBM-20A			
Date Checked	7/13/2022 2:06 PM			
Serial Number	L20235456603			
Unit ID				
ROM Version	V3.20			
IP Address	192.168.200.99			
Subnet Mask	255.255.255.0			
Default Gateway				
MAC Address	00:E0:96:03:C2:1C			
ROM Check				Pass
RAM Check				Pass
Total Operating Time (hr)	11709			
Operation Log No.1	T000000(hr)	INITIALIZE PARAM		
Error Log No.1	6/29/2022 10:06 AM	0030 Pump A		
Error Log No.2	6/23/2022 2:51 AM	0030 Pump A		
Error Log No.3	6/23/2022 2:48 AM	0030 Pump A		
Error Log No.4	6/9/2022 3:32 AM	0030 Pump A		
Error Log No.5	6/9/2022 3:30 AM	0030 Pump A		
Error Log No.6	6/9/2022 3:28 AM	0030 Pump A		
Error Log No.7	6/9/2022 3:27 AM	0030 Pump A		
Error Log No.8	6/9/2022 3:21 AM	81D4 Pump A		
Error Log No.9	6/2/2022 8:31 AM	0019 System Controller		
Error Log No.10	6/2/2022 8:27 AM	0019 System Controller		
Error Log No.11	6/2/2022 8:26 AM	0019 System Controller		
Error Log No.12	6/2/2022 4:34 AM	81D4 Pump A		
Error Log No.13	3/25/2022 10:27 PM	0030 Pump A		

Error Log No.14	3/25/2022 10:27 PM	8003 System Controller		
Error Log No.15	3/25/2022 3:07 AM	0030 Pump A		
Error Log No.16	3/9/2022 12:18 PM	0030 Pump A		
Error Log No.17	3/9/2022 8:01 AM	0077 Oven A		
Error Log No.18	3/9/2022 7:31 AM	0077 Oven A		
Error Log No.19	3/9/2022 6:55 AM	0077 Oven A		
Error Log No.20	3/9/2022 6:30 AM	0077 Oven A		
Instrument Name	SPD-M20A			
Date Checked	7/12/2022 9:19 PM			
Serial Number	L20155451603			
Unit ID				
ROM Version	V2.03			
IP Address	192.168.200.98			
Subnet Mask	255.255.255.0			
Default Gateway				
MAC Address	00:E0:96:03:BE:C7			
ROM Check				Pass
RAM Check				Pass
Leak Sensor Check	5/4/2016 1:00 PM			Pass
Leak Sensor Level	5/4/2016 12:59 PM			
	135			
Total Operating Time (hr)	11550			
D2 Lamp Operating Time (hr)	3373	2000	(168%)	***
D2 Lamp Energy(Narrow)	7/12/2022 9:19 PM			
	2882	5000		***
D2 Lamp Energy(Wide)	7/12/2022 9:19 PM			
	2936	5000		***
W Lamp Operating Time (hr)	3373	2000	(168%)	***
W Lamp Energy(Narrow)	7/12/2022 9:19 PM			
	8520	3000		Pass
W Lamp Energy(Wide)	7/12/2022 9:19 PM			
	8243	3000		Pass
Wavelength Calibration	5/27/2021 12:43 PM			
Slit Check	7/12/2022 9:19 PM			Pass
Slit Switch Time	271			
Absorbance Compensation Factor	5/4/2016 1:01 PM			
	1.00			
Stray Light Energy(Narrow)	54			
Stray Light Background(Narrow)	4207			
Stray Light Energy(Wide)	60			
Stray Light Background(Wide)	4299			
D2 Lamp Exposure Time(Narrow)(ms)	105			
W Lamp Exposure Time(Narrow)(ms)	316			
D2 Lamp Exposure Time(Wide)(ms)	18			
W Lamp Exposure Time(Wide)(ms)	44			
Wavelength Accuracy Check	7/12/2022 9:19 PM			Pass
Wavelength Accuracy 656nm Narrow	7/12/2022 9:18 PM	656.3(nm)	0.2(nm)	(Pass)
Wavelength Accuracy 486nm Narrow	7/12/2022 9:18 PM	485.8(nm)	-0.2(nm)	(Pass)
Wavelength Accuracy 288nm Narrow	7/12/2022 9:19 PM	287.1(nm)	-0.5(nm)	(Pass)
Wavelength Accuracy 361nm Narrow	7/12/2022 9:18 PM	360.8(nm)	0.0(nm)	(Pass)
Wavelength Accuracy 656nm Wide	7/12/2022 9:19 PM	656.1(nm)	0.0(nm)	(Pass)
Wavelength Accuracy Check Data	(mV)			
652.1(nm)	197	***		
653.1(nm)	222	***		
654.1(nm)	0	***		
655.1(nm)	2335	********		
656.1(nm)	4947	***************		
657.1(nm)	3749	************		
658.1(nm)	891	*****		
659.1(nm)	32	***		
660.1(nm)	114	***		
	(mV)			
482.0(nm)	915	***		
483.0(nm)	877	***		
484.0(nm)	1115	****		
485.0(nm)	1957	**********		
486.0(nm)	2472	***************		
487.0(nm)	1768	*********		
488.0(nm)	927	***		
489.0(nm)	895	***		
490.0(nm)	930	***		
	(mAbs)			
283.6(nm)	0	***		
284.6(nm)	0	***		
285.6(nm)	0	***		
286.6(nm)	163	*************		
287.6(nm)	180	***************		
288.6(nm)	83	********		
289.6(nm)	92	*********		
290.6(nm)	45	******		
291.6(nm)	8	***		
	(mAbs)			
356.8(nm)	0	***		
357.8(nm)	0	***		
358.8(nm)	196	******		
359.8(nm)	542	***********		

360.8(nm)	726	***************
361.8(nm)	524	***********
362.8(nm)	238	******
363.8(nm)	118	****
364.8(nm)	32	***
Maintenance Log No.1	5/27/2021 12:44 PM	228-34016 D2-Lamp
Maintenance Log No.2	5/27/2021 12:44 PM	228-34410 W-Lamp
Operation Log No.1	5/27/2021 12:43 PM	Wavelength Calib. OK
Operation Log No.2	5/27/2021 12:43 PM	Acc.-time Optimize
Error Log No.1	5/3/2022 11:45 AM	Command Is Invalid
Error Log No.2	5/3/2022 11:45 AM	Command Is Invalid
Error Log No.3	5/3/2022 11:45 AM	Command Is Invalid
Error Log No.4	12/20/2019 2:01 PM	PC LAN Timeout
Error Log No.5	10/26/2019 3:35 PM	PC LAN Timeout
Error Log No.6	10/9/2019 12:32 PM	PC LAN Timeout
Error Log No.7	10/4/2019 2:19 AM	PC LAN Timeout
Error Log No.8	8/14/2019 2:25 AM	PC LAN Timeout
Error Log No.9	7/10/2019 2:31 AM	PC LAN Timeout
Error Log No.10	4/12/2017 2:26 AM	PC LAN Timeout

System Check