



SERVICE REPORT 100X AUTOMATED FILTER TESTER

Customer TGA Customer ID# NA
Purchase Order # 14783 Sales order # A119790

100X Unit Information

Serial	Model	Reagent Type	Unit Type	Flow range	Local Exhaust Present	Base Storage Present
34962	100XS	Salt	Manual	Standard (0-120 SLPM)	Yes	Yes

COMPONENT		AS FOUND	AS LEFT	COMPONENT	AS FOUND			AS LEFT		
OPERATING HRS	Hr	212	213	PENETRATION HIGH LIMIT	Enabled <input checked="" type="checkbox"/>	Disabled <input type="checkbox"/>	0.0200	Enabled <input checked="" type="checkbox"/>	Disabled <input type="checkbox"/>	0.0200
AIR DRYER PRESSURE	PSI	74.3	72.7	PENETRATION LOW LIMIT	Enabled <input type="checkbox"/>	Disabled <input checked="" type="checkbox"/>		Enabled <input type="checkbox"/>	Disabled <input checked="" type="checkbox"/>	
STACK DILUTION	PSI	14.9	14.4	RESISTANCE HIGH LIMIT	Enabled <input checked="" type="checkbox"/>	Disabled <input type="checkbox"/>	25	Enabled <input checked="" type="checkbox"/>	Disabled <input type="checkbox"/>	25
CHUCK DIFFERENTIAL	mmH20	0	0	RESISTANCE LOW LIMIT	Enabled <input type="checkbox"/>	Disabled <input checked="" type="checkbox"/>		Enabled <input type="checkbox"/>	Disabled <input checked="" type="checkbox"/>	
GENERATOR DILUTION	PSI	20.1	20.3	FLOW TOLERANCE	Enabled <input type="checkbox"/>	Disabled <input checked="" type="checkbox"/>		Enabled <input type="checkbox"/>	Disabled <input checked="" type="checkbox"/>	
LOCAL EXHAUST	In/wc	0.2	0.2	LSC OFFSET	0			0		
MAXIMUM FLOW	LPM	120	120	LSC SENSITIVITY	85			94		
MEASUREMENT MODE		SLPM	SLPM	LSC ZERO (volts)	0.2057			0.0099		
				CYCLES TILL CALIBRATION	Enabled <input checked="" type="checkbox"/>	Disabled <input type="checkbox"/>	1000	Enabled <input checked="" type="checkbox"/>	Disabled <input type="checkbox"/>	1000

COMPONENT		AS FOUND	AS LEFT	Nominal Value	Tolerance
VACCUM PUMP PRESSURE	PSI	70.4	68.7	70	10
GENERATOR NOZZLE	PSI	52.1	50.8	51	2
Generator Dilution	PSI	20.1	20.3	20	2
DILUTION FLOW	LPM	59	59	55	5
CYLINDER CLAMP	PSI	55.5	55.1	55	2
CYLINDER UP/DOWN	PSI	30.8	30.9	30	10
GRAVIMETRIC TEST	<input checked="" type="checkbox"/> Salt	17.8	17.4	15-25 ug/L	N/A
	<input type="checkbox"/> Oil			80-120 ug/L	N/A
	<input type="checkbox"/> Paraffin			15-25 ug/L	N/A





PCB	As Found			As Left		
	Board REV	Serial Number	Firmware	Board REV	Serial Number	Firmware
MAIN CONSOLE (P/N: 40-00800-003)	A	5493009	2.01.00B	A	5493009	2.2.3B
DP SENSOR (P/N: 0800207)	F	KEI00370	1.2	F	33054	1.2
FLOW CONTROL (P/N: 0800198)	A	KE100261	1.2	A	KE100261	1.2
LSC INTERFACE (P/N: 0800200)	J	KEI00111	1.05	J	KEI00111	1.05
RELAY VALVE CONTROL (P/N:0800195)	A	KE100348	1.1	A	KE100348	1.1
MISC I/O (P/N: 0800198)	B	100278	1.05	B	100278	1.06
PRESSURE SENSOR 1 (P/N: 0800916)	C	33951	1.1	C	19210023	1.1
PRESSURE SENSOR 2 (P/N: 0800916)	C	33962	1.1	C	19210042	1.1
THERMOCOUPLE (P/N: 0800198)	E	33197	1.3	E	33197	1.3

Alicat Mass flow controller	As Found		As Left	
	Serial #	Calibration Due Date	Serial #	Calibration Due Date
	250202	6/22/2021	280535	6/16/2022

UNIT FOUND: INOPERABLE OPERABLE UNIT LEFT: NOT SERVICED SERVICED & OPERABLE

Ambient Temperature: 21.2 °C

Ambient Humidity: 36.1 %RH

GREENLINE VERIFICATION TEST RESULTS (As Found)					
Load time (secs)	8	Sample Time (secs)	2	Flow Rate (LPM)	85
# of filter sheets	Test	Lot Number	% Penetration	Resistance (Choose)	Flow (LPM)
2	Test # 1	511576	1.2198	55.3	84.9
	Test # 2	511576	1.1136	55.0	84.9
	Average				
3	Test # 1	511576	0.2434	82.6	84.9
	Test # 2	511576	0.2233	82.6	85.0
	Average				
4	Test # 1	511576	0.0876	110.0	85.1
	Test # 2	511576	0.0677	110.1	84.9
	Average				

GREENLINE VERIFICATION TEST RESULTS (As Left)					
Load time (secs)	8	Sample Time (secs)	2	Flow Rate (LPM)	85
# of filter sheets	Test	Lot Number	% Penetration	Resistance (Choose)	Flow (LPM)
2	Test # 1	511576	1.0649	56.3	85.2
	Test # 2	511576	0.9729	56.3	85.1
	Average				
3	Test # 1	511576	0.1874	84.3	85.1
	Test # 2	511576	0.1744	85.0	85.2
	Average				
4	Test # 1	511576	0.0505	112.1	85.2
	Test # 2	511576	0.0413	112.1	85.2
	Average				





MAINTENANCE PERFORMED

<input type="checkbox"/>	Change Coalescence Filter	<input checked="" type="checkbox"/>	Check HEPA filter In Local Exhaust	<input type="checkbox"/>	Replace ΔP filter elements	<input checked="" type="checkbox"/>	Power Up Test
<input type="checkbox"/>	Change HEPA Filter	<input type="checkbox"/>	Change Pre-Filter in Local Exhaust	<input checked="" type="checkbox"/>	Clean & check Test fixture	<input checked="" type="checkbox"/>	Gravimetric Concentration Test
<input type="checkbox"/>	Change Reference Filter	<input checked="" type="checkbox"/>	Change Alicat Mass Flow	<input checked="" type="checkbox"/>	Check Generator Tank	<input checked="" type="checkbox"/>	LSC Test
<input type="checkbox"/>	Change 5um (ZFC) Element Filter	<input checked="" type="checkbox"/>	Change the LSC	<input checked="" type="checkbox"/>	Check/Replace the O-rings	<input checked="" type="checkbox"/>	Pen Cal Test
<input type="checkbox"/>	Clean Mixing Manifold	<input checked="" type="checkbox"/>	Change the differential pressure sensor board	<input type="checkbox"/>	Leak Check	<input checked="" type="checkbox"/>	Greenline Verification Test
<input type="checkbox"/>	Clean tubing between mixing Manifold & Generator Tank	<input checked="" type="checkbox"/>	Change the two pressure sensor boards	<input type="checkbox"/>	Tighten Loose hardware	<input type="checkbox"/>	Other (please use notes section)

NOTES

- Customer replaced all filter parts in June, 2021; they were not replaced during this service; advised customer to replace according to their schedule
- New Alicat mass flow controller was not set to SERIAL (Instructions in calibration manual did not apply)
- Customer replaced HEPA filter in local exhaust on 4/21/21; it was not replace during this service
- Rev info missing on the main board; looked up in original verification report

The 100X has been calibrated and serviced according to all the manufacture's (ATI) instructions and conforms to the standards to which the product was designed

SERVICED BY:

S22

SERVICE DATE:

8/3/2021

SERVICE DUE:

8/3/2022