



GE  
HealthCare

Instrument Production, Umeå Plant  
Box 1414  
SE-90124 Umeå  
Sweden

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UM1284178301837

**Certificate**  
**ÄKTExpress**

Certificate number: UM1284178301837  
Serial number: 1284178  
Job Number: 4430639  
Instrument type: Chromatography System  
Software version: 01.01.00  
Date & Time: 2006-Nov-30 18.37

**Instrument test**

Test Procedure Number: KI 56321019 AB

ID	Function	Unit	Limits	Set Value	Read value
	UV Cell serial no.				016385
	Air Sensor Cell serial no.				01264243
	Cond.cell serial no.				01284699
	Optical Unit serial no.				01286532
101	Pulsation Test	%	<=5		2
102	Pressure Test 0 MPa	MPa	< 0.05	0.00	0.00
103	Pressure Test	MPa	1.96 - 2.04	2.00	2.00
104	Flow Test	ml/min	0.98 - 1.02	1.00	0.99
105	Inlet Valve positioning		Passed		Passed
106	Injection Valve positioning		Passed		Passed
107	Loop Valve positioning		Passed		Passed
108	Column Valve positioning		Passed		Passed
109	Outlet Valve positioning		Passed		Passed
110	Inlet Valve Switch Time	ms	<= 400		159
111	Inj. Valve Switch Time	ms	<= 400		207
112	Loop Valve Switch Time	ms	<= 400		151
113	Column Valve Switch Time	ms	<= 400		158
114	Outlet Valve Switch Time	ms	<= 400		162
115	Leakage Test	ul/min	< 1.00		0
116	Frac Positioning		Passed		Passed
117	Frac Switch Time	ms	<= 400		301
118	UV Lamp Intensity Test		Passed		Passed
119	UV Short Term Noise	uAU	<= 40		10
120	UV Long Term Noise	uAU	<= 40		5
121	UV Drift	uAU/h	+/-100		-78
122	UV Cell length	mm			2.09
123	Conductivity Accuracy @ 1 M NaCl%		+/- 2.0		-0.07
124	Air Sensor Test		Passed		Passed
125	Gradient Linearity A1/B1		Passed		Passed
126	Step Gradient A1/B1 30%	%	28.0 - 32.0		30.2
127	Step Gradient A1/B1 70%	%	68.0 - 72.0		70.2





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ID	Function	Unit	Limits	Set Value	Read value
128	Gradient Linearity A2/B2		Passed		Passed
129	Step Gradient A2/B2 30%	%	28.0 - 32.0		30.3
130	Step Gradient A2/B2 70%	%	68.0 - 72.0		70.3

**Reference Instruments**

Category	Make/Model	Serial No.	Used In
Scale	Mettler PG802-S	1125272179	104
Pressure gauge	Keller PA-21 S		102,103

This certificate certifies the compliance of the tested functions to GE HealthCare standards.

Date .....Tested by .....

Tomas Holmberg  
Accredited Engineer

General Electric Company



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