

	Catatan Hasil Kalibrasi Internal <i>Internal Calibration Record</i> HPLC Waters Millenium	No. : F-PM-01-57
		Rev. : 00
		Berlaku / Date : 3 September 2014

No. Fasilitas / Facility No.	:	Kapasitas / Capacity	:
No. Kode Kalibrasi / Cal. Code	:	Lokasi / Location	:
Merek / Brand	:	Bidang / Dept.	:
Tipe / Type	:	No. Protap Cara Kalibrasi / SOP	:
No. seri / Serial Number	:	Nama Petugas / Name	:

Kalibrator yang digunakan Calibrator	Tanggal Kalibrasi Kalibrator Cal. date of Calibrator	Tanggal Rekalibrasi Kalibrator Recal. date of Calibrator

1. Pump : WATERS

Serial Number :

A. Tes Penunjuk Tekanan Pompa pada 1000 PSI / Pressure indicator test at 1000 PSI

Tanggal / Date	Tekanan setelah 1 menit / Pressure after 1 min	Syarat / Requirement	Kesimpulan / Conclusion	Paraf Petugas / Signature	Paraf Asman / Sign. of Asst. Man.
	PSI	1000 ± 100 PSI			

B. Tes Kebocoran Pompa pada 5000 PSI / Leakage test at 5000 PSI

Tanggal / Date	Tekanan setelah 1 menit / Pressure after 1 min	Syarat / Requirement	Kesimpulan / Conclusion	Paraf Petugas / Signature	Paraf Asman / Sign. of Asst. Man
	PSI	≥ 4500 PSI			

C. Tes Kebocoran Injector pada 5000 PSI / Injector Leakage test at 5000 PSI

Tanggal / Date	Posisi / Injector Position	Tekanan setelah 1 menit / Pressure after 1 min	Syarat / Requirement	Kesimpulan/ Conclusion	Paraf Petugas/ Signature	Paraf Asman/ Sign. of Asst. Man.
	LOAD	PSI	≥ 4500 PSI			
	INJECT	PSI	≥ 4500 PSI			

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D. Tes Akurasi Flow rate Pompa / Flow rate test

Tanggal / Date	Flow rate	Hasil pengukuran / Data	Syarat / Requirement	Kesimpulan / Conclusion	Paraf Petugas / Signature
	5 ml/ min	Min. sec.	5 min. ± 9 sec.		
	1 ml/ min	Min. sec.	10 min. ± 18 sec.		
	0.5 ml/ min	Min. sec.	20 min. ± 36 sec.		
Flow rate Accuracy	Hasil perhitungan / Result	Syarat / Requirement	Kesimpulan / Conclusion	Paraf Petugas/ Signature	Paraf Asman/ Sign. of Asst. Man
	%	≤ 3%			

E. Tes Akurasi Flow rate Pompa Data II / Flow rate test (Second Data)

Tanggal / Date	Flow rate	Hasil pengukuran / Data	Syarat / Requirement	Kesimpulan/ Conclusion	Paraf Petugas/ Signature
	5 ml/ min	Min. sec.	5 min. ± 9 sec.		
	1 ml/ min	Min. sec.	10 min. ± 18 sec.		
	0.5 ml/ min	Min. sec.	20 min. ± 36 sec.		
Flow rate Accuracy	Hasil perhitungan / Result	Syarat / Requirement	Kesimpulan / Conclusion	Paraf Petugas/ Signature	Paraf Asman/ Sign. of Asst. Man
	%	≤ 3%			

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2. **DETECTOR : WATERS 486**
Serial Number :

A. Tes Akurasi Panjang Gelombang / Wavelength Accuracy

Tanggal / Date :

Suhu / Room Temp.:

RH :

Panjang gelombang / Wavelength (nm)	Pembacaan Absorbans / Abs. reading (AU)	Panjang gelombang maks. / Max. wavelength (nm)	Syarat / Requirement	Kesimpulan / Conclusion	Paraf Petugas / Signature	Paraf Asman / Sign. of Asst. Man.
250	_____					
251	_____					
252	_____					
253	_____					
254	_____					
255	_____					
256	_____					
257	_____					
258	_____					
259	_____					
260	_____					
261	_____					
262	_____					
263	_____					
264	_____					
265	_____					

B. Test PDA Calibration / PDA Calibration

Tanggal / Date :

Suhu / Room Temp.:

RH :

No.	Panjang Gelombang / Wavelength	Hasil / Result	Syarat / Requirement	Kesimpulan / Conclusion	Paraf Petugas / Signature	Paraf Asman / Sign. Of Asst. Man
1						
2						

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C. Test PDA Diagnostic/ PDA Diagnostic

Tanggal / Date :

Suhu / Room Temp.:

RH :

No.	Parameter / Parameters	Hasil / Result	Syarat / Requirement	Kesimpulan/ Conclusion	Paraf Petugas/ Signature	Paraf Asman/ Sign. Of Asst. Man
1	CPU		OK			
2	Timer		OK			
3	Shutter		OK			
4	Lamp		OK			
5	Wavelength Accuracy		OK			
6	Communications		OK			
7	Optics		OK			
8	ROM		OK			
9	DSP		OK			
10	RAM		OK			

3. Overall System Performance

Tanggal / Date :

Suhu / Room Temp.:

RH :

No. Inject	Retention time (min.)		Area		Resolution
	Methyl Paraben	Propyl Paraben	Methyl Paraben	Propyl Paraben	
1					
2					
3					
4					
5					
6					
Rata-rata / Average					
%RSD					
Syarat / Requirement	RSD ≤ 1.0%		RSD ≤ 1.0%		R > 1.5
Kesimpulan/ Conclusion					
Paraf Petugas/ Signature					
Paraf Asman / Sign. of Asst. Manager					