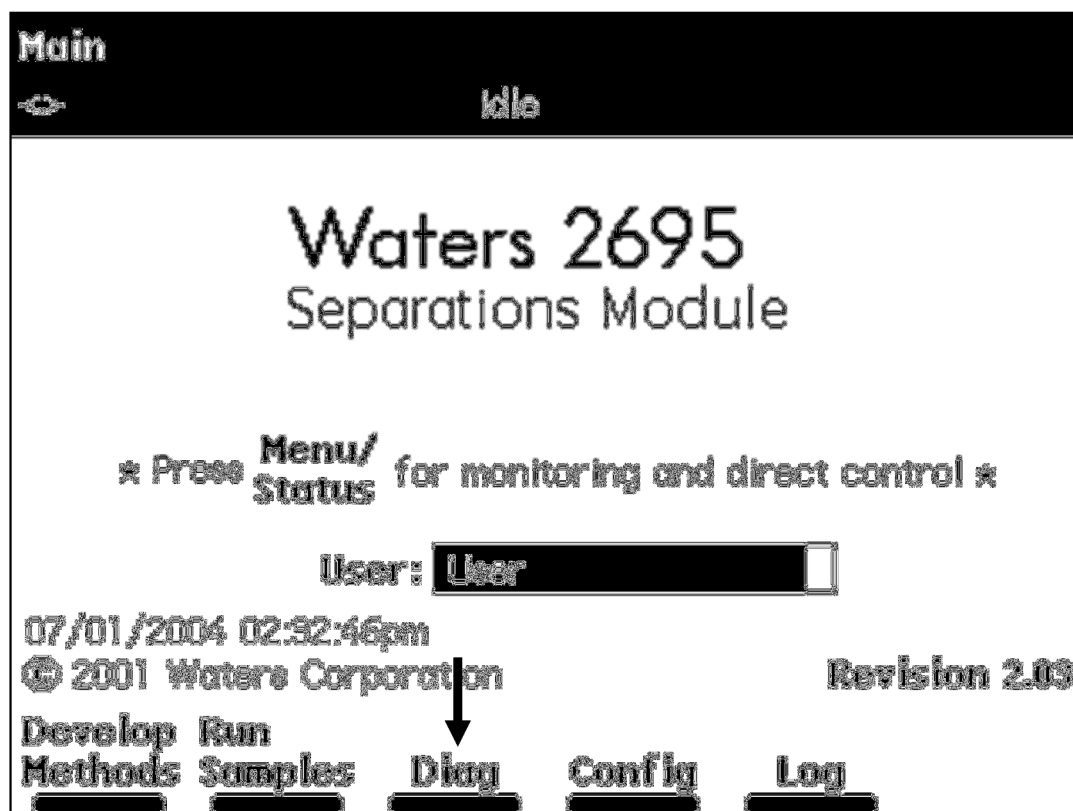




2695 Diagnostics Page

- Prime Seal Wash
- Compression Check
- Prime Needle Wash
- Adjust Seals
- Service Utilities
- Other Tests

- Prime Seal Wash - Fill/flush seal (plunger) wash system
- Compression test - Checks low pressure side of injection system
- Prime Needle Wash - Fill/flush needle wash system
- Adjust Seals - Calibrates injector seal pack to the system
- Service Utilities - Password protected
- Other Tests - Most diagnostic tools located here



- Main Screen
- Press **Diag**, the diagnostics menu screen is displayed.

Diagnostics
 <Default> Idle

Serial Number: **F97SM4290M**

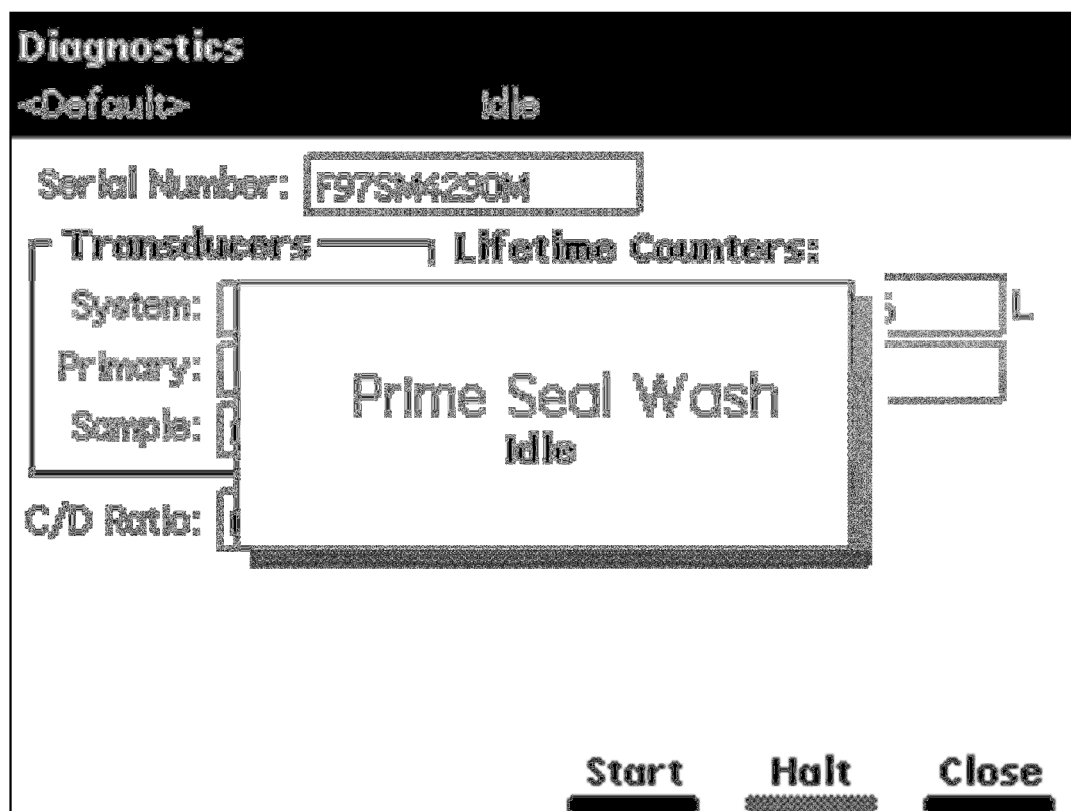
Transducers		Lifetime Counters:	
System:	1230 psi	Eluent delivered =	25 L
Primary:	-1 psi	Injection count =	392
Sample:	1207 psi		

C/D Ratio: **1.14**

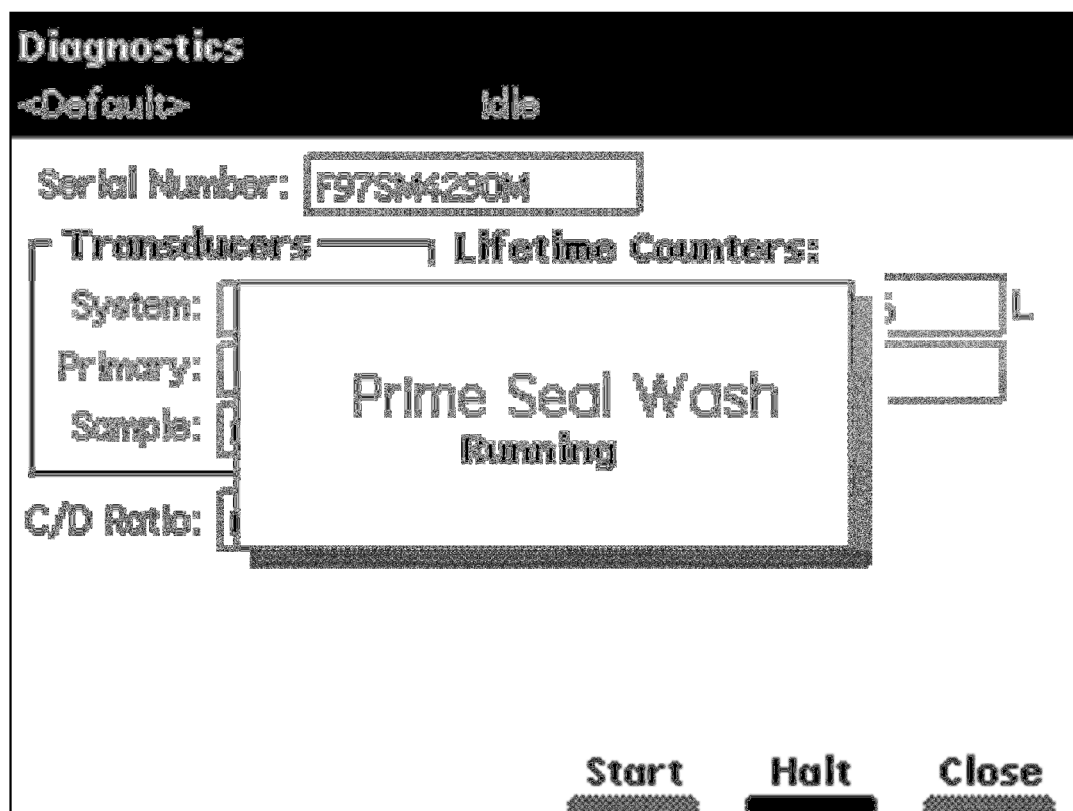
↓

Prime SealWsh	Comp Check	Prime NdWsh	Adjust Seals	Service Utilities	Other Tests

- Diagnostics menu screen
- Serial number is entered in Service Utilities
- Lifetime Counters: Helpful to determine service intervals based on use rather than by calendar. They cannot be reset.
- Transducers:
 - System = accumulator pump
 - Primary = primary pump
 - Sample = sample loop of injector
- Press **Prime SealWsh**, the Prime Seal Wash dialog box is displayed.



- Prime Seal Wash dialog box
- Press **Start**.



- Prime Seal Wash dialog box (Running)
- Seal wash pump cycles once per second. Each pulse is 200 ml. Priming may require applying a vacuum to the seal wash outlet.
- Press **Halt**, then **Close**.

Diagnostics
 <Default> Idle

Serial Number: F97SM4290M

Transducers		Lifetime Counters:	
System:	1232 psi	Eluent delivered =	25 L
Primary:	0 psi	Injection count =	392
Sample:	1208 psi		

C/D Ratio: 1.14

↓

Prime SealWsh	Comp Check	Prime NdWsh	Adjust Seals	Service Utilities	Other Tests
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- Return to Diagnostics screen

Note: All tests performed with degassed methanol.

- Press **Comp Check**, the Compression Check idle screen is displayed.

Diagnostics
 <Default> Idle

Serial Number
 Transducer
 System:
 Primary:
 Sample:
 C/D Ratio:

Compression Check
 Idle

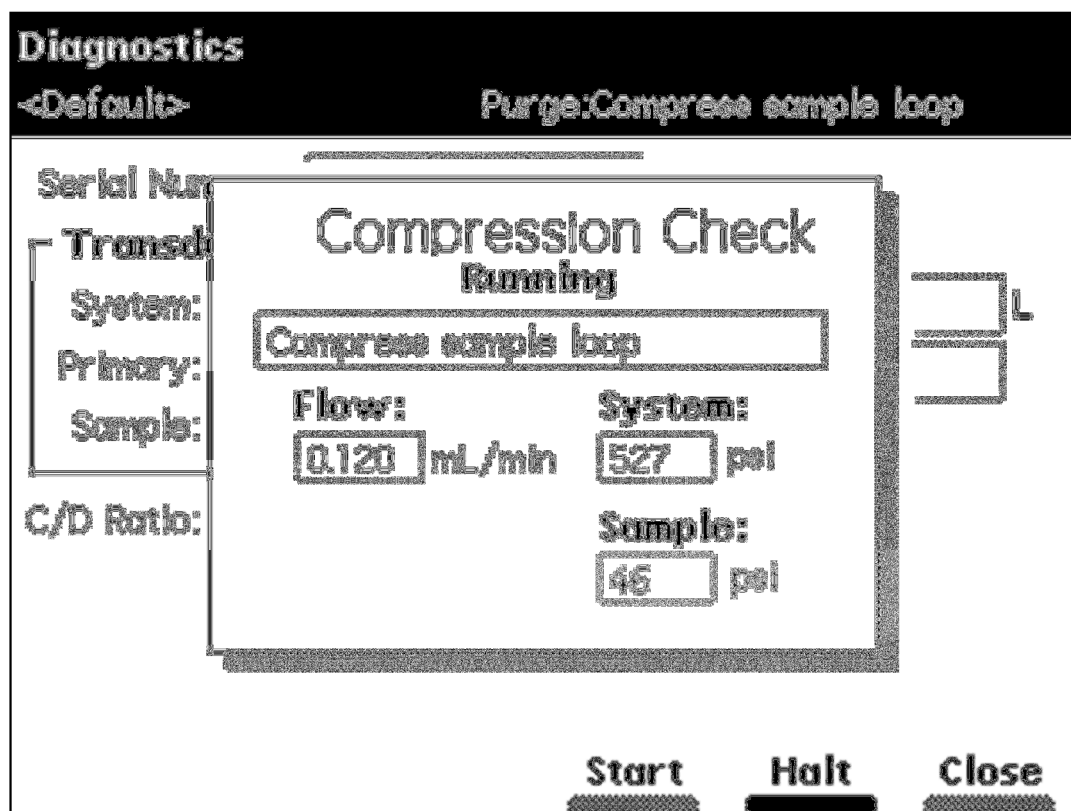
Results:

Compressed Volume: 9 µL
 Delta Decay Pressure: 14.0 psi
 Final Pressure: 109.9 psi

Start **Halt** **Close**

- Compression Check dialog box
- Press **Start**

Note: The values seen were generated when the Purge Injector was done in the Status-Direct page in this course.



- Compression Check dialog box (Running)
- The 2690 / 2695 require approximately 500 psi to perform a compression check. The unit will determine flow rate to obtain the required pressure.
- If there is insufficient system pressure, the unit will not perform the test and a "Restriction Missing" warning message will appear.

Waters

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Diagnostics
<Default> Idle

Serial Num
Transch
System:
Primary:
Sample:
C/D Ratio:

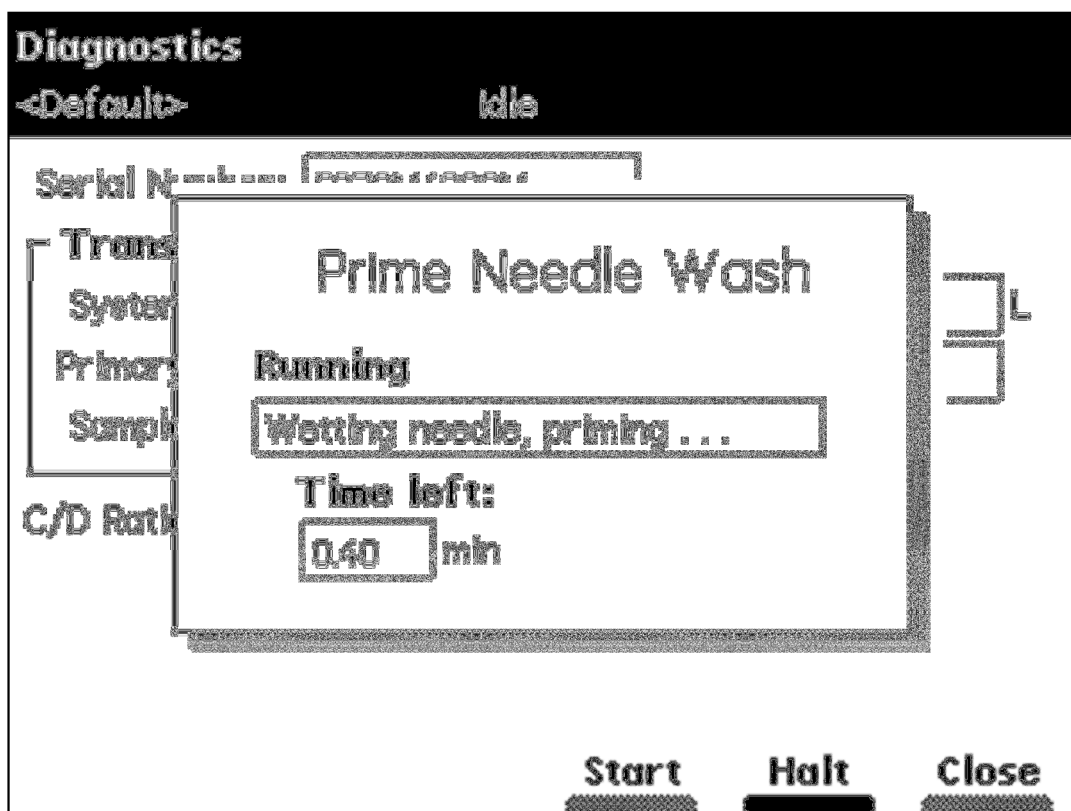
Compression Check
Idle

Results:

Compressed Volume: 1 µL
Delta Decay Pressure: 17.3 psi
Final Pressure: 87.7 psi

Start Again Halt Close

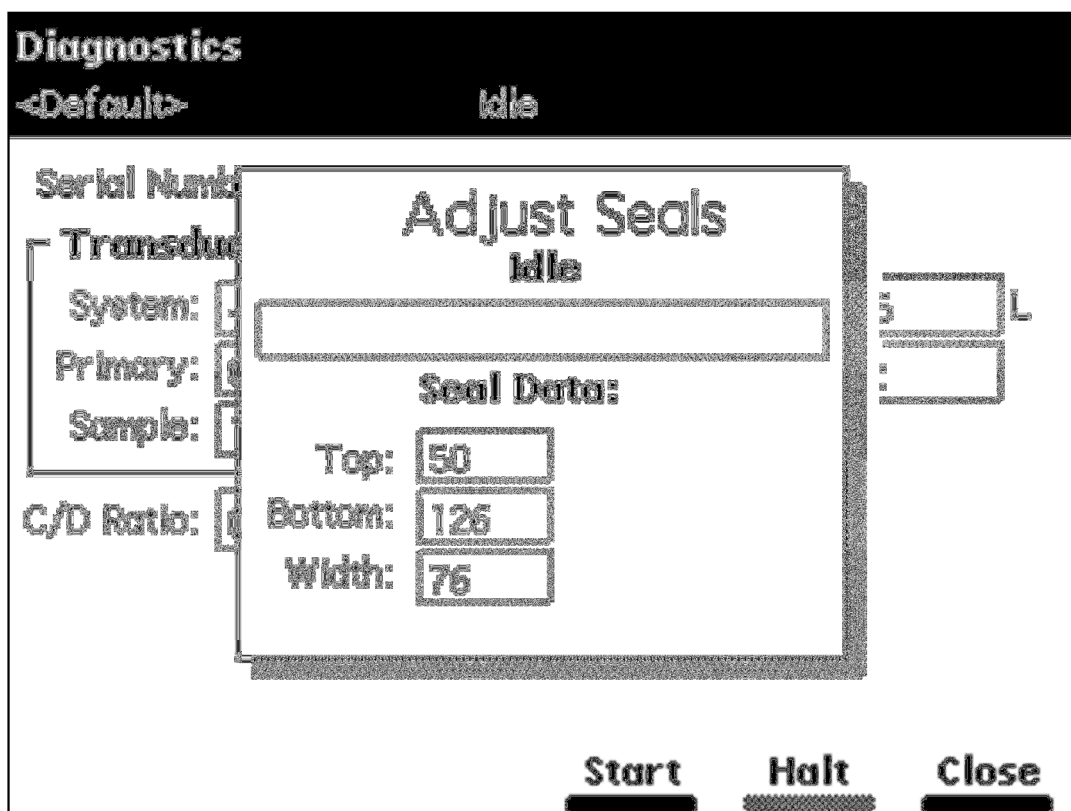
- Compression Check dialog box
- Press **Close** to accept the new values and return to the Diagnostics screen.
- Press **Prime NdlWsh**, the Needle Wash dialog box is displayed.



- The Prime Needle Wash dialog box
- Press **Start**, the function starts and runs for 0.5 minutes. It may be necessary to elevate the needle wash reservoir and run the test more than once to prime the needle wash. A spray of liquid will come out the yellow line when the needle wash pump is primed.
- At the end of the priming, press **Close** to return to Diagnostics page,
- Press **Adjust Seals**, the Adjust Seals dialog box is displayed.

Waters

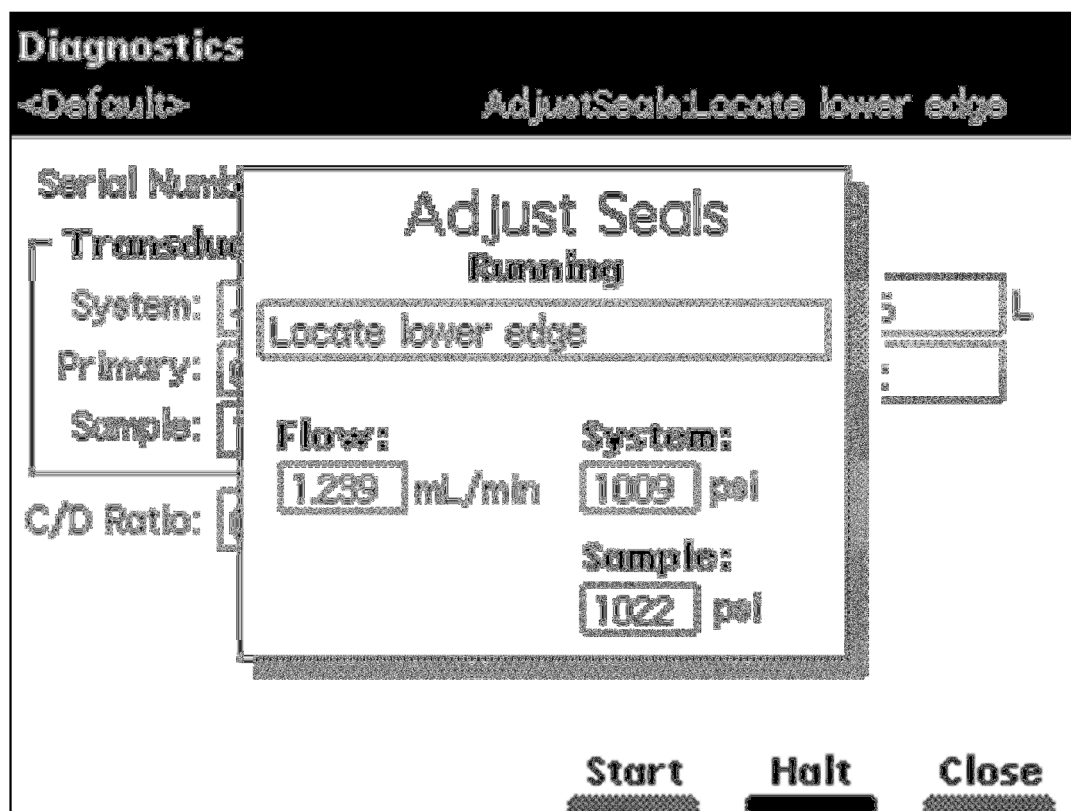
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- The Adjust Seals dialog box
- The unit will generate approximately 1000 psi to perform this procedure. The flow rate should be between 0.3 and 1.5 ml/min when performing this procedure. Too slow a flow and the pressure may not rise fast enough for the unit to find the seal edge. Too fast a flow can damage the seal. If you cannot generate this pressure, the system reports a "Restriction Missing" error.
- When you first start the 2690 / 2695, after you change or rebuild the seal pack, or as a check if you get a compression failed error.
- Press **Start**.

Waters

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- The test is performed on the Adjust Seal dialog box (Running)
- After approximately 10 minutes, the adjustment is complete and the seal pack numbers will be displayed in the Diagnostic screen. Acceptable ranges for the Adjust Seal Pack diagnostic are as follows:

— Top	30 - 80	30 - 50 typical
— Bottom	80 - 200	
— Width(Bottom - Top)	50 - 120	70 - 90 typical

Diagnostics
 <Default> Idle

Serial Number: []
 Transducer: []
 System: []
 Primary: []
 Sample: []
 C/D Ratio: []

Adjust Seals
 Idle

	New:	Previous:
Top:	50	50
Bottom:	123	126
Width:	73	76

Start Again Discard Results **Accept Results**

- The Adjust Seals dialog box (idle) screen showing the new and previous values.
- Press the **Accept Results** key; then, after returning to the Diagnostics screen.
- Press **Service Utilities**, the Service Utilities dialog box is displayed.

Diagnostics
 <Default> Idle

Serial Number: F97SM4290M

Transducers		Lifetime Counters:	
System:	0	Element delivered:	25 L
Primary:	4		
Sample:	1		
C/D Ratio: 0.95			

Restricted by password:
 [REDACTED]

More

ABCDEF GHIJKL MNOPQR STUVWX YZ-%/: [REDACTED]

- The service utilities are password protected.