IMQCS MILKING MACHINE TEST REPORT

Name_____ **Address**_____

_____ **Date**_____ **Plant Type**_____

No. of units_____ **Tester's Signature**_____ **IMQCS Reg. no.**_____

Vacuum and Airflow Tests

1. **Working vacuum at Vm; machine in the milking position (liners plugged)** _____ **kPa**
   Working vacuum recommended with the machine in the milking position (liners plugged) _____ kPa
1a. Working vacuum at Vr; machine in the milking position (liners plugged) _____ kPa
1b. Working vacuum at Vp; machine in the milking position (liners plugged) _____ kPa
1c. Vacuum in the milking system at Vm; machine ready for milking _____ **kPa**
1d. Plant gauge vacuum level; machine ready for milking _____ **kPa**
1e. Vacuum near plant vacuum gauge at Vr; machine ready for milking _____ **kPa**
Plant vacuum gauge accuracy (1d-1e) _____ **kPa**
2. Pump capacity; AFM direct to pump, test gauge at Vp _____ l/min
2a. Pump capacity at 50kPa; AFM direct to pump, test gauge at Vp _____ l/min
2b. Pump speed _____ rpm
   Estimated pump capacity required _____ l/min
3. Airflow with vacuum system; machine in the milking position (liners plugged), airline only added, regulator(s) plugged, test at A2 and Vr or Vp _____ l/min
   Airline leakage (2-3) _____ l/min
4. Airflow with milk system added; machine in the milking position (liners plugged), close claw air admission; test at A2 and Vr or Vp _____ l/min
   Milking system leakage (3-4) _____ l/min
5. Airflow with air admission at claws open; machine in the milking position (liners plugged), test at A2 and Vr or Vp _____ l/min
   Claw air admission (4-5) _____ l/min
6. Airflow with ancillary equipment connected to milkline added, machine in the milking position (liners plugged), test at A2 and Vr or Vp _____ l/min
   Milking system ancillary equipment usage (5-6) _____ l/min
7. Airflow with pulsators added; machine in the milking position (liners plugged), test at A2 and Vr or Vp _____ l/min
   Pulsation usage (6-7) _____ l/min
8. Airflow with ancillary equipment connected to airline added; machine in the milking position (liners plugged), test at A2 and Vr or Vp _____ l/min
   Airline ancillary equipment usage (7-8) _____ l/min
9. Manual reserve; machine in the milking position (liners plugged), regulator(s) plugged, drop vacuum 2kPa below no. 1, test at A1 and Vm _____ **l/min**
10. Effective reserve; machine in the milking position (liners plugged), add regulator(s), drop vacuum 2kPa below no. 1, test at A1 and Vm _____ **l/min**
Regulation loss (9-10) _____ **l/min**
   Required effective reserve _____ l/min
   Required cleaning reserve _____ l/min
11. Regulation sensitivity (1c-1) _____ kPa
12. Exhaust back pressure (positive pressure); test gauge at Pe _____ kPa
13. Fall-off/attachment vacuum drop; open one unit per 32 units _____ kPa
14. Regulation undershoot _____ kPa
15. Regulation overshoot _____ kPa
16. Airflow without regulator(s); machine in the milking position (liners plugged), regulator(s) plugged, drop vacuum 2kPa below 1a, test at A1 and Vr _____ **l/min**
17. Airflow with regulator(s); machine in the milking position (liners plugged), add regulator(s), drop vacuum 2kPa below 1a, test at A1 and Vr _____ **l/min**
Regulator leakage (16-17) _____ **l/min**

Pulsation Tests

Rate c/min	**Max**_____	**Min**_____
Ratio "a+b" % or ms	**Max**_____	**Min**_____
"a" value % or ms	**Max**_____	**Min**_____
"b" value % or ms	**Max**_____	**Min**_____
"c" value % or ms	**Max**_____	**Min**_____
"d" value % or ms	**Max**_____	**Min**_____

Pulsation graphs attached: yes/no _____
Simultaneous or Alternate _____
Limping (< 5%) _____

Liners

Make and identification no. _____
Next liner change due _____

Faults

Recommendations

N.B. Items in Bold Type must always be filled in. Tests 13, 14, and 15 may be completed instead of test number 10 for machines with 14 or more units.
It is recommended that milking machines be tested at least twice per year.