County of San Diego

DEPARTMENT OF ENVIRONMENTAL HEALTH AND QUALITY

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MAXIMUM SYSTEM FLOW RATE WORKSHEET

This worksheet is intended for use by the contractor or permittee for existing permitted pool facilities proposing a minor remodel/renovation. Use either option to obtain and provide the maximum system flow rate.

Pump Make & Model: _____

Option 1: If the flow meter is installed per manufacture specification, backwash the filter and restart the pump system. If the pump is a variable speed pump, set the pump to its highest speed setting. Observe the flow meter and document the reading here in Gallons Per Minute (GPM).

Flow Meter Reading: _____ (GPM)

Option 2: If the pump has an installed vacuum gauge and pressure gauge, backwash the filter and restart the pump system. If the pump is a variable speed pump, set the pump to its highest speed setting. Observe the gauge readings, document them here, and perform the below calculations.

A) Vacuum Gauge: _____ Hg X 1.13 = _____

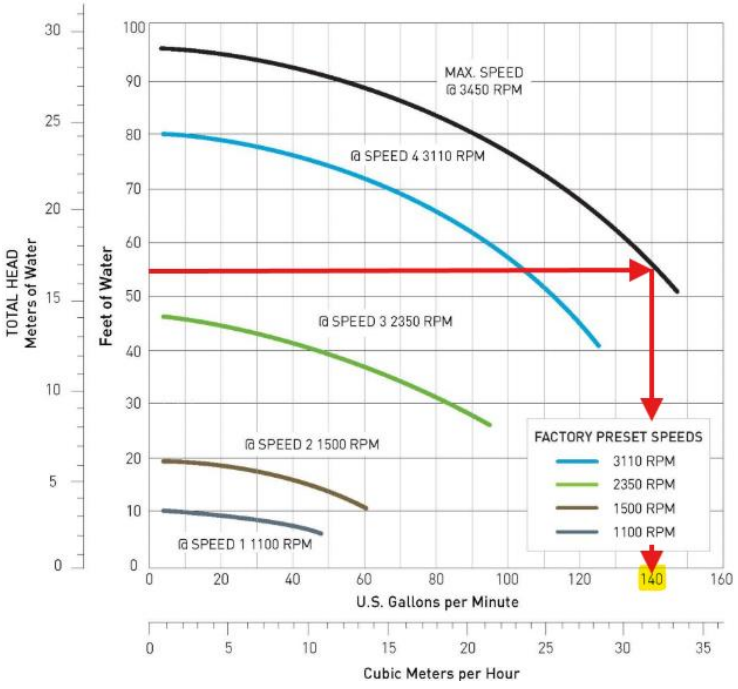
B) Pressure Gauge: _____ PSI X 2.31 = _____

(A) + (B) = _____ Total Dynamic Head (TDH)

C) Flow Rate Based on Pump Curve: _____ (GPM)

After calculating the system TDH, review the pump model's pump curve found in their specification sheet to determine the maximum system flow rate.

See hypothetical pump curve below with a calculated TDH of 55 and a 140 GPM flow rate at the highest setting of 3450 RPM:



Option 3: Use this option for drain cover replacements if not choosing option 1 or 2. Look at the pump curve, and for its highest speed setting find the highest possible flow rate. In the above hypothetical pump curve, the highest setting is 3450 RPM and it's highest flow rate is 140 GPM at 55 TDH.