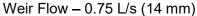


## Association of Hydraulic Services Consultants Australia – Research Foundation

## Flow Characteristic Curve - Q100/80SR 70 60 Water Head Level (mm) 50 40 30 TRANSITION FLOW REGION Please note that the water depth levels in this shaded area of the chart were observed to 20 fluctuate continuously between maximum and minimumlevels due to the transition between weir and orifice flow conditions occurring at the outlet. 10 Maximum observed water levels are shown by the curve on the graph. 0 0.25 0.5 0.75 1.25 1.5 1.75 2 Flow Rate (L/s)







Orifice Flow – 1.5 L/s (50 mm)

## **Observation Comments:**

- Flow rates from 0 0.75 L/s (14 mm Head) produced a linear characteristic curve.
- At 1.0 L/s the weir flow transitioned to orifice flow conditions.
- Flow rates between 1.0 2.0 L/s were observed to fluctuate bewteen wier and orifice conditions. The maximum stable water level achieved was 70 mm at a flowrate of 2.0L/s. Increasing the flowrate beyond this value caused the tank to surcharge.
- The maximum flow limit to maintain weir flow conditions was 0.75 L/s.

I hereby certify that the test results presented on this outlet performance certificate are true and correct and were obtained using recognised AHSCA Gutter Outlet Testing procedures.

Dr Terry Lucke,

Chief Researcher:

Date: 16th November 2016

Mark Alexander,

AHSCA Foundation Chairman:

Date: 16th November 2016