McCROMETER

Literature No.
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Industry:
Municipal Water

Niche Market:
METERS FOR WELLS

Process:
N/A

Product:
Water

Fluid:
Raw Water-Water Wells

Viscosity:
1.0 SpG

Flow Rate:
1,800 - 2,800 gpm

Pressure:
40 - 60 psig

Temperature:
50 -60 F

Size:
various

Date:
1994

Submitted by:
Jim Moodey
Measurement Control Systems
Santa Ana, CA

V-Cone Application Guide

Industry: Water/Wastewater

Application: Measure flow from water wells in a desert community.

Measurement Challenge/Difficulty: Well water is very turbulent and is filled with sand and debris. The turbulence is significant due to the typically short pipe runs. The sand and debris cause damage to the flow elements and create a need for lots of costly field maintenance. The customer was experiencing significant maintenance problems with the mechanical meters on the wells. These problems were caused by a combination of turbulence and short pipe runs, sand and debris.

Previous Method: Various propeller and turbine meters.

Solution: V-Cones were installed on the wells, and the customer has been extremely pleased with the V-Cone performance. The V-Cone has solved the maintenance problems the customer was experiencing on its meters that had moving parts. They plan to use the V-Cone in all future Well applications. They do not want to use any meters with moving parts. Another advantage of the V-Cone for this application is its flow conditioning ability which allows for installation within one or two diameters of an elbow upstream and two to four diameters downstream. This is much less than the distances required by other types of meters.

Date Installed: 1994

System Diagram: None

Submitted by:
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Additional Comments: We have been recommending the V-Cone for Wells in Southern California for more than eight years. To date we have over 300 V-Cones installed and have not experienced any problems from turbulence or sand/debris.