



Industry: Metals & Mining

Process: Solution Mining Primary Side

Application: Pump discharge collection through heat exchanger.

Measurement Challenge/Difficulty: High percentage of dissolved solids with moderately high flowing temperature. Significant pressure drop causes plating out of the solids.

Previous Method: Propeller Meters were used with limited success. Meter assemblies would need cleaning and rebuilding every six to ten weeks. A "salt like" substance would build up in stagnant areas until the propeller ceased to move. Typical pressure drop from an orifice plate causes buildup and possible pipe plugging downstream of the plate.

Solution: Six inch V-Cones were sized for minimal pressure drop. Flow is fairly constant with only a 2:1 turndown possible.

Date Installed:

Literature No.

24509-83/Rev. 1.1

Industry:

Mining

Niche Market:

Solution Mining of Soda ash, Pot ash, Borates, and other salts

Process:

Solution Mining Primary Side

Product:

Soda ash, Pot ash, Borates, and other salts

Fluid:

Primary Solution

Viscosity & Sp. G.

Operating Mass:
55.6 pounds/cubic foot

Flow Rate:

70 to 1350 GPM

Pressure:

113 psiA

Temperature:

340° F

Size:

8 Inch

Date:

March 1993

Submitted by:

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