

CASE STUDY

ICE PIGGING

Project Summary

Customer:

Park City Municipal Corporation.

Type of Project:

Cleaning Potable Water Distribution System

Date:

October of 2021

Results:

- Increased distribution system efficiency.
- Removed accumulated lead & thallium.
- Removed accumulated manganese.
- Very strong removal of iron & arsenic.
- Future UDF requirements will be very limited



PARK CITY, UTAH.



APS's preplanning with Distribution operators was crucial to the success of the project, and their team of professionals worked seamlessly with our field crews... In upcoming years we'll be looking to APS to continue to employ this important and superior advanced water main cleaning technology in other metal-accumulated areas of our community.

-Michelle De Haan, Water Quality and Treatment Manager, Park City Municipal Corp.



Park City lies east of Salt Lake City in the western state of Utah. Framed by the Wasatch Range, it's bordered by the Deer Valley Resort and the huge Park City Mountain Resort, both known for their ski slopes. Utah Olympic Park, to the north, hosted the 2002 Winter Olympics and is now predominantly a training facility. In town, Main Street is lined with buildings built during a 19th-century silver mining boom.

In 2016 Park City in collaboration with the Water Research Foundation published results of an advanced main cleaning pilot testing program that for the first-time comparing Ice Pigging to high velocity unidirectional flushing (UDF) and foam swabbing. *As documented in Project #4509 Metals Accumulation and Release Within the Distribution System: Evaluation and Mitigation.* Ice Pigging was over 100 times more effective at removing metals that had accumulated on water distribution system pipe walls from historic use of mine tunnel waters. In 2021 Park City contracted with APS crews who worked closely with its Distribution and Water Quality teams over 6-weeks to ice pig one of Park City's most metal-accumulated impacted residential neighborhoods that in the past had experienced a metals release event. *"APS's preplanning with Distribution operators was crucial to the success of the project, and their team of professionals worked seamlessly with our field crews."* -Michelle De Haan, Water Quality and Treatment Manager, Park City Municipal. Matching pilot testing results, full scale ice pigging resulted in nearly complete removal of accumulated lead, manganese and thallium complimented by very strong removal of iron and arsenic. Removing this material has allowed water quality professionals to sleep better at night since there is now limited risk of these metals being released except from service lines. Anticipating no future loading of metals in the effected area, future UDF requirements will be very limited. In upcoming years we'll be looking to APS to continue to employ this important and superior advanced water main cleaning technology in other metal-accumulated areas of our community.

We look forward to partnering on your next project.

Call 201-525-0088 or visit americanpipelinesolutions.com



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