PROJECT > Lake Mead Tunnel

QUIKRETE® Non-Shrink Precision Grout Boulder City, NV





PROJECT DESCRIPTION:

Las Vegas Valley and the surrounding area draw 90 percent of their water from Lake Mead, the largest reservoir in the U.S. Unfortunately, during the past 14 years the water level in Lake Mead has dropped more than 110 feet putting several existing water intakes at risk of running dry. The Southern Nevada Water Authority addressed the possibility of a water shortage by constructing a new intake tunnel that feeds water from the bottom of Lake Mead rather than the top where levels continue to fall. The three-mile tunnel is connected to a 100-foot tall, 7-foot thick

concrete vault that stores water nearly 600 feet below the lake's surface until being pumped to the surface. After the two-year tunnel excavation, Vegas Tunnel Constructors used 525,000 pounds of QUIKRETE® Non-Shrink Precision Grout to insert thousands of reinforcement anchors into the tunnels walls. In addition to having the necessary structural integrity to transport water, the tunnel is designed to withstand the pressure of three trillion tons of water.

QUIKRETE® Non-Shrink Precision Grout is a high-strength, Portland cement-based grout with a 25 minute working time, making it ideal for use in applications where multiple anchors are required. Non-Shrink Precision Grout achieves 12,500 PSI compressive strength in 28 days and a pull-out strength exceeding 35,000 PSI.

CONTRACTOR:

Vegas Tunnel Constructors

QUIKRETE® PRODUCTS:

• 50 lb QUIKRETE® Non-Shrink Precision Grout: 10,500 bags

PROJECT START DATE:

October 2014

PROJECT COMPLETION DATE:

May 2015

QUIKRETE® Non-Shrink Precision Grout>>

