



Engineering, Operations, & Technology Committee

Engineering, Operations, & Technology Field Inspection Trip Report

Item 6a

December 8, 2025

Presented by: JR Rhoads and Michael Thomas

Item 6a Engineering, Operations, & Technology Field Inspection Trip Report

Subject

Engineering, Operations, & Technology Field Inspection
Trip Report

Purpose

Provide Engineering, Operations, & Technology committee members a summary of the 2025 EOT Field Inspection Trip. Held on October 28 and 29, 2025, the trip visited Eagle Mountain Pumping Plant and Copper Basin Reservoir at Gene Pumping Plant. The trip focused on infrastructure reliability projects and operational challenges

2025 EOT Inspection Trip Highlights

Site Visits

- La Verne
- Eagle Mountain Pumping Plant
 - Motor and Pump Room Floors
 - Pump Maintenance and Machine Shop
 - Electrical Transformers
 - Multipurpose Building & Lodge
 - A Remodeled Housing Unit
 - Domestic Water System
- Copper Basin Reservoir
 - Dam
 - Sodium Hypochlorite Feed Tanks

Engineering, Operations & Technology - Field Inspection Trip Water Quality Building

- MWD 3D Printing Program
- Big Picture Asset Management - Maturity & Criticality Assessment



MWD 3D Printing Program



Asset Management - Maturity & Criticality Assessment

Engineering, Operations & Technology - Field Inspection Trip Eagle Mountain Pumping Plant

- CRA Operations Overview
- CRA Power Transmission System Maintenance Overview
- Power Operations & Strategic Planning



Eagle Multipurpose Room



High-Voltage Transmission Line Maintenance

Engineering, Operations & Technology - Field Inspection Trip Eagle Mountain Pumping Plant

- Housing & Support Facilities
 - Desert Housing Program – Kitchen & Lodge
 - Housing Improvements – Walkthrough of a Remodeled Home
 - Eagle Mtn. & Hinds Pumping Plants Utilities Replacement



Eagle Mountain Pumping Plant Lodge



Walkthrough of a Remodeled Home

Engineering, Operations & Technology - Field Inspection Trip Eagle Mountain Pumping Plant

- Eagle Mountain Pumping Plant Projects
 - CRA Main Pump Rehabilitation Program (CRAMPR)
 - Pump & Motor Maintenance (Unit No. 9)
 - Domestic Water Treatment System Upgrades



Motor Room Floor



Domestic Water Treatment System Upgrades

Engineering, Operations & Technology - Field Inspection Trip

Eagle Mountain Pumping Plant

- Desert O&M Capabilities
 - New Storage Building Project Overview
 - Aqueduct Pump Maintenance Shop

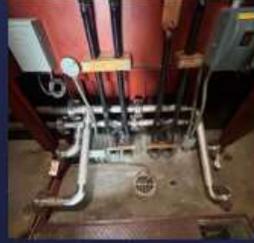


Aqueduct Pump Maintenance Shop

 **Eagle Mountain Unit 9**

Main Motor Maintenance Activities

- Rotor
 - Thoroughly cleaned
 - New insulation coating
 - Installed new anti rotation lock tabs
 - Electrical testing
- Stator
 - Thoroughly cleaned
 - New slot wedges and shims
 - Recoated stator windings
 - Performed electrical testing
- Installation of new stainless steel cooling water piping



Pump Refurbishment

Engineering, Operations & Technology - Field Inspection Trip Eagle Mountain Pumping Plant

- Electrical Facilities & Projects
 - CRA Main Pump Transformer Replacement
 - 230 kV Transmission System Rehabilitation



CRA Main Pump Transformers



230 kV Transmission System

Engineering, Operations & Technology - Field Inspection Trip

Gene Pumping Plant

- IT Projects
 - Overview of Desert Communications
 - Desert Microwave & Fiber Optics Improvements
 - Black Metal Communication Site Improvements

 **Black Metal Mountain 2.4 kV Electrical Power Upgrade**



- Project scope: Upgrade the existing one-mile-long power line & improve the site access road
- Current phase: Final Design



Black Metal Mountain Communication Site

Power Pole (Typ.)

Access Road

Communication Site Improvements

Engineering, Operations & Technology - Field Inspection Trip Copper Basin Reservoir

- Copper Basin Projects
 - Sodium Hypochlorite Tanks Upgrades
 - Discharge Valve Structure Rehabilitation



Sodium Hypochlorite Tank Farm



Discharge Valve Overview



2025 EO&T Field Inspection Trip

Thank you, attendees

- EOT Chair D. Erdman • Municipal Water District of Orange County
- EOT Vice Chair S. Faessel • City of Anaheim
- Director J. McMillan • Calleguas Municipal Water District
- Director K. Seckel • Municipal Water District of Orange County
- Director G. Shepherd Romey • City of San Marino



BOARD OF DIRECTORS EOT INSPECTION TRIP

