RECLAMATION

Managing Water in the West

TR-2013-08

Travel to Davis Dam

for continued routine maintenance and download logged data of the turbulence test system for quagga control research project 7169 and travel to Lake Mead for repairs to the quagga mussel research boat (research project 4923).

Date(s) of Travel: June 17-19, 2013

U.S. Department of the Interior
Bureau of Reclamation
Technical Service Center
Hydraulic Investigations and Laboratory Services Group
Denver, Colorado

BUREAU OF RECLAMATION
Technical Service Center
Denver, Colorado

TRAVEL REPORT

Code: 86-68460 Date: June 21, 2013

To: Manager, Hydraulic Investigations and Laboratory Services Group
From: Josh Mortensen, Hydraulic Engineer

Subject: Travel to Davis Dam for continued routine maintenance and download logged data of the turbulence test system for quagga control research project 7169 and travel to Lake Mead for repairs to the quagga mussel research boat (research project 4923).

1. Travel period: 17 June – 19 June 2013

2. Places or offices visited: Davis Dam and Lake Mead

3. Purpose of trip: Perform routine maintenance to the turbulence test system and download logged data (pump pressures and test pipe flow) for analysis and verification of system operation. Also, to repair the brush cleaning system for linear fish screens on the quagga research boat at the Lake Mead boat marina.

4. Synopsis of trip: On Monday, June 17th Josh arrived at Davis Dam where he showed the turbulence test system to Leonard Willett who was accompanied by Curt Brown and Erin Foraker from Reclamation's R&D office, Larry Lingerfelt from Davis Dam, and Sherri Pucherelli. Josh and Sherri showed preliminary biological test data to the group (approximately 20% of pedi-veliger samples damaged) and discussed the potential need for future testing. Following this discussion Josh returned to work on the system which included changing oil in the pumps and analyzing data since 5/21/13. These data showed slightly increased pump pressures on pumps 1 and 3 (possibility of plugged jet nozzles). Flow was measured on both pumps 1 and 3 using the inline propeller flowmeter. Results indicated that the flow capacity of both units is currently the same as it was when they were installed in March of this year.

On Tuesday, June 18th Josh met Brent Mefford at the quagga research boat at Lake Mead. Josh and Brent made repairs to the brush system used to clean the linear fish screens. The linear actuators used to drive the screens were re-installed and several cleaning cycles were made to verify correct operation. The morning of Wednesday, June 19th Josh and Brent returned to Denver.

5. Conclusions: Project 7169 – Pumps on the turbulence test system were serviced and consistent operation was verified using downloaded data. Josh will return to Davis Dam the week of July 15th to coordinate test system maintenance during a short term electrical outage at Davis Dam which will affect the circuit used by the turbulence system.

Project 4923 – Repairs were made to the linear screen brush cleaning system and all systems were operating upon departure from Lake Mead Tuesday evening. Josh will check on the quagga research boat again in mid-July on his way to Davis Dam.

6. Action correspondence initiated or required: N/A

7. Client feedback received: N/A

cc:

Leonard Willett (LCD-8200)
Vince Lammers (LCD-D11)
Sherri Pucherelli (86-68220)
Cathy Karp (86-68290)
Joe Kubitschek (86-68460)
Miguel Rocha (86-69000)

SIGNATURES AND SURNAMES FOR:

Travel to: Davis Dam, Bullhead City, AZ and Lake Mead, Boulder City, NV

Dates of Travel: 17 June – 19 June 2013

Names and Codes of Travelers: Josh Mortensen, 86-68460 and Brent Mefford, 86-68460

Travelers:

Joshua D Mortensen 6/19/2013
Joshua D. Mortensen Date
Hydraulic Investigations and Laboratory Services Group

Brent W Mefford 6/19/2013
Brent W. Mefford Date
Hydraulic Investigations and Laboratory Services Group

Noted and Dated by:

Robert F. Einhellig 6/20/2013
Robert F. Einhellig, Manager Date
Hydraulic Investigations and Laboratory Services Group