



United States Department of the Interior

U. S. GEOLOGICAL SURVEY

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Dear John,

Below is a summary of the progress made by the United States Geological Survey, Water Resources Discipline (USGS), in its oversight of the Dos Pobres/San Juan Mine Water Resources Mitigation Project during the federal fiscal year ending September 30, 2006. This is followed by a list of the progress expected to be made on the project during fiscal year 2007.

Copies of this letter are also being sent to the Bureau of Indian Affairs, the Army Corps of Engineers, and the Arizona Department of Water Resources. It will also be made available to the public on the USGS Dos Pobres/San Juan Mine Water Resources Mitigation Project web site (http://az.water.usgs.gov/projects_home/DosPobres/dospobres.html)

1. Progress made in Fiscal Year 2006

Significant progress was made on the Dos Pobres/San Juan Mine Water Resources Mitigation Project in fiscal year 2006 (October 1, 2005 to September 30, 2006) and most all of the preliminary work is now completed. In the coming fiscal year, 2007, the Project will involve monitoring of water levels, analysis of water chemistry and isotope data, and completion of a few website features.

a. Water levels in 40 of the 41 wells drilled by Phelps-Dodge for monitoring [Groups 2 through 5 from p. 34 and 35 of the Dos Pobres/San Juan Project Clean Water Act Section 404 Mitigation and Monitoring Plan (MMP), plus an additional well at the San Carlos Apache Reservation boundary in Pima Gap] were measured four times by Phelps-Dodge contractor Allen Pump of Thatcher, Arizona, using an electric tape. USGS personnel (Bruce Gungle and Nick Paretti) twice made side-by-side measurements with Allen Pump, once in January and once in August, 2006. Well AP-3A remains obstructed.

b. Water levels were measured monthly at the six Group 1 wells (p. 35 of the MMP) by Allen Pump. USGS personnel made side-by-side electric tape measurements with Allen Pump at the Group 1 wells, once in January and once in August, 2006. Pressure transducers deployed in these 6 wells logged measurements every 12 hours. Several of the transducers malfunctioned, however, for reasons that remain unclear. The USGS provided assistance in attempting to resolve the problems, and these transducers have since been replaced.

c. All ground-water levels measured by Allen Pump have been entered into GWSI and are readily available to the public via the website map links (http://az.water.usgs.gov/projects_home/DosPobres/dospobresmap.html).

d. Allen Pump sampled 15 wells for field parameters and major constituents, as outlined in the MMP, pp. 43-46. The USGS took sample splits at 5 of the wells as required by the MMP, p. 47. Four of nine springs were sampled for stable isotopes, water chemistry and discharge rate (MMP, p. 46.) Three springs were dry (Bear, Bryce and Pothole Springs) and two are located on lands of the San Carlo Apache and permission to visit them was not secured. The isotope data is available for review on the project website (http://az.water.usgs.gov/projects_home/DosPobres/Isotope_data_table.htm); the water chemistry will be available on the project website in the next few months.

e. A 5 year joint funding agreement was signed with the Arizona Department of Water Resources that ensures that the USGS continues its oversight role of PDSI's MMP into 2010; it is anticipated that the USGS will continue in this role for the life of the mine.

2. Plans for Fiscal Year 2007

a. USGS will continue to take water-level measurements twice yearly concurrent with the PDSI contractor's quarterly measurements (typically January or February and July or August).

b. All remaining ground-water and water-chemistry data will be catalogued and entered into the appropriate USGS data bases, and this data will be linked to the USGS Dos Pobres/San Juan Mine Water Resources Mitigation Project website.

c. Water chemistry and isotope data will be analyzed to determine locations of connectivity to the regional aquifer.

d. A document link will be added to the Project website.

Should you have any questions or comments with regard to this progress summary, please contact me at the address or phone number below.

Sincerely,

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cc: Ms. Cathy Wilson, Bureau of Indian Affairs
Mr. Frank Putman, Arizona Department of Water Resources
Ms. Marjorie Blain, United States Army Corps of Engineers