



# 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 U.S. Geological Survey, Water Resources Discipline, in its oversight of the Dos Pobres/San Juan Mine Water Resources Mitigation Project during the federal fiscal year ending September 30, 2005. This is followed by a list of the progress expected to be made on the project during fiscal year 2006.

Copies of this letter are also being sent to the Bureau of Land Management, the Bureau of Indian Affairs, and the Arizona Department of Water Resources, and will also be made available to the public on the USGS Dos Pobres/San Juan Mine Water Resources Mitigation Project web site. As you will read below, this web site will soon be accessible to the public via links from the USGS Arizona Water Science Center web site.

### **1. Progress made in Fiscal Year 2005**

Significant progress was made on the water level monitoring portion of the Dos Pobres/San Juan Mine Water Resources Mitigation Project in Fiscal Year 2005 (October 1, 2004 to September 30, 2005). In addition, preparations were made to begin the water quality sampling portion of the Project:

a. All 41 existing wells [Groups 2, 3 and 4 from p. 34 of the Final Environmental Impact Statement (FEIS), Appendix F] were inventoried by the USGS. This included making well measurements and obtaining precise GPS locations (~5 cm accuracy or better). Six additional wells (Group 1) were drilled by Phelps Dodge, Safford, Inc. (PDSI) and subsequently inventoried by the USGS in 2005. One well, AP-3A (Group 3), has been dry throughout the monitoring period and is no longer being monitored monthly by the PDSI contractor, Allen Pump, of Thatcher, Arizona.

b. Well inventory data have been coded onto USGS Ground-Water Site Schedules and have been entered into GWSI, the USGS public ground-water data base. Subsequently, all ground-water levels taken by both PDSI and the USGS will be entered into GWSI and will then be readily available to the public.

c. Nine springs were designated for isotope, chemistry and flow sampling (FEIS, p. 46, Appendix F.) The seven springs not located on lands of the San Carlo Apache have been visited, photographed and GPS'd with a handheld Garmin unit. Four of the springs have also been located with precise GPS.

d. The USGS made water level measurements at all 41 monitoring wells in conjunction with Allen Pump two times in FY 2005: once in January and once in July. Allen Pump began making monthly water level measurements in June, 2002.

e. In preparation for the initial round of water quality sampling that will commence this fall, the USGS enrolled the PDSI water quality lab, Del Mar Analytical of Phoenix, Arizona, in the USGS Standard Reference Sample program. The Standard Reference Sample program provides quality assurance of the water quality analyses conducted by non-USGS laboratories for data that is destined for the USGS water quality data base. Please see <http://bqs.usgs.gov/srs/> for more information about this program.

## **2. Plans for Fiscal Year 2006**

a. The initial round of water quality sampling will take place in fall, 2006, and as outlined in 3.3.1.4 (p. 43 – 46) of the Final Environmental Impact Statement, Appendix F. This will include water chemistry and isotope sampling at all sites plus flow rate measurements at the springs. Allen Pump will sample all wells and springs listed on p. 46 of Appendix F for PDSI, while the USGS will take sample splits at 5 wells. The USGS has also agreed to collect isotope samples at the wells and springs for PDSI.

b. The USGS Dos Pobres/San Juan Mine Water Resources Mitigation Project web site will be made available to the public via a link from the USGS web site. The website will include location and water level data (or links to data) for all monitoring wells and springs included in the EIS, as well as photographic data of the wells and water quality sampling. Other information such as copies of relevant memos (e.g., the present document) will also be included. While not currently available to the public via a link from the USGS web site, the current version of the web page can be viewed at:  
[http://az.water.usgs.gov/projects\\_home/DosPobres/dospobres.html](http://az.water.usgs.gov/projects_home/DosPobres/dospobres.html).

c. A 5 year joint funding agreement will be signed that ensures that the USGS continues its oversight role of PDSI's Water Resources Mitigation Program into 2010.

d. USGS will continue to take water level measurements twice yearly (January and July) concurrent with the PDSI contractor's monthly measurements.

e. All ground water and water quality 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 web site.

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. R. William T. Civish, Bureau of Land Management  
Mr. William J. Ruddick, Bureau of Land Management  
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