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Pat Longmire, 9/14/98 1:50 PM -0700, LANL Background Surface water and grou

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Date: Mon, 14 Sep 1998 13:50:15 -0700
To: dhickmott@lanl.gov
From: Pat Longmire <107987@incdp1.lanl.gov>
Subject: LANL Background Surface water and groundwater.
Cc: plongmire@lanl.gov

Background surface-water samples were collected during periods of snow melt, base flow, and thunder storm events in upper Los Alamos Canyon and upper Pajarito Canyon during 1997. Both filtered and non filtered water samples were collected for chemical and radiochemical analyses. Twelve surface-water samples were collected from the gaging station (E025) (skating rink) and west of the reservoir in upper Los Alamos Canyon during March 26, (1 sample); March 31 (1 sample), May 1, 1997 (2 samples); July 15; (2 samples), and August 5, (6 samples). Nine surface water samples were collected from the gaging station (E240) in upper Pajarito Canyon at the Laboratory boundary) during March 27 (1 sample); May 1 (1 sample); July 15 (1 sample); and September 10, (6 samples).

These surface water samples were analyzed for total suspended solids, major ions and trace elements (EES-1), radionuclides (cesium-137, strontium-90, americium-241, plutonium-238, plutonium-239,240, and uranium isotopes) (Paragon Analytics), PAHs and PCBs (Kemron), and DOC (Huffman Laboratories). The inorganic analyses performed by EES-1 consisted of ICP-ES, GFAA, IC, and specific ion electrode. The charge balances for the major ion analyses (filtered samples) are better than +/- 10 percent. The organic compounds were analyzed by GCMS and the radionuclides by alpha spectrometry (actinides), gamma spectroscopy (cesium-137), and gas proportional counting (strontium-90). Anthropogenic organic compounds (PAHs and PCBs) and fallout radionuclides, except for tritium, were not detected in the background surface water samples.

A report will be released in FY1999 (by September 30, 1999) detailing the background surface-water chemistry including upcoming water sampling for special low-level analyses for mercury.



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Date: Thu, 24 Sep 1998 06:48:15 -0700
To: dhickmott@lanl.gov
From: Pat Longmire <107987@incdp1.lanl.gov>
Subject: Background Groundwater for LANL
Cc: plongmire@lanl.gov

Background groundwater samples were collected from 11 springs (Doe, Spring 9B, Spring 4A, Seven, Pine, Apache, Water Canyon Gallery, Upper Canyon de Valle, Spring 1, La Mesita, and Scarced); one alluvial well (LAO-B); one Guaje Pumice Bed well (LAOI-1.1); and two supply wells (Otow-4 and Guaje 5) during the past two years (FY 1997 and FY1998). A total of four quarters of samples (60 groundwater samples) have been collected from the 15 stations. Both filtered and non filtered groundwater samples were collected for chemical and radiochemical analyses.

These background groundwater samples were analyzed for total suspended solids, major ions and trace elements (EES-1, Paragon Analytics, Inc.), radionuclides (cesium-137, strontium-90, americium-241, plutonium-238, plutonium-239,240, and uranium isotopes)(Paragon Analytics), tritium (Teledyne and the University of Miami), and DOC (Huffman Laboratories). The inorganic analyses performed by Paragon and EES-1 consisted of ICP-ES, CVAA, GFAA, IC, KPA (U), and specific ion electrode. The charge balances for the major ion analyses (filtered samples) are better than +/- 10 percent. Activities of radionuclides were determined by alpha spectrometry (actinides), gamma spectroscopy (cesium-137), and gas proportional counting (strontium-90). Fallout radionuclides, except for tritium, were not detected in the background groundwater samples. Activities of uranium isotopes are above MDA values. Uranium is naturally occurring in these background water samples.

A report will be released in FY1999 (by September 30, 1999) detailing the background groundwater chemistry.

Mime-Version: 1.0
Date: Thu, 24 Sep 1998 06:53:32 -0700
To: dhickmott@lanl.gov
From: Pat Longmire <107987@incdp1.lanl.gov>
Subject: Background Surface Waters for LANL
Cc: plongmire@lanl.gov

REVISED SURFACE WATER MEMORANDUM

Background surface-water samples were collected during periods of snow melt, base flow, and thunder storm events in upper Los Alamos Canyon and upper Pajarito Canyon during 1997. Both filtered and non filtered water samples were collected for chemical and radiochemical analyses. Twelve surface-water samples were collected from the gaging station (E025) (skating rink) and west of the reservoir in upper Los Alamos Canyon during March 26, (1 sample); March 31 (1 sample), May 1, 1997 (2 samples); July 15; (2 samples), and August 5, (6 samples). Nine surface water samples were collected from the gaging station (E240) in upper Pajarito Canyon at the Laboratory boundary) during March 27 (1 sample); May 1 (1 sample); July 15 (1 sample); and September 10, (6 samples).

These surface water samples were analyzed for total suspended solids, major ions and trace elements (EES-1), radionuclides (cesium-137, strontium-90, americium-241, plutonium-238, plutonium-239,240, and uranium isotopes) (Paragon Analytics), PAHs and PCBs (Kemron), and DOC (Huffman Laboratories). The inorganic analyses performed by EES-1 consisted of ICP-ES, CVAA, GFAA, IC, and specific ion electrode. The charge balances for the major ion analyses (filtered samples) are better than +/- 10 percent. The organic compounds were analyzed by GCMS and the radionuclides by alpha spectrometry (actinides), gamma spectroscopy (cesium-137), and gas proportional counting (strontium-90). Anthropogenic organic compounds (PAHs and PCBs) and fallout radionuclides, except for tritium, were not detected in the background surface water samples.

A report will be released in FY1999 (by September 30, 1999) detailing the background surface-water chemistry including upcoming water sampling for special low-level analyses for mercury.