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September 8, 2005

Mr. Mark Purcell
Remedial Project Manager
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200 (6SF-LP)
Dallas, Texas 75202-2733

Re: Splitting samples at the UNC Church Rock Superfund Site in October 2005.

Dear Mr. Purcell:

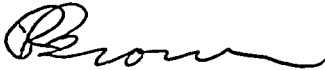
NMED proposes to collect split ground water samples at the UNC Church Rock Superfund Site in October 2005. We propose to collect samples from the following wells: SBL-01, 627, GW-2, and GW-3. We will also collect a duplicate sample from SBL-01. We propose to analyze the samples collected from these wells for major cations including calcium, magnesium, sodium and potassium, and major anions including bicarbonate as HCO_3 , carbonate, chloride, bromide, fluoride, nitrate and sulfate.

The sampling procedure, including preservation, and bottles used will follow as closely as possible to UNC's sampling procedure to insure proper splits. We propose that EPA's Houston drinking water laboratory perform the analyses, and therefore have attached the Region 6 "Request for Laboratory Sample Analyses" form to this letter. This form is provided for your review and submittal to the Region 6 Sample Control Center. Because we are using the Region 6 laboratory, which has a specific parameter list and specific test methods, some of the method numbers and analytes are different from analyses performed by UNC's laboratory (Energy Laboratories, Inc.). These methods, shown in the attached table, include bicarbonate as HCO_3 , chloride, nitrate (not ammonia and nitrate plus nitrite), and sulfate. The attached table also shows the preservatives we plan to use. Also, the UNC laboratory does not routinely analyze for carbonate, bromide and fluoride, but we have chosen to have them analyzed since they are major anions that are analyzed for by the EPA laboratory.

Roger Lee of the USGS, recommended filtering cation and anion samples using a 0.45 um filter if field turbidity is above 20 NTU and asking the laboratory to re-suspend any sediments prior to analyzing for bicarbonate. If any of the water from the ground has turbidity greater than 20 NTUs, we will filter the sample and send in a 2nd filtered sample.

We may request splitting samples and analyzing for a larger suite of analytes at a future sampling event. Please let me know if you have any questions on this or any other issues concerning the UNC Church Rock Site. I can be reached by telephone at (505) 827-2434 or by e-mail at: robin.brown@state.nm.us.

Sincerely,



Robin Brown
Environmental Scientist and Specialist
Superfund Oversight Section

Xc: Bill von Till, Project Manager/Hydrogeologist, United States Nuclear Regulatory Commission, Mail Stop: T8A33, Washington, DC 20555-0001.
Diane Malone, Navajo Nation EPA Superfund Program, P.O. Box 2946, Window Rock, AZ 86515.
Dana Bahar, Program Manager, Superfund Oversight Section, GWQB, NMED.
Jerry Schoepner, Mining Environmental Compliance Section, GWQB, NMED.

Table of proposed analytes to split with UNC at the UNC Church Rock site in October 2005.

Analyte	UNC's analytes? (yes/no)	Detection Limit at Energy Lab. (mg/L)	Method Number used by Energy Lab	Method Number used by Region 6 laboratory	Preservation
calcium	Y	1	E200.7	200.7 or 200.8	pH<2 HNO3
magnesium	Y	1	E200.7	200.7 or 200.8	pH<2 HNO3
sodium	Y	1	E200.7	200.7 or 200.8	pH<2 HNO3
potassium	Y	1	E200.7	200.7 or 200.8	pH<2 HNO3
bicarbonate as HCO ₃	Y	1	A2320B	310.1	Ice only
Carbonate	N	NA	NA	310.1	Ice only
chloride	Y	1	E200.7	300.0	Ice only
bromide	N	NA	NA	300.0	Ice only
fluoride	N	NA	NA	300.0	Ice only
nitrogen (ammonia as N),	Y	.1	A4500-NH3 G	Not analyzed	Not analyzed
nitrogen (nitrate + nitrite as N)	Y	.1	E353.2	Not analyzed	Not analyzed
nitrate	N	Not analyzed	Not analyzed	353.2	pH<2 H2SO4
sulfate	Y	8	E200.7	300.0	Ice only