

Margaret Anne ROGERS

& Associates, Inc.

April 7, 1989

General
Mr. Steve Slayten
USEPA, Region VI
Mail Code: 6H-PS
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Steve:

I enjoyed talking with you and Rich Mayer today. I am providing you with some additional details of my work experience with the Los Alamos National Laboratory and including a copy of the source document, LA-6848-MS. As I mentioned, I shall be in the Dallas area April 20-23, 1989 attending The 1989 Subcontract Marketing Opportunities Conference in Arlington on April 21st. Perhaps it would be possible to get together on the 20th and I could bring the geologic map if you would like to see it.

As an employee of the Lab from 1973 to 1985, I was principally involved in research and operations support in geology and environmental geochemistry for radioactive waste management. I was hired as principal investigator for the Lab's waste disposal site studies. In this work,

1. I developed a thorough knowledge of waste management operations from waste generation to waste disposal or storage.
2. I wrote the 432-page source document, "History and Environmental Setting of LASL Near-Surface Land Disposal Facilities for Radioactive Wastes (Areas A, B, C, D, E, F, G, and T) Volumes I and II", LA-6848-MS, for some of the Lab's radioactive disposal sites. I have been led to believe that I have all the undistributed copies of this document as well as the printer's plates. They were given to me because apparently the Lab did not want to store them.
3. I maintained extensive files which covered all of the Lab's Materials Waste Disposal Areas. Included in those files was:



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a filing cabinet containing all known geology or environmental reports dealing with any of the waste disposal sites or with any study pertinent to radioactive waste disposal,

a map cabinet containing historical and current maps of all disposal areas, (To my knowledge, Engineering Records Management is still unable to produce any drawing unless you have the drawing's number.)

a file of historical and current photographs of all disposal areas, (To my knowledge, Illustrative Services is unable to recover photographs or slides by subject--only by number.)

a filing cabinet of memos, reports, interviews and other documents I generated, found or was given (dealing with any subject) on any of the Materials Waste Disposal Areas, (It had a significant amount of material for the update of LA-6848-MS including Appendix H, Records of Disposals to Area C Shafts.) and

a filing cabinet of memos and reports quoted in LA-6848-MS.

The point of mentioning all this is that the Laboratory can produce very, very little of it for anyone inside or outside the Lab who is interested in its Materials Waste Disposal Areas. With the exception of the first item and some of the photographs, I took my personal files with me when I left so they would not be trashed. It is my understanding that the State of New Mexico sent them to the EPA for xeroxing. No one at the Lab had my comprehensive knowledge when I worked there (and that includes the "old-timers"); no one wished to inherit my files and the responsibilities which went with them when I left; and no one since has had the time or opportunity to redevelop the knowledge I had. My personal files are unique although the items in them are not.

4. I worked on many environmental studies of the disposal areas. Only some of that work was published. The rest is in my personal files.

5. I also worked on many studies aimed at developing better geologic knowledge of the laboratory reservation for environmental and land-use decisions. Some of these were published; however, the majority were not although some were ready for publication at the time my employment

terminated. In this category are:

a study which determined that structural jointing trends can be distinguished from the trends of cooling fractures in the Bandelier Tuff, (This study included joint data from the vicinity of or on-site for Areas A, B, C, D, E, F, G, and T.)

a study which resulted in the compilation of a geologic map of the LANL reservation at a scale of 1" = 400 ft., (There are 25 approximately 2 ft x 3 ft sheets at the color-proof stage in my possession. Originally, I had hoped to do most of the mapping by spot-checking and use of the 1" = 600 ft., color aerial photos I had flown. No such luck. I ended up walking practically every square foot of the reservation. Field notes were made on the Lab's 1" = 400 ft.-scale topographic sheets. Additional field notes and Polaroid photos were placed in field notebooks. Other color photographs [8 1/2 x 11] were taken of geology I considered particularly interesting or important. Numerous rock samples were taken and are identified in the field notes. Because of the degree of stratigraphic control I was able to achieve through the various geologic studies for the map, I identified faulting which is not shown on any other geologic map of the area and deleted faults shown on other maps through stratigraphic error.) and

a study which examined the use of trace-element geochemistry of the Bandelier Tuff in stratigraphic determination. (I looked at numerous ways [did preliminary studies] to identify my outcrop stratigraphic units down hole. The trace element study was the only one which accomplished the purpose. Of course, there is trace element data for disposal areas. I might also add that my division of the Tshirege Member of the Bandelier Tuff is the only one to successfully be mapped across the entire reservation and to be identifiable down hole.)

Since I wanted to see my work published (especially that dealing with the geologic map) and it could not be prepared for publication by others, the Lab gave me permission to keep all materials dealing with my geologic work at the time my employment terminated.

Recently, I made a preliminary estimate of what it would cost to publish the geologic map and the accompanying report: \$50,000 for 500 of 1. Map (1:400=21 sheets) and 2. Map (1:1200=42"x58" sheet) price includes printing, collation, folding, shrink-wrap, and freight

\$90,000 to bring out map and report
price does not include printing costs of report

\$120,000 to bring out map, report and measured sections
price does not include printing costs of report and measured sections

As I told you, a conservative estimate of what was spent on the geologic mapping project from 1974-mid 1981 is \$600,000. My understanding is that currently the cost of 1 staff member and 1 technician to work full-time for 2 years to redo this work (if it could be done in 2 years) is \$960,000. This figure does not include cost of aerial photography, base maps, scribing from aerial photos to base maps, preparation of map plates, analyses, etc.--it only represents the cost of their time. It does make sense for the LANL to publish my existing work.

If I can be of help to EPA in its work with the LANL as one who is very knowledgeable yet independent, I am available as a consultant. Thank you for your consideration.

Sincerely,



Margaret Anne Rogers, President

Registered Professional Geologist
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Enclosures