

Los Alamos National Laboratory

UNIVERSITY OF CALIFORNIA



Environmental Science and Waste Technology (E)
Environmental Restoration, MS M992
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Date: June 5, 2000
Refer to: ER2000-0248



Mr. John Kieling
NMED-HRMB
P.O. Box 26610
Santa Fe, NM 87502

SUBJECT: NOTIFICATION OF PORE GAS MONITORING AT TECHNICAL AREA (TA)-50, MATERIAL DISPOSAL AREA (MDA) C, POTENTIAL RELEASE SITE (PRS) 50-009

Dear Mr. Kieling:

The Los Alamos National Laboratory Environmental Restoration (ER) Project is planning to begin the collection of pore gas data from TA-50, MDA C, (PRS 50-009) during the week of June 19, 2000. The purpose of the pore gas data collection is to supplement the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) information obtained from MDA C in 1995 and 1996. Based on the similarity of inventory for MDA C and results of the field investigation at MDAs G and L, there may be a potential for a vapor phase plume at MDA C.

The pore gas monitoring will consist of the collection of volatile organic compound (VOC) samples from SUMMA samplers from one existing borehole 50-9100 installed in the north end of MDA C during the 1995/1996 RFI (see enclosed figure). The borehole was advanced to a depth of 316 feet. The borehole was drilled using an air rotary drill rig; however, to collect pore gas data using SUMMA samplers, the diameter of the borehole must be increased using an auger drill rig. The borehole will be reamed out during the week of June 5, 2000 and a multi-port sampling membrane will be installed down the entire length of the borehole. Since the borehole has remained open ever since being drilled, the ER Project is planning to allow the borehole to re-equilibrate with any adjacent matrix VOC concentrations. SUMMA samples will subsequently be collected from discrete depths through the borehole during June. The pore gas samples will be collected for the third quarter of fiscal year 2000 during the week of June 19, 2000 and quarterly for the next two years.

The ER Project is also planning to conduct a Quadrel Services Emflux® passive soil gas survey across the surface of MDA C June 16-20, 2000. One hundred Emflux® samplers will be distributed on transects of the disposal trenches and shafts to a depth of three inches and remain for 72 hours. The samplers will be exposed to passive soil gas flux and will then be retrieved and shipped to a fixed laboratory for VOC analysis. Passive soil gas flux measurements are non-disruptive and provide reliable data on subsurface soil gas distribution.



Handwritten vertical text on the left margin: "HSA LNL 5/11/97/50-009 [MDA] C"

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Sampling is summarized in the following table:

Plan/Document	Location	Number of Samples	Sample Type	Analyses
1. RFI Work Plan for Operable Unit 1147, May 1992, (LA-UR-92-969) Note: Pore gas monitoring was not included in the work plan.	TA-50, MDA C	Two SUMMA samples (10 screening measurements). 100 Locations on the surface of MDA C plus ten QC samples	Pore Gas from SUMMA sampler Soil gas flux Quadrel Emflux sampler	Subsurface VOC levels Surface flux VOC levels

We anticipate collecting subsequent pore gas data from borehole 50-9100 at MDA C on a quarterly basis concurrently with the pore gas sampling conducted quarterly at TA-54. The results will be reported in the quarterly ER Project Report. The Quadrel Emflux sampling will be conducted once in June. We will keep the New Mexico Environment Department Hazardous and Radioactive Materials Bureau apprised of any changes in this proposed schedule. Please don't hesitate to contact John Hopkins at (505) 667-9551 or myself if you or your staff would like to be present during any pore gas data collection event.

If you have any questions or concerns please feel free to give me a call at (505) 667-0819.

Sincerely,



Dave McInroy
Environmental Restoration Project

DM/PB/ev

Enclosure: Map

Cy (w/enc.):

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RPF, (ER 2000-0248), MS M707

Mr. John Kieling
ER2000-0248

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Cy (w/o enc.):

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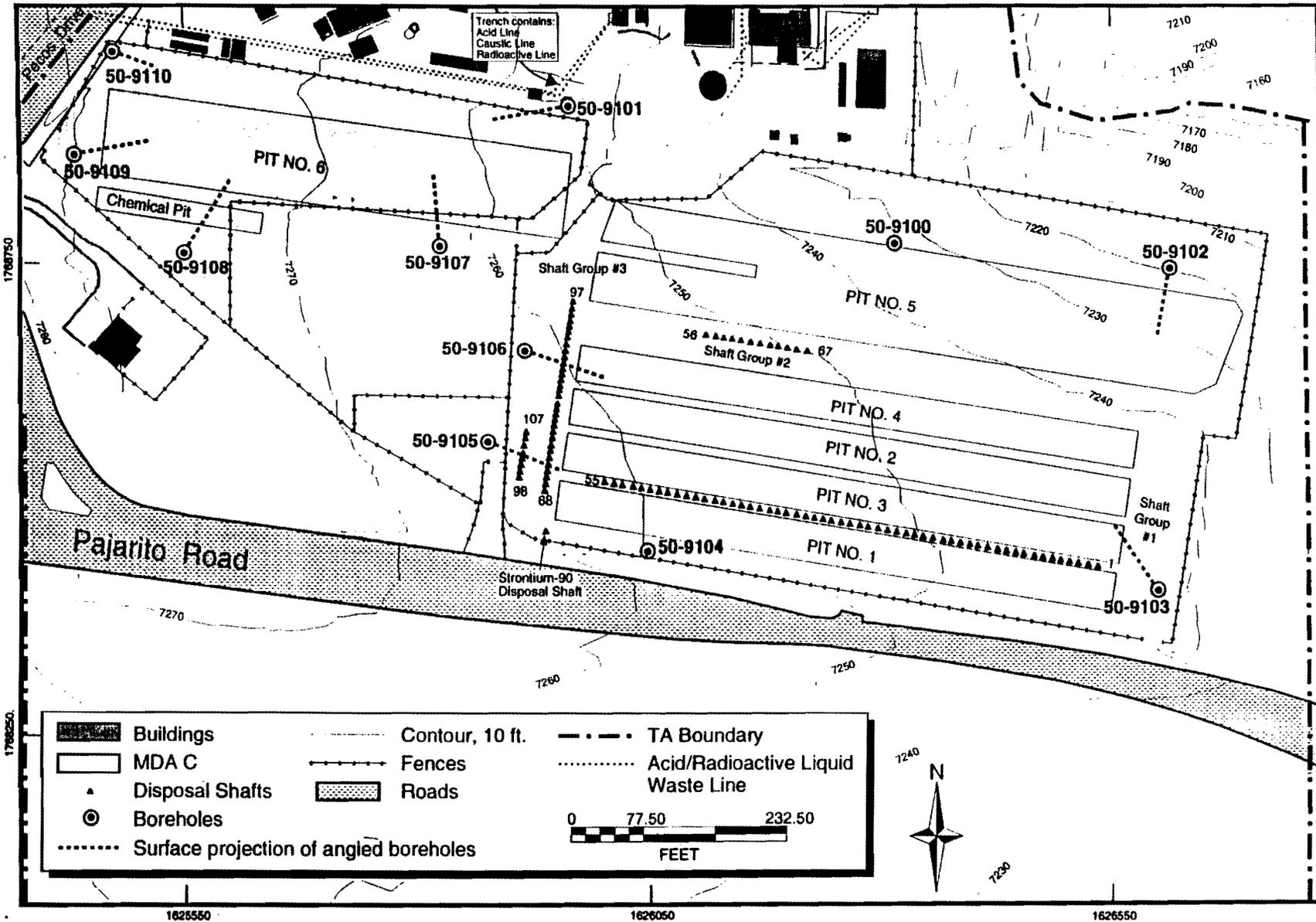


Figure 5.1-4-2. Locations of RFI Boreholes Investigating Subsurface Disposal Units at MDA C.

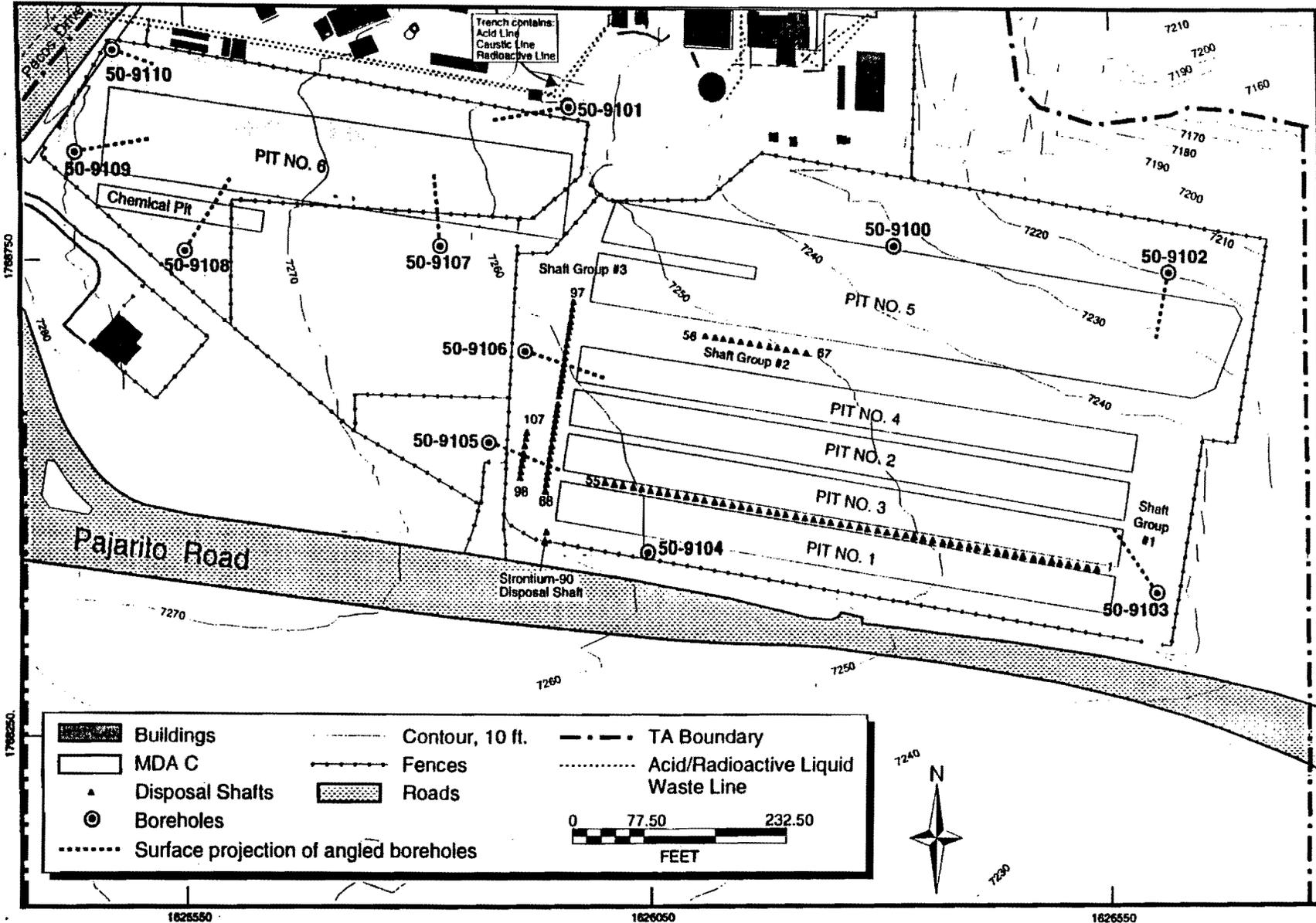


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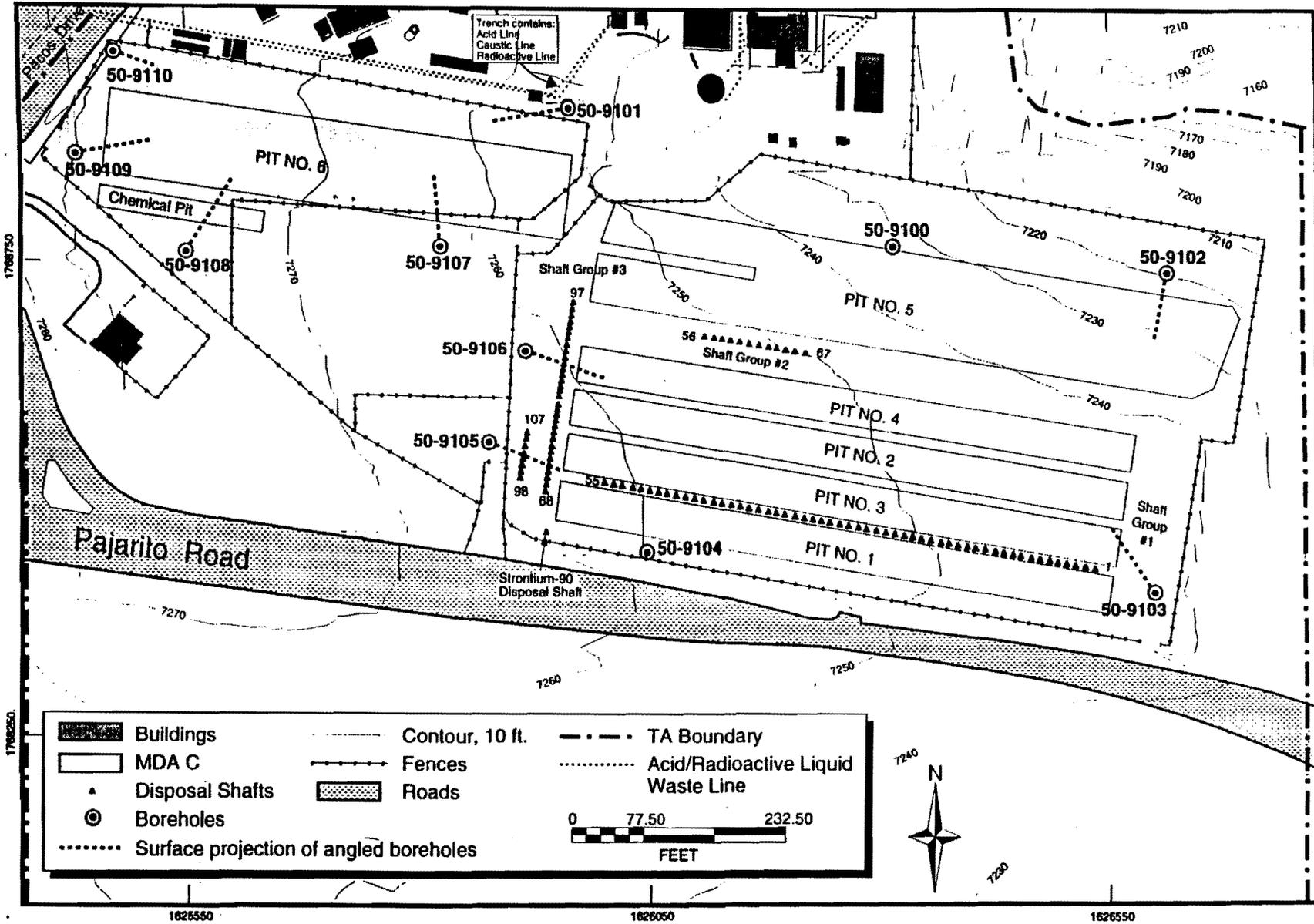


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