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U. S. Department of Energy
Los Alamos Area Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
505-667-7203/FAX 505-665-4504

Date: April 3, 1997
Refer to: EM/ER:97-094

APR 1997 RECEIVED

Mr. Benito Garcia
NMED-HRMB
P.O. Box 26110
Santa Fe, NM 87502

SUBJECT: RESPONSE TO THE REQUEST FOR ADDITIONAL INFORMATION TO THE NOD RESPONSE FOR TA-31, PRS 31-001 RFI REPORT (FORMER OPERABLE UNIT 1079)

Dear Mr. Garcia:

Enclosed is a copy of the Los Alamos National Laboratory's response to the New Mexico Environment Department's request for additional information to the Notice of Deficiency response concerning the TA-31, PRS 31-001 Resource Conservation and Recovery Act Facility Investigation Report. A certification form signed by the appropriate officials is also enclosed. The enclosed response repeats each comment from the request for additional information for convenience in reviewing.

Please contact Garry Allen at (505) 667-3394 or Bonnie Koch at (505) 665-7202 if you have any questions regarding the response to the request for additional information.

Sincerely,

Jorg Jansen, Program Manager
LANL/ER Project

Sincerely,

for Theodore J. Taylor, Program Manager
DOE/LAAO

JJ/TT/rfr

Enclosures: (1) Response to the Request for Additional Information for TA-31, PRS 31-001 RFI Report
(2) Certification

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HSWA LANL FU-1/OU-1079/TA-31/31-001

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T. Taylor, LAAO, MS A316
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EM/ER File (CT #C015), MS M992
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CERTIFICATION

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

Document Title: Response to the Request for Additional Information for TA-31, PRS 31-001 RFI Report (Former OU 1079)

Name: _____ Date: 4-3-97

Jorg Jansen, Program Manager
Environmental Restoration Project
Los Alamos National Laboratory

or

Tom Baca, Program Director
Environmental Management
Los Alamos National Laboratory

Name: _____ Date: 4-4-97

Mathew Johansen,
Acting Assistant Area Manager of
Environment Projects
DOE-Los Alamos Area Office

or

Theodore J. Taylor, Program Manager
Environment Restoration Program
DOE-Los Alamos Area Office

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION FOR TECHNICAL AREA 31, POTENTIAL RELEASE SITE 31-001

NMED COMMENT
General Comment:
LANL needs to provide detailed figures or photographs of the area to be remediated within the VCA plan and the final report. The actual area remediated for this site was approximately 6 feet long, but width and depth are not provided in the report. In figure 4, the blow-up of the area shows a site approximately 1/2 inch in size. Surely, LANL can provide a more detailed figure of the actual excavation. LANL might also provide a photograph with a scale showing the site after excavation.

LANL RESPONSE:
Figures 1 and 2 provide detail of the approximate area remediated during the voluntary corrective action (VCA) at Technical Area (TA) 31. The depth of the excavation averaged 1 to 2 ft, depending on the depth to the tuff. The width of the excavation ranged from 0.5 to 6 ft, such that the excavation was wider near the top of the outfall and narrower below (Fig. 2). Figure 3 is a photograph of the site after excavation.

NMED COMMENT
Comments on Voluntary Corrective Action Plan for Site under Field Unit 1 at TA-31, East Receiving Yard: 31-001, Septic System Outfall, June 9, 1995

1. **Table 7-1, Description of Confirmatory Sampling, p. 10:** The analysis method for metals is indicated as Toxicity Characteristic Leaching Procedure (TCLP) and also EPA Method 6010 which is an Inductively Coupled Plasma Atomic Emission Spectroscopy method. The use of TCLP for confirmation sampling is inappropriate, and should only be used for a hazardous waste determination. In the final VCA report (dated September 22, 1995) target analyte list (TAL) metals were used rather than TCLP.

LANL RESPONSE:
During the VCA at TA-31, toxicity characteristic leaching procedure (TCLP) analyses were used to characterize hazardous waste, and target analyte list (TAL) metals analyses were used for confirmation samples.

NMED COMMENT
2. **Methodologies for Developing Site-Specific Preliminary Remedial Goals to Demonstrate Clean Closure, p. E-3:** For an industrial exposure scenario, LANL should back-calculate a soil concentration for carcinogens from a target cancer risk value of 10^{-6} rather than the 10^{-4} which was indicated in this document.

LANL RESPONSE:
The cleanup levels calculated for Potential Release Site (PRS) 31-001 were based on a reasonable maximum exposed individual under a recreational land use scenario. As stated in the TA-31 VCA plan, the soil concentration for carcinogens was calculated from a target cancer risk value of 10^{-6} (1 in 1 000 000).

NMED COMMENT
Comments on Voluntary Corrective Action Completion Report, Potential Release Site 31-001, Septic System Outfall, September 22, 1995

3. **Corrective Action, p. 23:** Text indicates that due to the extreme slope, backfilling and reseeding were considered to be ineffective. There are other means of stabilizing a slope, and this slope should have been stabilized following the excavation of the soil. LANL needs to provide a plan for stabilizing the slope or information related to how the slope was stabilized.

LANL RESPONSE:
Upon receipt of this Request for Additional Information, a representative from Los Alamos National Laboratory's Water Quality and Hydrology Group (ESH-18) conducted a visual site inspection. The inspection confirmed that natural reseeding has occurred in the area of the excavation. The slope has an estimated 70% coverage of local natural vegetation. In addition, no erosion features were found, and rocks and boulders have been placed on the site to prevent channelization from occurring. Therefore, there are no runoff issues associated with this site.

NMED COMMENT
4. **Corrective Action, p. 23:** Text indicates that field screening did not indicate the presence of volatile organic vapors above background levels. To support this statement, LANL should provide the detection limits for the field screening devices used for volatile organics.

LANL RESPONSE:
A photoionization detector (HNu) was used to screen for volatile organic vapors. The detection limit was 1 part per million (ppm).

NMED COMMENT
5. **Corrective Action, p. 23-24:** Text is confusing in regards to the number of confirmatory samples collected and the analysis conducted. Text on page 23 indicates two confirmatory samples were collected from the excavated area, and analysis was conducted for PCBs, and TAL metals. Text on page 24, indicates that three confirmatory samples were collected and analysis was only for PCBs. LANL needs to clarify the confirmation sampling and analysis which was conducted and supply all analytical results.

   In addition, polycyclic aromatic hydrocarbons were found at this site above action levels. LANL indicates that these should have been remediated with the other materials; however, confirmatory sampling must be provided to substantiate this premise.

LANL RESPONSE:
The text on page 23 is correct. Two confirmatory samples were collected from the excavated area and analyses were conducted for polychlorinated biphenyls (PCBs) and TAL metals. The analytical results are provided in Table 1.

The polycyclic aromatic hydrocarbons (PAHs) detected during the Resource Conservation and Recovery Act facility investigation at TA-31 were not retained as contaminants of concern. The VCA plan for PRS 31-001 did not indicate that PAHs would be addressed during the remedial activities. There is no historical evidence that PAHs were used at the site. The detected PAH levels are attributable to surface runoff from a former parking lot area associated with the former TA-31 warehouse. Therefore, in accordance with accepted practice regarding PAHs that are unrelated to site processes, PAHs were not addressed during the remediation at TA-31.

NMED COMMENT

6. **Corrective Action, p. 24:** The depth and width of excavation should be provided. LANL indicates that material was removed to the tuff, but the depth is not included.

LANL RESPONSE:
The depth of the excavation averaged 1 to 2 ft, depending on the depth to the tuff. The width of the excavation ranged from 0.5 to 6 ft, such that the excavation was wider near the top of the outfall and narrower below (Fig. 2).

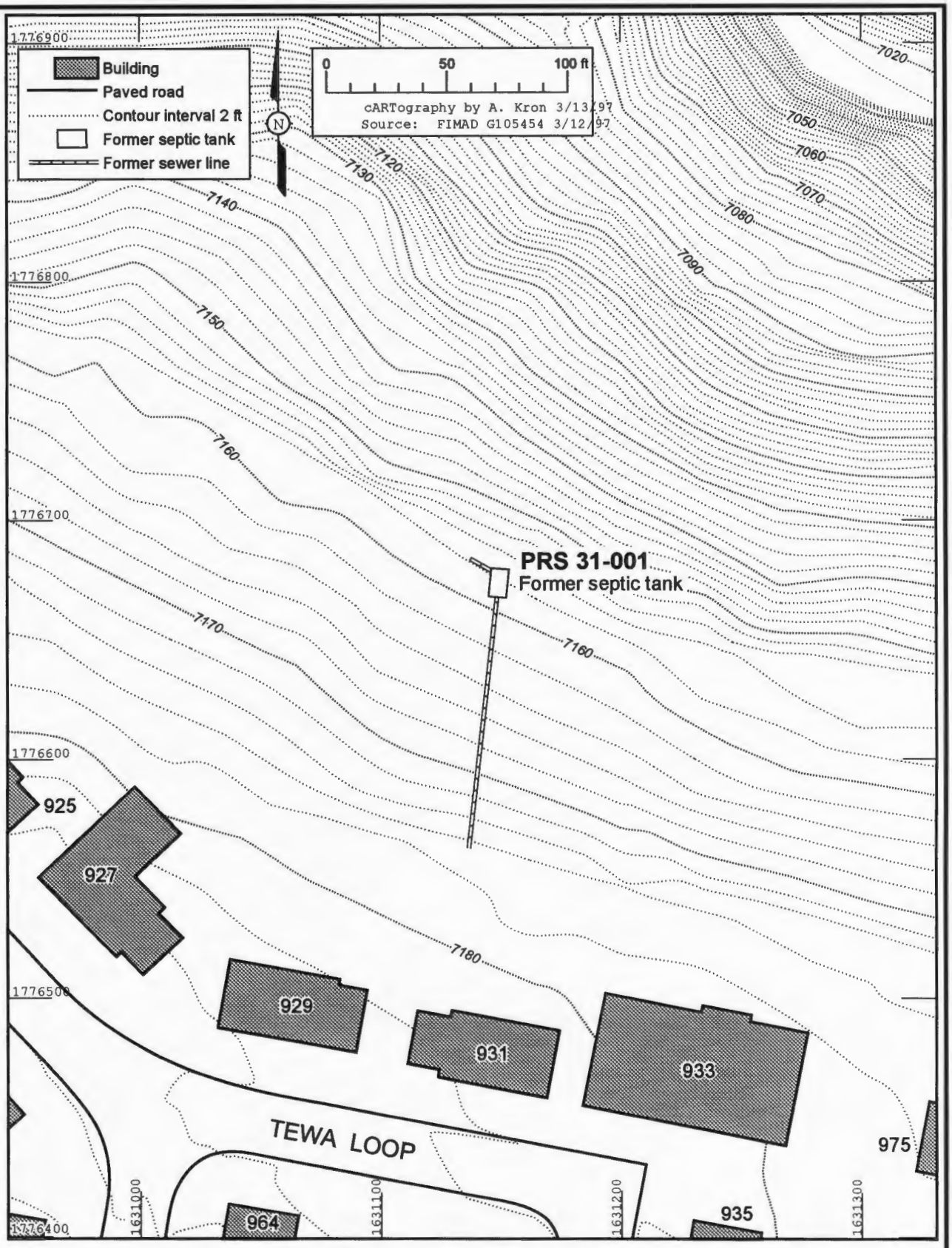

Fig. 1. General location of PRS 31-001, septic system outfall.

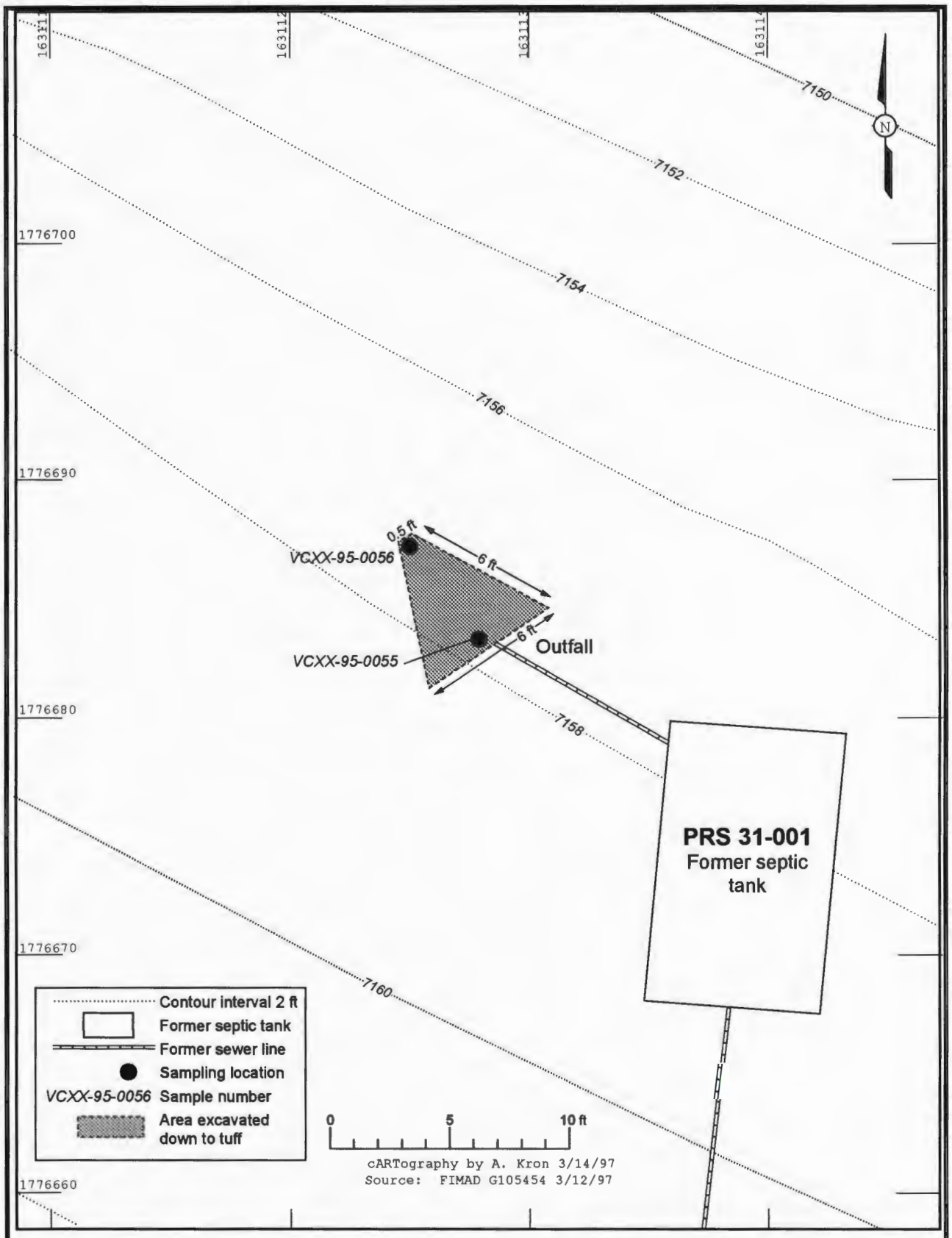

Fig. 2. Detailed map of excavation and confirmation sampling at PRS 31-001, septic system outfall.

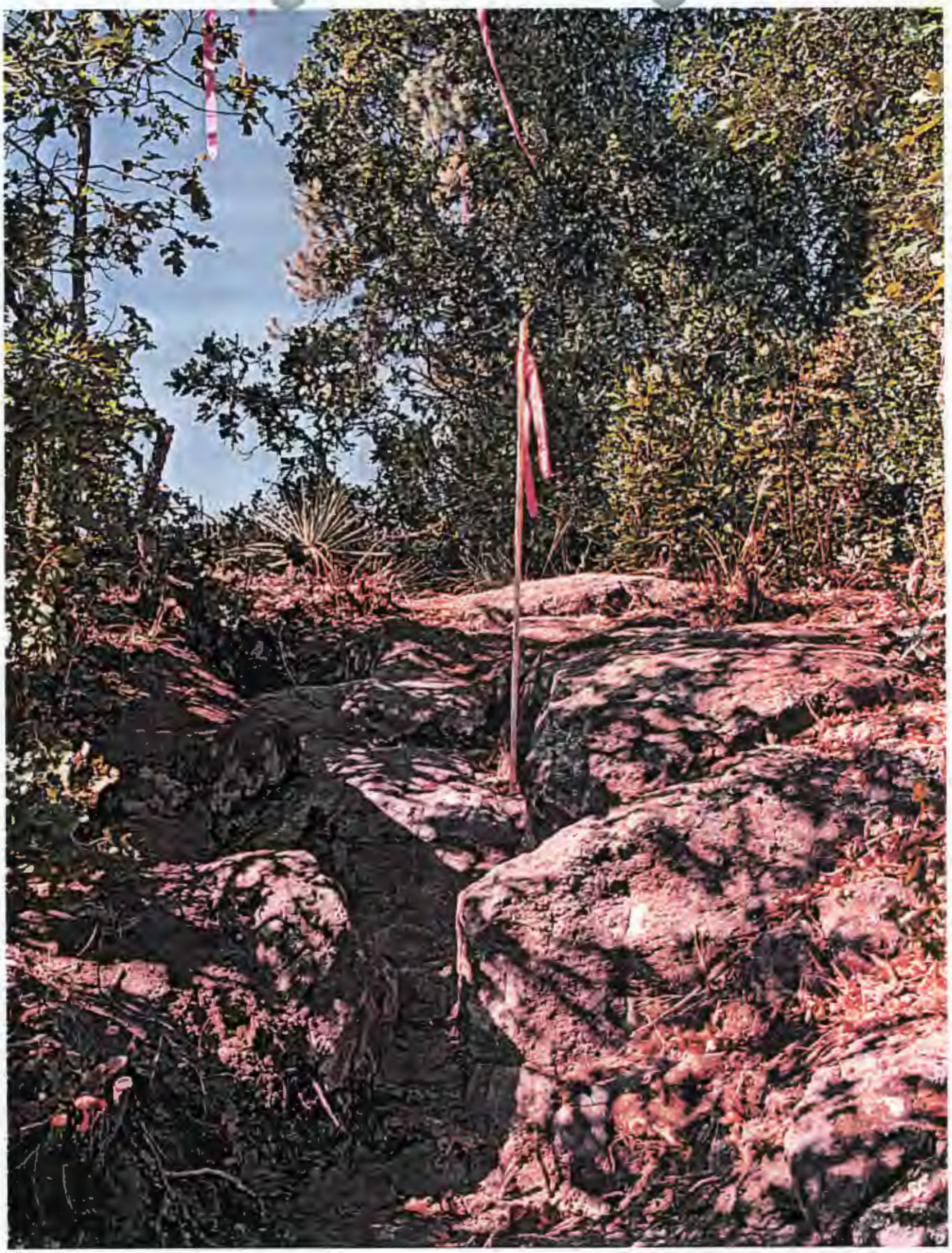

Fig. 3 TA-31 after excavation.

TABLE 1
RESULTS OF CONFIRMATORY SAMPLING AT PRS 31-001

SAMPLE ID	ANALYTE	RESULTS (mg/kg)	QUALIFIER
VCXX-95-0055	Aroclor-1016	0.033	U
	Aroclor-1221	0.033	U
	Aroclor-1232	0.033	U
	Aroclor-1242	0.033	U
	Aroclor-1248	0.033	U
	Aroclor-1254	0.033	U
	Aroclor-1260	0.033	U
	Aluminum	2 200	
	Antimony	8.1	U
	Arsenic	2	U
	Barium	40	U
	Beryllium	1	U
	Cadmium	1	U
	Calcium	720	
	Chromium	2.4	
	Cobalt	4	U
	Copper	4	U
	Iron	6 400	
	Lead	5.1	
	Magnesium	510	
	Manganese	100	
	Mercury	0.1	U
	Molybdenum	4	U
	Nickel	8.1	U
	Potassium	290	
	Selenium	1	U
	Silver	2	U
	Sodium	100	U
	Strontium	4.7	
	Thallium	1	U
	Vanadium	4.1	
	Zinc	23	

TABLE 1 (CONTINUED)
RESULTS OF CONFIRMATORY SAMPLING AT PRS 31-001

SAMPLE ID	ANALYTE	RESULTS (mg/kg)	QUALIFIER
VCXX-95-0056	Aroclor-1016	0.035	U
	Aroclor-1221	0.035	U
	Aroclor-1232	0.035	U
	Aroclor-1242	0.035	U
	Aroclor-1248	0.035	U
	Aroclor-1254	0.035	U
	Aroclor-1260	0.035	U
	Aluminum	7 400	
	Antimony	8.2	U
	Arsenic	2.8	
	Barium	77	
	Beryllium	1	U
	Cadmium	1	U
	Calcium	2 100	
	Chromium	7.7	
	Cobalt	4.1	U
	Copper	5.2	
	Iron	11 000	
	Lead	19	
	Magnesium	1 400	
	Manganese	250	
	Mercury	0.1	U
	Molybdenum	4.1	U
	Nickel	8.2	U
	Potassium	970	
	Selenium	1	U
	Silver	2.1	U
	Sodium	130	
	Strontium	16	
	Thallium	1	U
	Vanadium	12	
	Zinc	29	