Department of Energy
Field Office, Albuquerque
Los Alamos Area Office
Los Alamos, New Mexico 87544

DEC 2 2 1994

Mr. William Honker, Chief
RCRA Permits Branch
Hazardous Waste Management Division
U.S. EPA, Region 6
1445 Ross Ave., Suite 1200
Dallas, Texas 75202-2733

94 DEC 27 PM 12:05

Dear Mr. Honker:

Please find enclosed the response to deficiency 58 of the Notice of Deficiency (NOD) concerning the Operable Unit 1082 Resource Conservation and Recovery Act (RCRA) Work Plan Addendum I. The NOD was received at the Department of Energy Los Alamos Area Office on October 24, 1994. The enclosed response shows proposed text changes with new text highlighted. Should you have any questions, please contact me at (505) 665-7203.

Sincerely,

Theodore J. Taylor
Program Manager
Environmental Restoration
Program

Enclosure

cc w/enclosure:
Ms. Kathleen Sisneros
New Mexico Environment Department
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K. Schenck, Scientech/LAAO, ES&H, MS A316
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K. Hargis, UC-LANL, ESH-8, K490
RPF, MS M707
File 1.4.2.6.1.7.1.2

5960

December 15, 1994
EM/ER:94-J493
M992
505-667-0808

Mr. Joseph Vozella, Chief
Environment, Safety, and Health Branch
US Department of Energy
Los Alamos Area Office, MS A316
Los Alamos, NM 87544

Dear Mr. Vozella:

SUBJECT: RESPONSE TO DEFICIENCY 58 OF THE NOTICE OF DEFICIENCY (NOD) CONCERNING OPERABLE UNIT (OU) 1082 RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION (RFI) WORK PLAN ADDENDUM I WORK BREAKDOWN STRUCTURE NUMBER 1.4.2.6.1.7.1.2

Enclosed is the Los Alamos National Laboratory's response to Deficiency 58 of the Environmental Protection Agency's (EPA's) Notice of Deficiency concerning the OU 1082 RFI Work Plan Addendum I and a certification form signed by the appropriate Laboratory official. The NOD was received at the Los Alamos Area Office on October 24, 1994. A response to this deficiency within sixty days is required by the regulatory agency.

The enclosed response shows the proposed text changes with new text highlighted. A documented quality review of the enclosed response has been performed in accordance with procedure LANL-ER-AP-01.3.

Please let me know if there are questions about this response to the NOD, or contact Brad Martin of my staff at 667-6080. I would appreciate having the response and the signed certification form sent to the EPA, Region 6, by December 23, 1994 to meet the required deadline.

Sincerely,

Jorg Jansen

Jorg Jansen, Project Manager
Environmental Restoration

JJ/rfr

Enclosure: Responses to NOD
Certification Form

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 gather and evaluate 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 Deficiency 58 for the NOD for RFI Work Plan Addendum I for OU 1082

Name: _____ Date: 12/22/94

Dennis Erickson
Division Director
Los Alamos National Laboratory

Name: _____ Date: 12/22/94

Joseph Vozella, Chief
Environment, Safety, and Health Branch
DOE-Los Alamos Area Office

5.21 Administration Area

5.21.1 Background

The PRSs in the administration area are aggregated as a result of their common geographical location. They may be considered together in a future baseline risk assessment. Most of the AOCs located within the administration area are proposed for no further action (NFA) in Chapter 6. Those remaining are considered below and are listed in Table 5-103.

TABLE 5-103

SUMMARY OF ADMINISTRATION AREA PRSs

PRS	CURRENT STRUCTURE NUMBER	FORMER STRUCTURE NUMBER	DESCRIPTION	DIMENSIONS (FT)
16-015(a)	TA-16-15	S-12	Laundry	28 x 131 x 8 21.5 x 8.6 x 20.6
16-015(b)	TA-16-18	S-15	Steam wash house	16 x 20 x 11
16-026(s)	TA-16-5	NA*	Instrument shop outfall	NA
C-16-025	TA-16-8	NA	Cabinet shop	20 x 100 x 9 9 x 12 x 9 90 x 14 x 8
C-16-026	TA-16-6	NA	Repair shop	13 x 38 x 8 16 x 16 x 8
C-16-028	TA-16-5	NA	Instrument shop	25 x 40 x 9
C-16-030	TA-16-181	NA	Tank housing	8.5 x 5 x 1.6
C-16-031	TA-16-182	NA	Diesel unit building	13 x 14

* NA = not available

5.21.1.1 Description and History

The administration area is located east of Anchor Ranch Road in the western region of TA-16 (Fig. 5-81). The site is relatively level with a few scattered trees. Currently, there are only four structures remaining: TA-16-10, a warehouse enclosed by a fence; TA-16-7, a storage building; TA-16-13, a dock for unloading heavy equipment; and, TA-16-54, originally a barium nitrate grinding facility but now an office building for Group ESA-11. The area north of TA-16-10 drains to the northeast and the area south of TA-16-10 drains to the southeast.

The administration area of the World War II era S-Site complex was used by the S-Site groups (X-3, GMX-2, GMX-3) primarily for activities that did not involve HE processing, although the PRSs investigated in this subsection include the buildings in which HE was used. Construction in the administration

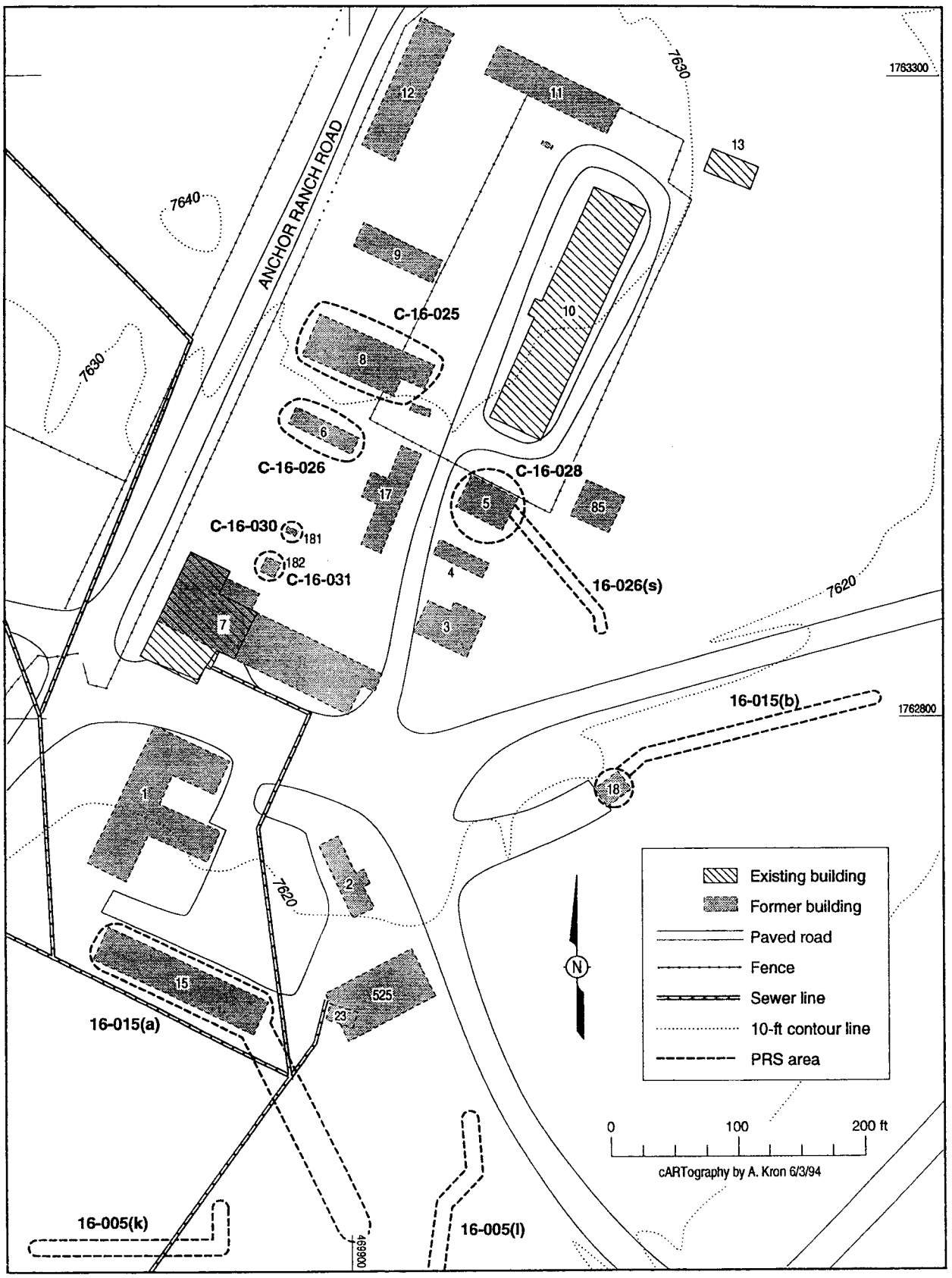

Fig. 5-81. Location of PRSs at the administration area.

C-16-028 is the former location of an instrument shop, TA-16-5. It was constructed in 1945 and removed in 1956 (LANL 1989, 15-16-363). TA-16-5 had a wooden frame construction and was located 50 ft south of TA-16-10. TA-16-5 was used to repair instruments such as gauges (Martin 1993, 15-16-477). A former site worker claimed that there were no hazards associated with the building (Blackwell 1983, 15-16-076), although the building probably had asbestos shingles. TA-16-5 also has an inactive outfall [SWMU 16-026(s)] associated with it. Contamination from oils and solvents or metals used in the instrument shop could have occurred.

C-16-030 and C-16-031 contain potentially contaminated surface soil associated with decommissioned tank housing (TA-16-181) and diesel unit building (TA-16-182), respectively. They were located within 20 ft of each other, roughly 40 ft northeast of TA-16-7 (Fig. 5-81) on level ground. The diesel unit building was of wooden construction and the nearby tank housing was concrete and partially buried (1.5 ft) in the soil. It is likely that the fuel for the diesel unit was stored in a tank located within the tank housing.

The diesel unit building was completed in March 1944 and the tank housing was added in May 1948. Both structures were removed in March 1956. A former site worker (Blackwell 1983, 15-16-076) stated that no hazardous materials were expected at these buildings.

C-16-025 contains potentially contaminated surface soil associated with decommissioned Zia cabinet shop, TA-16-8. It was constructed in 1945 and removed in March 1956. TA-16-8 (C-16-025) was of wooden-frame construction and was located 100 ft west of the southern end of TA-16-10 in a flat area (Fig. 5-81). No staining is visible within the former location of TA-16-8. TA-16-8 was a cabinet shop (Martin 1993, 15-16-477) that was probably used for construction of wooden structures for the HE processing area at TA-16. A former site worker claimed that there were no hazards associated with the building (Blackwell 1983, 15-16-076), although the building probably had asbestos shingles. Contamination from oils and solvents associated with maintenance of machine tools used in woodworking could be present in the soil beneath the former location of TA-16-8.

C-16-026 contains potentially contaminated surface soil associated with the decommissioned Zia repair shop, TA-16-6. TA-16-6 was constructed in

1945 and removed in March 1956. TA-16-6 (C-16-026) was of wooden-frame construction and was located roughly 125 ft southwest of TA-16-10 in a flat area (Fig. 5-81). No staining is visible in the former location of the building. TA-16-6 was used primarily for storing tools and supplies (Martin 1993, 15-16-477). It also may have been used to repair equipment or fixtures from the TA-16 HE processing area. A former site worker claimed that there were no hazards associated with the building (Blackwell 1983, 15-16-076), although the building probably had asbestos shingles. Contamination from oils and solvents associated with maintenance of machine tools used in repair operations could be present in the soils beneath the former location of TA-16-6. It is possible that HE was present on items that were repaired in TA-16-6.

5.21.1.2 Conceptual Exposure Model

The conceptual exposure model for the administration area is presented in Fig. 4-9. Site specific information on potential release sources, chemicals of concern, migration pathways, and potential receptors is presented below.

5.21.1.2.1 Nature and Extent of Contamination

The PCOCs at the administration buildings include: 1) HE, HE byproducts (barium), oils, and grease from the laundry facility and steam washing house; 2) diesel, oils, and solvents contained in the instrument shop; and, 3) asbestos shingles from the demolished buildings (Table 5-104).

Quantitative data are unavailable for these PRSs. A former site worker's memo, discussed above, states that HE contamination was present prior to removal of the laundry facility [SWMU 16-015(a)] and the steam washing house [SWMU 16-015(b)].

5.21.1.2.2 Potential Pathways and Exposure Routes

The administration area consists of removed buildings, drain lines, and outfalls; therefore, potential contamination may be present in surface and subsurface soils. Although solvents associated with area of concern C-16-028 could have volatilized into the atmosphere, it is possible that releases may have reached the subsurface. The land in this region is fairly flat with

TABLE 5-108

SUMMARY OF SITE SURVEYS, SAMPLING, AND ANALYSIS FOR THE ADMINISTRATION AREA

PRS	PRS TYPE	SAMPLED MEDIA	LABORATORY SAMPLES # STRUCTURE	FIELD DUP	SURFACE	FIELD DUP	SUBSURFACE	FIELD DUP	FIELD SCREENING # ORGANIC VAPOR	GROSS GAMMA/BETA	BTEX	HE SPOT TEST	GEOPHYSICS SURFACE	BARIUM - LIBS	A GEOLOGICAL CHARACTERIZATION	FIELD GROSS ALPHA	GROSS GAMMA/BETA	TRITIUM	VOLATILE ORGANICS	B XRF	SOIL MOISTURE	LABORATORY ANALYSES # ALPHA SPECTROSCOPY	GAMMA SPECTROSCOPY	C BETA SPECTROSCOPY	TOTAL URANIUM	ISOTOPIC PLUTONIUM	ISOTOPIC URANIUM	D VOA (SW 8240)	E SEMIVOLATILES (SW 8270)	F METALS (SW 6010)	G ASBESTOS	H HIGH EXPLOSIVES (SW 8330)	CYANIDE
16-015(a)	Laundry	Soil					2***					10																	2	2		2	
16-015(b)	Steam washing	Soil					3***	1				13																	3	3		3	
16-026(s)	Outfall	Soil					1																					1	1	1			
C-16-025	Cabinet shop	Soil					1		12		12																	1	1	1			
C-16-026	Repair shop	Soil					1		12		12																	1	1	1		1	
C-16-028*	Building	Soil																															
C-16-030**	Tank housing	Soil					1				5																	1	1	1			
C-16-031**	Diesel unit building	Soil					1				5																	1	1	1			

* The sampling of C-16-028 is considered with 16-026(s).
** Laboratory samples will be taken only if positive indicators on the BTEX test are found.
*** These PRSs include screening of both surface and subsurface samples.
# The actual number of samples will depend on the depths of the cores and the screening results.
Integers indicate anticipated numbers of laboratory, field laboratory, and field screening samples for each PRS.
A, B, C = not applicable; D = full suite; E = full suite; F = 1082 suite (barium, beryllium, cadmium, chromium, mercury, copper, lead, nickel, thallium
H = full suite

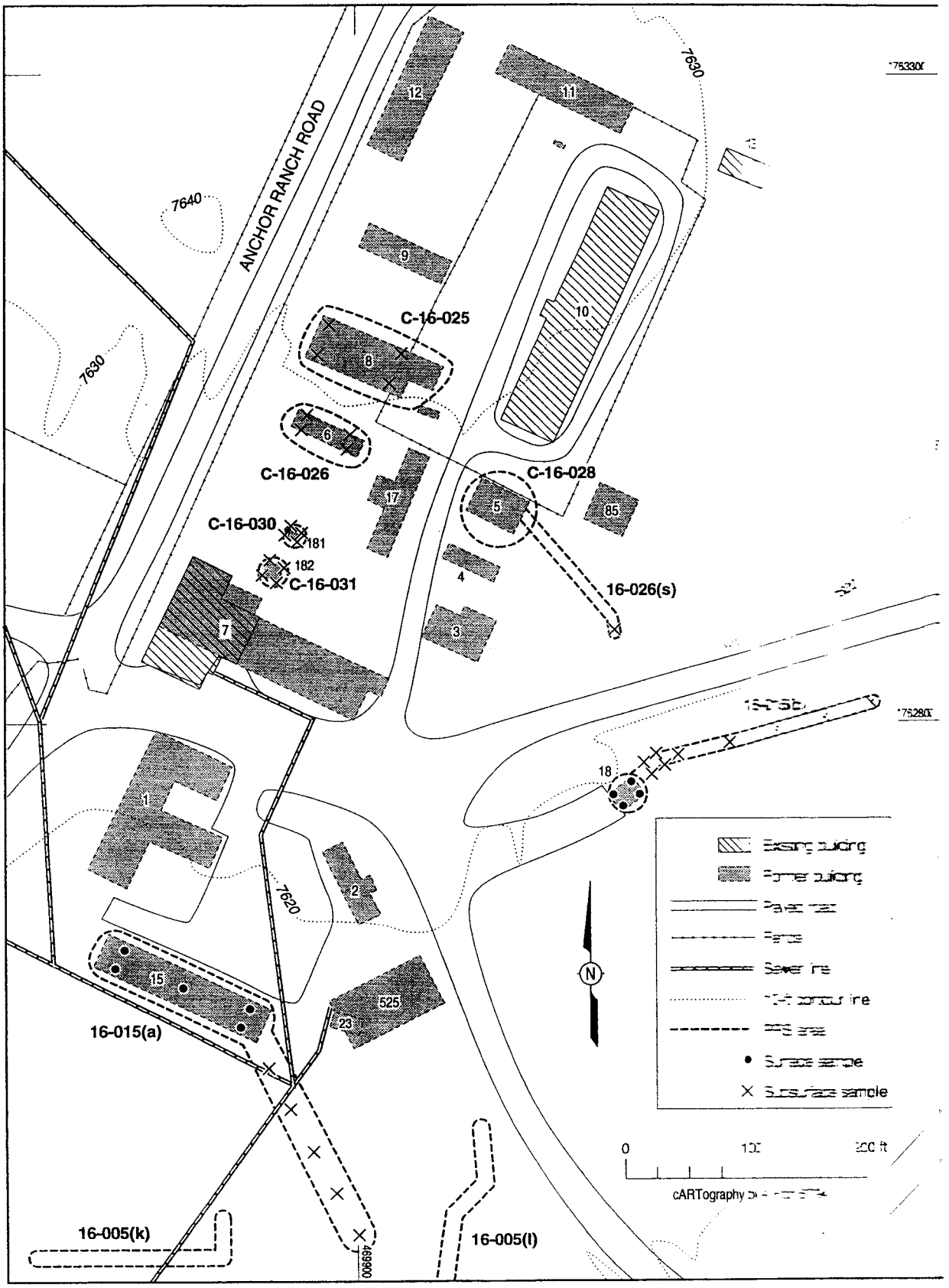

Fig. 5-82. Screening sample locations at the administration area.

the diesel unit or the nearby storage tank. For each PRS, four subsurface cores to bedrock will be screened by BTEX kit. Visible oil stained locations (Fig. 5-82) will be preferentially screened. In each PRS, the sample with the highest reading will be submitted for laboratory analysis. In the absence of a positive reading, no laboratory sample will be taken.

C-16-025 and C-16-026. The sampling of these AOCs is designed to detect residual oils or solvents in the soil at the former locations of the decommissioned cabinet shop, TA-16-8, and repair shop, TA-16-6. For each PRS, four subsurface cores to bedrock will be collected and sampled. The locations of these cores are shown on Fig. 5-82. Each core will be screened by BTEX spot test kit and by PID at 0 to 6 in., 12 to 18 in., and the soil-tuff interface. If the bottom interval in any core yields a positive field screening reading, then continue coring into the tuff taking a field-screening sample every two feet until a sample exhibiting no positive field screening indicators is found. In any core, the shallowest positive interval, the deepest positive interval, and the sample two feet beneath the deepest positive interval will be sent for laboratory analysis for the full suite of analytes (Table 5-108). In the absence of positive field screening readings, one sample from each PRS will be sent for laboratory analysis. This sample will be selected randomly from the four cores at the soil-tuff interface.

5.21.4.3 Laboratory Analysis

Fixed-base laboratory analyses of samples will be with detection limits and at a QA/QC level acceptable to EPA. We plan to use the following methods or equivalents for metals (SW 846 Method 6010), SVOCs (SW 846 Method 8270), volatiles (SW 846 Method 8240) and HE and its byproducts (SW 846 Method 8330). The principal HE of concern are TNT and RDX; the principal HE byproducts of concern are DNT, TNB, and DNB; and the principal volatiles of concern are benzene, toluene, and xylene.

5.21.4.4 Sample Quality Assurance

Field quality assurance samples will be collected according to the guidance provided in the QAPjP, Appendix T of the IWP (LANL 1991, 0553). Any QA/QC duplicate samples to be collected during the course of the field investigations are outlined in Table 5-108.