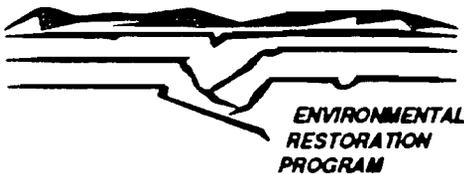


LANZ  
OU 1

**Los Alamos**  
NATIONAL LABORATORY



Fact Sheet for  
Operable Unit 1085  
Resource Conservation  
and Recovery Act  
Facility Investigation  
Work Plan

December, 1993

**Acronyms**

- AOC**  
Area of Concern
- DOE**  
US Department of Energy
- EPA**  
US Environmental Protection Agency
- ER**  
Environmental restoration
- OU**  
Operable unit
- PRS**  
Potential release site
- RCRA**  
Resource Conservation and Recovery Act
- RFI**  
RCRA facility investigation
- SWMU**  
Solid waste management unit
- TA**  
Technical area
- X Division**  
Explosives Division

Introduction: The Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) work plan for Operable Unit (OU) 1085 is a document that addresses the site characterization activities for all potential release sites (PRSs) at Technical Areas 12, 14, and 67. TA-12 has been decommissioned and incorporated into the other two technical areas. This document will be submitted to the US Environmental Protection Agency (EPA) in May 1994 and is subject to approval by the EPA. Characterization activities will begin in the spring of 1995 and will continue through 1996.

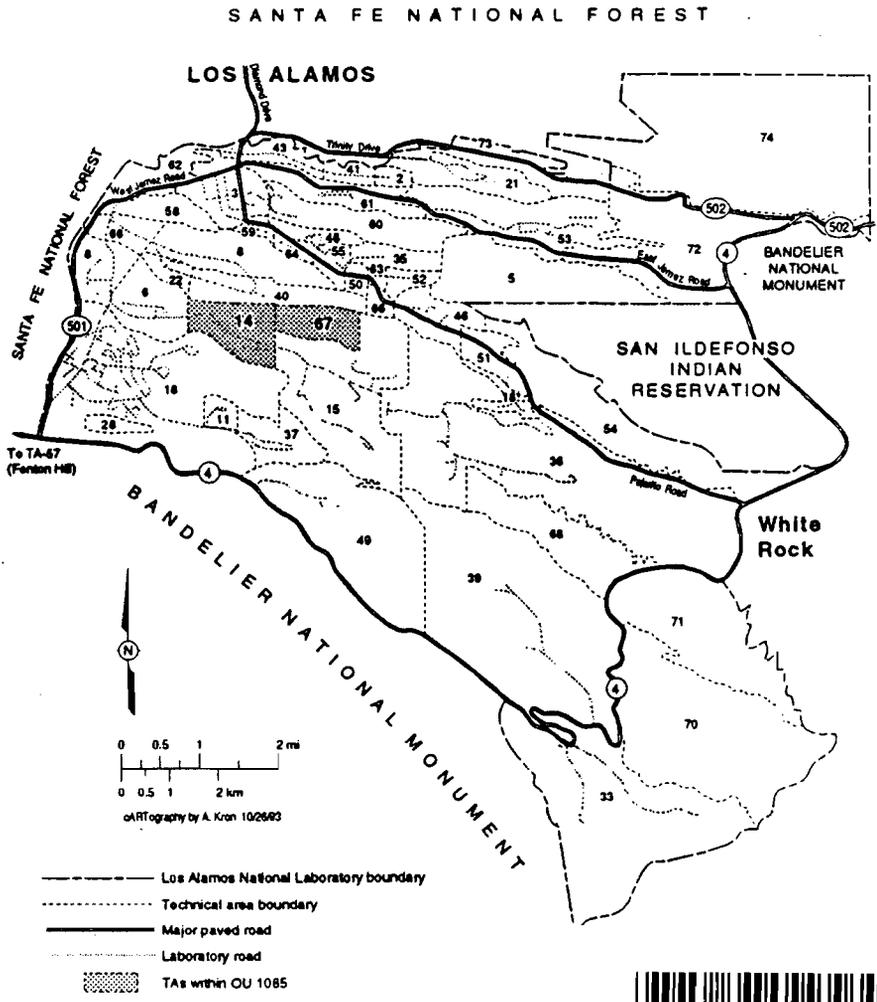
The primary purpose of the work plan is to satisfy the regulatory requirements of Module VIII of the Los Alamos National Laboratory's RCRA Part B Operating Permit. Its second purpose is to serve as a field sampling plan for personnel who will implement the RFI.

**Background**

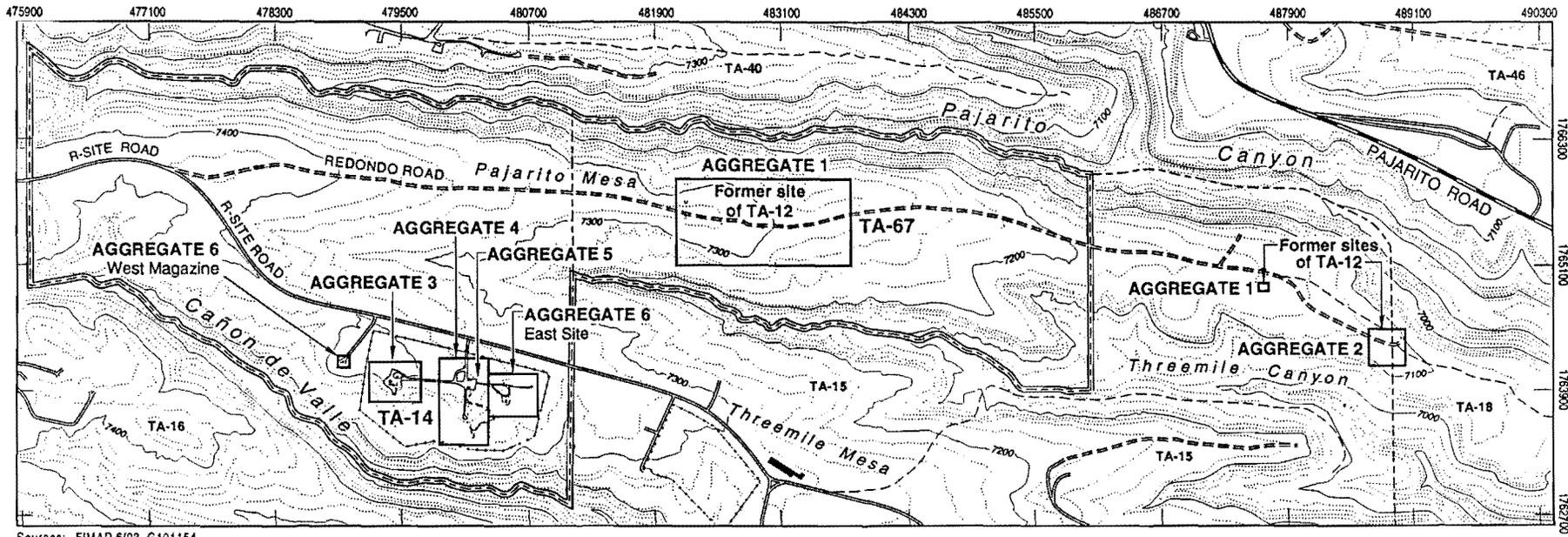
Operable Unit (OU) 1085 is located in the northwestern quadrant of the Laboratory complex. It lies near the head of Pajarito Mesa, which separates 180-ft-deep Pajarito Canyon on the north from 100-ft-deep Cañon de Valle on the south. Threemile Canyon, a tributary of Pajarito Canyon, originates in the OU and divides the mesa into two prongs. Technical Area (TA) 12 lies on the northern prong, and TA-14 lies on the southern prong. No prominent physical features mark the east or west boundaries. The OU is approximately 1.75 mi long and 0.7 mi at its widest point. The area is forested with ponderosa pine, piñon, and juniper.

Former TA-12, known as L-Site, was constructed in 1945 for the Explosives (X) Division. The site had several buildings associated with firing sites. The principal structure was a below-ground, steel-lined, firing pit (TA-12-4) used from 1945 to the mid 1950s. Material used at TA-12 firing sites included explosives, lead, and uranium-238. Two other major experiments were conducted at L-Site: in 1950, a radiation test involving a 1 000-Ci source of radioactive lanthanum, and in 1968, a mortar locator experiment using an acetylene gas gun.

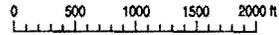
*TA-12 is inactive and was in 1967*



TL



Sources: FIMAD 6/93, G101154  
 FIMAD 5/94, G102166  
 FIMAD 5/94, G102190  
 Modified by: cARTography by A. Kron, 5/16/94



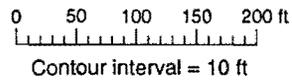
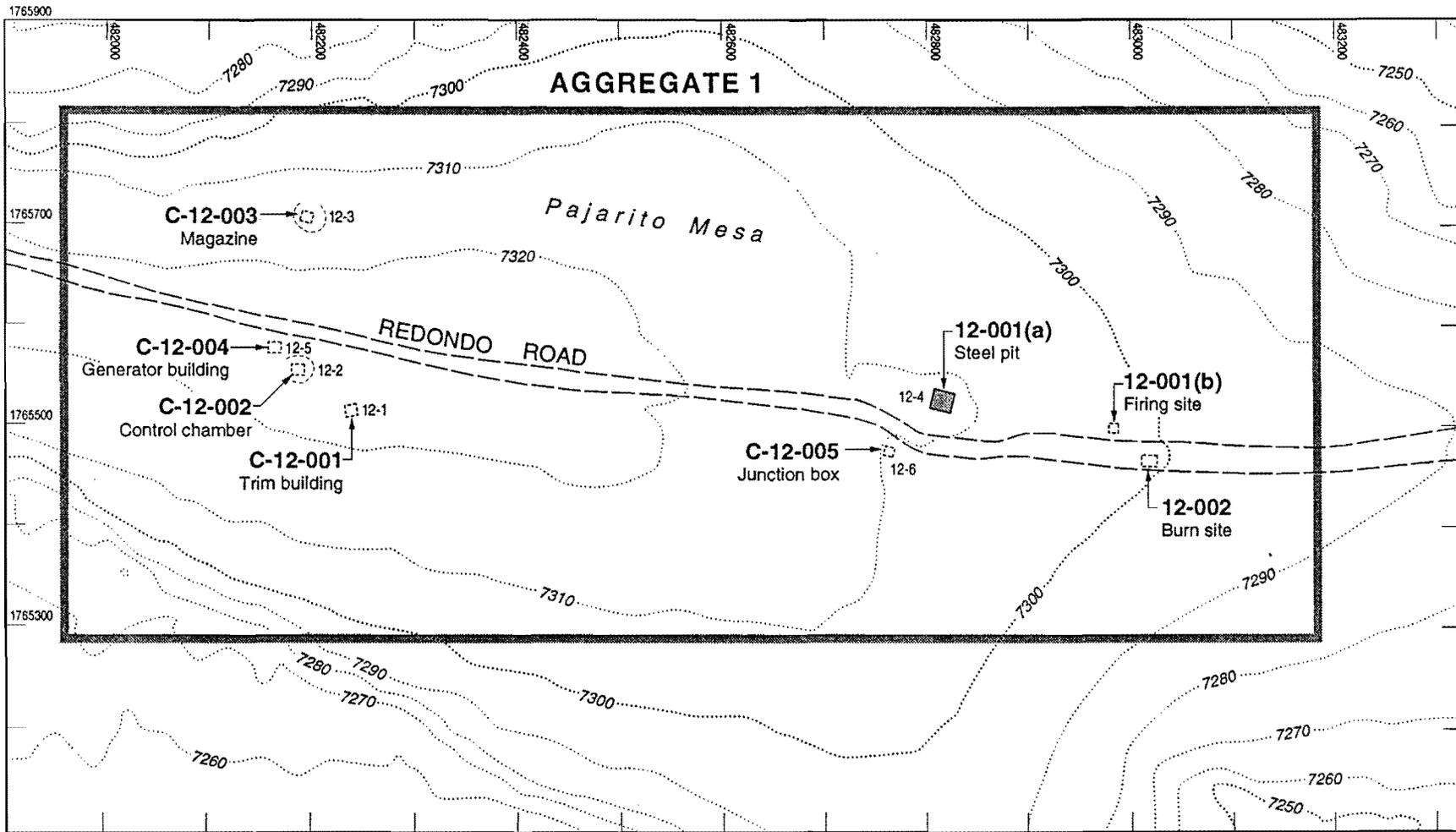
- Building or structure
- Major paved road
- Other paved roads
- Unimproved road
- Trail
- Fence
- TA boundary
- OU 1085 boundary
- Contour interval = 20 ft
- Aggregate location

*Pit 01-13 Vicinity  
 melted into  
 gravel area*

**Locations of PRS Aggregates in OU 1085.**

## TA-12: 'L' Site Background

- Site was active until 1953: Western area (SWMUs 12-001(a,b), 12-002, C-12-001–005), used as an overflow area for explosives testing; 12-003 used for gas-driven mortar; 12-004(a,b) used for  $\gamma$ -irradiation experiment in 1950.
- Main complex was a hexagonal, below-grade steel-lined firing pit (10.5' on a side x 11' deep) covered with a 20' x 22' x 5' high steel-lined cap. HEs found nearby (12-001(b))
- Historical use of the site is poorly documented
- All structures except 12-001(a), 12-004(a) were decommissioned by burning in 1960s
- Future Land Use: Industrial Control (Mixed-Waste Disposal Facility proposed site)

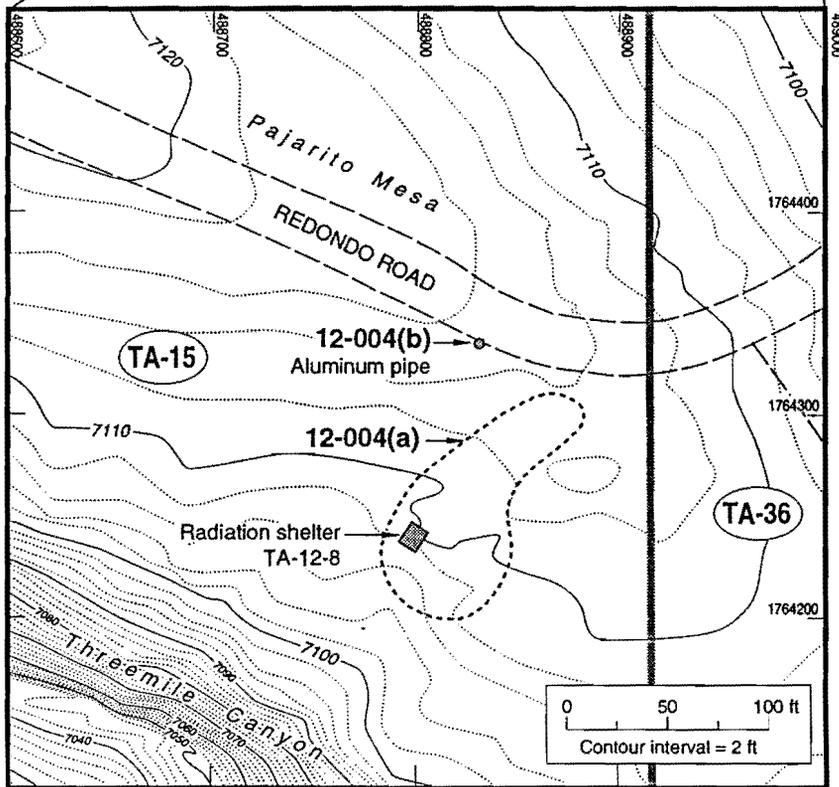
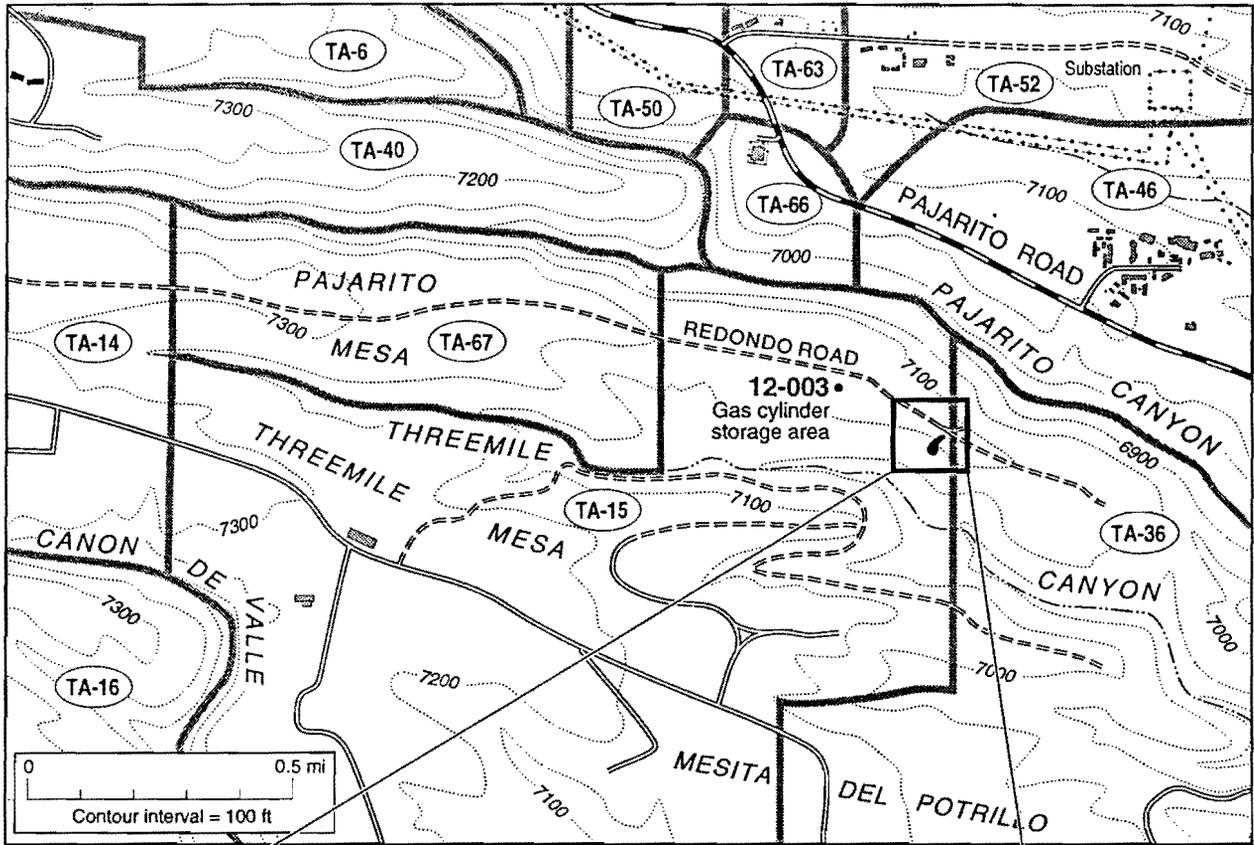


- Former structure
- Permanent structure
- Unimproved road
- "C"** Area of Concern (AOC)



Sources: FIMAD 1993 G101088  
 LASL 1950 ENG-R127  
 Modified by: cARTography by A. Kron 5/16/94

PRS locations in Aggregate 1—TA-12: Inactive Firing Sites.

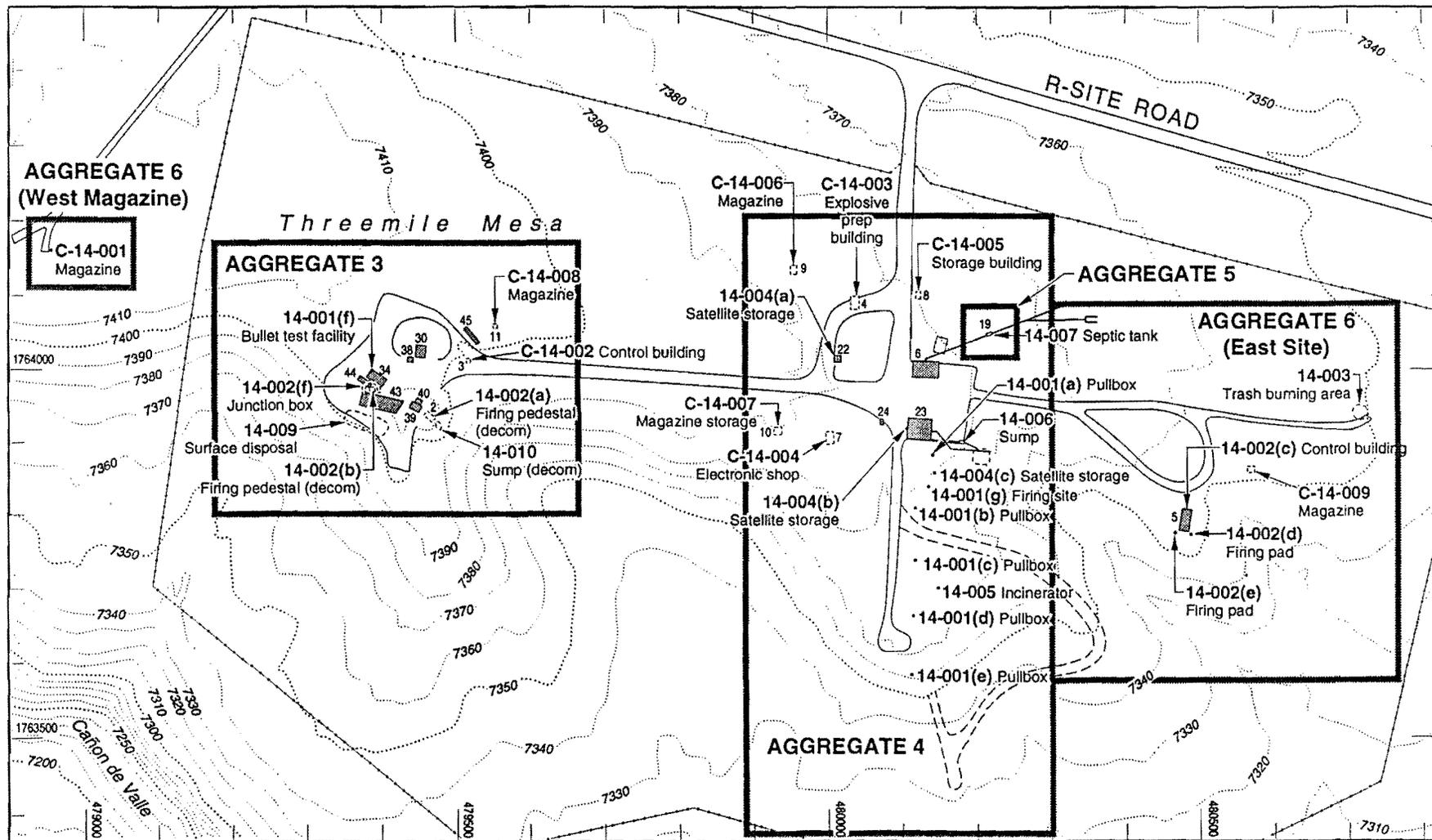


cARTography by A. Kron 5/16/94

Location of Aggregate 2—Radioactive Lanthanum Site.

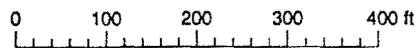
## TA-14 'Q' Site Background

- Site constructed in WWII and in continuous use for explosives development, including bullet impact on radioactive targets
- Eastern area (Aggregate 6) inactive closed firing site/control building
- Western area (Aggregate 3) is used for bullet impact experiments; rebuilt in 1968–70; majority of U, Be contamination is contained here
- Central area (Aggregates 4, 5) contains open and closed firing sites; is continually used for developmental testing of HEs. Likely HE contamination.
- Future Land Use: Continued Laboratory Operations



Sources: FIMAD 1993 G100991; LANL 1988, ENG-C45511  
 Modified by: cARTography by A. Kron 5/18/94

- |  |   |
|--|---|
|  Existing building or structure |  Fence                     |
|  Former building or structure   |  Pipeline and leach field  |
|  Paved road                     |  "C" Area of Concern (AOC) |
|  Unimproved road                |   |



Contour interval = 10 ft



PRS locations at TA-14.

# OU 1085 (TA-67/12, TA-14,)

## SUMMARY

- 29 SWMUs (Solid Waste Management Units), 15 AOCs (Areas of Concern); 11 HSWA SWMUs
- Contaminants of Concern: U, Be, Pb, High Explosives
- Proposed Disposition in FY94 Work Plan:
  - NFA (no further action): 6
  - Phase 1 Investigation/NFA: 16
  - Phase 2 Investigation/NFA: 3
  - VCA (Voluntary Corrective Action)/Remedial Action/Interim Measure: 2
  - Corrective Measures Study: 0
  - Deferred Action: 11