

ENTERED

M E M O R A N D U M

TO: File
FROM: Martyne Kieling
DATE : July 17, 1996
SUBJECT: **Tour of Southwest Test Area, OU 1335, including 14, 85, 91, 103, 117, 38, 6, 6A, and 54.**

A tour was conducted of the Southwest Test Area, OU 1335 on July 16, 1996 from 9:00 to 11:00 AM. The sites visited included RFI Work Plan Sites 14, 85, 91, 103, and 117; 4th round NFA Site 38; and 5th round NFA Sites 6, 6A and 54.

The tour was led by Bob Galloway (TL), Mike Young (ATL), and Skip Wrightson (ATL). NMED attendees of the tour included Ron Kern, William Moats, and Martyne Kieling.

Site 36 will be submitted in the 4th round NFA request in July 1996. Site 36 was an 1000 gal underground fuel oil tank that supplied heating fuel for Building 9926. Confirmatory sampling included one borehole through the middle of the former tank location. Two samples at 5 foot intervals were taken from below the tank depth and were found to be clean. In the process of Geoprobng the field crew encountered a drop cloth that looked like what is used to line the bottom of a UST excavation to mark the boundary of what had been removed and the clean fill dirt placed back in the hole. The tank was removed approximately 7 to 8 years ago. Ron Kern suggested that SNL notify the UST Bureau and try and get a clean closure letter from them to aid in the NFA process. The UST Bureau had not yet been created when this tank was pulled and usually does not handle tank pulls from that long ago. Thus, a closure letter may not be given.

Site 85 includes firing sites 1, 2, 3, and 4.

Site 85 firing site 1 was a small firing site shot area just west of a building some shots were on a steel plate outside the building others were further west on the dirt but east of the cable run boxes, and one or two tests were off the berm shot pad area to the north.

Site 85 firing site 2 (see Site 14)

SNL1032



SNL/ER/OU1335

Site 85 firing site 3 was a former inflatable building where very small explosive/DU mass balance tests were done. The building had a concrete pad and the floor was lined with a sheeting so the debris from the shot could be accounted for.

Site 85 firing site 4 was a large explosives area northwest of Building 9926. One test encased in DU suspended at approximately 75 feet did not go high order and scattered DU chunks around the site. Not all of the DU was accounted for after the test. A rad survey has found 2 additional DU fragments.

Site 14 is the shallow burial of the 8000 light bulb fragments from Site 85 firing site 2 that were too small to pick up and send to the landfill. The test and the burial took place in proximity to each other. This also coincides with a Rad anomaly that has been cleaned up. SNL feels that a portion of the burial pit has been remediated by the cleanup of the Rad soils. The Rad area is approximately 8 feet in diameter surrounding a pressure vessel that is approximately 3 feet in diameter. Site 14 (pit with glass/mercury) is thought to be at the same location.

Site 117, the sodium spray pits associated with the large melt facility have been found to contain a drum of elemental sodium. The primary hazard is elemental sodium and DU. An in house analysis for Gamma Spec and metals will be done.

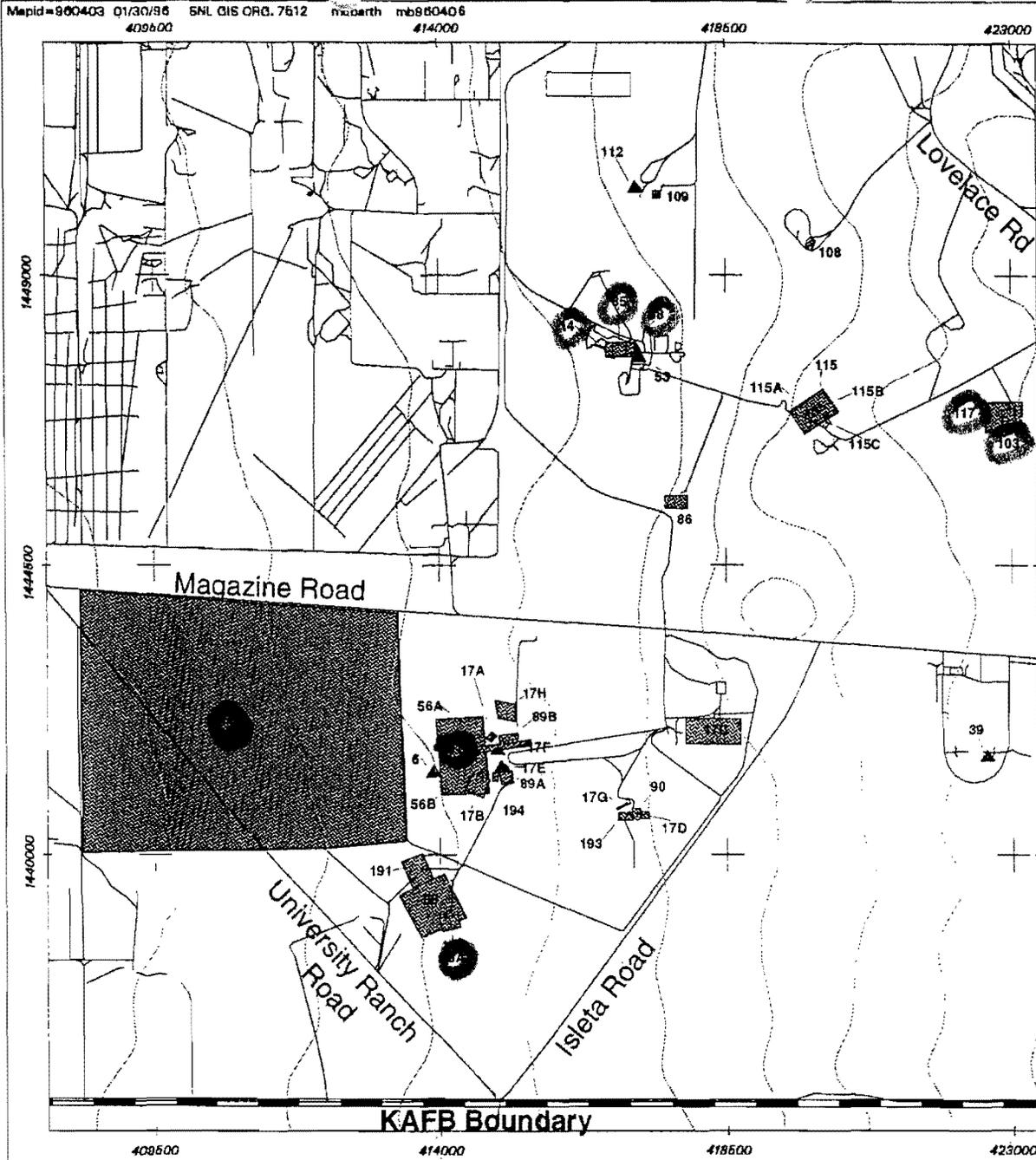
Site 103 has been found to contain several Rad area sources these have been addressed in the Rad VCM. In addition, an ethylene glycol leak from an underground line (approximately several 1000 gal.) is known to have happened. The pipeline will be investigated even though ethylene glycol is not a hazardous constituent. The soil will be analyzed for SVOC and gamma spec.

Site 91 was viewed from the tower. Lead cleanup levels to industrial were discussed. 2000 ppm lead is thought to be a high end number for industrial and that the state may suggest a lower number like 1000 ppm. A risk assessment is also planned to supplement the cleanup level. Work will begin 7-17-96 to pick up large lead debris by a walk over.

Site 6 and 6A were not visited. Will be proposed for August 5th round NFA.

Site 54 is the large explosive crater area that was created during the pickax tests for operation plowshare. No DU was used

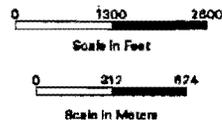
only uncased HE mainly TNT and RDX. Several craters have been tested for HE, the largest one that used 32,000 lb of RDX and the medium sized craters and trenches approximately 10 of these to get a feel for the worst case. No unexploded HE was left in place. If a charge did not go off, the workers replaced the fuse and then detonated the charge. All tests went high order. This site will be proposed for August 5th round NFA.



Legend

- Contours
- Roads
- Kirtland Boundary
- ▲ OU 1335 ER Sites < .1 acre
- OU 1335 ER Sites

Environmental Restoration GIS



Sandia National Laboratories, New Mexico
 Environmental Restoration Geographic Information System

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Figure 2.1-3
Locations of ER Sites in OU 1335