

SNL 2004



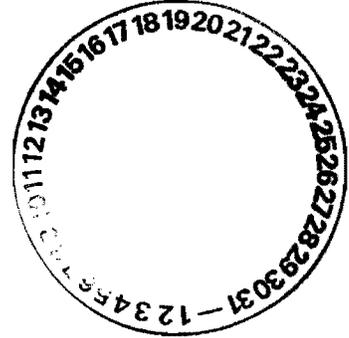
National Nuclear Security Administration  
Sandia Site Office  
P.O. Box 5400  
Albuquerque, New Mexico 87185-5400



MAR 1 0 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John E. Kieling, Manager  
Permits Management Program  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East  
Building 1  
Santa Fe, NM 87505



Dear Mr. Kieling:

On behalf of the Department of Energy (DOE) and Sandia Corporation, DOE is submitting new information regarding the operational history of solid waste management unit (SWMU) 28-2, a mine site identified as a SWMU under the Hazardous and Solid Waste Amendments Module of the Resource Conservation and Recovery Act Permit for Sandia National Laboratories, New Mexico (EPA ID No. NM5890110518).

The new information on SWMU 28-2 includes interview information, as well as a recently recovered map. The interviewees indicated that the mine was used only for a small number of explosive tests and possibly for the destruction of explosive waste. The map confirms that the mine was used as an explosive test site and was part of the Frustration Site seismic station tests. This information supports conclusions presented in the SWMU 28-2 No Further Action proposal (August 1995) and the response to the Request for Supplemental Information (May 1999).

If you have any questions, please contact John Gould at (505) 845-6089.

Sincerely,

Patty Wagner  
Manager

SNL1113



J. Kieling

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cc w/enclosures:

W. Moats, NMED-HWB (via Certified Mail)  
L. King, EPA, Region 6 (2 copies via Certified Mail)  
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C. Voorhees, NMED-OB, Santa Fe  
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## CERTIFICATION STATEMENT FOR APPROVAL AND FINAL RELEASE OF DOCUMENTS

Document title: Supplemental Information for SWMU 28-2, February 2004

Document author: Ed Mignardot, Dept. 6133

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to ensure 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 or imprisonment for knowing violations.

Signature: \_\_\_\_\_

*Peter B. Davies*

Director

Geoscience & Environment Center

Division 6100

Sandia National Laboratories/New Mexico

Albuquerque, New Mexico 87185

Operator

2/23/04

Date

and

Signature: \_\_\_\_\_

*Patty Wagner*

Manager

U.S. Department of Energy

National Nuclear Security Administration

Sandia Site Office

Owner and Co-Operator

3/17/04

Date

## **Supplemental Information Concerning SWMU 28-2, Mine Shaft**

The purpose of this transmittal is to provide supplemental information to address New Mexico Environment Department concerns about operational activities at the Solid Waste Management Unit (SWMU) 28-2 mine shaft. In early 2003 a search was conducted to identify current and former Sandia National Laboratories employees with knowledge concerning activities conducted at the SWMU 28-2 mine. A literature search was also conducted in an attempt to find information on past operational activities at this mine. Of 16 people interviewed, three had direct knowledge of operational activities at SWMU 28-2 (Attachment A). In addition to knowledge gained through these interviews, a map was discovered that identified the SWMU 28-2 mine as an "explosive test site" and part of the Frustration Site (SWMU 67) where seismic testing was conducted (Attachment B).

As stated in the interviews, this mine was primarily used for explosives testing to study shock wave phenomena. According to one of the interviewees, the concrete block in the interior of the mine was used to "block off and contain" the explosion. The testimony of the interviewees along with the information on the map presented in Attachment B indicates that SWMU 28-2 was used primarily for explosive testing in support of shock wave and seismic research. There is no evidence that indicates this mine was used for anything other than explosives work.

## ATTACHMENT A

### OPERATIONAL HISTORY OF SOLID WASTE MANAGEMENT UNIT 28-2 MINE FOOTHILLS TEST AREA

Below are the results of the interviews that were conducted with former SNL/NM staff to obtain additional information about the operational history of the SWMU 28-2 mine. In summary, the interviewees indicated that the mine was used only for a small number of explosive tests and possibly destruction of explosives waste. Of the 16 people interviewed, three had direct knowledge of the mine and its operational history, as described below:

#### First Interviewee

- Conducted hands-on explosives testing at the mine.
- Entered the mine on a few occasions for testing activities.
- Described mine tunnel extending approximately 30 feet, then turning right, and maybe turning left.
- Described one test conducted at the mine that involved explosives used to experiment with shock-wave phenomena. Before the test, sandbags were placed in the mine to protect wires connected to a plunger box used to set off the explosives.
- Described concrete block or wall used to block off and contain the explosion.

#### Second Interviewee

- Entered the mine on two or three occasions.
- The first 15 to 20 feet of the tunnel were large enough to walk in, and then the shaft became smaller towards the back. In addition, the front of the mine was partially collapsed.
- Explosives were destroyed inside the mine. At least five or six occurrences took place.
- The purpose of using the mine for explosives destruction was to contain the expended materials. In addition, small rockets were destroyed inside the mine.
- Not involved with the placement of the waste explosives inside the mine although he recalls that they placed the explosives past a 45-degree turn in the tunnel, far inside the mine.
- The purpose of the sandbags in the mine were to act as blast deflectors, to support items (e.g., cameras), and to serve as a surface on which to place explosives to mitigate damage to the mine, which ruptured the sandbags.
- Does not recall a concrete block inside the mine.

#### Third Interviewee

- The mine tunnel was used as a shock-tube tunnel, where explosives were placed well inside the mine.

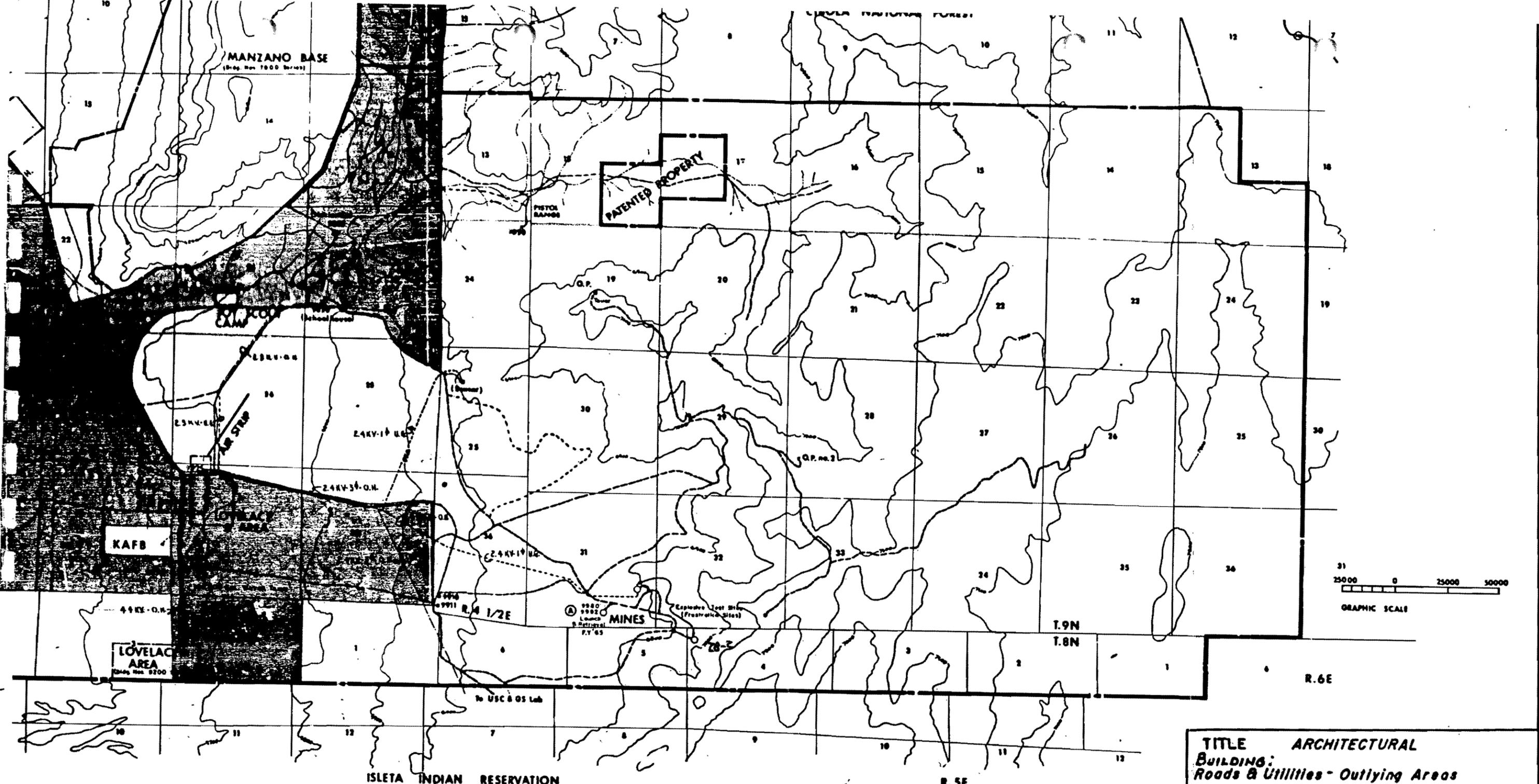
## ATTACHMENT B

### ADDITIONAL MAP INFORMATION ON SWMU 28-2 MINE

Additional information on the SWMU 28-2 mine has been found since SNL/NM's response to the SWMU 28 request for supplemental information (RSI) submission (SNL/NM May 1999). The attached map entitled, "Sandia Corporation Architectural Map 83563, Building: Roads & Utilities—Outlying Areas, May 23, 1963," labels the SWMU 28-2 mine as an "explosive test site" and identifies it as one of two "Frustration Sites."

This information provides supporting evidence that activities conducted at the SWMU 28-2 mine were in support of the seismic testing conducted at the Frustration Site, SWMU 67.

The map confirms the conclusions reached in the SWMU 28 proposal for no further action (SNL/NM August 1995) and response to the RSI, which were based upon interviews, visual inspection of the mine conditions, and sampling results. This map verifies two important facts. First, the SWMU 28-2 mine was used as an "explosive test site." Second, the mine was part of the Frustration Site seismic station tests.



<b>TITLE</b>		<b>ARCHITECTURAL</b>	
<b>Building: Roads &amp; Utilities - Outlying Areas</b>			
<b>LOCATION</b>		<b>MAPS</b>	
<b>DRAWN</b>	<b>SIGNATURE</b>	<b>DATE</b>	<b>SANDIA CORPORATION PLANT ENGINEERING DEPT.</b>
<b>CHECKED</b>	<i>F. J. Morris</i>	5/23/63	
<b>APPROVED</b>			
<b>APPROVED</b>			
<b>APPROVED</b>			
		<b>DATE</b> MAY 23, '63	<b>DRAWING NO.</b>
		<b>SCALE:</b> Noted	<b>83563</b>

83563

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PK