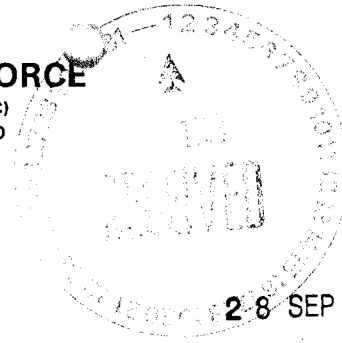




DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 49TH FIGHTER WING (ACC)  
HOLLOMAN AIR FORCE BASE, NEW MEXICO



Stu

MEMORANDUM FOR WHITE SANDS MISSILE RANGE

Attn: Thomas A. Ladd

STEW-SNRES

White Sands Missile Range, NM 88002-5048

FROM: 49 CES/CEVR

550 Tabosa Avenue

Holloman AFB, NM 88330-8458

SUBJECT: Voluntary Corrective Action (VCA) at Holloman AFB (HAFB) 20,000-Pound Open Detonation Unit (ODU)

1. HAFB has performed VCA at its 20,000-Pound ODU to rectify inconsistencies within the original permit regarding the actual location of the ODU. The VCA consisted of confirmation soil samples of the northern area of the unit, which extended on to White Sands Missile Range (WSMR) property, and covering this area with soil to match surrounding topography.
2. The ODU permit requires grading of the ODU and upkeep of the berm after each detonation event. Meeting these permit requirements, HAFB Explosive Ordnance Disposal personnel inadvertently extended the perimeter of the bermed area from approximately 150 feet in diameter to an area approximately 250 feet east to west by 450 feet north to south. This area was extended north from the original location of the ODU because of the additional area available in the northern portion of the fenced zone. Due to this expanding, the unit extended on to WSMR property by approximately 150 feet.
3. The VCA of this area has reduced the size of the unit to initially designed dimensions and configuration. HAFB recently completed confirmation sampling of the northern area. The location and analytical results of the samples are shown on the attached map and table (Atchs 1 and 2, respectively). Sample results show the area to be at or below background levels determined by the Background Study for the 20,000 pound ODU. The VCA consisted of covering this area with approximately 6 inches of local soil material to match surrounding grade. The ODU is currently located solely on HAFB property. HAFB also relocated the fence to correspond with the HAFB and WSMR boundary, eliminating the possibility of future migration of the unit.

4. If you have any questions or require additional information, please contact Drew Lessard at (505) 475-5177.

  
HOWARD E. MOFFITT  
Deputy Base Civil Engineer







Attachments:

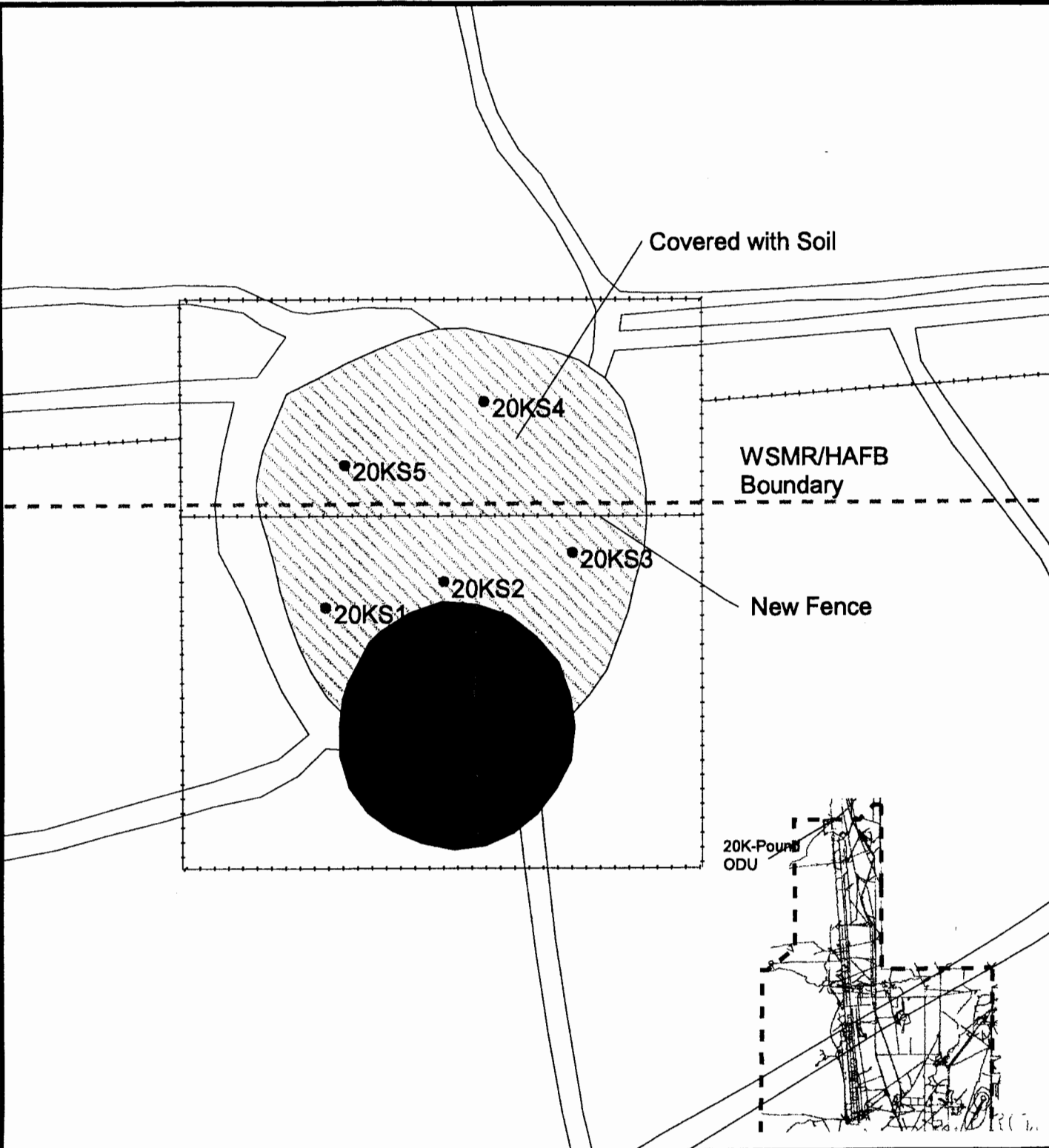
1. Map of HAFB 20,000-Pound Open Detonation Unit
2. Confirmation Sample Analysis Result for 20,000-Pound Open Detonation Unit

cc w/ Atch:

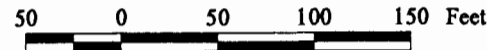
Attn: Mr. Robert S. (Stu) Dinwiddie  
Hazardous and Radioactive Materials Bureau  
2044 Galisteo  
P.O. Box 26110  
Santa Fe NM 87502

# HAFB 20K-Pound Open Detonation Unit (ODU)

-  Boundr97.shp
-  Sample Points
-  20K-Pound ODU
-  20KODUNEW
-  20KODUOLD
-  Roadedge.shp



Prepared 21 September 1998 by:  
 Drew Lessard, 49 CES/CEV  
 505 475-5177



**INSTALLATION RESTORATION PROGRAM**  
 Holloman Air Force Base, NM

Managed by the IRP Office - (505) 475-5177

A7ch 1

# Holloman AFB VCA soil confirmation results

Sampled 10 Jul 98

Parameter	Soil Sample Number					Units	Background Study UTLs	Units
	20KS-1	20KS-2	20KS-3	20KS-4	20KS-5			
Antimony	2.2 B	2.6	2.4	2.2 B	2.5	mg/kg	7.2844	mg/kg
Arsenic	1.4 B	1.3 B	ND	1.1 B	1.4 B	mg/kg	36.8833	mg/kg
Barium	33.7	28.0	50.9	39.0	35.2	mg/kg	84.3632	mg/kg
Beryllium	0.34	0.34	0.46	0.36	0.36	mg/kg	0.4000	mg/kg
Cadmium	ND	ND	ND	ND	ND	mg/kg	1.0359	mg/kg
Chromium	3.1	2.7	5.4	4.0	3.6	mg/kg	6.6049	mg/kg
Copper	4.0	2.2 B	4.8	3.6	4.1	mg/kg	4.8438	mg/kg
Lead	2.1	1.7	3.4	2.6	2.9	mg/kg	—	mg/kg
Mercury	ND	ND	ND	ND	ND	mg/kg	--	mg/kg
Nickel	1.9 B	2.1 B	4.1 B	2.6 B	2.5 B	mg/kg	5.6125	mg/kg
Selenium	1.5	ND	1.5	0.54	ND	mg/kg	10.5310	mg/kg
Silver	ND	ND	ND	ND	ND	mg/kg	0.7342	mg/kg
Nitroglycerin	ND	ND	ND	ND	ND	µg/g	5.0*	µg/g
PETN	ND	ND	ND	ND	ND	µg/g	1.0*	µg/g
RDX	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
HMX	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
Tetryl	ND	ND	ND	ND	ND	µg/g	0.50*	µg/g
1,3-Dinitrobenzene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
Nitrobenzene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
2,4,6-Trinitrotoluene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
2-Nitrotoluene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
3-Nitrotoluene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
4-Nitrotoluene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
1,3,5-Trinitrobenzene	ND	ND	ND	ND	ND	µg/g	0.25*	µg/g
Percent Moisture	13.1	12.9	12.9	11.8	10.6	%	N/A	%

\* - Reporting Limit

B - Estimated Result, less than Reporting Limit