



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

SEP 22 1994

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File LAM

Mr. William K. Honker, Chief
 RCRA Permits Branch
 U. S. Environmental Protection Agency
 Region 6
 1445 Ross Avenue, Suite 1200
 Dallas, Texas 75202-2733

Dear Mr. Honker:

Enclosed is the response to the Environmental Protection Agency's List of Modifications to the response on the Notice of Deficiency on the RFI Work Plan for Operable Unit 1111. A signed certification statement regarding this response is also enclosed.

If any questions arise, please call me at (505) 665-7203, or Mike Gilgosch, Scientech, at (505) 667-5794.

Sincerely,

Theodore J. Taylor
 Program Manager
 Environmental Restoration
 Program

LAAMEP:9TT-025

Enclosure

cc:
 See page 2



2907

TK

William K. Honker

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Bennett
SEP 22 1994

cc w/enclosure:

Ms. Kathleen Sisneros
New Mexico Environment Department
1190 St. Francis Drive
P. O. Box 26110
Santa Fe, New Mexico 87502
E. Merrill, EM-452, HQ
T. Taylor, AAMEP, LAAO
B. Swanton, NMED-AIP, LANL,
MS-J993
J. Levings, ERPO, AL

cc w/o enclosure:

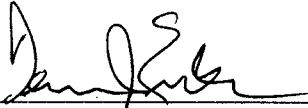
W. Spurgeon, EM-452, HQ
K. Schenck, Scientech, LAAO
M. Gilgosh, Scientech, LAAO
C. Rofer, EES-1, LANL, MS-D462
T. Baca, EM, LANL, MS-J591
J. Jansen, EM/ER, LANL, MS-M992
D. Garvey, ESH-8, LANL, MS-K490
RPF, LANL, MS M707

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 the Environmental Protection Agency's (EPA) Draft
List of Modifications on the Notice of Deficiency (NOD) Response
for Operable Unit (OU) 1111

Name:  Date: Sept. 29, 1994
Dennis Erickson
Division Director
Los Alamos National Laboratory

Name:  Date: 9/22/94
Joseph Vozella, Chief
Environment, Safety, and Health Branch
DOE-Los Alamos Area Office

**LANL Response to Draft List of Deficiencies
Operable Unit 1111**

1. *LANL's response to deficiency 6.a.ii, 7.a.i, 10.a was unsatisfactory. LANL needs to include a narrative describing the various details of the piping. Information such as the dimensions of the piping, the material composition, age, how the piping was connected is important information in evaluating the potential for leakage from the system.*

If contaminants are found above health-based risk levels at the outflow areas of these systems, further investigation will be proposed in the RFI Report. In that proposal, the piping will be addressed and available information such as the dimensions of the piping, the material composition, age, how the piping was connected will be included in the evaluation of the situation and proposal for further investigation.

2. *LANL's response to deficiency 6.a.iii and other portions of the NOD response related to compositing of samples were unsatisfactory. The compositing of samples for these areas is not acceptable, and discrete samples should be collected. If composited samples have already been collected at risk then LANL will be required to resample the areas. EPA has repeatedly indicated that compositing samples is not an acceptable sampling approach.*

We will resample and collect discrete samples. The following section replaces the section titled *Stained Area*, under Section 5.2.4, pp. 5-20 to 5-21.

Stained Area. The stained area is divided into three units for sampling (Figure 5-5).

In S1, three evenly spaced samples will be collected from the drainage area at each depth. Six evenly spaced samples will be collected from the pond at each depth.

In S2, three evenly spaced samples will be collected from the drainage area between the pond and the wagon road; at least one will be collected at the point where the drainage area and the wagon road meet. These samples will be collected at each depth. Three samples will be collected along the wagon road at each depth; at least one will be collected where the drainage area meets the wagon road. Sample locations in the wagon road will be biased toward the outer edge of the road where staining is heaviest.

In S3, eight soil samples will be collected at each depth in the drainage area below the wagon road.

The following section replaces the section titled *Unstained Area*, under Section 5.2.4, p. 5-21.

Unstained Area. Sample locations will be evenly spaced in the unstained area (Figure 5-5) along lines that parallel the stained area at a distance between 1 and 5 ft in unit U1.

3. *LANL's response to deficiency 6.b.ii was insufficient. Soil borings in the pond area should at a minimum go to 5 feet. If this is not feasible LANL should provide an explanation; otherwise LANL should provide a revised sampling plan indicating the position of the deeper borings.*

One boring, 8 feet deep, has been taken in the pond area. Soil (sediment) was found to a depth of 4 feet, followed by about 1 foot of weathered tuff and 3 feet of unweathered tuff. At a depth of about 8 feet, an extremely hard layer of welded tuff was encountered. This layer could not be penetrated with the drill rig in use.

4. *Figures provided in the August 1, 1994 additional response do not indicate SWMU numbers. Figures should be revised and resubmitted.*

Revised figures are enclosed with this response.

T2

5. *Response 7.d Figure 5-11, p. 5-36 - LANL should sample the media under a sump if mixed waste is present in the sump. The material under the sump may not be mixed, and LANL should make this determination independent of the availability of capacity for mixed waste disposal. This additional knowledge will assist in long term waste management. A determination concerning sampling under the sump should be made following receipt of analytical results from samples inside the tank.*

The second paragraph of LANL's response is not entirely correct. If solvents or listed wastes which were used in various processes and were discarded to sumps or septic tanks then the septic tank or sump could be considered to have managed hazardous waste and therefore is a regulated unit.

On the basis of process history, we believe that the probability of finding mixed waste in or under the sumps is vanishingly small and that removal of inactive sumps will proceed expeditiously. A determination concerning sampling under the sump will be made following receipt of analytical results from samples inside the tank.

Second part of comment noted.

6. *Response 7.e.ii, Table 5-8, p. 5-39 - The sludges for sumps 22-015(b) and 22-015(d) should be analyzed for volatile organics (SW 8240).*

We concur and will analyze those sludges for volatile organics.

7. *Response 7.e.iii, Active Sumps - LANL should provide the dates for deactivation and removal of these sumps. EPA can then evaluate whether or not to wait on additional sampling.*

LANL is proceeding to decommission most outfalls. Decommissioning of NPDES outfall 128, from the treatment facility in Building TA-22-91 (SWMU 22-013, recommended for NFA), is now in progress. The outfall from SWMU 22-014(a) has been plugged; outfalls from 22-014(b) and 40-005 will be plugged as soon as funds for this purpose are available, probably in FY 1995. These three sumps will continue in use as catchment basins, and their contents will be pumped out as required. The complete decommissioning of these sumps has not yet been scheduled.

8. *Response 10.c.i and ii - See deficiency #5 above.*

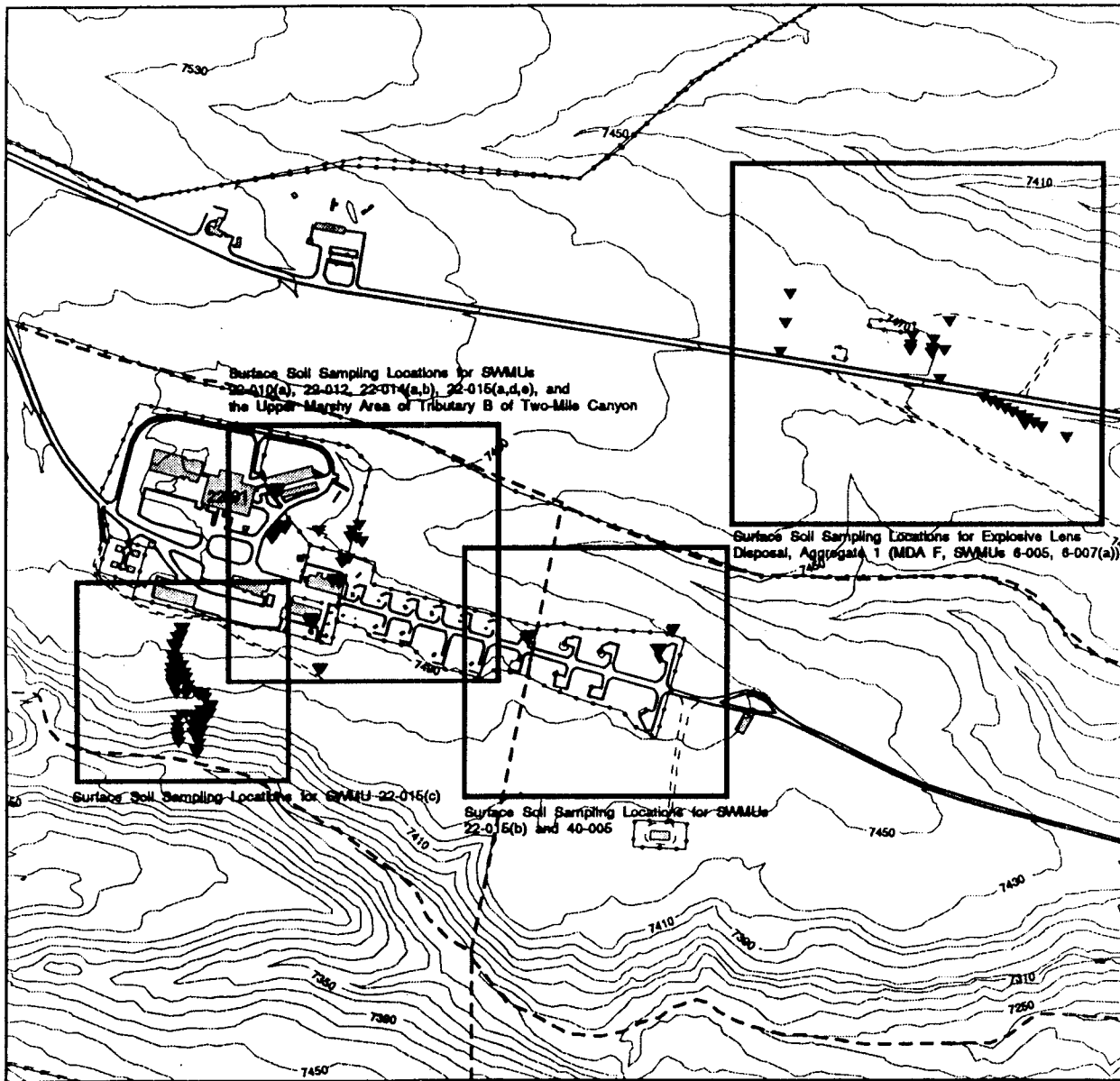
See response to deficiency #5 above. On the basis of process history, the probability of finding mixed waste in or under the septic tanks is slightly higher than for the sumps, but still is extremely small.

9. *Response to 10.d. - EPA stands by its original deficiency. EPA may require additional sampling or monitoring even if no further action is necessary at the unit at this time.*








Comment noted.

10. *Response to 10.e.ii - LANL should take a sample at least five feet in depth in these leach fields even if this is in the tuff.*

Samples have been taken in all leach fields to depths of as much as 15 feet.



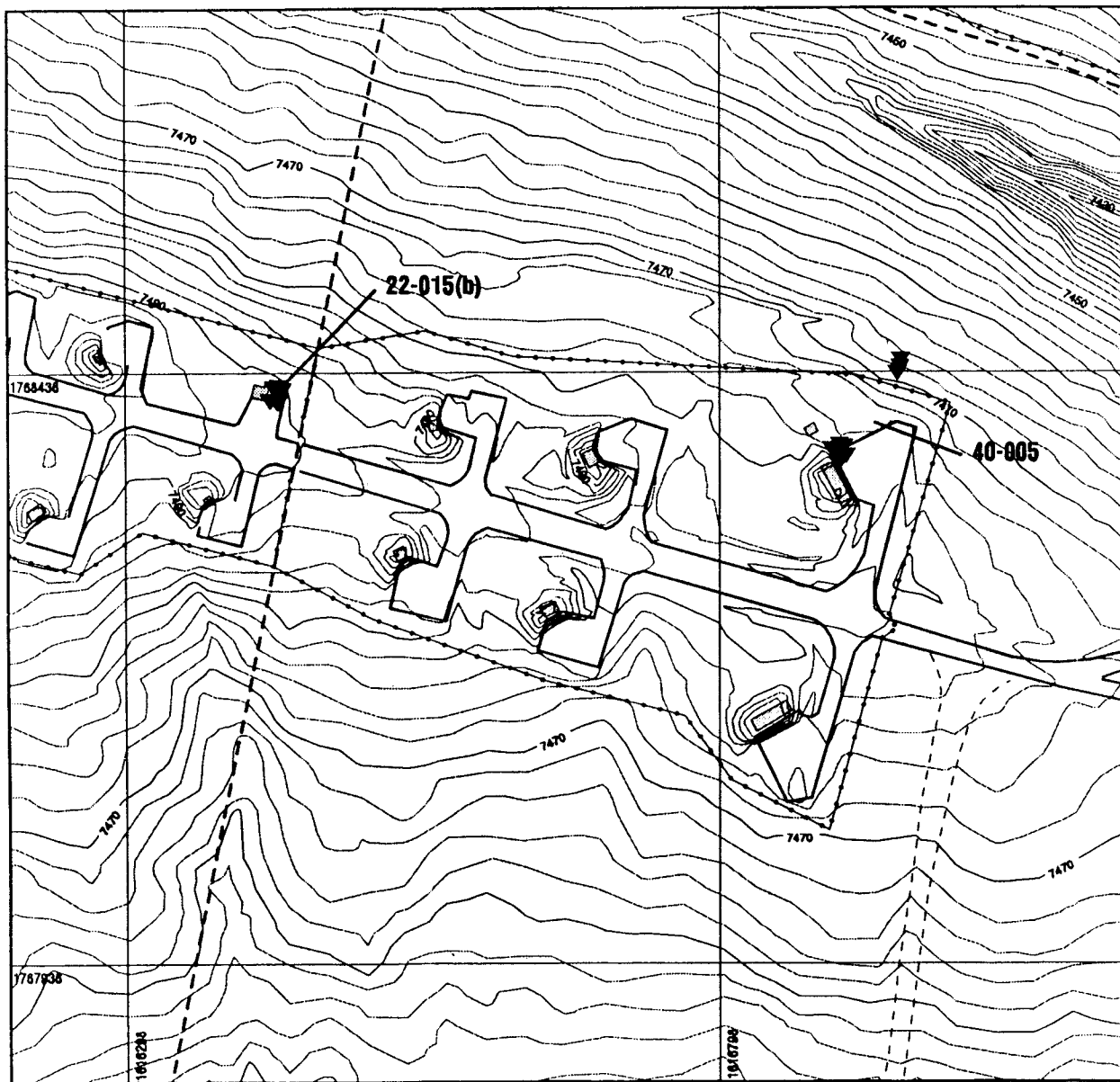
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-  Fence
-  Paved Road
-  Road/Trail
-  Building
-  Sample Location









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Index Showing Soil Sampling Locations



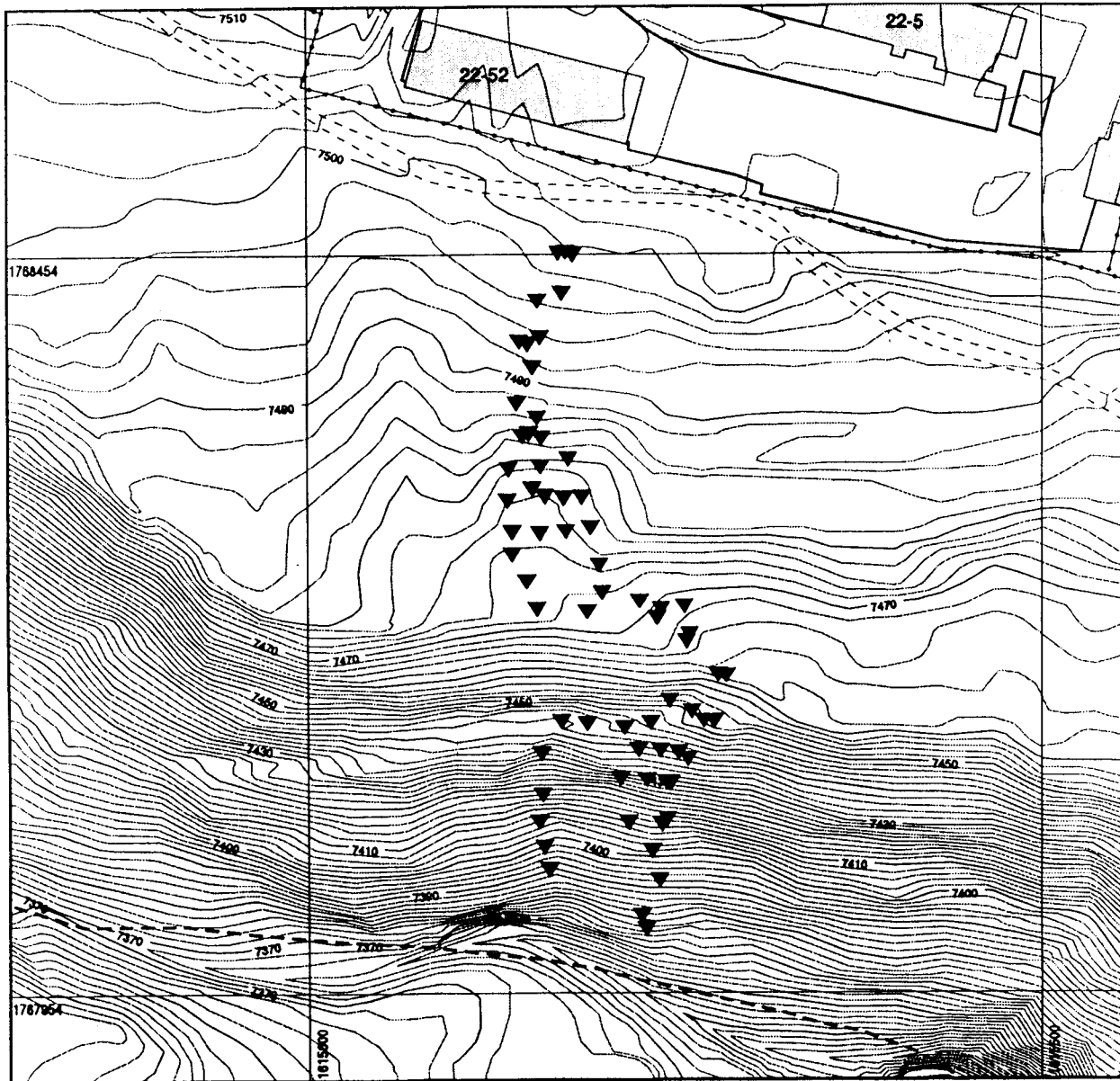
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-  Sample Location



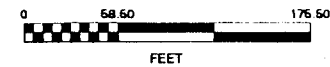
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FIMAD
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Surface Soil Sampling Locations for SWMUs 22-015(b) and 40-005



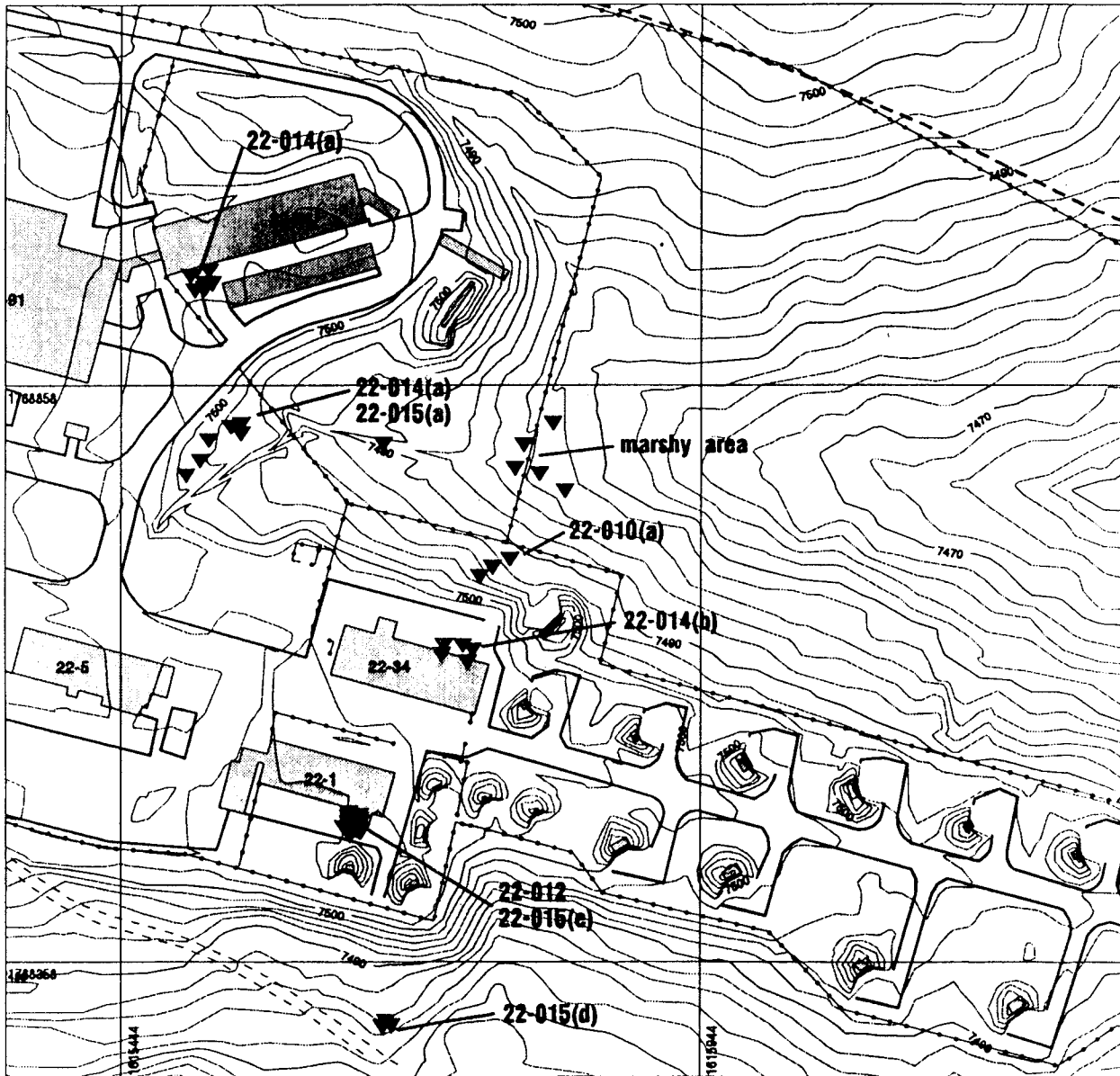
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-  Fence
-  Paved Road
-  Road/Trail
-  Building
-  Sample Location



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 Produced by: Elizabeth Zeiler
 Date: September 06, 1994 FIMAD ID: G102516

Surface Soil Sampling Locations for SWMU 22-015(c)



LEGEND

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- Contours, 10 ft
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- Paved Road
- Road/Trail
- Building
- Sample Location



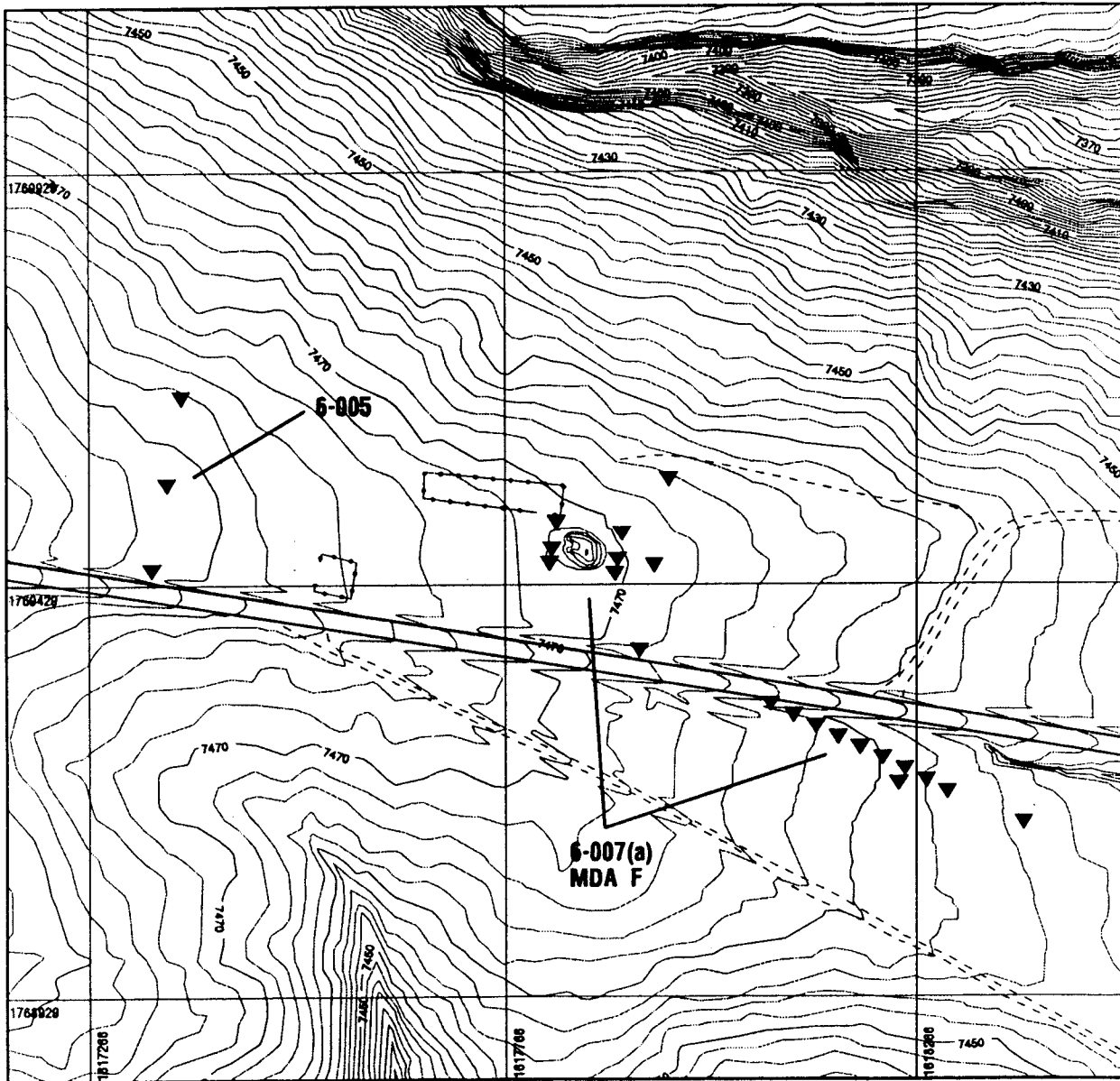
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

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Date: September 13, 1994 FIMAD ID: G102522

Surface Soil Sampling Locations for SWMUs 22-010(a), 22-012, 22-014(a,b), 22-015(a,d,e), and the Upper Marshy Area of Tributary B of Two-Mile Canyon



LEGEND

-  Boundary, Technical Area
-  Contours, 2 ft
-  Contours, 10 ft
-  Fence
-  Paved Road
-  Road/Trail
-  Building
-  Sample Location



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 Map Coordinates in New Mexico State Plane Feet
 Grid Interval, in feet: 500
 Feet per inch on map = 210
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Surface Soil Sampling Locations for Explosive Lens Disposal, Aggregate 1
 (MDA F, SWMUs 6-005, 6-007(a))