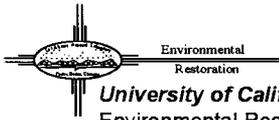


Barbara



University of California
Environmental Restoration Project, MS M992
Los Alamos, New Mexico 87545
505-667-0808/FAX 505-665-4747



U. S. Department of Energy
Los Alamos Area Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
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FILE HSWALANL TA-36-001



Date: August 15, 1996
Refer to: EM/ER:96-439



Mr. Benito Garcia
NMED - HRMB
P.O. Box 26110
Santa Fe, NM 87502

SUBJECT: INTERIM ACTION REPORT FOR TA-36, PRS 36-001, MDA AA ACTIVITIES

Dear Mr. Garcia:

Enclosed please find two copies of the Interim Action Completion Report for Technical Area 36, Potential Release Site (PRS) 36-001, Material Disposal Area AA cleanup activities completed in Fiscal Year 1996.

The Department of Energy has reviewed and approved this. The approval form is attached to the report.

If you have any questions, please call Gene Gould at (505) 667-0402 or Everett Trollinger at (505) 667-5801.

Sincerely,

Jorg Jansen
Jorg Jansen, Program Manager
LANL/ER Project

Sincerely,

Theodore J. Taylor
Theodore J. Taylor, Program Manager
DOE/LAO

JJ/TT/bp

- Enclosures: (1) Interim Action Report for TA-36, PRS 36-001, MDA AA
(2) DOE Approval Form



TL

Mr. Benito Garcia
EM/ER:96-439

-2-

August 15, 1996

Cy (w/ encs.):

S. Anderson, NMED-AIP, MS J993
D. Neleigh, EPA, R.6, 6PD-N (2 copies)
G. Gould, ESA-EPE, MS G787
D. Griswold, AL- ERD, MS A906
J. Harry, EM/ER, MS M992
B. Hoditschek, NMED-HRMB
N. Naraine, DOE-HQ, EM-453
M. Shaner, CIO, MS A117 (2 copies)
T. Taylor, LAAO, MS A316
E. Trollinger, LAAO, MS A316
N. Weber, NMED-AIP, MS J993
J. White, ESH-19, MS K490
S. Yanicak, NMED-AIP, MS J993
RPF, MS M707

Cy (w/o encs.):

T. Baca, EM, MS J591
D. Bradbury, EM/ER, MS M992
T. Glatzmaier, DDEES/ER, MS M992
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J. Levings, AL-ERD, MS A906
W. Spurgeon, DOE-HQ, EM-453
J. Vozella, LAAO, MS A316
K. Zamora, LAAO, MS A316
EM/ER File, MS M992

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**Interim Action
Completion Report
for**

**Potential Release Site
at TA-36**

36-001, MDA AA

Field Unit 2

**Environmental
Restoration
Project**

July 1996

**A Department of Energy
Environmental Cleanup Program**

Los Alamos
NATIONAL LABORATORY

LA-UR-96-2759

Interim Action Completion Report Potential Release Site 36-001 MDA AA

1.0 INTRODUCTION

MDA AA (PRS 36-001) is located within former OU 1130, TA-36, in Potrillo Canyon (Figures 1-1 and 1-2). The site consists of former trenches used for the disposal of high explosive (HE) test shot debris. Disposal operations at the site included unloading debris from shot residues into an open trench; burning the debris; and applying a soil cover approximately 3 to 4 ft thick after a trench area was filled with burned debris. The debris consisted of metals, plastics, wood, and sand—all possibly contaminated with HE, barium, uranium, and RCRA metals.

During the 1995 field season, the approximate trench boundaries were delineated and the trench materials were sampled. Two major trench areas—northern and southern—were identified (Figure 1-3). The eastern boundaries of the trenches were found to approach the Lower Slobbovia drainage culvert. Walk-through surveys along the drainage culvert were performed to determine if trench debris was exposed and migrating offsite. No evidence of ash or debris materials was noted in the culvert. However, the survey revealed that numerous erosion channels extend from the culvert towards the trenches. The section of the Lower Slobbovia drainage culvert adjacent to the southern trench exhibited the greatest erosion. Three erosion channels extending from this section of the culvert towards the southern trench pose an immediate threat to the integrity of trench soil cover. One channel was found to be within 3 ft of buried debris (Figure 1-3).

Although numerous erosion channels were identified in the northern trench area, the trench is presently not threatened because of its westerly orientation and the reduced erosion processes occurring within this section of the Lower Slobbovia drainage culvert.

An interim action (IA) was conducted at MDA AA to provide a long-term, low-maintenance solution to erosion of the eastern edge of the site. The final site remedy (addressing all potential migration and exposure pathways) will be determined following EPA's response to the RFI report of June 1996.

2.0 INTERIM ACTION

The IA was started May 6 and completed May 16, 1996. The purpose of the IA was to reduce the potential for future erosion in those channels that pose an immediate threat to the soil cover overlying the trenches. The three erosion channels at the southern trench area (identified in the walk-through survey) were the focus of the action. A low-cost, long-term solution to reduce the erosion by surface water runoff was to fill the channels with cobble. The cobble fill serves to slow movement of storm water and to allow suspended sediments to settle out.

Initially, the field team lined the channels with 17-gauge wire mesh (Photo 1). The wire mesh extended several feet beyond the east and west ends (length) of the channels. Cobble (2 to 8 in. diameter) was placed at the ends of the channel. The wire mesh extensions were folded over the applied cobble and across the middle portion of the channel. This created cobble and wire mesh dams at the entry and exit of the channels (Photo 2). Cobble was then applied to the middle of the channel, on top of the layers of wire mesh. Using this method, the cobble was stabilized and secured without using stakes, which could be dislodged by storm water runoff (Photo 3). Deviations from the plan were limited to using remaining supplies and cobbles collected from the culvert to pack additional erosion channels. These channels do not pose an immediate threat to MDA AA; however, nominal costs (1 to 2 hours of labor) were incurred by including the additional channels (Figure 1-3) (Photo 4).

3.0 Monitoring and Confirmatory Sampling

The IA required no sampling or monitoring.

4.0 Inspection and Maintenance

Using cobble fill secured by wire mesh provides a low-maintenance solution to the erosion processes occurring along the Lower Slobbovia drainage culvert. The IA will be occasionally monitored to assess the effectiveness of cobble fill to control erosion processes and to determine if the cobble fill is secured or if repairs are needed. The last inspection was conducted on July 10, 1996 after a major storm episode. The cobbled-filled channels were in good condition and appeared to be effectively controlling storm water runoff.

5.0 Waste Management

All work was conducted at ground surface (possible contaminants are below grade) and generally out of the MDA AA boundaries. Therefore, personnel and supplies did not come into contact with possibly hazardous constituents. Personnel and supplies were screened for radioactivity and visually inspected. All wastes were determined to be nonradioactive and nonhazardous.

6.0 Cost and Schedule

The IA was conducted within the proposed budget of \$28,593.

TABLE 6-1

BUDGET VERSUS ACTUALS

Description	Anticipated Costs	Approximate Actual Costs
Develop IA Plan	\$ 4,946	\$ 6,500
Pre-field Activities	\$ 2,247	\$ 5,500
IA Field Work	\$10,995	\$10,958
Develop iA Report	\$ 4,947	\$ 2,000
Review IA Report	\$ 2,008	\$ 1,000
Issue Report	\$ 2,600	\$ 1,000
Materials	\$ 850	\$ 1,000
TOTAL	\$28,593	\$27,958

All field activities were completed by May 16, 1996 in accordance with the proposed schedule even though mobilization into the field had to be done twice because of the interruption caused by the Dome Fire. Delays were encountered in writing the IA report because of budget constraints.

SANTA FE NATIONAL FOREST

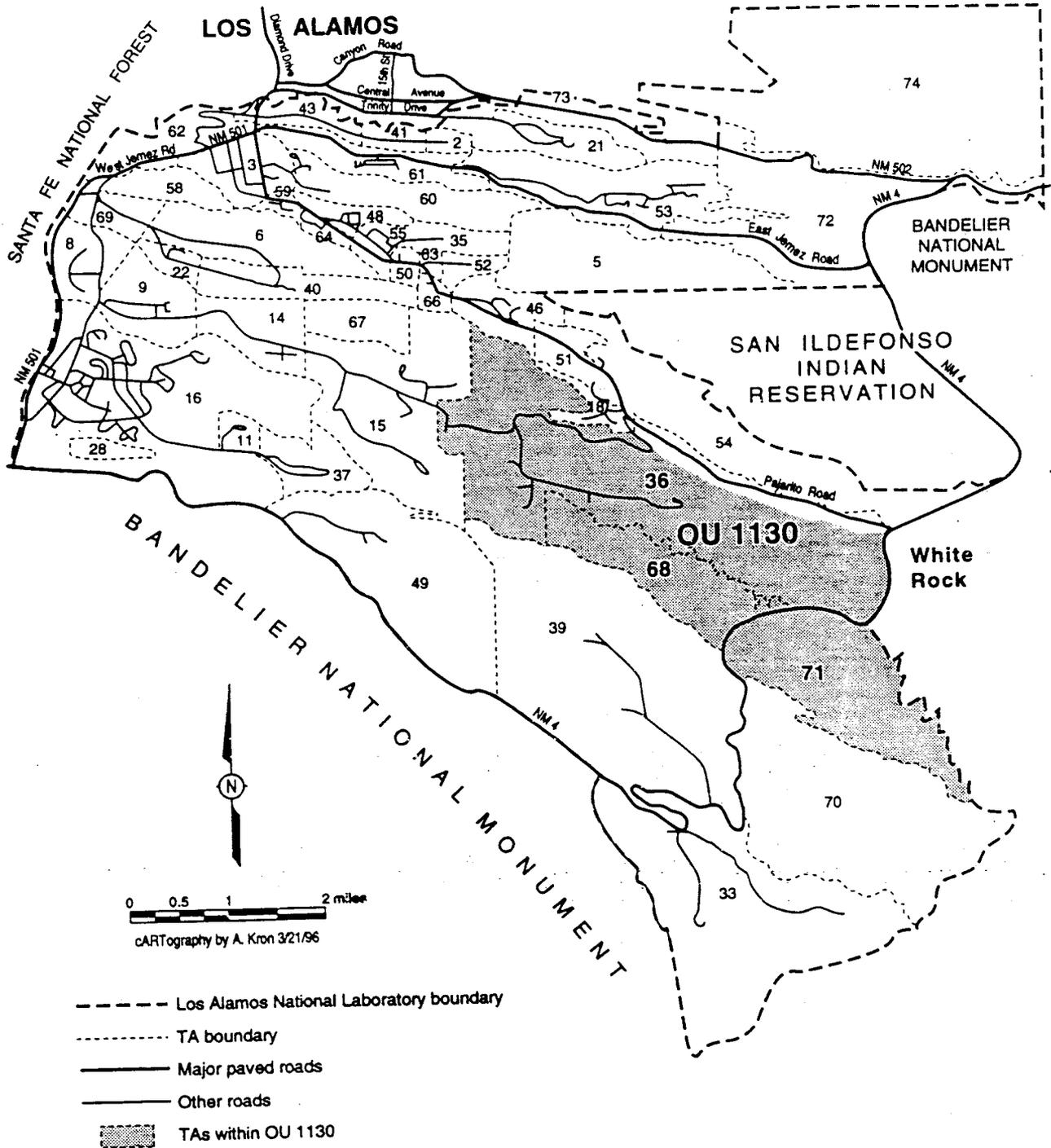


Figure 1-1. Location of former OU 1130 with respect to Laboratory technical areas and surrounding land holdings.

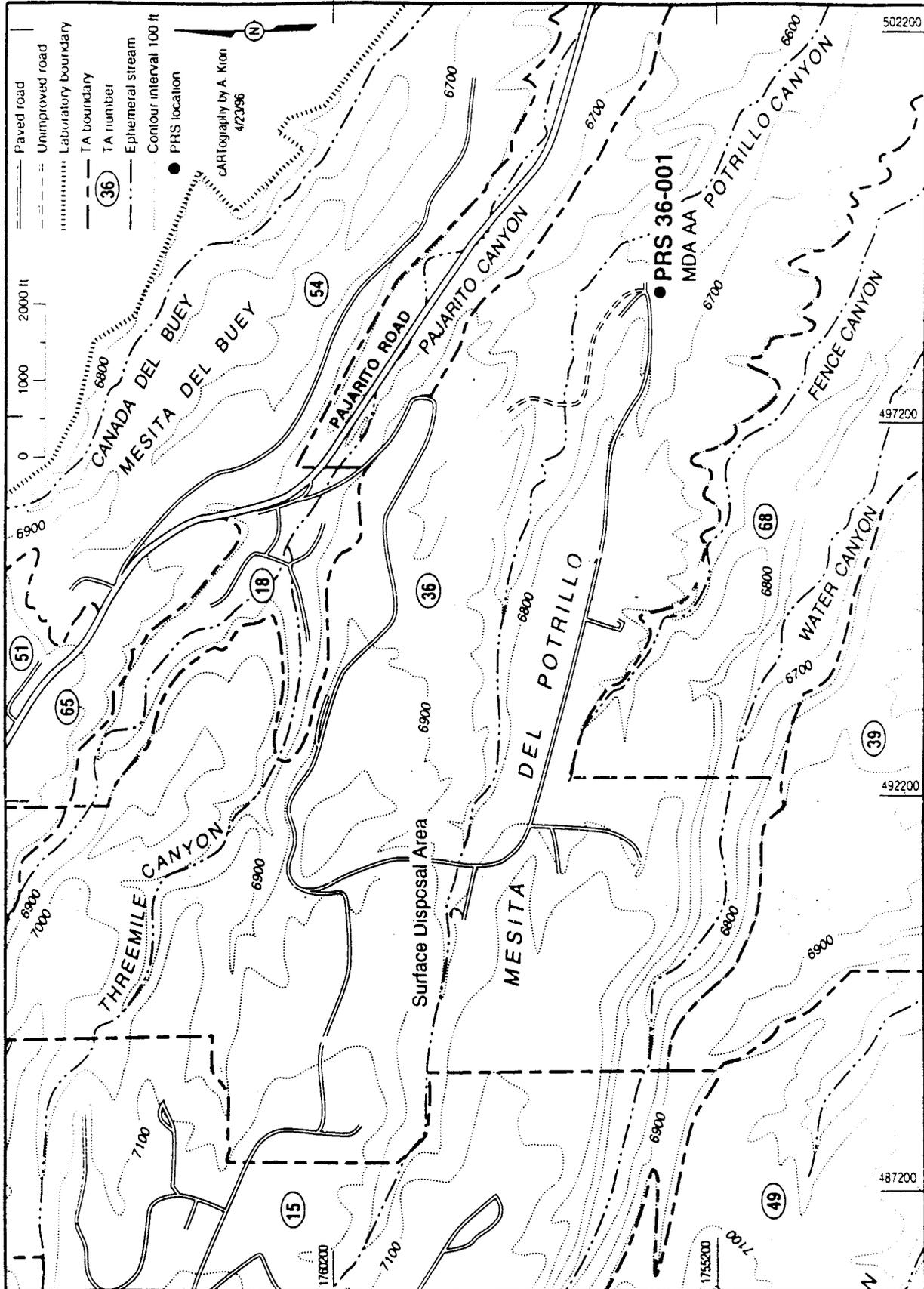


Figure 1-2. Locations of PRS 36-001 - Material Disposal Area AA.

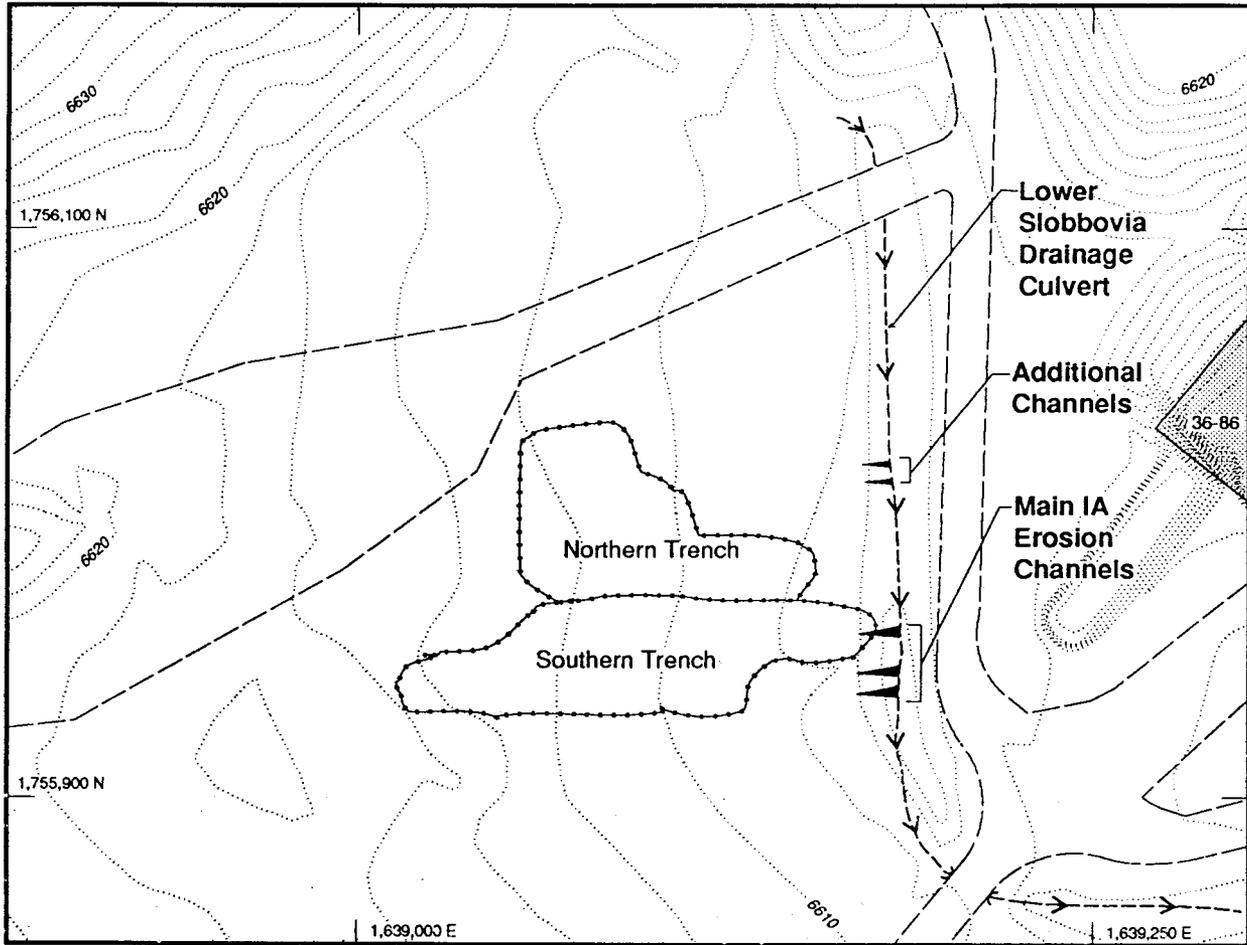


Figure 1-3. Erosion channels addressed by MDA AA interim action (PRS 36-001).



Photo 1. Main erosion channels.



Photo 2. Cobble dams.



Photo 3. Main erosion channels (cobble added and secured).

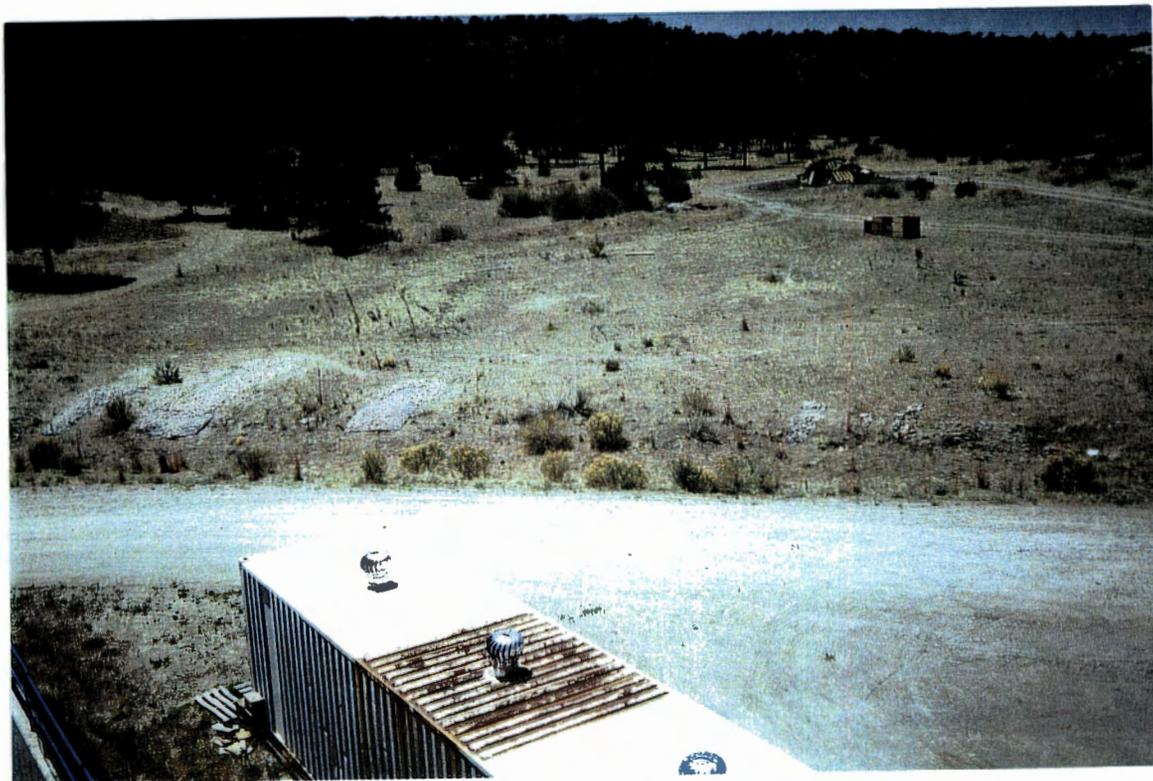
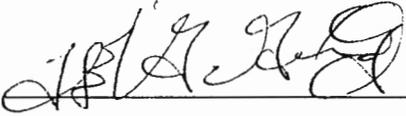


Photo 4. Interim action completed. Main channels (far left) and additional channels (far right).

INTERIM ACTION REPORT
APPROVAL/DISAPPROVAL FORM

PRS(s) 36-001

The undersigned have reviewed the Interim Action Report and believe that the intent and goals of the Interim Action Plan have been met.

FPL 

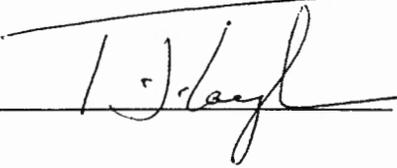
Date 8/6/96

FPC Eventual Tolling

Date 8-8-96

I, Theodore J. Taylor, DOE-LAO, **APPROVE** , **DISAPPROVE** the accompanying Interim Action Report for PRS(s) 36-001, TA- 36.

The following reasons reflect the decision for disapproval:

Signed: 

Date: 8/8/96