NVO-152

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SUMMARY REPORT
CENTRAL NEVADA TEST AREA
DEMOBILIZATION
AND
RESTORATION ACTIVITIES

DECEMBER 1974

UNITED STATES ATOMIC ENERGY COMMISSION
NEVADA OPERATIONS OFFICE
Las Vegas, Nevada

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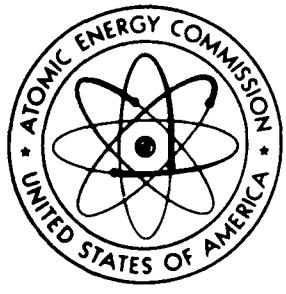

DECEMBER 1974

UNITED STATES ATOMIC ENERGY COMMISSION
NEVADA OPERATIONS OFFICE
Las Vegas, Nevada

Prepared By
HOLMES & NARVER, INC.
ON-CONTINENT TEST DIVISION
Las Vegas, Nevada

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SUMMARY REPORT

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SUMMARY REPORT

CENTRAL NEVADA TEST AREA DEMOBILIZATION AND RESTORATION ACTIVITIES

I. INTRODUCTION AND HISTORY

A. Objectives

This report has been prepared to document Atomic Energy Commission (AEC) demobilization and restoration activity at the Central Nevada Test Area (CNTA) through November of 1974. Although the CNTA is not completely demobilized and a final demobilization is not planned in the immediate future, recent site inspections made by Bureau of Land Management (BLM) personnel have tentatively resulted in the BLM's oral acceptance of demobilization work performed during the summer and fall of 1973. The purpose of this report is to:

1. Identify the facilities, equipment, and materials that have been demobilized and the land areas that have been restored.

2. Document the measures taken to plug, cap, or otherwise dispose of drilled holes.

3. Identify land areas that have been returned to the BLM and Nye County.

4. Indicate the facilities, land areas, materials, and supplies that remain.

5. Provide other pertinent data.

B. Supplemental Test Site Program

The Supplemental Test Site (STS) program was initiated when it became apparent that the Nevada Test Site (NTS) would be inadequate for certain higher-yield tests needed to support United States defense policy. A primary limitation at the NTS was anticipated ground motion and its possible adverse effect on structures in nearby communities, including Las Vegas.

A search for supplemental test sites that would accommodate a limited number of high-yield tests was begun. On November 18, 1966, the Manager, Nevada Operations Office (NV), established a Site Selection Committee for the purpose of reviewing all major factors of technical and operational nature which would result in the identification and subsequent recommendation of sites in which high-yield nuclear devices could be tested. The areas of principal interest included (1) Amchitka Island

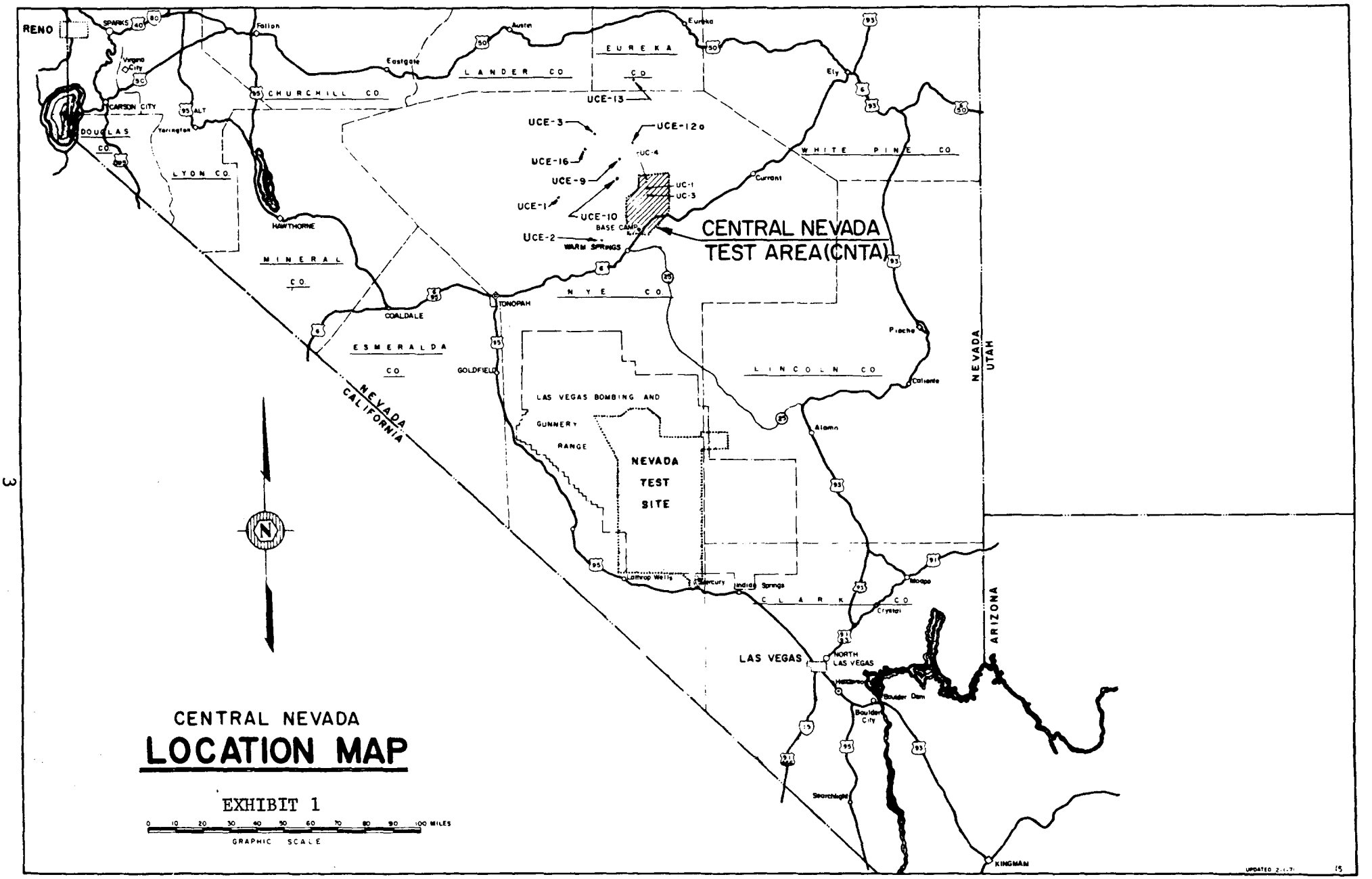
in the Aleutian Chain, (2) an area in central Nevada lying generally northeast of Tonopah, and (3) as an "insurance" alternative, an area in Alaska lying on the north slope of the Brooks Range. These sites were subjected to preliminary safety and technical reviews. Amchitka and central Nevada were judged to best satisfy the basic criteria established. Both sites were developed concurrently; however, this document will be limited to the CNTA. Refer to NVO-146 for demobilization and restoration activity at Amchitka.

Eight areas in central Nevada were investigated. They were: (1) Willow Creek Valley, (2) Central Monitor Valley, (3) Little Fish Lake Valley, (4) Northern Hot Creek Valley, (5) Pancake Range--South Little Smokey Valley, (6) North Central Monitor Valley, (7) Antelope Valley, and (8) Central Big Smokey Valley. Each area was evaluated on the basis of geology, ground shock, fallout (local), groundwater safety, groundwater resources, construction support, operations, and other considerations. On January 6, 1967, the Site Selection Committee chose several priority areas for deep exploration. They were Little Fish Lake Valley, Central Monitor Valley, and North Hot Creek Valley. Although other sites were not ruled out, early exploratory findings and the urgency of the STS program led to a calibration experiment (the Faultless event) conducted in North Hot Creek Valley.

C. Site Description

Hot Creek Valley is a remote desert area in Nye County, Nevada. U.S. Highway 6, extending from Tonopah to Ely, borders the CNTA on the south (refer to Exhibits 1 and 2). The Base Camp, at an elevation of 5250 feet, is located approximately 59 miles northeast of Tonopah at the junction of U.S. Highway 6 and Tybo Road and approximately 110 miles southwest of Ely. In lieu of forming a single, large test site similar to the NTS, the CNTA consisted of approximately 20 separate properties (land withdrawals, land easements, and special land-use permits) obtained from the BLM. Also, a contract, AT(26-1)-552, was negotiated with Nye County, Nevada, for a 300- x 300-foot area on an aircraft parking apron at the Tonopah Airport. Refer to Section IV-C for additional detail on various CNTA land areas.

The Base Camp and Control Point (CP) areas (the CP is shown in Figure 1) were developed in two stages. Originally, the Base Camp was a Holmes & Narver (H&N) subcontractor's temporary camp (refer to Figure 2), built to support the Faultless event. During CY 1968 and 1969, after Faultless and prior to the planned Adagio event, these areas were improved for reuse. Selected facilities were purchased from the H&N subcontractor; several new buildings were constructed and others were replaced with portable, trailer-type structures from the NTS (refer to


RENO
SPARKS
Fallon
Austin
Eureka
EUREKA CO
LANDER CO
Eastgate
Virginia City
CARSON CITY
CHURCHILL CO
Ely
WHITE PINE CO
DOUGLAS CO
Yerington
LYON CO
UCE-13
UCE-3
UCE-12o
UCE-4
UCE-16
UCE-9
UC-1
UC-3
UCE-1
UCE-10
BASE CAMP
Currant
CENTRAL NEVADA
TEST AREA(CNTA)
UCE-2
WARM SPRINGS
HAWTHORNE
MINERAL CO
NYE CO
TONOPAH
COALDALE
Pioche
ESMERALDA CO
GOLDFIELD
LINCOLN CO
NEVADA
UTAH
NEVADA
CALIFORNIA
LAS VEGAS BOMBING AND
GUNNERY
RANGE
NEVADA
TEST
SITE
Alamo
Caliente
Lathrop Wells
Mercury
Indian Springs
CLARK CO
Crystal
Moapa
ARIZONA
LAS VEGAS
NORTH
LAS VEGAS
Henderson
Boulder Dam
Boulder City
Searchlight
KINGMAN
CENTRAL NEVADA
LOCATION MAP
EXHIBIT 1
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GRAPHIC SCALE
UPDATED 2-1-71
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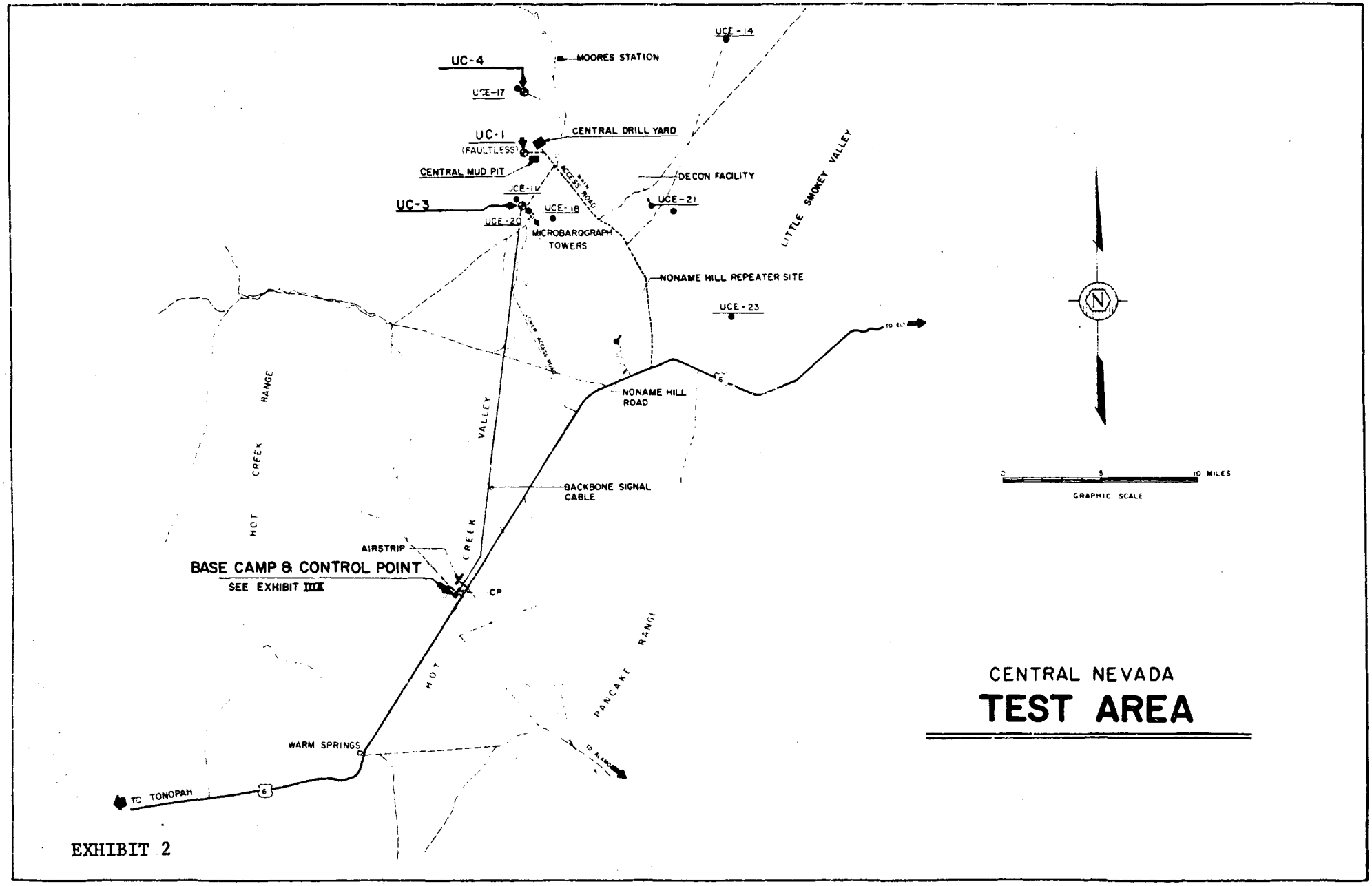


CENTRAL NEVADA

TEST AREA

EXHIBIT 2

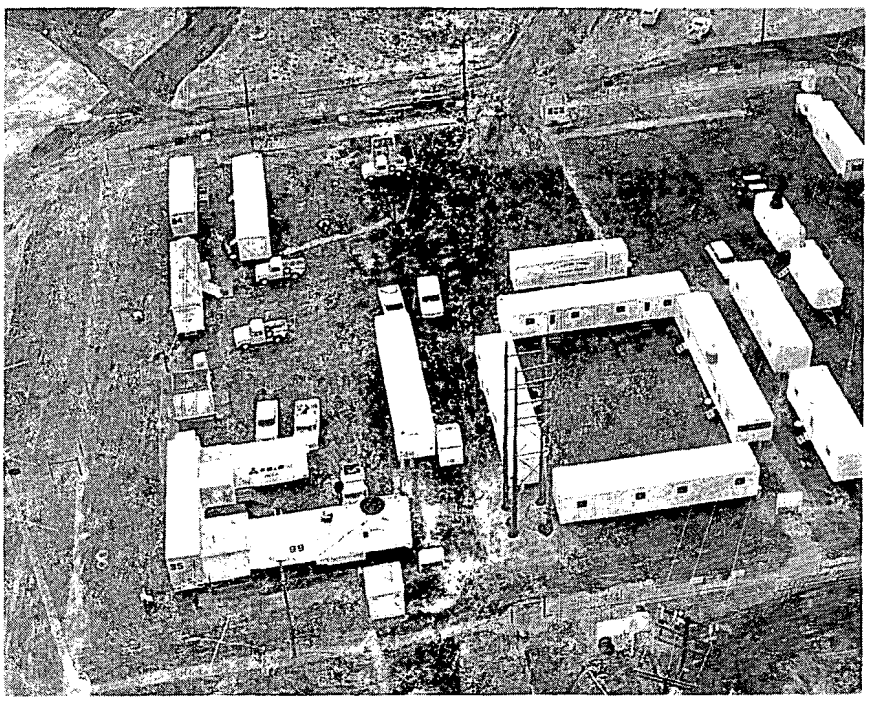


Figure 1 Control Point for the Faultless Event

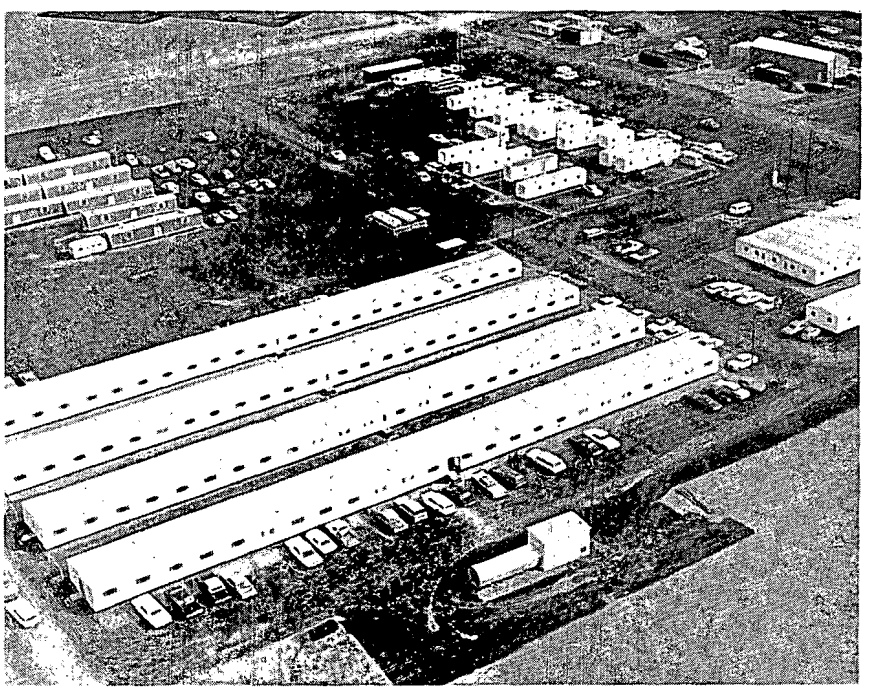


Figure 2 Base Camp for the Faultless Event

Figures 3 and 4). For the planned, but subsequently canceled, Adagio event, a new control point, airstrip, access road system, recording trailer park, cableway, and ground zero area were constructed, complete with technical structures (refer to Figures 5, 6, and 7).

D. Faultless Event

Project Faultless has been the only nuclear test conducted at the CNTA. It was executed to determine the behavior of seismic waves generated by a nuclear device detonation in Hot Creek Valley and to evaluate the potential usefulness of the site for higher-yield experiments. The event was conducted on January 19, 1968. The device, with a yield of less than one megaton, was detonated at a depth of 3200 feet in drill hole UC-1, at Nevada State coordinates (central zone) N 1,414,340 feet, E 629,000 feet, Nye County, Nevada. (Refer to Figure 8 for the Faultless ground zero area.) The event produced an unusual collapse crater. Instead of the typical cone-shaped depression, a large area subsided as an irregular block bounded by local faults (refer to Figure 9).

Seismic findings were approximately as had been predicted by the Environmental Research Corporation (ERC).

Radioactivity from the Faultless event was contained during the event and all subsequent drillback operations. A radiological survey, made prior to demobilization and restoration, detected no radioactivity that could be attributed to the project. As a consequence, radiological cleanup was not required. Refer to Section III-B for additional information on the radiological survey.

E. Onsite Liaison with the Bureau of Land Management (BLM)

After developing preliminary plans for the partial demobilization and restoration of the CNTA, including plugback of most bore holes, NV scheduled a meeting with BLM and H&N representatives to resolve details and to obtain BLM comments on the proposed work. On March 6, 1973, a meeting was held at the CNTA Base Camp. After a detailed discussion of the proposed work, the party made a field trip to several disturbed areas. The final plan resulting from the meeting became Appendix 1 to NVO-90, Planning Directive, Demobilization, Restoration and Monitoring, CNTA.

On October 3, 1973, BLM's Area Manager met with NV and H&N representatives to inspect completed work at the CNTA. During a tour of disturbed areas, only one discrepancy was noted and quickly corrected with an hour's bulldozer work. The BLM Area Manager expressed satisfaction with all work he had inspected. However,

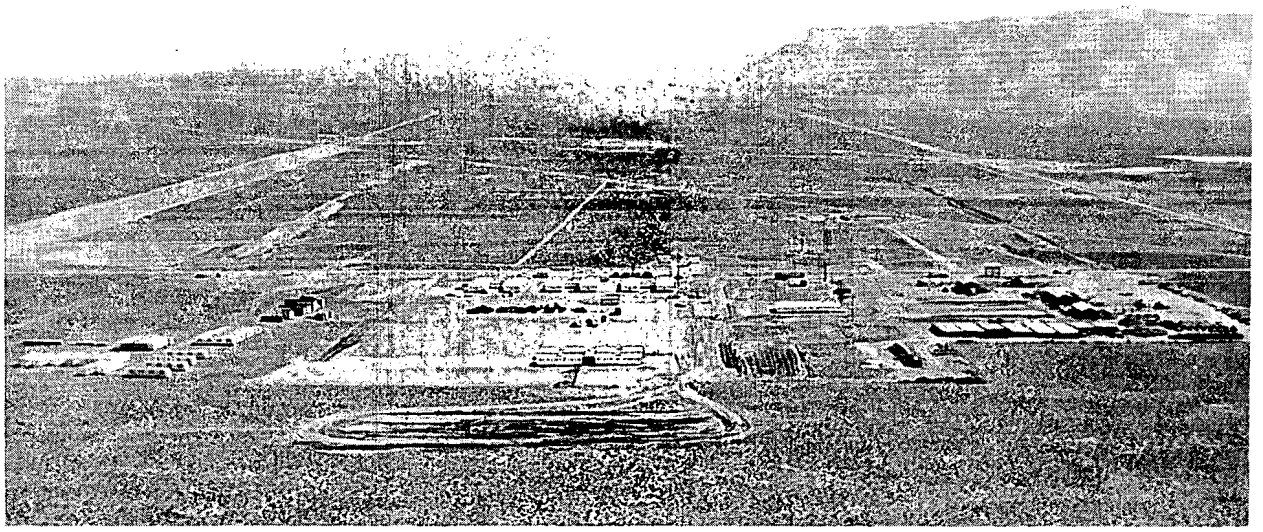


Figure 3 Base Camp Expansion - 1969

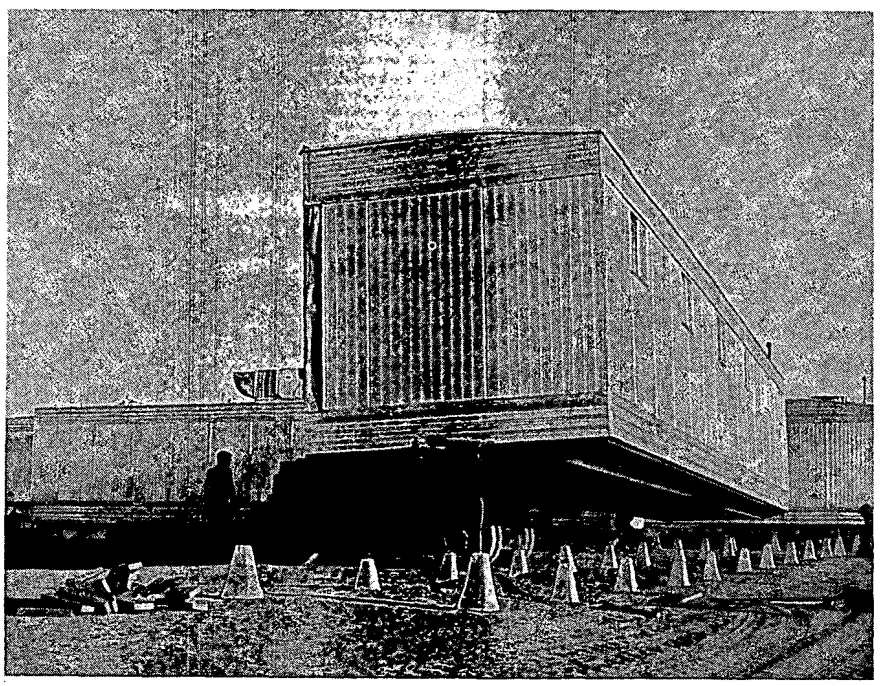


Figure 4 Dormitory Construction - Base Camp

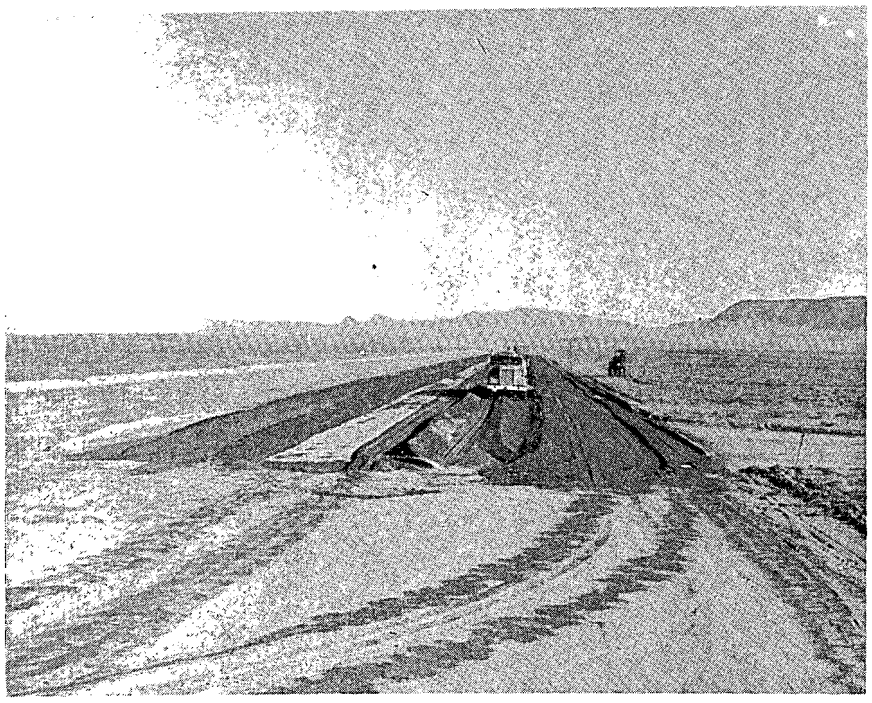


Figure 5 Air Strip Construction - Base Camp Area

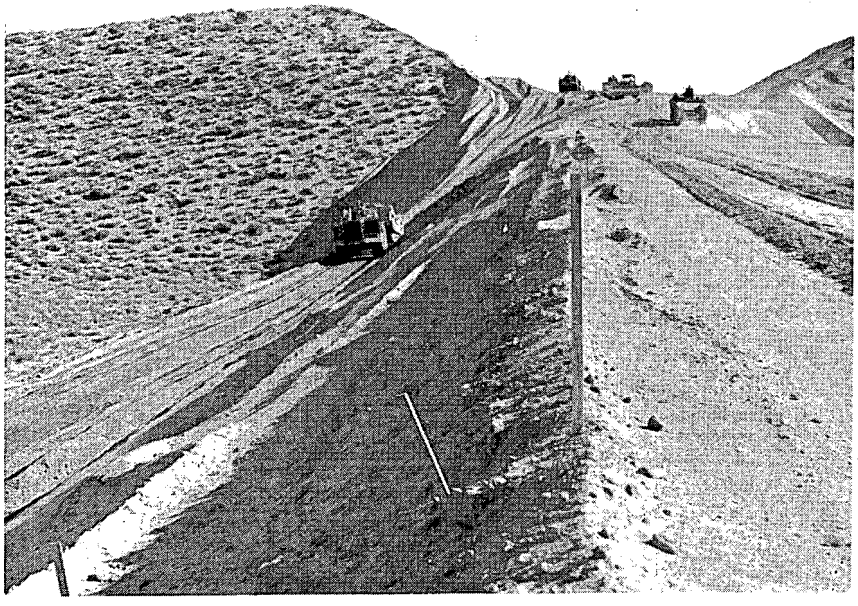


Figure 6 Road Construction - Central Pipe Yard Area

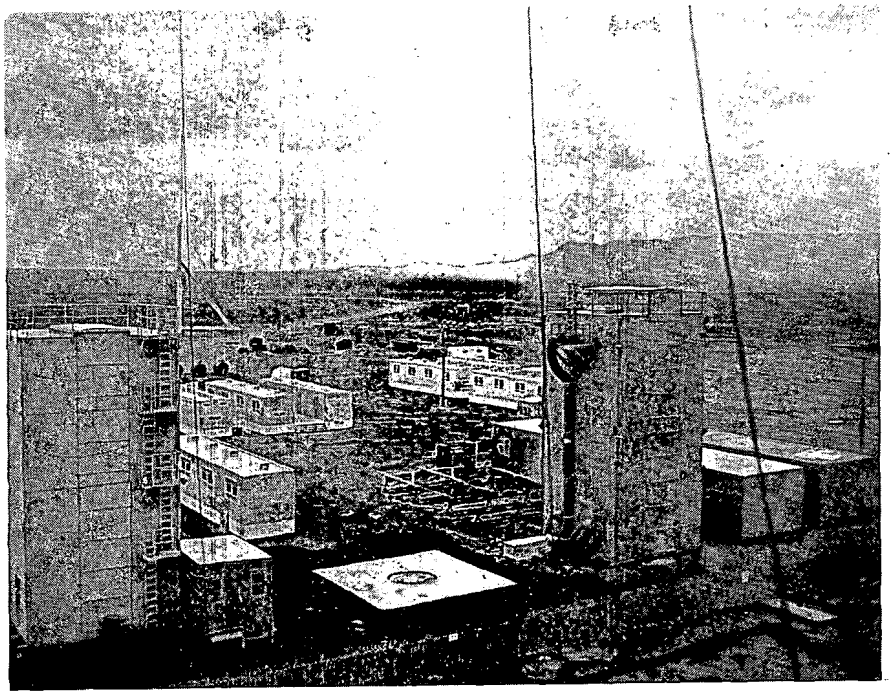


Figure 7 Station UC-3 Ground Zero Area

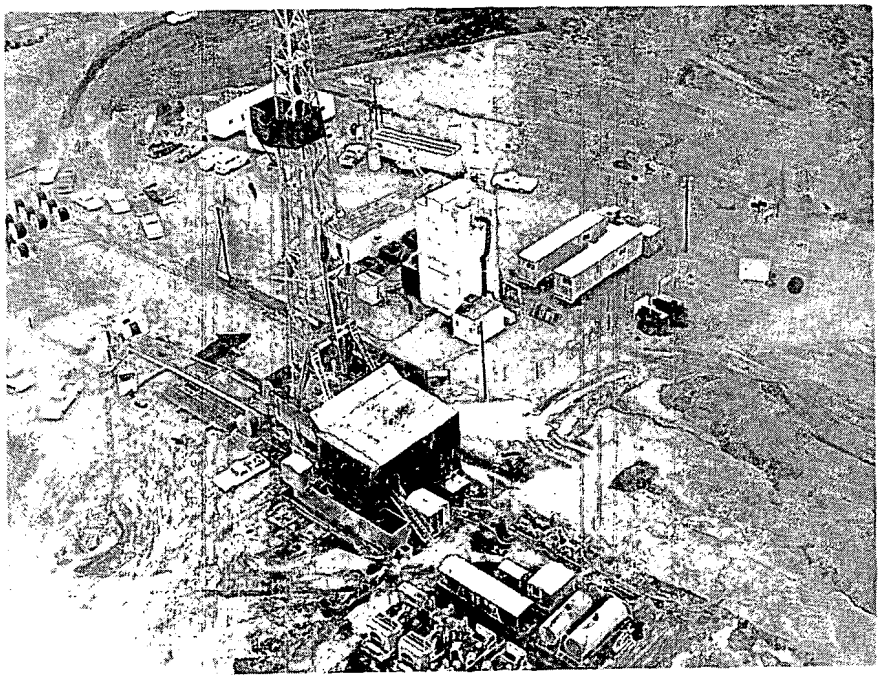


Figure 8 Station UC-1, Faultless Ground Zero Area

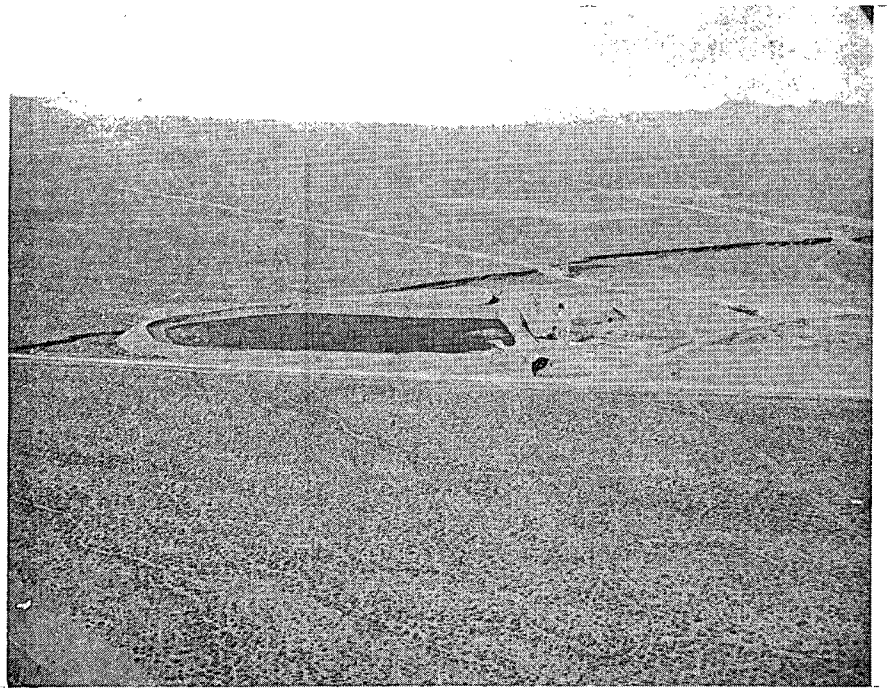


Figure 9 Faultless Subsidence Area - Central Mud Pit

Figure 10 Aggregate Site A - Waste (Oversize) Gravel

because of the size of the CNTA and the difficulty in getting to all outlying areas, he chose to withhold his acceptance of unvisited areas until BLM could visit them during their normal course of other scheduled inspections. Completion reports were prepared for all disturbed areas and all were signed by the NV & H&N representatives. Fifteen completion reports were retained by BLM for their future inspections.

On August 19, 1974, the H&N representative was orally notified of other minor discrepancies along the 22 miles of signal cableway running from Base Camp to UC-4. Corrective work was accomplished on September 26, 1974. On September 27, 1974, the BLM Area Manager orally notified the H&N representative that all work accomplished to date was satisfactory. On September 30, 1974, the last completion report was signed by the BLM representative, and in early November, the 15 retained reports were sent to AEC/NV.

II. DEMOBILIZATION AND RESTORATION THROUGH FY 74

A. Disturbed Areas--General Items

1. Roads and Parking Areas

a. Except for the removal of selected signs and two minor repairs made for safety reasons, all major roads constructed by AEC's Nevada Operations Office (NV) were left in their "as-is" condition for take-over by Nye County or the BLM. (With the BLM's prior concurrence, all minor roads were abandoned without further work.)

Minor repair work consisted of backfilling ditches in the roadbed where (1) the new UC-4 access road crosses Hot Creek and (2) where a new access road from U.S. Highway 6 cuts through a sandy hill one-fourth mile east of the Central Pipe Yard. In both cases, the damage had been caused by water erosion.

b. Road signs were removed where they related only to CNTA established vehicle speeds or CNTA areas being demobilized. All guard railing and highway safety signs were left in place.

2. Pipelines

Underground pipelines were abandoned in place. Few surface pipelines existed. Some pipe was included in a public sale of ferrous metal scrap. Small quantities of nonsalvable pipe were burried in dumps at UC-1, UC-3, UC-4, and UCE-18.

3. Survey Markers

Unsalvable plastic cloth and old stakes used for markers were hauled to dumps whenever they were found. Permanent survey markers were not disturbed.

4. Equipment and Materials

Salvable items were either transferred to other government agencies, sold as scrap at a public sale, or stored at a designated area--usually the Central Pipe Yard or the UC-3 and UC-4 ground zero areas.

5. Borrow Pits and Spoil Areas

These areas were cleaned of debris. Usable aggregates were left undisturbed with the concurrence of the BLM. Steep slopes were improved and exploratory pits were backfilled.

6. Repeater Stations

No action was taken as these stations will remain in service.

7. Overhead Power Lines, Poles, and Substations

All poles and power lines, including pole-mounted transformers, that were no longer required were transferred to the U.S. Navy, China Lake, California, and were removed by that agency. Substations no longer required were transferred to and removed by other NV prime contractors. Refer to Section III, paragraphs A-3-j and A-4 for overhead power lines remaining at the CNTA.

8. Surface and Underground Cable

Nearly all signal and telephone cable had been installed underground and was abandoned in place. Unsalvable short cable stub-ups at the Base Camp were cut off at or below ground level and hauled to an appropriate dump. The same action applied to underground power cables at the CP, UC-1, and UC-3 areas. Surface-laid power cable to the Warm Springs repeater site remains in service (see paragraph 6 above). Coaxial surface cable procured for the Adagio event was removed prior to demobilization. All coaxial cable remaining at UC-1 was damaged. It was placed in local sumps at UC-1 and buried. Reusable electrical panel boxes and switch gear were placed in storage. Supporting back boards for various electrical enclosures were not salvable and were disposed of in appropriate dumps.

9. Miscellaneous Activity Areas

Other disturbances, not specifically listed as a disturbed area in Planning Directive NVO-90, were demobilized in a manner described for similar disturbances. Included in this category were small fenced areas for weather stations, miscellaneous debris scattered throughout the CNTA, and backfilling of holes or pits whenever they were found.

10. Completion Reports

Completion reports were prepared for each "map location" or disturbed area that required action under Planning Directive NVO-90. Additionally, completion reports were prepared for each abandoned drilling location.

B. Specific Disturbed Areas

To facilitate cross-referencing with Planning Directive NVO-90, the same map location numbers are used in this text. To avoid redundancy in description, legends are used as follows:

Legend		Description
*	-	Completion Report signed and accepted by BLM
**	-	Completion Report not required for reason given
NAR	-	No action required (per NVO-90)

Map Location No.	Remarks
1.	Borrow Area (Aggregate Site A)* Debris was removed, waste piles were rounded off, steep slopes were improved, and exploratory sampling pits were backfilled (see Figure 10).
2.	Road Cutoff** NAR
3.	Borrow Area (Near Drill Hole HTH-5)** NAR
4.	HTH-5, Drill Hole Area* The drill hole was plugged (refer to paragraph C-2). Installed a nameplate, backfilled the cellar, and cleaned up the location.
5.	Microbarograph Tower Areas** NAR. (The towers had been removed to Base Camp prior to demobilizing the CNTA.)
6.	Signal and Telephone Cableways* Removed surface installations. Abandoned buried cable in place. Left cableway markers in place for future identification.
7.	Recording Trailer Park (RTP) for UC-3** All planned NV activity had been completed before October 3, 1973, the day of the inspection with the BLM. However, the U.S. Navy, China Lake, California, had not removed a generator shelter transferred to it nor had an Air Force Systems Command (AFSC) "jobber" completed salvage work on a cable splice building originally tranferred to the Navy. Work on the cable termination building has since been completed. Except for the generator shelter, all aboveground facilities, including

fencing, have been removed and the area cleaned up. Underground water, sewer, electrical, signal, and telephone lines were abandoned in place. This area is located inside the UC-3 land withdrawal which NV is retaining.

a. Scientific Cableway (RTP to Ground Zero)*

Fencing was removed and a parallel drainage ditch was backfilled (refer to Figure 11).

b. Trash Dump (West of the RTP)*

Trash that high winds had scattered was returned to the dump. Additional trash was added after which the entire pit was backfilled.

8. UC-3, Ground Zero Area**

This area is being retained by NV. It remains fenced (perimeter fence only). Work accomplished to date includes the following:

a. Removal of the inner security fence.

b. Capping of the large diameter UC-3 emplacement and and canister holes with heavy concrete slabs over existing steel plates. (See Figures 12, 13, and 14.)

c. Plugging of other drilled holes (refer to Section II, paragraph C).

d. Removal of all aboveground structures except for two technical buildings (long buildings) and two generator shelters which were transferred in place to the U.S. Navy in exchange for the Navy's removal from this site. Other buildings and aboveground facilities were disposed of either through public sale or transfer to other NV contractors and/or to other government agencies.

e. A large quantity of scrap iron, resulting from drilling operations, was removed via a public sale.

f. Sumps previously used to contain drilling mud and water were used for trash dumps and then were backfilled.

g. An initial cleanup has been made, principally around the emplacement hole or the eastern half of the fenced area.

9. Borrow Area (Aggregate Site C)**

NAR

Figure 11 Removing Fence Wire - UC-3 Cableway

Figure 12 Welding Cover Plate to Casing - Sta. UC-3

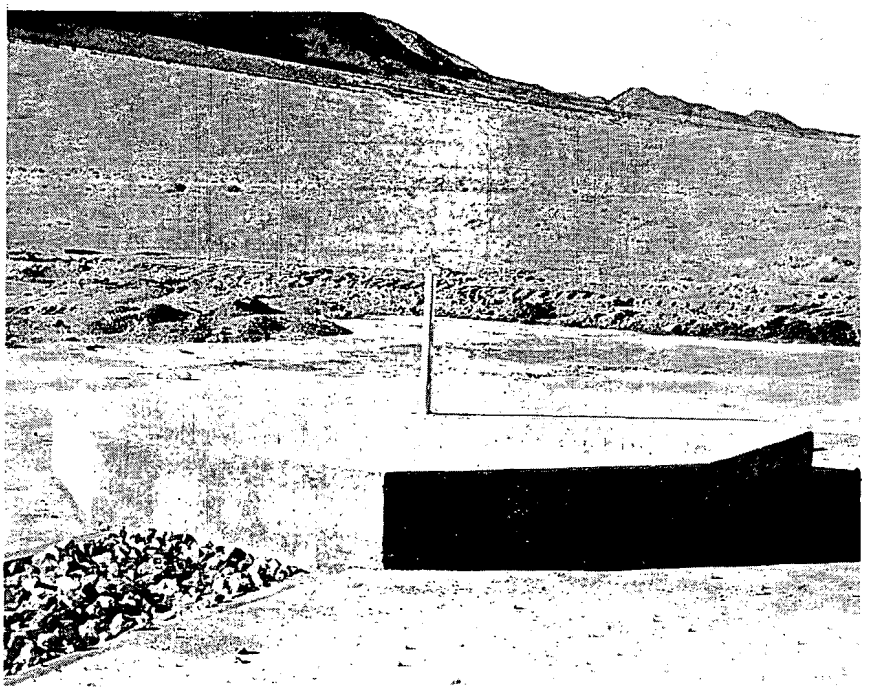


Figure 13 Concrete Cover Slab - Sta. UC-3

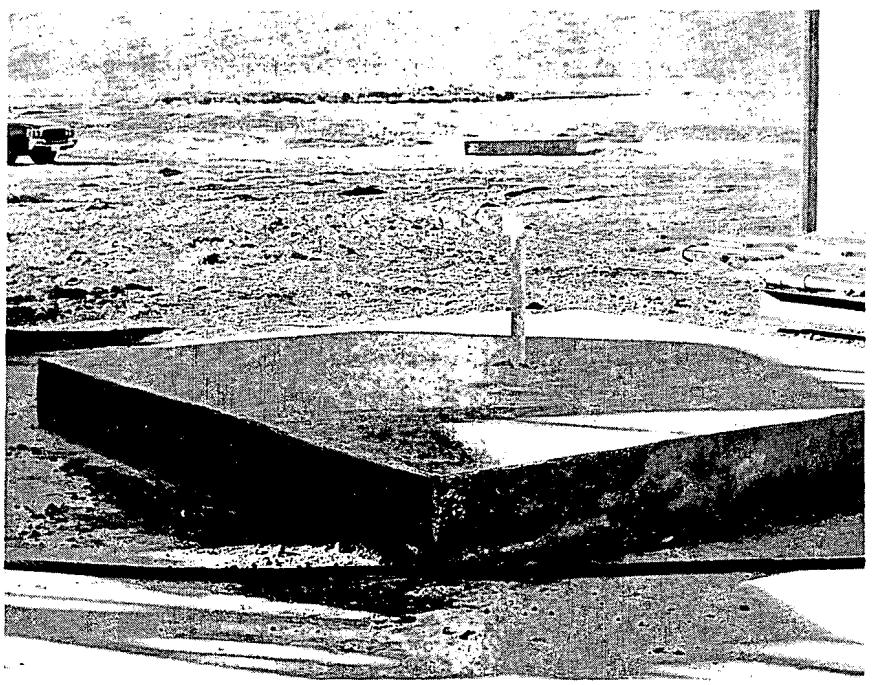


Figure 14 Concrete Cover Slab - UC-3 Cannister Hole

10. Central Pipe Yard*

Scrap metal was disposed of through a public sale of ferrous iron. The hillside to the west was cleaned up (refer to Figure 15). Salvable equipment from other areas was moved inside the fence. Drill casing stored outside the fence was moved inside (see Figure 16). A completion report was prepared and signed off except for the fenced area which NV is retaining as a storage yard. During June and July of 1974, a large amount of drilling equipment was moved to the NTS.

11. Area UC-1, Faultless Site*

With BLM's concurrence, a plan to erect a concrete monument was canceled in favor of installing a bronze tablet directly on the 88-inch diameter surface pipe used originally for the drill rig's cellar. This pipe, along with inner casing strings, is approximately nine feet higher than the land surface. Prior to the event, the top of the pipe was flush with the ground surface. This change in relative elevations resulted from differential subsidence after the event. The surface pipe serves as an interesting monument that was directly involved with Project Faultless (see Figures 17 and 18).

Although NV will continue to retain this site, the BLM has concurred with NV's cleanup and demobilization effort by signing a completion report.

Demobilization activity included the following:

a. A radiological survey (see Section III-B).

b. Removal of perimeter and GZ fencing.

c. A general cleanup including backfilling of sumps used for drilling mud and water.

d. The plugging, capping, and/or marking of all other bore holes in the area except those used for long-term monitoring programs.

e. Removal and disposal of signal and coaxial cables.

f. Removal of projecting emplacement casing and its "strongback" support above the Faultless emplacement hole and the filling of remaining voids with concrete.

12. Recording Trailer Park (RTP) for UC-1*

The area was cleaned up, steep drainage ditch slopes were improved, and back boards were removed.

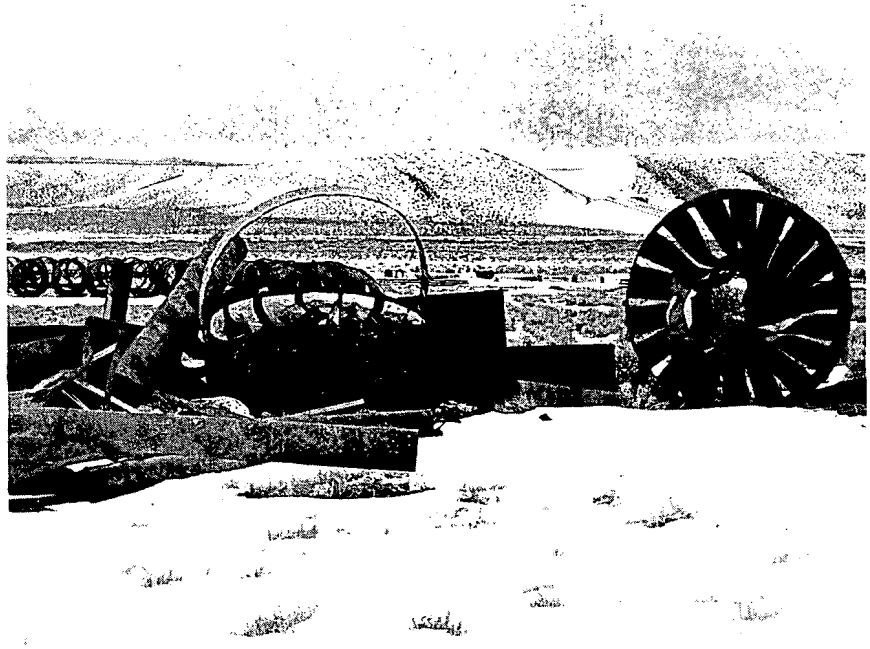


Figure 15 Scrap Metal - Central Pipe Yard

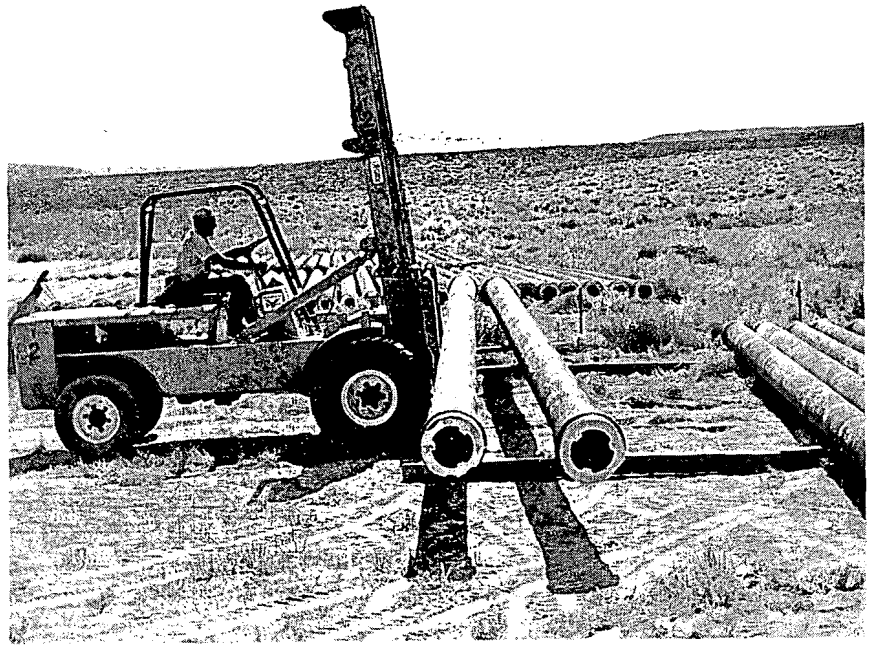


Figure 16 Moving Drill Pipe into the Pipe Yard

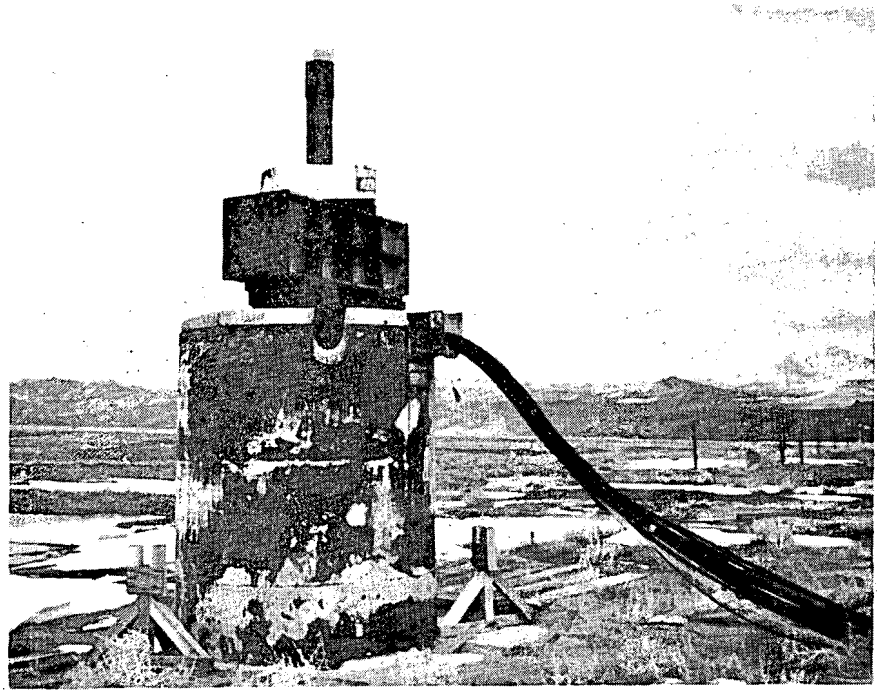


Figure 17 Projecting Surface Pipe - Sta. UC-1 prior to Cleanup and Restoration

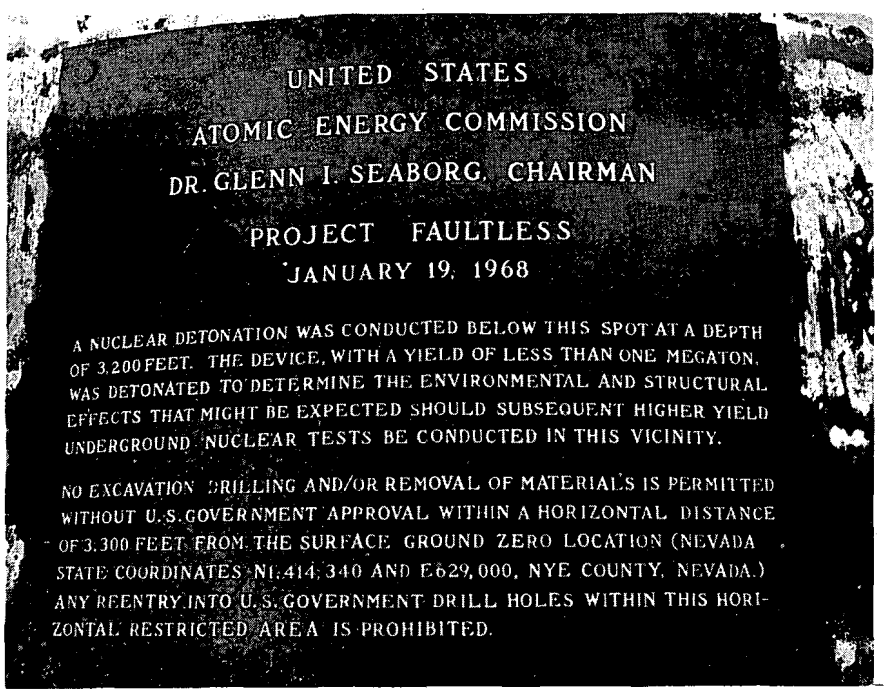


Figure 18 Project Faultless Plaque - Sta. UC-1

13. Central Mud Pit**

A mud pump and other salvable equipment was moved to the Central Pipe Yard. A large equipment pit was backfilled. The berm surrounding partially dry mud was opened to prevent future accumulations of water. This will further dry the drilling mud to allow backfilling at a future date. The fence was retained (refer to Figures 19 and 20). The pit is within the UC-1 land withdrawal which NV is retaining.

a. Decontamination Facility Pit (UC-1)*

A rad-safe survey found no radioactivity (see Section III-B). The fence was removed and the pit backfilled.

14. Borrow Area (approximately one-half mile north of the Central Pipe Yard)**

NAR

15. UC-4 Ground Zero Area*

The shaker plant's bulkhead was removed. All mud pits except one were backfilled (refer to Figures 21 and 22). The emplacement hole had previously been capped by welding a two-inch thick steel plate to the surface conductor pipe (see Figure 23). Additionally, a heavy concrete slab was poured over the plate (see Figure 24). The area was cleaned up. Perimeter fencing, 41 each 60-foot long joints of 54-inch diameter hole casing remain at UC-4. Although NV will retain this area, the BLM has accepted all work accomplished to date by signing a completion report. The berm surrounding the remaining mud pit was cut to prevent water accumulation and expedite drying. Refer to Figures 25 and 26 for drilling operations and Figure 27 for the demobilized site.

16. Contractors Camp Site (Near Moores Station)**

NAR. (The culvert pipe near this area and mentioned in NVO-90 was hauled to a dump.)

17. Moores Station**

NAR

18. UCE-18, Water Supply Well*

See paragraph C-1 for methods used to test and plug this hole. Other work included: removal of fencing, hauling salvable equipment and material to the Central Pipe Yard (see Figures 28 and 29), backfilling the water sump, disposal of nonsalvable lean-to shelters, transfer of a 10,000-gallon diesel tank to the AFSC, and cleanup of the area.

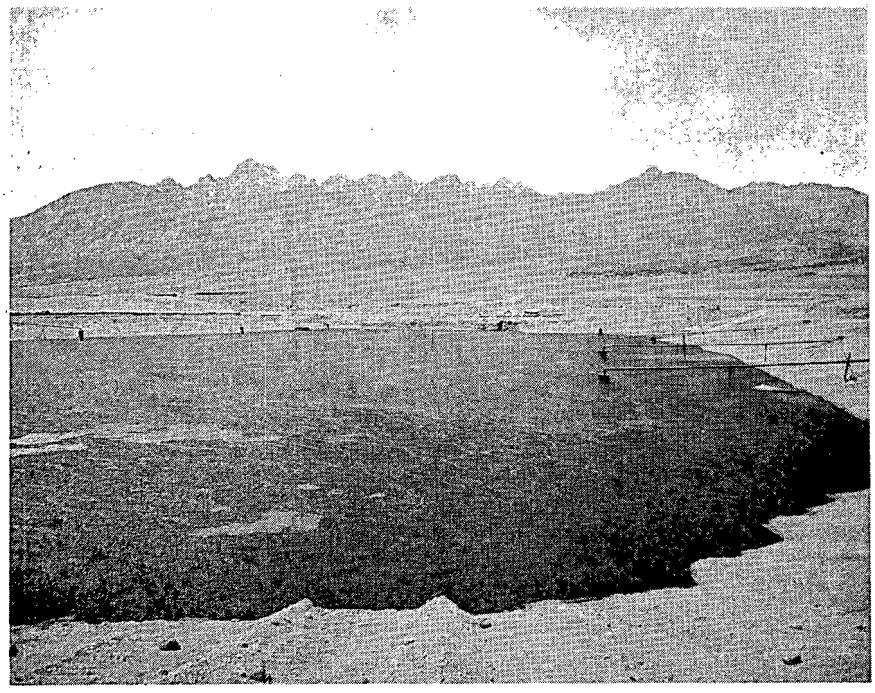


Figure 19 Central Mud Pit

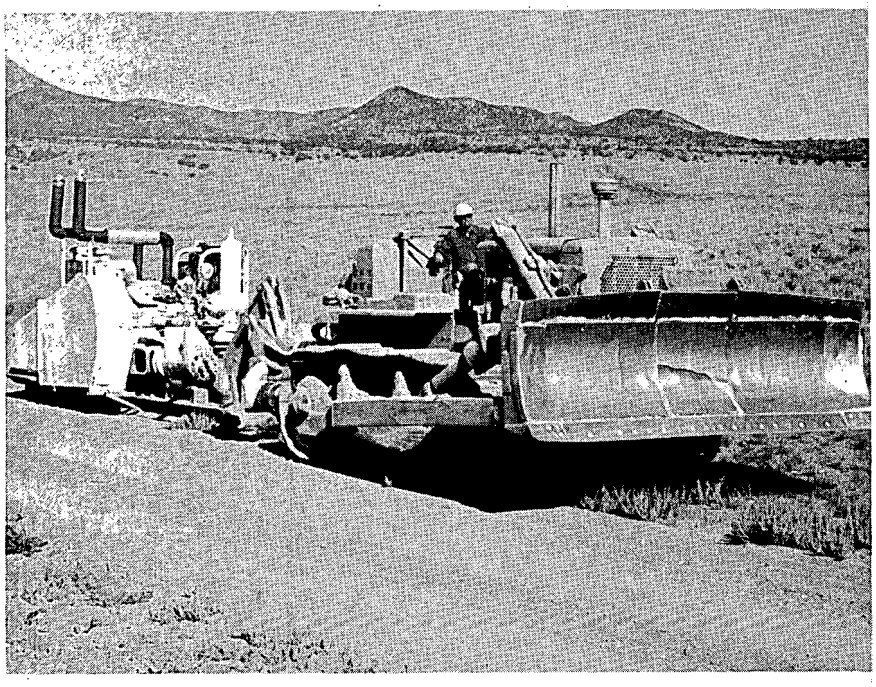


Figure 20 Moving a Mud Pump to the Central Pipe Yard

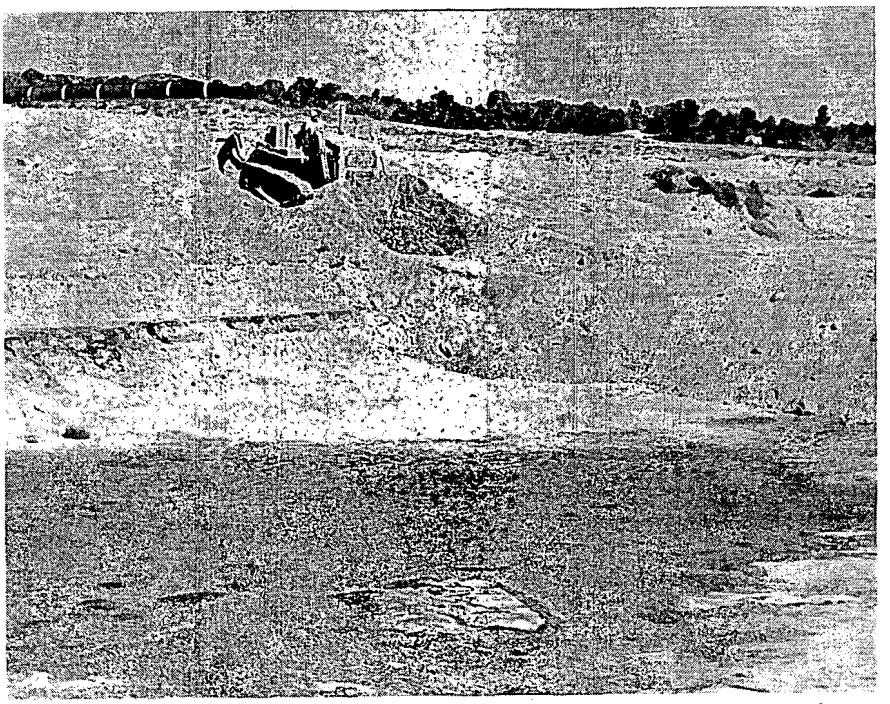


Figure 21 Backfilling Mud Pits at Station UC-4

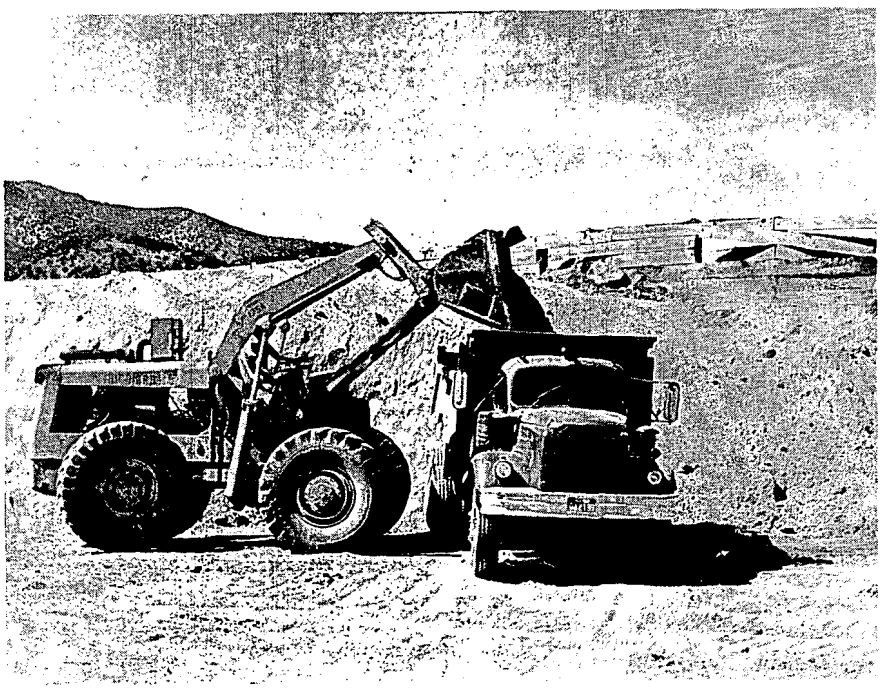


Figure 22 Loading Fill Material at Station UC-4

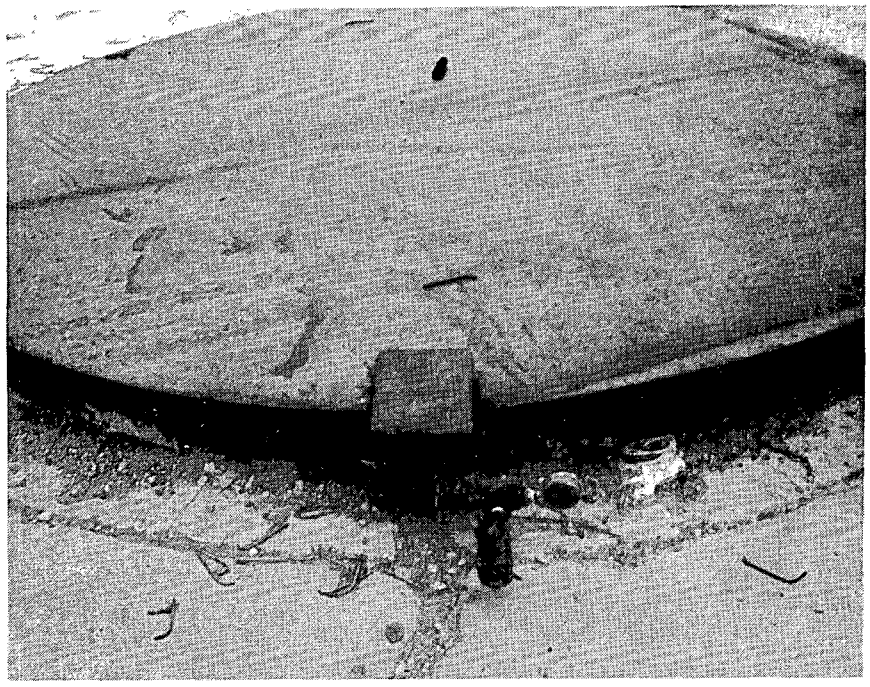


Figure 23 Steel Cover Plate - UC-4 Emplacment Hole

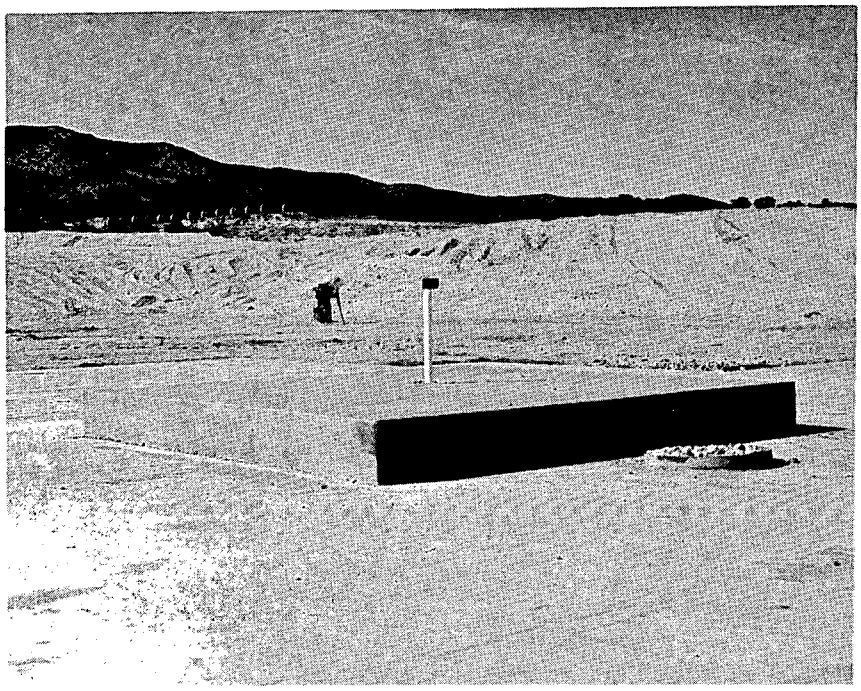


Figure 24 Concrete Slab Cover - Station UC-4

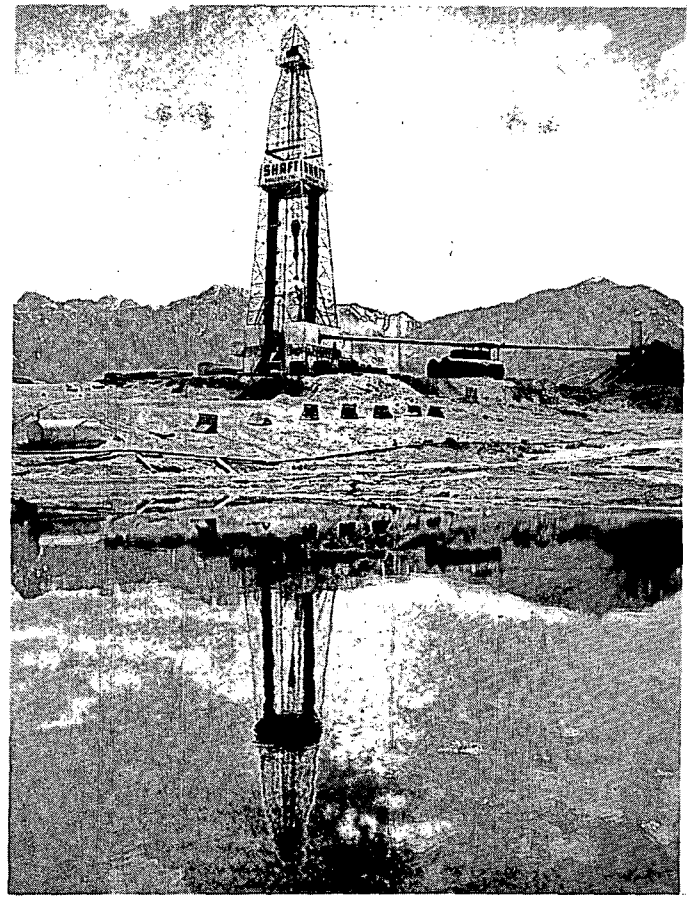


Figure 25 Drill Rig at the UC-4 Emplacment Hole

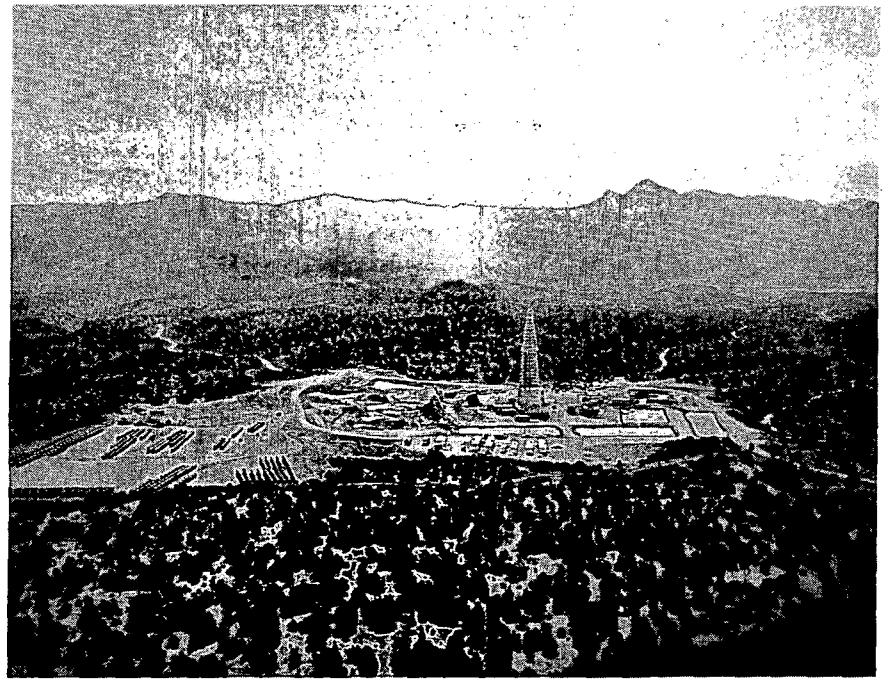


Figure 26 UC-4 Area during Drilling Operations

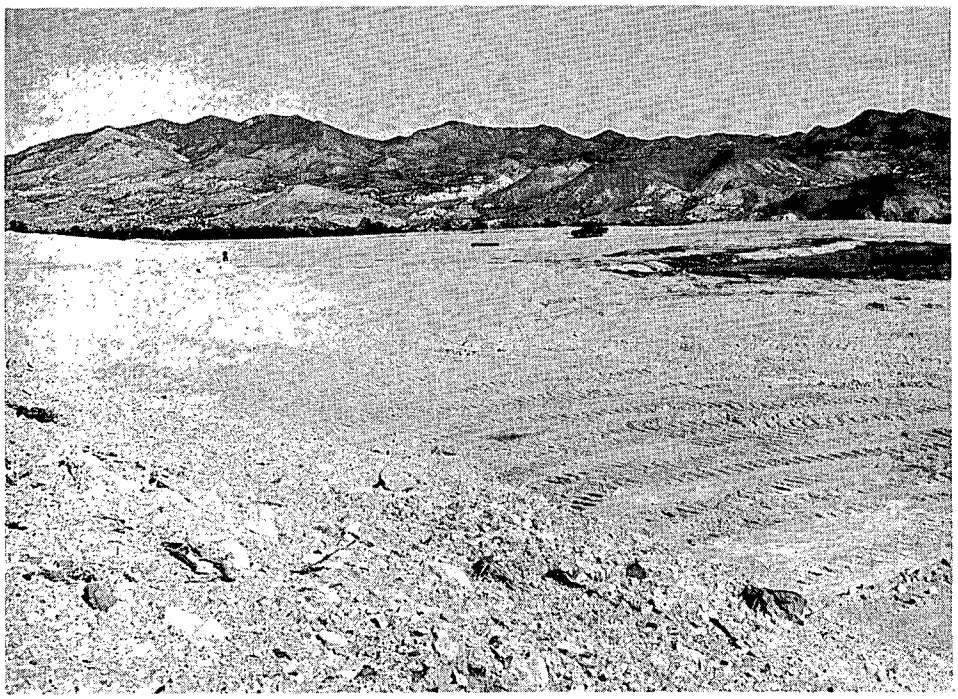


Figure 27 UC-4 Area after Demoblization and Restoration Activities

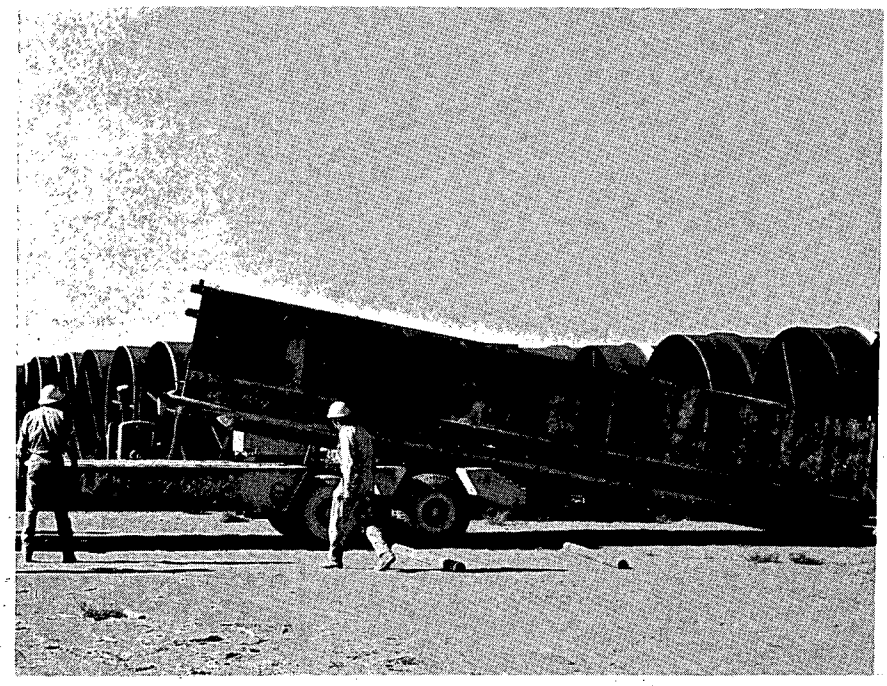


Figure 28 Offloading a UCE-18 Mud Tank at the Pipe Yard

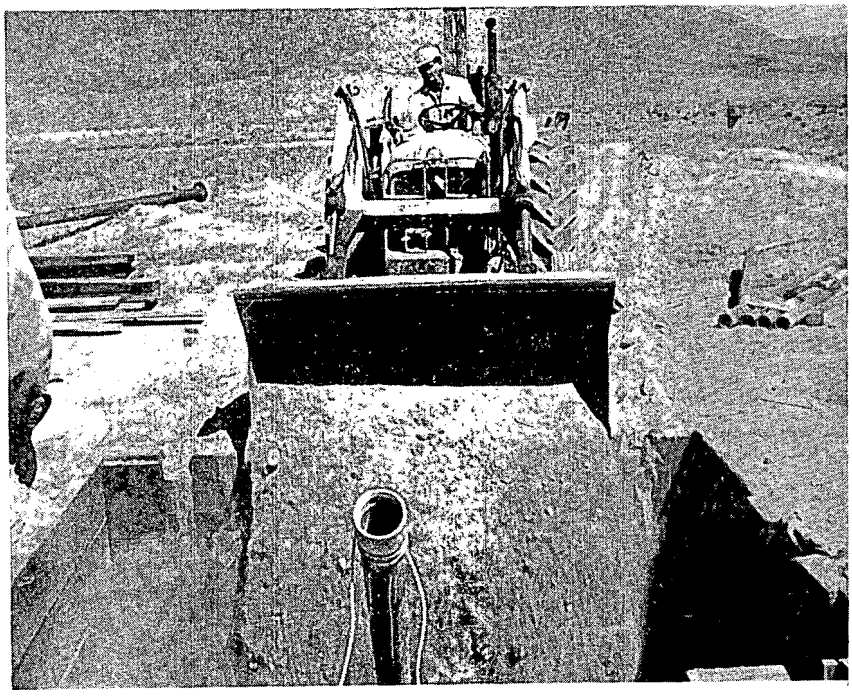


Figure 29 Backfilling the Drill Rig's Cellar - UCE-18

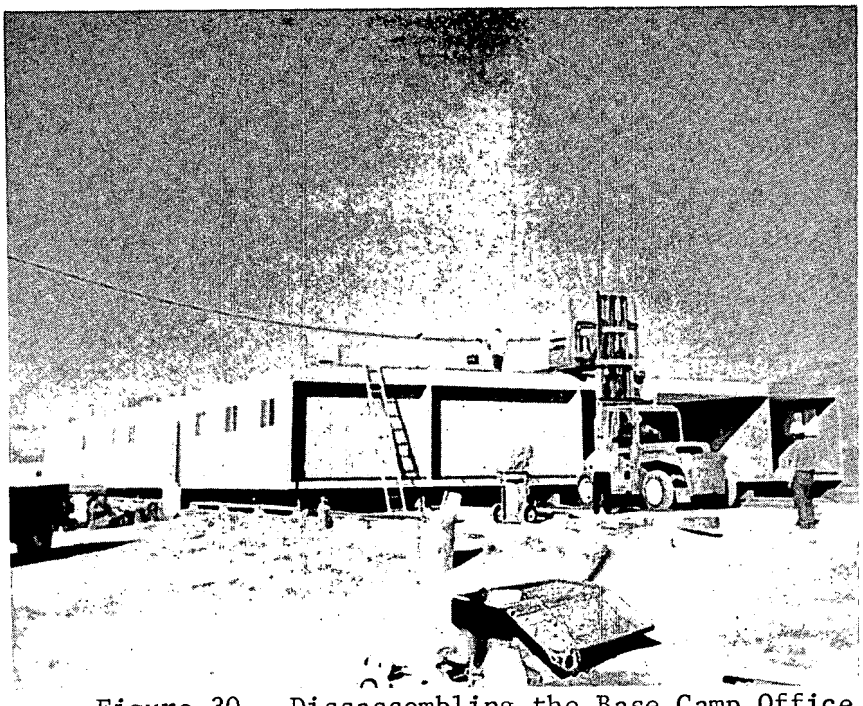


Figure 30 Dissassembling the Base Camp Office Building

19. Postshot Storage Yard*

The area was cleaned up.

20. HTH-3, Drill Hole*

See paragraph C-2 for data.

21. Borrow Areas (Near Noname Hill Road)**

A minor cleanup was performed; however, a loading ramp installed by AFSC personnel was left intact. NV will retain this area.

22. Noname Hill and Access Road**

No work was performed. NV will retain this area for use by the AFSC.

23. Base Camp, Control Point, and Balloon-Launch Area**

NV is retaining these areas, however, a considerable demobilization effort has taken place. Major facilities removed by government agencies and/or contractors include:

By the Lawrence Livermore Laboratory to Livermore, California. Office structure (16 each trailer modules, see Figures 30 and 31), dining hall (8 each trailer modules), dispensary (2 each trailer modules), and several smaller office trailers.

By NV to Amchitka Island, Alaska--office trailers, a considerable amount of equipment, and miscellaneous supplies.

By the U.S. Navy to China Lake, California--4 each dormitory complexes (52 trailer modules), a 210,000-gallon water tank, a pumphouse, ambulance shelter, miscellaneous bunk and office trailers, surplus power poles and transformers (at Base Camp and CP areas), 5 each kitchen trailer modules from the Base Camp's Mess Hall, and other equipment.

By the Intertribal Council, Duckwater, Nevada--3 each 10,000-gallon tanks (see Figure 32).

23a. Sewer Lagoons for Base Camp Area**

The lagoons are being retained by NV.

23b. Scrap and Trash Dump Areas (north of CP)**

The area is being retained by NV.

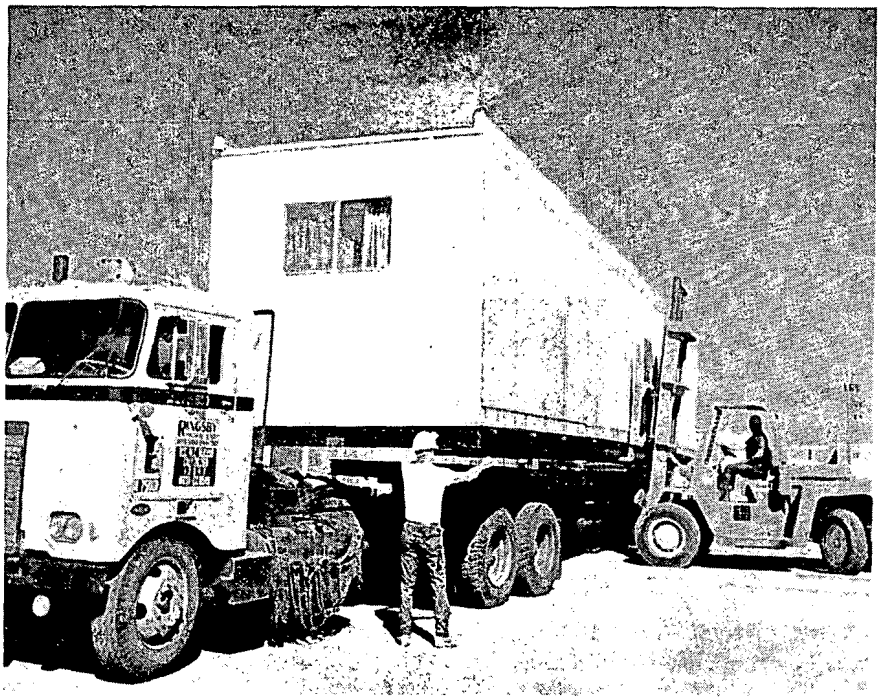


Figure 31 Loading an Office Building Module

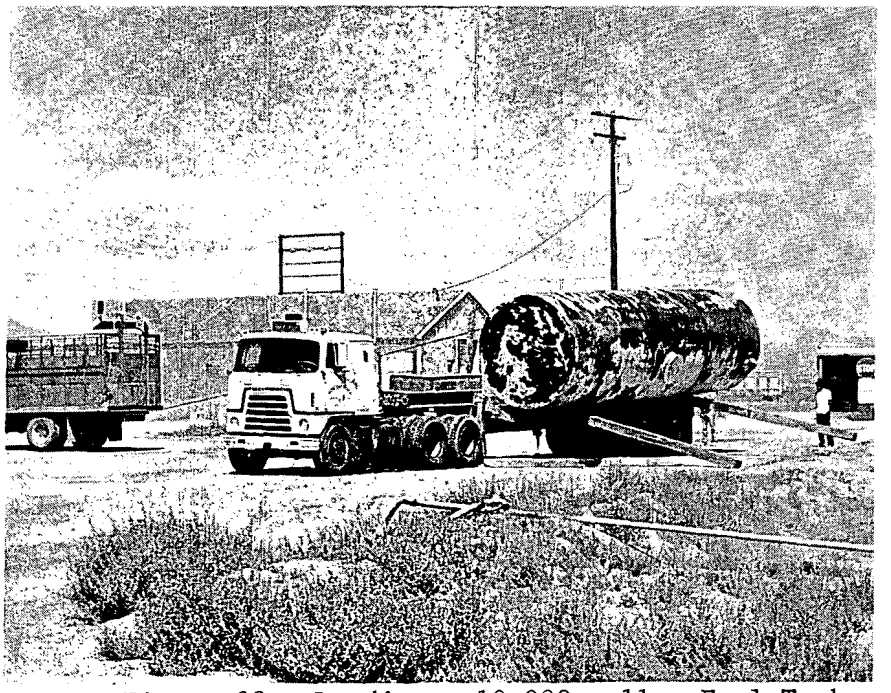


Figure 32 Loading a 10,000 gallon Fuel Tank

23c. Borrow Area (south of Base Camp)**

The area is being retained by NV.

24. Airstrip**

The strip was left with "X" markings and perimeter fencing. A minor cleanup was performed. It is being retained by NV for the AFSC.

25. Repeater Site (near Warm Springs)**

The site remains in service.

26. Tonopah Compound (at Tonopah Airport)**

The entire facility (located on Nye County property) has been removed by other government agencies. The contract with Nye County for use of the land has been terminated.

C. Drill Hole Abandonment

Abandonment methods for 37 designated bore holes (UCE-1, etc.) and 11 undesignated holes are discussed in the paragraphs which follow. Hole location data is provided in feet using the Nevada State Coordinate System--Central Zone. Legends are the same as those used in the preceding paragraphs under B, "Specific Disturbed Areas." A brief description of each hole is included.

1. Exploratory Holes

UCE-1** Coordinates: N - 1,395,000.00
E - 429,400.00

Description:

17 1/2-inch hole. 9 5/8-inch casing cemented at 406 feet w/450 ft.^{3}
7 7/8-inch hole to 478 feet.
6 1/8-inch hole to 2000 feet. 2 3/8-inch O.D. tubing cemented at 2000 feet w/633 ft.^{3} Water in tubing.

Abandonment:

Cut both the 2 3/8-inch tubing and 9 5/8-inch casing off at 1 foot below ground level (GL). Hung a wood plug in 2 3/8-inch tubing at 10 feet below top of 13 3/8-inch casing. Filled 2 3/8-inch tubing with cement and poured a concrete marker base to GL. Installed a marker post with name plate. Cleaned up the location. (This location is not on BLM Land.)

UCE-2** Coordinates: N - 1,293,700.00
E - 523,800.00

Description:

15-inch hole. 13 3/8-inch casing cemented at 15 feet w/12 ft.^{3}
12 1/4-inch hole to 18 feet.
6 1/8-inch hole to 1659 feet. 2 3/8-inch O.D. tubing cemented at 1605 feet w/1015 ft.^{3}

Abandonment:

This hole was assigned to the U.S. Bureau of Land Management; therefore, abandonment was not required.

UCE-3* Coordinates: N - 1,535,900.00
E - 508,900.00

Description:

15-inch hole. 13 3/8-inch casing cemented at 15 feet w/5 ft.^{3}
8 3/4-inch hole to 23 feet.
7 7/8-inch hole to 36 feet.
6 1/8-inch hole to 2000 feet. 2 3/8-inch O.D. tubing cemented at 1967 feet w/650 ft.^{3}

Abandonment:

Cut off 2 3/8-inch tubing at top of 13 3/8-inch casing (GL). The 2 3/8-inch - 13 3/8-inch annulus was already cemented. Hung a wood plug in 2 3/8-inch tubing at 10 feet and filled the tubing with cement. Installed a marker post with a name plate. Cleaned up the location.

UCE-9* Coordinates: N - 1,477,975.69
E - 562,341.41

Description:

7 7/8-inch hole to 3009 feet.
6 1/4-inch hole to 3295 feet. 4 1/2-inch slotted line pipe hung at 3019 feet. Slotted from 110 feet - 1530 feet
1634 feet - 2996 feet.

Abandonment:

Hung a wood plug at 10 feet inside the 4 1/2-inch casing and filled casing with cement. Cut clamps from 4 1/2-inch casing but casing would not fall. Installed a "bridge" at 6 feet below GL in the 4 1/2-inch - 7 7/8-inch annulus and filled annulus with cement. Installed marker post and name plate. Cleaned up the location.

UCE-10* Coordinates: N - 1,433,560.43
E - 558,294.63

Description:

12 1/4-inch hole. 9 5/8-inch casing cemented at 30 feet w/19 ft.^{3}
7 7/8-inch hole to 2695 feet.
6 1/4-inch hole to 2963 feet. 4 1/2-inch slotted casing hung at 2710 feet.
Casing slotted at 55 feet - 288 feet
798 feet - 1902 feet
2467 feet - 2691 feet.

Abandonment:

This hole had been flowing water. Cement plugs were placed as follows:

Pumped plug No. 1 down the 4 1/2-inch casing with 200 cubic feet of neat cement. The water flow stopped. Waited one hour for the cement to set. Pumped plug No. 2 using 50 cubic feet of neat cement and waited for the cement to set. Top of cement was located at 23 feet below GL. Pumped in Plugs No. 3, 4, and 5 with 25 cubic feet of 75 percent neat cement and 25 percent Cal-Seal. Each time the cement dropped to 23 feet. Placed 5 Halliburton rubber plug wipers at 23 feet, after which plug No. 6 held and the casing was filled with cement to GL.

Made a 4- x 5- x 1-foot earth form around the hole, then dug a 2- x 2- x 3-foot hole for the marker base. Installed marker post with name plate and filled the excavation with cement. Cleaned up the location.

UCE-11* Coordinates: N - 1,401,350.93
E - 626,475.43

Description:

12 1/4-inch hole to 31 feet.
7 7/8-inch hole to 4052 feet. 6 1/4-inch hole to 4198 feet. 6 1/8-inch hole to 4206 feet. 4 1/2-inch slotted casing hung at 4047 feet, slotted from 3008 feet to 4047 feet. 7 5/8-inch casing stripped over 4 1/2-inch to 33 feet and 7 5/8-inch to 12 1/4-inch annulus cemented w/35 cubic feet. Static water level 663 1/2 feet.

Abandonment:

Hung a wood plug in the 4 1/2-inch casing at 10 feet below GL and filled the casing with cement. Cut away the clamps supporting the 4 1/2- inch casing, however, it did not drop.

Dug a hole around 7 5/8-inch casing and cut both casings off at one foot below GL. Made a bridge plug in annulus between 4 1/2-inch and 7 5/8-inch casings at six feet below GL and filled the annulus with cement to the surface. Installed a marker post with name plate and cleaned up the location.

UCE-12A* Coordinates: N - 1,514,975.55
E - 594,617.42

Description:

15-inch hole. 10 3/4-inch casing cemented at 100 feet w/104 ft.^{3}
9 7/8-inch hole. 7 5/8-inch casing cemented at 1580 feet w/615 ft.^{3}
6 3/4-inch hole to 3482 feet. Water left in hole. Hole bridged at 2318 feet.

Abandonment:

Cut off the 10 3/4-inch casing at 1 1/2 feet below GL. Hung a wood plug at 10 feet (inside 10 3/4-inch casing) and filled the casing with cement. Poured 2-foot x 2-foot x 18-inch pad over casing and installed a marker post and name plate. Cleaned up the location.

UCE-13* Coordinates: N - 1,655,605.36
E - 597,793.93

Description:

12 1/4-inch hole to 120 feet.
7 7/8-inch hole to 1579 feet. No casing--mud in hole.

Abandonment:

Set a plug at 14 feet below GL. Filled the hole with cement and poured 3-foot x 3-foot x 20-inch cement pad on top of the hole. Installed a marker post with name plate and cleaned up the location.

UCE-14* Coordinates: N - 1,444,693.12
E - 682,524.23

Description:

9 5/8-inch hole to 30 feet.
7 7/8-inch hole to 1450 feet.
6 1/4"-inch hole to 1548 feet. 4 1/2-inch slotted casing hung at 1452 feet. Casing slotted from 59 feet to 1452 feet.
Fluid level at 1135 feet. Water and mud bailed from hole.

Abandonment:

Hung a wood plug inside 4 1/2-inch casing and filled casing with cement. Cut off the supporting casing clamps. Top of 4 1/2-inch casing settled to GL. Dug a 2- x 2- x 1-foot hole around the 4 1/2-inch casing and filled both the annulus and excavated hole with cement. Installed a marker post with name plate. Cleaned up the location.

UCE-16** Coordinates: N - 1,499,400.00
E - 487,000.00

Description:

30-inch hole. 20-inch casing cemented at 52 feet w/299 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cemented at 1687 feet w/5464 ft.^{3}
9 7/8-inch hole to 4353 feet.

Abandonment:

This hole was assigned to the BLM; therefore, an abandonment was not required.

UCE-17** Coordinates: N - 1,430,621.72
E - 628,171.70

Description:

30-inch hole. 20-inch casing cemented at 34 feet w/207 ft.^{3}
17 1/2-inch hole to 501 feet. 13 3/8-inch casing cemented at 500 feet w/713 ft.^{3}
12 1/4-inch hole to 2279 feet. 9 5/8-inch casing cemented at 2278 feet w/1566 ft.^{3}
8 3/4-inch hole to 7978 feet. Top of fish at 6576 feet. Static water level at 535 feet.

Abandonment:

This hole was assigned to the U.S. Bureau of Land Management; therefore, abandonment was not required.

UCE-18* Coordinates: N - 1,396,833.39
E - 635,840.12

Description:

26-inch hole. 20-inch casing cemented at 80 feet w/540 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cemented at 1206 feet w/1298 ft.^{3}
12 1/4-inch hole to 4798 feet. 9 5/8-inch casing cemented at 4797 feet w/2104 ft.^{3}

8 3/4-inch hole to 6503 feet.
6 1/8-inch hole to 6514 feet. Top of fish at 6469 feet.
9 5/8-inch casing parted in collar at 514 feet.
9 5/8-inch casing perforated 406 feet - 598 feet
4060 feet - 4190 feet
4555 feet - 4747 feet
The 9 5/8-inch casing was perforated from 1090 feet to 1095 feet and squeezed w/80 ft.^{3} Static water level 200 feet.

Abandonment:

(To improve the water's quality prior to transferring this hole to the BLM, NV made several attempts to seal off water coming from low aquifers. The attempts failed and, as a result, the hole was plugged and abandoned.)

Moved in a Desert Drilling Company Mayhew 1000 drilling rig and rigged up. Pulled the 6-inch Layne-Bowler turbine pump from the hole. Ran 1.9-inch Hydrill tubing in the hole to 1502 feet. Placed plug No. 1 down the tubing (using Halliburton equipment) with 50 cubic feet of neat cement. Ran 1.9-inch O.D. tubing to 1700 feet, did not tag any cement. Cleaned up the turbine pump. Fluid level was at 334 feet below the surface.

Rigged up to cement plug No. 2. Ran tubing to 1506 feet and placed cement plugs No. 2 through 6. Each plug was 15 cubic feet of 75 percent neat cement and 25 percent Cal-Seal.

Checked the fluid level at 334 feet. Ran 1.9-inch O.D. tubing in the hole and tagged top of plug No. 6 at 1371 feet. Pulled tubing and Bailed the hole for 6 hours with a 7-inch bailer at approximately 1920 gallons per hour. Fluid level remained at 334 feet. Took water samples. Checked fluid level at 334 feet. Made 4 bailer runs and took a water sample. Moved out rig. Rig released at 0800 hours.

The top of the 9 5/8-inch casing was 6 feet below GL. Hung a wood plug inside 9 5/8-inch casing at 10 feet below the casing top and filled the casing with cement. Welded a 14-inch plate to top of the casing with a 3-inch pipe extended up another 10 feet. Backfilled the cellar. Installed a marker post with name plate on the 14-inch plate.

UCE-20** Coordinates: N - 1,399,868.46
E - 628,092.75

Description:

30-inch hole. 20-inch casing cemented at 30 feet w/193 ft.^{3}
17 1/2-inch hole to 540 feet. 13 3/8-inch casing cemented at 536 feet w/830 ft.^{3}
12 1/4-inch hole to 4860 feet. 9 5/8-inch casing cemented at 4856 feet w/3356 ft.^{3}

8 3/4-inch hole to 6000 feet. Plugged back to surface from 4565 feet w/2103 ft.^{3}

Abandonment:

This hole had been plugged previously. A 3- x 3- x 2-foot footing was poured to support the marker post. The hole is located within the UC-3 withdrawal which NV is retaining.

UCE-21* Coordinates: N - 1,397,350.11
E - 668,405.56

Description:

30-inch hole. 20-inch casing cemented at 60 feet w/240 ft.^{3}
17 1/2-inch hole to 303 feet. 13 3/8-inch casing cemented at 302 feet w/405 ft.^{3}, circulated out cement leaving 212 ft.^{3} in the annulus.
7 7/8-inch hole to 6490 feet.
6 1/8-inch hole to 6495 feet.

Abandonment:

Cut the 13 3/8-inch casing off 1 foot below top of cellar. Hung a wood plug inside 13 3/8-inch casing at 10 feet below its top and filled it with cement. Installed a marker post and name plate. Backfilled the cellar and cleaned up the location.

UCE-23* Coordinates: N - 1,369,026.53
E - 683,894.78

Description:

26-inch hole to 95 feet. 20-inch casing cemented at 80 feet w/247 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cemented at 300 feet w/413 ft.^{3}
7 7/8-inch hole to 6493 feet.
6 1/8-inch hole to 6500 feet. Top of logging decentralizer at 6493 feet. Hole bridged at 483 feet.

Abandonment:

Cut the 13 3/8-inch casing off 2 feet below GL. Hung a wood plug on 1/2-inch iron bar at 10 feet below top of the 13 3/8-inch casing. Filled casing with cement and installed a marker post and name plate. The 6- x 6- x 6-foot cellar was backfilled. Cleaned up the location.

2. Hydological Test Holes

HTH-1** Coordinates: N - 1,411,442.75
E - 629,720.11

Description:

17 1/2-inch hole. 13 3/8-inch casing cemented at 52 feet w/64 ft.^{3}
12 1/4-inch hole. 9 5/8-inch casing cemented at 3704 feet w/3504 ft.^{3} 9 5/8-inch casing perforated from 150 feet to 3665 feet. Fluid level was 231 feet before hydrological testing.

Abandonment:

No action was taken. This hole is being retained for long-term monitoring.

HTH-2** Coordinates: N - 1,411,929.43
E - 629,587.75

Description:

17 1/2-inch hole. 13 3/8-inch casing cemented at 50 feet w/69 ft.^{3}
12 1/4-inch hole. 9 5/8-inch casing set on bottom at 1000 feet, no cement. Casing slotted from 504 feet to 1000 feet. Static water level 570 feet.

Abandonment:

No action was taken. This hole is being retained for long-term monitoring.

HTH-3* Coordinates: N - 1,385,943.94
E - 657,118.89

Description:

26-inch hole. 20-inch casing cemented at 52 feet w/220 ft.^{3}
17 1/2-inch hole to 648 feet. 13 3/8-inch casing cemented at 647 feet w/625 ft.^{3}
12 1/4-inch hole to 4700 feet. 9 5/8-inch liner ran from 576 feet to 4697 feet, cemented w/234 ft.^{3} Top of cement by log was 4150 feet.
8 3/4-inch hole to 6009 feet. 5 1/2-inch liner ran from 4623 feet to 5982 feet, no cement, liner slotted. 9 5/8-inch casing perforated from 3800 feet - 3820 feet. Static water level before testing was 573 feet.

Abandonment:

Cut the 13 3/8-inch casing off at 2 feet below GL. Hung a wood plug at 10 feet below top of the 13 3/8-inch casing. Filled the casing with cement and installed a marker post and name plate. The 6- x 6- x 6-foot cellar was backfilled. Cleaned up the location.

HTH-4** Coordinates: N - 1,385,984.00
E - 685,984.00

Description:

26-inch hole to 63 feet. 20-inch casing cemented at 62 feet w/278 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cemented at 1500 feet w/1600 ft.^{3} Top of good cement by log at 720 feet, top of poor cement at 360 feet.
13 3/8-inch casing perforated from: 505 feet - 520 feet, 575 feet - 585 feet, and 870 feet - 890 feet.
8 3/4-inch hole. 5 1/2-inch casing cemented at 6040 feet w/5016 ft.^{3} Top of good cement by log at 1350 feet, top of poor cement at 1260 feet. Water in hole.

Abandonment:

This hole was assigned to the U.S. Bureau of Land Management; therefore, an abandonment program was not required.

HTH-5* Coordinates: N - 1,368,424.47
E - 625,928.65

Description:

30-inch hole to 65 feet. 20-inch casing cemented at 64 feet w/260 ft.^{3}
17 1/2-inch hole to 454 feet. 13 3/8-inch casing cemented at 452 feet w/649 ft.^{3}
12 1/4-inch hole to 2085 feet. 9 5/8-inch casing cemented at 2084 feet w/1354 ft.^{3} Top of cement by log was 394 feet. 9 5/8-inch casing perforated 570 feet - 590 feet, 1760 feet - 1810 feet.
8 3/4-inch hole to 6000 feet.
6 1/8-inch hole to 6007 feet. 5 1/2-inch slotted liner from 1981 feet to 6004 feet, not cemented. Water in hole.

Abandonment:

Cut the 9 5/8-inch casing off at 2 feet below GL. Hung a wood plug inside the 9 5/8-inch casing at 10 feet below top of casing and filled it with cement. Installed a bridge plug in 9 5/8-inch - 13 3/8-inch annulus at 8 feet below GL and filled annulus with cement. Installed marker post with name plate and backfilled cellar. Cleaned up the location.

HTH-21* Coordinates: N - 1,397,350.13
E - 668,505.56

Description:

26-inch hole. 20-inch casing cemented at 33 feet w/129 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cement at 598 feet w/2761 ft.^{3}

12 1/4-inch hole to 1330 feet. Hole abandoned because of excessive caving, probably from behind the 13 3/8-inch casing. Cleaned out to 612 feet before abandoning, hole caving. Water in hole.

Abandonment:

Dug down 2 feet to top of the 13 3/8-inch casing. Casing and cellar were full of cement. Poured a 3- x 3- x 2-foot base over top of 13 3/8-inch casing and installed a name plate with marker post. Cleaned up the location.

HTH-21-1* Coordinates: N - 1,397,250.13
E - 668,505.56

Description:

26-inch hole. 20-inch casing cemented at 70 feet w/378 ft.^{3}
17 1/2-inch hole to 768 1/2 feet. 13 3/8-inch casing cemented at 768 feet w/1150 ft.^{3}
12 1/4-inch hole to 2280 feet. 9 5/8-inch casing cemented at 2279 feet w/200 ft.^{3} No cement top obtained.
8 3/4-inch hole to 6500 feet. Top of fish in hole at 5410 feet. Perforated 9 5/8-inch casing 1340 feet - 1360 feet, 1690 feet - 1710 feet, 1856 feet - 1876 feet, 2030 feet - 2050 feet. Water in hole.

Abandonment:

Dug down 3 feet to top of 9 5/8-inch and 13 3/8-inch casings. Hung a wood plug inside 9 5/8-inch casing and a bridge plug in annulus at 9 5/8-inch - 13 3/8-inch casing at 10 feet below GL, then filled annulus and 9 5/8-inch casing to surface with cement. Installed marker post and name plate and cleaned up the location.

HTH-23** Coordinates: N - 1,368,087.00
E - 684,237.00

Description:

30-inch hole. 20-inch casing cemented at 61 feet w/216 ft.^{3}
12 1/4-inch hole. 9 5/8-inch casing cemented at 1244 feet w/200 ft.^{3} Top of cement by log was 1050 feet.
8 3/4-inch hole to 4510 feet. 7 5/8-inch liner ran from 1152 feet to 4507 feet. Cemented and squeezed with 311 ft.^{3} Top of cement at 3484 feet by log. Liner parted from 4420 feet to 4433 feet.
6 3/4-inch hole to 7503 feet. Top of fish at 6445 feet. Water in hole.

Abandonment:

This hole was assigned to the U.S. Bureau of Land Management; therefore, an abandonment program was not required.

3. Project Faultless Holes

UC-1* Coordinates: N - 1,414,339.91
Project E - 628,920.87
FAULTLESS
Emplacement
Hole

Description:

This drill hole was expended when Project Faultless was detonated on January 19, 1968.
Excavated hole. 88-inch casing cemented at 10 feet w/400 ft.^{3}
72-inch hole to 400 feet. 48-inch casing cemented at 396 feet w/5696 ft.^{3}
42-inch hole to 3275 feet. 26-inch casing cemented at 3250 feet w/24,001 ft.^{3} Stemmed to surface.

Abandonment:

The abandonment methods used for this hole are described in paragraph B-11.

UC-1-I-1** Coordinates: N - 1,414,262.85
E - 628,900.14

Description:

Excavated hole. 36-inch casing cemented at 8 feet w/59 ft.^{3}
26-inch hole. 20-inch casing cemented at 97 feet w/380 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cemented at 1300 feet w/2316 ft.^{3}
12 1/4-inch hole to 3500 feet.

Abandonment:

This hole was cemented to the surface prior to the Faultless event.

Installed a name plate on a short piece of 4-inch pipe and placed both in concrete where the hole had been located. Filled the 4-inch pipe with cement and cleaned up the location. This hole is in the UC-1 withdrawal which NV is retaining.

UC-1-I-2** Coordinates: N - 1,414,320.47
E - 628,846.59

Description:

17 1/2-inch hole to 52 feet. 13 3/8-inch casing cemented at 50 feet w/154 ft.^{3}
12 1/4-inch hole to 1100 feet.
8 3/4-inch hole to 1500 feet.

Abandonment:

This hole had been cemented to the surface prior to the Faultless event.

Installed the name plate on a short piece of 4-inch pipe and placed both in concrete where the hole had been located. Filled the 4-inch pipe with cement and cleaned up the location. This hole is in the UC-1 withdrawal which NV is retaining.

UC-1-P-1** Coordinates: N - 1,413,421.49
E - 629,840.66

Description:

Excavated to 8 feet. Concrete cellar 9 feet x 9 feet x 8 feet.
26-inch hole in 50 feet. 18-inch casing cemented at 40 feet w/220 ft.^{3}
15-inch hole to 510 feet. 10 3/4-inch casing cemented at 502 feet w/492 ft.^{3} 10 3/4-inch casing collapsed at 185 feet, worked 9 7/8-inch bit to 205 feet and abandoned hole.

Abandonment:

This hole was solidly cemented from approximately 205 feet to the bottom of the cellar at 8 feet. The cellar has been backfilled.

A 3- x 3- x 2-foot cement pad was poured above the 10 3/4-inch casing and a marker post with name plate was installed. Cleaned up the location. The hole is in the UC-1 land withdrawal.

UC-1-P-1S** Coordinates: N - 1,413,403.26
E- 629,836.97

Description:

Excavated. 108-inch corrugated metal pipe at 10 feet.
Backfilled. 30-inch hole. 20-inch casing cemented at 30 feet w/201 ft.^{3}
15-inch hole. 10 3/4-inch casing cemented at 524 feet w/600 ft.^{3}
9 7/8-inch hole to 2734 feet. Struck drill pipe, plugged back hole to 600 feet. Drilled 9 7/8-inch hole from 600 feet to 789 feet and reentered old hole. Cleaned out hole to top of fish at 964 feet. Ran 4 1/2-inch casing to 922 feet, slotted from 34 feet to 922 feet. Water level 176 feet.

Abandonment:

This hole is being used for long-term monitoring. Abandonment has been deferred for the present.

UC-1-P-2** Coordinates: N - 1,414,632.50
E - 628,982.18

Description:

108-inch casing cemented at 10 feet w/704 ft.^{3}
26-inch hole to 222 feet. 20-inch casing cemented at 181 feet w/635 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cemented at 1150 feet w/1174 ft.^{3}
12 1/4-inch hole. 9 5/8-inch casing cemented at 1950 feet w/661 ft.^{3} Top of cement at 1100 feet by log.
8 3/4-inch hole to 3694 feet.

UC-1-P-2S (First Sidetrack in UC-1-P-2)

8 3/4-inch hole from 2700 feet to 3176 feet. Could not get back into sidetracked hole plugged back to 2863 feet.

UC-1-P-2SR (Second Sidetrack in UC-1-P-2)

8 3/4-inch hole from 2700 feet to 3600 feet. Perforated 9 5/8-inch casing from 1148 feet to 1945 feet. Ran 5 1/2-inch casing to 2792 feet, hung on slips. Perforated 5 1/2-inch casing from 1148 feet to 2790 feet. Mud in hole.

Abandonment:

This hole (UC-1-P-2) will also be used for long-term monitoring. Abandonment has been deferred.

4. Project Adagio Holes

UC-3** Emplacement Hole Coordinates: N - 1,399,948.43
E - 628,092.24

Description:

This project was not executed. The emplacement hole is being held in reserve.
144-inch corrugated metal pipe at 10 feet, cemented w/pad.
140-inch hole to 394 feet. 122-inch casing cemented at 391 feet w/10,136 ft.^{3}
120-inch hole to 4846 feet. 54-inch casing cemented at 4782 feet w/312,999 ft.^{3}

Abandonment:

Refer to paragraph B-8 for abandonment data.

UC-3**
Canister
Hole

Description:

Excavated a 11 1/2 feet x 27 feet deep hole. 94-inch casing cemented at 27 feet w/1927 ft.^{3}
86-inch hole to 307 feet. 54-inch casing landed at 305.47 feet. Casing set on 2 feet of fill. Hole is dry. Annulus was left open to permit future removal of 54-inch casing.

Abandonment:

Refer to paragraph B-8 for abandonment data.

UC-3 Instrument Holes*

Abandonments:

The following instrument holes were plugged with cement from a wood plug at 10 feet below GL to surface. Marker posts with name plates were installed. The cableway trenches in concrete surface pads were filled with sand, gravel, or cement:

UC-3-I-1 Coorindates: N - 1,399,719.62
E - 627,972.29

Description:

26-inch hole to 60 feet. 20-inch casing cemented at 60 feet w/241 ft.^{3}
17 1/2-inch hole to 1008 feet. 13 3/8-inch casing cemented at 1008 feet w/3380 ft.^{3}
12 1/4-inch hole to 4870 feet. Sidetracked from 3488 feet to 4870 feet. Mud in hole.

UC-3-I-2 Coordinates: N - 1,399,838.12
E - 627,922.79

Description:

26-inch hole. 20-inch casing cemented at 60 feet w/237 ft.^{3}
17 1/2-inch hole. 13 3/8-inch casing cemented at 410 feet w/440 ft.^{3}
12 1/4-inch hole to 2550 feet. Mud in hole.

UC-3-I-3 Coordinates: N - 1,399,248.21
E - 627,892.79

Description:

26-inch hole to 69 feet. 20-inch casing cemented at 60 feet w/261 ft.^{3}

12 1/4-inch hole to 1010 feet. 8 5/8-inch casing cemented at 1000 feet w/1218 ft.^{3}
7 7/8-inch hole to 3002 feet. Mud in hole.

UC-3-I-4 Coordinates: N - 1,398,948.12
E - 627,892.79

Description:

26-inch hole. 20-inch casing cemented at 60 feet w/177 ft.^{3}
16 1/2-inch hole. 13 3/8-inch casing cemented at 1005 feet w/1135 ft.^{3}
7 7/8-inch hole to 3002 feet. Mud in hole.

UC-3-I-5R Coordinates: N - 1,399,805.46
E - 627,948.09

Description:

26-inch hole. 13 3/8-inch casing cemented at 40 feet w/178 ft.^{3} 12 1/4-hole to 360 feet. Mud in hole.

5. Future Project Emplacement Hole

UC-4 Coordinates: N - 1,430,564.49
E - 628,253.40

Description:

144-inch corrugated metal pipe at 12 feet, cemented w/pad.
140-inch hole to 415 feet. 122-inch casing cemented at 413 feet w/10,825 ft.^{3}
120-inch hole to 5500 feet. Mud in hole.

Refer to paragraph B-15 for hole abandonment data.

6. Miscellaneous (Undesignated) Holes

Four "rat holes" were backfilled with gravel to the surface. Two were located in the UC-3 and UC-4 concrete foundations used to support drill rigs. The other two were located at the UC-1 (Faultless) and UC-3 (Adagio) multideck building sites.

Near UC-1, five small holes were abandoned by cutting off their 1-inch diameter plastic pipes at 6 inches below ground surface and filling each hole with cement.

Two other undesignated holes are the water wells at Base Camp. They remain in service for use by the camp's current tenant, the AFSC.

D. Disposal of AEC Property

1. Excess Property

Much of the Central Nevada Test Area was demobilized through excess property transfer proceedings, with the receiving agency bearing all costs. The following list details recipients, description, and the approximate acquisition cost of the property transferred:

Agencies	Description	Amount
Los Alamos Scientific Laboratories (LASL)	Trailers and Equipment, Furniture	$ 18,671.68
Lawrence Livermore Laboratory (LLL)	Trailers, A/C Units, Pickups, Cable, Shop Equipment, and Well Casing	346,235.79
Edgerton, Germeshausen & Greer (EG&G)	Equipment, Stores Material, Forklift Truck	61,553.31
AEC Headquarters	Office Furniture	6,126.10
Wapato Indians	94-inch Casing, Office Furniture and Equipment, Stores Material	354,187.79
Intertribal Council	Furniture, Equipment, Stores Material, Pickup Truck, Tanks	34,563.33
National Park Service	Kitchen Equipment, General Equipment, Office Equipment	43,685.40
Naval Weapons Center (Fallbrook)	Pickups	4,852.49
U.S. Naval Reserve Training Center	Mess Hall Equipment	1,671.30
Atlantic-Richfield (Hanford)	Trucks, Carryall, Tool Box	8,810.25
Geo Tech Teledyne	General Equipment	1,312.97

Agencies	Description	Amount
Inter-Motor Pool, LVO	Shop Equipment	$ 1,724.54
Sandia Tonopah Test Range	Equipment, Furniture, Stores Material, Refrigerators, Binoculars, Camera	60,826.68
Nevada State Civil Defense	Equipment	2,426.49
Nevada State Purchasing	Equipment	2,915.65
Navajo Economics, Fort Defiance	Building-Butler (Tonopah Airport Warehouse)	51,834.97
Rancho Murieta Training Center	Equipment	15,858.36
REECo, Tonopah Test Range	Stores Material, Shop Equipment, Office Furniture	16,035.46
University of Nevada - RENO	Drilling Material (Tubing)	36,689.27
Reynolds Electrical & Engineering Co., Inc. (REECo) - NTS	Stores Materials, Furniture, Shop Equipment, General Equipment, Office Equipment Drilling Materials, Cable, Mess Hall Equipment	3,000,000.00 (approx.)
Department of Defense (DOD) - NTS	Drilling Equipment	426,984.02
Naval Weapons Center China Lake, CA	Trailers, A/C Units, Entrance Ways, Portable Building, Water Tank w/ Pumphouse Building and Equipment, Office Furniture, Equipment, Stores Material, Power Poles	510,682.93
Sandia - Albuquerque (Kirtland AFB)	Substations, Drilling Equipment	62,715.00
Dow Chemical Company	Substation, Generator	8,685.00

Agencies	Description	Amount
U.S Environmental Protection Agency (EPA) - Las Vegas	Trailer, Equipment	$ 6,004.33
Aerojet Nuclear	Trailers, A/C Units, Office Equipment	10,817.61
U.S. Naval Ammunition Depot - Hawthorne	Stores	23,897.11
AEC Rocky Flats - Colorado	Pickup Trucks	22,542.36
University of Rochester, NY	Generator, Tools	6,962.44
University of Notre Dame, IN	Nylon Slings	375.40
U.S. Bureau of Land Management	Well Casing, Lumber, Floor Tile	12,151.60
	TOTAL	$5,161,799.63 (approx.)

2. Sale of Property

Two public sales of government property were held at the CNTA, one for scrap metal and the other for two technical (multideck) buildings and a "Brock house" building. Las Vegas Auto and Truck Salvage was high bidder on an estimated 548 tons of ferrous scrap metal with a bid of $12,222.22.

Nevada Mine Services was high bidder on the buildings with a bid of $457.67.

3. Bore Holes

Of the 37 bore holes drilled in Central Nevada and used by the AEC, five have been assigned to the U.S. Bureau of Land Management (BLM). They are UCE-2, UCE-16, UCE-17, HTH-4, and HTH-23.

III. PRESENT STATUS

A. Structures and Equipment Remaining Onsite

Although many of the supplies, structures, equipment items, and other facilities were demobilized, transferred to other agencies, or sold, a considerable number of assets remain. They may be summarized as follows:

1. Control Point (CP)

The CP currently consists of a 380- x 560-foot fenced area containing: an 8- x 8-foot portable wooden structure; a privately owned house trailer (owned by the current tenant's caretaker); a portable substation (from which power is distributed to the house trailer and to a sewage lift station located approximately 1000 feet to the northeast); and underground electrical, water, and sewer distribution lines. The current tenant has also moved the Adagio 16- x 16-foot cable termination building from UC-3 to the CP. (It had originally been transferred in place to the U.S. Navy, China Lake, California.)

The CP's current tenant is the U.S. Air Force Systems Command (AFSC).

2. Airstrip

The runway is 150 x 6000 feet. It remains paved (with oil and chips) on a heavily primed (MC-70) base course material over a compacted subbase. A windsock and paved aircraft parking area with tiedowns, are included. The strip has been painted with large Xs at each end for aircraft warning purposes. The current tenant is the AFSC.

3. Base Camp

At the Base Camp, the following facilities remain (refer to Exhibit 3):

a. Fire Station: 33- x 40-foot, Butler-type insulated building. Attached to it are two 11- x 40-foot trailer-type dormitory structures containing office, kitchen, and living quarters.

b. Communications Radio Shop: 38- x 50-foot, Butler-type insulated building, partitioned into shop, vehicle, and storage areas.

c. Warehouse: 60- x 150-foot, Butler-type insulated building with office.

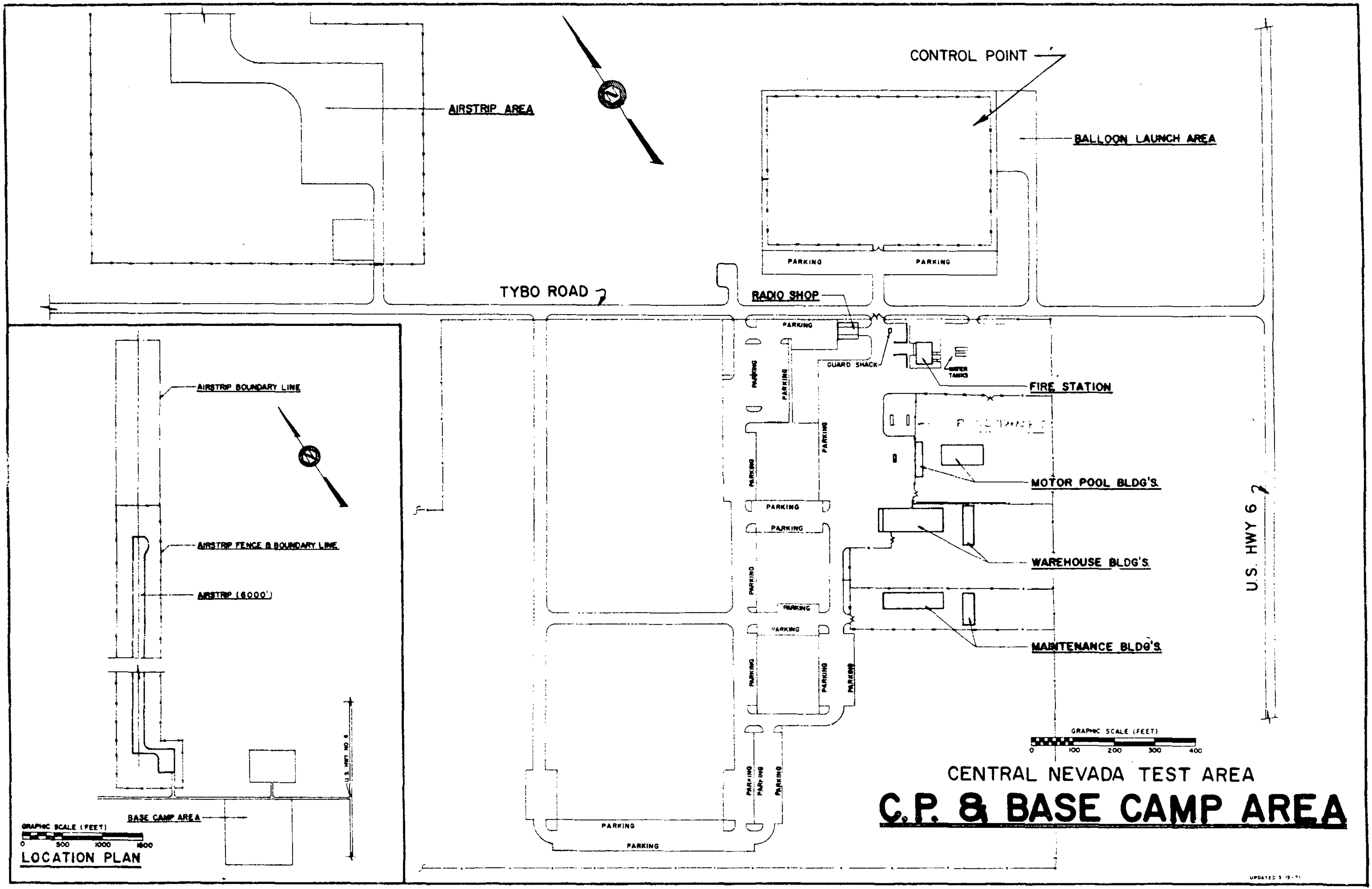

CONTROL POINT
AIRSTRIP AREA
BALLOON LAUNCH AREA
PARKING
PARKING
TYBO ROAD
RADIO SHOP
PARKING
GUARD SHACK
WATER TANKS
FIRE STATION
MOTOR POOL BLDG'S.
WAREHOUSE BLDG'S.
MAINTENANCE BLDG'S.
U.S. HWY 6
AIRSTRIP BOUNDARY LINE
AIRSTRIP FENCE & BOUNDARY LINE
AIRSTRIP (6000')
BASE CAMP AREA
U.S. HWY NO 6
GRAPHIC SCALE (FEET)
0 500 1000 1500
LOCATION PLAN
GRAPHIC SCALE (FEET)
0 100 200 300 400
CENTRAL NEVADA TEST AREA
C.P. & BASE CAMP AREA

EXHIBIT 3

d. Warehouse: 24 feet 1/2 inch x 105 feet, 2- x 4-stud framing with fiberboard wall and roof sheeting.

e. Motor Pool Building: 48- x 100-foot, Butler-type building with fiberglass insulation.

f. Motor Pool Building: 24 feet 1 1/2 inches x 108 feet 5 1/2 inches, 2- x 4-stud framing with fiberboard wall and roof sheeting.

g. Maintenance Building: 40- x 150-foot, Butler-type building with fiberglass insulation, partitioned into shop areas.

h. Maintenance Building: 24 x 34 feet, 2- x 4-stud framing with fiberboard wall and roof sheeting.

i. Water Systems: Two separate systems exist as follows: (1) For potable water, a 2000-gallon skid-mounted insulated tank was installed next to the Fire Station. It is supplied from a submersible pump in a 200-foot well. A booster pump near the Fire Station is then used to provide water at the Fire Station. It can also provide a limited supply into the Base Camp-CP water distribution system. (2) For construction water, a 200-foot well was drilled and a submersible pump installed. It supplies water to two each overhead 10,000-gallon tanks at a truck fill stand.

j. Electrical Distribution System: Sierra Pacific (SP) lines supply 34.5 KV to a SP substation located outside the Base Camp. Beyond the SP meter pole, the entire distribution system is AEC owned. The system provides power to the Base Camp and CP with service drops at all remaining Base Camp buildings and facilities through appropriate transformers. Distribution within the CP is through buried cable.

k. POL Facilities: The present system consists of a 10,000-gallon diesel tank, a 10,000-gallon motor gasoline tank within earth berms, and a 8- x 15-foot portable metal building and dispensing pumps. A third 10,000-gallon tank (property of the Air Force) has been installed at the POL site.

l. Sanitary Sewer System: Both the Base Camp and CP are served by this system which consists of 8- and 6-inch mains and laterals that drain into lagoons via a sewage lift station, located approximately 1600 feet northeast of Base Camp. Each of the lagoons are 140 x 140 feet at

the top and 9 feet deep. The lagoons are enclosed by a three-strand barbed wire fence.

m. Miscellaneous: There are several other minor improvements remaining at CNTA's Base Camp. The entire camp is fenced with three strands of barbed wire. Parking bumpers are installed near most buildings. Within the camp, several roads and parking areas remain. They were constructed by applying oil and chips over a graded and compacted soil base. The guard shack is still installed at the main gate.

The current tenant at the Base Camp is the AFSC.

4. Noname Hill Repeater Site

This site consists of a graded area for trailers and a 52-foot high antenna tower atop the hill. A steep, winding, gravel access road 12 feet wide x 3.95 miles long provides access from U.S. Highway 6. Commercial power is supplied via a Sierra Pacific pole line which runs to the top of the hill. The antenna tower is triangular in shape, has 6-inch diameter pipe columns supported from concrete footings, has five working platforms, and is of bolted steel construction. The current tenant is the AFSC.

5. Central Pipe Yard

The yard, approximately 10 acres, is enclosed with a three-strand barbed wire fence. It is being used to store NV drilling and/or drilling-related equipment and materials.

6. UC-3 Area

Of the 960 acres withdrawn for UC-3 under PLO-4748, approximately 28 acres are fenced with three strands of barbed wire. Stored within the fence are drilling equipment and supplies and several buildings which were transferred (in place) to the U.S. Naval Weapons Center, China Lake, California, but which have not been removed. Also, located inside the fence are the UC-3 emplacement hole, the UC-3 cannister hole, drill hole UCE-20, and several instrument holes. All holes are either capped or plugged. Refer to Section II-B for hole abandonment details.

7. UC-4 Area

Nine hundred and sixty acres were also withdrawn for UC-4 under PLO-4748. Part of this area is fenced with three strands of barbed wire. Inside the fence are stored 54-inch drill casings. Also, located inside the fence is the capped UC-4 emplacement hole and drill hole UCE-17. UCE-17 has been transferred to the BLM.

8. Warm Springs Repeater Site

This site is located on a mountain top approximately two miles west of Warm Springs, Nevada. A surface line provides commercial power. Approximately one mile west of Warm Springs, and near a telephone company microwave station, is a small AEC generator facility which automatically starts and provides emergency power during commercial power outages. A narrow and steep gravel road provides access to the site from U.S. Highway 6. All equipment and maintenance is the responsibility of REECo. The facility is currently used as a Net 12 communications repeater for the NTS and as a repeater site for the current Base Camp tenant on a local radio network.

9. Drilling Equipment and Materials

At present, drilling equipment and materials remain stored at the CNTA. Much of it is new. Badly worn and expended ferrous metal drilling items were disposed of in a scrap metal sale. The following lists some of the major items in storage.

Item	Approximate Cost
Casing, 54-inch I.D., 42 joints @ 60 feet, total length = 2520 feet (approx.), wall thickness ranges from 11/16 to 1 1/16 inches. (Five additional 60-foot joints are installed in the UC-3 canister hole which could be recovered.)	$ 758K
Drill pipe, 13 3/8-inch O.D., Reed V-4 tool joints, R-3, X-95, 67.5 pounds/foot, 150 ea. joints.	$ 247K
Miscellaneous items: casing, tubing, drill collar weights, fishing tools, elevators, centralizers, crown block, subs, stablizers, etc.	$ 500K

B. Radiological Survey Results

During April, 1973, Eberline Instrument Corporation (EIC) conducted a detailed radiological survey and sampling program at the CNTA. The purpose of the program was to document the radiological condition of several areas prior to their cleanup and demobilization. The results of the program may be summarized as follows:

1. Personnel Monitoring

No radioactivity was detected among the EIC, NTS, or H&N subcontractor employees during any phase of this operation. EIC participants wore their customary dosimetry badges. NTS participants wore their NTS film badges, and H&N subcontractor employees were provided badges.

Personnel, who participated in retrieving a logging cable and transducer from a Faultless postshot reentry hole, wore anticontamination clothing and submitted urine samples prior to the start of work to provide a base line datum in the event radioactivty was encountered. The principal participant submitted a sample after the retrieval operation. All tests were negative.

2. Decontamination and Disposal of Equipment used in the Transducer Recovery

The retrieved logging cable and transducer mentioned in paragraph 1 above were contained on plastic sheets, given swipe tests, and checked for radioactivity. Nothing was found. Since the cable was flexible and might contain radionuclides within its strands, it was considered to be potentially contaminated. It was coiled into a plastic lined steel drum and sent to the NTS for burial. Tools used in the operation were also checked for radioactivity. They were not contaminated.

3. Soil Sampling

a. Prior to the start of the CNTA survey, to assist in its planning, the U.S. Environmental Protection Agency (EPA), Las Vegas, Nevada, collected three soil samples: one at the Project Faultless decontamination pit; one adjacent to the Faultless drill back hole; and one at Base Camp. The first two were gamma scanned by the EPA for 40 minutes using a 3- x 3-inch NaI crystal detector. The EPA report of these analyses indicated nothing detectable other than naturally occurring isotopes. The third sample was sent to EIC where it was gamma scanned for 200 minutes using a high resolution Ge(Li) detector. Results of this anlysis were as follows:

Isotope	KEV	± 2 Sigma pCi/g (dry)
Bi - 214	1765	1.3 ± .6
K - 40	1460	29 ± 3
Cs - 137	662	1.0 ± .1
Bi - 214	609	1.2 ± .2
Tl - 208	583	.44 ± .09
Pb - 214	352	1.7 ± .3
Hg - 203	279	.17 ± .08
Pb - 212	239	2.4 ± .3

Note: When the two-sigma counting statistic error was greater than 50 percent of the pCi/g figure, the concentration was considered to be below the practical reporting level.

b. Three areas within the Faultless subsidence were selected for detailed soil sampling, as follows:

(1) A square area, 100 feet on each side, centered on the Faultless wellhead was divided into a grid with sampling points located in accordance with Exhibit 4.

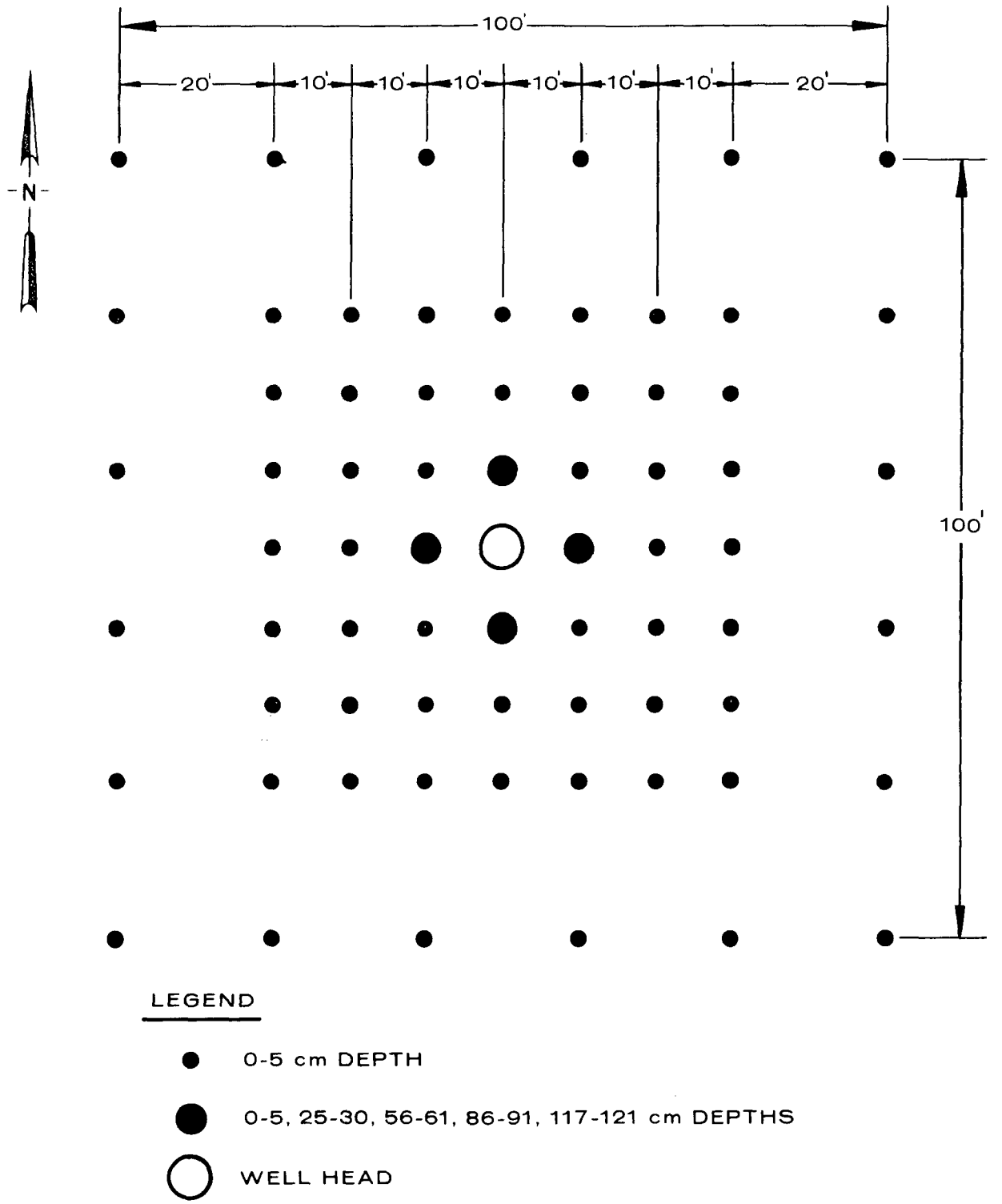
A total of 84 samples were obtained from the 68 sampling points.

Five samples each were obtained from the four points closest to the wellhead. These samples were taken at depths of 0-5, 25-30, 56-61, 86-91, and 117-121 cm. All other points (64) were sampled at the surface, 0-5 cm. The entire 84 soil samples obtained were gross gamma counted. Sixteen were analyzed for tritium. No radioactivity other than naturally occurring was detected.

(2) At the Faultless drillback well (UC-1-P-2), sampling points were located in a similar manner as those around the emplacement well. Additionally, a line of five sample points was located along a trench leading into the mud pit: two of these points were sampled at depths of 0-5, 25-30, 56-61, 86-91, and 117-121 cm. The drill rig's "rat hole" was sampled at 366 cm and its "mouse hole" at 274 cm. Again, no contamination was found in any of the samples taken. All samples were gross gamma counted; 25 were analyzed for tritium.

(3) Using the surrounding fence for orientation, a rectangular area at the Faultless decontamination pad was sampled. The geometric center of the fenced area was established and a 10-foot grid of sampling points was laid out from this center to cover an area 80 feet x 100 feet. Surface samples were taken at all points and profile samples at selected points. A total of 99 points were located from which 112 samples were taken. All samples were gross gamma counted; 16 were analyzed for tritium. Again, no radioactivity other than natural occurring was detected.

c. Four soil samples were collected on the surface 0-5 cm at a distance of 554 feet from the Faultless emplacement hole on north, south, east, and west bearings. Another sample was taken 300 feet east of the CP (near Base



Layout For Soil Sampling Points at Faultless Emplacement Hole (UC-1) & Postshot Reentry Hole (UC-1-P-2).

EXHIBIT 4

Camp). These samples were gross gamma counted to determine a background for soil in the area. They were also analyzed with respect to gamma energy to verify that the observed radioactivity was from naturally occurring radioisotopes. No isotope other than naturally occurring ^{40}K was identified and the concentration of this isotope averaged about 30 pCi/g of wet soil.

4. Water Sampling

Prior to the survey and within the Faultless subsidence, water from rain and melted snow had collected in pools and casings. Water samples were taken from each of the following locations:

a. The cellar of the drillback well (UC-1-P-2).

b. A multideck building's "rat hole" 20 feet deep with casing, located 80 feet west of UC-1.

c. The trench (drilling chip area) near UC-1-P-2.

d. A low area 550 feet east-northeast of UC-1 where drainage had collected from both the UC-1 and UC-1-P-2 areas.

Each of the four samples were gross gamma counted and analyzed for tritium. In addition, the last sample (d) was evaporated and counted for beta. No radioactivity above instrument background was detected.

5. Miscellaneous Instrument Surveys

Using an Eberline PRM-4 (HP-210 probe) beta-gamma pulse rate meter and an Eberline PAC-4G gas proportional alpha counting instrument, the wellhead at UC-1-P-1 was surveyed. No radioactivity above background was detected.

The central pipe storage yard, storage areas at UC-3, UC-4, and a scrap and trash dump at the Base Camp were similarly surveyed. No radioactivity was found in any of these areas that could be identified with Project Faultless.

6. Summary

Radiological survey and sampling of the Project Faultless site and instrument surveys of equipment and scrap stored at the CNTA detected no radioactivity other than naturally occurring. No radioisotopes were detected that could be attributed to Project Faultless.

IV. CONTINUING SITE-RELATED ACTIVITIES

A. Long-Range Monitoring

1. Hydrological Monitoring for Radioactivity

The Faultless device was detonated on January 19, 1968, at a depth of 3,200 feet. It produced a subsurface cavity-chimney complex and numerous surface fractures of up to 9,000 feet and greater in length. The only known radioactive contamination at the CNTA is confined to the underground cavity-chimney complex.

It has been predicted that groundwater will not migrate away from the cavity-chimney complex until it has filled the available void volume and approaches the preevent water table level--about 500 feet below land surface. The chimney had not filled above 2,280 feet below land surface in four years following the event and is now filling at an exceptionally slow rate. Studies indicate that another 80 to 100 years may elapse before filling to preevent levels is complete (when the start of a very slow southeasterly migration will occur). During this time frame, water soluble radionuclides can be expected to decay to background levels well before reaching the boundaries of AEC-controlled land.

Prior to Faultless, Teledyne Isotopes' Palo Alto Laboratory established a 60-point water sampling network at the CNTA. It was reduced to 30 points with preshot samplings on a monthly basis. Postshot samplings indicated no increase in background radioactivity. The network was further reduced to 8 points and sampled until 1971.

NV is currently sampling the following points:

Drill Hole UC-1-P-2 (at the Faultless Site)
Drill Hole HTH-1
Drill Hole HTH-2
Hot Creek Ranch Domestic Water Supply
6-Mile Well
Blue Jay Spring
Blue Jay Maintenance Station Well

Samples are analyzed for tritium, gross alpha, gross beta, and are given a gamma spectral scan. The monitoring programs for CNTA will continue until, based on continued negative results, a decision is made to terminate them.

2. Other Monitoring

No need for bioenvironmental and seismic long-range monitoring has been identified.

B. U.S. Air Force Occupancy

NV has a "Memorandum of Agreement" AT(26-1)-607, with the U.S. Air Force Systems Command (AFSC), the current tenant at CNTA. NV has granted AFSC the temporary use of facilities in the Base Camp area, of the airstrip, and of a communications site (Noname Hill) including its access road. AT(26-1)-607 is for an indefinite term although it can be canceled on 30 days' written notice by either party. Upon termination and in consideration for the use of these facilities, the AFSC has agreed to bear all costs incurred by the NV associated with an ultimate disposal, including costs incurred for care and handling for up to one year following release by AFSC. During the tenure, NV will be reimbursed by AFSC for electric power costs and AFSC will hold the NV harmless from any liability to third parties which may arise from AFSC activities occurring under the terms of the agreement.

C. Status of CNTA Land Rights with the Bureau of Land Management

1. Land Withdrawals, Public Land Orders (PLO), with indefinate expiration dates which are being retained by NV.

Number	Description
PLO 4338	640 acres for the Faultless detonation site and bore holes including HTH-2 and the Central Mud Pit. Acquired December 6, 1968.
PLO 4748	960 acres each for the UC-3 and UC-4 detonation sites and bore holes including UCE-11 and UCE-17. Each area contains a drilled emplacement hole and stored NV equipment. Acquisition date, December 2, 1969.

2. Land Easements obtained under 44LD513 authority with indefinite expiration dates, being retained by NV.

Number	Description
N 1819 B	180 acres for the AEC Base Camp and CP area. Acquired June 19, 1967. (Current tenant is AFSC.)
N 1819 D	Warm Springs Radio Repeater Site. (Currently used by REECo for NTS Net 12.) Acquired June 19, 1967.
N 2578	Airstrip--Base Camp area. Acquired October 7, 1968. (Current tenant is AFSC.)

Number	Description
N 3505	Noname Hill Radio Repeater Site and Access Road. Acquired April 10, 1969. (Current tenant is AFSC.)

3. Special Land Use Permits with expiration dates of June 30, 1975, being retained by NV.

Number	Description
N 1330	Base Camp Construction area, 1,440 acres for sewage lagoons, etc. Acquired June 19, 1967. (Current tenant is AFSC.)
N-6-71-4	Drill Hole HTH-1. (Currently used for USGS testing and long-term monitoring.) Acquired September 20, 1970.
N 3682	AEC Storage Yard (Central Pipe Yard). (Currently used for storage of NV equipment.) Acquisition date April 1, 1969.

4. Land Easements under 44LD153 authority, with indefinite expiration dates, turned back to BLM by letter on December 19, 1973.

Number	Description
N 1819 A	10 miles of water or mud line to supply drilling operations. Acquired June 19, 1967.
N 1819 C	22 miles of signal and telephone cableway from Base Camp to detonation sites. Acquired June 19, 1967.
N 2473	Field camp area near Moore's Station, used by McKenzie Construction Company. Acquired June 20, 1968.
N 4064	A planned decontamination facility (no construction was undertaken). Acquired October 28, 1969.

5. Special Land Use Permits turned back to BLM by letter on December 19, 1973, with expiration dates of June 30, 1975.

Number	Description
N 1568	Weather Stations for the U.S. Department of Commerce/Air Resources Laboratories (ARL). 5 each, 60-foot triangular sites at miscellaneous locations. Acquired August 28, 1967.

Number	Description
N 2204	Drill hole sites for UCE-21, UCE-23, HTH-21, HTH-21-1, and HTH-23.
N 2568	Drill Hole HTH-3. Acquired July 15, 1968.
N 4045	Microbarograph Towers and 26 USGS Seismic Stations. Acquired August 15, 1969.
N 4029	Drill Holes UCE-10, 11, and 14. Acquired August 15, 1969.
N 866	Drill Hole UCE-18. Water supply for drilling operations. Acquired February 6, 1967.
N 2744	HTH-5 test hole. Acquired October 7, 1968.

D. Site Disposal Planning

While NV has no immediate plan to dispose of the entire CNTA, it is anticipated that the following actions will ultimately occur:

1. Demobilize all remaining Base Camp, CP, Airstrip, and Noname Hill facilities at AFSC expense after the AFSC terminates its activities at these locations.

2. Plug and abandon the remaining drill holes now used for long-term monitoring, after continued negative results indicate they are no longer required.

3. Transfer to other AEC sites or other government agencies the equipment and materials now in storage at the CNTA, as needs arise.

4. Backfill the Central Mud Pit. (See paragraph II-B-13.)

It is anticipated that all detonation sites with emplacement holes (Faultless, UC-3, and UC-4) will be permanently retained by NV.

REFERENCES

1. NVO-146, Summary Report, Amchitka Demobilization and Restoration Activities.

2. NVO-90, Planning Directive, Demobilization, Restoration, and Monitoring, Central Nevada Test Area.

3. Abandonment of Drilled Holes, Central Nevada Test Area, Fenix & Scisson, Inc., March, 1973.

4. Central Nevada Supplemental Test Area Facility Records, U.S Atomic Energy Commission, September, 1970.

5. NVO-249-10, Radiation Contamination Clearance Report for Central Nevada Test Area, Eberline Instrument Corporation, Santa Fe, New Mexico.