

# UNITED NUCLEAR CORPORATION



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## CERTIFIED – RETURN RECEIPT REQUEST

March 23, 2005

Mr. Gary Jonosko, Branch Chief  
U.S. Nuclear Regulatory Commission  
Division of Fuel Safety and Safeguards  
Fuel Cycle Licensing Branch  
Office of Nuclear Material Safety & Safeguards  
11545 Rockville Pike, Mail Stop: T-8F42  
Rockville, Maryland 20852-2738

Re: License No. SUA-1475, Condition No. 31

Dear Mr. Jonosko:

In compliance with our NRC Radioactive Material License No. SUA-1475, Condition No. 31, the attached Annual Land Use Report is presented.

Sincerely,

A handwritten signature in cursive script that reads "Max Chischilly, Jr.".

Max Chischilly, Jr.  
Radiation Safety Officer

MC:drb

Enclosure

Cc: NRC, Region IV, Arlington, TX  
Steve Hill, GE  
Roy Blickwedel, GE  
Bill Von Till, NRC

ANNUAL LAND USE SURVEY REPORT

UNITED NUCLEAR CORPORATION

LICENSE SUA-1475

CONDITION NO. 31

MARCH 23, 2005

SURVEY OF LAND OWNERSHIP AND USE WITHIN TWO MILE RADIUS OF MILL SITE

UNITED NUCLEAR CORPORATION  
 License no. SUA – 1475  
 Condition No. 31

**1.0 Introduction**

This report has been prepared pursuant to License Condition 31 of United Nuclear Corporation's License No. SUA – 1475. The information submitted in this report was acquired from the master title plat published by the Bureau of Land Management. The surface ownership records are maintained by United Nuclear Corporation. The map is a copy of the USGS Quadrangle of Hardground Flats, Oak Springs, and Churchrock; the photo revised in 1987. The land use survey was performed by United Nuclear Corporation's Radiation Safety Officer.

**2.0 Ownership and Use**

Reference the enclosed map for location in regards to Mill Site.

<b>Area:</b>	<b>Owner:</b>	<b>Usage:</b>
Section 1	Navajo Tribe	Grazing
Section 2*	United Nuclear	Mill & Tailings site plus one employee homesite
Section 3	Navajo Tribe	Grazing
Section 4	Indian Allotted	Grazing
Section 6	Indian Allotted	Grazing
Section 9	Navajo Tribe	Grazing
Section 10	Indian Allotted	Grazing, plus eleven homesite
Section 11	Navajo Tribe	Grazing
Section 12	BLM, A, Etah, Etal	Grazing
Section 13	Navajo Tribe	Grazing
Section 14	Indian Allotted	Grazing
Section 15	Navajo Tribe	Grazing

- Additional Note for Sec. 2:

The mill has been decommissioned and has been cleaned to meet releasable standards for unrestricted use. The tailings area has been reclaimed and interim cover placement was completed in 1991. Final cover including drainage was completed on one-third of the tailings area in 1993, and the second one-third was completed in 1994. Final cover of the last one-third of the tailings area was completed in 1995. Construction of drainage swales and channels to carry surface water away from tailings site was completed in 1996. Radon flux testing over the tailings pile final radon barrier (with the exception of two used evaporation ponds for ground water remediation) was performed in September 25, 1996. And the subsequent test result was reported in the "Report on Radon Emanation Testing of Final Radon Cover Over UNC's Church Rock Tailings Site," Docket No. 40-80907 submitted on January 3, 1997.

Current ongoing activity included sampling monitoring wells on UNC's Sec. 2, and 36, Sec. 1 (Navajo Tribe), and Sec. 10 (Indian Allotted), on a quarterly basis in accordance with Condition No. 30 of our License No. SUA – 1475. Installment of new wells on UNC's Sec. 2 and 36, as part of an ongoing, extended pilot program to evaluate the use of hydrofracturing as a way to enhance the remedy for cut off and containment of the migrating Zone 3 seepage impact water.

<b>Area:</b>	<b>Owner:</b>	<b>Usage:</b>
Section 33	Navajo Tribe	Grazing
Section 34	BLM	Grazing
Section 35	Navajo Tribe	Grazing, United Nuclear Corporation Reclaimed Northeast Church Rock Mine Sites are located on this section.
Section 36	United Nuclear	Unauthorized grazing, Quivira Mining's decommissioned administration Office was located on this section
Map Northern Portion of 2 mile radius	Navajo Reservation	Grazing, plus 23 homesites. Quivira's reclaimed Churchrock Mine is located on this area.
Section 31	Indian Allotted	Grazing

### 3.0 Wells, Use, and Location

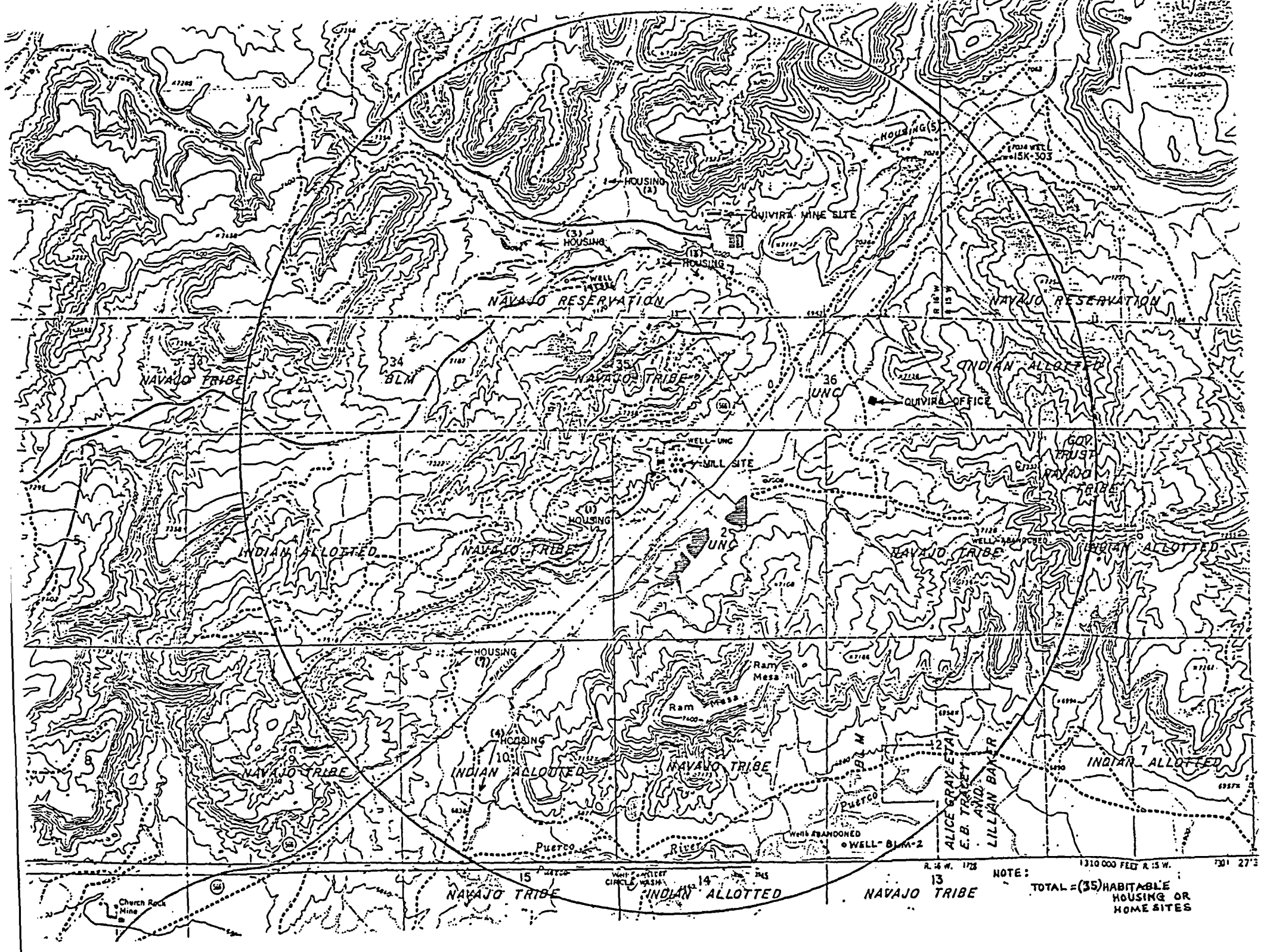
Well:	Use:	Location:	Formation:
United Nuclear	Domestic	Sec. 2-Mill Site	Westwater
Circle Wash	Domestic/ Livestock	Sec. 14	Alluvium
Abandoned	No Known Use	Sec. 11	Alluvium
J.E. Soper # 1	No Known Use	Sec. 1	Two Wells- Members Mancos
BLM – 2	Monitor	Sec. 12	Alluvium
14T – 586	Domestic/ Livestock	N.I.R. N Part of Map	Lower Gallup

### 4.0 Significant change or event which took place since the 2004 Land Use Report

1. Residents homesites had increased from ten to eleven on Section 10 (Indian Allotted).
2. From 6/8/04 to 7/21/04, sixteen Zone 3 area test wells and one Southwest Alluvium Monitor well were drilled and installed on UNC's Sec. 36 and 2, T. 17 N., R. 16 W., NMPM and Indian Allotted Land on Section 10, T. 16 N., R. 16 W., NMPM. Well description and purpose are listed below.
  - Test boring well and later plugged (RW-11C to RW-17C).
  - Pilot test, hydrofracture and extraction well (RW-11 to RW-17).
  - Zone3 piezometer and plume monitoring well (Z3M-1 and Z3M-2).
  - Southwest Alluvium monitor well (SBL-1).

The above RW wells are part of an ongoing, extended pilot program to evaluate the use of hydrofracturing as a way to enhance the remedy for cut-off and containment of the migrating Zone 3 seepage impact water.

3. Construction of cattle-guard foundation, installment of cattle-guard and gate was completed on 9/10/04. This completed project is located in the northern most portion of UNC's Section 36 near the Navajo Indian Reservation boundary line and is installed to enhance the prevention of livestock damage to present and future monitor or extraction well piping system and livestock entry into the reclaimed tailings area.



NOTE:  
TOTAL = (35) HABITABLE HOUSING OR HOME SITES