

Navajo Abandoned Uranium Mine Site Screen Report

This form is for use at the site of abandoned uranium mines (AUM) located on Navajo Nation lands. Applicable sites include all mine and mine features that have or have not undergone reclamation by the Navajo Abandoned Mine Lands Reclamation Program, including features, adits and pits. Applicable sites also include all AUM sites listed in the USEPA CERCLIS database, all sites listed in the 2008 AUM GIS Report issued by USACOE and USEPA, all AUM sites on allotment lands associated with the Navajo Nation, and any and all AUM sites lands not listed in any database located on Navajo lands. Reconnaissance of any sites located on lands adjacent to Navajo lands but that are or may be impacting Navajo lands will need to be coordinated with the authorities appropriate to those lands.

The purpose of the form is to ascertain the status and location of the identified AUM site, to record all immediate site information associated with the mine site and to document the recommendation and/or decision on what additional steps, if any, are needed at the site.

NE Churchrock Quivira Mines (No. 1)

Navajo AUM Eastern Region

Prepared by:

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Contract: W91238-06-F-0083

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Part I Site Identification, Location and Status**Site Names and ID numbers as applicable****Mine ID:** 305**Map ID:** E4**CERCLIS:** NNS FN0 905 492**NAMLRP:** NOT ASSIGNED**New Mexico Mining and Mineral Division ID:** NM0024**New Mexico Bureau of Geology and Mineral Resources:** NMMK0112**Local name / Aliases:** Churchrock 1, Kerr McGee Quivira, Kerr-McGee Section 35 Mine**Chapter and local area:** Coyote Canyon Chapter**Lat/Long:** 35.6654391042 N / -108.500960227 W**Nearby road and highway:** Redwater Pond Rd, Route 566 **Local Post Office:** Church Rock, NM**Land Status: check one or more and provide ownership and contact information below**

Tribal Trust Land	<input checked="" type="checkbox"/>
Tribal Fee Land	<input type="checkbox"/>
Allotment	<input type="checkbox"/>
Fee land	<input type="checkbox"/>
Public lands	<input type="checkbox"/>
Private	<input type="checkbox"/>
Bureau of Land Mgmt	<input type="checkbox"/>
State	<input type="checkbox"/>

Ownership and contact information:

The mine site property is classified as Navajo Tribal Trust land.

Part II Site Observations

Structures: list number of and describe human habitation status of structures at the following distances from mine:

0 to 200 feet: None

200 feet to 0.25 mile: Five residential compounds located within $\frac{1}{4}$ mile with the nearest being 680 feet south of the mine.

Public or commercial structure: list and describe all schools, clinics, Chapter Houses, places of business and any other structure used by members of the community at the following distances:

0 to 200 feet: None

200 feet to 0.25 mile: None

Levels measured around the perimeter(s) of the identified structure(s):

None

Observed water sources: list the number and type of wells and surface water sources that are potentially used for human consumption at the following distances from the mine:

0 to 0.25 miles: Well located 630 feet south of the mine

0.25 miles to 4 miles: Two domestic wells (14T586 and G00012) located less than $\frac{3}{4}$ mile to the south

Sensitive environments: note and describe all sensitive environments located within visible range of the mine site, including: wetlands, endangered species habitats and approximate locations of sites that may be under protection of the government of the Navajo Nation.

None observed

Known Site History: include information from interviews with Chapter officials and residents.

Note information on mine ownership, period of operation, and type of mining operation.

The NE Church Rock No. 1 mine consists of an area of 169,958.9 square meters with approximately 595,009 square meters of underground workings extending to the NE Church Rock No. 1-East mine

Part III Type, number and reclamation status of mine features

Provide description and reclamation status of all mine sites and features at site. Include all waste piles, adits, pits and other features, and indicate whether they are open, closed, covered, capped, buried or unreclaimed. Indicate approximate size, shape and extent, including description of any reclamation caps. Note condition of all reclamation caps.

The mine appears to have had significant reclamation. No waste piles, adits, or other mine features were observed during the site visit.

Part IV Summary of radiological readings**Background Locations**

#1 14,543 cpm

#2 15,421 cpm

Mine site: NE Church Rock Quivira Mines (No. 1)

- See Figures 1 and 2

Nearby Structure Perimeter – None

Describe any other radiological measurements:

A total of 5,278 gamma radiation measurements were collected from mine sites, ranging from 10,249 cpm to 79,431 cpm. The measurements are represented in Figures 1 and 2.

Part V Site sketch of all mine features and readings, including locations of all structures, sources of drinking water and any other important features and radiological readings.

Presented in Figures 1 and 2

Part VI Response Action Summary

Site Name(s): NE Churchrock Quivira Mines (No. 1) **Chapter:** Canyon Chapter

Decision Criteria

Is there an unreclaimed waste pile at the site? No

At what distance from the waste pile is the nearest residential structure located? N/A

At what distances from the waste pile are there potential drinking water sources? N/A

Is there a reclamation cap or sealed adit in place at the site? No

Is the cap/seal functionally intact? N/A

Is the cap/seal sufficiently degraded to create a concern about releases? No

At what distance from the cap/seal is the nearest domestic structure located? 680 feet

At what distance from the cap/seal is the nearest domestic drinking water source? 630 feet

Summary of emergency response factors

None

Summary hazard ranking system factors

2 housing compounds and 1 well found within 0.25 miles of the site property

Summary of reclamation factors

No known reclamation

Part VII Photos



Photo 1: NE Churchrock Quivira Mines (No.1) site, towards the south



Photo 2: Original grade at power pole in northern portion of mine, towards the north



Photo 3: Survey of western mine boundary, towards the north



Photo 4: Southern portion of mine and residence located to the south



Photo 5: Survey of central portion of mine towards the east



Photo 6: Nearest residence located south of the mine.



Photo 7: Residence located south of the mine.



Photo 8: Well located between residences and mine.

Part VIII Contacts Reports and InformationName Stanley EdisonTitle or official role (if any) Navajo EPA Superfund ProgramAddress PO Box 2946, Window Rock, AZ 86515Telephone number 928-871-6861

Information provided

Name _____

Title or official role (if any) _____

Telephone number _____

Information provided _____

Name _____

Title or official role (if any) _____

Telephone number _____

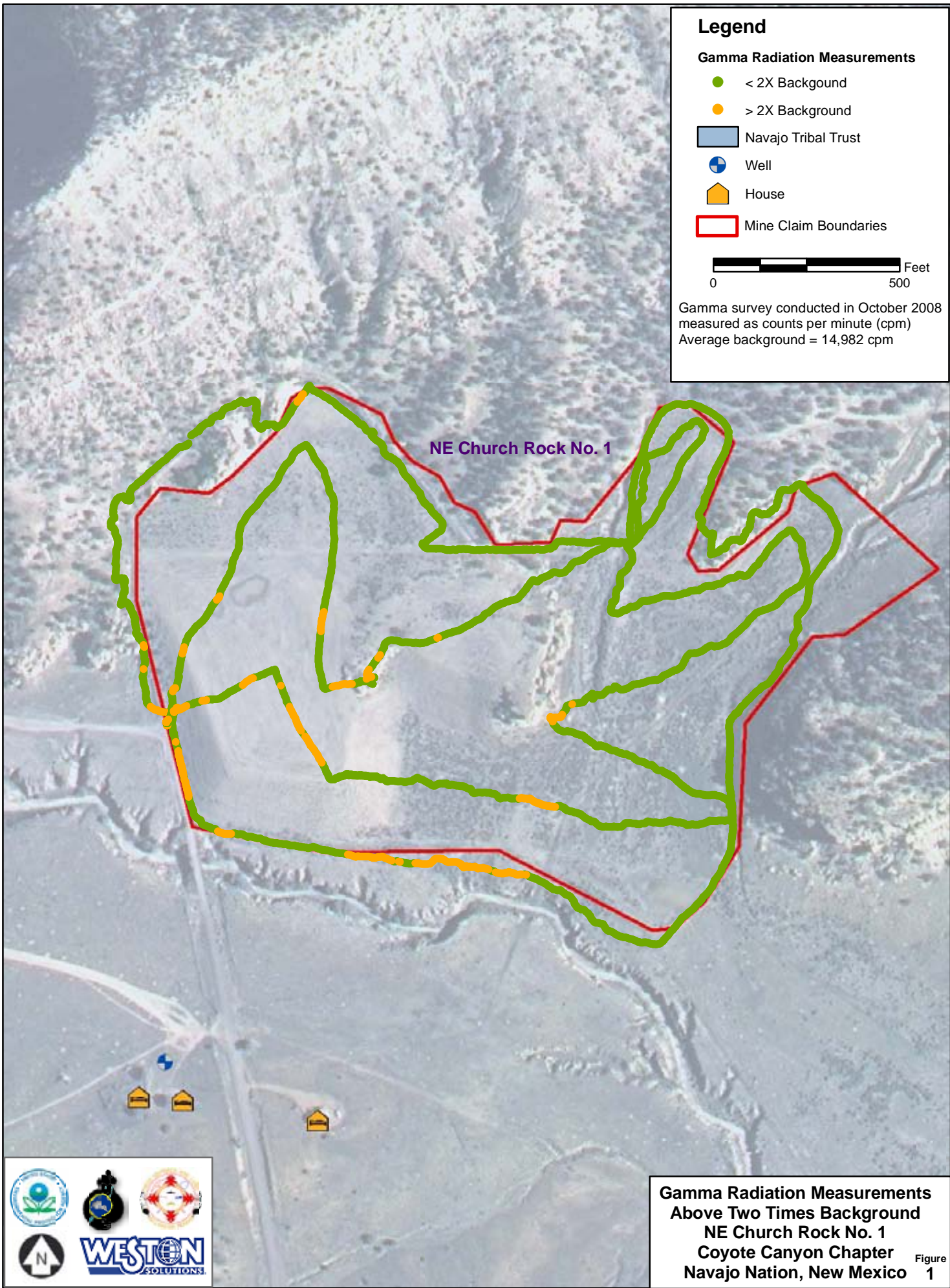
Information provided _____

Name _____

Title or official role (if any) _____

Telephone number _____

Information provided _____



Legend

Gamma Radiation Measurements

- < 2X Background
- > 2X Background
- Navajo Tribal Trust
- ⊕ Well
- House
- Mine Claim Boundaries

0 500 Feet

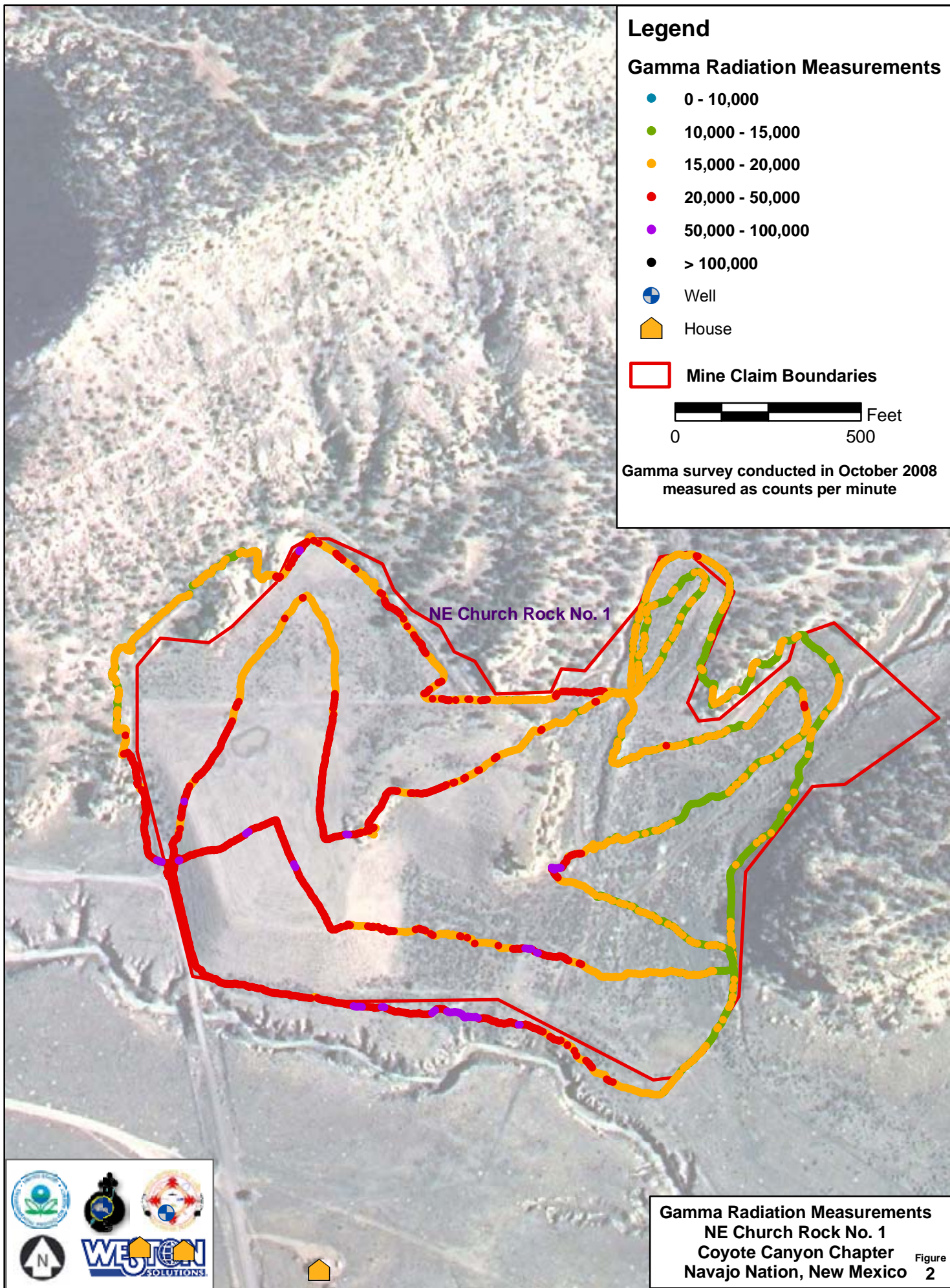
Gamma survey conducted in October 2008
measured as counts per minute (cpm)
Average background = 14,982 cpm

NE Church Rock No. 1

**Gamma Radiation Measurements
Above Two Times Background
NE Church Rock No. 1
Coyote Canyon Chapter
Navajo Nation, New Mexico**

Figure
1





Gamma Radiation Measurements
NE Church Rock No. 1
Coyote Canyon Chapter
Navajo Nation, New Mexico

Figure 2