

# 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.*

## **Section 16 Deposit AUM Site**

### **Navajo AUM Eastern Region**

**Prepared by:**

**Weston Solutions, Inc.**

**Contract: W91238-06-F-0083**

**12767.063.496.1111**

**May 2009**

**Part I Site Identification, Location and Status**

**Site Names and ID numbers as applicable**

**Mine ID:** 1030

**Map ID:** E9

**CERCLIS:** NNN 000 908 743

**NAMLRP:** NOT ASSIGNED

**New Mexico Mining and Mineral Division ID:** NM0051

**New Mexico Bureau of Geology and Mineral Resources:** NMMK-0034,-0318,-0319

**Local name / Aliases:** N/A

**Chapter and local area:** Church Rock Chapter

**Lat/Long:** 35.6137636131 N / -108.545304842 W

**Nearby road and highway:** NM-566, Interstate 40  
NM

**Local Post Office:** Church Rock,

**Land Status: check one or more and provide ownership and contact information below**

- Tribal Trust Land**
- Tribal Fee Land**
- Allotment**
- Fee land**
- Public lands**
- Private**
- Bureau of Land Mgmt**
- State**

**Ownership and contact information:**

No ownership was identified. The mine site property is classified as Navajo Tribal Fee and State of New Mexico land.

## **Part II Site Observations**

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

**0 to 200 feet:**

**200 feet to 0.25 mile:**

**Observed 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):**

- Homes along north and northwestern edge of site – measured at less than 2 times background levels

**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:** Water pump observed in the western area of the site (Photo 9), likely used for livestock. A water tank associated with the home to the west of the site was observed. Field personnel were unable to determine the source or use of the tank.

**0.25 miles to 4 miles:** None

**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.**

Section 16 Deposit mine consists of an area of 911,757.33 square meters. Any historical information pertaining to mining operations and historical ownership of the mine site appeared to be unclear. Two riverbeds/washes were found along the eastern and southern edges of the site (Photo 3, 5).

### **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.**

Reclamation status of the mine site is currently unknown. No waste piles, adits, or pits were observed during the site visit.

### **Part IV Summary of radiological readings**

#### **Background Locations**

- #1 9,948 counts per minute (cpm)
- #2 12,962 cpm
- #3 11,682 cpm

**Mine site:** Section 16 Deposit  
- See Figures 1 and 2

**Nearby Structure Perimeter** – N/A

#### **Describe any other radiological measurements:**

A total of 5,600 gamma radiation measurements were collected from mine sites, ranging from 7,130 cpm to 18,483 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):** Section 16 Deposit    **Chapter:** Church Rock

**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?** N/A

**At what distance from the cap/seal is the nearest domestic structure located?** N/A

**At what distance from the cap/seal is the nearest domestic drinking water source?** N/A

**Summary of emergency response factors**

None

**Summary hazard ranking system factors**

Empty drums and other waste was found along the southern portion of the site. Water pump observed in the western area of the site, likely used for livestock.

**Summary of reclamation factors**

No known reclamation

**Part VII      Photos**



Photo 1. Section 16 Deposit site, towards the east



Photo 2. Section 16 Deposit site, towards the north



Photo 3. River bed / wash area along the southern edge of the site, towards the southeast



Photo 4. Empty drums and wooden boards found along the southern edge of the site, towards the south





Photo 5. River bed / wash area along the eastern edge of the site, towards the southeast





Photo 9. Water pump found along the western edge of the site, towards the west



Photo 10. Wooden pole with tires and metal sheeting found in the center of the site, towards the south

**Part VIII      Contacts Reports and Information**

Name Stanley Edison

Title or official role (if any) Navajo EPA Superfund Program

Address PO Box 2946, Window Rock, AZ 86515

Telephone number 928-871-6861

Information provided General Background and Contact/Access Information

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Name \_\_\_\_\_

Title or official role (if any) \_\_\_\_\_

Telephone number \_\_\_\_\_

Information provided \_\_\_\_\_

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Name \_\_\_\_\_

Title or official role (if any) \_\_\_\_\_

Telephone number \_\_\_\_\_

Information provided \_\_\_\_\_

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Name \_\_\_\_\_

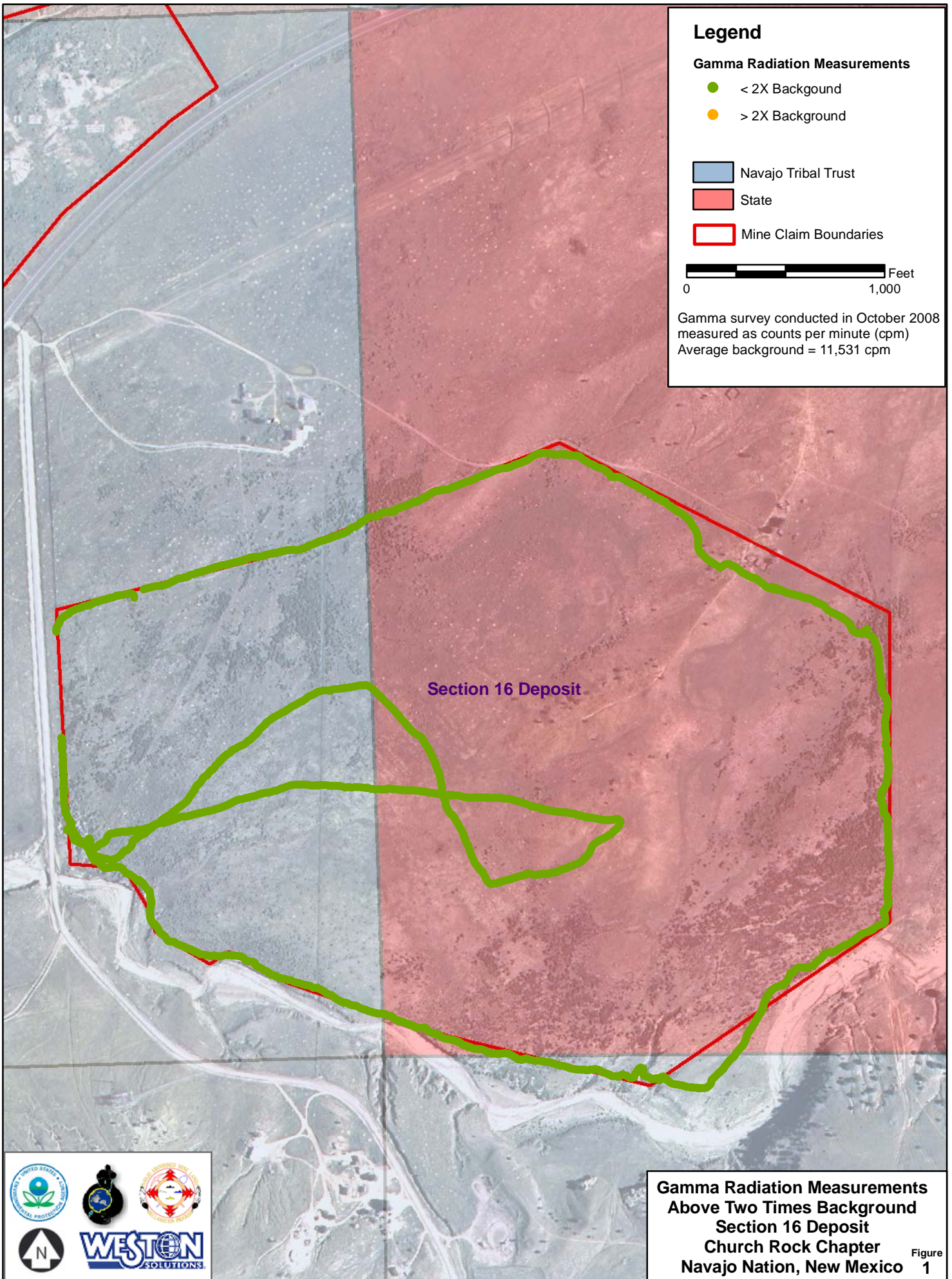
Title or official role (if any) \_\_\_\_\_

Telephone number \_\_\_\_\_

Information provided \_\_\_\_\_

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**Legend**

**Gamma Radiation Measurements**

- < 2X Background
- > 2X Background

Navajo Tribal Trust

State

Mine Claim Boundaries

0  1,000 Feet

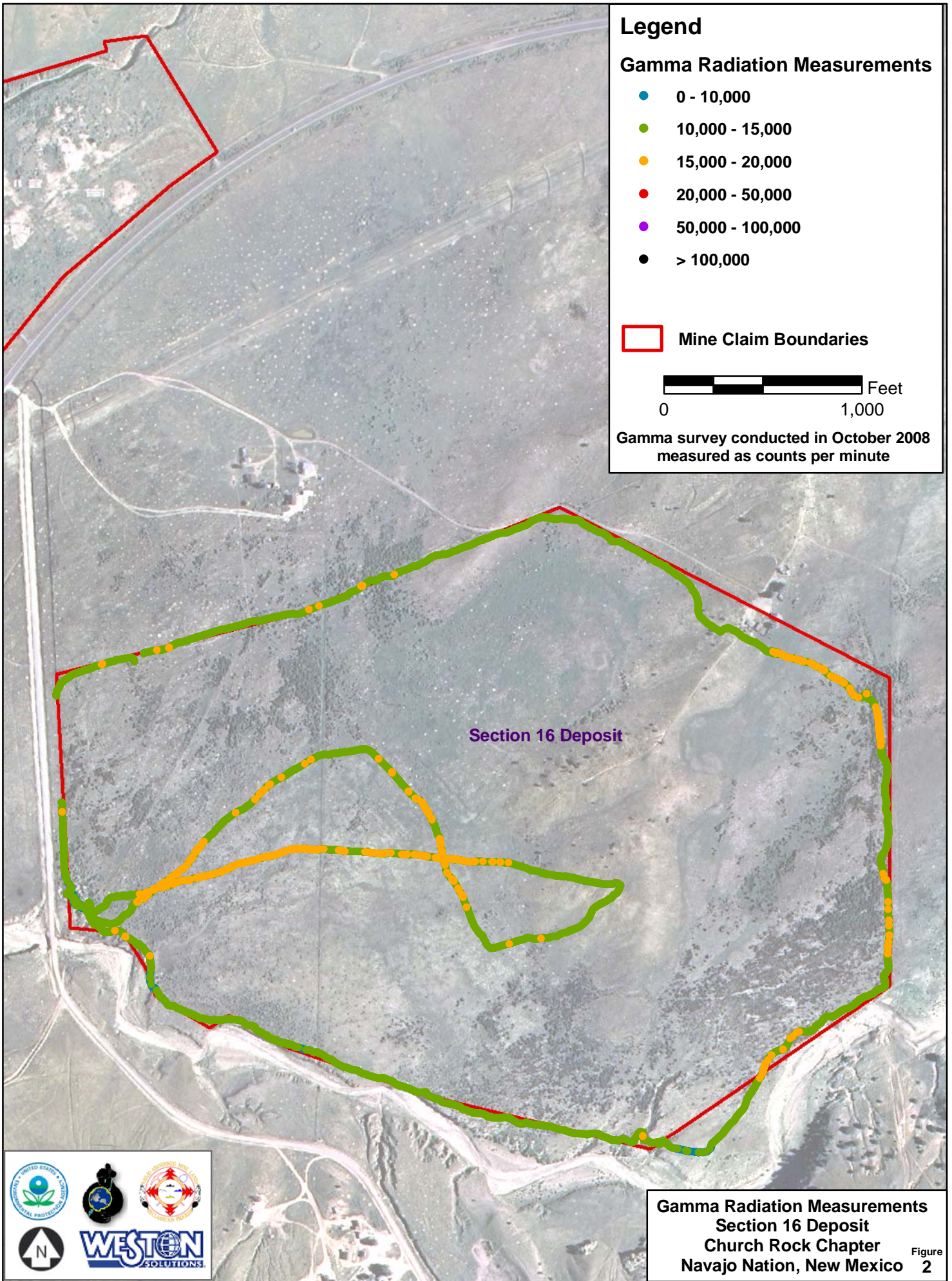
Gamma survey conducted in October 2008  
 measured as counts per minute (cpm)  
 Average background = 11,531 cpm

Section 16 Deposit

**Gamma Radiation Measurements  
 Above Two Times Background  
 Section 16 Deposit  
 Church Rock Chapter  
 Navajo Nation, New Mexico** Figure 1







**Legend**

**Gamma Radiation Measurements**

- 0 - 10,000
- 10,000 - 15,000
- 15,000 - 20,000
- 20,000 - 50,000
- 50,000 - 100,000
- > 100,000

□ Mine Claim Boundaries

0 1,000 Feet

Gamma survey conducted in October 2008  
measured as counts per minute

Section 16 Deposit

**Gamma Radiation Measurements  
Section 16 Deposit  
Church Rock Chapter  
Navajo Nation, New Mexico** Figure 2

