

# **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.*

## **Reynolds 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:** 1025

**Map ID:** E43

**CERCLIS:** NNN 000 908 735

**NAMLRP:** NOT ASSIGNED

**New Mexico Mining and Mineral Division ID:** NOT ASSIGNED

**New Mexico Bureau of Geology and Mineral Resources:** NOT ASSIGNED

**Local name / Aliases:** June

**Chapter and local area:** Smith Lake Chapter

**Lat/Long:** 35.4506605062 N / -108.177365419 W

**Nearby road and highway:** Old Gravel Road, Route 371 **Local Post Office:** Throeau NM

**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:**

The mine site property is classified as Navajo Tribal Trust 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:** None                      **200 feet to 0.25 mile:** None

**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):**

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:** None                      **0.25 miles to 4 miles:** None

**Observed 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 Reynolds mine consists of an area of 1,010.02 square meters. Any historical information pertaining to mining operations and historical ownership of the mine site appeared to be unclear.

### **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 visible signs of reclamation were observed. Two adits were observed in the bluff with waste rock piles down slope. The mines access road was washed out in several areas. No other mine features were observed during the site visit.

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

#### **Background Locations**

#1 9,341 cpm

#2 8,473 cpm

#### **Mine site: Reynolds**

- See Figures 1 and 2

**Nearby Structure Perimeter – None**

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

A total of 1,082 gamma radiation measurements were collected from mine sites, ranging from 5,634 cpm to 22,329 cpm. The measurements are represented in Figures 1 and 2.

Gamma radiation measurements were collected at the entrance to two adits and ranged from 24,000 cpm to 28,000 cpm.

**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):** Reynolds                      **Chapter:** Smith Lake

**Decision Criteria**

**Is there an unreclaimed waste pile at the site?** Yes

**At what distance from the waste pile is the nearest residential structure located?** 1.3 miles

**At what distances from the waste pile are there potential drinking water sources?** 1.2 miles

**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**

None

**Summary of reclamation factors**

No known reclamation

**Part VII      Photos**



Photo 1. Reynolds Mine site, towards the northwest



Photo 2. Reynolds Mine site, towards the southeast



Photo 3. Reynolds Mine site, possible sealed adit



Photo 4. Reynolds Mine site, possible sealed adit





Photo 5. Reynolds Mine site, partially buried adit



Photo 6. Reynolds Mine site, view towards southwest

**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

---

Name \_\_\_\_\_

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

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

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

---

Name \_\_\_\_\_

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

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

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

---

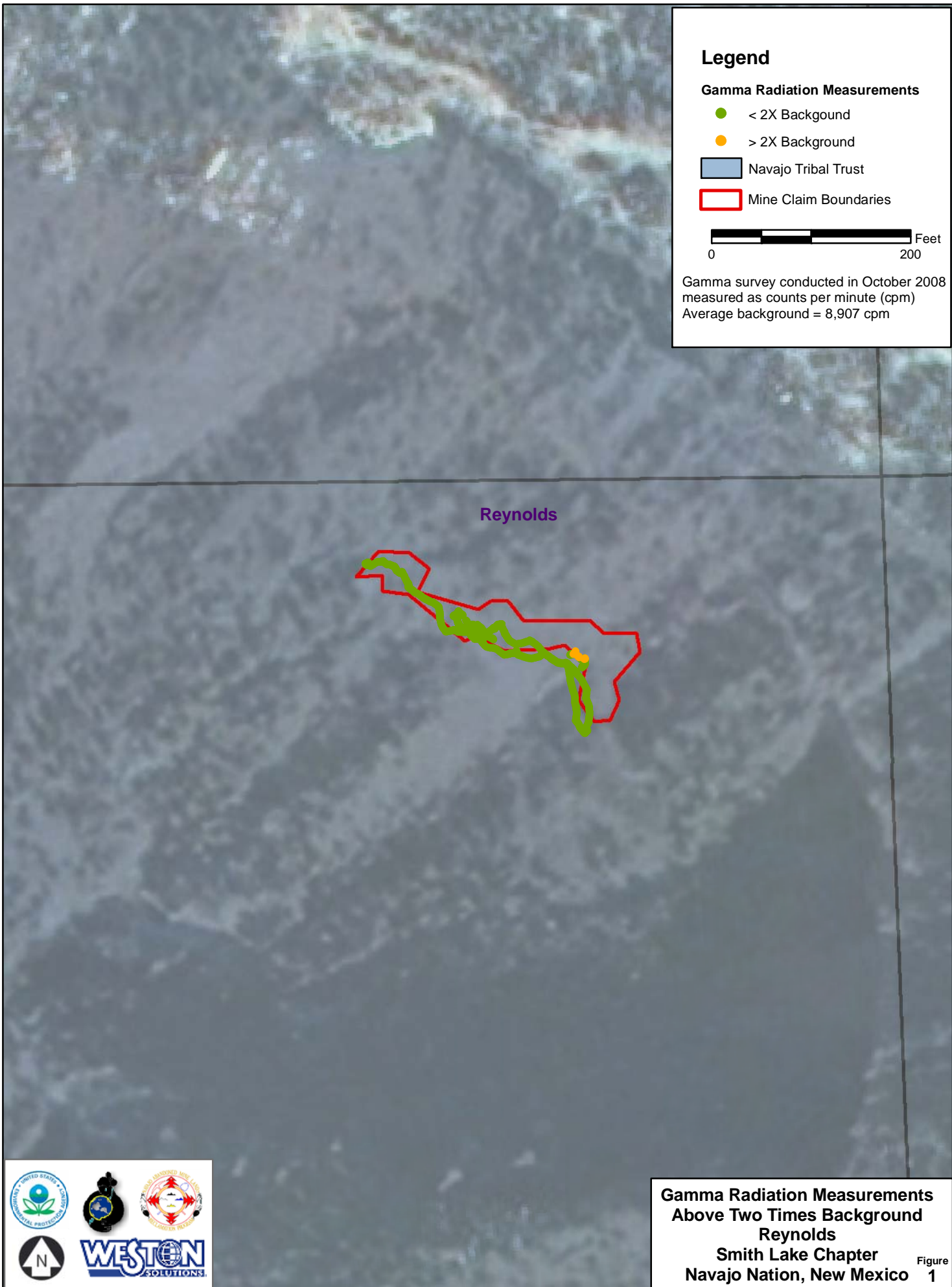
Name \_\_\_\_\_

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

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

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

---



**Legend**

**Gamma Radiation Measurements**

- < 2X Background
- > 2X Background

Navajo Tribal Trust

Mine Claim Boundaries

0  200 Feet

Gamma survey conducted in October 2008  
 measured as counts per minute (cpm)  
 Average background = 8,907 cpm

Reynolds

**Gamma Radiation Measurements  
 Above Two Times Background  
 Reynolds  
 Smith Lake Chapter  
 Navajo Nation, New Mexico** Figure 1



## Legend

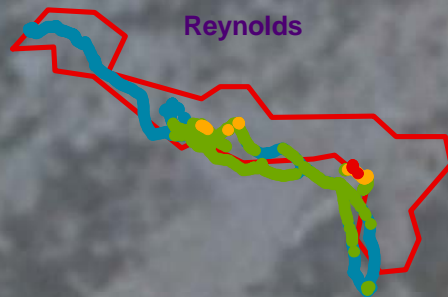
### Gamma Radiation Measurements

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

□ Mine Claim Boundaries



Gamma survey conducted in October 2008  
measured as counts per minute



Gamma Radiation Measurements  
Reynolds  
Smith Lake Chapter  
Navajo Nation, New Mexico