# 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, pits and waste piles. 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 not listed in any database located on Navajo lands. Reconnaissance of any sites located on lands adjacent to Navajo lands that 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, and record all immediate site information associated with the mine site. Decisions and recommendations on what additional steps are needed will be provided on a separate document.

# Evans Huskon No. 35 AUM Site

Navajo AUM Western Region

Prepared by:

Weston Solutions, Inc.

Contract: W91238-06-F-0083

12767.063.599.1111

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Part I	Site Identification, Location and Status					
Site Names and ID numbers as applicable						
Mine ID:	380					
Map ID:	W79					
CERCLIS:	NNN000909101					
Navajo Abandoned Mine Land Reclamation Program: None						
Local name / Aliases: Evans Huskon #35; Earl Huskon #35						
Chapter and local area: Coalmine Mesa Chapter						
County: Coc	oconino State: Arizona					
<b>Lat/Long:</b> 35.7697734049 N / -111.274331988 W						
Nearby road and highway: Indian Route 6730 Local Post Office: Cameron, AZ						
Surface Land Status: check one or more and provide ownership and contact information below						
Tribal Trust I Private Bureau of La State			Public lands Tribal Fee Land Allotment Fee land			
Subsurface Mineral Rights:						
No information on subsurface mineral rights ownership was found in the EPA/AUM Database.						
Claim and operator information:						
The mine site surface land status is classified as Tribal Trust Land. Historical documents showed the operator of the mine as the Utco Uranium Corporation in 1958. No additional ownership / lease information was identified in the EPA/AUM database.						
Number of residential structures within 200 feet of mine: None						

Estimated volume of mine waste onsite: None

#### Part II Summary of radiological readings

#### **Highest gamma radiation measurement:**

98,248 counts per minute (cpm)

#### Describe any other radiological measurements:

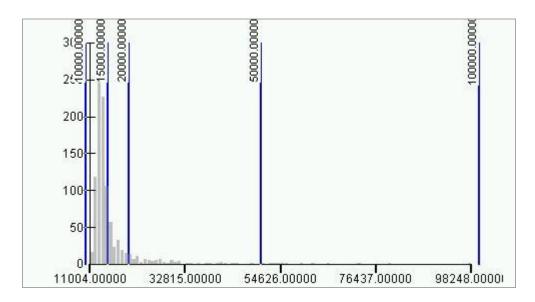
A total of 987 gamma radiation measurements were collected from the mine site, ranging from 11,004 cpm to 98,248 cpm. The measurements collected at one of the mounds were found at a maximum level of approximately 95,000 cpm. The measurements are represented in Figures 1 and 2.

**Background Readings:** 12,056 cpm; 12,857 cpm

Background Average: 12,457 cpm

#### **Distribution Chart and Statistics:**

The following chart and statistics were generated by ESRI ArcGIS 9.3.1, and show the general distribution of the site gamma radiation measurements. The horizontal X axis represents the gamma radiation reading levels in cpm (lowest levels to the left). The vertical Y axis represents the frequency of each gamma radiation level.



 Count:
 987

 Minimum:
 11004,00000

 Maximum:
 98248,00000

 Sum:
 15812075,00000

 Mean:
 16020,33941

 Median:
 13952,00000

 Standard Deviation:
 7340,66904

#### Part III Status of Reclamation and Mine Waste

The following information was obtained from the Navajo Abandoned Mine Land Reclamation Program (NAMLRP) Point Features Database:

NAMLRP Status of the mine site: Reclaimed : No Waste Pile onsite : No

**NAMLRP Project Number:** None

**NAMLRP Mine features:** 1 Rim Strip / Pit

The following information was obtained from field observations collected during the 2010 site screening:

Provide description and 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 caps.

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Observed reclamation work and status:	
Adits None	
Waste Piles None	
Pits None	

# Shafts

None

#### **Other Debris and Mine Features**

Several brown-grey mounds approximately 10'h, possible reclamation caps

#### Part IV

#### **Site observations and Environs**

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:** Little Colorado River Basin approximately 2.5 mi W of the site

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, type of mining operation, period of operation, known amount of production, and any other information as provided.

Evans Huskon No. 35 mine consists of an area of 11,657.18 m<sup>2</sup>. The mine was identified as being operational in 1958. Historical documents showed the operator of the mine as the Utco Uranium Corporation in 1958. While operational, the mine had a total production volume of 64 tons. No other historical information or any additional ownership / lease information was identified in the EPA/AUM database.

#### Part V Response Action Summary

#### **Summary of Evaluation Factors:**

#### Accessibility:

Was the mine easily accessible to potential human activity? Yes

#### Radiological Measurements:

Were any gamma radiation measurements collected at the mine greater than two times the site-specific background levels?

Yes

#### Waste Piles:

Were any unreclaimed waste piles observed at the mine with gamma radiation measurements greater than two times the site-specific background levels? No

#### Structures:

Were any structures observed within 200 feet of the mine?

No

#### Potential Drinking Water Sources:

Were any potential drinking water sources observed within 4 miles of the mine? Yes

#### Reclamation:

Was the mine reported to be previously reclaimed, or did the mine appear to be reclaimed?

Yes (possible reclamation caps)

## Part VI Photos



Photo 1. Evans Huskon No. 35 mine site



Photo 2. Evans Huskon No. 35 mine site



Photo 1. Evans Huskon No. 35 mine site, small mound with elevated gamma readings

# **Part VII Contacts Reports and Information** Name: Stanley Edison (928) 871-6861 Eugene Esplain (928) 871-7331 Title or official role (if any) Navajo EPA Superfund Program Address\_\_\_PO Box 2946, Window Rock, AZ 86515 Information provided Lead Regulatory Agency Title or official role (if any) Address Telephone number\_\_\_\_\_ Information provided\_\_\_\_\_ Title or official role (if any) Telephone number\_\_\_\_\_ Information provided\_\_\_\_\_ Name

Title or official role (if any)

Telephone number

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

# Figure 1 - Gamma Radiation Measurements, Above Two Times Evans Huskon No. 35 (380) Coalmine Mesa Chapter, Navajo Nation

Evans Huskon No. 35 (380)



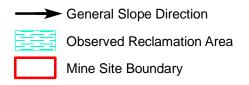
### Legend

#### **Gamma Radiation Measurements**

- < 2X Backgound</p>
- > 2X Background

Gamma survey conducted 11/2010 Measured as counts per minute (cpm)

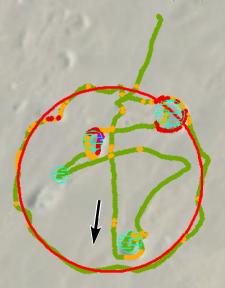
Average background 12,457 cpm





# Figure 2 - Gamma Radiation Measurements Evans Huskon No. 35 (380) Coalmine Mesa Chapter, Navajo Nation

Evans Huskon No. 35 (380)



#### 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

General Slope Direction

Observed Reclamation Area



Mine Site Boundary

Gamma survey conducted 11/2010 Measured as counts per minute (cpm)

Average background 12,457 cpm



