

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.

Pat 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: 350

Map ID: E76

CERCLIS: NNN 000 908 730

NAMLRP: NOT ASSIGNED

New Mexico Mining and Mineral Division ID: NM0153

New Mexico Bureau of Geology and Mineral Resources: NMMK0123

Local name / Aliases: Dakota Mine, Gossett, Black Rock, Section 4, Martinez lease

Chapter and local area: Baca/Haystack Chapter

Lat/Long: 35.3847022718 N / -107.893405266 W

Nearby road and highway: Blackwood Road, BIA 41 (Red Mountain Road)

Local Post Office: Prewitt, 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:

No ownership was identified. The mine site property is half on private land and half on Allotment land, but no residences were found within 0.25 miles of the site

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:**

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 Pat mine consists of an area of 18,904.07 square meters. Any historical information pertaining to mining operations and historical ownership of the mine site appeared to be unclear. The New Mexico Mining and Minerals Division identified the operator from 1952-1959 as the Dakota Mining Co.; 1959 Black Rock Mining Co., Inc.; and 1962 -1963 Farris Mines, Inc.

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 sites are currently unknown. No visible signs of reclamation were observed. No mining operations were apparent. No waste piles, adits, or other mine features were observed during the site visit.

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

#1 8,304 cpm

#2 9,414 cpm

Mine site: Pat

- See Figures 1 and 2

Nearby Structure Perimeter – None

Describe any other radiological measurements:

A total of 1,680 gamma radiation measurements were collected from mine sites, ranging from 6,784 cpm to 647,159 cpm. The measurements are represented in Figures 1 and 2. The New Mexico Mining and Minerals Division identified radiological measurements levels at the stockpile as 1000 counts per second (cps); and the stope as 150 cps.

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): Pat

Chapter: Baca/Haystack

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

None

Summary of reclamation factors

No known reclamation

Part VII Photos



Photo 1. Pat Mine site, towards the east



Photo 2. Pat Mine site, towards the west

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

Information provided General Background and Contact/Access Information

Name Susan A. Lucas Kamat

Title or official role (if any) AUM Data Manager – New Mexico Mining & Mineral Division

Telephone number (505) 476-3408 fx: (505) 476-3408

Information provided Background information and findings from 2008 New Mexico MMD
Survey of mining sites.

Name Ms George Padilla

Title or official role (if any) Regional Environmental Scientist, BIA, Navajo Nation

Telephone number (505) 863-8434

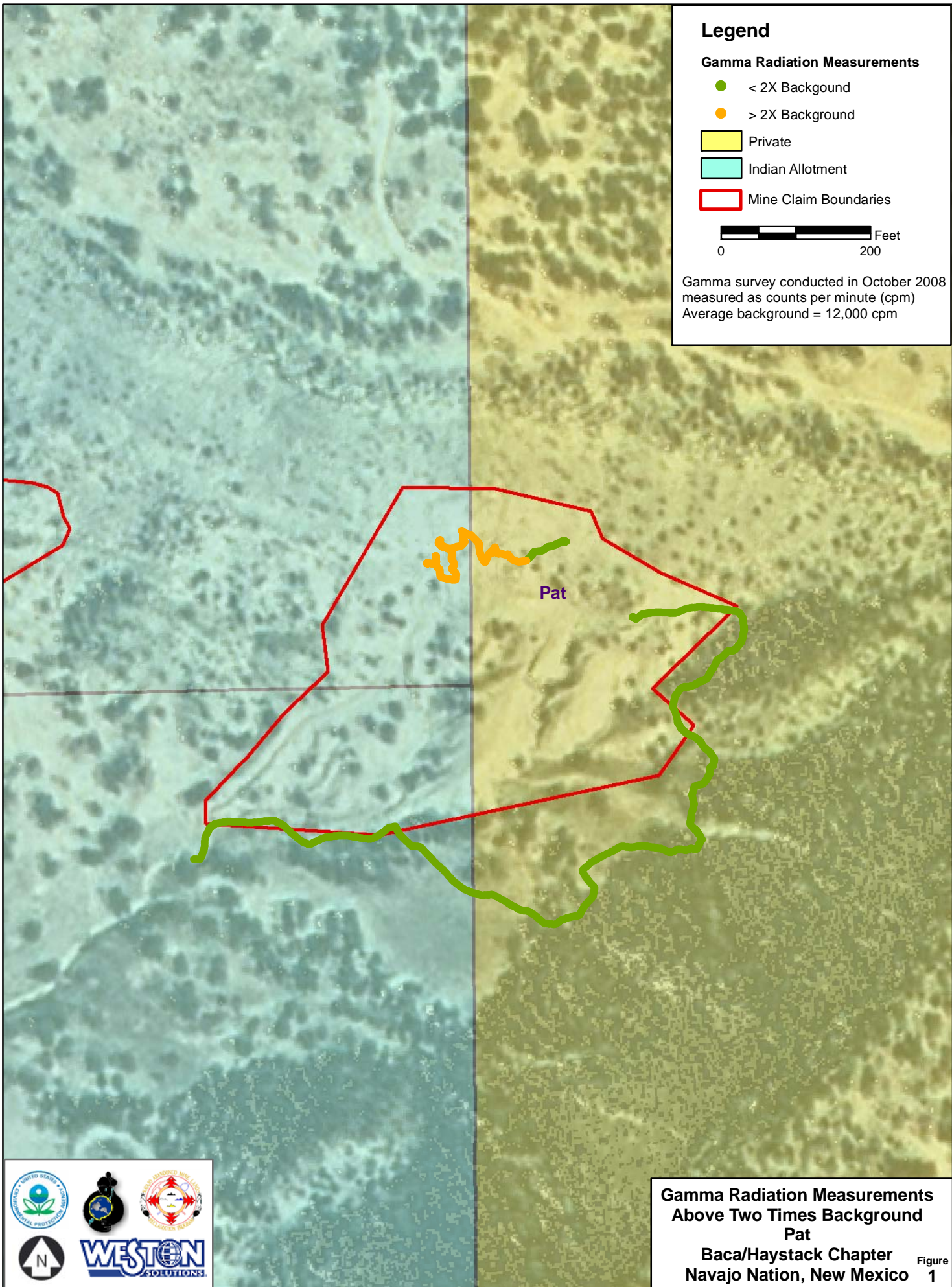
Address PO Box 1060, Gallup, NM 87305

Name _____

Title or official role (if any) _____

Telephone number _____

Information provided _____



Legend

Gamma Radiation Measurements

- < 2X Background
- > 2X Background
- Private
- Indian Allotment
- Mine Claim Boundaries

0 200 Feet

Gamma survey conducted in October 2008
 measured as counts per minute (cpm)
 Average background = 12,000 cpm

Pat

Gamma Radiation Measurements Above Two Times Background Pat
Baca/Haystack Chapter Navajo Nation, New Mexico Figure 1

Legend

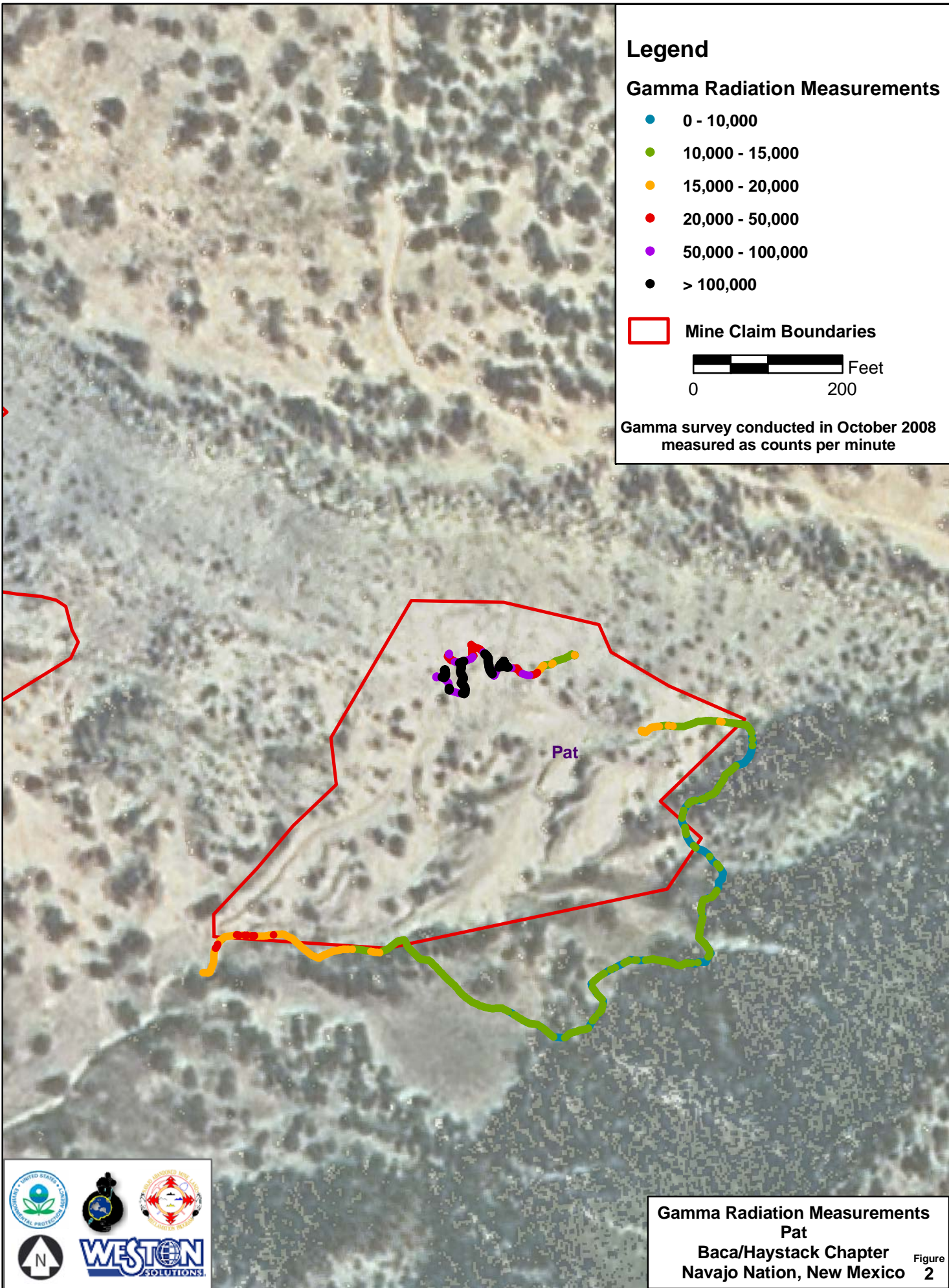
Gamma Radiation Measurements

- 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
Pat
Baca/Haystack Chapter
Navajo Nation, New Mexico