

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.

Church Rock ISL Site

Navajo AUM Eastern Region

Prepared by:

Weston Solutions, Inc.

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: 1005

Map ID: E7

CERCLIS: NNN 000 908 703

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: Church Rock (Sec. 8), Old Church Rock

Chapter and local area: Church Rock Chapter

Lat/Long: 35.6303337187 N / -108.551275334 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 Bureau of Land Management land. One house, with adjoining horse paddock, was located just beyond 0.25 miles southeast of the site. A local resident stated that the owner of the house did not live on the property, and it was only used for keeping the horses.

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

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.

Church Rock ISL mine consists of an area of 11,669.71 square meters. The site was known to be an Insitu Leach (ISL) operation, and many monitoring wells surrounded the site, as is typical with any ISL. Any other historical information pertaining to mining operations and historical ownership of the mine site appeared to be unclear. An empty water tank, trough, and associated well were located approximately 0.1 miles south of the site, which appears to have been used for livestock.

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. No waste piles, adits, or other mine features were observed during the site visit.

Part IV Summary of radiological readings

Background Locations

#1 16,465 cpm

#2 16,002 cpm

#3 14,832 cpm

Mine site: Church Rock ISL

- See Figures 1 and 2

Nearby Structure Perimeter – None

Describe any other radiological measurements:

A total of 1,155 gamma radiation measurements were collected from mine sites, ranging from 9,946 cpm to 16,121 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): Church Rock ISL **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

None

Summary of reclamation factors

No known reclamation

Part VII Photos



Photo 1. Church Rock ISL mine site, towards the northwest



Photo 2. Church Rock ISL mine site, towards the north



Photo 3. Metal pipe and well within the southern portion of the mine site, towards the southeast



Photo 4. Water tank and feeding trough south of the mine site, towards the north



Photo 5. ISL monitoring well surrounding the mine site, towards the east

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 _____

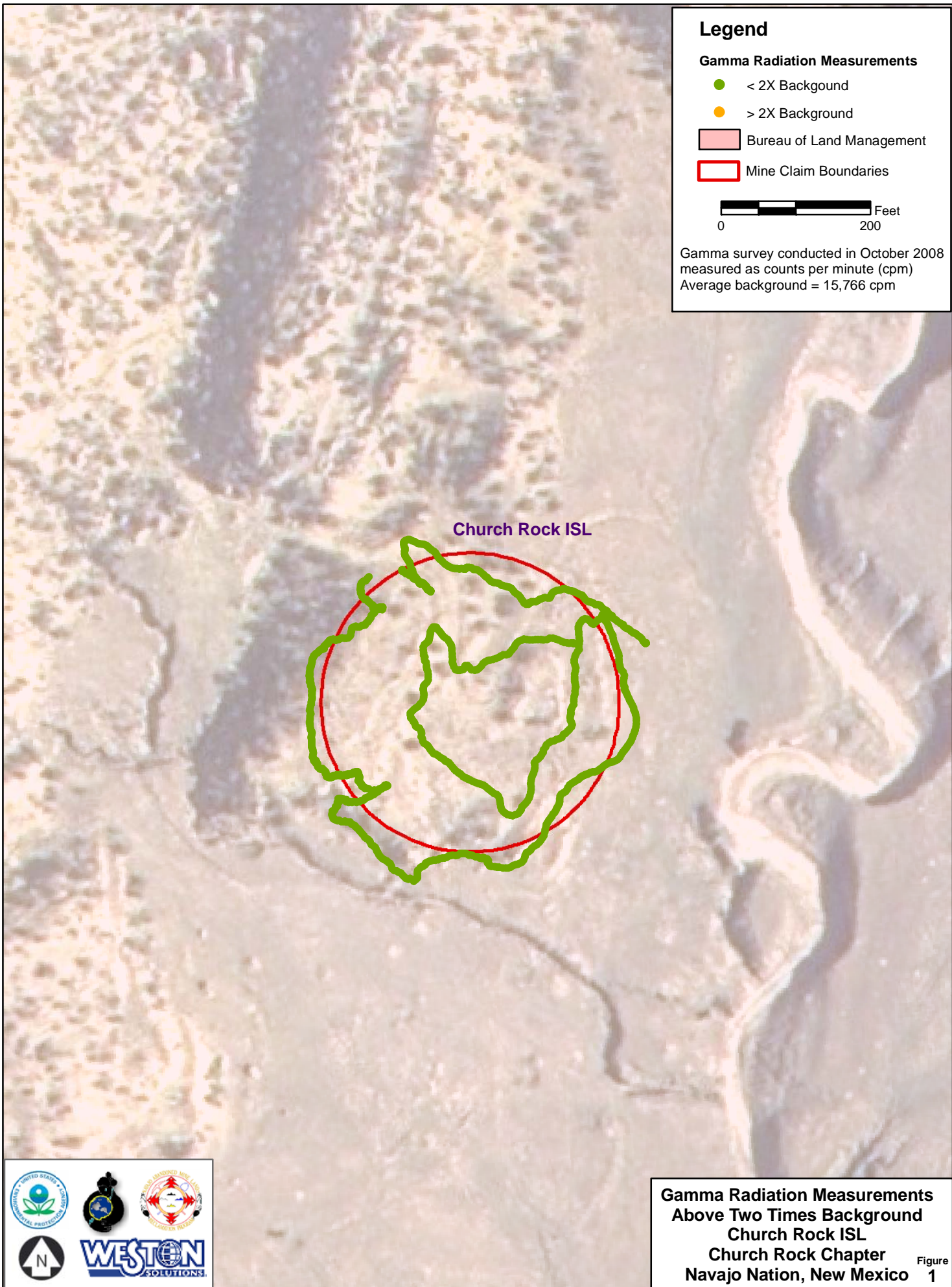
Information provided _____

Name _____

Title or official role (if any) _____

Telephone number _____

Information provided _____



Legend

Gamma Radiation Measurements

- < 2X Background
- > 2X Background
- Bureau of Land Management
- Mine Claim Boundaries

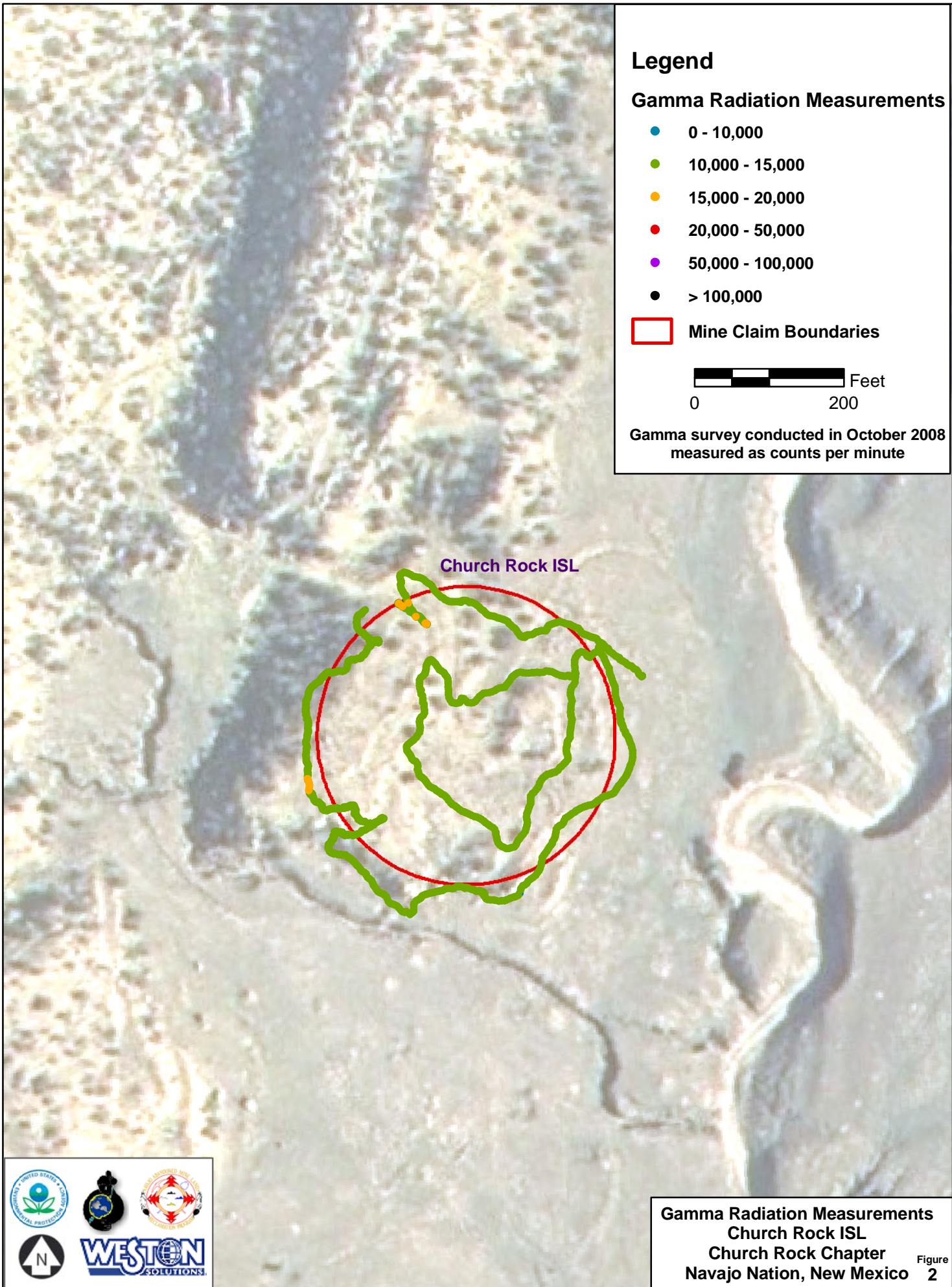
0 Feet
200

Gamma survey conducted in October 2008
 measured as counts per minute (cpm)
 Average background = 15,766 cpm

Church Rock ISL



**Gamma Radiation Measurements
 Above Two Times Background
 Church Rock ISL
 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



Gamma survey conducted in October 2008
measured as counts per minute

Church Rock ISL



**Gamma Radiation Measurements
Church Rock ISL
Church Rock Chapter
Navajo Nation, New Mexico** Figure 2