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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.

Nanabah Vandever AUM Site

Navajo AUM Eastern Region

Prepared by:

Weston Solutions, Inc.

Contract: W91238-06-F-0083

12767.063.496.1111

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Part I Site Identification, Location and Status

Site Names and ID numbers as applicable

Mine ID: 1033

Map ID: E81

CERCLIS: NND 986 669 109

NAMLRP: NOT ASSIGNED

New Mexico Mining and Mineral Division ID: NM0102

New Mexico Bureau of Geology and Mineral Resources: NMMK0213

Local name / Aliases: Indian Allotment, Nan-A-Bah, Glen and Edith, Section 24

Chapter and local area: Baca/Haystack Chapter

Lat/Long: 35.3465449599 N / -107.947928184 W

Nearby road and highway: Haystack Road (BIA 23), Red Mountain Road (BIA 41)

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:

The mine site property is classified as Indian Allotment 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: To the east of the site are located: 1 house at a distance of approximately 250 feet; and 2 house trailers at a distance of approximately 800 feet. To the south is located a single house attached to a Church, at a distance of approximately 700 feet from the mine site.

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: A Church and an attached residence are located downhill from the mesa approximately 700 feet south of the site

Levels measured around the perimeter(s) of the identified structure(s):

- 3 houses east of site – measured at 11,140 counts per minute (cpm)
- Church south of site – measured at less than two-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: None

0.25 miles to 4 miles: Windmill well located approximately 2.5 miles northwest of sites

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 Nanabah Vandever mine consists of an area of 110,779.97 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. The mine appears to have been reclaimed by dirt covering waste piles. The mine is fenced and posted with signs warning of underground radiological hazards. The signs were faded and nearly illegible. No adits or other mine features were observed during the site visit.

Part IV Summary of radiological readings

Background Locations

#1 6,238 cpm
#2 5,828 cpm
#3 9,044 cpm

Mine site: Section 24
- See Figures 1 and 2

Nearby Structure Perimeter – None

Describe any other radiological measurements:

A total of 3,024 gamma radiation measurements were collected from mine sites, ranging from 4,569 cpm to 594,083 cpm. The measurements are represented in Figures 1 and 2.

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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

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Part VI Response Action Summary

Site Name(s): Nanabah Vandever AUM Site **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? Yes

Is the cap/seal functionally intact? Yes

Is the cap/seal sufficiently degraded to create a concern about releases? No

At what distance from the cap/seal is the nearest domestic structure located?
Three residences are located to the east within ¼ mile of the mine. A church with a possible residence is located adjacent and below the mine to the south.

At what distance from the cap/seal is the nearest domestic drinking water source? 1.0 mile

Summary of emergency response factors

None

Summary hazard ranking system factors

None

Summary of reclamation factors

No known reclamation

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Part VII Photos

Photo 1. Nanabah Vandever Mine site, towards the south

Photo 2. Nanabah Vandever Mine site, section corner survey marker

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Photo 3. Nanabah Vandever Mine site, suspect covered waste piles

Photo 4. Nanabah Vandever Mine site, waste rock emitting gamma radiation

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Photo 5. Nanabah Vandever Mine site, faded sign warning of subsurface radiological hazards

Photo 6. Nanabah Vandever Mine site, view of church from mine

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Part VIII Contacts Reports and Information

Name Tom and Lena Vandever

Title or official role (if any) resident

Telephone number POB 518 Prewitt, NM 87045

Information provided Lives adjacent to the mine. His father is Brown Vandever who lives next door just off of mine (POB 262 Prewitt, NM 87045

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

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Name Ms George Padilla

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

Telephone number (505) 863-8434

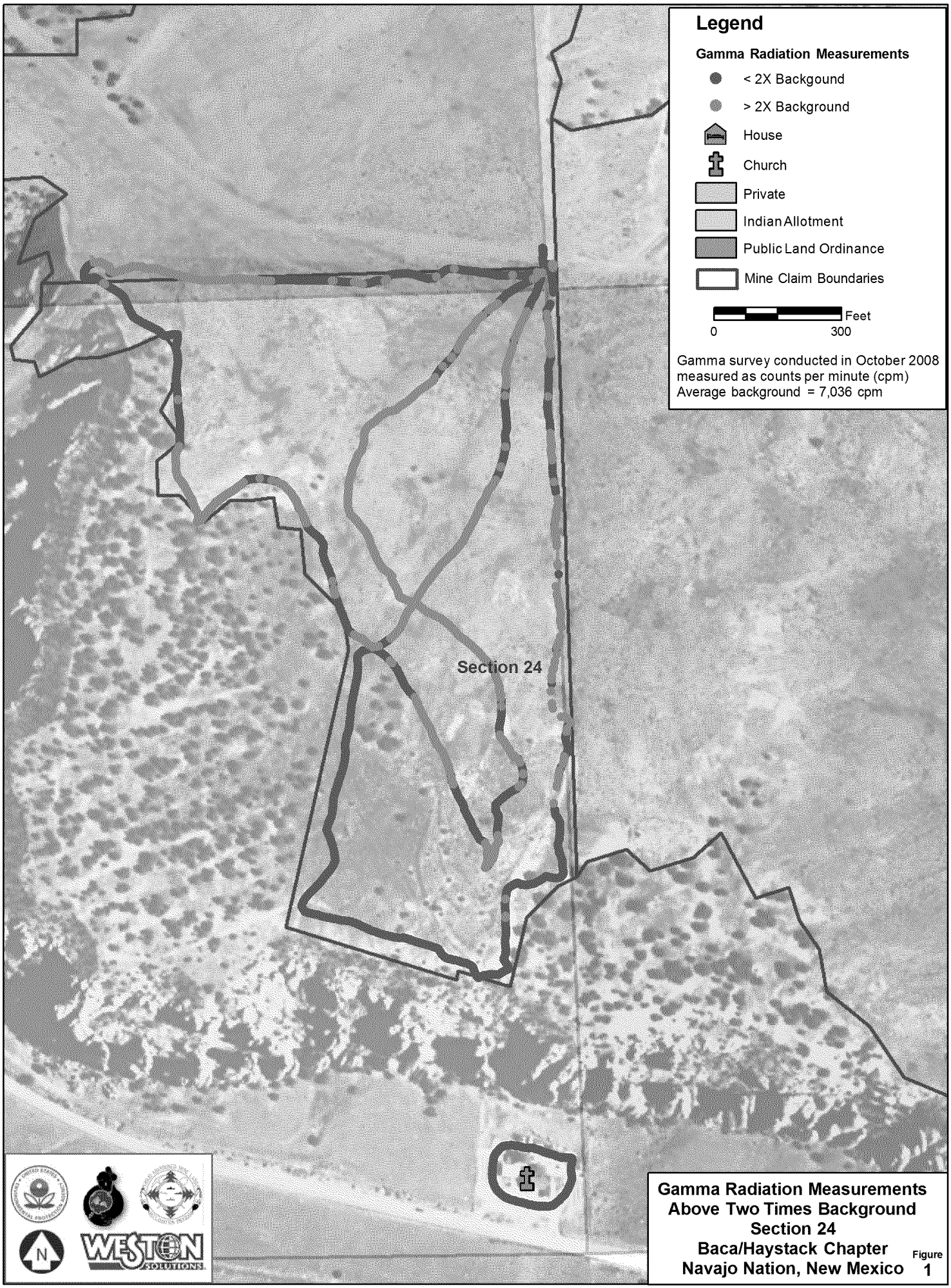
Address PO Box 1060, Gallup, NM 87305

Name

Title or official role (if any)

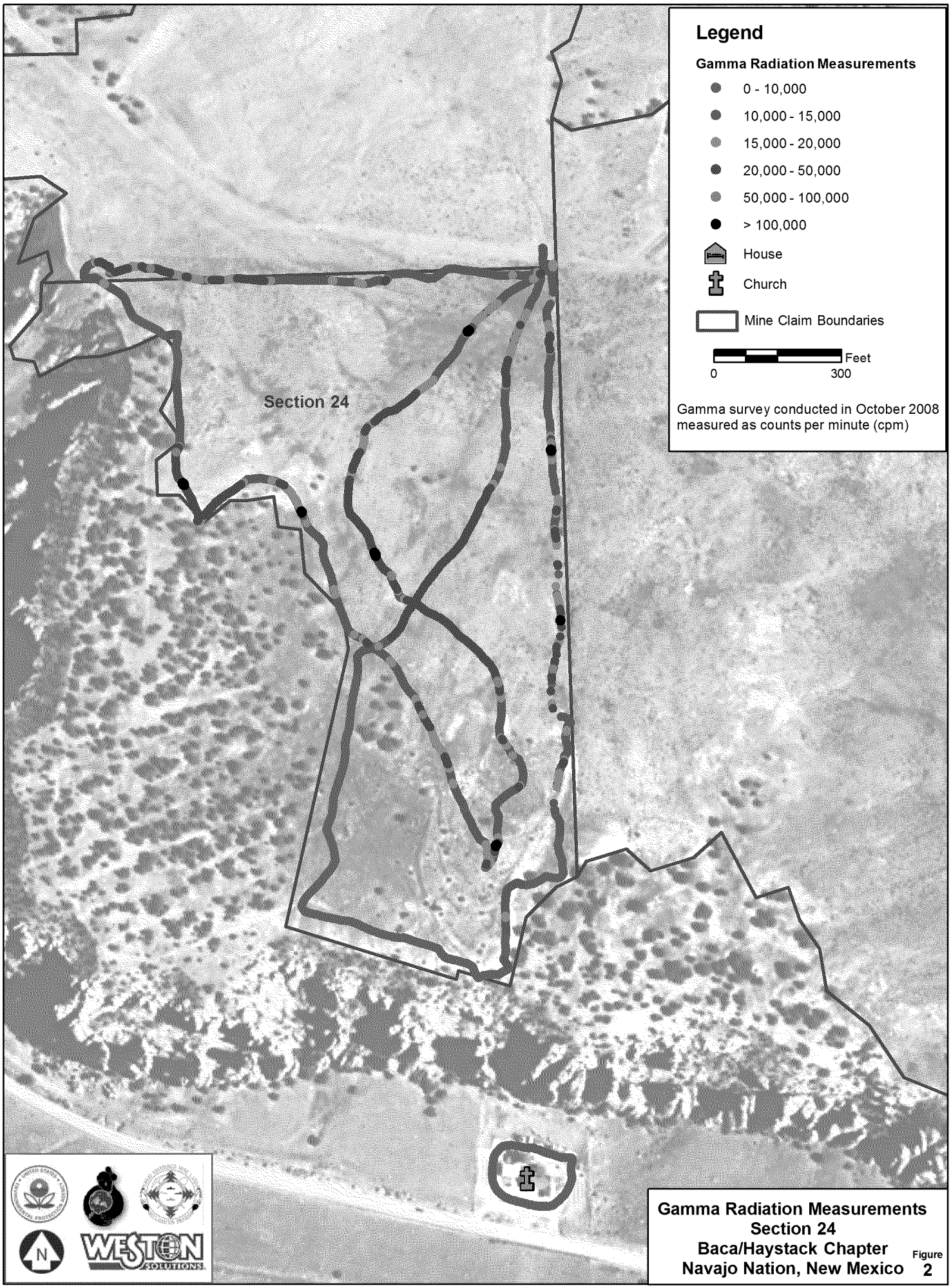
Telephone number

Information provided



Gamma Radiation Measurements Above Two Times Background
Section 24
Baca/Haystack Chapter
Navajo Nation, New Mexico

Figure **1**



Gamma Radiation Measurements
Section 24
Baca/Haystack Chapter
Navajo Nation, New Mexico

Figure **2**