EPA-R9-2015-010125 Production VOL001

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.

Haystack No. 1 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: 344

Map ID: E82

CERCLIS: NNN 000 908 720

NAMLRP: NOT ASSIGNED

New Mexico Mining and Mineral Division ID: NM0047

New Mexico Bureau of Geology and Mineral Resources: NMMK0081, 0077,0080

Local name / Aliases: Haystack – Section 19 Open Pit Complex

Chapter and local area: Baca/Haystack Chapter

Lat/Long: 35.3457135782 N / -107.943650564 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 majority of the mine site property is located as private land with a smaller portion located on Indian allotment located at the northern extent of the mine.

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.

The Haystack No. 1 mine consists of an area of 279,659.30 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 sites are currently unknown. The mine appears to have been reclaimed. The portion of the mine on private property was 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 10,310 cpm
#2 9,952 cpm
#3 8,504 cpm

Mine site: Haystack No. 1
- See Figures 1 and 2

Nearby Structure Perimeter – None

Describe any other radiological measurements:

A total of 7,045 gamma radiation measurements were collected from mine sites, ranging from 5,965 cpm to 626,434 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): Haystack No. 1 **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? 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? One residence is located on the mine; two others are located within ¼ mile. A church is also located within ¼ mile from the site.

At what distance from the cap/seal is the nearest domestic drinking water source?
0.6 miles

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. Haystack No 1 Mine site, towards the southwest

Photo 2. Haystack No 1 Mine site, towards the south

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Photo 3. Haystack No 1 Mine site, residence (Tom and LeneaVandever) locate on the mine site

Photo 4. Haystack No 1 Mine site, open hole or vent near residence

Photo 5. Haystack No 1 Mine site, section corner survey marker

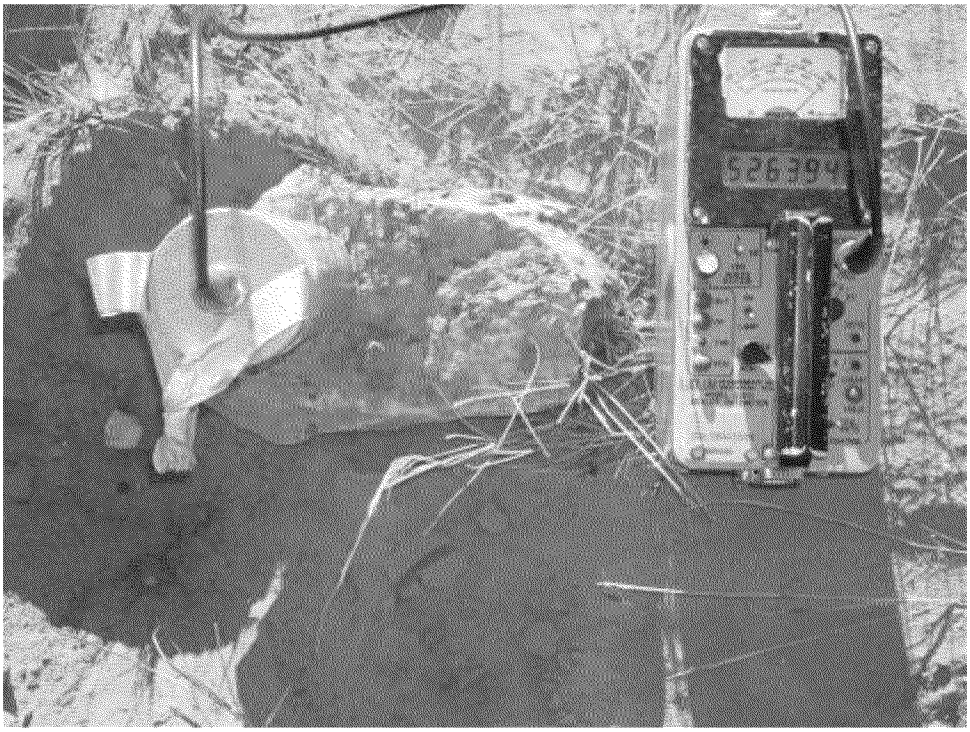

Photo 6. Haystack No 1 Mine site, gamma radiation emitting 500,000 cpm from waste rock located near residence

Photo 6. Haystack No 1 Mine site, faded sign posted on portion of mine located on private property warning of subsurface radiological hazards

Photo 6. Haystack No 1 Mine site, waste piles on mine

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 within the mine boundary, 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

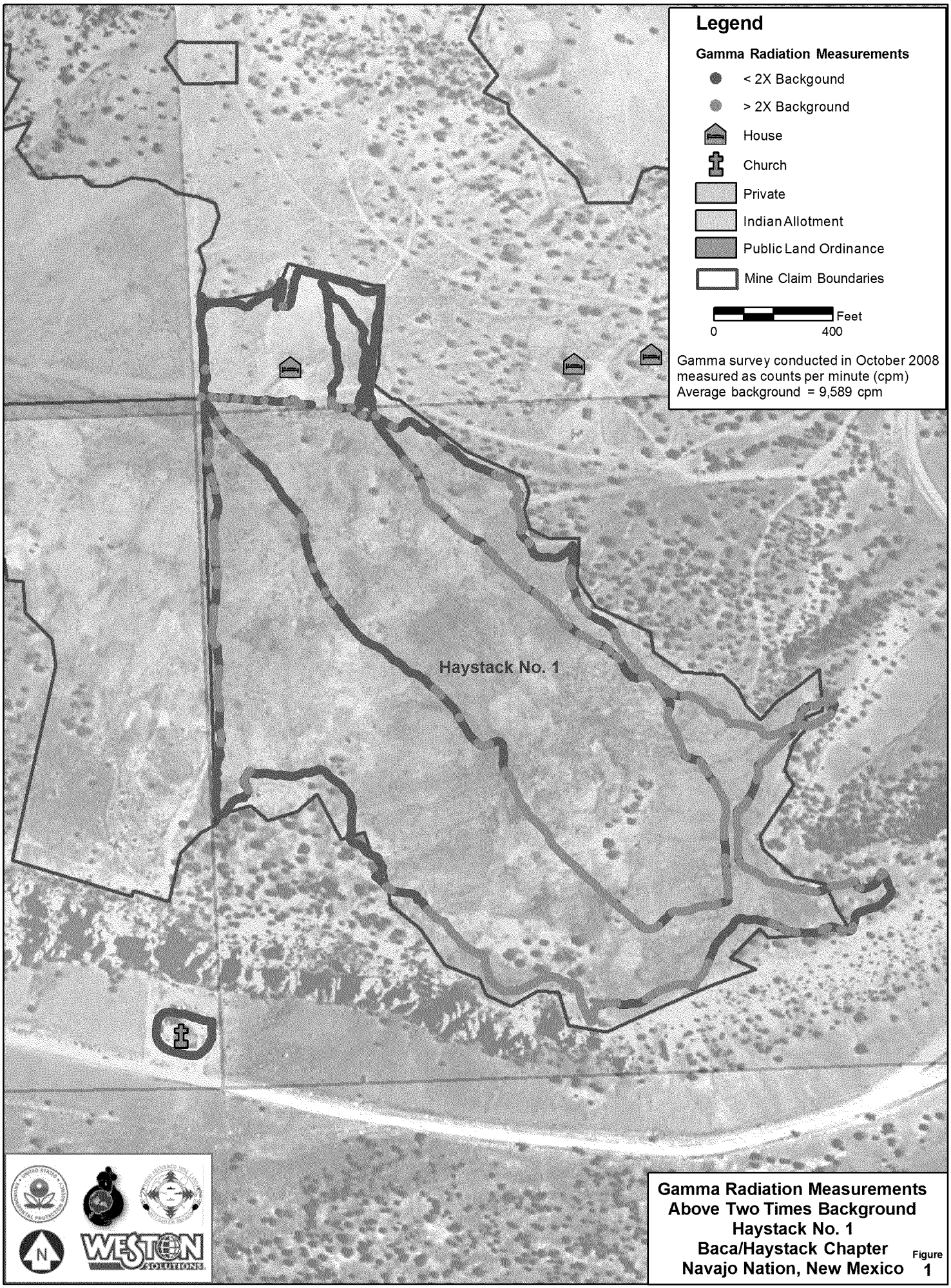
Address PO Box 1060, Gallup, NM 87305

Name

Title or official role (if any)

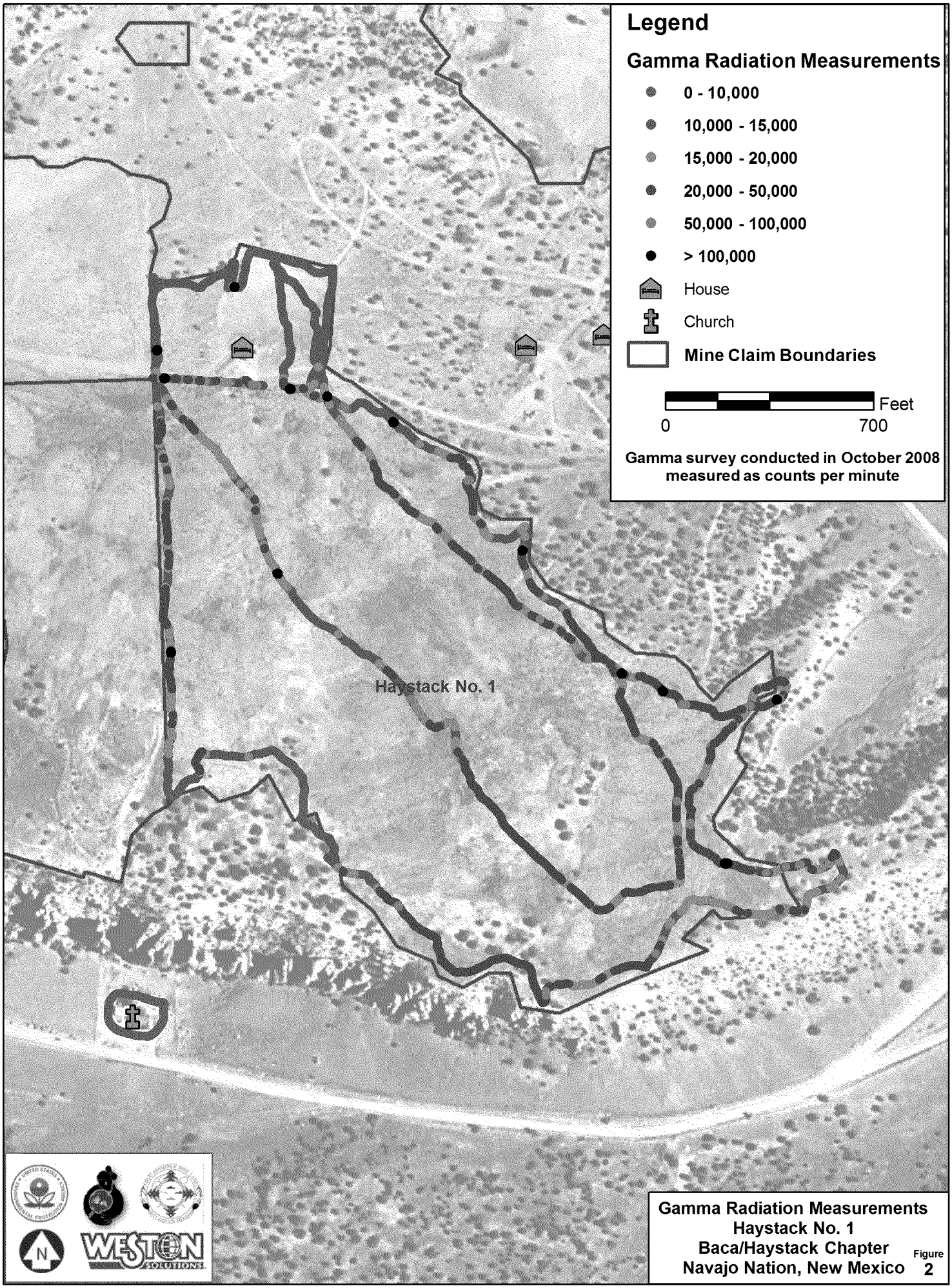
Telephone number

Information provided



Gamma Radiation Measurements Above Two Times Background
Haystack No. 1
Baca/Haystack Chapter
Navajo Nation, New Mexico

Figure 1



Gamma Radiation Measurements
Haystack No. 1
Baca/Haystack Chapter
Navajo Nation, New Mexico

Figure 2