

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.

Febco

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: 450

Map ID: E70

CERCLIS: NND 986 669 166

NAMLRP: NOT ASSIGNED

New Mexico Mining and Mineral Division ID: NM0106

New Mexico Bureau of Geology and Mineral Resources: NNMK0259

Local name / Aliases: Small Stake, Silver Spur No. 5, Silver Spur Group

Chapter and local area: Baca/Haystack Chapter

Lat/Long: 35.3929392866 N / -107.940653138 W

Nearby road and highway: Red Mountain Road/Blackwood 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 classified as private land, but no residences were found within 0.25 miles of the site. New Mexico Mining and Minerals Division identifies the surface and mineral rights owner as the Berryhill Family.

Part II Site Observations

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

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:** Windmill well located approximately 2.75 miles northwest of 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, period of operation, and type of mining operation.

The Febco mine consists of an area of 16,822.13 square meters. The extent of underground workings are unknown. 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 in 1952 as Chas Davis; 1952-1953 Silver Spur Mining Co.; 1955 Holly Uranium Co.; 1956 Holly Minerals; 1957-1959 Febco Mines; 1958 Holly Corp.; and in 1966 as Farris Mines.

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. Large waste rock piles extend down slope from the bluffs. Adits are shown on topographic maps, however none were observed. No other mine features were observed during the site visit. The database search identified 7 unreclaimed waste piles within the Febco and the nearby Silver Spur mine sites.

Part IV Summary of radiological readings

Background Locations

#1 14,747 cpm

#2 17,058 cpm

#3 16,491 cpm

Mine site: Febco

- See Figures 1 and 2

Nearby Structure Perimeter – None

Describe any other radiological measurements:

A total of 2,671 gamma radiation measurements were collected from the mine site, ranging from 6,629 cpm to 302,766 cpm. The measurements are represented in Figures 1 and 2. The New Mexico Mining and Minerals Division identified radiological measurements with level in the portals as 350 counts per second (cps); and the tailings dumps as 800-1,200 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): Febco **Chapter:** Baca/Haystack

Decision Criteria

Is there an unreclaimed waste pile at the site? Yes

At what distance from the waste pile is the nearest residential structure located? 0.5 mile

At what distances from the waste pile are there potential drinking water sources? 2 miles

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. Febco Mine site, towards the northwest



Photo 2. Febco Mine site, towards the north



Photo 3. Febco Mine site, towards the east



Photo 4. Febco Mine site, large waste rock pile

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

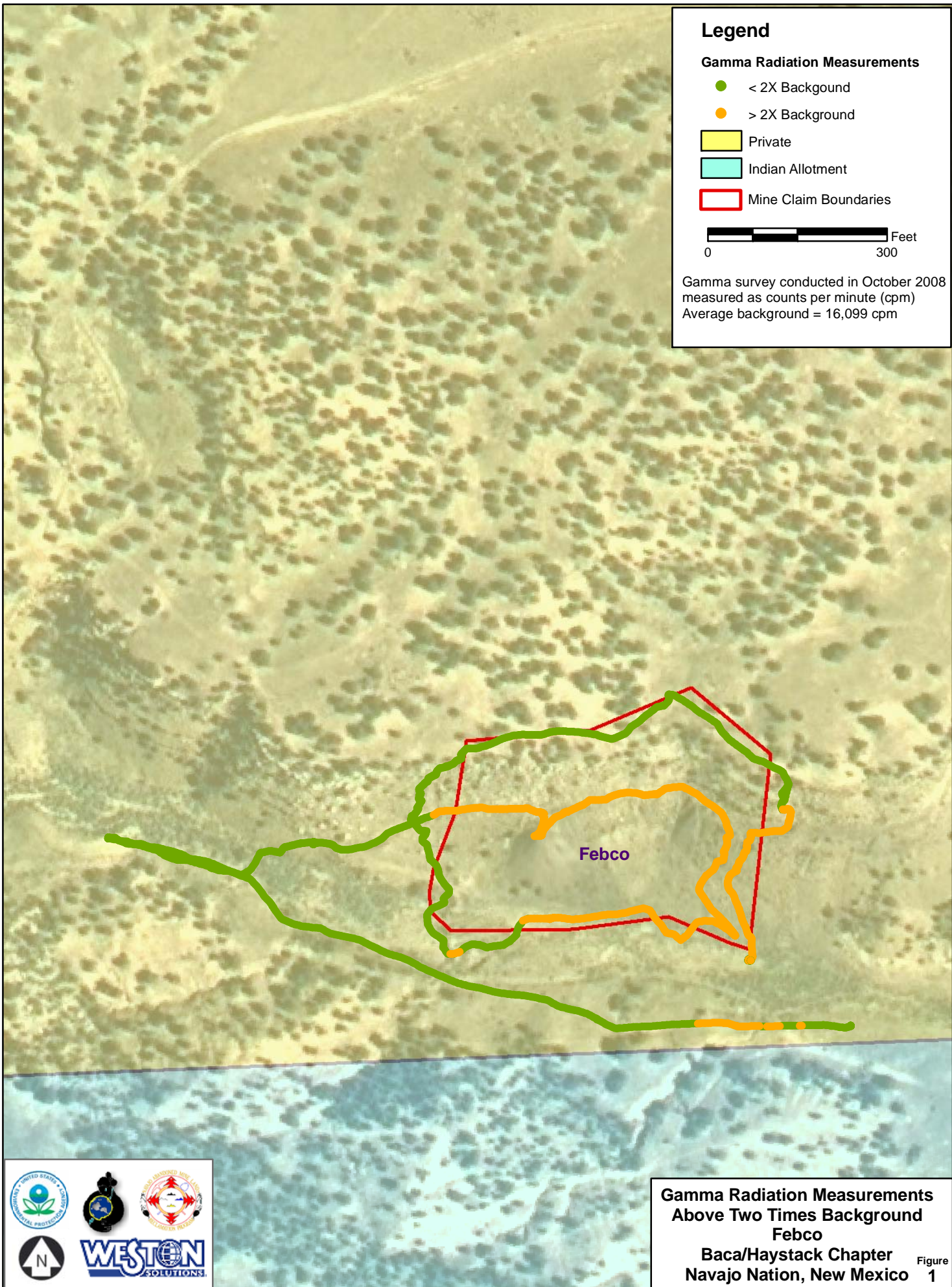
Information provided Background information and findings from 2008 New Mexico MMD
Survey of mining sites.

Name _____

Title or official role (if any) _____

Telephone number _____

Information provided _____



Legend

Gamma Radiation Measurements

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

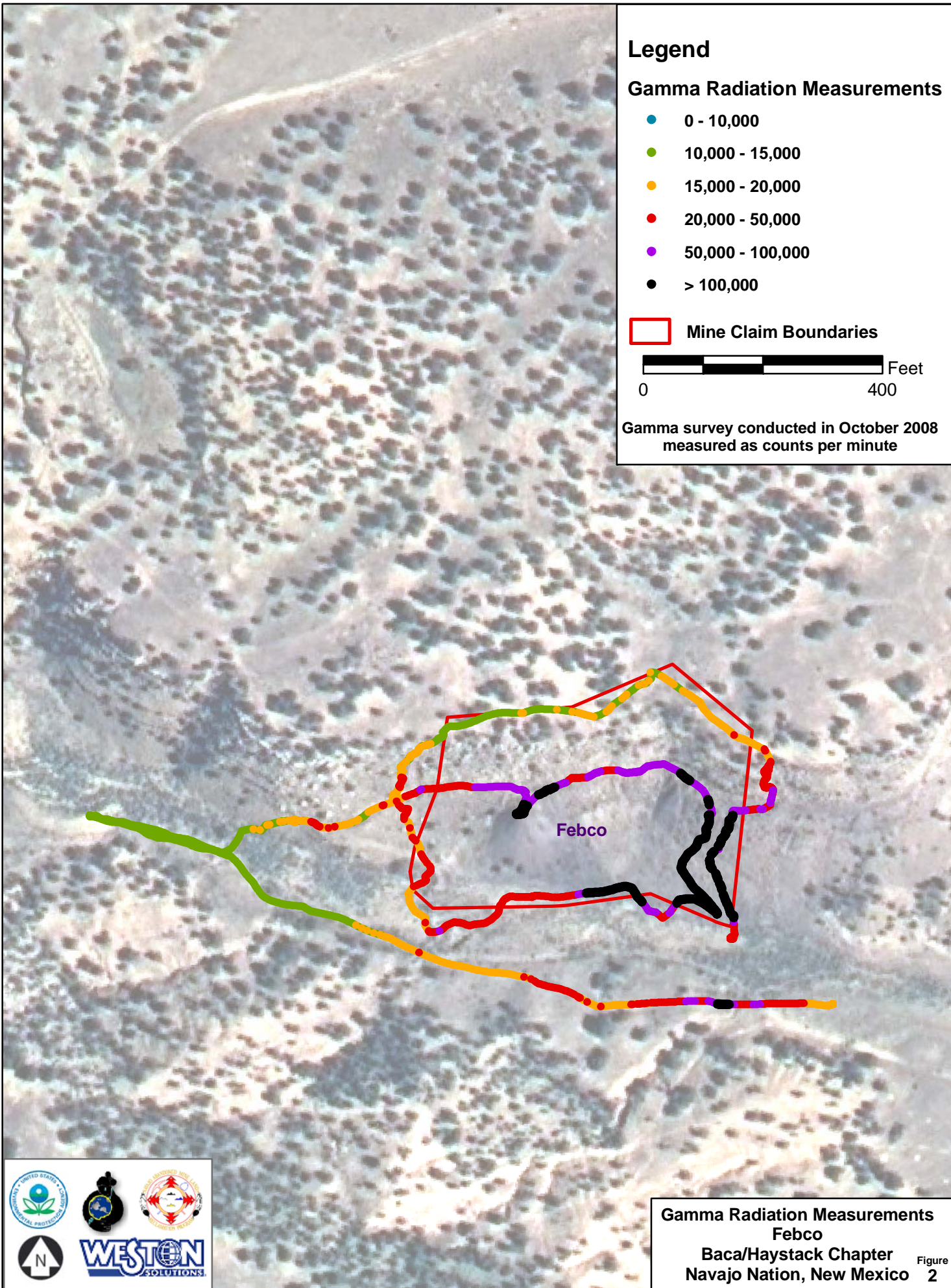
0 300 Feet

Gamma survey conducted in October 2008
 measured as counts per minute (cpm)
 Average background = 16,099 cpm

Febco



Gamma Radiation Measurements Above Two Times Background Febco
 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

Febco



**Gamma Radiation Measurements
Febco
Baca/Haystack Chapter
Navajo Nation, New Mexico** Figure 2