

# Abandoned Uranium Mine Assessment for the Marquez Site (NM0039)

## FINAL REPORT

Prepared For:



New Mexico Energy, Minerals and  
Natural Resources Department  
Wendell Chino Building  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Prepared By:



October 5, 2010

NM0039

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## 1.0 INTRODUCTION

INTERA Incorporated (INTERA) has prepared this Abandoned Uranium Mine (AUM) Site Assessment Report for the Mining and Minerals Division (MMD) of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) in compliance with the Professional Service Agreement dated November 2, 2009. INTERA visited the Marquez Mine Site (AUM Site), MMD ID: NM0039, on September 17, 2010.

### 1.1 PREVIOUSLY KNOWN INFORMATION ABOUT THE SITE

The AUM Site is part of the Ambrosia Lake subdistrict of the Grants Uranium Mining District (McLemore, 1983). The Ambrosia Lake subdistrict is also known as the Poison Canyon Trend (Anderson, 1980). The uranium is found in the Poison Canyon sandstone in the lower Brushy Basin Member of the Jurassic Morrison Formation (Anderson, 1980 and McLemore, 1983). McLemore describes the production shaft to be a 1,875 feet decline with a 10 degree slope and the Anderson Report describes the portal as being a 1,800 feet incline at a 10% grade (Anderson, 1980 and McLemore, 1983). The shaft was mined from 1958 to 1966, during which 723,032 tons of ore yielding 3,757,847 pounds of  $U_3O_8$  at a production grade of 0.26 percent were produced (McLemore, 1983).

The Anderson Report records scintillometer readings from the shaft area from 700 to 1,500 counts per second (cps), from the waste pile area from 800 to 2,500 cps, and near San Mateo Creek as high as 10,000 cps on ore grade material (Anderson, 1980). The workings were left intact through 1980, though the buildings had been removed (Anderson, 1980). The 11 ft high and 15 ft wide entrance to the shaft had been fenced off but was still open (Anderson, 1980).

### 1.2 SITE LOCATION AND DIRECTIONS

The AUM Site is located on private land in the NW ½ of Section 23, Township 13 North, Range 9 West. This AUM Site is located in McKinley County and is approximately 15 miles north of the town of Grants (Figure 1).

To reach the AUM Site from Albuquerque, drive approximately 83 miles west on Interstate 40. Take Exit 79 toward NM-122/NM-605, Milan/San Mateo. Turn right on Horizon Boulevard, continue approximately 400 feet and turn left at Willow Drive. Continue on Willow Drive for 0.2 miles and turn right onto NM-605. Continue on NM-605 for 16 miles. Approximately 2.2 miles after passing the turn for Ambrosia Lake Road/NM-509 turn right onto the Schmitt Ranch. There is a white gate that leads to a dirt road to the west of the ranch house. Permission from the private landowner is required to pass through the gate on the Schmitt Ranch, and to view the site. Travel south on the dirt road for about 0.75 miles until it curves to the left, and the road forks. At the fork, turn almost 180 degrees and travel to the west for 0.25 miles, where you will cross through an ephemeral stream bed. Continue west for about 0.4 miles, where the road will curve to the south and cross a barbed wire gate. After the gate, the road will turn 90 degrees to the right (west) and cross San Mateo Creek after 0.5 miles. Continue across San Mateo creek to the west until on flat, brushy ground. Turn right to the north and drive for 250 ft, crossing through a gate. After the gate, continue north for about 0.65 miles, driving parallel to San Mateo Creek. This section is especially rugged and contains several prairie dog holes and woody brush. Drive

cautiously and choose a safe route. Park in this general area, the disturbed area is about 0.2 miles to the west. Note that permission from the private landowner is required to cross the fence and view the Site.

### **1.3 SITE GEOLOGY**

The AUM Site is located near San Mateo Creek in a valley north of La Jara Mesa, on the eastern side of the Colorado Plateau and the southeastern edge of the San Juan Basin. The AUM Site is in the Brushy Basin Member of the Morrison Formation, light greenish-gray shales with interbedded sandstone lenses (McLemore, 1983). The uranium at this AUM Site is found in the basal Poison Canyon sandstone of the Brushy Basin Member (McLemore, 1983). The Poison Canyon sandstone is an arkosic sandstone that was deposited in a braided stream environment and is similar to the upper Westwater Canyon sandstones (McLemore, 1983). Uranium mineralization in the Poison Canyon sandstone occurs as primary-tabular and redistributed ore bodies (McLemore, 1983).

### **1.4 SITE HYDROGEOLOGY**

The AUM Site is located just to the southeast of San Mateo Creek and surface runoff either runs off to San Mateo Creek or seeps into the ground and then flows toward San Mateo Creek. San Mateo Creek, an ephemeral stream, locally flows west around La Jara Mesa and then south-southwest to Rio San Jose. Rio San Jose is an intermittent stream that flows east-southeast past the town of Grants and into the Rio Puerco. The Rio Puerco is also an intermittent stream that flows southeast into the Rio Grande south of Belen.

The AUM Site is located in the Bluewater groundwater basin, which covers the south central portion of McKinley County and the north central portion of Cibola County (Edwards and Kiely, 2004). The Bluewater Basin contains a patchwork of groundwater aquifers, though the most productive is the San Andres-Glorieta Aquifer (Edwards and Kiely, 2004). Many domestic and stock wells utilize groundwater in the alluvium of surface drainages but the majority of potable groundwater comes from the San Andres-Glorieta Aquifer, including the town of Grants' municipal supply (Edwards and Kiely, 2004).

### **1.5 REGIONAL TOPOGRAPHY AND TERRAIN**

The AUM Site can be found on the Dos Lomas Quadrangle 7.5 minute United States Geological Survey topographic map at an elevation of approximately 6900 feet above mean sea level (Figure 2). The broader region around the AUM Site consists of mesas and broad flat valleys. The AUM Site is located north of La Jara Mesa in a shallow, steep walled, flat bottomed canyon associated with San Mateo creek. An aerial photograph of the terrain surrounding the AUM Site is shown in Figure 3.

## **2.0 MINE FEATURES**

The mine features described below are based on the features provided to INTERA by MMD in the GIS Data Dictionary (MMD, 2009). INTERA marked the locations of the AUM Site features using a Trimble Global Positioning System (GPS) and entered details about the features

into the GPS using the MMD data dictionary. The AUM Site consists of one decline, four dumps, four structures, two piles, and one load out. Please see the Photo Log in Appendix A for photos, Table 1 for a list of all AUM Site features, and Figure 4a and 4b for the locations of the AUM Site features.

## **2.1 MINE SHAFTS, ADITS, AND DECLINES**

No mine shafts or adits were found at the AUM Site. One decline (DeclPt-1) was found at the location described in the Anderson Report (1980). Since 1980, the decline has been backfilled with soil, the backfill area measures 30 ft high, 30 ft wide, and 40 ft long (see Photo 2 in Appendix A). The maximum gamma radiation measurement for the decline was 75 microroentgens per hour ( $\mu\text{R/hr}$ ) at 0 ft above ground at radiation survey point Rad-1 (see Table 2).

## **2.2 MINING AND EXPLORATION PITS AND OPEN CUTS**

No pits or open cuts were found at the AUM Site.

## **2.3 WASTE AND ORE PILES AND DISTURBANCES**

Two waste piles (PilePly-1 and -2) and four dumps (DumpPly-1, -2, -3, and -4) were found at the AUM Site. The waste piles and one of the dumps were found near the decline and the rest of the dumps were found near the buildings, approximately 600 ft east of DeclPt-1 (see Figures 4a and 4b). The piles consisted of sand and waste rock and were located northwest of the decline. PilePly-1 was the largest waste pile, measuring 20 ft high, 300 ft wide, and 400 ft long. The largest dump area was DumpPly-1, measuring 100 ft wide and 300 ft long and consisting of old timber and metal pipes. DumpPly-2, -3, and -4 consisted of timber, metal, and building materials. The maximum gamma radiation measurement for these features was 800  $\mu\text{R/hr}$  at 0 ft above ground at radiation survey point Rad-8 on PilePly-2 (see Table 2). Other notable gamma radiation measurements for these features was 700  $\mu\text{R/hr}$  at 0 ft above ground at radiation survey point Rad-12 on DumpPly-4 (see Table 2).

## **2.4 MINING RELATED BUILDINGS AND FOUNDATIONS**

Four mine-related concrete foundations and one load out were found at the AUM Site. StrucPly-1 was the largest of the concrete foundations measuring 30 ft wide by 80 ft long (see Photo 12 in Appendix A). StrucPly-2 consisted a concrete foundation and a raised wooden deck, measuring 15 ft wide by 40 ft long (see Photo 14 in Appendix A). StrucPly-4 is a concrete foundation located in the east corner of the other foundations. Metal equipment and pipes are located on the east end of StrucPly-4 (see Photo 16 in Appendix A). The maximum gamma radiation measurement taken near these features was 240  $\mu\text{R/hr}$  at 0 ft above ground at radiation survey point Rad-11 near StructPly-3 (see Figures 4a and 4b).

## 2.5 OTHER MINE FEATURES

One loadout (LoadPly-1) was found at the AUM Site. LoadPly-1 was located approximately 50 ft east of the concrete foundations (see Figures 4a and 4b). LoadPly-1 was constructed of wood and measured 5 ft tall, 10 ft wide, and 20 ft long (see Photo 19 in Appendix A). The maximum gamma radiation measurement for this feature was 230  $\mu\text{R/hr}$  at 0 ft above ground at radiation survey point Rad-13 (see Table 2).

## 2.6 BOREHOLES

No boreholes were identified at the AUM Site.

## 2.7 RECLAMATION ACTIVITIES

Reclamation activities occurred at the AUM Site based on MMD files (email, 2010). In 1987 Santa Fe Pacific Gold completed reclamation work at the AUM Site (email, 2010). The decline has been backfilled with soil (see Photo 2 in Appendix A) and the waste pile (PilePly-1) to the west has been re-contoured (see Figures 4a and 4b and see Photos 3-6 in Appendix A). The buildings (StrucPly-1, -2, -3, and -4) mentioned in the Anderson Report are in similar condition as described in the Anderson Report (1980).

## 3.0 ARCHEOLOGICAL SITES

No apparent archeological sites were identified at or near the AUM Site.

## 4.0 SITE GAMMA RADIATION READINGS

The background gamma radiation reading at the AUM Site was measured approximately 450 ft east from the AUM Site recording 14 ( $\mu\text{R/hr}$ ) at 0 ft above the ground surface and 13  $\mu\text{R/hr}$  at 4 ft above the ground surface (see Figures 4a and 4b). The gamma radiation readings taken at the AUM Site are provided in Table 2. Please see Table 2 for all the gamma radiation readings taken at the AUM Site and Figures 4a and 4b for the locations of the radiation readings.

The gamma radiation readings throughout the AUM Site varied significantly (see Table 2). The maximum readings were recorded on isolated ore material, black rock with yellow banding, and were measured at 2200  $\mu\text{R/hr}$  at 0 ft above ground surface and 320  $\mu\text{R/hr}$  at 4 feet above ground surface at radiation survey point Rad-7 (see Photos 8 and 9 in Appendix A and Table 2). A gamma radiation reading taken at PilePly-2 (radiation survey point Rad-8) recorded 800  $\mu\text{R/hr}$  at 0 ft above ground and a gamma radiation measurement taken at DumpPly-4 (radiation survey point Rad-12) recorded 700  $\mu\text{R/hr}$  at 0 ft above ground.

## 5.0 CURRENT LAND USES

### 5.1 HUMAN ACTIVITY AND RECREATIONAL SITE USE

The AUM Site is located in a pasture owned by Schmitt Ranch and used for grazing.

### 5.2 NEARBY RESIDENTIAL, COMMERCIAL AND INDUSTRIAL STRUCTURES

One residential structure is located approximately 0.3 miles north of the AUM Site (see Figure 3).

### 5.3 NEARBY DOMESTIC WELLS

Five domestic wells and one stock well are located within a 1 mile radius of the AUM Site. Four domestic wells are located about 0.9 miles northwest of the AUM Site. One domestic well is located about 0.5 miles north of the AUM site. The wells were drilled from 1978 to 1986. Depths for these wells range from 32 to 95 ft and depth to water ranges from 15 to 74 ft (NMOSE, 2008).

### 5.4 EVIDENCE OF GRAZING OR AGRICULTURE

Fences, cow prints and cow droppings indicate grazing in the area surrounding the AUM Site. One stock well is approximately 1 mile north of the AUM Site also indicating active grazing in the area.

### 5.5 EVIDENCE OF WILDLIFE

Prairie dog holes and mounds were observed in the area surrounding the AUM Site. Ravens were observed at the AUM Site as well as deer and rabbit droppings.

## 6.0 VEGETATION

The AUM Site is located in the Desert Grassland (Ecotone) vegetation type (Dick-Peddie, 1999). The dominant woody species include chamisa, sand sagebrush, and snakeweed. Grasses included black grama and spike dropseed. Halogeton, a Class B noxious weed for the state of New Mexico, was observed at the AUM Site.

## 7.0 POTENTIAL OFFSITE IMPACTS

### 7.1 EROSION

No erosion was observed at the AUM Site.

## 7.2 ENVIRONMENTAL IMPACTS

There is no evidence of soil staining from chemicals potentially brought to the AUM Site, or from constituents present in the ore or waste rock.

## 8.0 REFERENCES

Anderson, Orin J., 1980. Abandoned or Inactive Uranium Mines in New Mexico. New Mexico Bureau of Mines and Mineral Resources Open File Report 148.

Edwards, Mark H. and Jeffrey Kiely, 2004. New Mexico Water Planning Region 6, Cibola/McKinley Regional Water Plan. Prepared for: The New Mexico Interstate Stream Commission; Prepared by: Northwest New Mexico Council of Governments, Gallup, New Mexico.

Dick-Peddie, William A, 1999. New Mexico Vegetation: Past, Present, and Future. University of New Mexico Press.

McLemore, Virginia T., 1983. Uranium and Thorium Occurrences in New Mexico: Distribution, Geology, Production, and Resources with Selected Bibliography, New Mexico Bureau of Mines & Mineral Resources, Open-file Report 183, pp. 1-21.

Mining and Minerals Division (MMD), 2009. Mine Feature Data Dictionary.

New Mexico Office of the State Engineer (NMOSE), 2008. Wells and Surface Diversions in New Mexico. WATERS\_PODS\_may08.shapfile. OSE Waters Database.

## TABLES

**Table 1  
Site Features**

**Marquez-NM0039  
Abandoned Uranium Mine Assessments**

Feature Name	On Site?	Feature Type	Associated Feature	Material	Height or Depth (ft)	Width or Diameter (ft)	Length (ft)	Open	Collapsed	Closure Type	Associated Photos	Notes
Access-1	No	Access	--	Dirt Nonmaintained	--	--	--	--	--	--	--	--
DeclPt-1	Yes	--	--	--	30	30	40	No	No	Backfill	NM0039_002	--
DumpPly-1	Yes	--	--	Wood	1	100	300	--	--	--	NM0039_007	wood and metal
DumpPly-2	Yes	--	--	Construction Debris	1	15	20	--	--	--	NM0039_011	--
DumpPly-3	Yes	--	--	Construction Debris	3	10	15	--	--	--	NM0039_013	--
DumpPly-4	Yes	--	--	Metal	3	20	50	--	--	--	NM0039_017	--
LoadPly-1	Yes	Wood	--	Wood	5	10	20	--	--	--	NM0039_018	--
PilePly-1	Yes	Waste	--	Soil	20	300	400	--	--	--	NM0039_003 NM0039_004 NM0039_005 NM0039_006	--
PilePly-2	Yes	Waste	--	Soil	1	25	50	--	--	--	NM0039_010	--
StrucPly-1	Yes	Building	--	Concrete	--	30	80	--	--	--	NM0039_012	--
StrucPly-2	Yes	Building	--	Concrete	2	15	40	--	--	--	NM0039_014	concrete and wood
StrucPly-3	Yes	Building	--	Concrete	--	20	80	--	--	--	NM0039_015	--
StrucPly-4	Yes	Building	--	Concrete	1	20	80	--	--	--	NM0039_016	concrete and metal

**Notes:**  
-- designates no information



**Table 2  
Gamma Radiation Survey Results**

**Marquez-NM0039  
Abandoned Uranium Mine Assessments**

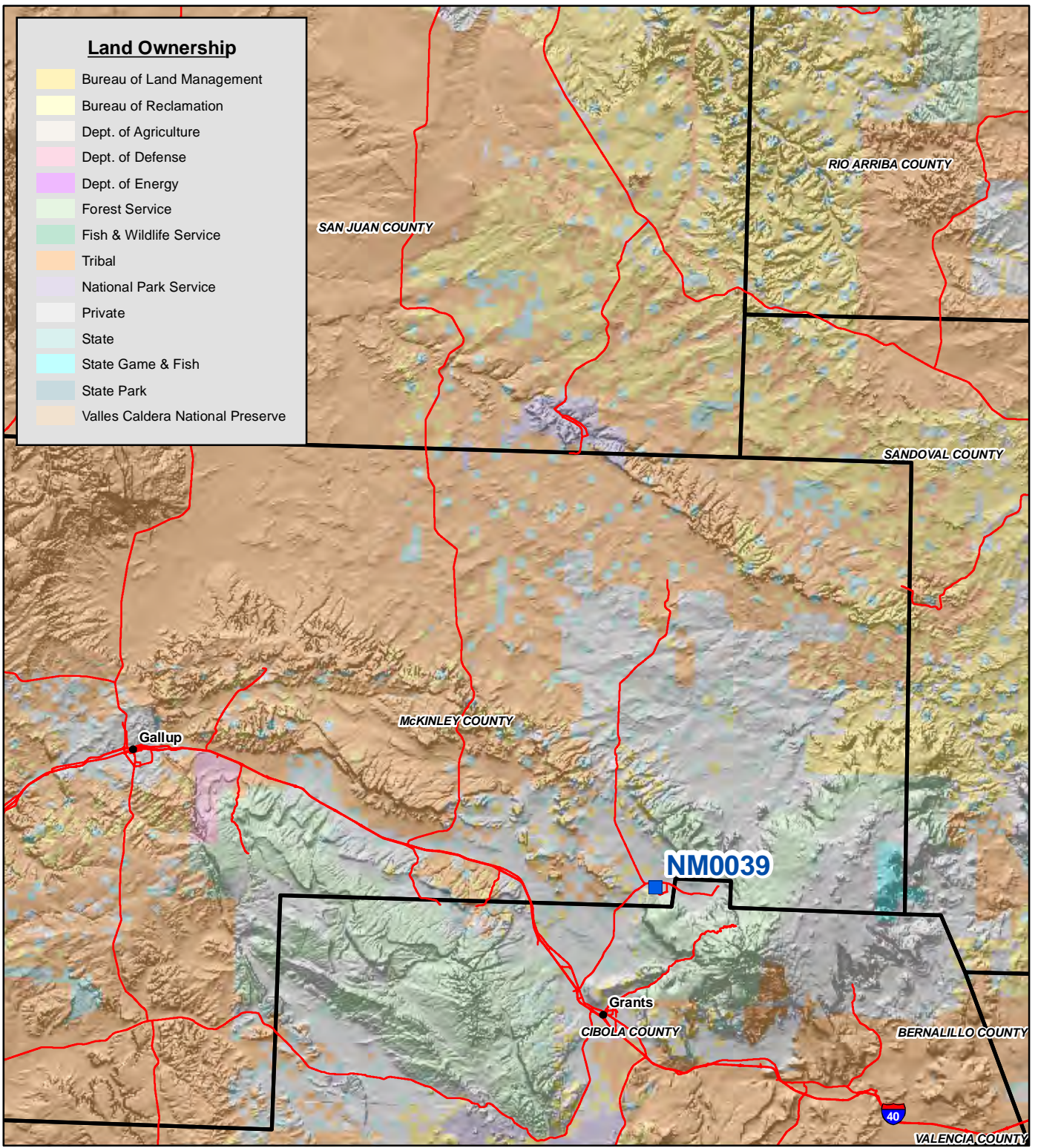
Reading ID	Associated Features	0 ft ( $\mu$ R/hr)	4 ft ( $\mu$ R/hr)	Associated Photos
Rad-1	declpt-1	75.00	45.00	--
Rad-2	pileply-1	90.00	75.00	--
Rad-3	pileply-1	150.00	120.00	--
Rad-4	pileply-1	100.00	90.00	--
Rad-5	dumpply-1	21.00	22.00	--
Rad-6	dumpply-1	180.00	120.00	--
Rad-7	--	2200.00	320.00	NM0039_008- NM0039_009
Rad-8	pileply-2	800.00	380.00	--
Rad-9	dumpply-2	37.00	35.00	--
Rad-10	dumpply-3	60.00	40.00	--
Rad-11		240.00	190.00	--
Rad-12	dumpply-4	700.00	140.00	--
Rad-13	loadply-1	230.00	190.00	--
RadBack-1	--	14.00	13.00	--

**Notes:**

All gamma readings at this site taken by Ludlum 192  $\mu$ R/Ratemeter  
 $\mu$ R/hr=microroetgens per hour  
 -- designates no information



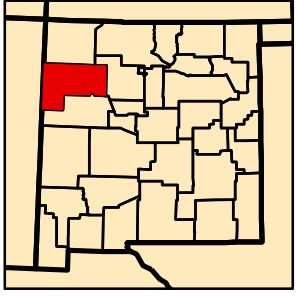
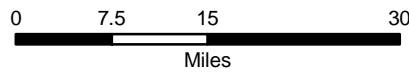
## FIGURES



**Land Ownership**

Yellow	Bureau of Land Management
Light Yellow	Bureau of Reclamation
White	Dept. of Agriculture
Pink	Dept. of Defense
Purple	Dept. of Energy
Light Green	Forest Service
Green	Fish & Wildlife Service
Orange	Tribal
Light Purple	National Park Service
White	Private
Light Blue	State
Cyan	State Game & Fish
Blue	State Park
Light Orange	Valles Caldera National Preserve

Map Source(s):  
Ownership - BLM, 2008

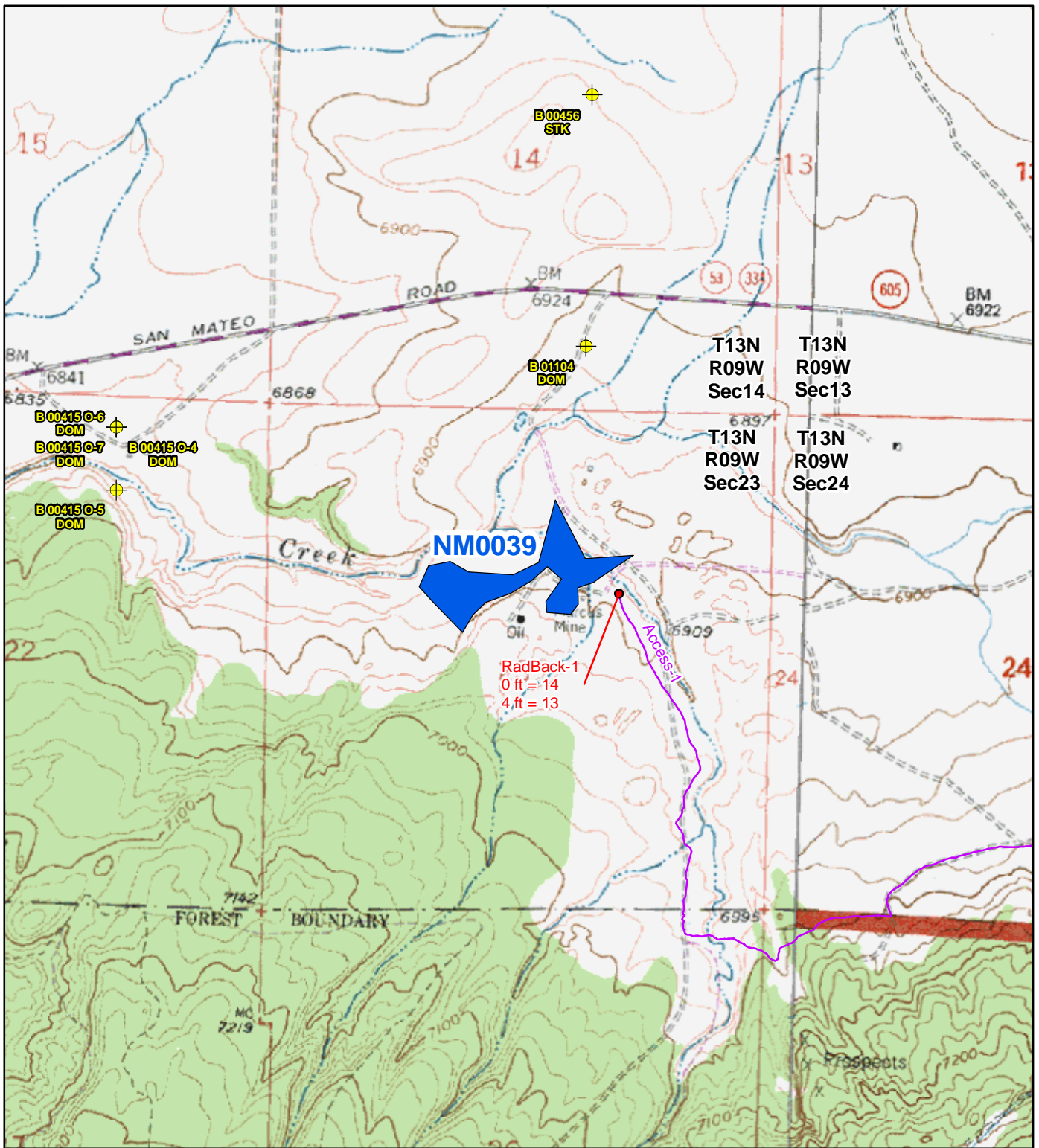


**Legend**

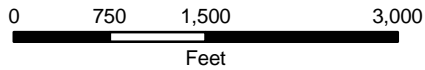
Blue square	AUM Location
Red line	Road
Black outline	County Boundary

**Figure 1**  
**Site Location Map**  
**NM0039-Marquez**  
Abandoned Uranium  
Mine Assessment





Map Source(s):  
 U.S. Geological Survey 7.5-Minute  
 Topographic Map  
 -Dos Lomas, 1980  
 -San Mateo, 1995

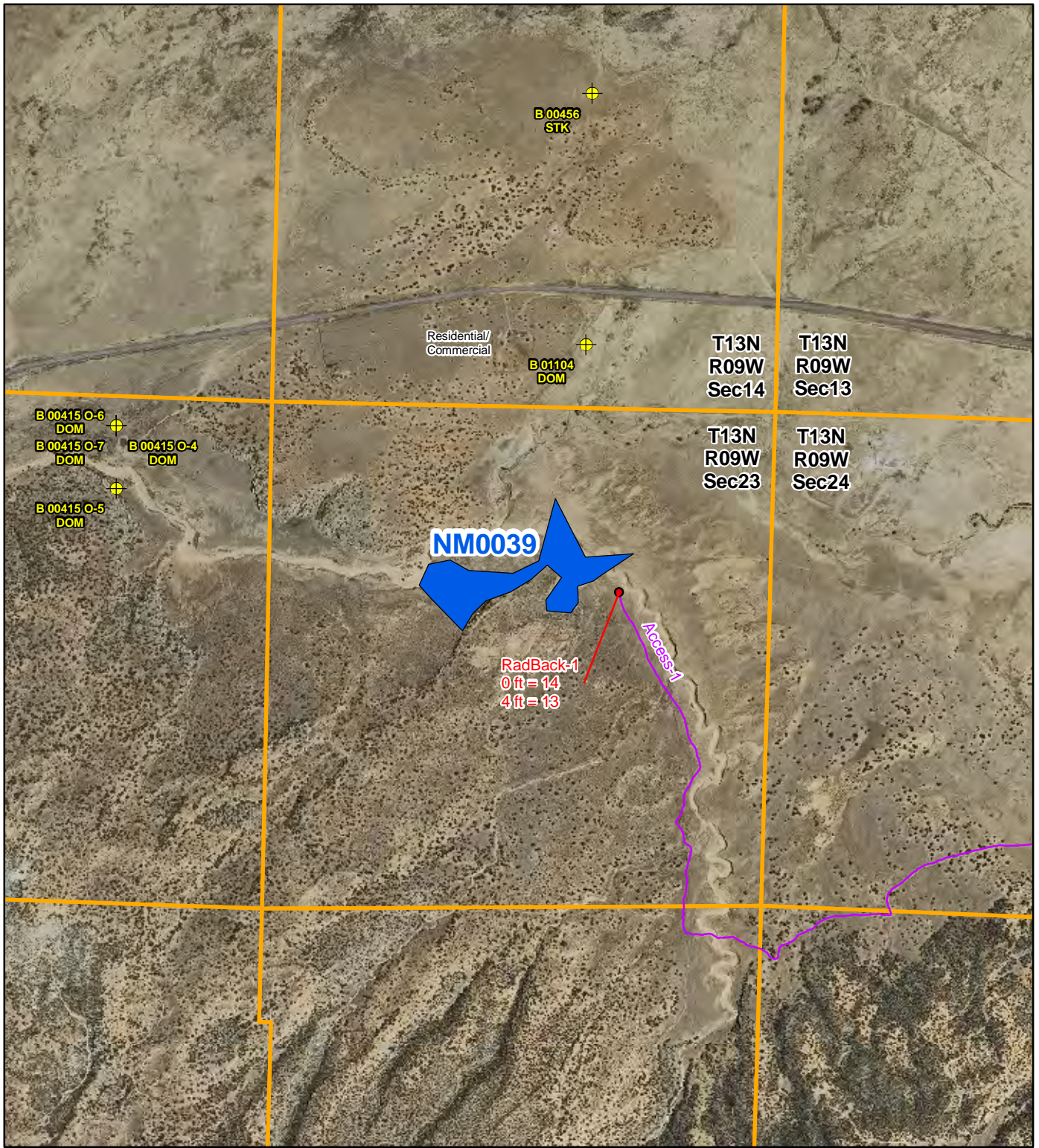


**Legend**

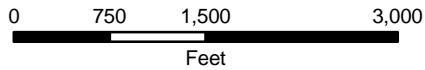
- Radiation Readings ( $\mu\text{R/hr}$ )
- ⊕ Well Within 1 Mile of Site
- Access Route
- AUM Location Boundary (MMD Provided)

**Figure 2**  
**Topographic Map**  
**NM0039-Marquez**  
 Abandoned Uranium  
 Mine Assessment





Map Source(s):  
 U.S. Geological Survey 7.5-Minute  
 DOQQ County Mosaic  
 -McKinley County, 2009



**Legend**

- Radiation Readings ( $\mu\text{R/hr}$ )
- ⊕ Well Within 1 Mile of Site
- Access Route
- AUM Location Boundary (MMD Provided)
- Section Boundary

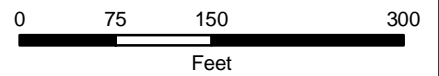
**Figure 3**  
**Aerial Photo**  
**NM0039-Marquez**  
 Abandoned Uranium  
 Mine Assessment





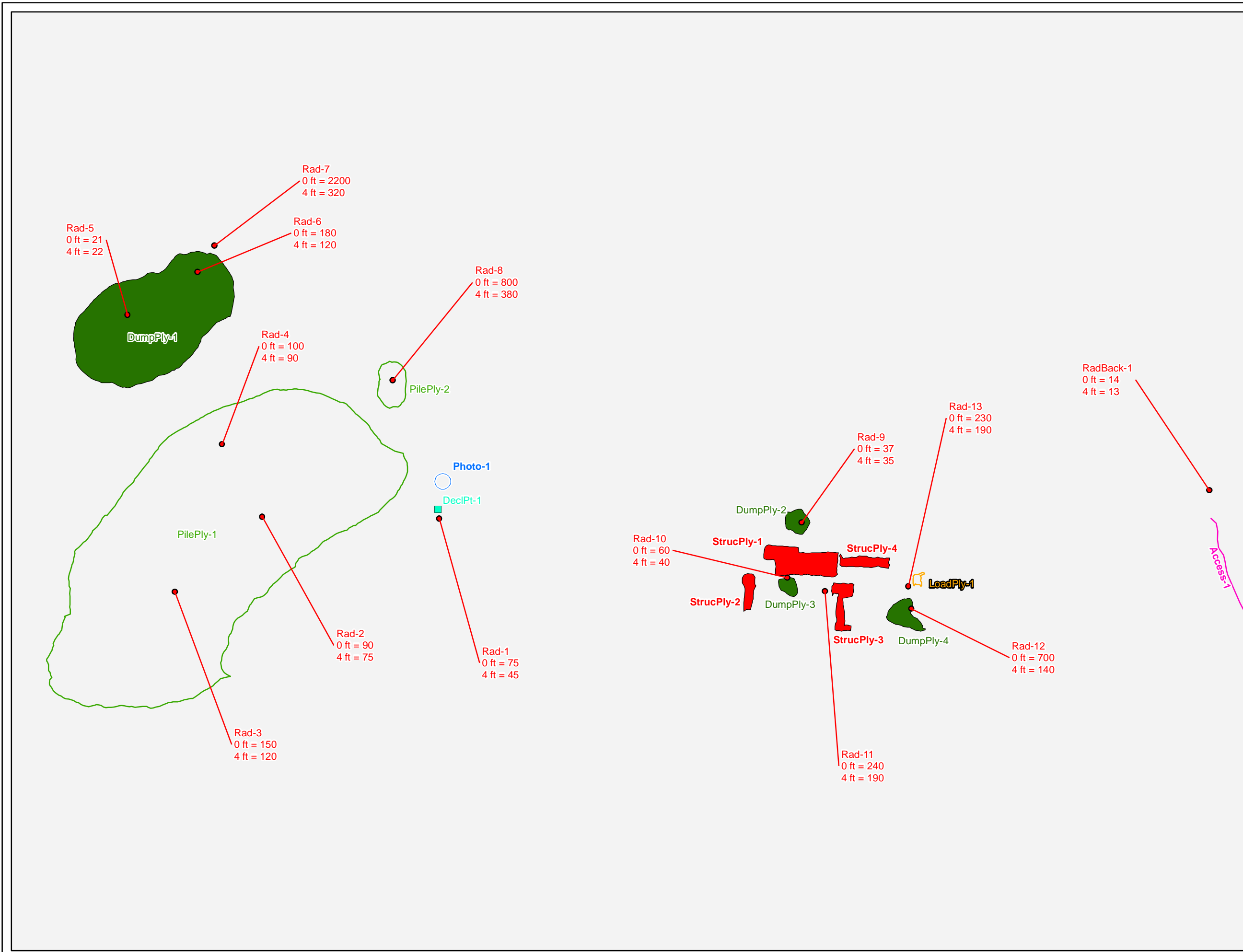
**Legend**

- Radiation Readings (μR/hr)
- Photo Location
- Decline
- Access Route
- Pile Boundary
- Load Out Boundary
- Dump Boundary
- Structure Boundary



Map Source(s):  
 U.S. Geological Survey 7.5-Minute  
 DOQQ County Mosaic  
 -McKinley County, 2009

**Figure 4a**  
**Site Map on**  
**Aerial Photo**  
**NM0039-Marquez**  
 Abandoned Uranium  
 Mine Assessment

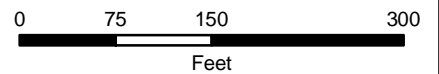


**Legend**

- Radiation Readings (µR/hr)
- Photo Location
- Decline
- Access Route
- Pile Boundary
- Load Out Boundary
- Dump Boundary
- Structure Boundary

**Surface Ownership**

- Private



Map Source(s):  
Ownership - BLM, 2008

**Figure 4b**  
**Site Map with**  
**Surface Ownership**  
**NM0039-Marquez**  
 Abandoned Uranium  
 Mine Assessment

## **APPENDIX A**

### **PHOTO LOG**

Note: Gaps in the numbering sequence of the photos is the result of removing photos not suitable for the report. A full set of photos is provided in the electronic deliverable.



Photo 1- Looking west at Site location photo.



Photo 2- Looking southeast at DeclinePt-1, replicating Anderson photos A and B.



Photo 3- Looking west at PilePly-1, replicating Anderson photo C. Note that the pile has been recontoured.



Photo 4-Looking northeast at PilePly-1, replicating Anderson photo D. Note that the pile has been recontoured.



Photo 5-Looking north at west end of PilePly-1, replicating Anderson photo E. Note that the pile has been recontoured.



Photo 6-Looking east at PilePly-1, replicating Anderson photo F. Note that the pile has been recontoured.



Photo 7-Looking south from DumpPly-1.

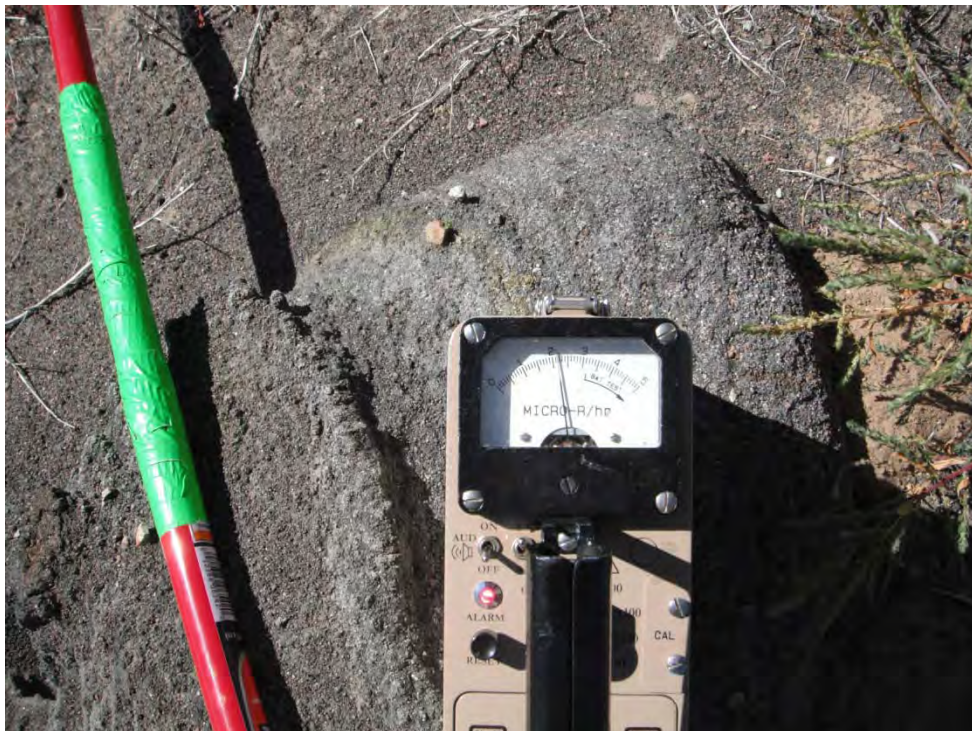


Photo 8-Looking south at Rad-7. High radiation levels were concentrated near the yellowish band in this black ore material.



Photo 9-Looking west at Rad-7, replicating Anderson photo H, San Mateo Creek to the north.

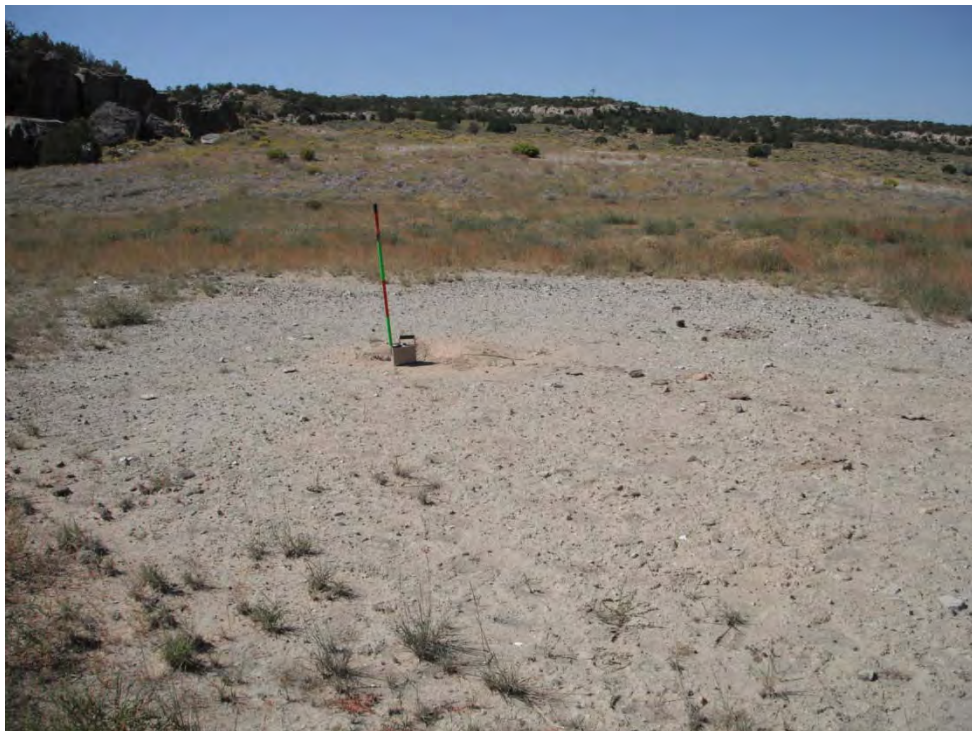


Photo 10-Looking west at PilePly-2.



Photo 11-Looking north at DumpPly-2.



Photo 12-Looking east at StructPly-1.



Photo 13-Looking south at DumpPly-3.



Photo 14-Looking south at StructPly-2.



Photo 15-Looking east at StructPly-3.



Photo 16-Looking west at StructPly-4.



Photo 17-Looking south at DumpPly-4.



Photo 18-Looking east at LoadPly-1.

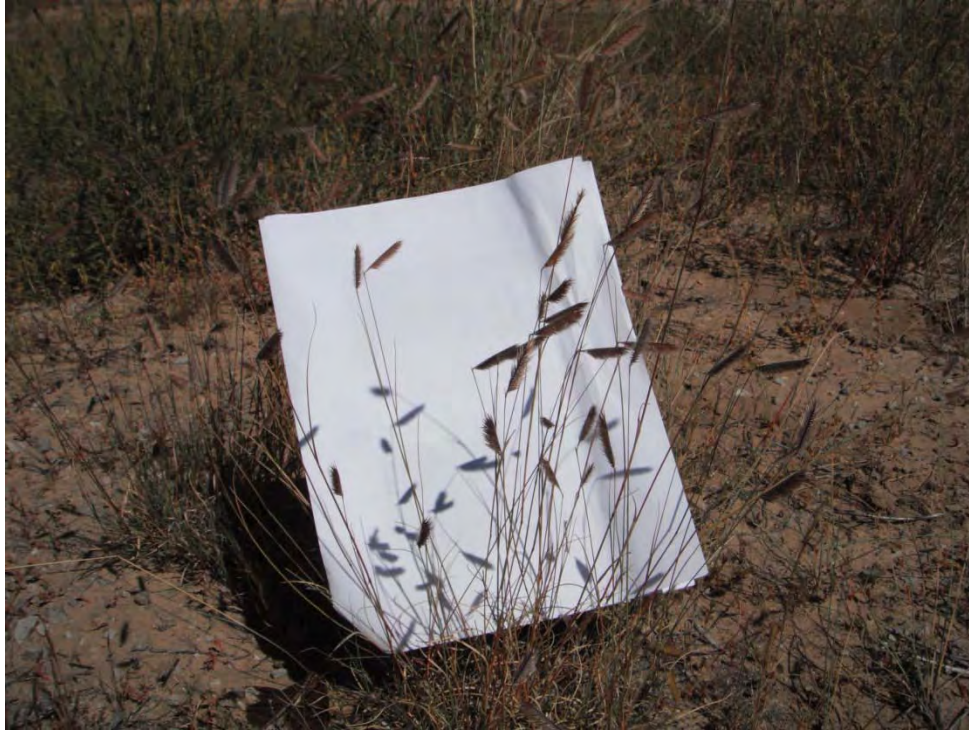


Photo 19-Vegetation at AUM site.



Photo 20-Vegetation at AUM site.



Photo 21-Vegetation at AUM site.



Photo 22-Vegetation at AUM site.



Photo 23 – Vegetation at AUM site.

**APPENDIX B**  
**FIELD NOTES**

Site Name: NM0039, Marquez

Objective: Site Assessment

Personnel: Annelia Tinklenberg  
Spencer Whitman

Equipment: Rental truck, Trimble GeoXM (SN: 494844727, 2008 series), Ludlum 182 (SN: 234149), Fujifilm digital camera (No. 078531259), backup Garmin GPS, cell phone amplifier, field laptop

815 Leaving Grants

HASP meeting

900 At Schmitt Ranch, talked with Jayne Schmitt to verify road and mine location.

930 At eastern end of AUM polygon. Looking for mine features.

Photo 1 - Site ID location looking west

Decline Pt-1 - Location of portal opening, now filled in - backfilled; southeast into Dakota sandstone; 30' tall, 30' wide, 40' long

Photo 2 - Decline Pt-1 looking southeast, replicating Anderson Photos a and b.

Rad-1 - Decline Pt-1; 0m - 75 uR/h; 1m - 45 uR/h

Pile Ply-1 - 20' high; 300' wide; 400' long 10° slope; sand and waste rock

Photo 3 - Pile Ply-1 looking west, replicating Anderson Photo C

Photo 4 - Pile Ply-1 looking northeast, replicating Anderson Photo D

Photo 5 - Pile Ply-1 looking north at west end of dump, replicating Anderson Photo E

Photo 6 - Pile Ply-1 - looking east, replicating Anderson Photo F

Rad-2 - Pile Ply-1; 0m - 90 uR/h; 1m - 75 uR/h

Rad-3 - Pile Ply-1; 0m - 150 uR/h; 1m - 120 uR/h

Rad-4 - Pile Ply-1; 0m - 100 uR/h; 1m - 90 uR/h

61 9/17/10 ACT Abandoned Uranium Mines

DumpPly-1 - wood timbers, metal pipes and tubes; 100' x 300'

Photo 7 - DumpPly-1 looking south

Rad 5 - ~~Act~~ DumpPly-1; 0m - 21 uR/h; 1m - 22 uR/h

Rad 6 - DumpPly-1; 0m - 180 uR/h; 1m - 120 uR/h

Rad 7 - near DumpPly-1; 0m - 2200 uR/h; 1m - 320 uR/h

Photo 8 - Rad 7 looking south at

Photo 9 - Rad 7 looking west, San Mateo creek to the north, replicating Anderson photo

PilePly-2 - small pile east of PilePly-1; 1' tall, 25' wide, 50' long  
5° slope

Photo 10 - PilePly-2 looking ~~east~~ west

Rad 8 - PilePly-2; 0m - 800 uR/h; 1m - 380 uR/h

DumpPly-2 - wood, metal; appears recent; 1' tall; 15' wide, 20' long  
construction debris

Photo 11 - DumpPly-2 looking north

Rad 9 - DumpPly-2; 0m - 57 uR/h; 1m - 35 uR/h

StructPly-1 - foundation, cement; 0' tall, 30' wide, 80' long

Photo 12 - looking east at structPly-1

DumpPly-3 - construction debris, wood, metal, plastic  
2' tall, 10' wide, 15' long

Photo 13 - DumpPly-3 looking south

Rad 10 - DumpPly-3; 0m - 60 uR/h; 1m - 40 uR/h

StructPly-2 - cement foundation and wood ~~load~~  
2' high, 15' wide, 40' long

Photo 14 - StructPly-2 looking south

Rad 11 - 0m - 240 uR/h; 1m - 140 uR/h

StructPly-3 - cement foundation; 0' tall, ~~20~~ 20' wide, 80' long

Photo 15 - StructPly-3 looking east

StructPly-4 - cement foundation; 0' tall; 20' wide, 80' long

Photo 16 - StructPly-4 looking west

DumpPly-4 - metal; 26' wide, 50' long, 3' tall

Photo 17 - DumpPly-4 looking south

Rad 12 - DumpPly-4, black rock; 0m - 700 uR/h; 1m - 140 uR/h

Loadout-1 - wood, 5' tall, 10' wide, 20' long

Photo 18 - Loadout looking east

Rad 13 - Loadout-1; 0m - 230 uR/h; 1m - 190 uR/h

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Background Rad - 0m - 14 uR/h; 1m - 13 uR/h

Photos 19-23 - Vegetation

Access Rd-1 - leading out of site

1200 Leaving site

1230 Back at Schmitt Ranch

Soils: Tan sandy soils.

Rocks: Aed to tan sandstone. Dakota Sandstone in outcrop.  
Gray Poison Canyon sandstone ore rock.

Wildlife: Ravens. Deer and rabbit droppings.

Human Activities: Grazing. Cow prints, droppings and fences.  
Possibly recent dumping of trash.

