

Abandoned Uranium Mine Site Assessment for the Osmer-Silver Site (NM0134)

FINAL REPORT

Prepared For:



NM0134
New Mexico Energy, Minerals and
Natural Resources Department
Wendell Chino Building
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Prepared By:



April 14, 2010

TABLE OF CONTENTS

1.0	Introduction.....	1
1.1	Previously Known Information About the Site.....	1
1.2	Site Location and Directions	1
1.3	Site Geology.....	1
1.4	Site Hydrogeology.....	2
1.5	Regional Topography and Terrain	2
2.0	Mine Features.....	2
2.1	Mine Shafts, adits, and declines.....	3
2.2	Mining and Exploration Pits and Open Cuts.....	3
2.3	Waste and Ore Piles and Disturbances.....	3
2.4	Mining Related Buildings and Foundations.....	3
2.5	Other Mine Features.....	3
2.6	Boreholes.....	3
2.7	Reclamation Activities	3
3.0	Archeological Sites	3
4.0	Site Gamma Radiation Readings	4
5.0	Current Land Uses	4
5.1	Human Activity and Recreational Site Use.....	4
5.2	Nearby Residential, Commercial and Industrial Structures.....	4
5.3	Nearby Domestic Wells	4
5.4	Evidence of Grazing or Agriculture	4
5.5	Evidence of Wildlife	4
6.0	Vegetation.....	5
7.0	Potential Offsite Impacts.....	5
7.1	Erosion	5
7.2	Environmental Impacts	5
8.0	References.....	5

TABLES

Table 1	Site Features
Table 2	Gamma Radiation Survey Results

FIGURES

Figure 1	Site Location Map
Figure 2	Topographic Map
Figure 3	Aerial Photo
Figure 4a	Site Map on Aerial Photo
Figure 4b	Site Map with Surface Ownership

APPENDICES

Appendix A	Photo Log
Appendix B	Field Notes

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 Osmer Silver Mine Site (AUM Site), MMD ID: NM0134, on March 2, 2010.

1.1 PREVIOUSLY KNOWN INFORMATION ABOUT THE SITE

The Osmer Silver claim is located in the Black Hawk District, or Bullard Peak District (McLemore, 1983). This AUM Site was recorded to have produced 120 (the report does not include the units) uranium ore, according to McLemore (1983). The AUM Site deposit is characterized as an epithermal vein (McLemore and Chenoweth, 1989) or a hydrothermal vein (McLemore, 1983). The uranium-bearing veins contain silver, cobalt, nickel, uranium, along with other minerals deposited as fill in fissures and faults in Precambrian quartz-diorite gneiss and granite (McLemore and Chenoweth, 1989 and McLemore, 1983).

The McLemore (1983) report describes the mine workings as a 40 foot shaft with a drift. This working was sunk in 1958-1959 by Dave Osmer (McLemore, 1983). The background radiation was recorded as 50-60 cps (McLemore, 1983).

1.2 SITE LOCATION AND DIRECTIONS

The Osmer Silver Mine Site is located on Forest Service land in the NW 1/4 Section 28, Township 18 South, Range 16 West. This Site is located in Grant County and is approximately 13 miles west of Silver City in the Burro Mountains (please see Figure 1).

To reach the AUM Site from Albuquerque, drive approximately 170 miles south on Interstate 25. Take Exit 63 towards Hillsboro and get on NM-152. Take NM-152 approximately 65 miles to Santa Clara. At Santa Clara, take US-180 west, turning right on Silver Heights Blvd, for approximately 8 miles to Silver City. In Silver City turn right at 14th Street to stay on US-180, and continue west for approximately 13.5 miles. Turn left on Saddlerock Canyon Road, a dirt road, and drive for 1.9 miles. Approximately 3,000 feet after passing a private house on the left, take a slight left at Blackhawk Canyon Road and continue up the stream bed approximately 5 miles. Blackhawk Canyon Road is not marked; make sure to stay in the left-most canyon after turning onto the dirt road from US-180.

The access road goes through private land and is blocked by locked gates. Drive as far as possible up the stream bed and then continue on foot up the stream bed until meeting back up with the road. Follow the road south, to the right, another 1,000 feet. The AUM Site is in the hills to the west of the road.

1.3 SITE GEOLOGY

The AUM Site is located on the northern end of the Big Burro Mountains in Grant County, near Silver City. The Burro Mountains are a tilted fault-block uplift of Precambrian granite and gneiss in the northwestern-trending transition zone between the Colorado Plateau Province and the

Basin and Range Province (Trauger, 1965). The Black Hawk mining district in the Burro Mountains is characterized by hydrothermal veins filling fractures and faults in the granite and quartz diorite of Precambrian age, as well as in the Tertiary intrusive igneous rock (McLemore, 1983). These fracture and fault veins contain nickel, cobalt, silver and uraninite (McLemore, 1983). Locally, uraninite is the dominant uranium mineral (McLemore, 1983).

McLemore reports that the uranium potential of this area in the Burro Mountains is speculative, and that very little information about the depths of the veins is known (McLemore, 1983). Most of the veins in this area are small and rarely exceed 500 feet in length and have not been explored beyond 206 feet in depth (McLemore and Chenoweth, 1989).

1.4 SITE HYDROGEOLOGY

The AUM Site is located on a ridge west of an unnamed drainage in Black Hawk Canyon. North of the AUM Site, Black Hawk Canyon merges with Saddle Rock Canyon and the drainages empty into Mangas Creek. Mangas Creek flows north for approximately 5 miles and then west for approximately 4 miles where it drains into the Gila River. The Gila River flows west into Arizona and eventually drains into the Colorado River.

The AUM Site is located in the Gila groundwater basin. Groundwater flow in the basin generally follows drainage patterns of the surface flow (DBSA, 2005). Groundwater in the vicinity of the AUM Site is largely confined to alluvial fill in the surface drainages. Very little development of groundwater has occurred near the AUM Site.

1.5 REGIONAL TOPOGRAPHY AND TERRAIN

The AUM Site can be found on the Bullard Peak Quadrangle 7.5 minute United States Geological Survey topographic map at an elevation of approximately 5840 feet above mean sea level (please see Figure 2). The Site is in the Big Burro Mountains, approximately 1.5 miles west of Bullard Peak (7064 feet above mean sea level). The broader region around the AUM Site consists of fault-block ranges separated by down-dropped valleys. In general the area is steep, rough, and carved by surface drainages. Figure 3 shows an aerial photograph of the terrain surrounding the AUM Site.

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 shaft, one pit, one trench, and five piles. Please see the Photo Log in Appendix A for photos, Table 1 for a list of all AUM Site features, and Figures 4 for the locations of the AUM Site features. Note that the scale differs between Figure 4a (aerial photo) and 4b (ownership map) due to resolution on aerial photographs.

2.1 MINE SHAFTS, ADITS, AND DECLINES

One shaft was found on the AUM Site, it was estimated to be approximately 50 feet deep (Shaft-1) and had a 5 foot diameter. McLemore reports that the shaft is approximately 40 feet deep (McLemore, 1983). A few pieces of old timber were near the shaft opening. The shaft is open at the ground surface.

2.2 MINING AND EXPLORATION PITS AND OPEN CUTS

One open cut (Trench-1) was identified at the AUM Site. The cut was approximately 40 feet long, 15 feet wide, and 10 feet high. One exploration pit (PitPly-1) was also identified, near the shaft. The pit was approximately 20 feet long, 10 feet wide, and 5 feet deep.

2.3 WASTE AND ORE PILES AND DISTURBANCES

Five waste piles were found onsite. Two waste piles (PileRidge-1 and PilePt-1) were associated with the open cut (Trench-1). The waste rock from these piles was taken out of the open cut. Two other waste piles (PilePly-1 and PilePly-2) were associated the pit (PitPly-1). An area of disturbance (DistPly-2) is also associated with the pit and shaft and may have been a building pad or staging area. The disturbance was flattened and was unvegetated. The disturbance area may have also been built up with material from the shaft (Shaft-1). One waste pile (PilePly-3) was associated with the shaft (Shaft-1).

2.4 MINING RELATED BUILDINGS AND FOUNDATIONS

No mining related buildings and foundations were evident at the AUM Site.

2.5 OTHER MINE FEATURES

An access road runs north-south approximately 200 feet west of the AUM Site.

2.6 BOREHOLES

No boreholes were evident at the AUM Site.

2.7 RECLAMATION ACTIVITIES

No reclamation activities were evident at the AUM Site.

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 readings at the AUM Site were measured approximately 1 mile from the northern end of the site. The background gamma readings were measured at 6 microrentgens per hour ($\mu\text{R/hr}$) at the ground surface and 5 $\mu\text{R/hr}$ at 4 feet above the ground surface. Please see Table 2 for all of the gamma radiation readings taken at the AUM Site.

The gamma radiation readings at the AUM Site did not vary significantly above background levels. The highest gamma radiation readings were in the open cut (Trench1) and were measured at 17 $\mu\text{R/hr}$ at the ground surface and 14 $\mu\text{R/hr}$ at 4 feet above the ground surface. Please see Table 2 for details.

5.0 CURRENT LAND USES

5.1 HUMAN ACTIVITY AND RECREATIONAL SITE USE

Abundant past and present evidence of cattle grazing exists at AUM Site and the surrounding area. This evidence includes cow tracks, fences, water tanks, and structures. Extensive evidence of past and current mining activity is evident in the area surrounding AUM Site in the Big Burro Mountains, including roads, signs, waste piles and structures. While assessing the AUM Site two vehicles were seen entering private land areas and explosions were heard coming from the direction of the Black Hawk Mine. The area is also used for recreation; ATV tracks, fire rings and trash were noted in the area.

5.2 NEARBY RESIDENTIAL, COMMERCIAL AND INDUSTRIAL STRUCTURES

Approximately $\frac{1}{2}$ to 1 mile southwest of the AUM Site one residential structure, a shed, and a trailer were observed. The structures were in good condition and seemed to be presently in use.

5.3 NEARBY DOMESTIC WELLS

There are no domestic wells within a 1-mile radius of the AUM Site.

5.4 EVIDENCE OF GRAZING OR AGRICULTURE

Fences, corrals, and water catchments in the area attest to active and past ranching activity. Cattle were seen along the access roads to the AUM Site. One well has been completed within 1.5 miles of the AUM Site, GSF-01523. GSF-01523 is a stock well owned by the Gila National Forest. No other information about the well was available.

5.5 EVIDENCE OF WILDLIFE

No wildlife was observed in the area however mountain lion, raccoon, and deer tracks were identified. Please see the Photo Log in Appendix A for photos.

6.0 VEGETATION

The Osmer Silver site is located in the Coniferous and Mixed Woodland vegetation type. This AUM Site has a diverse variety of shrub species including pine, Emory oak, Scrub oak, Mountain Mahogany, cholla, prickly pear, yucca, and Pointleaf Manzanita. The grass species identified at the AUM Site included Sideoats grama and Hairy grama. No forbs were identified at the AUM Site and there was no evidence of noxious weeds.

7.0 POTENTIAL OFFSITE IMPACTS

7.1 EROSION

No erosion was evident 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. Gamma radiation levels at the AUM Site are not significantly above background level.

8.0 REFERENCES

- Daniel B. Stephens & Associates, Inc (DBSA), 2005. Southwest New Mexico Regional Water Plan. Prepared for: Southwest New Mexico Regional Water Plan Steering Committee, City of Deming, New Mexico.
- McLemore, Virginia T. and William L. Chenoweth, 1989. Uranium Resources in New Mexico. New Mexico Bureau of Mines & Mineral Resources, Resource Map 18.
- McLemore, Virginia T., 1983. Uranium and Thorium Occurrences in New Mexico: Distribution, Geology, Production, and Resources, with Selected Bibliography. New Mexico Bureau of Mines and Mineral Resources, Open-file Report OF-183.
- 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.
- Trauger, Frederick D., 1965. Geologic Structure Pattern of Grant County, New Mexico. New Mexico Geological Society Fall Field Conference Guidebook – 16 Southwestern New Mexico II, eds. J. Paul Fitzsimmons and Christina L. Balk, pp. 184-187.

TABLES

**Table 1
Site Features**

**Osmer Silver-NM0134
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 Photo	Notes
Access-1	No	Other	--	--	--	--	--	--	--	--	--	Hiking in to AUM Site
Access-2	No	Dirt non-maintained	--	--	--	--	--	--	--	--	--	Road along river wash
DistPly-1	Yes	Site Extent	--	--	--	--	--	--	--	--	--	Approximate disturbed area
DistPly-2	Yes	Other	Adjacent to Pit-1	--	--	20	35	--	--	--	NM0134_018	Bulldozed area
PilePly-1	Yes	Waste	Adjacent to Pit-1	Rock	4	15	20	--	--	--	NM0134_018 NM0134_019	--
PilePly-2	Yes	Waste	Adjacent to Pit-1	Rock	5	16	18	--	--	--	NM0134_018 NM0134_020	--
PilePly-3	Yes	Waste	Adjacent to Shaft-1	Rock	4	7	15	--	--	--	NM0134_026 NM0134_030	--
PilePt-1	Yes	Waste	Adjacent to Pileridge-1	Rock	2	4	5	--	--	--	NM0134_017	--
Pileridge-1	Yes	Waste	At entrance to Trench-1	Rock	4	5	20	--	--	--	NM0134_016 NM0134_017	--



**Table 1
Site Features**

**Osmer Silver-NM0134
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 Photo	Notes
Pit-1	Yes	Mining	--	--	8	10	20	Yes	No	--	NM0134_021 NM0134_022 NM0134_029	--
ShaftPly-1	Yes	Vertical	--	--	--	5	--	Yes	No	Open	NM0134_023 NM0134_024 NM0134_025 NM0134_030	Unknown depth, but is more than 50 ft deep
Trench-1	Yes	--	--	--	10	15	40	Yes	No	--	NM0134_003 NM0134_014 NM0134_015	--

Notes:

-- designates no information



**Table 2
Gamma Radiation Survey Results**

**Osmer Silver-NM0134
Abandoned Uranium Mine Assessments**

Reading ID	Associated Feature	Reading at 0ft Above Ground (μR/hr)	Reading at 4ft Above Ground (μR/hr)	Associated Photo
Rad-1	Trench-1	16	15	--
Rad-2	Trench-1	17	14	--
Rad-3	Pileridge-1	14	12	--
Rad-4	PilePt-1	13	13	--
Rad-5	--	14	12	--
Rad-6	DistPly-2	8	8	--
Rad-7	PilePly-1	10	10	NM0134_019
Rad-8	PilePly-2	9	9	--
Rad-9	PitPly-1	10	10	--
Rad-10	PitPly-1	9	8	--
Rad-11	PilePly-3	10	10	--
RadBack-1	--	6	5	NM0134_031

Notes:

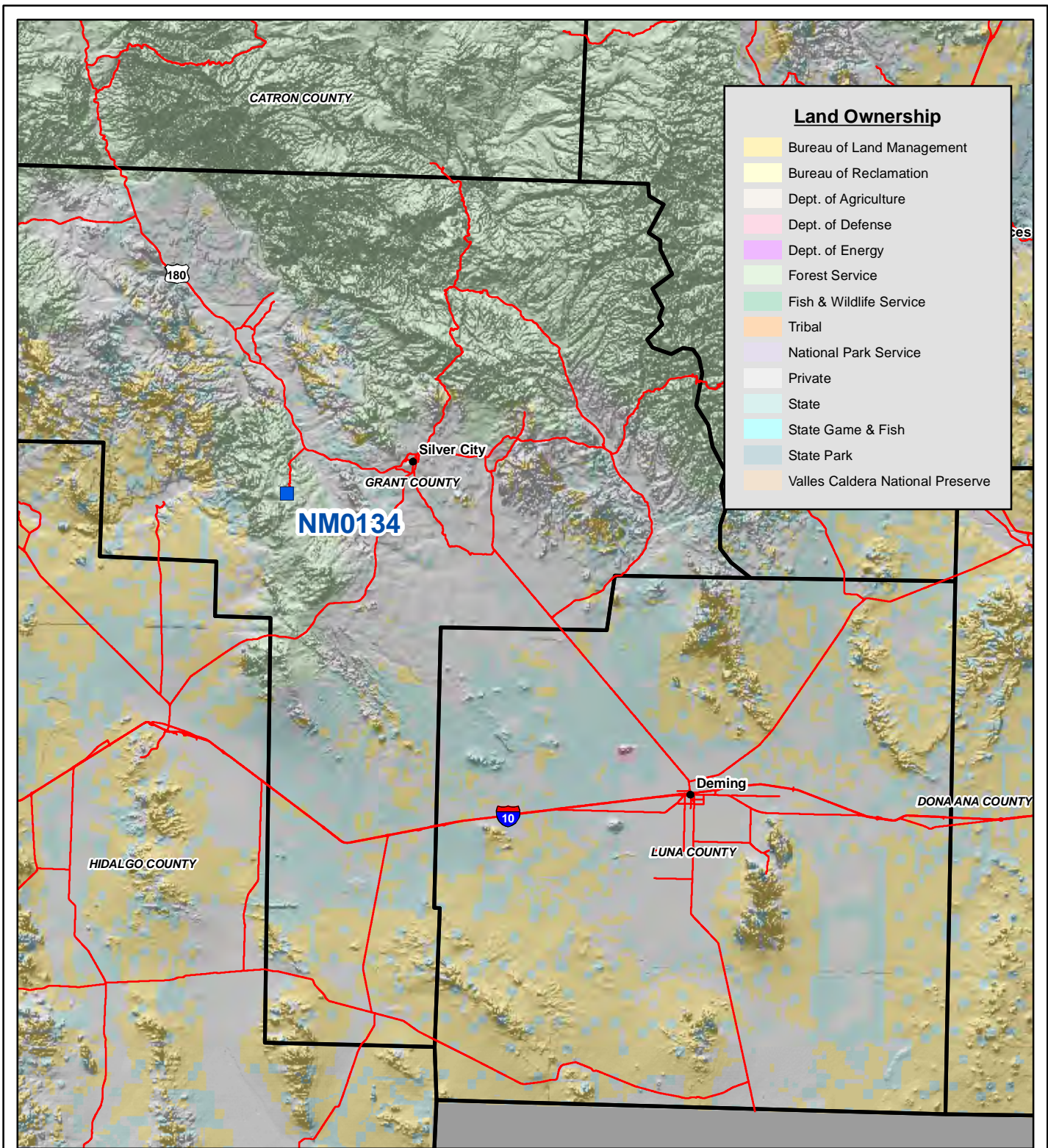
All gamma readings at this site taken by Ludlum 192 μR/Ratemeter

μR/hr=microroetgens per hour

-- designates no information



FIGURES



Map Source(s):
Ownership - BLM, 2007

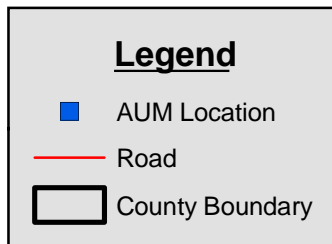
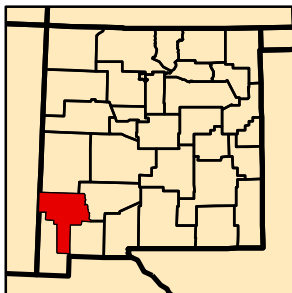
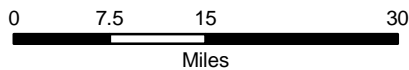
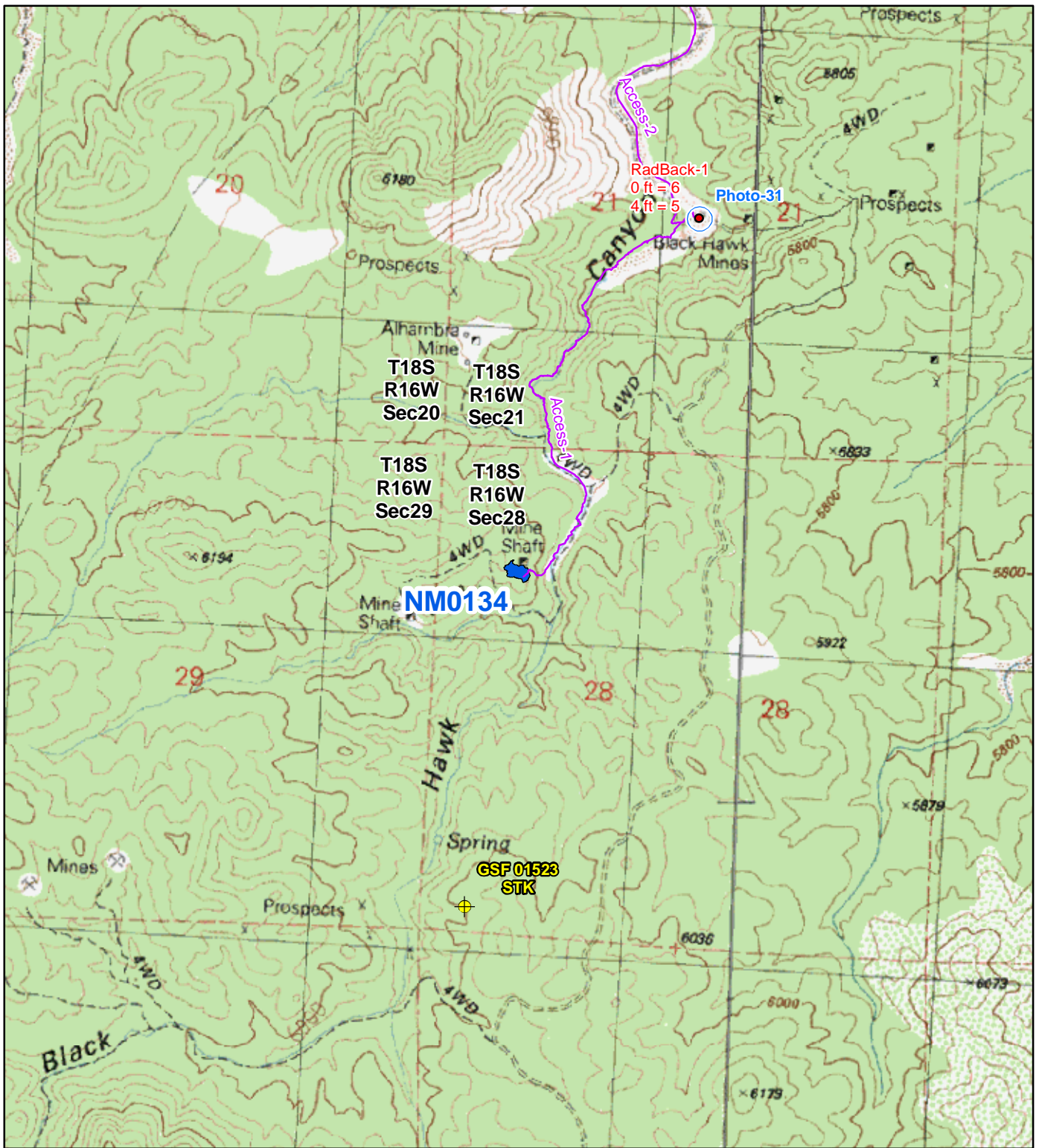
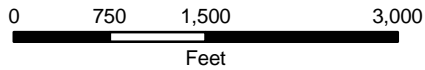


Figure 1
Site Location Map
NM0134-Osmer Silver
Abandoned Uranium
Mine Assessment





Map Source(s):
 U.S. Geological Survey 7.5-Minute
 Topographic Map
 -Bullard Peak, 1990
 -Wind Mountain, 1992

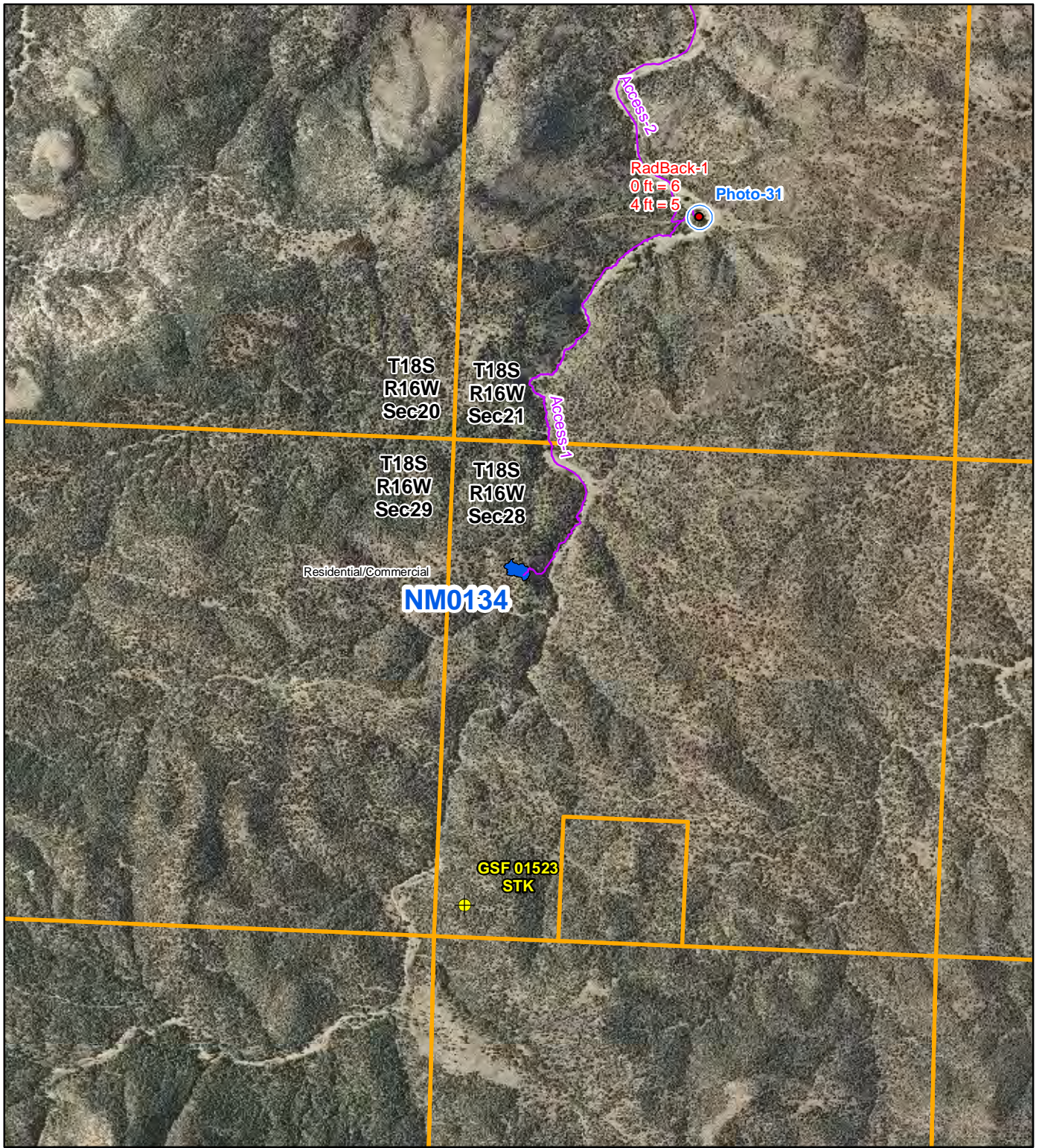


Legend

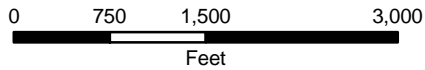
- Radiation Readings ($\mu\text{R/hr}$)
- Photo Location
- ⊕ Well Within 1 Mile of Site
- AUM Location Boundary
- Access Route

Figure 2
Topographic Map
NM0134-Osmer Silver
 Abandoned Uranium
 Mine Assessment





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



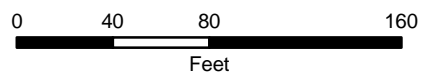
Legend

●	Radiation Readings ($\mu\text{R/hr}$)	■	AUM Location Boundary
○	Photo Location	—	Access Route
⊕	Well Within 1 Mile of Site	□	Section Boundary

Figure 3
Aerial Photo
NM0134-Osmer Silver
 Abandoned Uranium
 Mine Assessment



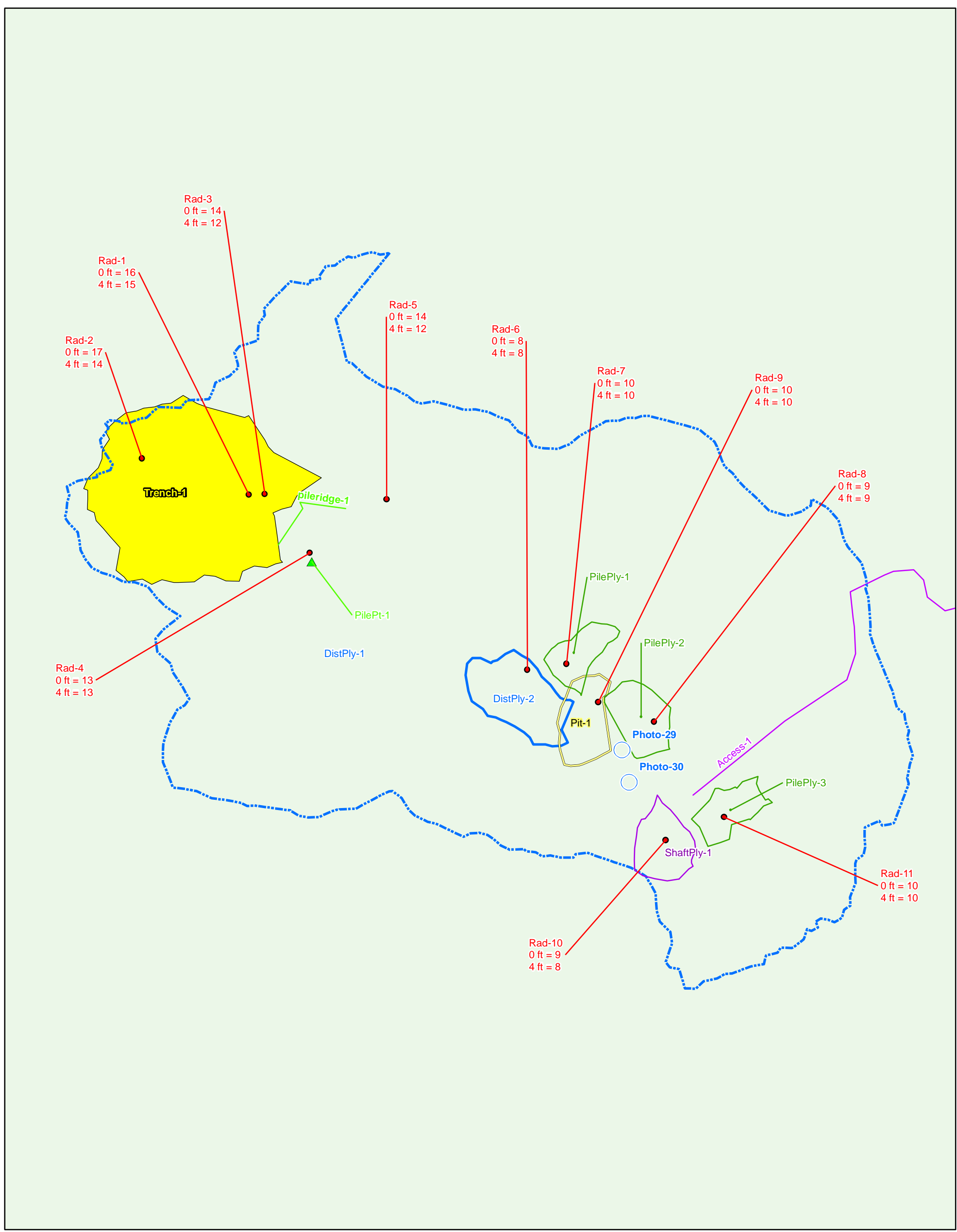
Map Source(s):
 U.S. Geological Survey 7.5-Minute
 DOQQ County Mosaic
 -Grant County, 2009



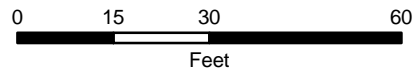
Legend					
●	Radiation Readings ($\mu\text{R/hr}$)	▭	Pile Boundary	▭	Other Disturbance Area
▲	Pile	▭	Pit Boundary	▭	Site Extent Disturbance Area
○	Photo Location	▭	Shaft Boundary	▭	Trench
—	Pile Ridge				

Figure 4a
Site Map on
Aerial Photo
NM0134-Osmer Silver
 Abandoned Uranium
 Mine Assessment





Map Source(s):
Ownership - BLM, 2008



Legend		
● Radiation Readings (μR/hr)	▭ Pile Boundary	▭ Other Disturbance Area
▲ Pile	▭ Pit Boundary	▭ Site Extent Disturbance Area
○ Photo Location	▭ Shaft Boundary	Surface Ownership
— Pile Ridge	▭ Trench	▭ Forest Service

Figure 4b
Site Map with
Surface Ownership
NM0134-Osmer Silver
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-Mountain lion track on the access to site (Access-1).



Photo 3-Looking north at the site with the trench in the background (Trench-1).



Photo 4-Emory Oak at the AUM Site.



Photo 6-Vegetation at the AUM Site.



Photo 7-Pointleaf Manzanita at the AUM Site.



Photo 9-Vegetation at the AUM Site.



Photo 10-Vegetation at the AUM Site, the rock is similar to material in Trench-1.



Photo 13-Cholla at the AUM Site.



Photo 14-Looking northwest at Trench-1.



Photo 15-Looking southeast at Trench-1.



Photo 16-Looking northeast at Pileridge-1.



Photo 17-Looking east at Pileridge-1.



Photo 18-Looking east at DistPly-2, PilePly-1 and PilePly-2 are in the background on the left.



Photo 19-Looking north at PilePly-1.



Photo 20-Looking north at PilePly-2.



Photo 21-Looking north at Pit-1.



Photo 22-Looking west and down at Pit-1.



Photo 23-Looking north at ShaftPly-1.



Photo 24-Looking north at ShaftPly-1.



Photo 25-Looking down into ShaftPly-1.



Photo 26-Looking southwest at PilePly-3 and Rad-11.



Photo 27-Scat at the AUM Site.



Photo 28-Vegetation at the AUM Site.



Photo 29-Looking northwest at the site location, Pit-1 in on the left.



Photo 30-Looking southeast at the site location, ShaftPly-1 is on the right and PilePly-3 is on the left.



Photo 31-Looking south-southeast at road with private/no trespassing signs.

APPENDIX B
FIELD NOTES

2/26/10 AEA Abandoned Uranium Mines

Photo 12 - site photo looking down on area where first 3 mine features were found, looking W

Rad 6 - contact = $11 \mu\text{R/hr}$; $1\text{m} = 12 \mu\text{R/hr}$

Rad 7 - contact = $14 \mu\text{R/hr}$; $1\text{m} = 12 \mu\text{R/hr}$

Rad 8 - contact = $100 \mu\text{R/hr}$; $1\text{m} = 27 \mu\text{R/hr}$

Photo 13 - rad 8, looking W

Rad 9 - contact = $12 \mu\text{R/hr}$; $1\text{m} = 11 \mu\text{R/hr}$

Photo 14 - rad 9, looking NE

Rad 10 - contact = $20 \mu\text{R/hr}$; $1\text{m} = 18 \mu\text{R/hr}$

Photo 15 - rad 10, looking E

Photos 16-20 vegetation

Radback - contact = $11 \mu\text{R/hr}$; $1\text{m} = 12 \mu\text{R/hr}$

1030 Offsite to Abq

Radiation at this site did not appear to originate from any visible outcrops

3/02/10 ALT Abandoned Uranium Mines 62

Site Name: NMD134, Osmer-Silver

Objective: Site Assessment

Personnel: Annelia Tiaklenberg
Eileen Romesser

Equipment: Rental Truck, Trimble GeoXM (SN: 4948447071, 2008 Series), Ludlum 192 (SN: 234149), Fuji Film digital camera (No. 80839493) backup Garmin GPS, cell phone amplifier, field laptop

800 Left Silver City for site.

920 Road is no longer passable, parked truck to hike 0.75 mi to site

1100 Had trouble locating mine site, due to a number of roads being blocked by gates saying private property.

1140

Distply 1 - site extent

Photos 1+2 - wildlife

Visible features at the site include 1 shaft, 1 pit and 1 trench (disturbance).

Photos 3-13 - vegetation

Trench-1 - on north side of site extent

40' deep, 15' wide, 10' high

Photo 14 - looking NW at Trench-1

63 ALT 3/02/10 Abandoned Uranium Mines

~~1200~~ ALT 1200

Photo 15 - looking southeast at Trench-1

Rad-1 - Entrance to Trench-1

Om - 16 MR/hr; 1m - 15 MR/hr

Rad-2 - In Trench-2; Om - 17 MR/hr; 1m - 14 MR/hr

Pile Ridge-1 - At entrance to Trench-1
4' high, 20' long,

Photo 16 - looking ne at piled ridge-1

Rad 3 - Pile Ridge-1 Om - 14 MR/hr; 1m - 12 MR/hr

Pile Pt-1 - south east of pile ridge-1

Photo 17 - looking east at pile ridge-1

Rad 4 - Pile Pt-1 Om - 13 MR/hr; 1m - 13 MR/hr

Rad 5 - Between features Om - 14 MR/hr; 1m - 12 MR/hr

Dist Ply 2 - Bulldozed area, west of Pit-1

35' long, 20' width

Rad 6 - on Bulldozed area, Dist Ply 2

Om - 8 MR/hr; 1m - 8 MR/hr

Photo 18 - looking ^{NE} east at Dist Ply 2

Pile Ply 1 - 4' high, 15' long, 20' wide

Photo 19 - looking north at pile ply 1

Rad 7 - on Pile Ply 1 - Om - 10 MR/hr; 1m - 10 MR/hr

3/02/10 ALT Abandoned Uranium Mines

64

Pile Ply-2 - east of Pit-1; 5' high; 18' long, 16' wide

Photo 20 - looking ^{north to alt} south at Pile Ply-2

Rad 8 - Pile Ply-2; Om - 9 MR/hr; 1m - 9 MR/hr

Pit Ply 1 - 5' high; 20' long, 10' wide

Photo 21 - looking north at Pit Ply 1

Photo 22 - looking west at pit Ply 1

Rad 9 - in Pit Ply 1 Om - 10 MR/hr; 1m - 10 MR/hr

Shaft Ply-1 - 5' diameter shaft, more than 50' deep
(unknown depth), a few old pieces of timber
are near by

Photo 23 - looking north at shaft Ply-1

Photo 24 - looking north at shaft Ply-1

Photo 25 - looking down into shaft Ply-1

Rad 10 - shaft Ply-1 Om - 9 MR/hr; 1m - 8 MR/hr

^{ALT} Pile Ply 3
~~Pile Pt-2~~ - east of shaft Ply-1

4' high, 7' wide, 15' length

Photo 26 - looking south west at Pile Ply 3

Rad 11 - Pile Ply-3 - Om - 10 MR/hr; 1m - 10 MR/hr

Photo 27 - scat

Photo 28 - Vegetation

1300

Photo 29 - looking northwest at site location

Photo 30 - looking south east at site location

Photo 31 - looking S-SE at road (assumed access
road) with private/no trespassing sign

1420 Back at truck

Access Rd. 1 - Route from site to truck, follows roads, creek, and ~~trail~~^{ALT} off-trail.

Road blocked by private gate

Rad Background - at truck - 0m - 6m/h; 1m - 5m/h

Access Rd. 2 - Dirt road, follows/driving in drainage

Soils: Red and tan, very sandy and rocky

Rocks: Granite outcrops ~~among~~^{ALT} overlain with sandstone. Mineralization occurred in veins of intrusive rock.

Vegetation and Wildlife: The vegetation was predominately pinon pine - juniper. Also noted were Alligator juniper, mountain mahogany, a number of shrub oak species, blue grama, side oats grama, prickly pear cactus, and cholla, yucca or sotol.

No wildlife was seen but tracks and scat were seen. Species-presence noted were ~~mate~~^{ALT} deer, skunk, raccoon, and maybe mountain lion, and maybe bobcat, jackrabbit.

Human Activities: The presence of fences, corrals, cow prints and cow pies throughout site and surrounding area. A number of vehicles (4) were encountered on the access road. Two vehicles entered private land and drove out of

the drainage. Noticeable mining activity was occurring in the area. We heard explosions (2 or 3 times) coming from the direction of the mine.

The other two vehicles seemed to be hunting. Other recreational use was observed; fire rings, ATV tracks, alcohol containers.

About 0.5 miles to the ~~NE~~^{ALT} SW were observed 1 building (home), 1 shed, and 1 trailer. The home looked ^{in ALT} good condition and presently in use.

