Lost Mine

Stage 1 Uranium Mine Site Assessment Work Plan

November 2025

Title Page:

NMED Lost Mine

Stage 1 Uranium Mine Site Assessment Work Plan

Prepared for:

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TABLE OF CONTENTS

FIGURES

1 INTRODUCTION AND PURPOSE

This Work Plan describes the proposed activities for conducting the Stage 1 Uranium Site Assessment (Stage 1 Assessment) at Lost Mine (Site), located in northern New Mexico (Figure 1). Due to its close proximity, a portion of Section 34 Mine will be included in these activities. The objectives are to identify and document site features, evaluate potential hazards, review historical mining and reclamation records, and establish access and property ownership information. Results of this work will guide subsequent phases of investigation and potential remedial planning in coordination with the New Mexico Environment Department (NMED) and the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD).

Parsons will serve as the prime contractor with Tidewater providing subcontractor support, particularly gamma surveying and radiological characterization. The Stage 1 Assessment will be conducted to establish baseline conditions and identify areas requiring further evaluation. This investigation will include a detailed assessment of site access and ownership, previous mining and reclamation activities, and the development of a Health and Safety Plan (HASP). Additionally, the investigation will include a reconnaissance-level site survey and a low-density gamma survey of the site. Systematic on-the-ground documentation of existing site features, access routes, and potential physical hazards will be conducted, with particular emphasis on recording evidence of mining-related disturbances, natural drainage pathways, and any areas of prior reclamation activity. Conditions that may influence subsequent investigation activities or remedial actions will also be identified. The gamma survey will characterize background conditions and identify localized areas of elevated radiological activity or anomalies of concern. This broad-scale assessment of surface radiological conditions will help focus future, higher-resolution investigations on areas with the greatest potential for elevated radiological impacts. Together, these tasks will provide a comprehensive foundation for understanding current site conditions and prioritizing follow-up investigation activities.

1.1 BACKGROUND

Lost Mine (Lost NM0151; Site) is an abandoned uranium mine located in McKinley County, New Mexico, at approximately latitude 35.402645° N and longitude -107.975066° W. The Section 34 mine (NM0152) is located approximately 1000 feet to the west along the same escarpment at latitude 35.402355° N and longitude -107.982981° W. The Site lies within a rugged portion of the Zuni Uplift, a geologic feature characterized by high-elevation mesas, steeply incised sandstone cliffs, and narrow canyons. Vegetation within the area consists primarily of piñon-juniper woodlands, mixed desert shrubs, and grassland benches typical of the semi-arid southwestern plateau environment.

Land ownership at Lost Mine is designated as private, although access to the Site is obtained via an unpaved road network crossing a combination of private and federal lands. The Navajo Nation maintains adjacent land holdings in proximity to the Site. The majority of the Section 34 mine claim is located on Navajo Nation land; however a portion (approx. 25%) of the claim boundary is on private property.

The general project area encompasses approximately 78.5 square miles within a 5-mile radius of the Site. The Lost Mine claim boundary is approximately 8 acres, located on the northern mesa escarpment in Rincon Canyon. The portion of Section 34 Mine residing on private property is approximately 2 acres. The Site is accessed from State Highway 19, north of Prewitt, New Mexico, by traveling east on Hoodoo Hills Road for approximately 4 miles, followed by an additional 4 miles south on a two-track road to reach the mine (Figure 1). A rural residential population of roughly 439 residents is estimated to live within the 5-mile radius surrounding the Site.

Lost Mine and Section 34 were developed for uranium extraction in the 1950s, during the peak of mid-20th century uranium exploration in northwestern New Mexico. Historical records indicate that the mines were small-scale operation, likely part of a cluster of similar claims developed along the mesa escarpments in this region. The uranium-bearing ore occurs primarily within Jurassic-age sedimentary formations, notably the Todilto Limestone, which is a thinly bedded limestone and dolomite unit known for localized uranium mineralization. Several other historic uranium mines are located nearby.

No known cleanup, reclamation, or remediation activities have been documented at the Site to date. A site survey conducted by the New Mexico Bureau of Mines and Mineral Resources (Anderson, 1980) documented visible mine features. At Lost Mine, a bench cut and associated waste or tailings piles were identified. At Section 34, a bench cut, tailings piles, and a small adit were identified, however these features are likely located on current Navajo land holdings. Additionally, a in 2009, Weston Solutions performed a Site Screening Assessment under the U.S. Environmental Protection Agency's Abandoned Uranium Mines program, observing no evidence of reclamation or recent mining disturbance at either mine location(Weston, 2009-1&2). Gamma radiation surveys conducted during those assessments identified multiple areas exhibiting radiation levels elevated above background, indicating the potential presence of residual mine-related contamination. Recently, (September 2025), NMED conducted a Site visit and identified several areas of interest, including the bench cuts, waste piles, access roads, and areas of potential reclamation activities to be investigated at the Site. These features are discussed further in Section 3 of this document. The current investigation builds upon these prior findings to further assess the extent of radiological impacts, physical hazards, and site access conditions at Lost Mine and the surrounding area.

2 STAGE 1 ASSESSMENT

A Stage 1 Assessment at Lost Mine will be conducted to establish a clear baseline understanding of site conditions, ownership, and historical context. The work will focus on documenting physical characteristics of the site, evaluating potential hazards, and reviewing access and ownership information. In addition, the investigation will include a review of historical mining records and reclamation efforts to place the site within its broader regional and regulatory context. Together, these objectives will provide NMED and EMNRD with the information needed to determine next steps for investigation and potential remediation. Objectives of this effort include:

- Develop and implement a site-specific Health and Safety Plan (HASP).

- Assess site access conditions and legal requirements for entry
- Complete a property title search to identify ownership and responsible parties.
- Conduct desktop research on historical mining operations, prior reclamation efforts, and regional uranium mining activities.
- Document site features and conditions through a systematic field survey to identify mining features, potential areas of investigation, and physical and radiological hazards.

2.1 HEALTH AND SAFETY PLAN

Because abandoned uranium mines present unique physical and radiological hazards, a site-specific Health and Safety Plan (HASP) will be developed and implemented prior to mobilization. The HASP will provide detailed guidance for protecting field personnel, establishing safe work practices, and ensuring that all activities are conducted in compliance with applicable federal and state health and safety requirements. The plan will also serve as a framework for emergency preparedness and response during fieldwork. Key elements of the HASP will include:

- **Hazard Assessment:** evaluation of physical hazards such as unstable ground and steep slopes, environmental hazards such as weather, animal, and plant hazards, radiological risks associated with uranium ore and tailings, potential exposure to chemical contaminants.
- **Personnel Protection:** baseline Level D protection will be used during field investigations. Required personal protective equipment (PPE) will include hard hats, high-visibility vests, and safety boots, and may include dosimetry badges.
- **Emergency Protocols:** procedures for first aid, communication, and evacuation to ensure rapid and coordinated response in the event of an incident

In the event an adit, shaft, or decline is found on-site, Parsons will consult with the State Mine Inspector's office for review of this Health and Safety Plan and the adjustments will be made as necessary.

2.2 SITE ACCESS ASSESSMENT

A key component of this investigation will be the assessment of physical and legal access to Lost Mine. Field teams will evaluate the condition of access roads and trails, identifying whether four-wheel drive or other specialized vehicles are required. Terrain constraints, locked gates, and other barriers will be documented. Concurrently, Parsons will coordinate with NMED and EMNRD to establish legal access through right-of-entry agreements if needed. Engagement with landowners, neighboring property holders, and state or federal land management agencies will be facilitated by NMED and EMNRD to secure permissions necessary for safe and lawful site entry.

2.3 DESKTOP REVIEW OF MINING AND RECLAMATION HISTORY

Parsons will conduct a comprehensive desktop review to compile historical and technical information relevant to Lost Mine and its surrounding region. This effort will draw upon state, federal, and industry records to develop a thorough understanding of the mine's operational history and any prior reclamation activities. Key resources will include the U.S. Geological Survey and

U.S. Department of Energy databases, which provide production data, geological context, and radiological background. Additional records will be obtained from the EMNRD and the NMED, including permitting files, historic reports, and reclamation documentation. To complement these archival sources, Parsons will examine historical aerial photographs and satellite imagery to track physical changes at the site and surrounding landscape over time. The review will also consider information from similar or nearby uranium mines, particularly those where reclamation has been documented, to identify potential lessons learned that may be applicable to Lost Mine. This evaluation will provide a preliminary understanding of the ore geology, production history, and extent of past reclamation, and the findings will be included in the Stage 1 Assessment Report, including references, annotated maps, and data tables.

3 SITE FEATURE IDENTIFICATION AND GAMMA WALKOVER SURVEY

A central component of the Stage 1 Assessment will be a systematic survey of Lost Mine and the surrounding area to characterize site features and current conditions. Figure 2 provides a depiction of the known site features that form the basis for the planned field survey. The purpose of this survey is to establish a detailed record of site features, radiation levels, land disturbances, and environmental indicators that will inform both hazard assessment and future remedial planning. By carefully documenting the layout and features of the mine and the surrounding area, Parsons and Tidewater will provide NMED and EMNRD with a reliable foundation for evaluating risks and prioritizing subsequent investigation activities.

The field team will employ GPS-enabled mapping tools, photography, and detailed field notes to ensure accurate and comprehensive coverage of the Site. A low-density gamma-survey of the Site will be used to assist in identification of site features through analysis of elevated levels of radioactivity and to identify areas warranting more detailed analysis or targeted soil sampling during subsequent phases of the investigation. Specific attention will be given to mine-related features such as waste rock piles, adits and ventilation shafts (if found), as well as evidence of past reclamation activities, natural drainage pathways, and any structures. Observations will also include signs of unauthorized use, including trespassing, dumping, or vandalism, that may pose additional safety or environmental concerns.

Tidewater, in conjunction with Parsons, will conduct a low-density gamma walkover survey of accessible areas of the site, supported by MARSSIM guidance, to measure and map radiation levels for comparison to background levels, which will be established as part of the Stage 1 Assessment. Two times (2x) the measured background radiation level, the Investigation Level, will be the criteria for detecting “elevated levels” of radiation within the worksite. Background area selection and use is discussed in greater detail below.

The MARSSIM process was developed collaboratively by the U.S. Nuclear Regulatory Commission (NRC), the U.S. Environmental Protection Agency (EPA), the DOE, and the U.S. Department of Defense (DOD), for use in designing, implementing, and evaluating surveys for sites contaminated with radionuclides. Based on survey results, targeted soil analysis using non-intrusive techniques such as hand augers and mobile X-Ray fluorescence (XRF) analysis may be

performed to confirm and characterize areas of interest. Given the size of the site and the large volume of data generated during the survey, the evaluation of results and the delineation of investigation units requiring further study will be performed electronically during post-survey data analysis. Areas that exceed the Investigation Level (2x background) will be identified through this analytical process and will be physically marked in the field for subsequent detailed survey and soil sampling tasks to ensure precise sample collection and correlation with radiological anomalies.

The investigation area will include the Lost Mine claim boundary and the portion of the Section 34 claim boundary located on private property. Also included is a buffer zone extending 100 feet beyond the claim boundaries and areas of special interest (described below) but not extending beyond the property boundary. Difficulties in identifying the boundary between Navajo Allotment and private property and/or inaccurate depiction on maps may exist, and appropriate actions will taken to ensure that no investigation on Navajo land will occur.

This minimum area of investigation is intended to capture potential impacts immediately adjacent to the mine footprint. In addition, historic haul roads and access roads associated with the site will be evaluated, with a survey corridor extending 20 feet on either side of the road alignments and a minimum of 1000 feet in both directions along the road from the claim boundary. Emphasis will be placed on the rim strip(s) and the waste rock pile(s), which represent key features of interest for radiological and physical hazard evaluation. NMED has also identified areas of possible prior reclamation activities that will be specifically investigated to assess their current condition. In addition to the defined survey area and features within the mine boundary, several areas of interest have been identified outside of the claim boundary and the 100-foot buffer zone. These will be documented and evaluated as part of the site survey to provide a comprehensive understanding of the broader site setting.

The features to be evaluated as part of the field investigation are illustrated in Figure 2 and the investigation area is illustrated in figure 3, including:

- Access roads
- Historic haul road and associated access road
- Rim strip areas or other suspected radiation sources
- Waste/tailings pile(s)
- Areas of possible prior reclamation activities (including areas identified by NMED)
- Any adit, shaft, decline, or drilling core holes (if found)
- Any unidentified wells
- Adjacent or hydrologically downgradient surface water features (ephemeral streams and drainages)

Areas of special interest have also been identified in relation to Lost Mine and Section 34 (Figure 3) and will be investigated as part of the site survey.

- Two potential ponding areas located downgradient of the mine are of particular concern because of their potential to accumulate contaminated runoff or sediments. These areas

may be subject to surface water and/or sediment sampling for radionuclides to determine if mine waste has migrated downgradient into these features.

- Hydrologically downgradient ephemeral drainages will also be surveyed as potentially impacted, with a 20 ft buffer on either side and from the northern end of the investigation area downgradient to the property boundary.

In addition to these points of interest, portions of the Site may present terrain and access challenges that require special consideration. Inaccessible areas, such as those with dense brush, steep slopes, or poor GPS coverage, will be documented, and partially accessible areas will be surveyed to the extent practicable without compromising safety or data quality. For areas that cannot be surveyed safely or effectively, Parsons may recommend additional clearance, specialized equipment, or drone-assisted surveys during future phases.

All data collected during the survey will be compiled into site maps, a photographic log, and GIS files prepared in formats compatible with NMED's data systems. These products will ensure that both visual and spatial records of the site are preserved in a manner that can be easily incorporated into regulatory and planning workflows

3.1 GAMMA SURVEY PROTOCOL

Accessible portions of Lost Mine will be covered by a systematic scanning walkover survey designed to measure gross gamma radiation levels from surface soils and materials within the investigation area described above. The total area for the initial survey is approximately 25 acres (Figure 3). The entire area will be treated as a single survey unit for the Stage 1 Assessment. To ensure adequate coverage and minimize gaps, walkover surveys will be guided by real-time GPS positioning relative to pre-established waypoints that define straight-line traverses across the site. The survey system provides the operator with continuous positional feedback, updated once per second, indicating lateral deviation from the target traverse line and allowing for immediate course corrections to maintain consistent coverage. All survey data will be logged electronically, downloaded daily, and transferred to secure project computers for quality review, processing, integration into a geographic information system (GIS), and subsequent analysis.

To establish a defensible radiological baseline, one or more background survey areas will be identified and surveyed using the same walkover method applied within the area of investigation. Potential background locations have been identified in Figure 3. Background locations will be selected to approximate similar soil geology to that found in the site survey area while ensuring they have not been affected by historic uranium mining or milling activities. Where possible, suitable background locations may be selected on the Lost Mine property, provided they can be confidently demonstrated to be outside areas impacted by past radioactive material operations.

In addition, background areas will be selected to meet specific criteria to ensure the reliability of baseline measurements. These areas must be located at sufficient distances from roadways to avoid the influence of roadway dust, positioned upgradient and upwind from mining activities to minimize the potential for downgradient contaminant migration, and of a minimum area to support statistical confidence in background estimates. Specifically, the selected areas will be large enough, approximately 100 m^2 or greater, to allow for adequate spatial averaging that bounds

natural variability. Furthermore, background areas should be of comparable land use and vegetation coverage, and, if possible, have similar slope and drainage characteristics to ensure that gamma response is not biased by geomorphology. Prior to being used as a basis of comparison, data from background surveys will be carefully evaluated to confirm that the selected areas are free from anomalous hotspots or elevated gamma radiation levels.

All analyses and interpretations of walkover survey results will be performed by qualified health physicists provided by Tidewater. Field data will be reviewed daily, with health physicists providing ongoing oversight and guidance to survey operators. Should anomalously high readings be detected in the field, the health physicists will direct the immediate resurvey of the affected area, evaluate whether hotspots are present, and determine if modifications to survey acquisition methods are warranted in response to site-specific conditions.

3.2 SURVEY SENSITIVITIES, DETECTION LIMITS, AND FIELD INSTRUMENTATION

The walkover surveys will be conducted using 2-inch by 2-inch sodium iodide (NaI) scintillation detectors (Ludlum Measurements Model 44-10 or equivalent) connected to count-rate meters (Ludlum Measurements Model 2221, or equivalent). These instruments will be coupled with sub-meter accuracy global positioning systems (GPS) and electronic data loggers configured to automatically record both detector position and gamma radiation count rates (counts per minute, cpm) at one-second intervals. Logged survey data from both detectors and GPS units will be downloaded daily to field computers for review, transfer, and analysis.

The NaI scintillation detectors will be carried by trained radiation survey technicians at an elevation of approximately 6 inches above ground surface. This height has been selected based on the survey objectives, which prioritize higher-resolution measurements and detailed characterization over broader spatial coverage. Although operating at this lower elevation reduces the detector's field of view and increases survey time, it allows for greater sensitivity to surface-level variations in gamma radiation. Maintaining the detector at this height provides effective penetration of approximately 6 inches into the soil, resulting in consistent detection of radionuclides contained within the upper 6 inches of the ground surface. Care will be taken to maintain a uniform detector height throughout the survey to ensure data consistency and comparability across the Site. Mapping of vertical/near vertical features will be carried out by suspending the detector on a 25 ft line and vertically moving down the face of the feature in 1-meter intervals while maintaining a distance of 6 inches from the vertical face. The GPS antenna will be mounted in a backpack worn by the technician, while the meter will be carried at their side. Surveyors will walk at a steady pace of approximately 2 feet per second (0.5 meters per second), where conditions safely permit, passing the detector continuously over the surface to ensure comprehensive coverage.

If portions of the site prove unsafe or impractical to survey at standard grid spacing due to terrain, vegetation, or other obstacles, the grid will be minimally modified to maximize survey coverage while maintaining worker safety. In the event anomalous readings are encountered, more detailed static surveys will be conducted in the affected area to better define the anomaly and guide subsequent soil sampling.

Additional radiation survey equipment will be deployed in support of field activities. Beta/gamma detectors (Ludlum Model 44-9 or equivalent) connected to Ludlum Model 3 survey meter will be used to screen personnel and equipment for removable surface contamination prior to exiting work areas. A Ludlum 2221 meter coupled with a 44-10 2-inch by 2-inch NaI detector will also be used to perform static counts on surface soil samples. These static measurements will provide field estimates of activity and enable correlation between field gamma data and laboratory analytical results.

All instrumentation will be maintained under current calibration (within the past 12 months, or at the frequency recommended by the manufacturer). Daily performance checks, including both background and radioactive source checks, will be conducted prior to field use and at any time instrument performance is in doubt. These checks will be performed on each detector/meter combination, and results must fall within ±20% of expected values. Deviations greater than ±20% will be investigated immediately. Instruments that do not meet performance criteria will be removed from service and replaced. Only data collected with instruments meeting these requirements will be accepted for evaluation.

Survey results will be recorded in counts per minute (cpm). For the walkover surveys, gross gamma sensors will be fully integrated with GPS units to record georeferenced coordinates of each individual gamma measurement, ensuring a defensible digital record of survey coverage and results.

3.3 Data Management, Processing, and Analysis

Each data file generated during the gamma walkover survey will be systematically analyzed to ensure quality and to guide ongoing field operations. Health physicists will review incoming data daily and maintain close communication with field operators to provide direction on survey performance, address potential anomalies, and adjust procedures as necessary. All GPS-linked gamma radiation data will be compiled into a single geospatial dataset, enabling generation of a comprehensive GIS map to track survey progress and produce the final site survey map. Analyses will be conducted routinely throughout the survey period and results will be compared to the established Investigation Level to identify areas requiring additional attention.

3.3.1 Data Processing

Processing of survey data will follow a four-step workflow:

1. Export of raw data – location coordinates, count rates, measurement times, and descriptors will be exported into spreadsheets (Excel or equivalent).
2. Data cleanup – count rate fields will be parsed and reformatted, as needed, to ensure compatibility with GIS software.
3. Preliminary map generation – partial walkover maps will be generated from processed files to evaluate interim progress and identify any irregularities.
4. Ongoing analysis and communication – data summaries will be shared with the field team to highlight unusual radiation levels, notable site conditions, or features warranting further investigation.

Final gamma walkover maps will be developed using GIS software such as QGIS or ArcGIS. These maps will display survey coverage, measurement locations, and gross gamma radiation intensity, providing a visual basis for evaluating site conditions. All data collected will be integrated into Arc Field Maps and Survey 123 for consistency with NMED databases.

3.3.2 DATA INTERPRETATION

Combined GIS data will be evaluated to:

- Compare gamma radiation count rates against the Investigation Level (2x background).
- Demonstrate adequate spatial coverage across the survey area.
- Identify the distribution and extent of any elevated measurements.

Individual readings above the Investigation Level will be subjected to further scrutiny, which may include verifying data entry, rechecking file imports, resurveying the area, reviewing instrument calibration records, investigating historical land use, and examining surface materials for confirmation of anomalous readings.

3.3.3 QUALITY CONTROL AND INSTRUMENT CHECKS

To maintain defensibility, static background readings will be performed with each instrument at least daily in conjunction with performance checks. A consistent reference background location will be used throughout the survey to allow interpretation of temporal trends. Check-source measurements will also be conducted daily at the reference background location. Instruments with check-source responses outside ±20% of the reference value, or those showing low-battery or other service indicators, will be removed from service until recalibrated or repaired. Only data collected using instruments meeting these QC criteria will be accepted for evaluation.

3.3.4 RADIOLOGICAL SURVEY REPORT

Upon completion of the survey, Parsons will prepare a Radiological Survey Report that will be incorporated into the Stage 1 Assessment Report. The report will present survey maps generated from the gross gamma walkover data and will include full documentation of the background measurements used to establish the Investigation Level. It will also provide a detailed interpretation of the survey findings, highlight anomalous areas of elevated radiation and identify specific portions of the site that exceed the Investigation Level. These results will serve as a screening tool to identify areas that warrant more detailed investigation and soil sampling in the Stage 2 Investigation.

3.4 HEALTH AND SAFETY PROVISIONS

The HASP developed as part of this workplan will remain in effect and be fully implemented during all radiological surveying activities. Personnel will work under Level D PPE (hard hat, safety glasses, long sleeves, safety vests, and steel-toed boots). Field staff will also carry personal dosimeters. Radiation safety officers will be empowered to halt work or increase PPE if conditions warrant. Biological hazards (snakes, insects) and heat stress/winter weather will also be addressed through pre-job briefings, buddy systems, and emergency readiness.

4 PROPOSED SCHEDULE AND DELIVERABLES

The investigation will be carried out in a structured sequence to ensure that all preparatory requirements are completed before field activities begin. Prior to initial mobilization, Parsons will prepare the site-specific Health and Safety Plan while simultaneously assessing access requirements. Once these elements are in place, Parsons and Tidewater will mobilize to Lost Mine for a site visit tentatively scheduled for November 2025, during which the initial site survey will be conducted. The site survey includes the low-density gamma scan of the area, which will be used when investigating known/potential site features. The result of the survey will be to identify and document all mine features and areas where further investigation is warranted, historic haul roads and access roads, assess areas of special interest, and document background conditions.

Upon completion of the Stage 1 Assessment, Parsons will prepare a draft report of findings, which will be submitted to NMED and EMNRD for review. The draft report will include annotated maps, photographic documentation, GIS data capturing site features, and a summary of the mine's history and any prior reclamation activities, including ownership information obtained during the title search. The report will present GIS-based gamma radiation maps showing gross count distributions and areas where radiation exceeds the background Investigation Level, along with annotated maps of survey coverage and soil sampling locations (if any). Any additional data collected as part of this effort (i.e. soil samples, XRF data, water chemistry, etc.) will also be included in the draft report. Laboratory analytical results, if applicable, will be included with QA/QC validation to ensure data integrity, and supporting documentation such as field logs and photographic evidence will be provided. All data presented will be provided in the preferred NMED format (Arc Field Maps and Survey 123) in accordance with the EPA National Geospatial Deliverable Standards.

Upon receipt of comments from NMED and EMNRD, Parsons will prepare a final Stage 1 Assessment Report that incorporates NMED's and EMNRD's feedback and serves as the definitive record of this investigation. The results of the Stage 1 Assessment will be used to prepare the survey and sampling plan for the Stage 2 Investigation. A detailed work plan for Stage 2 Investigation will be submitted for approval prior to beginning field work. Once Stage 2 field work is completed, a MARSSIM closeout survey will be conducted and a final report will be completed and submitted to NMED and EMNRD.

5 REFERENCES

Anderson, O. J. (1979–1980). *Abandoned or inactive uranium mines in New Mexico: A report of investigation carried out between August 1979 and May 1980 under contract with the New Mexico Energy and Minerals Department*. New Mexico Mineral Resources Open-File Report 148, Bureau of Mines.

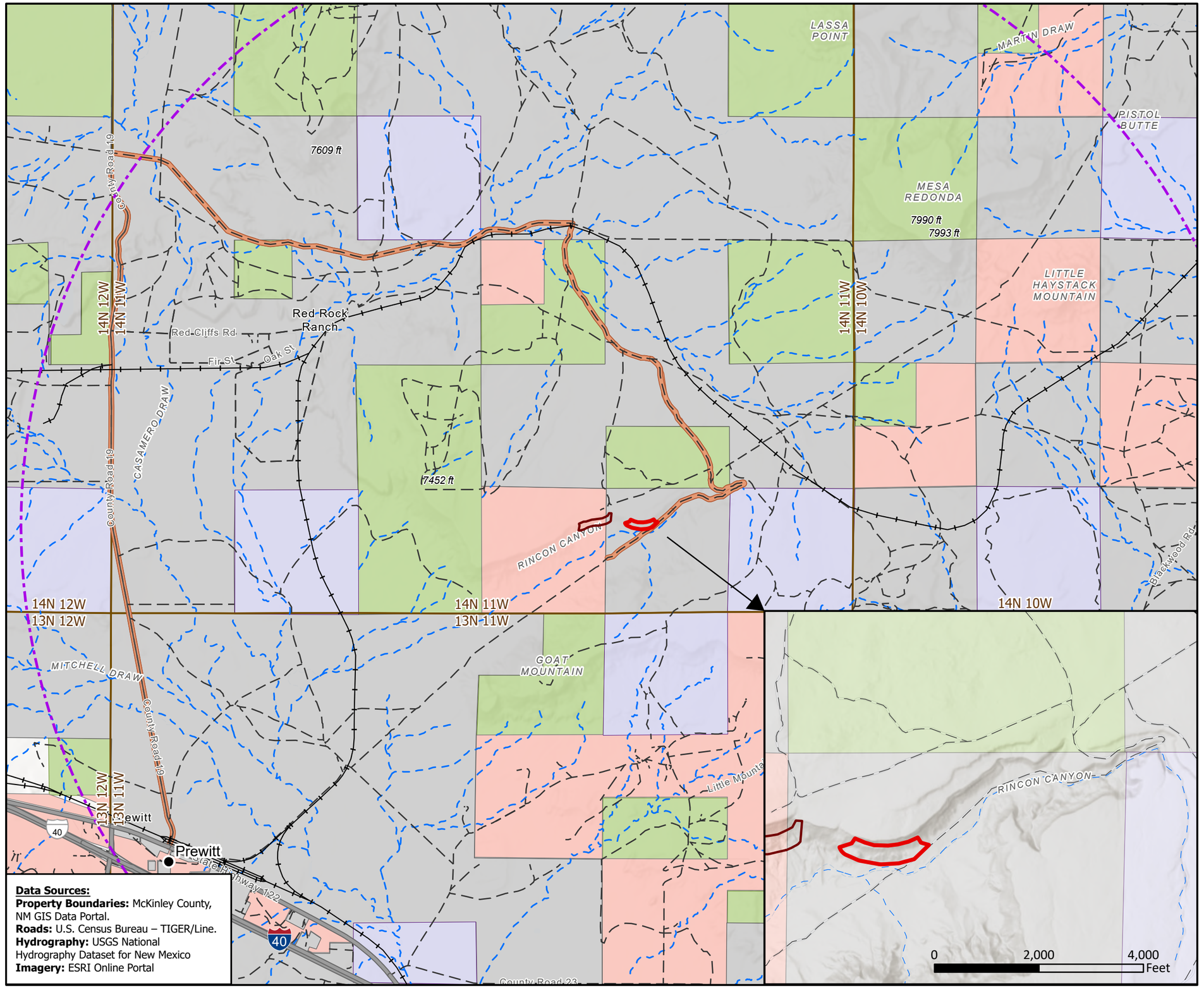
Weston Solutions, 2009-1, prepared for U.S. Environmental Protection Agency Region IX. Navajo Abandoned Uranium Mine Site Screen Report: Lost Mine AUM Site. W91238-06-F-0083. Retrieved from Navajo AUM Project.

Weston Solutions, 2009-2, prepared for U.S. Environmental Protection Agency Region IX. Navajo Abandoned Uranium Mine Site Screen Report: Section 34 AUM Site. W91238-06-F-0083. Retrieved from Navajo AUM Project.

FIGURES

Figure 1

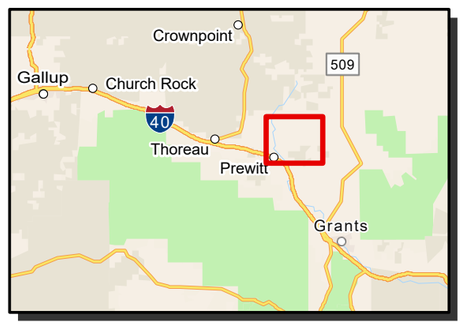
Mine Location and Regional Features



Site Feature
- Lost Mine Claim Boundary
- Section 34 Mine Claim Boundary
- Township Range
- Community/City
- 5 Miles Radius Around Project Area

Property Ownership
- Federal Ownership
- State Owership
- Private Ownership
- Navajo Nation Ownership

- Route to Site
- Highway
- Paved Roads (State and County)
- Unpaved Roads
- Railroads
- Ephemeral Water Course



N

0 5,000 10,000 Feet

1:60,000

Data Sources:
Property Boundaries: McKinley County, NM GIS Data Portal.
Roads: U.S. Census Bureau – TIGER/Line.
Hydrography: USGS National Hydrography Dataset for New Mexico
Imagery: ESRI Online Portal

0 2,000 4,000 Feet

Stage 1 Site Assessment

Lost Mine
Baca/Haystack Chapter
McKinley County, New Mexico

NEW MEXICO emnrd Energy, Minerals and Natural Resources Department

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V:\NMED_Lost_Mine\338_Lost_Mine\Figure 1 - Mine Location and Regional Features - Layout. Date: 10/30/2025

Figure 2

Mine Site Features

Site Features
- Lost Mine Claim Boundary
- Section 34 Mine Claim Boundary
- Old Access Road
- Rim Strip Area
- Waste/Tailings Pile Area
- Potentially Reclaimed Area
- Contours (20ft Interval)
- Unpaved Roads
- Ephemeral Water Course
- Flow Direction
- Approximate Overland Water Flow Direction

Property Ownership
- Navajo Nation Ownership
- Private Ownership

N

0 410 820 Feet

1:4,200

Data Sources:
Property Boundaries: McKinley County, NM GIS Data Portal.
Roads: U.S. Census Bureau – TIGER/Line.
Hydrography: USGS National Hydrography Dataset for New Mexico
Contours: USGS 10m DEM.
Imagery: ESRI Online Portal

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V:\NMED_Lost_Mine\338_Lost_Mine\Figure 2 - Mine Site Features - Layout. Date: 10/28/2025

Figure 3

Proposed Site Surveys

Site Feature
- Lost Mine Claim Boundary
- Section 34 Mine Claim Boundary
- Contours (20ft Interval)
- Unpaved Roads
- Ephemeral Water Course
- Area of Investigation
- Areas of Special Interest
- Potential Background Survey Areas

Property Ownership
- Navajo Nation Ownership
- Private Ownership

Note:
Area of Investigation includes a 100-foot buffer around the Lost Mine Claim Boundary and the private portion of the Section 34 Mine Claim Boundary. Areas of Special Interest include: a 20-foot buffer on either side of the potentially impacted ephemeral water course and the site access road.

N

0 410 820 Feet

1:4,200

Data Sources:
Property Boundaries: McKinley County, NM GIS Data Portal.
Roads: U.S. Census Bureau – TIGER/Line.
Hydrography: USGS National Hydrography Dataset for New Mexico
Contours: USGS 10m DEM.
Imagery: ESRI Online Portal

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