

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Elevation NewCo, LLC Non-Mechanized Exploration NE of the Inactive Smith-Dillon Talc Mine
Proposed Implementation Date:	~Spring 2025 to ~Spring 2030 (for non-mechanized non-metalliferous mineral exploration)
Proponent:	Elevation NewCo, LLC 8625 Hwy 91 South Dillon, MT 59725
Location:	Section 24, Township 8 South Range 8 West (Pine Hills School Trust) N½N½, 160 acres, more or less
County:	Beaverhead

I. TYPE AND PURPOSE OF ACTION

Elevation NewCo, LLC. has applied to the Montana Department of Natural Resources and Conservation (MT-DNRC) for a non-mechanized Land Use License (LUL) to explore for talc on the state tract listed above, about 8 miles southeast of Dillon, MT. (See attached site map, Figure 1).

Field work is expected to include geologic mapping and possible rock (chip) sampling if talc exposures are present. Geologic mapping will be performed by the company geologist walking the ground and observing rocks and soils with a focus on determining the extent of surface mineralization. Mapping includes taking notes, compass readings, and delineating the various rock types, rock contacts, and faults or other features on a topographic map and/or aerial photo with pen and colored pencils. Rocks (likely exposed talc) may be taken by hand from the surface. Samples of rocks, if collected, would be analyzed for physical characteristics, such as brightness, hardness, and impurities. A small amount of digging could occur to better access rock/soil at and/or just below the ground's surface. The geologist may return to the site after the primary mapping to check information or for more detailed sampling. The information gathered will be used to determine if the proponent would be interested in pursuing additional (mechanized) exploration. One to three company employees could be at the site at any given time. Activities may also include topographic, aerial photographic, and geophysical surveys by Unmanned Aerial Vehicle (UAV or drone). Geophysical surveys using hand-held equipment could also be conducted.

The proponent plans to accompany their contractor [Water and Environmental Technologies, (WET) Butte, MT] in the field for an aerial photographic/topographic survey. They plan to fly the area of interest via UAV. The area of interest may expand to include the whole the licensed portion of the section. Expansion of the flight area would increase the flight time. The drone is expected to be a vertical take-off, fixed-wing type UAV that will fly a grid pattern over the area(s) of interest.

MT-DNRC does not guarantee access to its lands/mineral estate. The Licensee has the responsibility for obtaining permission to access the licensed area. If the Licensee obtains permission from private landowner(s), they may use travel on foot or utilize one to three company pickup trucks to reach the site for mineral exploration. No off-road/trail vehicular use is planned. MT-DNRC will require the trucks to remain on existing roads/trails, unless otherwise authorized in writing by DNRC.

High Divide Minerals, associated with Elevation Newco, LLC, recently petitioned the Beaverhead County Commissioners to return the Axes Canyon road to public county road status. Part of this road would provide access to the inactive Smith-Dillon talc mine in Section 23, T.8 S., R. 8 W (Figure 2). At present, Elevation NewCo, LLC does not have access to the N½N½ of Section 24 (Figures 1 and 2).

The applicant applied for a term of ten years. The license duration would be shortened to 5 years by the Department if issued.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:
Provide a brief chronology of the scoping and ongoing involvement for this project.

On May 13, 2020, Minerals Management Bureau (MMB) personnel, Trevor Taylor, chief, Teresa Kinley, geologist, MT DNRC Dillon Unit personnel, Tim Egan, manager, and Chuck Maddox, land use specialist visited the former Banning-Jones talc mine in Section 13, T8S, R8W (Figure 2). Mike Cerrino and Josh Reagan from Barretts Minerals, Inc. accompanied us. We had a general overview of the northwest quarter of Section 24 during this field visit.

State of Montana DNRC: surface and mineral owner. MMB Geologist, Teresa Kinley; MMB Bureau Chief, Trevor Taylor; AGMB Archaeologist, Patrick Rennie; Dillon Unit Manager, Tim Egan, Montana Natural Heritage Program Map Viewer; Mark Odegard, Hard Rock Mining Bureau, Air, Energy, and Mining Div., MT Department of Environmental Quality (DEQ), Steven Lubinski, Geologist, Bureau of Land Management (BLM) Dillon Field Office, and DNRC surface/grazing lessee La Cense LLC.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Elevation NewCo, LLC has an exploration license with Montana DEQ’s Hard Rock Mining Program. A DEQ license is not required for non-mechanized mineral exploration activity. Consultation with the MT Greater Sage Grouse Habitat Conservation Program will be required. Regulations for UAV flights will need to be followed.

3. ALTERNATIVES CONSIDERED:

No Action Alternative: The proposed Land Use License (LUL) would not be granted. Current grazing lease activities would continue.

Action Alternative: The Land Use License would be granted to Elevation NewCo, LLC to conduct non-mechanized exploration for talc, a non-metalliferous mineral. Exploration methods include non-ground disturbing UAV (drone) flight(s) for photography and topographic mapping, and geophysical surveys; geologic mapping, rock/soil sampling with hand tools, and possible geophysical surveys using hand-held equipment on State land in the N½N½, Section 24, T. 8 S., R. 8 W. (MT-DNRC will stipulate that all requirements for drone flights are met). Current grazing lease activities would continue.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The geologic map of the Dillon 1 x 2-degree quadrangle, Montana and Idaho (1:250,000) by Ruppel, et al. (1993) shows the general geology of Section 24, T8S, R8W. They mapped two Archean metamorphic rock types in Section 24, T. 8 S., R. 8 W., P.M.M. Archean quartzofeldspathic gneiss and dolomitic marble comprise these rock types and both are present in the N $\frac{1}{2}$ N $\frac{1}{2}$ of Section 24. The northern band of dolomitic marble in this section strikes approximately North 30 to 40 degrees East and dips 60 to 70 degrees NW (Berg, 1979) and cuts the N $\frac{1}{2}$ NW $\frac{1}{4}$ of the section (Ruppel, et al, 1993).

During a May 13, 2020 site visit to the former Banning-Jones small talc mine in the adjacent SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 13, T. 8 S., R. 8 W. (Figure 2), DNRC staff noted talc on the surface that had been disturbed by mining and some talc subcrops. Marble outcrops were also present. The remnant Banning-Jones mine locates about 0.15 miles North of the proposed LUL's closest point.

The Archean marble of this general area is known for talc deposits. The Regal talc mine is located in Section 2, T. 8 S., R. 7 W. and Sec. 35, T. 7 S., R. 7 W., about 5 miles away from the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 24, T. 8 S., R. 8 W. Berg (1979) reported on the Smith-Dillon talc mine (Figure 2) in the adjoining Section 23, T. 8 S., R. 8 W. from information including provided by Perry, 1948; Okuma, 1971, and Olson, 1976. This talc mine began as an underground operation and then was developed into a surface operation. Berg (1979) noted the lenticular talc ore body occurred in a layer of the dolomitic marble. The talc ore body was estimated to be about 750 feet long and about 100 feet wide in Berg's report. He also noted a left lateral fault, striking to the west, displaced the talc zone approximately 70 feet to the west at the north end of the Smith-Dillon mine.

The southern contact of the northern dolomitic marble layer with the quartzofeldspathic gneiss as mapped by Ruppel et al. (1993) runs along the west side of the Smith-Dillon disturbance in Section 23. This contact has been mapped in general in the N $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 24.

Childs (2016) reported that the currently inactive Smith-Dillon talc mine in the adjoining Section 23, T. 8 S., R. 8 W. was owned by Barretts Minerals Inc. He also updated the strike length of the mineralized zone to about 500 meters and described the talc as 30 to 100 meters thick. Childs (2016) interpreted that the ore zone had been offset on both ends by poorly exposed faults. In addition, he noted that the ore developed along another set of faults, striking north-south to northeast with a steep dip. Some amphibolite/diabase dikes were also associated with the faults. More detailed mapping planned by Elevation NewCo, LLC, would provide better understanding of the geology and possible extension of talc associated with the marble into Section 24.

The State of Montana has previously leased its mineral estate in Section 24 for talc exploration in the 1970's, 1980's, and almost into the 1990's. Earlier activity may have occurred prior to the State's acquisition of the area in 1958. The 1962 Dillon East, MT USGS topographic map notes an adit and

three prospect pits in the NW¹/₄NW¹/₄ of Section 24. Aerial photos as early as 1965 show some previous surface disturbance, likely bulldozer scrapes and possible trenching.

Other mineral exploration and geologic mapping continue at the Ruby Graphite prospect at the historic Crystal Graphite (Groundhog Mine) Mine in Sections 30-31, T. 8 S., R. 7 W. Mining occurred in 1887, 1901-1919 and in the 1940's. Childs Geoscience Inc. (2024) indicated that the graphite occurs within Archean marble, quartzofeldspathic and biotite gneisses, calc-silicate gneiss, schists, and pegmatite. According to Dr. Childs, the deposit was previously thought to be in an isoclinal fold hinge. They now think the deposit occurs where the marble is transitioning westward, that is, where marble is fingering out into a series of calc-silicate layers that are both altered to prograde and retrograde skarn.

Although previously leased for oil and gas, no oil and gas exploration has been done on this tract.

A 4.1-magnitude earthquake occurred on October 7, 2024, about 12 km east of Dillon, MT and about 6.8 miles northeast of this tract's closest point. The closest mapped fault to the earthquake epicenter is the range-front fault along the northwest side of the Ruby Mountains. This fault is projected to the southwest on geologic maps and occurs about 0.5 to 1.5 miles away from the N¹/₂N¹/₂ of Section 24, T. 8 S., R. 8 W.

The tract proposed for non-mechanized exploration has steep topography. Soil reports from the USDA indicate two soil types within the proposed LUL area. These two soil units are Cheadle Family, Very Stony Rock Outcrop complex and Libeg, stony Poin, very stony-Rock outcrop complex. Both occur on 25 to 60 percent slopes. These soils have a moderate erosion hazard for off-road/trail travel with a severe hazard for road and trail construction. These soil types are moderately resistant to dust propagation, which would help to mitigate impacts to air quality if accessing the site by vehicle.

The Cheadle Family soil has only a slight rutting hazard, but it has a poorly-suited rating for reclamation suitability. It has a moderate restoration potential once degraded. The Libeg soil shows moderate resistance to rutting and has a moderate suitability rating for reclamation suitability. It has a high restoration potential. They also have a moderate to low soil compaction resistance, respectively. Possibility for site degradation runs high for both soils.

The use of pickup trucks on existing roads/trails and/or foot traffic would not negatively affect the soils present on the proposed lands. MT-DNRC will require on-road/trail motorized vehicle use only and limit use to dry soil conditions (soil moisture content below 20%), unless extenuating circumstances arise and MT-DNRC authorizes off-road travel in writing. Site-specific conditions could preclude this authorization. Surface disturbance of soils would be minimal due to lack of off-road/trail vehicle use, minor digging, and the use of foot traffic for mineral exploration.

No Action Alternative: No impact from mineral exploration. MT-DNRC would lose opportunities to learn more about the geology and mineralization on this tract and to bring in additional funds to the Pine Hills School Trust.

Action Alternative: The proponent may be able to explore for talc through non-mechanized methods, including but not limited to: geological mapping, sampling of rock outcrops and subcrops, for physical and geochemical analyses, non-mechanized geophysical surveys, and/or non-ground-disturbing aerial geophysical surveys, and collection of aerial photographic and topographic data. Non-mechanized soil

sampling with hand tools if conducted would cause minimal soil disturbance for scattered locations throughout the area of interest. The LUL will include a requirement to reclaim any disturbances of soil immediately after samples are collected. If motorized vehicles are used to reach the area, MT-DNRC will require that the Licensee, employees, and contractors stay on existing roads/trails. Usage will be limited to times of dry soil conditions (soil moisture content below 20%), unless otherwise authorized in writing by the Department. Special written authorization may be given for extremely extenuating circumstances. Surface disturbance of soils would be minimal due to lack of off-trail vehicle use, no or limited digging, and use of only foot traffic for geologic mapping, sampling, and flying the UAV. The proponent will be responsible for reclamation of disturbance.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

A portion of an unnamed perennial stream in Axes Canyon runs east to west through the southern half of Section 24. This stream's closest point locates about a half mile from the N½N½ of Section 24. According to Montana's Ground Water Information Center there are no wells documented in the proposed tract. No effects to water resources are anticipated.

No Action Alternative: No impact from non-mechanized mineral exploration.

Action Alternative: No effects to water quality, quantity and distribution are expected from proposed non-mechanized mineral exploration activity.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The closest Class I airsheds to the State lands proposed for non-mechanized talc exploration are the Anaconda Pintler Wilderness area and Yellowstone National Park, both located about 67 miles away from the tract's closest point. Non-mechanized mineral exploration activities would not impact these airsheds due to the distance between them and the proposed LUL boundary and to the nature of activity proposed.

Emission sources in the vicinity of the area proposed for the LUL include vehicle travel from ranching operations and farming activity. These activities would also create fugitive dust that is expected to settle within close proximity to the roads/trails, or farm fields.

The company estimates two site visits per month during a 6-month period from May to October each licensed year. One to three pickup truck(s) would traverse existing unimproved road(s)/trail(s) on the licensed area. A short duration, minimal increase in airborne pollutants and particulates would be expected. However, the proponent may decide to reach the tract on foot from the adjacent, inactive Smith-Dillon mine site. Exploration activities would be carried out on foot and vehicles will be restricted to the roads/trails.

Dust could be generated during the short-term site visits. The dust is expected to stay close to the source, the roads/trails. Increased wind velocities would likely increase dust dispersion in the area due to existing conditions.

The combustion of gasoline or diesel fuel at the site would release GHGs, primarily carbon dioxide (CO₂), nitrous oxide (N₂O) and much smaller concentrations of non-combusted fuel components, including methane (CH₄) and other volatile organic compounds (VOCs).

U.S. Environmental Protection Agency (EPA) notes information on GHG emissions, “automobiles using gasoline produce carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) from the tailpipe.” Leaking air conditioners result in hydrofluorocarbon (HFC) production. EPA indicates that the HFC emissions are small in comparison to CO₂. <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle> (accessed on March 24, 2025).

U.S. EPA estimates CO₂ emissions from a gallon of gasoline as 8,887 grams CO₂/gallon and from a gallon of diesel fuel as 10180 grams CO₂/gallon. According to the U.S. EPA, an average passenger vehicle with a fuel efficiency of 22.2 miles per gallon (MPG) emits about 400 grams of CO₂ per mile (see EPA-420-F-23-014 published in June 2023).

Elevation NewCo, LLC may use one to three pickup trucks powered by gasoline or diesel fuel with a fuel efficiency unknown to MT-DNRC. MT-DNRC assumes an efficiency of 10 miles per gallon (MPG) over unimproved roads/trails on the tract. MT-DNRC also assumes the approximate maximum length of the unimproved road(s)/trail(s) that will be traversed on the tract is 1.3 miles.

Using the EPA information, MT-DNRC calculated that for one gas-powered pickup traversing the 1.3 miles twice per visit two times per month in a 6-month period per year during a five-year license term, production of 0.14 metric tons of CO₂ is expected. This amount increases to 0.42 metric tons for three gasoline-powered pickups. A larger amount of CO₂ would be expected if diesel-powered pickups are used, 0.16 metric tons for one or 0.48 metric tons for three. In both scenarios, these are negligible amounts compared with annual emissions in the State of Montana, the United States, or the World.

Variations in air quality can occur throughout the year due to occurrences such as weather patterns, wildfire smoke, heating of homes, and ranching activities. The small amounts of additional dust and emissions created by non-mechanized mineral exploration are not expected to appreciably increase amounts resulting from existing activities.

Minimal, short-term impacts to air quality are expected.

No Action Alternative: No impacts expected.

Action Alternative: A short-term, minimal change in the air quality is expected due to dust and GHG emissions from a few vehicles on the unimproved roads/trails in the licensed area.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The land cover of the proposed exploration area is located primarily in Inter-Mountain Basins Montane Sagebrush Steppe with some pockets of Northern Rocky Mountain Lower Montane, Foothill and Valley Grassland and Middle Rocky Mountain Montane Douglas-Fir and Woodland. No extensive

ground-disturbing activity is proposed. Some very minimal vegetative disturbance could occur from the proposed action. No changes to vegetation communities are anticipated.

MT-DNRC's last tract evaluation for Section 24 was completed in the summer of 2021. Vegetation species encountered included Bluebunch Wheatgrass, Indian Ricegrass, Sandberg Bluegrass, Needle and Thread, Idaho Fescue, Threadleaf Sedge, Big Sagebrush, Juniper and Whitebank Pine.

Power washing of vehicles to remove noxious weed seeds prior to entry will be stipulated. Any noxious weeds introduced from the proposed activity would be mitigated and eliminated by the proponent.

Susceptibility of the area to fire starts is a concern. There would be no off-road/off-trail vehicle use unless extenuating circumstances arise, and the Department provides approval in writing. The Licensee, employees, and contractors would be required to comply with any requirements of fire restriction stages. MT-DNRC will require each vehicle to have: a 1-gallon or larger bucket; a usable shovel with a minimum overall length of 36 inches (with a round pointed head and a minimum width of 6 inches), or a pulaski; a 5-gallon container full of water at all times; and an operable, dry-chemical fire extinguisher (minimum 2.5-pound capacity and 4BC or higher rating) for fire suppression due to vegetation on/near 4-wheel drive roads/trails.

No Action Alternative: The current vegetation would not be changed by mineral exploration.

Action Alternative: The vegetation in the licensed area would experience negligible disturbance from the proposed action, including possible minor clearing of vegetation using hand tools. Vehicle use would be restricted to established roads/trails and to time when the soil moisture content is below 20 percent, unless otherwise authorized in writing by the Department. No impacts are expected to occur from the proposed activity that would not be addressed by mitigation measures. The proponent will be required to repair any soil disturbance from exploration activities.

Spread of noxious weeds creates concern regarding vegetation on Montana's lands. The proponent would be required to monitor exploration sample sites and control noxious weeds during the license period. MT-DNRC will require washing of vehicles prior to entry onto the tract to reduce the spread of noxious weeds (see LUL Provision 21, Stipulation 3).

Prevention of wildfire also protects trust resources. MT-DNRC will include a stipulation that field vehicles traversing existing roads/trails on the tract have fire suppression equipment as indicated above. The proponent will also follow guidelines from the Dillon Unit, CLO. Hand tools will be required to be available during activities on the licensed premises. The proponent will be advised to call 911 if a fire starts.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

This tract likely provides habitat for a variety of big game, large and small mammals, raptors, and songbirds. Wildlife activities, if present on the tract, may experience temporary disruption due to the proposed project. No long-term impacts are anticipated from mapping and collection of rock/soil samples and/or data via UAV's or hand-held geophysical equipment.

No action alternative: The tract would remain undisturbed by non-mechanized mineral exploration.

Action alternative: The proponent would be granted permission with conditions to conduct non-mechanized mineral exploration in the proposed LUL area. Impacts to habitats would be negligible. Any disruption to wildlife would be temporary. Similar habitat and forage can be found throughout the area and could sustain the wildlife species present. A sage grouse Executive Order stipulation will be applied to this LUL.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

The Montana Natural Heritage Program (MT-NHP) map viewer was used to locate sensitive species and species of concern located in the vicinity of the proposed LUL. Montana species of concern located in the vicinity are identified below.

MT-NHP notes a transient golden eagle site in Section 24 that was last observed in 2015 with no evidence of breeding indicated. Another eagle site, about 2.8 miles away from the tract's closest point also showed no evidence of breeding when it was last observed in 2020. A Brewer's sparrow site locates about 0.72 miles from the tract's closest point. Last observed in 2014, indirect evidence of breeding was noted. A Clark's nutcracker was observed in 2014 at the same location, but it showed no evidence of breeding.

The closest pygmy rabbit [(G4, S3); BLM: sensitive] sites to the tract occur about 6 and 6.5 miles away from this tract's closest point. When last observed in 1997, the burrows were active.

A MT-NHP 2020 ferruginous hawk [(G4, S3B); BLM: sensitive] site observation and a 2021 golden eagle observation, both with no evidence of breeding occur about 3 miles from the tract's closest point.

The tract is located within Executive Order Greater Sage Grouse [(G3G4, S2); BLM and USFS: Sensitive] general habitat. The closest confirmed active sage grouse lek is about 7.5 miles from the tract's closest point. MT-NHP noted 4 males when last observed in 2022. Another confirmed active lek with 38 males counted occurs about 10 miles away from this tract. This lek was last observed in 2022. The closest sage grouse site to the tract is one with no evidence of breeding. Last observed in 2017, it is located about 5 miles from the tract's closest point.

The proponent has a sage grouse permit from the Montana Sage Grouse Habitat Conservation Program (MSGHCP) for the Smith-Dillon mine area in Section 23, T. 8 S., R. 8 W. They plan to contact the program regarding requirements for non-mechanized activity in the N½N½ of Section 24, T. 8 S., R. 8 W. and the status of previous correspondence from the program on this area. The LUL will include a general habitat sage grouse stipulation.

Elevation NewCo, LLC plans to get drone flights, geologic mapping, and sampling done outside of the sage grouse restriction timeframe.

No long-term or cumulative impacts to unique, endangered, fragile, or limited environmental resources (including wetlands) are anticipated from the proposed activity.

No action alternative: The tract would remain undisturbed by non-mechanized mineral exploration.

Action alternative: The Licensee would be granted conditioned approval to map the geology of the licensed area, collect rock and soil samples, conduct ground geophysics with handheld instruments, make aerial geophysical surveys, and collect aerial topographic and aerial photographic information within the guidelines of the MSGCP. There could be a temporary disruption of species of concern if they are present on this tract. Sagebrush range lands and scattered mountainous brush-covered areas with scattered timber occur on the tract. Animals would utilize surrounding areas during the temporary disturbance and return to the tract upon project completion and/or reclamation. The non-mechanized nature of the mineral exploration would create minimal interference with wildlife species of concern and their habitat. The proponent would be working through the MT Sage Grouse Habitat Conservation Program, per Provision 21, Stipulation 12 in the LUL.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

No extensive ground disturbance is planned for non-mechanized activity under the proposed land use license.

A Class I (literature review) level review was conducted by the MT-DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, MT-DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search results revealed that no cultural or paleontological resources have been identified in the APE, but it should be noted that Class III level inventory work has not been conducted there to date.

The low-impact nature of proposed activities will have *No Effect to Antiquities*. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

The Land Use License includes a provision that requires the Licensee to stop work and to contact MT-DNRC if they encounter archaeological, historic, or paleontological resources.

No action alternative: The licensed area would remain undisturbed by non-mechanized mineral exploration.

Action alternative: The proponent would be provided conditioned approval to map the geology of the area, collect rock and soil samples for geochemical and physical analyses, conduct ground and aerial geophysical surveys and collect aerial topographic and aerial photo data. No effects to cultural, archeological, or paleontological resources are anticipated resulting from the action alternative. As noted above, a provision of the LUL covers location of such resources during exploration activities and indicates it is the Licensee's responsibility to cease action at the resource site and immediately call the Department.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The N½N½ of Section 24, T. 8 S., R. 8 W. locates about 1.6 miles northeast of the Buster Brown Road. The closest ranch houses and buildings are located about 1.6 to 4.3 miles away from the area proposed for mineral licensure for non-mechanized talc exploration. The mineral exploration proposed would not be easily visible from the ranch houses.

No action alternative: Aesthetics would not be affected by non-mechanized mineral exploration.

Action alternative: Due to the short-term and minimal use of equipment (pedestrian access, or use of pickup trucks on existing roads/trails, and small drone) needed for the activity proposed under the LUL, negligible aesthetic impacts are expected. UAV (drone) operation would only occur during day-time hours and some minimal noise is expected during flight.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The proposed project will have minimal impact on the land, water, air, or energy. Vehicle use on road/trails would temporarily affect the air quality due to airborne dust particles and GHG emissions. The particulates and emissions result from one to three vehicles traveling on established unimproved roads/trails across part or the whole length of the licensed area. The company anticipates site visits twice per month for 6 months annually. No cumulative effects to environmental resources have been identified as a result of the proposed non-mechanized land use license.

Exploration and geologic mapping continue at Reflex Advanced Materials' Ruby Graphite project located primarily in Sections 29 through 31, T. 8 S., R. 7 W. and some adjacent areas, about 1.7 miles away from the closest point of the N½N½ Sec. 24, T. 8 S., R. 8 W.

No action alternative: Mineral exploration activities for critical minerals in the general area would continue. Non-mechanized mineral exploration activities on the tract would not occur. Grazing activities would continue.

Action alternative: Non-mechanized mineral exploration for talc would be authorized on the area of interest. This exploration would not affect nearby exploration for graphite.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

The BLM Dillon Office's recent evaluation review of their 2005-6 Resource Management Plan indicated that their current plan is still effective, and they chose not to update it. The closest BLM land

to the N½N½ of Section 24 is about 0.75 miles away. Private land and other State land bounds the area proposed for licensure.

The BLM recently prepared a “Draft Resource Management Plan Amendment (RMPA)/Draft Environmental Impact Statement (DEIS) to analyze potential amendments to specific” Greater Sage Grouse (GRSG) “goals, objectives, and management actions contained in 77 existing RMPs to enhance GRSG conservation through management of GRSG habitats on BLM-administered lands.” BLM released this draft Greater Sage Grouse Conservation plan on March 14, 2024. Neither a final EIS nor a Record of Decision on this plan has been published at present. Continuation may be driven by 2024 election results. The draft plan has six alternatives. BLM lists alternative 5 as their preferred alternative. This alternative “considers other potential alignments of habitat management areas and associated management to balance GRSG conservation with public land uses.” It has various flexibilities and includes “removal of the withdrawal from mineral entry recommendation and prioritization strategies.” BLM also notes “Identifying a preferred alternative does not indicate any decision or commitments from the BLM. In developing the Proposed RMPA/Final EIS, the next stage of the planning process, the decision maker may select various goals, objectives, allocations and management prescriptions from each of the alternatives analyzed in the Draft RMPA/EIS.”

In one possible alternative regarding BLM changes due to GRSG, Federal land in Beaverhead County and parts of surrounding counties would be withdrawn from mineral entry. Changes to ranching operations and other land uses would occur. The extreme scenario would deter mineral activities on State School trust land and mineral estate in these areas because the mineralization package may not be completely available for discovery and potential development. Companies may not be interested in a smaller package and the income producing capacity of the trust lands and mineral estate would be diminished or extinguished. BLM continues their evaluation process and work on the Final RMPA/EIS.

No other environmental documents were located that pertain to Section 24 in T. 8 S., R. 8 W. No other state, or federal actions are known for this area.

No action alternative: The State land proposed for non-mechanized mineral exploration would not be evaluated for talc mineralization. Existing Trust Land management activities would continue, including grazing operations.

Action alternative: Mineral exploration would provide additional information on talc in the N½N½ of Section 24, T. 8 S., R. 8 W. Grazing operations would continue. Any sample holes dug with hand tools would be backfilled with the disturbed topsoil. The proponent has the responsibility to contact the MT Sage Grouse Habitat Conservation Program regarding their exploration plans (see LUL Provision 21, Stipulation 12).

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter “NONE” if no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No human and health safety risks were identified from the proposed project other than typical occupational hazards that coincide with non-mechanized mineral exploration and UAV operations.

No action alternative: No impact.

Action alternative: No impacts expected.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The proposed project may have a short-term minor effect on grazing activities. The LUL will have contact and coordination stipulations. Effects on current or future industrial, commercial, and agricultural production activities are dependent on detailed exploration results that are unknown at this point.

No action alternative: No impact.

Action alternative: The action alternative has potential to provide a resource for industrial, commercial activities. Non-mechanized mineral exploration provides a starting point for evaluation of possible mineral resources that may/or may not be present.

The proposed project is not expected to alter current or future industrial, commercial, or agricultural activities and production.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

The proposed project would not create, move, or eliminate jobs. The proponent currently has a contractor employed for drone flights at other sites. They plan to use the same contractor for this area.

No action alternative: No impact.

Action alternative: No impacts expected.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

Creation or elimination of tax revenue is not anticipated. The proponent would continue to pay employees for their work, withdraw income tax, and pay other business-related taxes.

No action alternative: No impact.

Action alternative: No impacts expected.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

No action alternative: No changes due to non-mechanized mineral exploration.

Action alternative: No impacts expected from non-mechanized mineral exploration.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

MT-DNRC produced a Habitat Conservation Plan (HCP) for Forest Management Bureau activities in western Montana in 2010. The HCP is meant to “avoid, minimize, and/or mitigate the impacts of incidental take of threatened or endangered species as a result of timber harvest and related activities to the maximum extent practicable.” The proposed tract is not a designated HCP tract. Timber harvest is not the proposed activity.

As noted above in Part 13 above, BLM published a Draft Resource Management Plan Amendment (RMPA)/Draft Environmental Impact Statement (DEIS) focused on Greater Sage Grouse on March 14, 2024. The final documents remain in progress. The alternative selected could have some major to minor ramifications for mineral development in the area.

The Bureau of Land Management Dillon Field Office’s recent review of their Resource Management Plan and Final Environmental Impact Statement” did not indicate that an update is needed (see Part 13 above).

No action alternative: No Impact.

Action alternative: No impacts are expected from the proposed non-mechanized mineral exploration for talc.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

This tract has no public or administrative access. It is the proponent’s responsibility to obtain permission from landowners to be able to use roads/trails that cross the landowner’s property or walk on their property to reach the State land/minerals estate proposed for licensure.

Recreationists would also have to obtain landowner permission to cross private land in order to reach this tract.

The closest parts of the Blacktail Mountains Wilderness Study Area locate about 6 miles from the N½ NW¼ of Section 24. Recreational activity in the tract is limited by lack of public access. There would be no effects to any recreational activities resulting from the issuance of the license.

No action alternative: No impact.

Action alternative: No change in access to recreational and wilderness activities or to the quality of those activities should occur as a result of this project.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

No action alternative: No impact.

Action alternative: No population changes or requirements for additional housing are expected. No cumulative effects on either population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No action alternative: No impact.

Action alternative: No impacts expected.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

No action alternative: No impact.

Action alternative: No impacts expected. Non-mechanized mineral exploration is not anticipated to affect any unique qualities of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

No action alternative: Currently the State lands proposed for non-mechanized mineral exploration are utilized for grazing activities. No change to this activity would occur other than what might be planned by the grazing lessee. The existing State grazing lease on Section 24, T. 8 S., R. 8 W provides approximately \$562 in annual revenue (2024) that goes to the Pine Hills School Trust. The no action alternative could limit future exploration for talc or other valuable minerals on Trust Lands in this area.

Action alternative: The proponent provided a \$25 payment for a non-mechanized mineral exploration Land Use License (LUL) application fee. Issuance of this non-mechanized Land Use License for N½ N½ of Section 24 would provide an annual rental fee of \$480 dollars (\$3.00 per acre X 160 ac. = \$480). The five-year term of the LUL would generate a total of \$2400 in rental for the Pine Hills School Trust. If non-mechanized mineral exploration shows promise, the company may pursue a mechanized exploration LUL, prospecting permit, and/or a mineral lease. If additional exploration proves an economic resource, a mineral lease could potentially generate more revenue for the Pine Hills School Trust.

No cumulative economic and social effects from this non-mechanized exploration are expected.

EA Checklist Prepared By:	Name: Teresa Kinley	Date: 4/10/2025
	Title: Geologist/Hydrologist	

V. FINDING

25. ALTERNATIVE SELECTED:

After reviewing the Environmental Assessment, I have selected the Action Alternative, to issue a Land Use License on the north half of the north half of Section 24, T. 8 S., R. 8 W. for non-mechanized talc exploration. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area and will generate revenue for the Pine Hills School Trust.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I conclude that the stipulations listed below that will be included in Provision 21 of the LUL, along with other provisions of the document, will mitigate all identified potential impacts and no significant impacts will occur because of implementing the selected alternative.

Stipulations:

- 1) Licensee shall be in compliance with all applicable state and federal laws, rules and regulations, including but not limited to those concerning safety, environmental protection, reclamation, drone flight requirements for photography and topographic mapping or geophysical surveys over the site, and sage grouse requirements.

Licensee shall submit copies of required permits or pertinent exemptions to the Department's Minerals Management Bureau.

- 2) It is the responsibility of the Licensee to acquire permission for access to the licensed state lands/mineral estate.
- 3) All vehicle traffic must stay on established roads/trails. All vehicle traffic will be limited to time periods or conditions when use of the roads/trails will not create ruts, i.e. periods when the soil moisture content is below 20 percent, unless otherwise authorized in writing by the Department.

All vehicles must be washed, particularly the undercarriage, to assure removal of dirt, plant material, and seeds prior to entering the tract.

All vehicles must be equipped with fire suppression equipment as follows: a 1-gallon or larger bucket; a usable shovel with a minimum overall length of 36 inches (with a round pointed head and a minimum width of 6 inches), or a pulaski; a 5-gallon container full of water at all times; and an operable, dry-chemical fire extinguisher (minimum 2.5-pound capacity and 4BC or higher rating). In addition, call 911 if a wildfire should get started.

- 4) The Licensee has the responsibility to keep themselves, staff and contractors and their staff apprised of the boundaries of the non-mechanized LUL to assist in documentation of mineral exploration activities within the licensed area.

- 5) The boundary for the LUL is delineated on the accompanying Vicinity Map (Figure 1) and in detail on the 2023 aerial photo Site Map (Figure 2). Figure 2 shall be used by proponent and contractors and their staff to keep exploration activities within the licensed area.
- 6) The Licensee will provide MMB with an annual exploration plan covering the licensed area for review and approval prior to beginning non-mechanized exploration each year. The plan should include type of non-mechanized exploration proposed within the licensed area and planned locations of sample sites and potential disturbance areas. Reclamation plans for disturbances should also be included.
- 7) Soil disturbance within 10 feet of wetlands, springs, and/or the ordinary high-water mark of streams is not allowed without prior written approval by Minerals Management Bureau, Montana Department of Natural Resources and Conservation (MT-DNRC).
- 8) Licensee will repair soil damage/disturbance created by the Licensee, employees, contractors and/or subcontractors of the Licensee on the licensed area. The size of hand dug disturbance is limited to a maximum of 2 feet by 2 feet opening, outside the buffer zone of streams, springs, wetlands, unless the Licensee receives prior written approval by MMB, MT-DNRC. Topsoil/sod will be stockpiled separately from subsoil for reclamation. Licensee and/or employees/contractors shall fill holes with subsoil before covering with topsoil and sod. All holes must be filled and reclaimed immediately prior to moving on to the next hole. MT-DNRC Dillon Unit will advise the Licensee as to the Unit's requirements regarding reseeding of disturbances.
- 9) Geologic, geochemical/geophysical/physical information and photographic & topographic drone data (processed), (including but not limited to: detailed sample site locations, areas disturbed by non-mechanized mineral exploration, and sample results for each corresponding sample site) if collected for the tract will be provided to Minerals Management Bureau, Forestry and Trust Lands Division, MT-DNRC annually with a report on exploration activities. The Licensee shall also concurrently provide GPS, GIS, or other data, detailed maps and/or aerial photos associated with the non-mechanized exploration to MMB. Licensee should advise the department if they consider this information confidential.
- 10) The Licensee, and employees, including contractors, and/or operators shall comply with any requirements of fire restriction stages unless they obtain an exemption that may be issued by the Dillon Unit Manager after field review. Access may be temporarily denied should the fire restrictions rise to the level of closure.
- 11) To mitigate management conflicts during the term of this license, Licensee must contact and coordinate with MT-DNRC's surface/grazing lessee and any future licensee/lessee.
- 12) This license is located within designated sage grouse general habitat. Proposed activities are subject to, and shall comply with, all provisions, stipulations and mitigation requirements of the Montana Sage Grouse Habitat Conservation Strategy, as implemented by Governor's Executive Orders 10-2014, 12-2015, and amendments thereto. Contact the FTLD prior to preparing a project proposal.

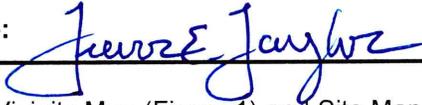
13) The Licensee shall contact the Department's Forestry and Trust Lands Division, Minerals Management Bureau if any mineralization other than talc, such as gold, silver, base metals, graphite, platinum group, and/or REE minerals, is encountered on the licensed premises.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Trevor Taylor Title: MMB Bureau Chief
Signature: 	Date: 4/11/25

See Attached Vicinity Map (Figure 1) and Site Map (Figure 2) for N½N½ of Section 24, T. 8 S., R. 8 W.

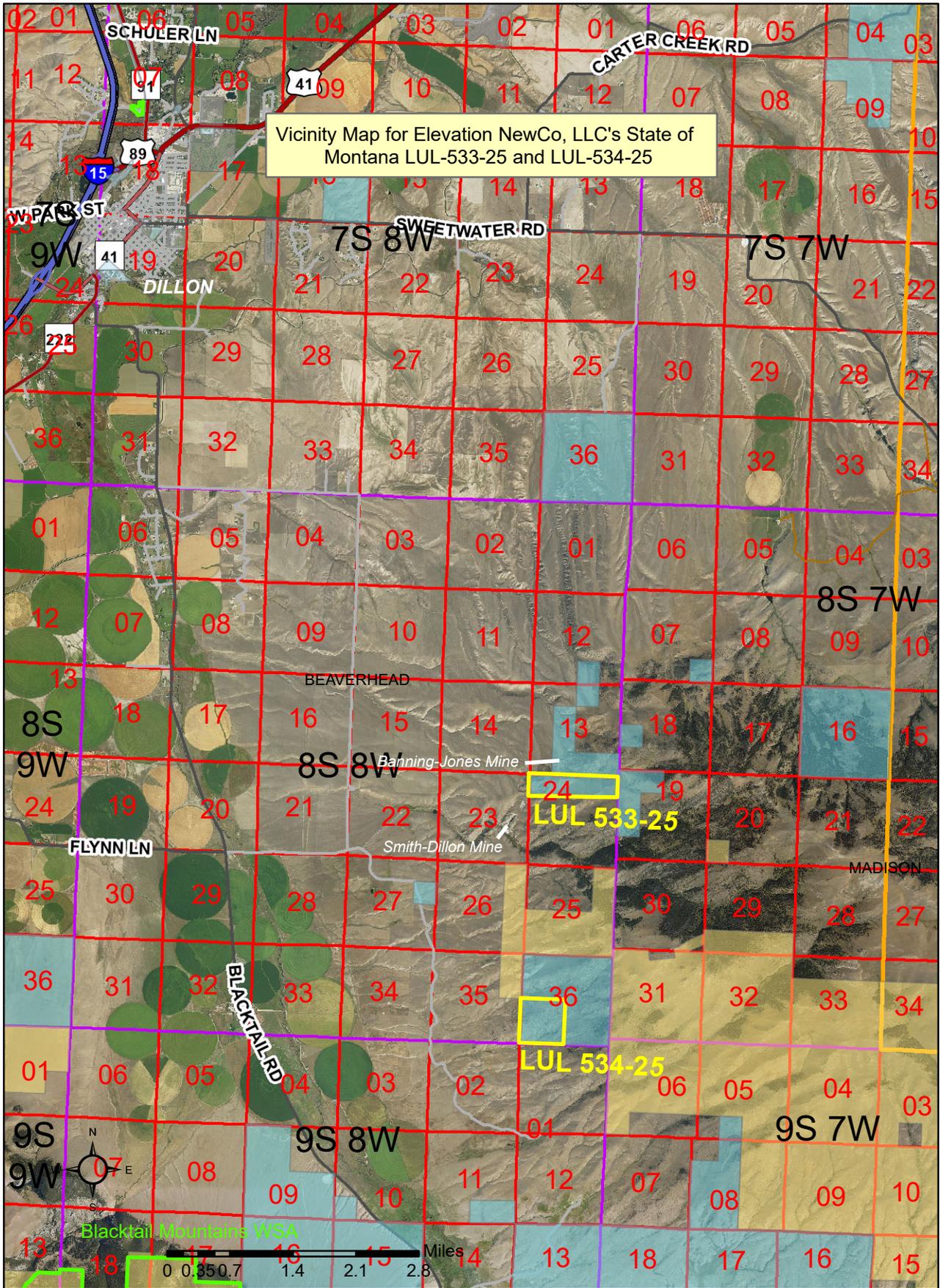


Figure 1: Vicinity Map for State of Montana Land Use Licenses LUL-533-25 and LUL-534-25 for non-mechanized talc exploration. Prepared by T. Kinley, MT-DNRC, April 8, 2025.

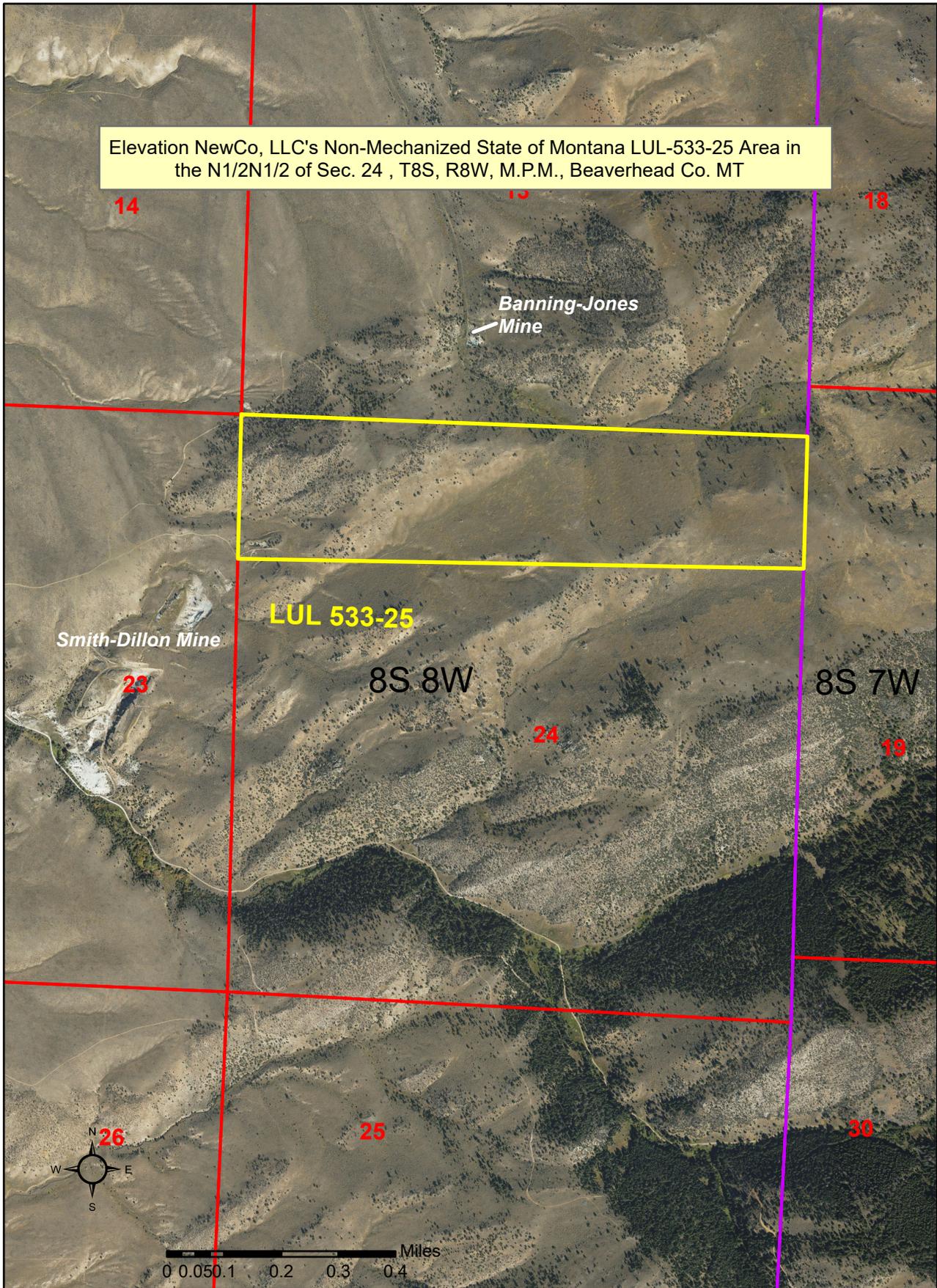


Figure 2: Site Map on 2023 Aerial for State of Montana Land Use License LUL-533-25 for non-mechanized talc exploration. Prepared by T. Kinley, MT-DNRC, April 8, 2025.