

### 3.3. CULTURAL/TRIBAL/HISTORIC RESOURCES

This section addresses the affected environment and potential impacts to cultural resources within the area surveyed for the proposed Project, which includes the MOP Application Boundary (approximately 1,888 acres) and associated access roads (see **Figure 3.3-1**). Cultural resources include the locations of human activity, occupation, or usage of the environment that contains sites, features, structures, objects, or landscapes that may have important tribal, historic, or archaeological values.

The Project is located on private land and there is no federal regulatory involvement; therefore, the federal laws relating to the protection of cultural resources (e.g., Section 106 of the National Historic Preservation Act [NHPA]) do not apply. The Montana Antiquities Act, which applies to activities conducted on state-owned land, also does not apply. MEPA requires identification of known cultural resources within a project area and a disclosure of what the potential impacts might be to those resources. This consists of a summary of the results of a file search conducted with the Montana SHPO. In addition to the file search, the Proponent conducted cultural resource inventories to identify cultural resources that may be eligible for listing in the NRHP. The inventories were conducted under the same standards as required by federal law and followed guidelines provided by the SHPO. The SHPO concurred with the methods and site recommendations in the survey reports in letters dated February 11, 2013, October 29, 2015, and August 30, 2018.

#### 3.3.1. Analysis Methods

The Proponent conducted the following cultural resources surveys and literature searches for the Project:

- Three cultural resource surveys that examined 1,633 acres within and adjacent to the Project area (Tetra Tech 2013a, 2013b, 2015, 2018) (see **Figure 3.3-1**). This includes an intensive pedestrian survey of 970 acres in 2011, 20 acres in 2012, 510 acres and 1.25 miles of access roads in 2015, and 133 acres in 2018. Additional evaluative testing was conducted in 2019.
- A background file and literature search for the entire current Project area. This background search identified two previously recorded cultural resources (Butte Creek Road [24ME936] and Sheep Creek Road [24ME925]), both of which were recommended as not eligible for listing in the NRHP.
- Site 24ME1111 (the Sheep Creek Quarry District) has been determined eligible for listing in the NRHP. Mitigations to address impacts to the district have been determined but not implemented.
- Evaluative testing on one archaeological site (24ME163) in 2012 to determine its eligibility for listing in the NRHP. Based on evaluative testing, the site was recommended as eligible for listing in the NRHP. A mitigation plan was submitted to DEQ and SHPO in 2019. SHPO did not concur with the proposed mitigation plan. Mitigation was performed in June 2019 without SHPO approval. The Montana Antiquities Act and federal laws relating to the

protection of cultural resources on private land as described above do not apply to this site as it is located on private land and there is no federal regulatory involvement.

- Evaluative testing was conducted on four archaeological sites (24ME0166, 24ME1105, 24ME1109, and 24ME1110) in 2019. Based on the evaluative testing, two sites (24ME0166 and 24ME1110) are recommended as not eligible for listing in the NRHP and two sites (24ME1105 and 24ME1109) are recommended as eligible for listing in the NRHP. No mitigation measures for the two eligible sites have been proposed at this time. Any construction at these two locations could result in resource impacts.

### 3.3.2. Affected Environment

The Project is located on private land in the Little Belt Mountains, with general elevations that range between 5,600 and 6,100 feet above mean sea level (amsl). The topography is moderately sloped with open woodland consisting of Douglas fir on the ridgetops and aspen and willow along the drainages. The total surface disturbance of the Project would impact approximately 311 acres.

The Project is located within the prehistoric cultural subarea known as the Northwestern Plains, a region that extends from central Alberta to southern Wyoming and from western North Dakota to western Montana. Prehistoric site types common to the region included campsites, rock shelters, rock structures (e.g., hunting blinds), lithic quarries, stone rings, stone cairns, stone alignments, ceramic remains, rock art, bison processing areas, and lithic reduction areas. Historic cultural resources identified in the vicinity of the Project include homesteads, ranches, and refuse dumps.

A total of 24 cultural resources (21 archaeological sites, one historic district, and two isolates) were documented during the three surveys conducted in 2011, 2012, and 2015 (Tetra Tech 2013a; 2013b; 2015) (see **Table 3.3-1**). The archaeological sites consist of 13 prehistoric sites (all lithic scatters) and eight historic sites (a log structure, mining structural remains, two roads, a homestead, a historic cairn, and two irrigation ditches). The historic district is a prehistoric stone quarry district that includes the 13 lithic scatters and a thin veneer of isolated flaking debris. The two isolates consist of historic prospect pits.

Seven historic sites and the two isolated finds were recommended as not eligible, two sites (one prehistoric and one historic) and the stone quarry district were recommended as eligible, and 12 prehistoric sites remained unevaluated for listing in the NRHP. SHPO concurred with all eligibility recommendations of sites identified in the survey reports. Evaluative testing was conducted on four of the unevaluated sites; two of these sites are recommended as not eligible for listing in the NRHP and two are recommended as eligible for listing in the NRHP (see Section 3.3.1).



**Table 3.3-1  
Cultural Resources Identified within the Survey Area**

<b>Site Number</b>	<b>Site Type</b>	<b>Potential Impacts</b>	<b>NRHP Recommendation</b>	<b>Report Source</b>
Isolate 1	Prospect Pit	Avoided	Not eligible	Tetra Tech 2013a
Isolate 2	Prospect Pit	Avoided	Not eligible	Tetra Tech 2013a
24ME0158	Historic Log Structure	Avoided	Not eligible	Tetra Tech 2013a
24ME0159	Historic Mining	Avoided	Not eligible	Tetra Tech 2013a
24ME0160	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0161	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0162	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0163	Lithic Scatter	Avoided	Eligible under Criterion D	Tetra Tech 2013a, Tetra Tech 2013b
24ME0164	Lithic Scatter	Impacted	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0165	Lithic Scatter	Impacted	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0166	Lithic Scatter	No Impact	Tested, not eligible	Tetra Tech 2013a, 2019
24ME0925	Historic Road-Sheep Creek	No Impact	Not eligible	Tetra Tech 2015
24ME0936	Historic Road-Butte Creek	No Impact	Not eligible	Tetra Tech 2013a
24ME0940	Historic Homestead	Avoided	Not eligible	Tetra Tech 2013a
24ME1104	Historic Shepherd's Cairn	Avoided	Eligible under Criterion C	Tetra Tech 2015
24ME1105	Lithic Scatter	Impacted	Tested, eligible under Criterion D	Tetra Tech 2015, 2019
24ME1106	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1107	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1108	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1109	Lithic Scatter	Impacted	Tested, eligible under Criterion D	Tetra Tech 2015, 2019

Site Number	Site Type	Potential Impacts	NRHP Recommendation	Report Source
24ME1110	Lithic Scatter	No Impact	Tested, not eligible	Tetra Tech 2015, 2019
24ME1111	Sheep Creek Surface Stone Quarry District	Impacted	Eligible under Criterion D	Tetra Tech 2015
24ME1135	Coon Creek Irrigation Ditch	No Impact	Not eligible	Tetra Tech 2018
24ME1136	Sheep Creek Irrigation Ditch	Avoided	Not eligible	Tetra Tech 2018

### 3.3.3. Environmental Consequences

#### 3.3.3.1. No Action Alternative

Under the No Action Alternative, the Project would not be permitted or constructed and there would be no additional ground disturbance with the potential to disturb cultural resources associated with proposed activities in the MOP Application. Existing disturbances include land that was previously approved for exploration facilities under Exploration License No. 00710. Existing resources would continue to degrade over time. However, limited mitigation conducted at Site 24ME163, evaluative testing that has occurred to 24ME1105 and 24ME1109, and all ground-disturbing activities that have occurred to date in regard to the Sheep Creek Surface Stone Quarry District (24ME1111) represent an adverse effect to Historic Properties due to a reduction of integrity to those sites. Data collection tied to these efforts may assist in reducing the adverse effects.

#### 3.3.3.2. Proposed Action

One historic site (24ME1104) was recommended as eligible under Criterion C; three prehistoric sites (24ME0163, 24ME1105 and 24ME1109) were recommended as eligible under Criterion D; and seven historic sites (24ME0158, 24ME0159, 24ME925, 24ME0936, 24ME940, 24ME1135, 24ME1136), two prehistoric sites (24ME0166 and 24ME1110), and two isolated finds were recommended as not eligible for listing in the NRHP. The Sheep Creek Surface Stone Quarry District (24ME1111) encompasses all of the prehistoric sites and a thin veneer of isolated flaking debris. The results of evaluative testing at the archaeological sites could further contribute to the eligibility recommendation of this district.

Avoidance was recommended for the eight unevaluated sites; if avoidance is not possible, additional testing to determine eligibility was recommended. As currently designed, the Project would avoid six of the unevaluated sites (24ME0160, 24ME0161, 24ME0162, 24ME1106, 24ME1107, and 24ME1108); no further work is recommended at these sites. If there are design changes that would impact these sites, then additional testing is recommended.

Project activities would avoid eligible site 24ME1104. Project activities could impact eligible sites 24ME1105 and 24ME1109; no mitigation measures have been proposed at this time. A mitigation plan for eligible site 24ME0163 was proposed and discussed among SHPO, the Proponent, and DEQ in October 2018. At that time, a concept for an acceptable approach was developed with a written mitigation plan to be forthcoming. In May 2019, the Proponent submitted a mitigation plan to DEQ that was different from the concept previously discussed and agreed upon. DEQ submitted the plan to SHPO, and SHPO did not concur with the proposed mitigation. The Proponent proceeded with the proposed mitigation in June 2019.

A mitigation plan for the Sheep Creek Quarry District (24ME1111) was developed (Tetra Tech 2016). Mitigation of 24ME111 is proposed to be through chert <sup>1</sup> chemical analyses in an effort to identify a chemical fingerprint of the Sheep Creek cherts. Chert samples would be collected across the quarry area and several of the lithic scatters. These samples would be subjected to neutron activation analysis to identify the chemical makeup of the Sheep Creek cherts and determine if a unique chemical signature exists. The results would add to southwest Montana's chert database to provide data for future chert sourcing projects and research concerning prehistoric lithic procurement and lithic technology.

### **Smith River Assessment**

There would be no ground-disturbing activities associated with the Project conducted between the Smith River and the Project area. Therefore, there would be no potential impacts to known cultural resources along the Smith River.

#### **3.3.3.3. Agency Modified Alternative**

The potential impacts of the AMA on cultural resources would be the same as described for the Proposed Action. There would be no additional ground-disturbing activity within the MOP Application Boundary due to the backfilling of additional mine workings. Therefore, there would be no change to impacts on cultural resources.

### **Smith River Assessment**

There would be no ground-disturbing activities associated with the AMA conducted between the Smith River and the Project area. Therefore, there would be no potential impacts to known cultural resources along the Smith River.

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<sup>1</sup> Chert is a fine-grained sedimentary rock that was often used as a raw material for stone tools.