Project: TransColorado Natural Gas Pipeline (FERC)
Client: TransColorado Gas Transmission Company

Alpine Archaeological Consultants conducted cultural resource inventory, archaeological monitoring, and archaeological mitigation for the TransColorado Natural Gas Pipeline. The TransColorado Pipeline is a 22- and 24-inch interstate pipeline extending from west-central Colorado to northwestern New Mexico. In 1991 and 1992, Alpine conducted cultural resource inventory of access roads, temporary use areas, ancillary facilities and variances, in addition to 333 miles of pipeline right-of-way. Over 400 archaeological sites and over 400 isolated finds were identified along the project route.

In an effort to mitigate the affects of pipeline construction on the significant archaeological sites in a cost-effective and time-sensitive manner, Alpine implemented a new approach. Rather than conducting excavations at every significant site along the project route, as was the common practice in the region at that time, Alpine and its client convinced the overseeing state and federal agencies of the efficacy of a sampling approach. The sampling approach involved selecting only a portion of the significant sites along the corridor for extensive archaeological investigation, though the areas excavated at the selected sites were large. This approach meant that there were far fewer archaeological sites of concern for construction personnel along the project route, which resulted in no construction delays associated with archaeology.

Responsibility: Prime Contractor for Archaeology and Paleontology
Project Area: Western Colorado and northwestern New Mexico
Project Highlights:
- Class I and Class III archaeological inventories
- Construction monitoring
- Archaeological data recovery
- Native American consultation

ALPINE ARCHAEOLOGICAL CONSULTANTS, INC.
Pipeline Projects

Project: Rocky Mountain Loop Pipeline
Client: Mid-America Pipeline Company

Alpine conducted a cultural resource inventory, archaeological monitoring, and archaeological mitigation for the Rocky Mountain Loop Pipeline. In 1998, Alpine conducted archaeological inventory of this 412-mile-long buried natural gas pipeline in northwestern New Mexico, western Colorado, and eastern Utah. A total of 313 sites and 206 isolated finds was recorded in the inventoried acreage.

Extensive data recovery and limited data recovery plans were prepared and carried out for treatment of the significant sites along the Rocky Mountain Loop pipeline corridor in 1999. To expedite construction, limited data recovery was conducted at all 57 significant sites within the pipeline construction zone prior to construction impacts. Of the 233 significant sites within the construction corridor, extensive data recovery was then performed at a select group of sites (32 prehistoric and eight historic sites) where data recovery potential was perceived to be the greatest relative to specific archaeological research domains.

Period of Performance: 1998-2003
Responsibility: Prime Contractor for Archaeology, Paleontology, and Geomorphology
Project Area: Northwestern New Mexico, western Colorado, and eastern Utah
Project Highlights:
- Class I and Class III archaeological inventories
- Archaeological data recovery
- Construction monitoring
- Construction completed within 20 months of project initiation
- Popular Report as a portion of mitigation
Project: Kern River 2003 Expansion Pipeline (FERC)  
Client: Kern River Gas Transmission

The Kern River 2003 Expansion Pipeline extends from southwestern Wyoming through Utah and Nevada to its terminus in southern Californian. This 36- and 42-inch pipeline transports natural gas. Alpine Archaeological Consultants was hired to conduct intensive cultural resource inventory and mitigation efforts in Wyoming and Utah. The Wyoming and Utah portions covered 424 miles and included 346 archaeological sites. The large majority of the pipeline length and archaeological sites occurred in Utah. Construction schedules were extremely tight, and there was little time between agency approval of the project and the beginning of construction. To avoid construction delays, Alpine again won approval of a sampling approach to the mitigation phase. A relatively small sample of the sites was selected for archaeological excavation, and the selected sites were extensively excavated. Several of the selected sites were outside of the pipeline right-of-way, so posed no obstacle to pipeline construction. Little work beyond archaeological monitoring was conducted at the sites not selected, so they posed no constraints to construction. A key element of the mitigation project also included trade-offs between archaeological excavations and archaeological studies that did not involve site excavations, as well as efforts aimed at public education. This meant that fewer sites were excavated. The mitigation tasks not involving excavation did not necessarily represent less expenditures by the developer, but did result in fewer points of potential problems for construction personnel during the construction phase. The pipeline was successfully completed without delays associated with cultural resources.

Period of Performance: 2003-2005  
Responsibility: Co-Prime Contractor for Archaeology  
Project Area: Utah and southwestern Wyoming  
Project Highlights:  
- Class I and Class III archaeological inventories  
- Archaeological data recovery  
- Construction monitoring  
- Popular Report as portion of mitigation
**Pipeline Projects**

**Project:** Rockies Express Pipeline (FERC)  
**Client:** Natural Resource Group and Kinder-Morgan

Alpine Archaeology conducted cultural resource inventory, archaeological monitoring, and archaeological mitigation for the Rockies Express Pipeline. This pipeline is a 36- and 42-inch natural gas pipeline that extends from west-central Colorado into southern Wyoming, and then on to a hub in northeastern Colorado. Alpine was hired to conduct archaeological inventory and mitigation along 95 miles of the pipeline corridor in the northwestern and northeastern corners of Colorado. The frequent occurrence of wind-blown sands in northwestern Colorado posed a special challenge to the project, as previous pipeline work had indicated that nearly half of the prehistoric sites along the corridor were completely buried and lacked surface evidence. This indicated that many cultural features and sites would be discovered during the construction phase. Mitigation efforts were designed to minimize the chances that discoveries made during construction would cause construction delays.

Two samples of sites were selected for archaeological excavation. The samples constituted a fraction of the total number of significant sites. One sample was excavated prior to the beginning of construction. Archaeological monitors then observed pipeline construction and identified many buried cultural features, as anticipated. After pipeline construction was completed, a second sample of sites was excavated, focusing on monitoring discoveries. Important archaeological information was retrieved, while not affecting construction schedules.

**Period of Performance:** 2003-Present  
**Responsibility:** Subcontractor and Prime Contractor for Archaeology in Colorado  
**Project Area:** northwestern Colorado  
**Project Highlights:**  
- Class I and Class III cultural resource inventory  
- Archaeological data recovery and monitoring  
- Popular Report as portion of mitigation
Pipeline Projects

**Project:** Overland Pass Pipeline  
**Client:** Natural Resource Group, LLC for Overland Pass Pipeline Company

Alpine was responsible for the cultural resource clearance on the Colorado and Wyoming segments of the Overland Pass Pipeline, which carries natural gas from Opal, Wyoming to Conway, Kansas. In the 321-mile-long Wyoming portion of the project, Alpine conducted pre-construction excavation of three sites, photodocumented three historic sites, and oversaw the archaeological monitoring of construction. In Colorado, Alpine carried out a cultural resource inventory and assessment of the geomorphological landscape along the 171-mile-long pipeline and its associated facilities and access roads. The survey resulted in the recordation of 69 historic and prehistoric sites and 51 isolated finds. Considerable effort was made during the inventory phase to avoid significant sites in the project area, resulting in only one site requiring additional documentation prior to the initiation of construction activities. The project encountered numerous historic canals and railroads, which were avoided by boring beneath them.

Archaeological monitoring of 492 miles of pipeline construction was completed in November 2008 and a total of 144 discoveries were made during construction, resulting in 29 newly discovered sites. Alpine is working with agency archaeologists to develop a treatment plan for the post-construction data recovery phase of the project.

**Period of Performance:** 2005-Present  
**Responsibility:** Subcontractor for Archaeology in Colorado and Wyoming  
**Project Area:** Northeastern Colorado and southern Wyoming  
**Project Highlights:**
- Class I and Class III cultural resource inventory in Colorado
- Avoidance of impacts to nearly all historic properties in Colorado
- Archaeological data recovery
- Photodocumentation of historic sites in Wyoming and Colorado
- Archaeological monitoring in Wyoming and Colorado
- Post-construction data recovery in Wyoming and Colorado

ALPINE ARCHAEOLOGICAL CONSULTANTS, INC.
Pipeline Projects

**Project:** Ruby Pipeline (FERC)
**Client:** Environmental Planning Group, for Colorado Interstate Gas Company

Alpine is presently conducting a cultural resource inventory of the 182-mile-long Utah portion of the proposed 675-mile-long Ruby Pipeline, scheduled for construction in 2010. Inventory of the 42-inch natural gas pipeline in Utah has thus far resulted in the recordation of 104 historic and prehistoric sites and over 200 isolated finds. The inventory is ongoing.

Efforts are being made to avoid significant or sensitive sites in the project area. The project has encountered several historic canals and railroads, which will be avoided by boring beneath them. A historic building and a prehistoric rockshelter site have already been avoided by rerouting the centerline. During construction, archaeological monitoring will take place in locations along the route where there is potential for buried cultural resources.

**Period of Performance:** March 2008-Present
**Responsibility:** Subcontractor for Archaeology in Utah
**Project Area:** Northern Utah
**Project Highlights:**
- Class I and Class III cultural resource inventory
- Avoidance of impacts to significant or sensitive historic properties

**Project:** Piceance Basin Lateral

**ALPINE ARCHAEOLOGICAL CONSULTANTS, INC.**
Pipeline Projects

Client: CH2M Hill/Trigon for Overland Pass Pipeline Company

Alpine oversaw the cultural resource inventory, pre-construction data recovery, and archaeological monitoring for the Oneok Piceance Basin Lateral pipeline that extends 152 miles from Meeker, Colorado to Wamsutter, Wyoming. The inventory phase included the documentation and reevaluation of 102 culturally significant archaeological sites located in the proposed right-of-way. Following the inventory fieldwork, Alpine carried out backhoe testing at 21 sites considered to have the most potential for buried cultural deposits. This work was an effort to reroute and avoid archaeologically important sites whenever possible. As a result, only six archaeological sites were selected for pre-construction data recovery.

In 2008 and 2009, Alpine conducted extensive data recovery at four prehistoric and two historic sites that would be impacted by pipeline construction. Construction of the pipeline began in 2008 in those areas not scheduled for excavation and continues during 2009, with Alpine archaeologists providing monitoring services throughout construction. Alpine ensured that archaeological discoveries made during monitoring were handled efficiently and thoroughly, so construction activities were not interrupted.

Period of Performance: March 2007-Present
Responsibility: Subcontractor for Archaeology in Colorado and Wyoming
Project Area: Northern Colorado and Southern Wyoming
Project Highlights:
- Class I and Class III cultural resource inventory
- Pre-construction archaeological data recovery of six sites
- Archaeological monitoring of pipeline construction
- Avoidance of impacts to significant or sensitive historic properties
Pipeline Projects

Project: Meeker Segment of the Pathfinder Pipeline Project
Client: AECOM Environment for TransCanada Pipeline USA Ltd.

Alpine conducted a cultural resource inventory for the 130 mile-long Meeker Segment of the Pathfinder Pipeline project. The lateral extends from western Colorado’s Piceance Basin to existing pipeline facilities near Wamsutter, Wyoming. The 82-mile-long Colorado portion of the inventory resulted in the documentation and evaluation of 59 prehistoric and historic archaeological sites and 29 isolated finds within the proposed construction corridor. In Wyoming, Alpine archaeologists documented 50 cultural resources sites and 29 isolated finds in the 48-mile-long segment.

If this segment is constructed, archaeological monitoring will take place in locations along the route where there is potential for buried cultural resources. Using data from previous pipelines that traverse the area, Alpine has identified at least 99 buried archaeological sites that will need to be mitigated by archaeological monitoring during pipeline construction.

Period of Performance: 2008
Responsibility: Subcontractor for Archaeology in Colorado and Wyoming
Project Area: Northern Colorado and Southern Wyoming
Project Highlights:
- Class I and Class III cultural resource inventory
- Avoidance of impacts to significant or sensitive historic properties