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# Ruby Pipeline Excavations: Archaic Great Divide Phase through Protohistoric Period Occupations in Lincoln and Uinta Counties, Wyoming



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## Introduction

Excavations conducted by MAC in 2010-11 for the Wyoming portion of the Ruby Pipeline resulted in identification of occupations ranging in age from the Archaic Great Divide Phase (7830 BP) through the Protohistoric Period (80 BP). Great Divide Phase dates were recovered from a deeply buried camp (48LN4114) along the Hams Fork River near Opal and an isolated hearth (48UT2696) beside Little Muddy Creek in Cumberland Flats. On the eastern slope of Oyster Ridge, sites 48LN1301 and 48LN3997 preserved Opal, Pine Spring, Deadman Wash, and Uinta Phase occupations, with house pits in Uinta and Pine Spring Phase components at 48LN3997. A probable Archaic Bridger chert chipping station (48LN2043) was found in the Dry Muddy Creek drainage. Finally, a Protohistoric camp and antelope processing site lacking trade goods (48LN2041) was found along Dry Muddy Creek southwest of Opal. Results were notable for the large number of diagnostics and decorative items found projectwide as well as for the collection of Shoshonean artifacts and antelope bone recovered from 48LN2041.

## 48LN1301

At site 48LN1301, situated northeast of Cumberland Gap and east of Oyster Ridge, a 208 sq m block was excavated to explore Late Prehistoric and Early and Late Archaic occupations. The upper of three cultural zones yielded Rose Spring points and two radiocarbon ages indicating association with the Late Prehistoric Uinta Phase. The middle zone, a Pine Spring Phase occupation, was dated by Duncan-Hanna points and a radiocarbon age of 3770±40 BP. The lower cultural zone, contained at or near the base of sand shadow deposits, was dated to the Early Archaic Opal Phase by two radiocarbon ages as well as Northern and Elko Side-notched points. One large semi-circular depression similar to a house pit that opened to the east was associated with the Early Archaic component. Hundreds of projectile points and point fragments as well as domestic items including three bone awl/punch fragments and a bone bead were recovered from these excavations.

## 48LN3997

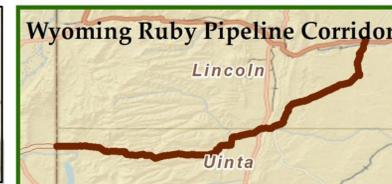
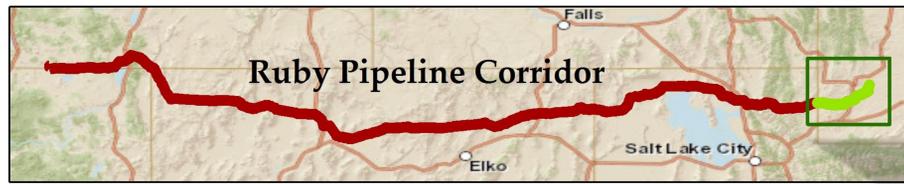
The Bathub Site (48LN3997) is located east of Oyster Ridge and northeast of Cumberland Gap. In 2010 and 2011, MAC excavated 268 sq m centered on a sand shadow below a low ridge. Stratified Uinta Phase and Pine Spring Phase cultural levels were identified in the field; a discrete Deadman Wash Phase occupation was later identified through radiocarbon dating. The upper cultural level yielded small arrow points consistent with the Rose Spring style and six radiocarbon dates that confirmed the presence of significant materials associated with the Late Prehistoric Uinta Phase. In addition to numerous small basin features, three house pits were identified. This cultural level is notable for its decorative artifacts, including stone and bone beads and a pendant fragment. The Archaic lower cultural zone yielded dates of 4230±30 BP from a floor feature in a probable basin house and 4310±90 from an unassociated basin hearth, both consistent with the age of the McKean Complex in the Wyoming Basin. Associated projectile points are either Duncan-Hanna or small side-notched styles similar to types common to the earlier Archaic periods. A pendant and a possible gaming piece appear to be associated with this component. Pine Spring Phase artifacts differ from the Late Prehistoric assemblage with a higher percentage of very large cores, flake tools, and primary and secondary flakes of local materials. Obsidian flakes and tools, including one Rose Spring point, are associated with both components. Finally, the discrete Archaic Deadman Wash Phase occupation was located at the southern edge of excavations, dating to 2430±30 BP and represented by at least six overlapping hearths.



48LN3997 Pine Spring Phase House Pit



Ruby Pipeline Project Area Overview West over Dry Muddy Creek Basin



48LN1301 Projectile Points



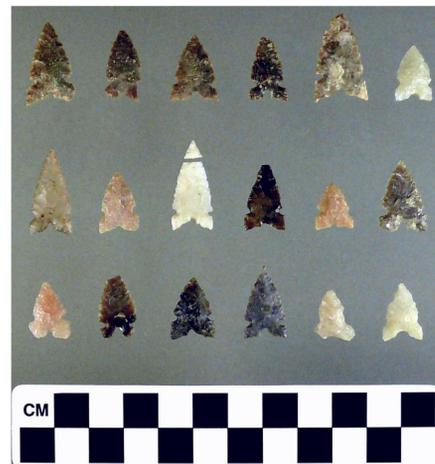
48LN3997 Projectile Points



48LN4114 Projectile Points



48LN2043 Projectile Points



48LN2041 Tri-notched Projectile Points

## Radiocarbon Determinations

Site	Feature (F), Sample (S)	Sample Description	<sup>14</sup> C Age B.P.
48LN1301	F3, S61	Sage charcoal	1220 ± 30
	F3, S62	Sage charcoal	1070 ± 30
	F32, S38	Sage charcoal	3810 ± 40
	F14, S147	Sage charcoal	5420 ± 40
48LN2041	F24, S177	Sage charcoal	5770 ± 40
	F14, S92	Sage charcoal	100 ± 30
	Non-feature, S96	Sage charcoal	80 ± 30
48LN3997	F17, S105	Sage charcoal	150 ± 30
	F6A, S73	Sage charcoal	160 ± 30
	F33, S106	Sage charcoal	2430 ± 30
	F17, S34	Sage charcoal	1220 ± 30
	F49 (F48 House), S200	Sage charcoal	1350 ± 60
48LN4114	F117, S4961	Sage charcoal	1330 ± 30
	F41, S154	Sage charcoal	1230 ± 30
	F68 (F51 House), S222	Sage charcoal	1320 ± 60
	F26 (F29 House), S221	Sage charcoal	1180 ± 40
48UT2696	F22, S56	Sage charcoal	4310 ± 90
	F112 (Archaic house), S4778	Sage charcoal	4230 ± 30
	F12, S426	Greasewood charcoal	6290 ± 40
48LN2041	F1	Sage charcoal	6700 ± 40
	F9, S157	Sage charcoal	7310 ± 40
48LN2041	F1, S2	Sage charcoal	7830 ± 40



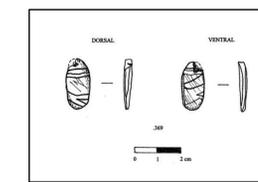
48LN3997 Sample of Decorative Items



48LN2041 Paired Wolf Canine Pendants



48LN1301 Bone Bead



48LN2043 Stone Pendant



48LN2041 Shoshone Knives



48LN3997 Late Prehistoric House Pits (2 of the 3)

## 48LN4114

Site 48LN4114 is a large multicomponent campsite located at the northern edge of the Hams Fork River valley west of Opal. Deeply buried charcoal staining detected during open trench inspection prompted data recovery totaling 32 sq m. At least three Archaic components (ca. 7300, 6700, and 6300 BP) associated with the Great Divide and Opal Phases were encased in extensive aeolian sand deposition, capped by ca. 2 m of culturally sterile mixed alluvial and slopewash deposits. Excavations produced 13 small features with about 15,000 pieces of chipped stone debitage and 60 tools. Very few ground stone or faunal remains were recovered, and little evidence of subsistence was preserved. Results documented a campsite repeatedly reoccupied by Early Archaic Period groups drawn to the area by resources available along the Hams Fork River.

## 48LN2043

Site 48LN2043 is a 40-acre prehistoric lithic scatter and sparse historic trash scatter just north of Dry Muddy Creek. Seventeen sq m were excavated, revealing a chipping station containing nearly 10,000 pieces of chert debitage in the targeted cultural level at ca. 150 cms. Only three flake tools and two cores were recovered amidst the dense amount of debitage. The cultural level is undated; no in situ charcoal was recovered, and OSL dating produced an unreliable age. It is probably Archaic in affiliation, with overlying, heavily disturbed cultural levels including Late Prehistoric projectile points similar to a Rose Spring point and an Eastgate point. Not to be outdone by other Ruby excavations which contained decorative items, the site produced one stone pendant that was associated with the overlying Late Prehistoric cultural levels.

## 48UT2696

The buried portion of this Archaic Great Divide Phase campsite (48UT2696) along Little Muddy Creek in Cumberland Flats consisted of a basin hearth with an adjacent oxidized stain discovered during open trench inspection. The hearth, F1, was found in the trench wall at 80 cm below bladed surface. Exposed in plan, it measured 48 cm in diameter and 10 cm deep. A red linear oxidation lens, F2, was located at the same depth about 40 cm west. No artifacts or intact living surface were found in the 2 sq m around the features. The flotation sample from the hearth yielded small amounts of burned and unburned bone, several microflakes, three charred sedge (*Scirpus* sp.) seeds, one charred goosefoot (*Chenopodium* sp.) seed, and sage charcoal. The charcoal sample yielded a conventional radiocarbon age of 7830±40 BP, making it the oldest feature dated on the Ruby-Wyoming project.

## 48LN2041

At the Carter Lease Site (48LN2041) along Dry Muddy Creek, a Protohistoric camp and faunal processing location was investigated in a 185 sq m area. Tri-notched points, Shoshonean knives, and flat-bottomed Intermountain ware ceramics were all present. Four overlapping radiocarbon assays were Protohistoric in age, but, typical of many such sites in the region, no Euroamerican trade goods were identified during excavation or by a metal detector survey. At least 14 pronghorn ranging in age from less than a year to six years were heavily processed, with entire carcass utilization represented; mandibular tooth eruption/wear suggests occupation between mid-September and mid-October. In addition, at least three beaver (including 16 bones with cutmarks reflective of meat removal) and several rabbit bones exhibiting evidence of groove-and-snap bead production were identified. Bone ornaments included beads and a pair of probable wolf canine pendants. Obsidian sourcing identified the majority of tested artifacts to Malad, Idaho.



48LN1301 Early Archaic Possible House Pit