BASIN - DAM DESCRIPTION

Remains of two full walls intersect at the basin dam's most southerly point. From this point one wall runs approximately 70° northward. The other wall runs approximately 0° northward before its plane of the wall is intersected by a niche cut into its eastern wall 12' ±. The niche is 9'-8" wide and returns to 20' ± before intersecting with the plane of the northeastern wall.

Northwest wall

The southwest wall at its most westerly point is vaguely defined because of Mt. 15 road construction obliterating its connection to its headrace. At this end, the construction of the wall running S.W. is a slightly battered stone face on the N.W. wall topped with a small terry of 1 ft. ± and gradually sloping to the center of the basin behind. The stonework is field stone roughly dressed and roughly dressed. The wall presumably a gravity wall given the amount of surcharge affecting it. The wall is dry laid and fills back into the wall with occasional header stones also undressed. No vertical seams appear in the remaining 27' ± of stone-faced wall to indicate change in construction. The stone is 43" long 9" high stands out from the nature of its other stones in the wall. It is larger and has a more dressed appearance than the
dry plumb. Its top is 3½ feet from the top off the present formed material and is found half way between its ends of its remaining stone pad. Examining its wall further to the south east no stone facing is found on the wall now more appropriately termed a beam. Stone from its earlier facing forming a similar nearly vertical plane as the former stone cut is strewn down the front of its wall mixed in with the fill material. Much of this stone is visible on its surface at its southeast end of its southwest wall or its intersection of its two remaining principle walls.

Southeast wall

The southern portion of S.E. basin-dam wall is without a stone face. Trench number 1 exposed and verified its stone construction seen elsewhere in the basin-dam. Seen also in trench 1 is the rip rap stones behind the outer face. This is strong evidence of its gravity wall construction common in such civil structures. A 27 ft length of stone faced wall is observed approx. 27½ N.E. of the point of the S.W. and S.E. walls. This field stone randomly dry laid in this area is smaller (in size range of 7½ – 12” long x 3½ – 8” high) than in the stone faced portion of the N.W. wall. It also has a face roughly dressed cut in front of this portion of stone faced wall than on that on the S.W. wall. Yet field stones
presumably from this wall can be observed in front of it. The lesser encumbrance results in a slightly vertical dimension (7 ft. at its highest) for the N.W. wall. The wall stands in two reasons: 1) an original battlement and 2) a lowering of the wall toward its center. With 3 ft. from its N.E. end the wall angles out slightly in what appears a purposeful manner rather than its effects of nature. This appears to have been done in order to intercept the southwest end of the south wing wall of the niche. This may have been responsible for the collapse of the portion of the wall between the niche wing wall and its remaining stonewall just discussed.

The most exceptional feature of the basin-down self today is the niche. The niche is comprised of a stonewall running parallel with the remainder of the S.E. wall set back approximately 3 ft. The 9" wicket of the niche is defined by two wing walls perpendicular to the back wall on the S.E. and S.W. sides of the space. Much smaller field stone from the other walls is found in the niche. The field stone found here has a distinct coursing unlike the other part of the N.E. wall and a stone facing remaining. Its stone work has a larger dimensional range (10"-23" long x 3"-8" high).
Both wing walls do not have their stonework tied into the back wall indicating they were not constructed at the same time as the back wall. Yet the similarity of stonework in all three walls of its niche and the purposefulness of the set back of the back wall from the plane of its remainder of its N.E. wall and the angled part of field stone wall S.W. of its niche supports an early relationship of the back wall and its present wing walls.

The S.E. wall (at side of its N.E. end) N.E. of its niche is in an approximate line with its angled part of its stonewall to the S.W. and its projected intersection of the S.W. wing wall and that line. It lacks any stonewall facing but continues at an approximate same height as the rest of its basin dam for approximately 20 ft before tapering down to the S.E. The 20 ft length is cut this long in order to allow its users.

The 20 ft length of its S.E. wall beyond its niche is only long enough to allow its basin dam to return with a N.E. hermed wall, at its N.E. retaining wall of the wall holding stock. This hermed wall runs 50 ft before it tapers down to private property. A presumed extension of this wall running north west intersecting with its head race was razed.
BASIN

The basin behind the dam structure is at an average of 6 ft. below the top of the walls around. The profile at present is gradual to its lower point. No inner vertical walls have been found to indicate rocking by erosion.

The top of the walls at present are not wide enough to allow passage of ore wagons.

It is not known at present whether or not until basin area was excavated, as seen today, in its original state.

TAILRACE

The presumed water power system at site 18 FR 320 would require a means by which to drain the water used to turn any water wheels. Such a drainage system known commonly as a tailrace would have served a water power system predating turbines and steam engines.

Two drainage patterns presently drain the immediate area of site 18 FR 320. The drainage for the removal of the adjacent R1.15 appears to be the newer of the two systems in that its primary water source is R1.15, c. 1960.

Once it has passed beneath R1.30 it enters a modern concrete culvert immediately south of the site flows eastward down a series of small rapids in a meandering fashion and through a 4 ft. high
The termed wall mentioned above runs parallel N.-S. 1,700 ft. approximately 150 ft. to the east. Its southern end continues at its full height until its surrounding grade meets it to approximately 1 ft. south of the 12 ft. drainage slope. It is terminated to the north by another term perpendicular to it.

Shoaled for 12 ft. E.O.L., the original traffic corridor is handled in the immediate area. Section BPK 310 by a collared steel culvert pipe under 12 ft. E.O.L. and east of the basin dams. A 1 ft. stone retaining wall approximately contemporary to the steel pipe with holds the surcharge of the road. The eastern course of this drainage is kept very straight by its southern mast made bank - term. The northern bank is a steep natural bank. The construction of such a long flat and lightly banked term appears extravagant for such a small drainage pipe at 12 ft. E.O.L. The immediacy of large drainage ditch to the basin - plant suggests its use as a tailrace. Perhaps its most convincing evidence in support of the termed drainage ditch being a tailrace is the amount of excavation done to bring its grade of the ditch tailrace down to a minimum elevation above it. Streams yet still provide positive drainage. This amount
of work would be unnecessary for the road drainage. The purpose of such a deep cut would be for maximum head for a water power system in the works at site 18 FK 320.

The present difference in elevations between the bottom of tailrace and the highest point on the dam basin is 24.93 ft. Head, i.e., height between the surface of the headrace water and the surface of the tailrace water, would be in the neighborhood of 24 ft, allowing for an arbitrary "depth of tailrace water" and a "clearance" below the top of the dam and above the top of the headrace water governed by a spillway. These figures do not account for erosion at the top of the dam and deposition of silt in the present tailrace. Confirmation of the headrace water height is sought from excavations of the headrace north of site 18 FK 320 being carried out by Mr. Asr. The profile at this point shall also guide us to the flow characteristics of the headrace and enable us to derive a horse power figure for the water power system.

Such a head would be ample for an overshot water wheel.