Bloomington Canyon Mine

Bloomington Canyon, one mile west of the town of Bloomington (Figure 162), has been the site of several different episodes of phosphate exploration and mining. The first development of the phosphate ore in the Canyon was reported in Richards and Mansfield (1911). They described several prospects that were opened in the phosphate shales (Figure 163). Mansfield (1927) elaborated on these prospects when he reported that the discovery of phosphate float material on the south side of the Canyon led to the opening of two pits by H. H. Broomhead of Bloomington. Even the development of the Consolidated Mine in 1930 in Little Canyon, a branch of Bloomington Canyon to the north, did not encourage further exploration and development of the phosphate in the Canyon proper. In 1942-1943, the vanadium explorations of Wyodak, discussed earlier in this report, opened several inclines and underground developments on the north side of Bloomington Canyon. The principal development was Wyodak's T14S incline. This incline consisted of about 741 feet of total underground workings (see Table 8).

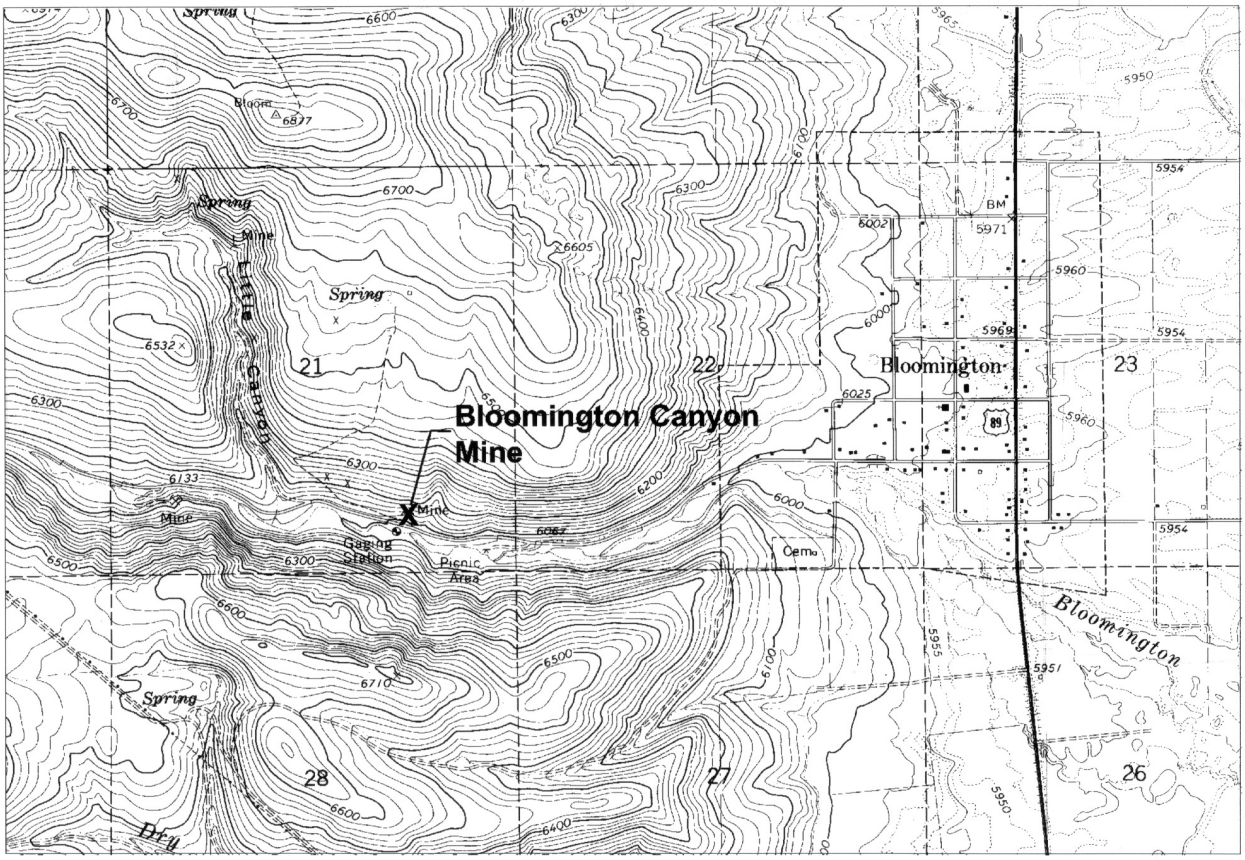

Figure 162. Map showing the location of the Bloomington Canyon Mine, Bear Lake County, Idaho.

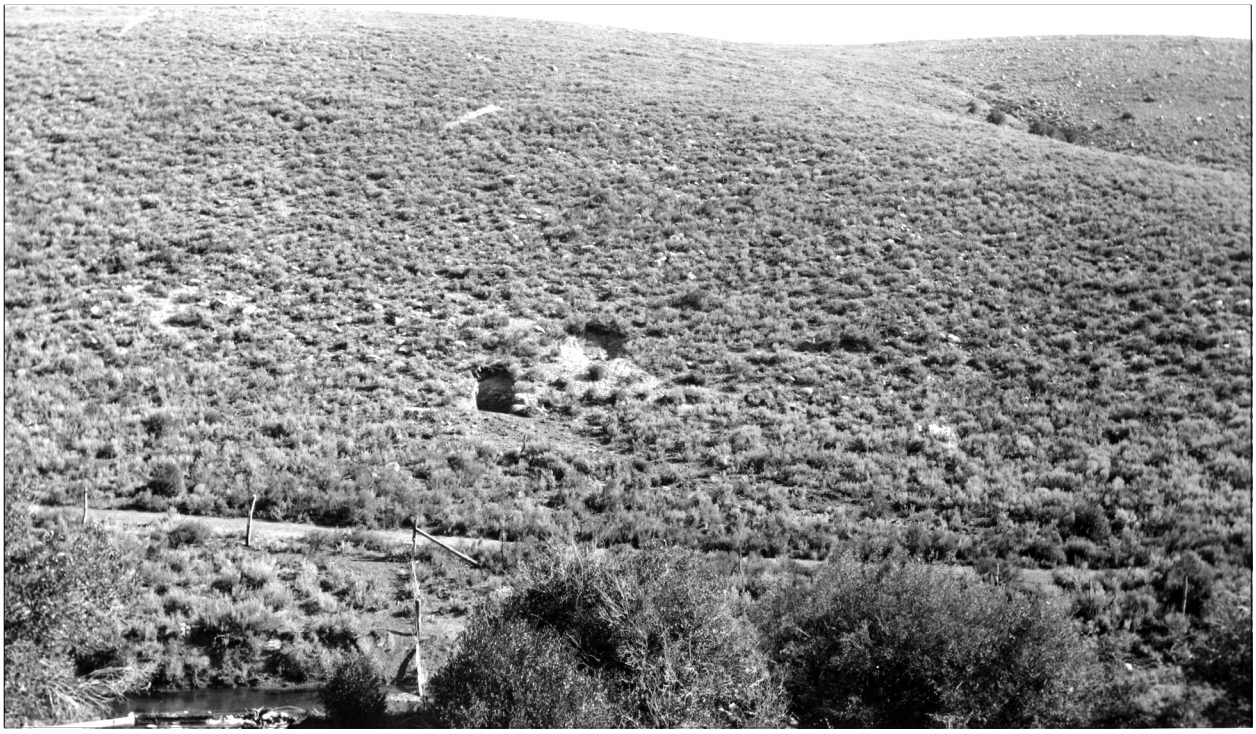

Figure 163. Phosphate prospects on north side of Bloomington Canyon, date unknown. Photo by R. W. Richards, #118, USGS Photographic Library.

After the Wyodak exploration and development, the property remained idle until November 7, 1961 when the Ruby Company (J. R. Simplot Co.) applied for a competitive phosphate lease from the Bureau of Land Management. A phosphate lease sale was held on June 7, 1962 with the Ruby Company as the high bidder. A phosphate lease, I-012982,was issued to the Ruby Company on July 1, 1962 for Lot 4 and the SW¼SE¼ of Section 21, T. 14 S., R. 43 E. The Ruby Co. did not develop the lease and in 1973, assigned the lease to Earth Sciences, Inc. (ESI).

ESI had performed some preliminary exploration work on the lease in 1972 while the sale was being negotiated with Simplot. This preliminary exploration consisted of driving an 8x8½-foot tunnel about 150 feet deep from an outcrop in Bloomington Canyon just west of the Wyodak T14S incline in order to collect bulk samples of the phosphate (ESI unpublished information). Starting in August, 1973, this tunnel was extended to the west and north until a major fault was encountered at about 690-700 feet from the portal. An offset drift was driven 190 feet eastward to intercept the vanadiferous zone of the phosphate rock. This underground venture was concluded in 1974 and is referred to as the 1974 tunnel.

In 1975, ESI located a new portal a few hundred feet east of the T14S incline (Figure 164). This development work consisted of about 2,700 feet of underground workings and is called the 1975

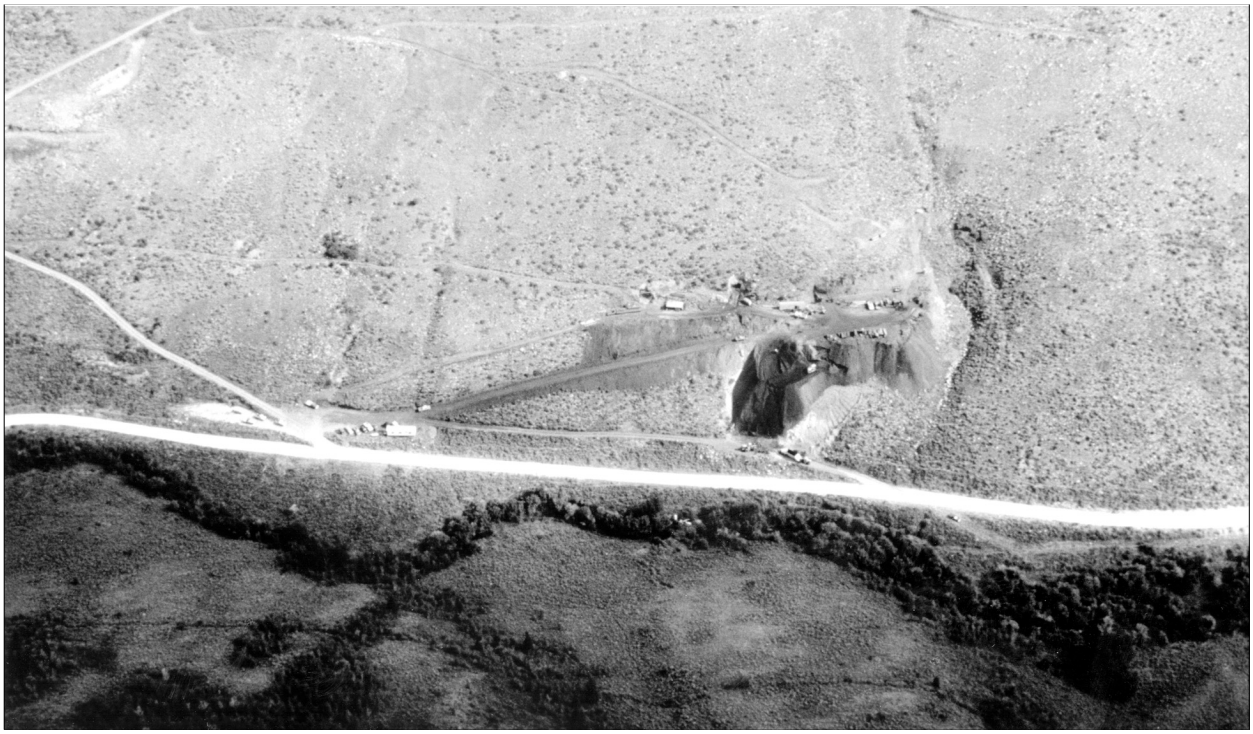

Figure 164. Bloomington Canyon Mine, view north, August 12, 1975. Photo by Peter Oberlindacher, BLM.

tunnel (Figure 165). Figure 166 shows a plot of the T14S incline, the 1974 tunnel, and the 1975 tunnel. The purpose of the 1975 tunnel was to prove the success of a continuous mining machine in excavating phosphate ore, to provide bulk samples and to determine existing mining conditions in the phosphate rock. The vanadiferous phosphate ore mined in 1973-1974 and in 1975, was shipped to a processing plant in Wyoming. Gulbrandsen and Krier (1980) reported that ESI's underground work in Bloomington Canyon had created new interest in large-scale underground operations in the phosphate field.

On November 1, 1984, ESI's Federal phosphate lease was assigned to the Conda Partnership, an established phosphate mining company. The Conda Partnership did no development on the Federal lease in Bloomington Canyon and on April 1, 1993 assigned the lease back to ESI. ESI has reclaimed the portal areas of their two tunnels and no further activity has occurred.

Figure 165. Bloomington Canyon Mine, view north, November, 1978. Photo by Peter Oberlindacher, BLM.

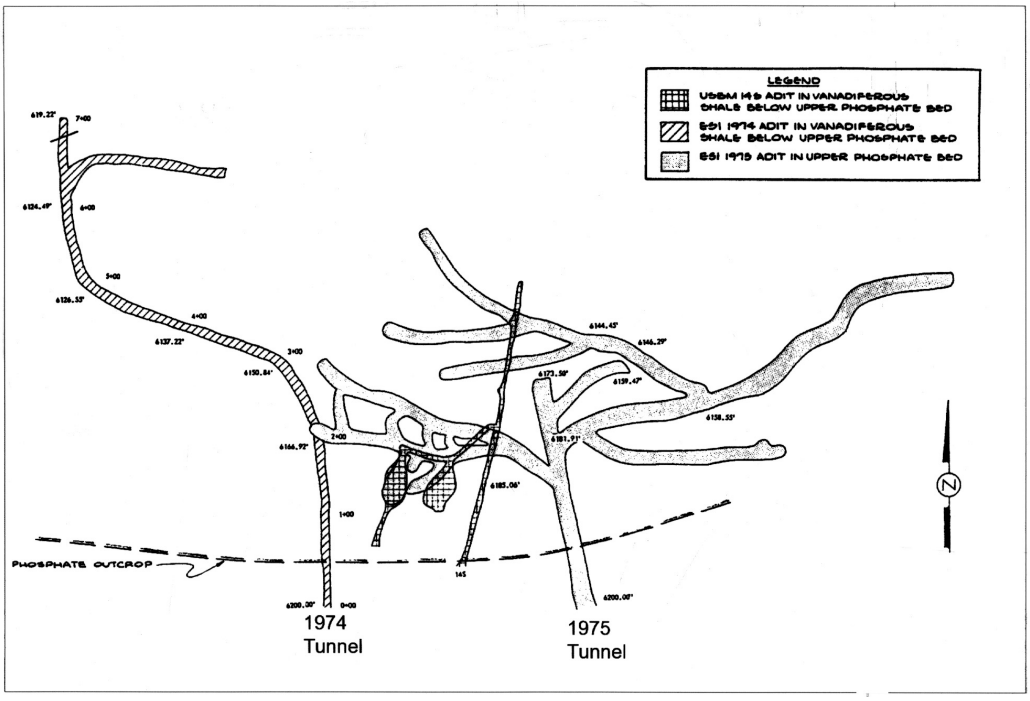

Figure 166. Underground mine map, Bloomington Canyon Mine, October, 1975. Map courtesy of Earth Science Incorporated.