

## Henry Mine

The Henry Mine, operated by the Monsanto Company, is located in T. 6 S., R. 42-43 E., just to the southeast of the small village of Henry, Idaho (Figure 155). The phosphate resources in the area of the North Pit of the Henry Mine were first explored in 1912 by a field party of the USGS. A trench in the NE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 10, T. 6 S., R. 42 E. was excavated to sample the phosphatic shales. The trench was 350 feet long, 6 to 7 feet wide, and 4 $\frac{1}{2}$  feet deep, and cut nearly the entire phosphatic shale section (Mansfield, 1927).

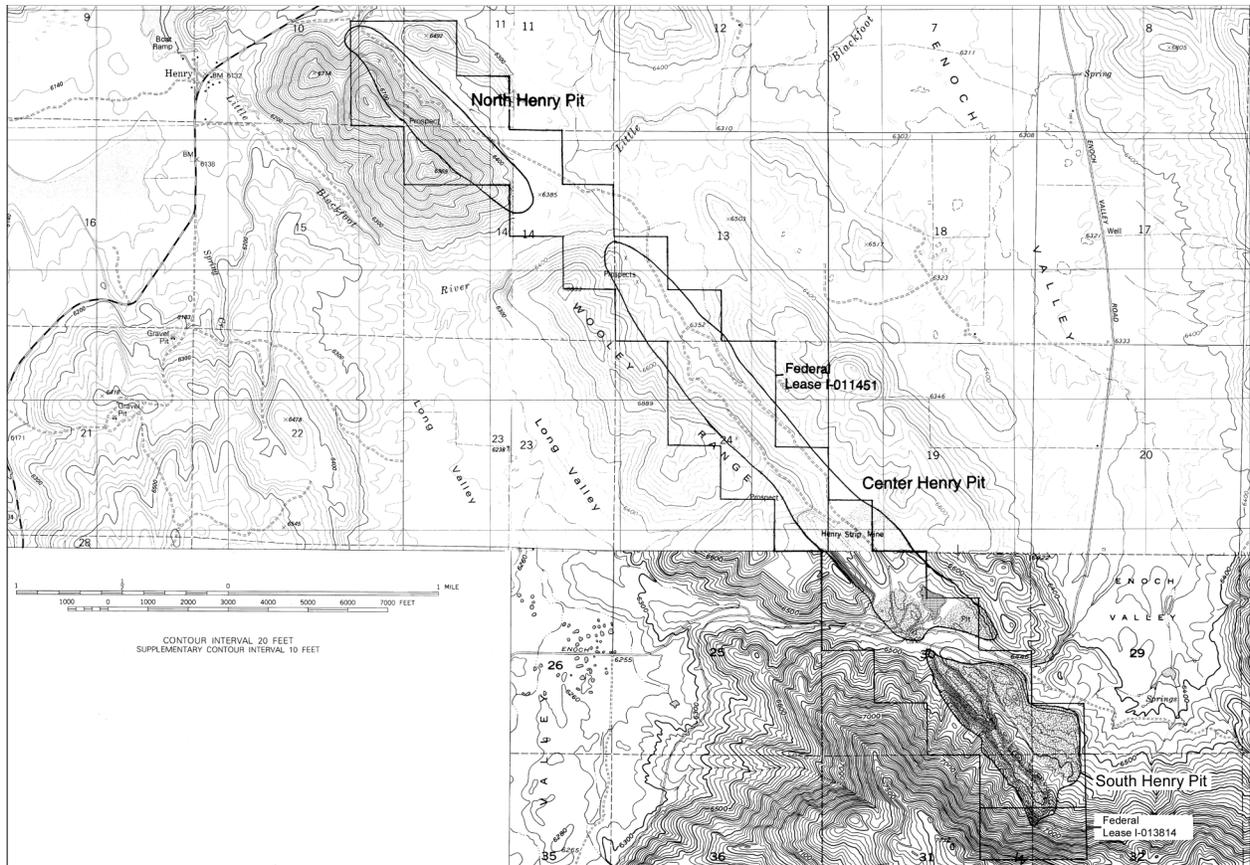


Figure 155. Map showing the location of the Henry Mine, Caribou County, Idaho.

There was no further known interest in the phosphate of this particular area until the Monsanto Chemical Company applied to the BLM for a Federal phosphate lease on March 15, 1960. A phosphate lease sale was held on July 7, 1960. There were two bidders at the sale, the J. A. Terteling and Sons Company and the Monsanto Chemical Company. Monsanto was the high bidder and was issued Federal Lease I-011451 on September 1, 1960. Monsanto's intent was to use the ore on this lease as replacement for the dwindling resources at their Ballard Mine (Carter, 1978).

Exploration on their newly acquired Federal lease (Figures 156 and 157) soon led the Monsanto Company to seek additional adjacent acreage. On December 10, 1962, Monsanto applied to the BLM for a prospecting permit covering land immediately south of Federal Lease I-011451. The BLM issued a prospecting permit on April 5, 1963. Apparently, Monsanto found phosphate ore in the area of the permit because they filed an application with the BLM for a Federal Preference Right Lease on January 11, 1965. The lease, I-013814, was issued on December 1, 1965.



Figure 156. Core drill and drill site, Henry Mine, view north, date unknown. Photo courtesy of the FMC Corporation.

Mining at the Henry Mine began in 1969. Approximately five miles of phosphate outcrop was eventually developed and mined with the entire output of the mine going to Monsanto's elemental plant at Soda Springs (USGS, 1977). The mining plan called for five mine panels or pits; Pits I and II were the site of the initial mining, Pit III was the South Henry Continuation, Pit IV was the Center Henry Continuation, and Pit V was the North Henry Continuation. The Monsanto Company contracted with the Dravo-Soda Springs for mining and ore hauling. Dravo-Soda Springs was a joint venture between the Dravo Corporation and N. A. Degerstrom, Inc. Initial mining was a scraper operation using a scraper spread for both mining the ore and stripping waste. The ore in the steeply dipping side-hill



Figure 157. Exploration trench, Henry Mine, view east, date and individual unknown. Photo courtesy of the FMC Corporation.

deposit was moved by self-discharging scrapers from the mine face to the tipple ore stockpile or directly into the tipple when shipping was occurring. Mining was later converted to a truck/shovel operation during the mining season of 1986.

Shipping the ore from the mine to the elemental phosphorous plant at Soda Springs was by trucks with two or three belly-dump trailers. These truck-trailer combinations were called “trains” and ran on the private heavy-duty haul road that was initially built for the Ballard Mine and later extended to the Henry Mine. The haul road distance from the mine to the plant at Soda Springs is about 18 miles.



Figure 158. South Henry Mine, view west, July, 1978. Photo by Peter Oberlindacher, BLM.

Mining in the South Henry Pit (Pit III) started in the fall of 1976 (Figure 158). Mining operations in that pit were completed in 1980, and mining then started in Center Henry Pit (Pit IV) in the summer of 1981 (Figures 159, 160, and 161). Mining in the Center Henry Pit was completed in the fall of 1985. The North Henry Pit (Pit V) was opened and mining operations started at the beginning of the summer mining season in 1986. Mining operations were completed at North Henry in mid-October, 1989, bringing to a close the active phase of the Henry Mine.

Reclamation of the Henry Mine progressed throughout the active mining phase with excavated waste rock being used to backfill the pits as mining advanced. Once the mine closed in late 1989, other forms of reclamation took place such as reseeding and hydromulching of the highwalls. Reclamation continued for a number of years after mining and monitoring of the reclamation effort continued even longer.

Monsanto applied to the BLM for relinquishment of the two Federal leases on December 3, 1993. The BLM accepted the relinquishments on December 7, 1993, the leases were closed thus bringing an end to the Henry Mine.



Figure 159. Center Henry Mine, August 12, 1975. Photo by Peter Oberlindacher, BLM.



Figure 160. Center Henry Mine, view northwest, 1975. BLM file photo.



Figure 161. Henry Mine, view southeast, 1975. BLM file photo.