manufacture of spark plugs and refractories. The deposit in Pershing County is said to be the only known commercial source of this mineral in the world.

The dumortierite occurs in irregular lenses in a keratophyre formation. The largest lens found contained 600 tons. The mineral is readily distinguishable by its color, which ranges from light pink to deep purple, while the keratophyre is white. The deposit outcrops on the side of the canyon so that it is mined mainly by the open-cut method; however, some has been mined by open stopes from several tunnels. Development work totals about 1,400 feet.

Mining is done with jackhammers using 7/8- and 1-inch hexagonal steel. Compressed air is furnished by a two-drill portable compressor. Drill steel is sharpened by machine. The ore is blasted with 40-percent gelatin dynamite. In places the mineral is traversed with bands of country rock, and it is hand-cobbed and sorted into two grades. The sorted material is transported to a loading bin by a home-made gravity tram equipped with two buckets holding 500 pounds each. From the loading bin it is hauled to Oreana by truck for rail shipment east. Truck haul to Oreana, a distance of 6 miles, is done on contract at $2 per ton.

The detrital material covering the deposit in places contains angular fragments of dumortierite. The detritus is scraped down the hillside by a 78-hp. Sauerman dragline outfit. The dumortierite is so valuable that fragments the size of a hand specimen are cobbed and saved.

San Jacinto District

The San Jacinto district is at the south end of the Antelope Range about 10 miles southwest of Humboldt, a station on the Southern Pacific Railroad. The district was discovered by "Poker" Brown in the early seventies. Considerable prospecting work has been done in the district, but most of it is superficial in character. The deepest shaft is 150 feet. Some silver-lead ore was shipped from here in 1876. No large production is recorded. For many years the district has been idle.

The country rock is mainly slate, limestone, and granite. The veins, which are 2 to 6 feet wide, occur mainly in the slate. The veins contain bunches of argentiferous galena and carbonate of lead.

A deposit of diatomaceous earth occurs 17 miles by road southwest of Humboldt in the east foothills of the Trinity Range. This deposit was first located about 1921. George Copley of Imlay owns 160 acres comprising the southwest part of sec. 20, R. 30 N., T. 32 E. in this area. This property has been developed by 15 shafts and open-cuts. The deepest shaft is 16 feet. The diatomaceous earth occurs beneath an overburden of detrital material 6 inches to 3 feet deep. The diatomaceous earth is 6 to 12 feet thick, where exposed in open-cuts and shafts, and extends over an area 1,800 feet long and about 600 feet wide. Tests show that the material is of good quality, and preliminary prospecting indicates a large tonnage. When the new road is completed over Rye Patch Dam, now under construction, the railroad siding at Rye Patch will be about 6 miles from the deposit.

Sawtooth District

The Sawtooth district is in northern Pershing County 12 miles east of north from Scossa by automobile road.