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MILLER MINING COMPANY URANIUM PROSPECT

In Northeastern Oregon

Soda Creek Spring Uranium Prospect

by
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Copied from report furnished by
Ernest Wells,
Miller Mining Company,
Joseph, Oregon,
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SODA CREEK SPRING URANIUM PROSPECT

Location

The Soda Creek Spring Uranium prospect is in the Ne Ne Sec. 19, T11S R46E Baker County, Oregon. The prospect will amount to relatively few acres, probably a maximum of 360, as it is on fee land; The Miller Mining Company is currently completing the leasing.

Climate

The climate is mild with warm to hot and dry summers. Winter extremes are unusual at this elevation (approximately 2,000 feet), and are short lived. Snow free winters are not unusual.

Topography

The prospect is on a bench a short distance from and above the Snake River in a relatively narrow canyon. Mountains on both sides of the river rise to a little over 5,000 feet. The canyon walls, however, are not precipitous as the argillites are conducive to quite gentle and rounded slopes.

Culture

The immediate area is devoted to ranching and mining and is very sparsely populated. The nearest trade center of size is Huntington, Oregon, 17 miles to the south. An abandoned cinnabar mine and retort lie on the opposite side of the river in Idaho.

Transportation and Roads

The Oregon Short Line Railroad connecting Robinette 17 miles to the north with the main line of the Union Pacific at Huntington is only a few hundred feet from the prospect. The road through the canyon is gravel and dirt; it passes through the prospect.

Stratigraphy and General Geology

Sediments at Soda Creek Springs consist of a dark blue, finely crystalline limestone which has been, in places, highly brecciated. Interbedded with the limestone are altered sediments, all thought to be Triassic in age. These are generally called argillites. Interbedded within the series are one time coal beds 10 to 15 feet thick which are now graphite-like in appearance, plus shales and sands. The beds, aside from the limestone, are generally incompetent. Feeder dikes of Columbia River basalt cut the argillite series which, on O'Connor Creek, have an apparent thickness of 5,000 feet. Although repetition of beds may account for some of this interval, 10,000 feet of Triassic sediments is not unusual on the Pacific Coast. In the vicinity of Soda Creek Spring dips are nearly vertical.

Soda Creek Spring Prospect

This prospect is at a spring which in recent years was hot, but has subsequently cooled. (See field book sketches.) I believe the sketches by Mr. Wells show quite well the geologic relationships as they appear. While any mineralization, save the tufa deposited

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by the spring, could not be sampled, instrument readings indicate a high percent of U_3O_8 .

It is from hydrothermal deposits similar to this that some of the best ore bodies have been developed. The waters from the spring reputedly give off a certain amount of radon gas, an element which results from the decay of radium, and it is the first product of this breakdown. A decomposed rock brought into solution results in the gas being brought to the surface in solution.

The writer believes that because of the high radioactive readings, good quality mines from similar zones, and because of the geologic relationships and ramifications, that this is an unusually good prospect. The zone of mineralization would undoubtedly come near the surface. Accessibility, climate, transportation, water, and the proposed buying station at Spokane are ideal.

Recommendations

It is recommended by this office that Northern Natural Gas Producing Company instigate immediate negotiations with the Miller Mining Company regarding this property.

s/ Emerson K. Beekly