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OIL AND GAS HISTORY OF UTAH: HIGHLIGHTS OF THE EARLY YEARS

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The first documented report of an oil seep in what is now Utah can be found in the report of Howard Stansbury's (U.S. Army Corps of Topographical Engineers) 1849-1850 expedition to explore the Great Salt Lake. While exploring the area around Rozel Point on the northeast shore, Stansbury mentioned finding "bitumen" at the edge of the lake on May 4 and May 7, 1850. Although the expedition did not include a geologist, Stansbury had been schooled intensively by the eminent Yale geology professor James Dana in preparation for leading his expedition.

While it would be nearly 100 years before the establishment of sustained commercial oil production in Utah, that period included the discovery of two commercial natural gas fields and numerous exploration drilling attempts, some of which encountered significant oil and gas resources. Undoubtedly, several of these would have been commercial had they been located in less remote and rugged places. The story of these efforts is both interesting and little known.

Proof that oil was retorted from Green River oil shale near Levan in Juab County before the drilling of Drake's well on Oil Creek in Pennsylvania in August 1859 remains elusive. However, a circumstantial case for this claim can be made based on the evidence provided by a USGS geologist in 1916 (USGS Bulletin 961) and a subsequent effort made by Utah Geological and Mineral Survey director Arthur Crawford in 1961. Both men cite the presence of an old retort in close proximity to a small excavation in a nearby oil shale outcrop. Interviews were conducted with elderly residents of the area and it seems quite possible that the activity dates back to the period of 1855-1859, a period bracketed by the Walker War and before the Blackhawk War, two Indian uprisings that effectively limited any remote work by Mormons in the area of the retort while they were in progress. Supposedly, about one barrel of oil per day was produced and used as leather harness dressing. Even if true, no significant economic activity took place and Pennsylvania's claim to the first oil well is unchallenged. The Utah occurrence simply adds to a number of other footnotes with respect to pre-1859 oil discoveries.

The first attempt to drill for oil in Utah was the Bamberger & Millis #1, located about one-half mile south of Green River. The well was drilled on an oil placer mining claim through the

Mancos shale, Cedar Mountain and Morrison formations to a depth of approximately 1,000' with no show of hydrocarbons. Simon Bamberger, a partner in the well, went on to become the fourth governor of Utah. He was also the first democrat elected to the office and the first and, so far, only Jewish governor of the state.

Several sources state that the first commercial natural gas production in Utah was achieved in 1925 at Ashley Valley field in the Uinta Basin near Vernal. However, USGS geologist George Richardson (USGS Bulletin 260) documented the discovery of biogenic gas near Farmington Bay, about twelve miles north of Salt Lake City, in 1892. Approximately twenty wells were drilled in the area. During the winter of 1894-1895, a 6" pipeline was laid from the wells to Salt Lake City and natural gas was supplied to the city at about 7,000 Mcfg per month. This gas was presumably used for lighting, and it was surely a commercial venture.

Offshore drilling made an early appearance in Utah in 1896, the same year as drilling commenced from a pier in Summerland, near Ventura, California. The drilling of a well approximately one-quarter mile from shore in the Great Salt Lake at Rozel Point was detailed in USGS geologist James Boutwell's "Oil and Asphalt Prospects in Salt Lake Basin" which was included in 1904's USGS Bulletin 260. Boutwell examined heavy oil seeps from numerous islets near the lakeshore and described bubbles up to two inches in diameter and threads of oil six to eighteen inches long in the water. At the time of his visit, a break from his primary study of the mines of Park City, five shallow wells had been drilled at Rozel Point and produced about twenty barrels of oil. The "oil" from Rozel Point exhibited 5-9 API gravity and up to 15% sulfur. The original material was used for paving in Ogden.

In 1925, natural gas was discovered in the Frontier and Morrison sands at Ashley Valley field near Vernal. A ten-mile steel gas line was built northwest to Vernal and the gas was used for lighting until WWII, by which time the gas flow had diminished and the value of the salvaged pipeline for the war effort exceeded the gas transport value.

Despite the several hundred wells drilled in Utah searching for oil since the Bamberger-Millis #1 in 1891, the first commercial discovery of oil was in the deeper Weber sandstone in September 1948, at the same Ashley Valley field as had produced natural gas starting in 1925. Equity Oil Company's Ashley Valley #1 recorded an initial potential of 300 barrels of oil per day from the Weber sand at a depth of 4,136'-4,152'. After many attempts and several significant blowouts elsewhere in the state, Utah could now claim commercial oil production and the Uinta Basin was on its way to a prolific oil and gas future.