

SOAP LAKE HEALING WATERS: THE PROOF IS IN THE OIL, PART 2

By: Kathleen Kiefer

Soap Lake is meromictic, it has two layers of water that do not intermix. The lower level of the lake is much more dense, containing a significantly higher concentration of minerals and microorganisms. Being denser and thus “heavier” the lower layer of water does not mix with the upper layer. In the early 1900’s sanitarium owners and mud bath purveyors offered their customers “deep sea baths.” It took some effort to retrieve the water from a boat perched near the north end of the lake where the water was deeper.

According to stories told by Native Americans who have been visiting Soap Lake for centuries, the lake was once much smaller than it is now. The lake was at one time nothing more than a muddy pond. The evidence of lower water levels in the past can be seen in shallow water along the west shore of the lake. On a summer day when the water is usually clear, remnants of calcified sagebrush can be seen at varying depths beneath the surface.

There are several fresh water springs along the west side of the lake. In a detailed report written in 1915 by Peter Spaberg, a scientist from the State College of Pullman, now known as Washington State University, appeared over several weeks in the Grant County Journal, Spaberg noted the following:

The lakes in the northern section of the Grand Coulee are successively higher from south to north. It follows that water from the northernmost of these lakes is comparatively fresh and palatable, the waters of the others become more alkaline. Soap Lake, the most southerly, is extremely alkaline; its waters

when they lap against the shore on windy days are beaten into great masses of white foam like soap suds.

At Soap Lake the rainfall is slight and the evaporation high. In fact, so high that by the 1940’s the lake water consisted of 20% more total dissolved solids than seawater. The lake has no outlet. The bottom is covered by clay, making it a self contained bowl holding the accumulated salts which have seeped into it for tens of thousands of years from surrounding basalt flows.

In 1970 a granite slab monument was erected on the East Beach to commemorate the efforts of former mayor M.R.Newell who lobbied the United States Congress to protect the lake from fresh water incursions by Bureau of Reclamation irrigation canals which were built along three sides of the lake. On the monument is engraved mineral content of the lake:

Sodium – Carbonate – Sulfate – Bicarbonate – Chlorine – Silica – Magnesium – Potassium – Organic Nitrogen – Calcium – Aluminum – Lithium – Fluoride – Copper – Iron – Rubidium – Phosphorus and Oil (Ichthol).

The presence of Ichthol in Soap Lake water is remarkable, especially considering that in 1905 the medical profession recognized this oily organic sulphurous preparation as a remedy with universal application. A note in the Medical Summary published in November 1915 indicated: “It cures everything from corns to consumption.” Early studies of Ichthol demonstrated physiological properties that allowed it to penetrate unbroken skin. It was first brought into commercial use in Germany in 1882 and was used

extensively to treat skin diseases and eventually became universally prescribed for a wide variety of maladies.

A Wikipedia search of Ichthol reveals that it is a product of natural origin obtained by dry distillation of sulfur-rich oil shale (bituminous schists). Further processing of the oily substance with ammonia results in a water-soluble substance called Ammonium bituminosulfonate that can be purchased at most drug stores as Ichthammol. This common drawing salve has anti-inflammatory, bactericidal and fungicidal properties and is used to treat eczema, psoriasis, rosacea, and acne, and it decreases microorganisms in the area surrounding a skin condition. The list of therapeutic values goes on. A mixture of Ichthammol and glycerol is used for topical treatment of ear infections. It also has extraordinary anti-inflammatory properties. It is recommended by dermatologists and is available in pharmacies for compounding medications.

A rare book published by Merck and Company in 1913 titled, ICHTHYOL: It’s History, Properties and Therapeutics is loaded with research and case studies of Ichthol and how it was used to treat dozens of maladies including dermatitis, herpes, gonorrhea, inflammation, abscesses, laryngitis, burns, measles, mumps, Typhoid Fever and more. The book includes the chemistry, bactericidal action and therapeutics as well as methods of administering and using Ichthol.

In a country where natural medicines and homeopathic cures are finding new and growing audiences with those looking for alternatives, it’s amazing that Soap Lake hasn’t become a mecca like



it once was. A documentary produced about Soap Lake in 2002 includes interviews with people who grew up in Soap Lake witnessing sick and injured people come for treatment to then be cured. Many of those cured stayed in town, running businesses and getting involved in city government.

There is not another body of water anywhere on the planet like Soap Lake. It is truly one-of-a-kind. Located in the heart of Eastern Washington’s Columbia Basin Irrigation Project and surrounded by farms growing food for the world. It is a stunningly beautiful place. On a quiet summer day, the lake is a perfect mirror framed by basalt cliffs.

A review of archives back to the 1920’s from the Grant County Journal published in nearby Ephrata reveal a thriving community packed with visitors. There were eight large sanitariums and dozens of cabins and cottage for rent. Those arriving without reservations could rent a tent from one of the local stores. The documentary is the best source of information about the history of

the town and includes several hundred historic photographs.

A survey of visitors to the lake on recent summer outings reveals that it has become popular with Eastern Europeans, particularly those from Slavic countries who have long indulged in salt springs and mineral spas in their home nations where these places continue to be popular destinations for people seeking rejuvenation and treatment for some medical conditions.

A beautiful facelift of the downtown area and a few new businesses paint an inviting picture. The City of Soap Lake is one of the oldest and smallest communities in Eastern Washington. Real estate prices remain low, but are beginning to rise. It would be a great place to in-

vest, but most of all, it would be a great place to take your shoes off, lay on the beach and rest in between swims in water like none other on the planet. Hard to say what it will be like in the little town on the shores of the lake once it is discovered, again.

Kathleen Kiefer, formerly of Soap Lake, Washington now living in Baker City, Oregon is a writer, photographer and filmmaker. Her articles have appeared in newspapers, magazines, annual reports and hydropower industry publications. Her photographs have won awards and can be found published in books, magazines, calendars, posters, and numerous websites. Her documentary films have won AVA Gold, Telly Bronze and Silver awards including a Telly People’s Choice award. Her YouTube channel is Kiefdoml. Her favorite subject to photograph, write-about, and to document is People.



O. A. Anderberg’s Mud Baths.

Chemical analysis of Soap Lake water as made by the chemist of the State College at Pullman, Washington:

	PARTS PER 1000
Total Solids	28. 6690
Volatile Solids.....	0.62503
Non-Volatile Solids.....	27.64186
Silicia	0.12816
Albumina and Iron Oxide.....	Trace
Calcium Sulphate	Trace
Calcium Carbonate	Trace
Magnesium Sulphate.....	0.39089
Sodium Sulphate.....	6.34872
Sodium Chloride.....	2.81384
Sodium Carbonate.....	11. 8901
Lithium Sulphate	Trace
Potassium Carbonate.....	0.51177
Phosphorus Pentoxide	0.1218
Carbon Dioxide (semi combined)	1.37034
Free Ammonia	0.34000
Albuminoide Ammonia.....	1.10600
Specific Gravity.....	1.02600

Copy of the Analysis of the mud taken from the property of O. A. Anderberg, by Peter Spaberg:

SiO2—Silicon Dioxid	Heavy
Fe—Iron.....	Trace
Al—Aluminum	Trace
Ca—Calcium.....	Trace
Na—Sodium.....	Light
K—Potassium.....	Trace
Cl—Chlorine.....	Trace
So—Sulphate.....	Trace
CO3—Carbonate.....	Trace

HYPOTHETICAL COMBINATION.

SiO2—Silicon Dioxide.
NaCl—Sodium Chlclid— Table Salt.
KCl—Potassium Chlorid—Similar to table salt.
FeSo4—Iron Sulphate—Copperas.
CaCo3—Calcium Carbonate—Chalk.
MgCo3—Magnesium Carbonate—A salt used in medicine.
Al2O3—Aluminum Oxid—Occurs as Ruby, Corundum and Sapphire, slightly radio active.