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Assessment of Physico-Chemical Analysis of Lakho Peer Spring Water, Jhall Magsi, Balochistan

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Abstract—Natural spring is an herbal situation at which water flows from an aquifer to the Earth's floor. It is a component of the hydrosphere. Spring discharge, or resurgence, is decided by means of the spring's recharge basin. Elements that have an effect on the recharge consist of the dimensions of the area in which groundwater is captured, the quantity of precipitation, the scale of seize points, and the scale of the spring outlet. The research elaborates the physical and chemical characteristics of spring water of Lakho Peer District Jhall Magsi, Baluchistan, through Atomic Absorption Spectro-photo-meter (AAS), UV visible spectrophotometer, conductivity meter, turbidity, meter portable pH meter and titration method. Lakho Peer spring is contaminated by minerals which change its chemical properties. The spring water found from mountains of lakho peer contained high levels of Total Dissolved Solids (TDS), and trace amounts of other contaminants such as Chloride (Cl), Potassium (k), Sodium (Na), Magnesium (Mg), Sulphate (S), Nitrate, pH, Turbidity and hardness. Physio-chemical assessment of the samples was analysed pre and post-monsoon seasons and comparison of the results with World Health Organizations (WHO) was done in this study of Natural Spring of Lakho Peer, district Jhall Magsi, Balochistan. The pH of water samples was directly measured by dipping pocket-size pH digital meter at the field. The turbidity, electrical conductivity (EC), chloride and sodium were tested from Pakistan Council for Research in Water Resources (PCRWR) Quetta. All the results were compared to WHO standards for drinking water.

***Keywords*—physico-chemical, natural spring, Lakho peer, TDS, EC, chlorides, sodium**