Anions, Cations, and Ionic Reactions

Hands-On Labs, Inc. Version 42-0304-00-01

Lab Report Assistant

This document is not meant to be a substitute for a formal laboratory report. The Lab Report Assistant is simply a summary of the experiment's questions, diagrams if needed, and data tables that should be addressed in a formal lab report. The intent is to facilitate students' writing of lab reports by providing this information in an editable file which can be sent to an instructor.

Exercise 1: Qualitative Anion Tests

Data Table 1. Anion Confirmation Tests.

Chemical	Anion	Observations: Addition of AgNO ₃	Observations: Addition of HCI
NaBr	Bromide	Turned milky white	Turned yellowish More of a gel
Na ₂ CO ₃	Carbonate	Thick white glob A little grainy	White sediment in a clear liquid Bubbles up
NaCl	Chloride	Milky white	White sediment visible
Nal	lodide	Yellow glob immediately when dropped in	Yellow, grainy/sediment, thick looking
Na ₂ SO ₄	Sulfate	Thickened	Very cloudy/milky
Na₂S	Sulfide	Brown Globs immediately when dropped in Still watery	Brown globs thinned out into brown pieces of sediment Still watery (brownish) looks like dirty water
Unknown #103	Carbonate	Thick white glob Turned gel	Bubbly and cloudy Very thick gel
Unknown #104	Sulfide	Brown globs immediately when dropped in Still watery	Brown globs thinned out into brown pieces of sediment Still watery (brownish) looks like dirty water

Analysis Of Anions Cations Lab Answers

M Lipman

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Qualitative Anion-cation Analysis Emil J. Margolis, 1962 Laboratory Experiments in General Chemistry and Qualitative Analysis George Willard Watt, 1951 Heavy Metals in Water (excluding Mercury) Water Resources Scientific Information **Selected Water Resources Abstracts** ,1990-10 Center.1977 **Chemical Principles in the Laboratory** Lester R. Journal of the American Water Works Association American Water Works Morss, Robert S. Boikess, 1978 Association, 1958 Vols for 2012 contain only executive summaries of articles Hydrogeochemistry of the East Bull Lake Pluton, Massey, Ontario Atomic Energy of Canada Limited, 1986 Methods for Detection, Measurement and Monitoring of Pollutants in the Aquatic Environment FAO/SIDA Training Course on Marine Pollution in Relation to Annual Report - Agricultural Experiment Station Alabama Agricultural Experiment Protection of Living Resources, 1976 Hydrogeological Characterization of the East Bull Lake Research Area K. G. Raven, 1987 In the period 1983 Station, 1906 1985 the National Hydrology Research Institute in cooperation with Atomic Energy of Canada Ltd undertook hydrogeological research studies at the East Bull Lake research area a gabbroanorthosite pluton located near Massey Ontario This report describes the methodology results and interpretation of the borehole investigations completed at East Bull Lake to measure the fundamental hydrogeological parameters of hydraulic conductivity hydraulic head and ground American Laboratory, 1978 Manual of Qualitative Analysis for Use in the Chemical Laboratory water chemistry of Dartmouth College Leon Burr Richardson, Andrew Jackson Scarlett, 1921 **Biennial Report of the Director -**Agricultural Experiment Station, Kansas State College of Agriculture and Applied Science Kansas Agricultural An Introduction to Medical Experiment Station, 1927 **Annual Report** Indiana Air Pollution Control Board, 1981 Laboratory Technology Francis Joseph Baker, R. E. Silverton, Eveline D. Luckcock, 1962 Annual Report of the Agricultural Experiment Station of the Alabama Polytechnic Institute Alabama Polytechnic Institute. Agricultural Experiment Station, 1919 Elementary Manual for the Chemical Laboratory Louis Warner Riggs, 1904 Preliminary Report of the Hakuhō Maru Cruise .1997 Water Quality Studies, Red Rock and Saylorville Reservoirs, Des Moines River, Iowa, 1989 A Laboratory Guide to the Study of Qualitative Analysis Edgar Henry Summerfield Bailey, Hamilton Perkins Cady, 1901

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