External Assay Submission Sheet
Quantitative X-Ray Diffraction

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Contact Name _____ **Phone No.** _____ **Email** _____

Company _____ **Number of Samples** _____ **Are assays supplied? (XRF, ICP etc.)** Yes/No

Methodology

Minimum amount of sample required for QXRD is 1g. Sample preparation includes pulverising and screening over 150 micron screen. A subsample is loaded into a Olympus BTX-III XRD machine and exposed for 120 cycles. The instrument uses transmission geometry to analyse samples. The resulting XRD pattern is analysed by a combination of the programs SwiftMin and XPowder; which identifies phases in a sample by comparing them against known minerals from the American Mineralogist Crystal Structure Database (AMCSD). Supplementary information such as location specific data, geological description, analytical chemistry etc. supplied by the client will also be used to identify the minerals present. Subsequent to this, quantification of the minerals present is determined using Siroquant V3.0 software.

Sample ID	**Sample Description**		
	Sample Type	***Geological Description (location, rock type, oxidised/non-oxidised etc.)***	***Additional Comments***