TCLP Multiphasic Sample Result Calculation

Enter information into blue cells

Volume of Phase 1 (aqueous layer), mL:		% of Sample from Phase 1	#DIV/0!
Volume of Phase 2 (organic layer), mL:		% of Sample from Phase 2	#DIV/0!
Volume of Total TCLP Extract, mL:	0		#DIV/0!

This information is found on the TCLP extraction logbook extract finalization section.

Weight of Sample (g):		(Digestate volume (mL))/((Sample mass (g))/(Density))
Density of Phase 2 (g/mL):		Dilution Factor = #DIV/0!
Final Volume of Digestate (mL):		

This information can be found on the prep worksheet for the waste digestion of the sample. The dilution factor should be entered into QCM instead of the sample weights from prep worksheet manager.

	As	Ba	Cd	Cr	Pb	Se	Ag
Phase 1 (prepped as TCLP), mg/L:							
Qualifier:							
Phase 2 (prepped as Waste), mg/L:							
Qualifier:							
SOP Category/Example:	1	1	1	1	1	1	1
Combined TCLP Extract, mg/L:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Qualifier	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Formula for Combined TCLP Extract (If one phase is better quantitated, SOP category 2) = (Phase X, mg/L) * (% Sample Phase X)
Formula for Combined TCLP Extract (If both phases quantitated equally, SOP category 1) = (Phase 1, mg/L) * (% Sample Phase 1) + (Phase 2, mg/L) * (% Sample Phase 2)

MDL/ PQL Calculations: same equations as Combined TCLP Extract, but use MDL in mg/L instead of Phase X mg/L

	As	Ba	Cd	Cr	Pb	Se	Ag
Phase 1 MDL (prepped as TCLP), mg/L:							
Phase 2 MDL (prepped as Waste), mg/L:							
Calculated MDL (mg/L)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Calculated PQL (mg/L)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

The dilution factor should be applied in LIMS to the 3050 waste digestion samples (do not enter weights into LIMS).
The Test ID and Matrix for the waste digestion should be set to TCLP, this will calculate results in mg/L.

Note to analysts:

1: The batch QC for the analytes comes from the more representative phase (higher %) in cases where the qualification is equal.
Otherwise the QC for the analyte comes from the batch with the better qualifier.
2: The results should be changed in QC manager to reflect the accurate concentration, MDL and PQL, then uploaded with the appropriate QC.
3: Comment in LIMS that "The TCLP extract of the sample is comprised of incompatable phases and the results have been mathematically combined."