Diabetes Data: ANOVA Table for MODEL 4: main effects plus interaction

loggluf + group + loggluf.group

NOTE: C = A + B is the decomposition SS = SSR + SSE.

k = Total number of parameters - 1
= 6 - 1 = 5

Dependent Variable: Log(GluTest)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	A 27.187[a]	5	5.437	569.463	.000
Intercept	.973	1	.973	101.906	.000
group	.104	2	.052	5.447	.005
loggluf	.675	1	.675	70.702	.000
group * loggluf	.155	2	.077	8.099	.000
Error	B 1.318	138	.010		
Total	5509.040	144			
Corrected Total	C 28.504	143			

a. R Squared = .954 (Adjusted R Squared = .952)

Number of additional parameters needed to introduce each of the main effects and the interaction

R squared/Adjusted R squared terms give an indication of whether the regression terms contribute significantly to the model. As a rule of thumb:

R squared > 0.7 implies a good fit
R squared > 0.4 implies that although the fit might not be good, there is some explanatory power in the predictors.