

**ANEXO No. 7. Análisis de Varianza para el Experimento Tipo  
"Screening" relacionado con el Caso Base**

Análisis de la Corriente, 706B (Experimento de Screening)  
02/12/2005 12:28 p.m.

#### Analysis Summary

Dependent variable: Ol\_y\_Ona\_706B

Factors:

- Carga
- Vapor E530
- P C525
- Nivel V540
- Vapor\_E532

Number of complete cases: 32

#### The StatAdvisor

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This procedure performs a multifactor analysis of variance for Ol y Ona 706B. It constructs various tests and graphs to determine which factors have a statistically significant effect on Ol y Ona 706B. It also tests for significant interactions amongst the factors, given sufficient data. The F-tests in the ANOVA table will allow you to identify the significant factors. For each significant factor, the Multiple Range Tests will tell you which means are significantly different from which others. The Means Plot and Interaction Plot will help you interpret the significant effects. The Residual Plots will help you judge whether the assumptions underlying the analysis of variance are violated by the data.

Análisis de la Corriente, 706B (Experimento de Screening)  
 02/12/2005 12:28 p.m.

Analysis of Variance for Ol y Ona 706B - Type III Sums of Squares

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
MAIN EFFECTS					
A:Carga	4065,54	1	4065,54	246,95	0,0000
B:Vapor E530	1965,49	1	1965,49	119,39	0,0000
C:P C525	133,866	1	133,866	8,13	0,0115
D:Nivel V540	3302,61	1	3302,61	200,61	0,0000
E:Vapor_E532	60,3077	1	60,3077	3,66	0,0737
INTERACTIONS					
AB	333,659	1	333,659	20,27	0,0004
AC	557,53	1	557,53	33,87	0,0000
AD	3,84338	1	3,84338	0,23	0,6355
AE	69,5315	1	69,5315	4,22	0,0566
BC	1335,54	1	1335,54	81,12	0,0000
BD	0,759528	1	0,759528	0,05	0,8326
BE	110,893	1	110,893	6,74	0,0195
CD	7,45945	1	7,45945	0,45	0,5105
CE	143,186	1	143,186	8,70	0,0094
DE	2,28445	1	2,28445	0,14	0,7144
RESIDUAL	263,411	16	16,4632		
TOTAL (CORRECTED)	12355,9	31			

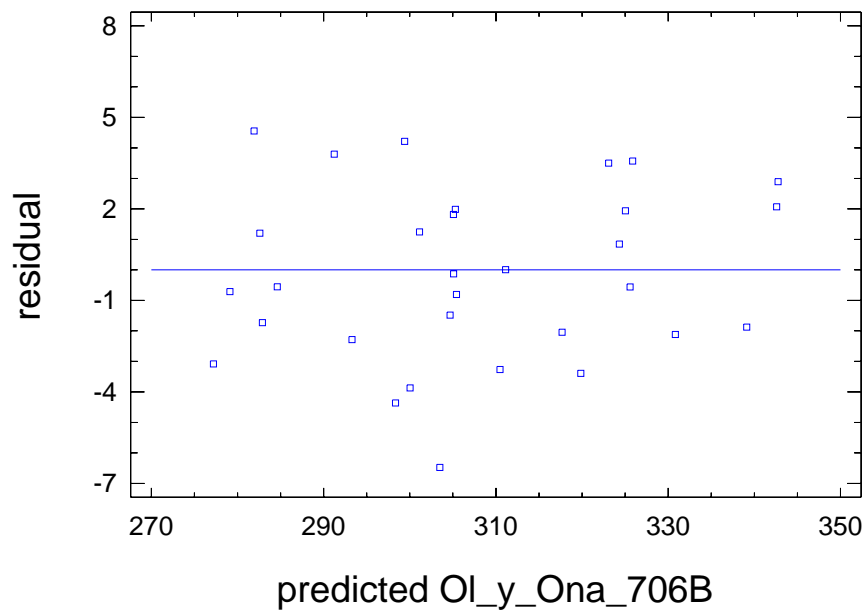
All F-ratios are based on the residual mean square error.

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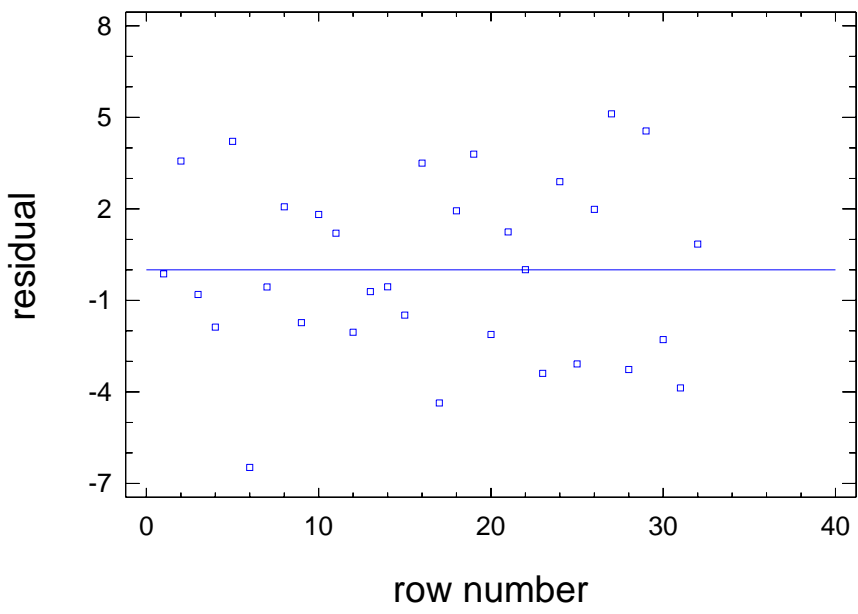
The ANOVA table decomposes the variability of Ol y Ona 706B into contributions due to various factors. Since Type III sums of squares (the default) have been chosen, the contribution of each factor is measured having removed the effects of all other factors. The P-values test the statistical significance of each of the factors. Since 9 P-values are less than 0,05, these factors have a statistically significant effect on Ol\_y\_Ona\_706B at the 95,0% confidence level.

Análisis de la Corriente, 706B (Experimento de Screening)  
02/12/2005 12:28 p.m.

Residual Plot for OI\_y\_Ona\_706B



Residual Plot for OI\_y\_Ona\_706B



Análisis de la Corriente, 723 (Experimento de Screening)  
02/12/2005 12:29 p.m.

#### Analysis Summary

Dependent variable: Ol\_y\_Ona\_723

Factors:

- Carga
- Vapor\_E530
- P\_C525
- Nivel\_V540
- Vapor\_E532

Number of complete cases: 32

#### The StatAdvisor

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This procedure performs a multifactor analysis of variance for Ol y Ona 723. It constructs various tests and graphs to determine which factors have a statistically significant effect on Ol y Ona 723. It also tests for significant interactions amongst the factors, given sufficient data. The F-tests in the ANOVA table will allow you to identify the significant factors. For each significant factor, the Multiple Range Tests will tell you which means are significantly different from which others. The Means Plot and Interaction Plot will help you interpret the significant effects. The Residual Plots will help you judge whether the assumptions underlying the analysis of variance are violated by the data.

Análisis de la Corriente, 723 (Experimento de Screening)  
 02/12/2005 12:29 p.m.

Analysis of Variance for Ol y Ona 723 - Type III Sums of Squares

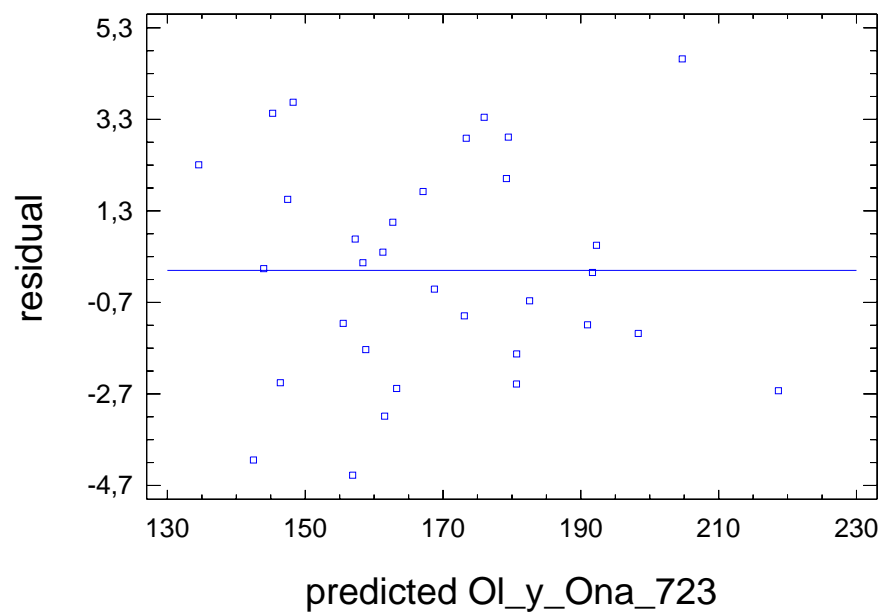
Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
MAIN EFFECTS					
A:Carga	3182,42	1	3182,42	287,30	0,0000
B:Vapor_E530	1773,99	1	1773,99	160,15	0,0000
C:P_C525	2953,35	1	2953,35	266,62	0,0000
D:Nivel_V540	2924,98	1	2924,98	264,06	0,0000
E:Vapor_E532	960,754	1	960,754	86,73	0,0000
INTERACTIONS					
AB	42,4581	1	42,4581	3,83	0,0679
AC	3,47161	1	3,47161	0,31	0,5834
AD	120,979	1	120,979	10,92	0,0045
AE	17,4345	1	17,4345	1,57	0,2277
BC	146,034	1	146,034	13,18	0,0022
BD	4,0328	1	4,0328	0,36	0,5547
BE	27,2322	1	27,2322	2,46	0,1365
CD	34,6112	1	34,6112	3,12	0,0962
CE	62,0498	1	62,0498	5,60	0,0309
DE	2,7848	1	2,7848	0,25	0,6229
RESIDUAL	177,233	16	11,077		
TOTAL (CORRECTED)	12433,8	31			

All F-ratios are based on the residual mean square error.

The StatAdvisor

The ANOVA table decomposes the variability of Ol y Ona 723 into contributions due to various factors. Since Type III sums of squares (the default) have been chosen, the contribution of each factor is measured having removed the effects of all other factors. The P-values test the statistical significance of each of the factors. Since 8 P-values are less than 0,05, these factors have a statistically significant effect on Ol\_y\_Ona\_723 at the 95,0% confidence level.

Residual Plot for OI\_y\_Ona\_723





Residual Plot for Ol\_y\_Ona\_723

