

Turbidity analyses

Summary

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Column 1	30	719750	23991.67	7351221
Column 2	30	701750	23391.67	7119325
Column 3	30	708000	23600	12640517
Column 4	30	5296250	176541.7	64077945
Column 5	30	5376500	179216.7	47291954
Column 6	30	5300250	176675	28707543
Column 7	30	3606000	120200	40928448
Column 8	30	3660000	122000	67465517
Column 9	30	3628500	120950	22294828
Column 10	30	2360500	78683.33	40340230
Column 11	30	2408000	80266.67	33072989
Column 12	30	2354250	78475	45919612

Anova

<i>Source of variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	1.14E^12	11	1.04E^11	2991.254	<0.0001	1.816209
Within Groups	1.21E^10	348	34767511			
Total	1.16E^12	359				

Completely randomized design

Data:

Treatments	1 ^a Rep.	2 ^a Rep.	3 ^a Rep.	4 ^a Rep.	5 ^a Rep.
Treatment 1	24750.00	20250.00	20750.00	26250.00	24500.00
Treatment 2	20750.00	27750.00	22250.00	27500.00	24750.00
Treatment 3	22250.00	24500.00	17500.00	18000.00	26500.00
Treatment 4	190000.0	166750.0	168000.0	182500.0	184500.0
Treatment 5	191000.0	195000.0	186250.0	171250.0	176750.0
Treatment 6	185000.0	176250.0	180250.0	183500.0	181750.0
Treatment 7	123250.0	112250.0	125750.0	124500.0	111250.0
Treatment 8	133500.0	119000.0	128000.0	114500.0	128750.0
Treatment 9	127500.0	124750.0	116750.0	118500.0	128250.0

Treatment 10	84000.00	85000.00	85250.00	90000.00	87750.00
Treatment 11	75250.00	82500.00	92250.00	81000.00	83500.00
Treatment 12	84750.00	91500.00	82000.00	74250.00	72750.00

Treatments	6 ^a Rep.	7 ^a Rep.	8 ^a Rep.	9 ^a Rep.	10 ^a Rep.
Treatment 1	22750.00	20500.00	25750.00	19750.00	21250.00
Treatment 2	19750.00	26500.00	20750.00	22250.00	21500.00
Treatment 3	26500.00	25250.00	22250.00	19000.00	23750.00
Treatment 4	182750.0	191000.0	170250.0	172500.0	174500.0
Treatment 5	177750.0	173750.0	178000.0	190500.0	184250.0
Treatment 6	179750.0	173750.0	172500.0	175000.0	172000.0
Treatment 7	118000.0	119750.0	128250.0	112000.0	111750.0
Treatment 8	120250.0	112750.0	108000.0	123750.0	119500.0
Treatment 9	126750.0	122000.0	119000.0	118500.0	118750.0
Treatment 10	78250.00	73500.00	77250.00	80500.00	74000.00
Treatment 11	90000.00	89500.00	90750.00	82250.00	79000.00
Treatment 12	80500.00	81000.00	79250.00	86500.00	89250.00

Treatments	11 ^a Rep.	12 ^a Rep.	13 ^a Rep.	14 ^a Rep.	15 ^a Rep.
Treatment 1	28750.00	23000.00	26250.00	27000.00	22750.00
Treatment 2	20000.00	21750.00	25500.00	20750.00	21000.00
Treatment 3	15250.00	27000.00	19250.00	28750.00	27000.00
Treatment 4	180250.0	176750.0	171250.0	185000.0	180000.0
Treatment 5	187500.0	183500.0	182250.0	177250.0	183750.0
Treatment 6	182250.0	174500.0	180750.0	170750.0	174750.0
Treatment 7	122250.0	127750.0	112250.0	129250.0	123500.0
Treatment 8	110500.0	120500.0	129750.0	124250.0	132500.0
Treatment 9	129250.0	125500.0	121500.0	115000.0	117000.0
Treatment 10	86000.00	80250.00	69000.00	77000.00	85500.00
Treatment 11	80500.00	78500.00	83250.00	81750.00	82000.00
Treatment 12	78750.00	73000.00	64750.00	69000.00	86500.00

Treatments	16 ^a Rep.	17 ^a Rep.	18 ^a Rep.	19 ^a Rep.	20 ^a Rep.
Treatment 1	24750.00	20250.00	21750.00	28250.00	26500.00
Treatment 2	28250.00	26000.00	22250.00	26000.00	24250.00
Treatment 3	24000.00	28750.00	22750.00	22500.00	21500.00
Treatment 4	178250.0	168500.0	172750.0	186500.0	180750.0
Treatment 5	183000.0	167000.0	169750.0	173500.0	174000.0
Treatment 6	172500.0	171000.0	179000.0	182750.0	164250.0
Treatment 7	112000.0	121250.0	122750.0	114500.0	115250.0
Treatment 8	121750.0	126250.0	124500.0	112750.0	128750.0
Treatment 9	124500.0	125250.0	118250.0	112750.0	124500.0
Treatment 10	74000.00	68000.00	70750.00	76250.00	84500.00
Treatment 11	74000.00	79750.00	77000.00	74250.00	81000.00
Treatment 12	81000.00	68250.00	78750.00	74500.00	89250.00

Treatments	21 ^a Rep.	22 ^a Rep.	23 ^a Rep.	24 ^a Rep.	25 ^a Rep.
Treatment 1	23250.00	21000.00	26250.00	22250.00	25000.00
Treatment 2	20250.00	19250.00	21500.00	25500.00	25250.00
Treatment 3	21000.00	20750.00	26750.00	24250.00	28500.00
Treatment 4	167500.0	184750.0	165500.0	187500.0	159500.0
Treatment 5	178250.0	180500.0	181750.0	172500.0	185250.0
Treatment 6	182500.0	176500.0	179750.0	181500.0	167500.0

Treatment 7	113750.0	127000.0	131250.0	121000.0	129000.0
Treatment 8	136500.0	133000.0	118250.0	117750.0	126750.0
Treatment 9	125250.0	121500.0	123000.0	113000.0	118250.0
Treatment 10	76750.00	83250.00	70500.00	86250.00	73250.00
Treatment 11	71250.00	74500.00	80750.00	78000.00	71000.00
Treatment 12	73500.00	78500.00	75750.00	84250.00	73000.00
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Treatments	26 ^a Rep.	27 ^a Rep.	28 ^a Rep.	29 ^a Rep.	30 ^a Rep.

Treatment 1	21500.00	26500.00	24500.00	24750.00	29000.00
Treatment 2	23750.00	25500.00	26500.00	22000.00	22750.00
Treatment 3	26750.00	24000.00	26250.00	26500.00	21000.00
Treatment 4	171750.0	172500.0	174250.0	170250.0	180000.0
Treatment 5	175000.0	170250.0	176000.0	178500.0	172500.0
Treatment 6	185250.0	177250.0	172500.0	171000.0	174250.0
Treatment 7	116000.0	117750.0	118000.0	129500.0	115250.0
Treatment 8	107750.0	111750.0	135000.0	115750.0	118000.0
Treatment 9	123250.0	123750.0	115500.0	117000.0	113750.0
Treatment 10	68750.00	82000.00	82750.00	71500.00	78750.00
Treatment 11	73000.00	88750.00	79000.00	73750.00	80000.00
Treatment 12	83000.00	69500.00	82750.00	73250.00	75250.00
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Descriptive treatments statistics :

Treatments	Average	Variance	SD	SEM
Treatment 1	23991.6667	7351221.26	2711.31357	495.015867
Treatment 2	23391.6667	7119324.71	2668.20627	487.145588
Treatment 3	23600.0000	12640517.2	3555.35051	649.115225
Treatment 4	176541.667	64077945.4	8004.87011	1461.48264
Treatment 5	179216.667	47291954.0	6876.91457	1255.54708
Treatment 6	176675.000	28707543.1	5357.94206	978.221909
Treatment 7	120200.000	40928448.3	6397.53455	1168.02466
Treatment 8	122000.000	67465517.2	8213.73954	1499.61681
Treatment 9	120950.000	22294827.6	4721.73989	862.067816
Treatment 10	78683.3333	40340229.9	6351.39590	1159.60094
Treatment 11	80266.6667	33072988.5	5750.91197	1049.96807
Treatment 12	78475.0000	45919612.1	6776.40111	1237.19592

Analysis of Variance

	df	SS	MS	F	P-value
Treatments	11	1.1439E^12	103998466840	2991.25**	< 0.0001
Residual	348	1209909375	34767510.776	-	-
Total	359	1.156082E^12		-	-

General Average.....: 100332.64
 Standard deviation.....: 5896.3981
 standard error of the mean...: 1076.5301
 coefficient of variation.....: 5.8768494

Comparison of means tests

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Tukey test

Treatment	Variable 1	
Treatment 5	179216.67	a
Treatment 6	176675.00	a
Treatment 4	176541.67	a
Treatment 8	122000.00	b
Treatment 9	120950.00	b
Treatment 7	120200.00	b
Treatment 11	80266.66	c
Treatment 10	78683.333	c
Treatment 12	78475.000	c
Treatment 1	23991.667	d
Treatment 3	23600.000	d
Treatment 2	23391.667	d

significant difference (5%) = 5009.6171

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