

**Barnett, Assessment Unit 39100101
Assessment Results Summary**

[MMBO, million barrels of oil. BCFG, billion cubic feet of gas. MMBNGL, million barrels of natural gas liquids. MFS, minimum field size assessed (MMBO or BCFG). Prob., probability (including both geologic and accessibility probabilities) of at least one field equal to or greater than the MFS. Results shown are fully risked estimates. For gas fields, all liquids are included under the NGL (natural gas liquids) category. F95 represents a 95 percent chance of at least the amount tabulated. Other fractiles are defined similarly. Fractiles are additive under the assumption of perfect positive correlation. Shading indicates not applicable]

Field Type	MFS	Prob. (0-1)	Undiscovered Resources												Largest Undiscovered Field (MMBO or BCFG)			
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)				F95	F50	F5	Mean
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean				
Oil Fields	3	1.00	45	128	275	140	92	272	642	308	5	16	40	18	13	28	62	31
Gas Fields	18						271	771	1,655	843	11	33	77	37	80	168	381	190
Total		1.00	45	128	275	140	363	1,043	2,298	1,151	16	49	118	56				

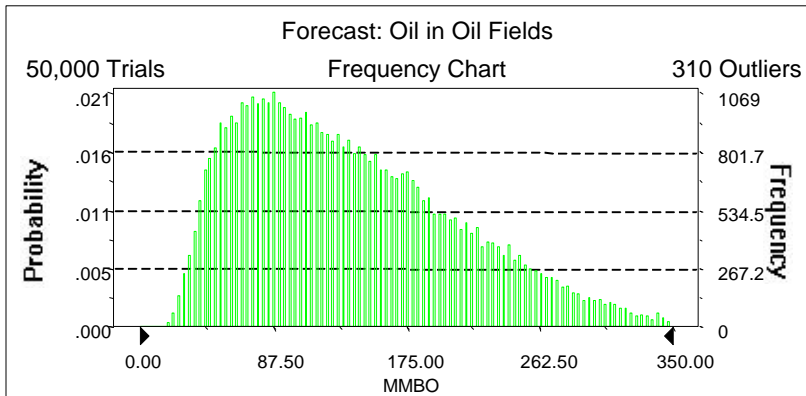
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Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 350.00 MMBO
Entire range is from 16.26 to 473.34 MMBO
After 50,000 trials, the standard error of the mean is 0.32

Statistics:	Value
Trials	50000
Mean	139.91
Median	127.71
Mode	---
Standard Deviation	72.19
Variance	5,211.43
Skewness	0.72
Kurtosis	3.06
Coefficient of Variability	0.52
Range Minimum	16.26
Range Maximum	473.34
Range Width	457.07
Mean Standard Error	0.32



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	16.26
95%	45.33
90%	55.78
85%	65.26
80%	73.79
75%	82.33
70%	90.66
65%	99.27
60%	108.49
55%	117.72
50%	127.71
45%	137.87
40%	148.63
35%	160.22
30%	172.90
25%	185.90
20%	202.01
15%	220.38
10%	243.06
5%	275.07
0%	473.34

End of Forecast

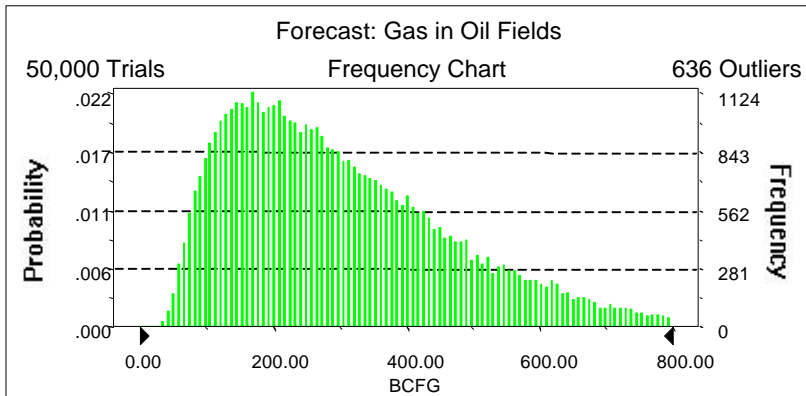
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Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 800.00 BCFG
Entire range is from 25.29 to 1,365.31 BCFG
After 50,000 trials, the standard error of the mean is 0.78

Statistics:	Value
Trials	50000
Mean	307.72
Median	271.94
Mode	---
Standard Deviation	174.27
Variance	30,369.22
Skewness	1.00
Kurtosis	3.99
Coefficient of Variability	0.57
Range Minimum	25.29
Range Maximum	1,365.31
Range Width	1,340.03
Mean Standard Error	0.78



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	25.29
95%	91.99
90%	115.45
85%	135.68
80%	154.51
75%	173.10
70%	191.86
65%	210.71
60%	230.30
55%	250.95
50%	271.94
45%	294.86
40%	319.50
35%	346.23
30%	375.51
25%	407.97
20%	444.81
15%	489.80
10%	552.28
5%	642.34
0%	1,365.31

End of Forecast

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Forecast: NGL in Oil Fields

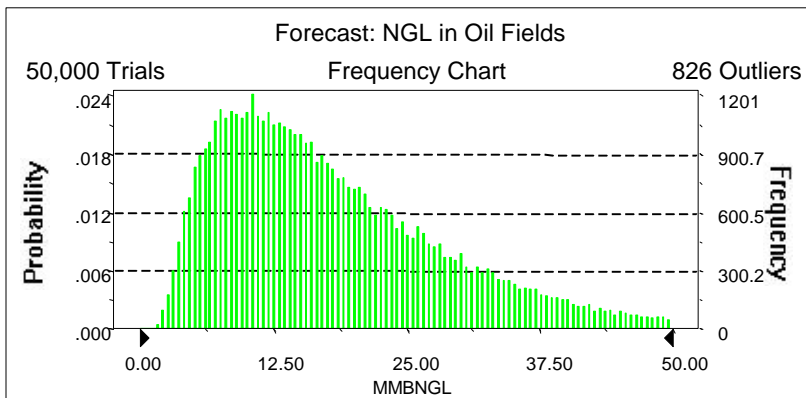
Summary:

Display range is from 0.00 to 50.00 MMBNGL

Entire range is from 1.48 to 99.33 MMBNGL

After 50,000 trials, the standard error of the mean is 0.05

Statistics:	Value
Trials	50000
Mean	18.49
Median	15.88
Mode	---
Standard Deviation	11.34
Variance	128.52
Skewness	1.24
Kurtosis	4.98
Coefficient of Variability	0.61
Range Minimum	1.48
Range Maximum	99.33
Range Width	97.85
Mean Standard Error	0.05



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	1.48
95%	5.10
90%	6.51
85%	7.72
80%	8.87
75%	9.99
70%	11.08
65%	12.23
60%	13.40
55%	14.62
50%	15.88
45%	17.27
40%	18.79
35%	20.47
30%	22.36
25%	24.46
20%	26.91
15%	30.02
10%	34.07
5%	40.45
0%	99.33

End of Forecast

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Forecast: Largest Oil Field

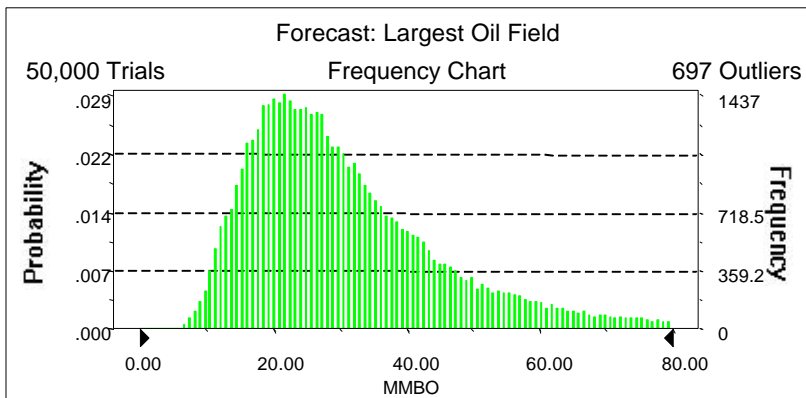
Summary:

Display range is from 0.00 to 80.00 MMBO

Entire range is from 5.71 to 99.97 MMBO

After 50,000 trials, the standard error of the mean is 0.07

Statistics:	Value
Trials	50000
Mean	31.40
Median	27.80
Mode	---
Standard Deviation	15.38
Variance	236.58
Skewness	1.34
Kurtosis	5.13
Coefficient of Variability	0.49
Range Minimum	5.71
Range Maximum	99.97
Range Width	94.26
Mean Standard Error	0.07



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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	5.71
95%	13.26
90%	15.70
85%	17.47
80%	19.05
75%	20.46
70%	21.87
65%	23.31
60%	24.79
55%	26.28
50%	27.80
45%	29.51
40%	31.34
35%	33.35
30%	35.69
25%	38.47
20%	41.73
15%	45.91
10%	52.21
5%	62.37
0%	99.97

End of Forecast

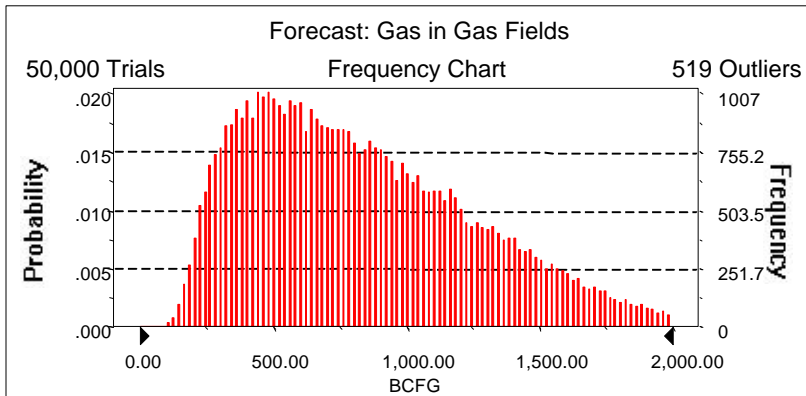
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Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 2,000.00 BCFG
Entire range is from 86.55 to 3,132.42 BCFG
After 50,000 trials, the standard error of the mean is 1.94

Statistics:	<u>Value</u>
Trials	50000
Mean	843.41
Median	770.69
Mode	---
Standard Deviation	434.66
Variance	188,931.64
Skewness	0.71
Kurtosis	3.04
Coefficient of Variability	0.52
Range Minimum	86.55
Range Maximum	3,132.42
Range Width	3,045.87
Mean Standard Error	1.94



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	86.55
95%	271.42
90%	336.06
85%	391.35
80%	445.68
75%	494.88
70%	547.67
65%	599.76
60%	654.96
55%	711.12
50%	770.69
45%	831.84
40%	896.89
35%	965.60
30%	1,042.68
25%	1,126.10
20%	1,215.93
15%	1,329.06
10%	1,462.85
5%	1,655.23
0%	3,132.42

End of Forecast

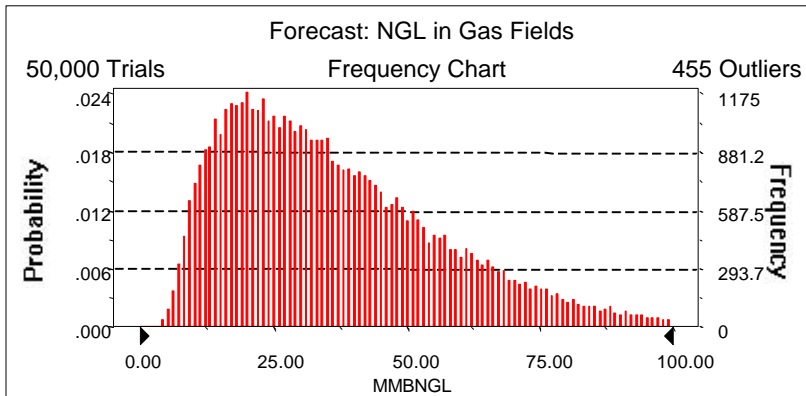
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Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 100.00 MMBNGL
Entire range is from 2.85 to 158.31 MMBNGL
After 50,000 trials, the standard error of the mean is 0.09

Statistics:	Value
Trials	50000
Mean	37.07
Median	32.87
Mode	---
Standard Deviation	20.91
Variance	437.03
Skewness	0.98
Kurtosis	3.90
Coefficient of Variability	0.56
Range Minimum	2.85
Range Maximum	158.31
Range Width	155.46
Mean Standard Error	0.09



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	2.85
95%	11.03
90%	13.94
85%	16.41
80%	18.67
75%	20.83
70%	23.11
65%	25.43
60%	27.84
55%	30.32
50%	32.87
45%	35.51
40%	38.54
35%	41.75
30%	45.18
25%	49.12
20%	53.58
15%	59.27
10%	66.32
5%	77.16
0%	158.31

End of Forecast

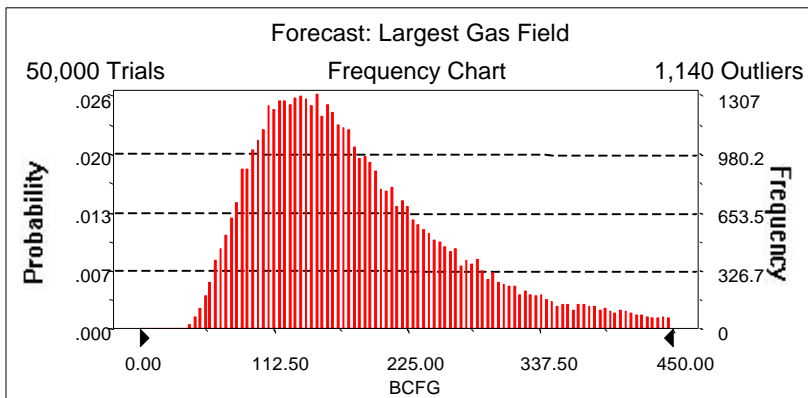
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Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 450.00 BCFG
Entire range is from 34.08 to 599.95 BCFG
After 50,000 trials, the standard error of the mean is 0.42

Statistics:	Value
Trials	50000
Mean	189.58
Median	167.86
Mode	---
Standard Deviation	93.67
Variance	8,774.62
Skewness	1.35
Kurtosis	5.13
Coefficient of Variability	0.49
Range Minimum	34.08
Range Maximum	599.95
Range Width	565.87
Mean Standard Error	0.42



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Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	34.08
95%	79.99
90%	93.73
85%	104.78
80%	113.95
75%	123.05
70%	131.93
65%	140.61
60%	149.55
55%	158.68
50%	167.86
45%	177.95
40%	189.04
35%	201.14
30%	215.48
25%	231.84
20%	252.12
15%	278.01
10%	314.25
5%	381.26
0%	599.95

End of Forecast

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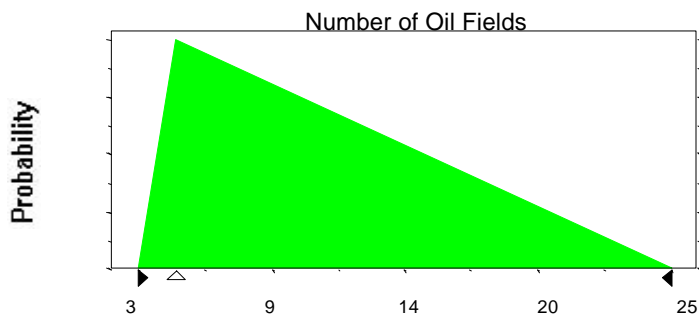
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	3
Likeliest	5
Maximum	25

Selected range is from 3 to 25
Mean value in simulation was 11



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	10.05
Standard Deviation	10.36

Shifted parameters

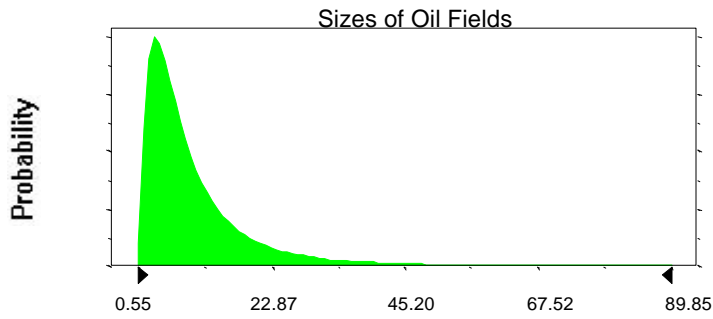
13.05
10.36

Selected range is from 0.00 to 97.00
Mean value in simulation was 9.93

3.00 to 100.00
12.93

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Assumption: Sizes of Oil Fields (cont'd)

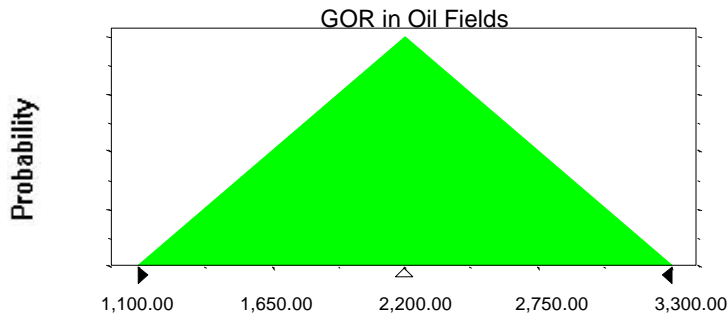


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,100.00
Likeliest	2,200.00
Maximum	3,300.00

Selected range is from 1,100.00 to 3,300.00
Mean value in simulation was 2,199.03



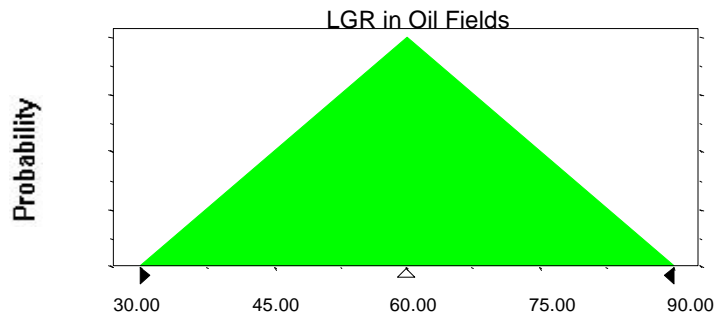
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Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	30.00
Likeliest	60.00
Maximum	90.00

Selected range is from 30.00 to 90.00
Mean value in simulation was 60.09



Assumption: Number of Gas Fields

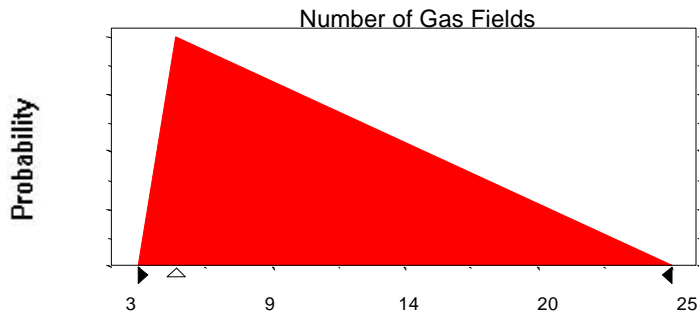
Triangular distribution with parameters:

Minimum	3
Likeliest	5
Maximum	25

Selected range is from 3 to 25
Mean value in simulation was 11

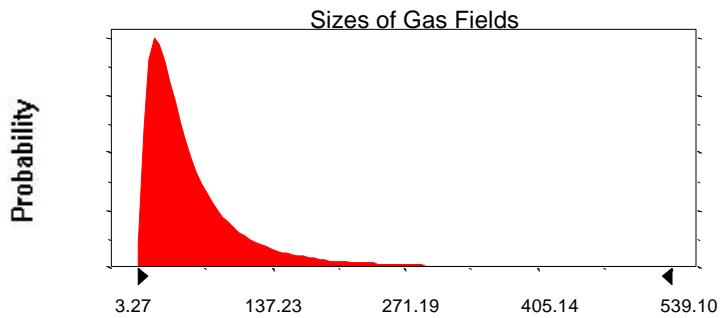
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	60.31	78.31
Standard Deviation	62.16	62.16
Selected range is from 0.00 to 582.00	18.00 to 600.00	
Mean value in simulation was 59.32	77.32	



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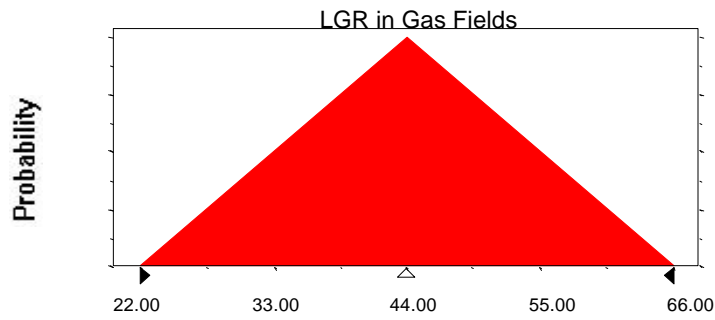
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	22.00
Likeliest	44.00
Maximum	66.00

Selected range is from 22.00 to 66.00

Mean value in simulation was 43.98



End of Assumptions

Simulation started on 4/26/99 at 10:32:20
Simulation stopped on 4/26/99 at 10:51:42