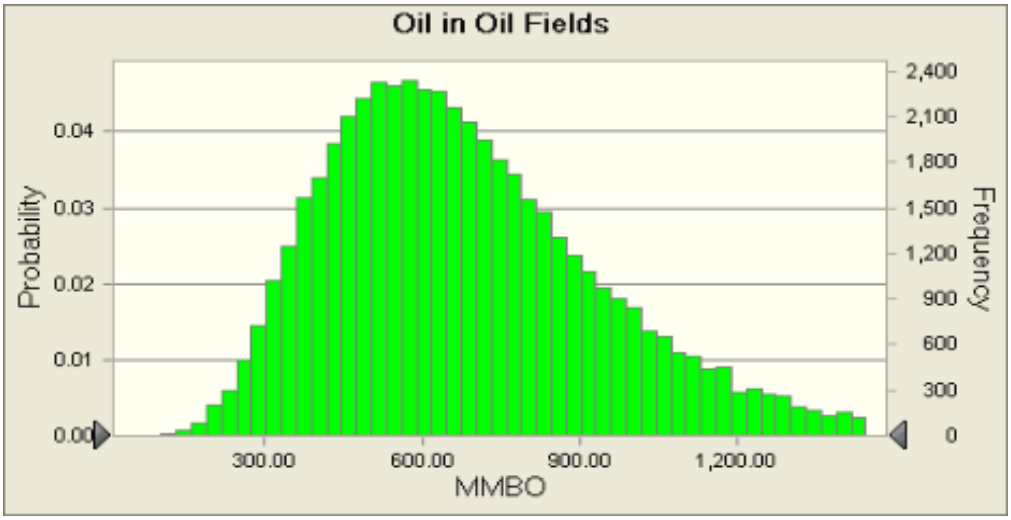
35050101
Oligocene-Miocene Reservoirs
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 45.75 to 2,236.43
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.21



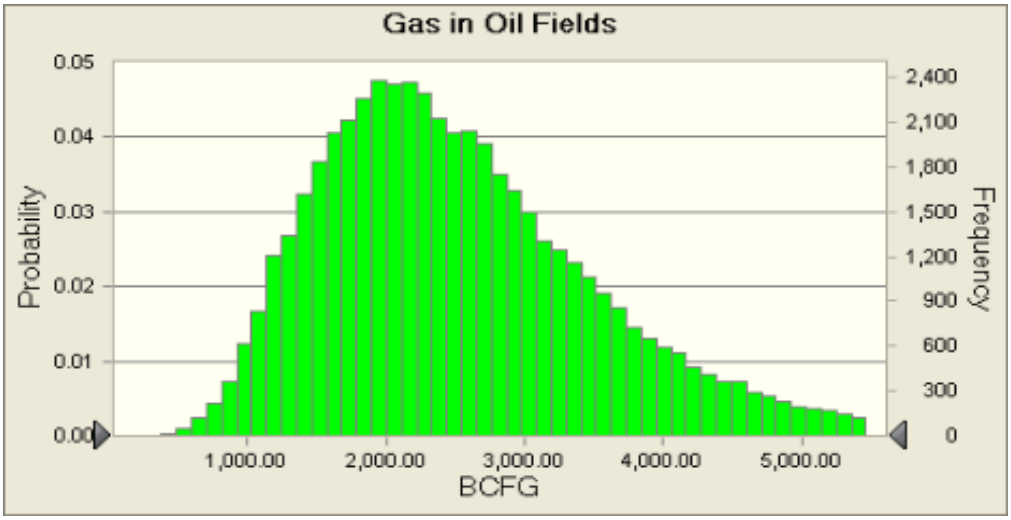
Statistics:	Forecast values
Trials	50,000
Mean	685.33
Median	642.98
Mode	---
Standard Deviation	271.02
Variance	73,453.00
Skewness	0.9052
Kurtosis	4.13
Coefficient of Variability	0.3955
Minimum	45.75
Maximum	2,236.43
Range Width	2,190.68
Mean Standard Error	1.21

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	45.75
95%	321.34
90%	376.64
85%	418.85
80%	454.77
75%	488.08
70%	519.50
65%	550.10
60%	580.63
55%	611.91
50%	642.97
45%	676.17
40%	711.63
35%	749.40
30%	790.68
25%	837.41
20%	893.37
15%	961.56
10%	1,050.98
5%	1,191.77
0%	2,236.43

Forecast: Gas in Oil Fields

Summary:
Entire range is from 163.65 to 10,296.68
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 4.66



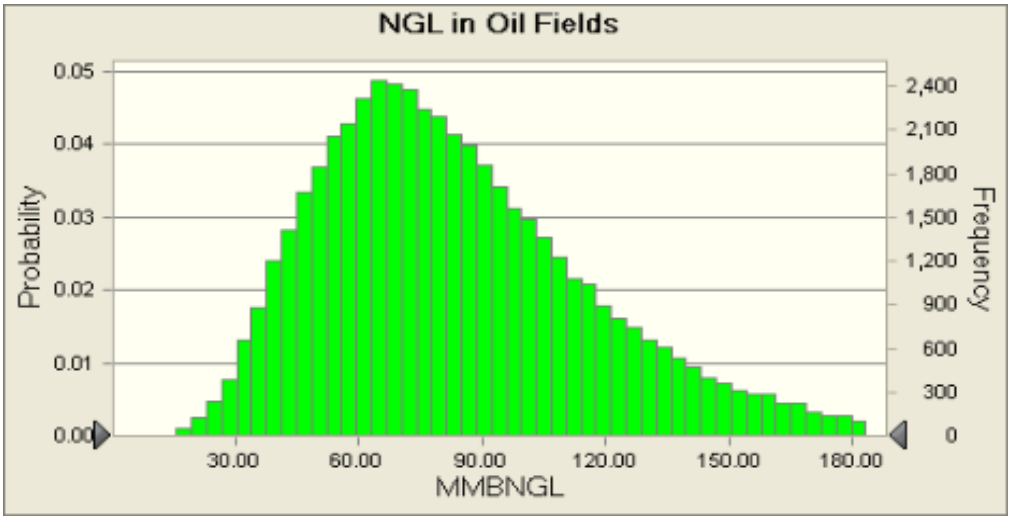
Statistics:	Forecast values
Trials	50,000
Mean	2,547.49
Median	2,376.26
Mode	---
Standard Deviation	1,042.47
Variance	1,086,748.28
Skewness	0.9699
Kurtosis	4.39
Coefficient of Variability	0.4092
Minimum	163.65
Maximum	10,296.68
Range Width	10,133.03
Mean Standard Error	4.66

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	163.65
95%	1,164.66
90%	1,372.51
85%	1,528.38
80%	1,667.62
75%	1,794.04
70%	1,913.40
65%	2,025.36
60%	2,141.67
55%	2,254.54
50%	2,376.26
45%	2,507.97
40%	2,640.85
35%	2,781.23
30%	2,940.25
25%	3,122.87
20%	3,335.84
15%	3,593.73
10%	3,949.23
5%	4,523.76
0%	10,296.68

Forecast: NGL in Oil Fields

Summary:
Entire range is from 4.61 to 364.89
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.16



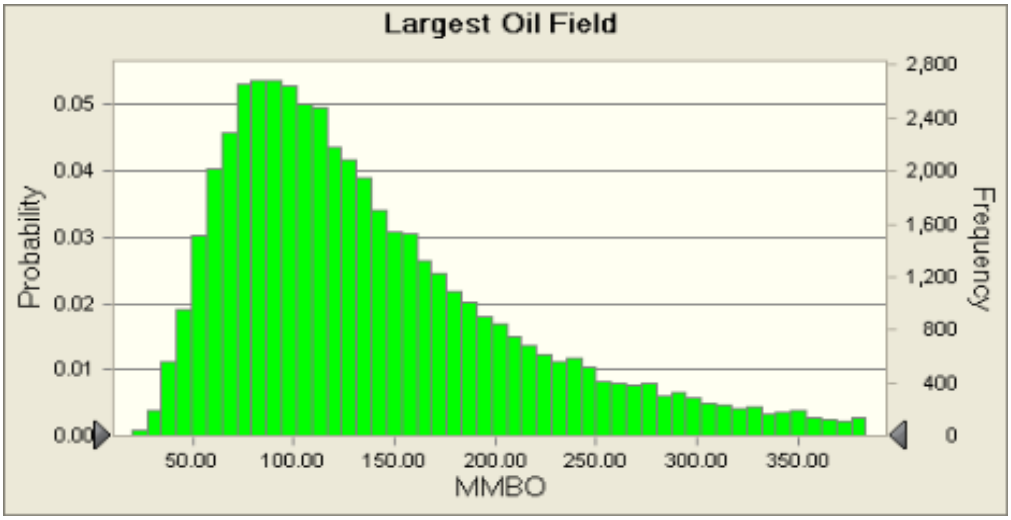
Statistics:	Forecast values
Trials	50,000
Mean	84.52
Median	78.51
Mode	---
Standard Deviation	35.33
Variance	1,248.51
Skewness	1.02
Kurtosis	4.61
Coefficient of Variability	0.4181
Minimum	4.61
Maximum	364.89
Range Width	360.28
Mean Standard Error	0.16

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	4.61
95%	38.04
90%	44.91
85%	50.25
80%	54.85
75%	59.11
70%	63.07
65%	66.83
60%	70.66
55%	74.49
50%	78.51
45%	82.86
40%	87.33
35%	92.16
30%	97.65
25%	103.75
20%	110.91
15%	119.94
10%	132.05
5%	151.43
0%	364.89

Forecast: Largest Oil Field

Summary:
Entire range is from 19.55 to 499.77
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.38



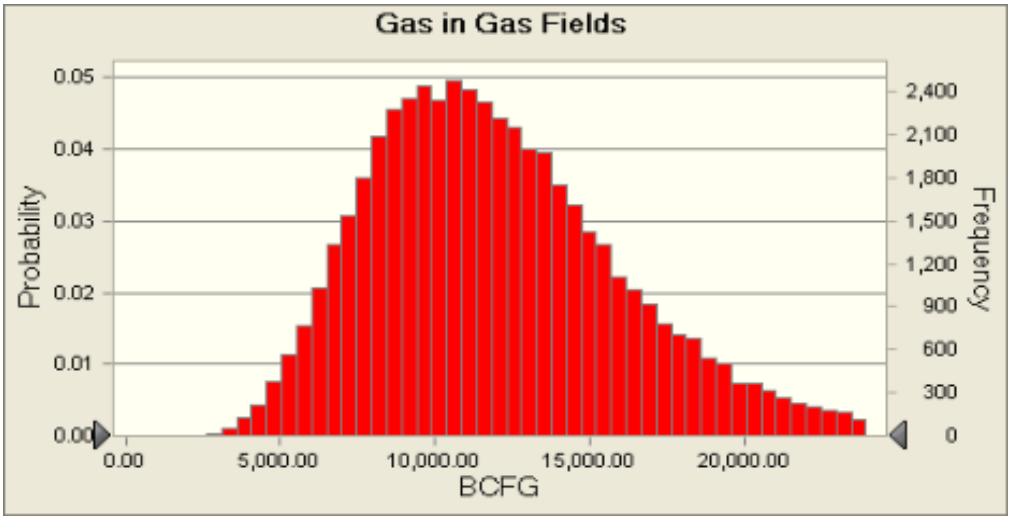
Statistics:	Forecast values
Trials	50,000
Mean	145.64
Median	122.24
Mode	---
Standard Deviation	85.05
Variance	7,234.01
Skewness	1.48
Kurtosis	5.27
Coefficient of Variability	0.5840
Minimum	19.55
Maximum	499.77
Range Width	480.22
Mean Standard Error	0.38

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	19.55
95%	53.48
90%	63.31
85%	71.44
80%	78.47
75%	85.38
70%	92.28
65%	99.34
60%	106.47
55%	114.05
50%	122.24
45%	131.19
40%	141.01
35%	152.49
30%	165.35
25%	180.85
20%	200.24
15%	226.23
10%	263.06
5%	324.75
0%	499.77

Forecast: Gas in Gas Fields

Summary:
Entire range is from 109.17 to 40,350.64
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 18.95



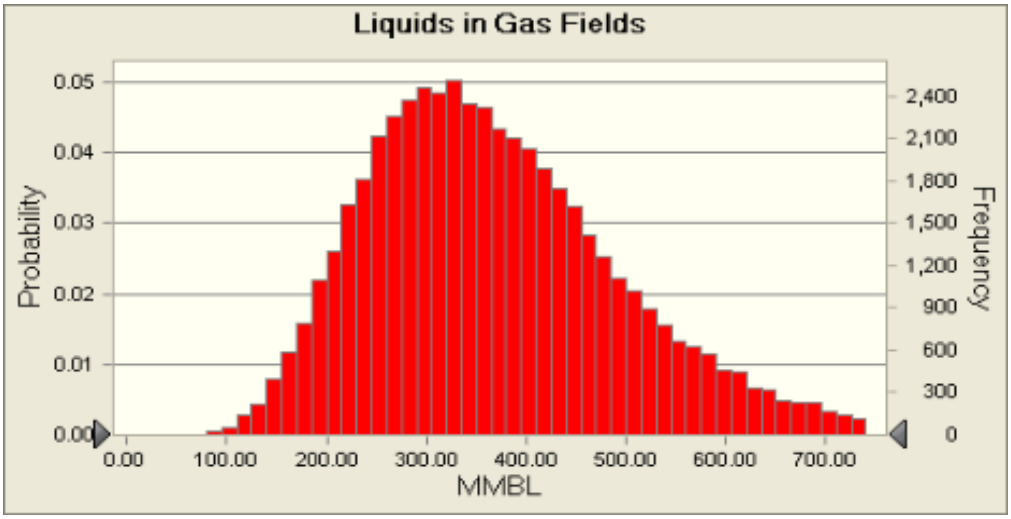
Statistics:	Forecast values
Trials	50,000
Mean	12,052.66
Median	11,487.66
Mode	---
Standard Deviation	4,236.30
Variance	17,946,241.00
Skewness	0.8083
Kurtosis	3.98
Coefficient of Variability	0.3515
Minimum	109.17
Maximum	40,350.64
Range Width	40,241.47
Mean Standard Error	18.95

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	109.17
95%	6,195.51
90%	7,146.50
85%	7,857.21
80%	8,441.01
75%	8,973.40
70%	9,482.73
65%	9,984.70
60%	10,491.43
55%	10,978.57
50%	11,487.61
45%	12,015.17
40%	12,571.70
35%	13,162.39
30%	13,785.28
25%	14,481.14
20%	15,320.47
15%	16,346.65
10%	17,739.28
5%	19,899.46
0%	40,350.64

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 4.36 to 1,227.90
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.59



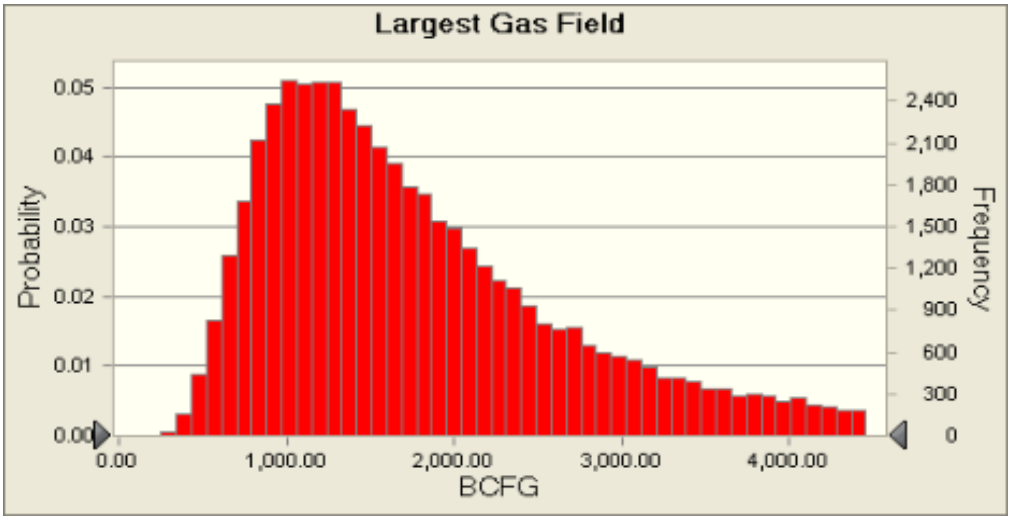
Statistics:	Forecast values
Trials	50,000
Mean	371.39
Median	353.23
Mode	---
Standard Deviation	132.06
Variance	17,441.01
Skewness	0.8237
Kurtosis	4.00
Coefficient of Variability	0.3556
Minimum	4.36
Maximum	1,227.90
Range Width	1,223.54
Mean Standard Error	0.59

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	4.36
95%	189.67
90%	218.88
85%	240.89
80%	259.07
75%	275.54
70%	291.53
65%	306.74
60%	322.29
55%	337.26
50%	353.23
45%	369.86
40%	387.16
35%	405.40
30%	425.07
25%	447.03
20%	472.64
15%	504.99
10%	548.35
5%	615.77
0%	1,227.90

Forecast: Largest Gas Field

Summary:
Entire range is from 70.78 to 4,998.91
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 4.24



Statistics:	Forecast values
Trials	50,000
Mean	1,799.95
Median	1,559.84
Mode	---
Standard Deviation	949.17
Variance	900,926.46
Skewness	1.09
Kurtosis	3.77
Coefficient of Variability	0.5273
Minimum	70.78
Maximum	4,998.91
Range Width	4,928.13
Mean Standard Error	4.24

Forecast: Largest Gas Field (continued)

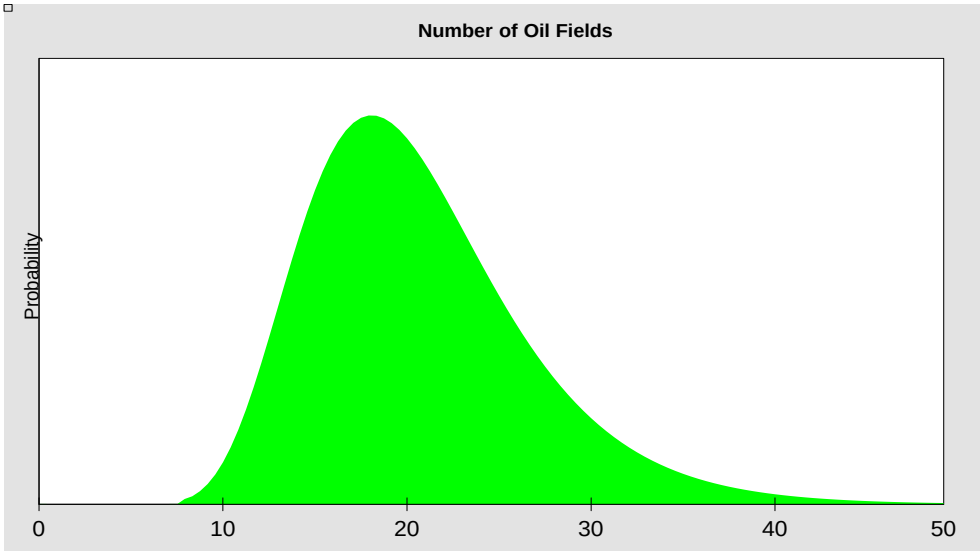
Percentiles:	BCFG
100%	70.78
95%	683.44
90%	812.25
85%	913.41
80%	1,003.74
75%	1,092.04
70%	1,179.51
65%	1,268.01
60%	1,358.79
55%	1,457.99
50%	1,559.82
45%	1,673.62
40%	1,800.21
35%	1,937.48
30%	2,092.10
25%	2,276.18
20%	2,502.24
15%	2,790.36
10%	3,189.39
5%	3,817.39
0%	4,998.91

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	19.91	20.91
Standard Deviation	6.25	6.25
Selected range is from -Infinity to 49.00		1.00 to 50.00



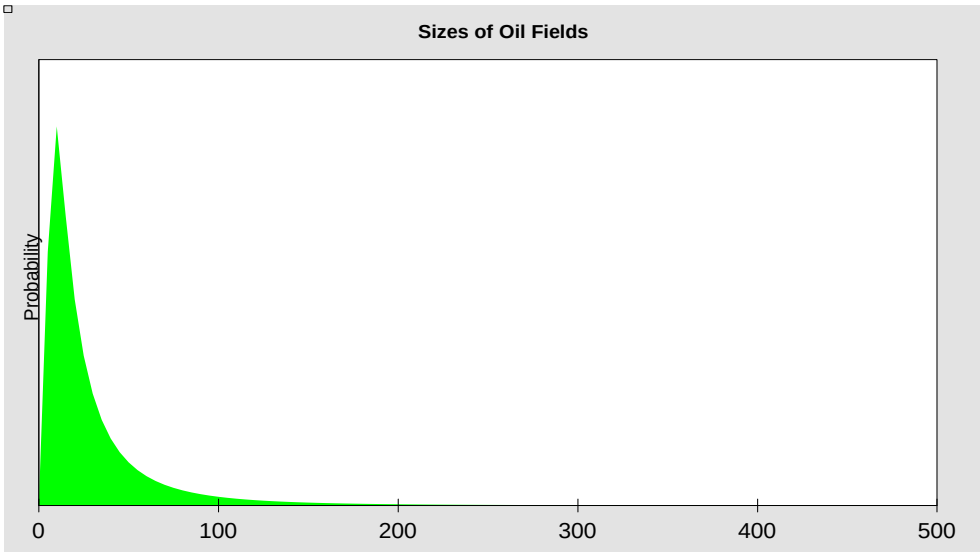
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	20.90	20.88
Median	20.01	19.99
Mode	---	---
Standard Deviation	6.16	6.16
Variance	38.00	37.98
Skewness	0.8556	0.8607
Kurtosis	4.01	4.03
Coefficient of Variability	0.2950	0.2951
Minimum	6.23	1.00
Maximum	49.60	50.00
Range Width	43.37	49.00
Mean Standard Error	0.03	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.23	1.00
95%	12.50	12.47
90%	13.84	13.82
85%	14.83	14.82
80%	15.69	15.68
75%	16.47	16.45
70%	17.19	17.17
65%	17.88	17.88
60%	18.57	18.57
55%	19.28	19.28
50%	20.01	19.99
45%	20.77	20.74
40%	21.55	21.52
35%	22.39	22.37
30%	23.32	23.30
25%	24.35	24.35
20%	25.59	25.57
15%	27.09	27.08
10%	29.10	29.10
5%	32.44	32.37
0%	49.60	50.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	28.45	33.45
Standard Deviation	45.86	45.86
Selected range is from -Infinity to 495.00		5.00 to 500.00



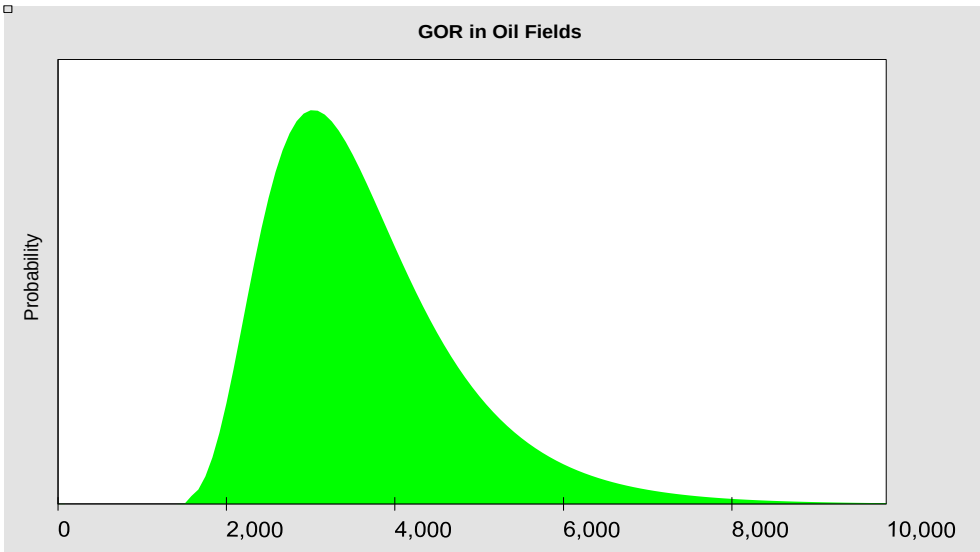
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	32.85	32.77
Median	20.02	19.98
Mode	---	---
Standard Deviation	39.72	39.37
Variance	1,577.65	1,549.89
Skewness	4.34	4.23
Kurtosis	31.18	29.55
Coefficient of Variability	1.21	1.20
Minimum	5.11	5.00
Maximum	499.77	500.00
Range Width	494.66	495.00
Mean Standard Error	0.18	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.11	5.00
95%	7.38	7.33
90%	8.58	8.52
85%	9.71	9.64
80%	10.85	10.78
75%	12.07	11.99
70%	13.38	13.28
65%	14.78	14.69
60%	16.28	16.25
55%	18.02	18.00
50%	20.02	19.98
45%	22.26	22.26
40%	25.02	24.94
35%	28.26	28.15
30%	32.27	32.09
25%	37.01	37.09
20%	43.67	43.75
15%	53.13	53.27
10%	68.31	68.59
5%	101.08	100.48
0%	499.77	500.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	2,724.30	3,724.30
Standard Deviation	1,179.64	1,179.64
Selected range is from -Infinity to 9,000.00		1000.00 to 10,000.00



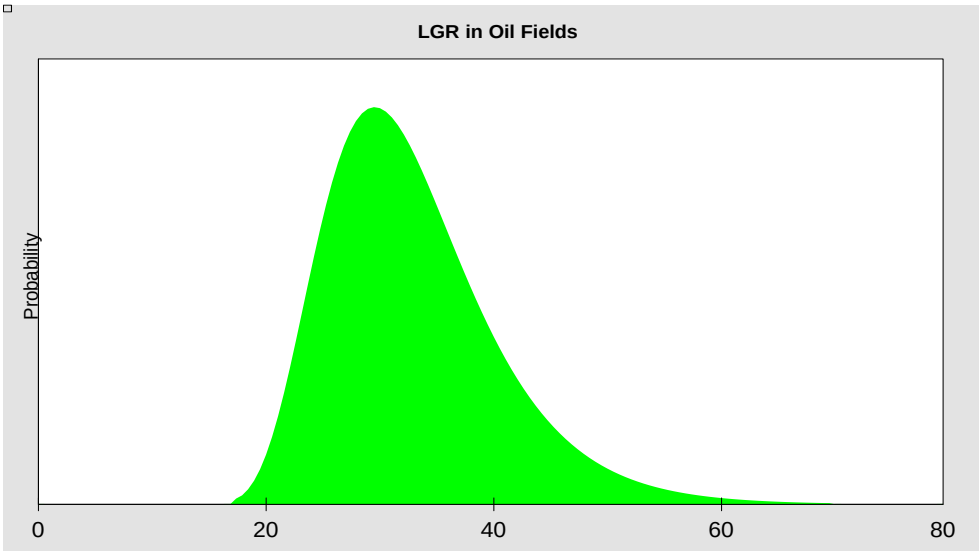
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	3,711.04	3,716.85
Median	3,497.40	3,498.70
Mode	---	---
Standard Deviation	1,141.23	1,155.92
Variance	1,302,413.30	1,336,159.98
Skewness	1.17	1.20
Kurtosis	5.04	5.09
Coefficient of Variability	0.3075	0.3110
Minimum	1,450.81	1,000.00
Maximum	9,998.48	10,000.00
Range Width	8,547.67	9,000.00
Mean Standard Error	5.10	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1,450.81	1,000.00
95%	2,269.14	2,263.93
90%	2,472.58	2,469.32
85%	2,625.31	2,626.42
80%	2,765.46	2,763.16
75%	2,891.13	2,889.59
70%	3,018.18	3,010.83
65%	3,137.16	3,130.10
60%	3,253.20	3,249.79
55%	3,371.93	3,371.99
50%	3,497.38	3,498.70
45%	3,626.24	3,632.16
40%	3,773.76	3,775.05
35%	3,930.11	3,930.86
30%	4,099.96	4,104.47
25%	4,296.65	4,303.28
20%	4,527.93	4,539.53
15%	4,824.81	4,835.98
10%	5,227.83	5,243.66
5%	5,884.27	5,925.17
0%	9,998.48	10,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	23.19	33.19
Standard Deviation	7.73	7.73
Selected range is from -Infinity to 60.00		10.00 to 70.00



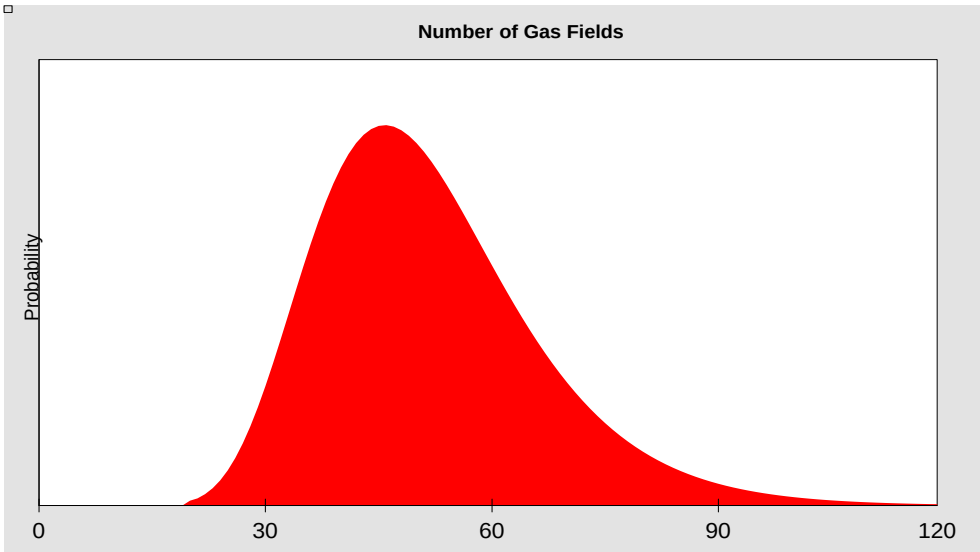
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	33.15	33.15
Median	32.02	31.99
Mode	---	---
Standard Deviation	7.57	7.62
Variance	57.30	58.00
Skewness	0.9039	0.9158
Kurtosis	4.14	4.18
Coefficient of Variability	0.2283	0.2297
Minimum	14.59	10.00
Maximum	69.90	70.00
Range Width	55.31	60.00
Mean Standard Error	0.03	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	14.59	10.00
95%	22.94	22.89
90%	24.56	24.51
85%	25.77	25.71
80%	26.78	26.74
75%	27.71	27.67
70%	28.60	28.55
65%	29.43	29.41
60%	30.30	30.26
55%	31.15	31.11
50%	32.02	31.99
45%	32.92	32.91
40%	33.87	33.87
35%	34.91	34.92
30%	36.05	36.07
25%	37.36	37.37
20%	38.87	38.89
15%	40.71	40.77
10%	43.31	43.30
5%	47.37	47.42
0%	69.90	70.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	51.06	52.06
Standard Deviation	14.97	14.97
Selected range is from -Infinity to 119.00		1.00 to 120.00



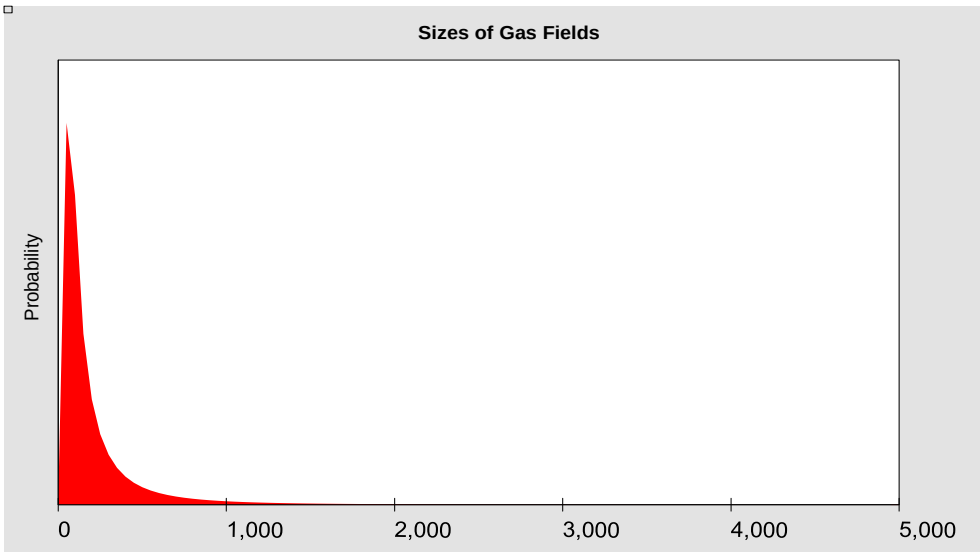
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	52.07	51.98
Median	50.17	49.98
Mode	---	---
Standard Deviation	14.72	14.77
Variance	216.64	218.11
Skewness	0.8032	0.8020
Kurtosis	3.93	3.88
Coefficient of Variability	0.2827	0.2841
Minimum	14.65	1.00
Maximum	119.67	120.00
Range Width	105.02	119.00
Mean Standard Error	0.07	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	14.65	1.00
95%	31.64	31.55
90%	35.03	34.91
85%	37.49	37.38
80%	39.60	39.47
75%	41.51	41.36
70%	43.30	43.14
65%	45.03	44.86
60%	46.76	46.55
55%	48.40	48.25
50%	50.17	49.98
45%	51.91	51.78
40%	53.74	53.67
35%	55.79	55.71
30%	57.96	57.93
25%	60.51	60.43
20%	63.35	63.34
15%	67.00	66.92
10%	71.57	71.69
5%	79.14	79.38
0%	119.67	120.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	209.02	239.02
Standard Deviation	438.14	438.14
Selected range is from -Infinity to 4,970.00		30.00 to 5,000.00



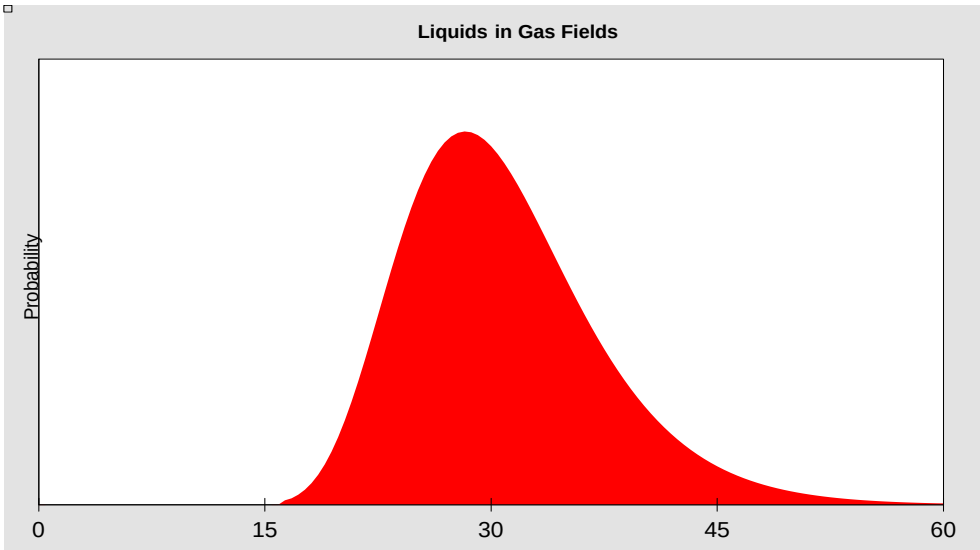
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	230.89	231.59
Median	119.93	119.85
Mode	---	---
Standard Deviation	343.93	349.24
Variance	118,289.71	121,966.64
Skewness	5.11	5.16
Kurtosis	41.41	42.06
Coefficient of Variability	1.49	1.51
Minimum	30.41	30.00
Maximum	4,951.73	5,000.00
Range Width	4,921.32	4,970.00
Mean Standard Error	1.54	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.41	30.00
95%	40.43	40.63
90%	47.09	47.04
85%	53.42	53.42
80%	60.17	60.15
75%	67.56	67.46
70%	75.50	75.51
65%	84.70	84.51
60%	94.57	94.69
55%	106.37	106.34
50%	119.92	119.85
45%	135.90	135.76
40%	154.97	154.80
35%	178.92	178.08
30%	208.61	207.32
25%	246.36	245.37
20%	299.99	297.38
15%	377.55	373.97
10%	503.32	501.94
5%	778.10	782.38
0%	4,951.73	5,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	23.85	30.85
Standard Deviation	6.56	6.56
Selected range is from -Infinity to 53.00		7.00 to 60.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	30.83	30.82
Median	29.98	29.99
Mode	---	---
Standard Deviation	6.48	6.48
Variance	42.05	42.00
Skewness	0.7482	0.7512
Kurtosis	3.75	3.75
Coefficient of Variability	0.2104	0.2103
Minimum	15.26	7.00
Maximum	59.97	60.00
Range Width	44.71	53.00
Mean Standard Error	0.03	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	15.26	7.00
95%	21.70	21.75
90%	23.25	23.27
85%	24.40	24.38
80%	25.34	25.32
75%	26.18	26.16
70%	26.97	26.96
65%	27.74	27.72
60%	28.48	28.47
55%	29.24	29.23
50%	29.98	29.99
45%	30.76	30.79
40%	31.63	31.62
35%	32.51	32.51
30%	33.52	33.49
25%	34.60	34.58
20%	35.86	35.85
15%	37.43	37.40
10%	39.47	39.47
5%	42.84	42.78
0%	59.97	60.00

End of Assumptions

Simulation started on 5/21/2009 at 16:03:39
Simulation stopped on 5/21/2009 at 16:24:44