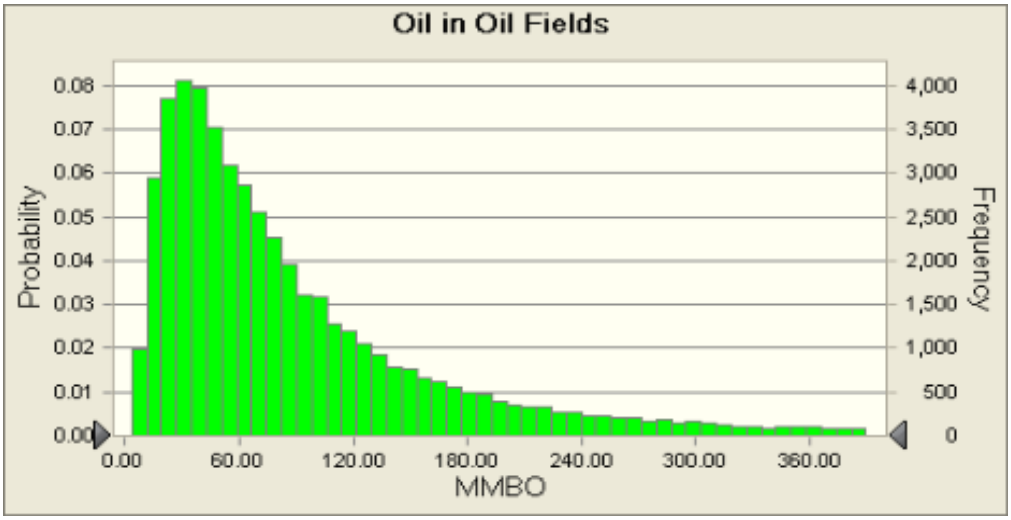
60590102
Andean Fold Belt Structures
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 3.27 to 1,475.59
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.46



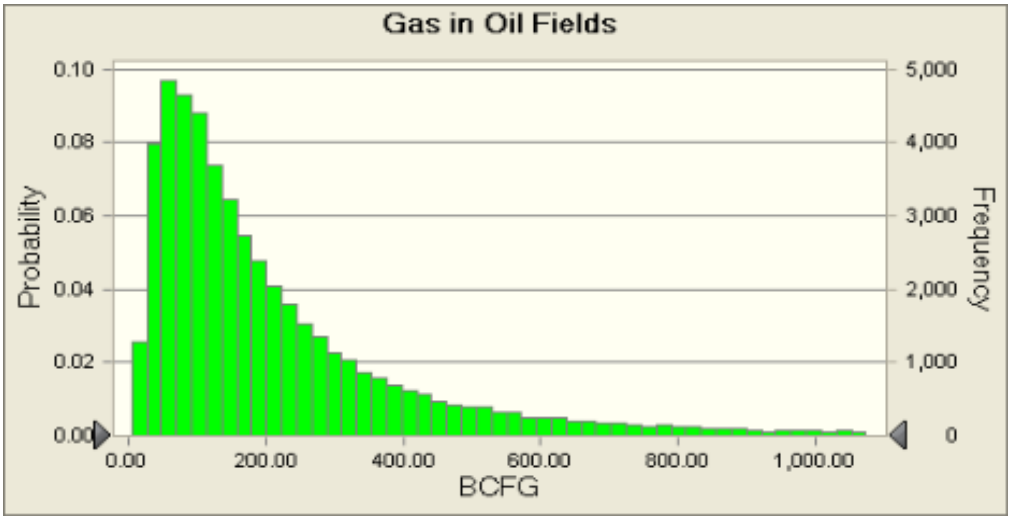
Statistics:	Forecast values
Trials	50,000
Mean	99.03
Median	65.61
Mode	---
Standard Deviation	103.84
Variance	10,783.64
Skewness	2.84
Kurtosis	14.45
Coefficient of Variability	1.05
Minimum	3.27
Maximum	1,475.59
Range Width	1,472.33
Mean Standard Error	0.46

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	3.27
95%	15.65
90%	21.37
85%	26.39
80%	31.30
75%	36.19
70%	41.07
65%	46.46
60%	52.16
55%	58.72
50%	65.61
45%	73.28
40%	81.84
35%	92.21
30%	104.46
25%	119.93
20%	140.38
15%	169.06
10%	214.02
5%	303.97
0%	1,475.59

Forecast: Gas in Oil Fields

Summary:
Entire range is from 4.71 to 6,911.73
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.33



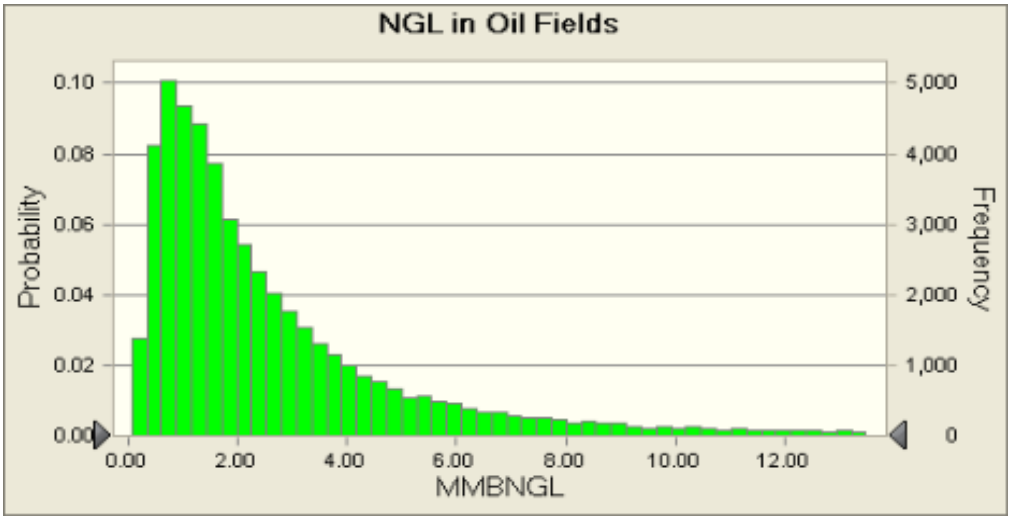
Statistics:	Forecast values
Trials	50,000
Mean	240.24
Median	149.73
Mode	---
Standard Deviation	297.66
Variance	88,600.53
Skewness	4.72
Kurtosis	43.57
Coefficient of Variability	1.24
Minimum	4.71
Maximum	6,911.73
Range Width	6,907.02
Mean Standard Error	1.33

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	4.71
95%	34.16
90%	47.02
85%	58.78
80%	69.70
75%	81.13
70%	93.17
65%	105.65
60%	118.39
55%	133.45
50%	149.72
45%	168.33
40%	189.52
35%	214.88
30%	244.52
25%	281.38
20%	330.15
15%	400.56
10%	511.90
5%	743.89
0%	6,911.73

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.06 to 108.70
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.02



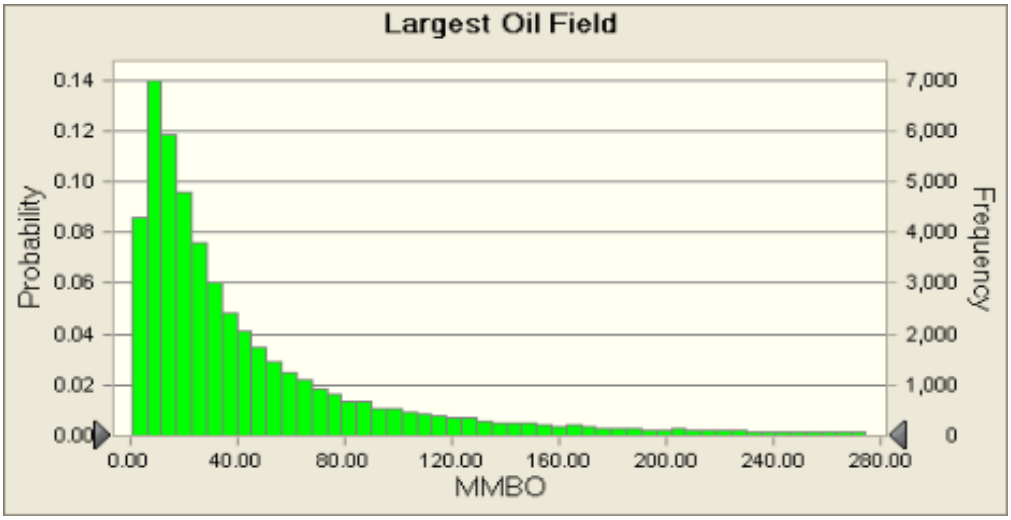
Statistics:	Forecast values
Trials	50,000
Mean	2.97
Median	1.83
Mode	---
Standard Deviation	3.76
Variance	14.13
Skewness	5.20
Kurtosis	56.69
Coefficient of Variability	1.27
Minimum	0.06
Maximum	108.70
Range Width	108.65
Mean Standard Error	0.02

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.06
95%	0.42
90%	0.58
85%	0.72
80%	0.85
75%	1.00
70%	1.14
65%	1.29
60%	1.45
55%	1.63
50%	1.83
45%	2.07
40%	2.34
35%	2.65
30%	3.01
25%	3.46
20%	4.06
15%	4.92
10%	6.30
5%	9.14
0%	108.70

Forecast: Largest Oil Field

Summary:
Entire range is from 0.74 to 599.34
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.35



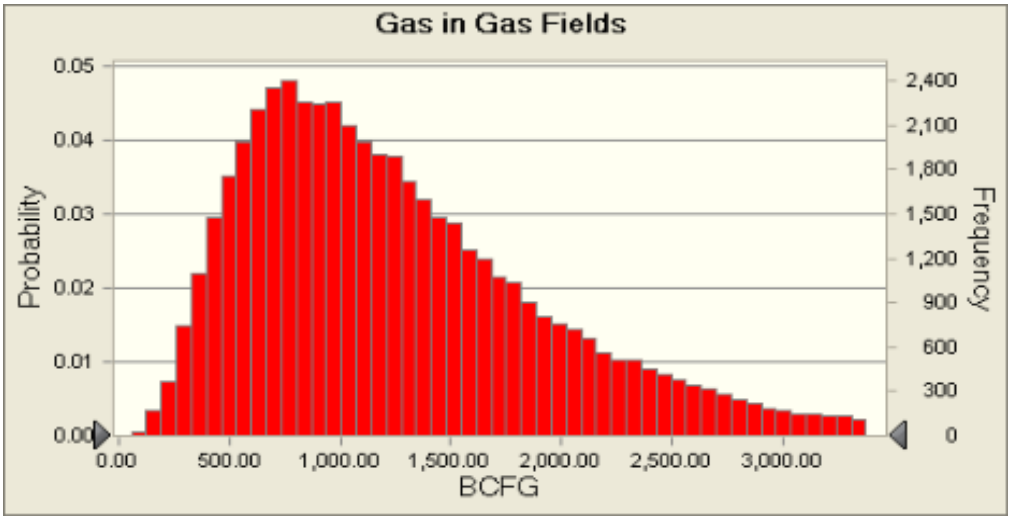
Statistics:	Forecast values
Trials	50,000
Mean	55.00
Median	27.46
Mode	---
Standard Deviation	78.31
Variance	6,132.38
Skewness	3.32
Kurtosis	16.51
Coefficient of Variability	1.42
Minimum	0.74
Maximum	599.34
Range Width	598.60
Mean Standard Error	0.35

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	0.74
95%	4.69
90%	6.85
85%	8.86
80%	10.84
75%	12.96
70%	15.20
65%	17.76
60%	20.65
55%	23.80
50%	27.46
45%	31.73
40%	36.85
35%	43.19
30%	50.94
25%	61.08
20%	74.99
15%	96.15
10%	130.11
5%	206.44
0%	599.34

Forecast: Gas in Gas Fields

Summary:
Entire range is from 56.03 to 7,703.39
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 3.34



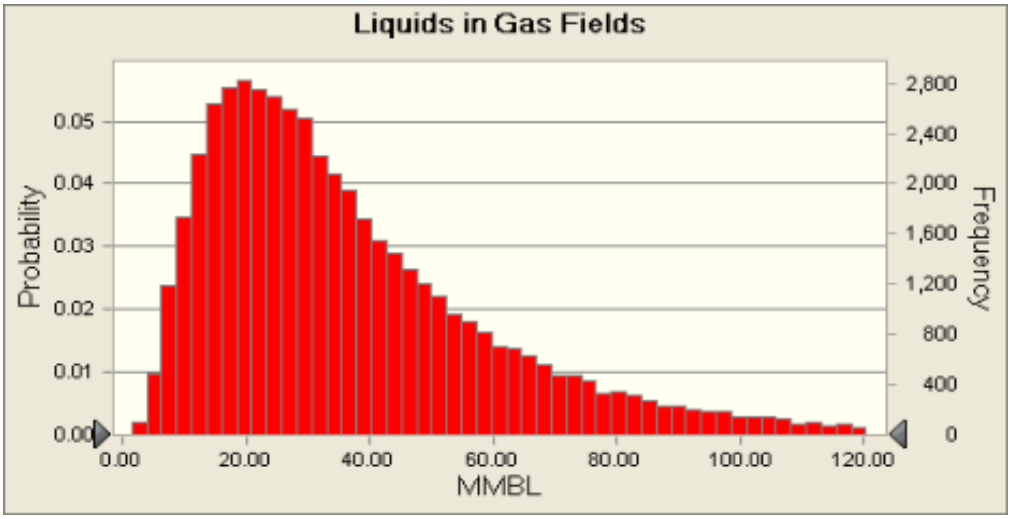
Statistics:	Forecast values
Trials	50,000
Mean	1,288.60
Median	1,125.92
Mode	---
Standard Deviation	746.30
Variance	556,967.47
Skewness	1.31
Kurtosis	5.41
Coefficient of Variability	0.5792
Minimum	56.03
Maximum	7,703.39
Range Width	7,647.36
Mean Standard Error	3.34

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	56.03
95%	399.70
90%	507.17
85%	594.43
80%	671.25
75%	742.71
70%	813.45
65%	888.79
60%	963.51
55%	1,042.94
50%	1,125.91
45%	1,213.81
40%	1,305.26
35%	1,409.78
30%	1,524.58
25%	1,660.68
20%	1,817.41
15%	2,023.20
10%	2,300.24
5%	2,737.80
0%	7,703.39

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 1.33 to 578.03
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.13



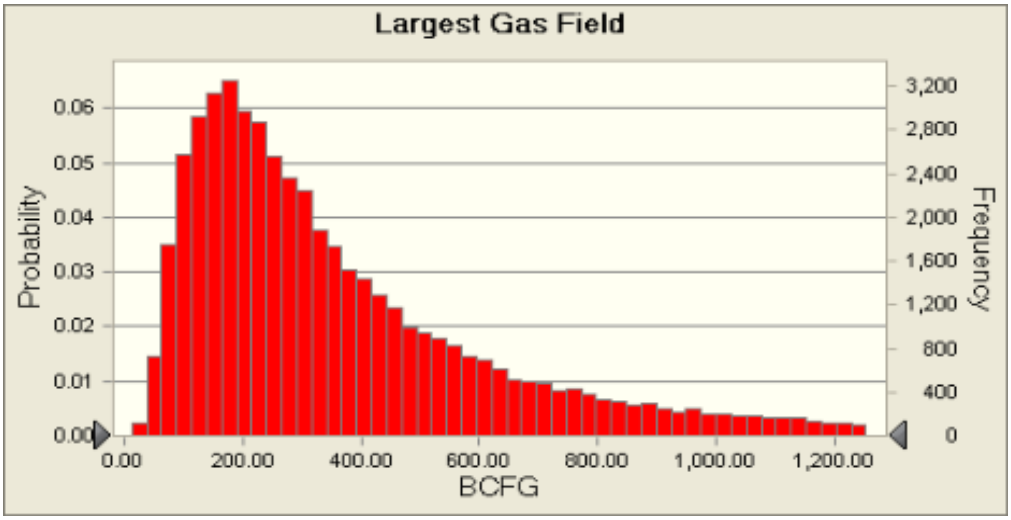
Statistics:	Forecast values
Trials	50,000
Mean	38.54
Median	31.00
Mode	---
Standard Deviation	29.25
Variance	855.35
Skewness	2.97
Kurtosis	23.24
Coefficient of Variability	0.7589
Minimum	1.33
Maximum	578.03
Range Width	576.69
Mean Standard Error	0.13

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	1.33
95%	9.73
90%	12.69
85%	15.12
80%	17.35
75%	19.52
70%	21.68
65%	23.91
60%	26.17
55%	28.53
50%	31.00
45%	33.79
40%	36.76
35%	40.18
30%	44.19
25%	48.84
20%	54.54
15%	62.02
10%	72.42
5%	91.70
0%	578.03

Forecast: Largest Gas Field

Summary:
Entire range is from 11.72 to 1,799.91
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.39



Statistics:	Forecast values
Trials	50,000
Mean	385.86
Median	287.68
Mode	---
Standard Deviation	310.10
Variance	96,163.17
Skewness	1.79
Kurtosis	6.48
Coefficient of Variability	0.8037
Minimum	11.72
Maximum	1,799.91
Range Width	1,788.19
Mean Standard Error	1.39

Forecast: Largest Gas Field (continued)

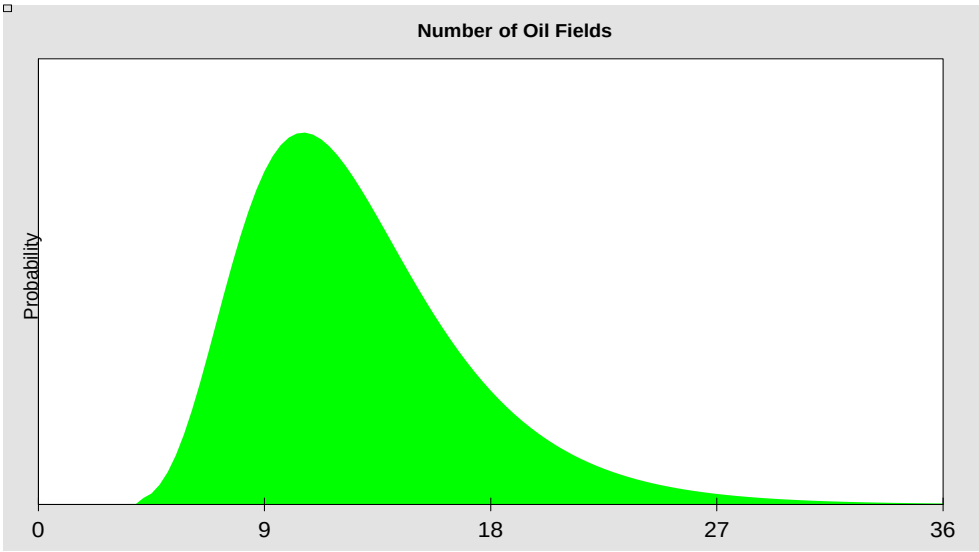
Percentiles:	BCFG
100%	11.72
95%	86.80
90%	111.94
85%	133.62
80%	153.53
75%	173.54
70%	193.43
65%	214.90
60%	236.88
55%	261.44
50%	287.68
45%	315.97
40%	350.28
35%	389.31
30%	435.36
25%	492.04
20%	562.84
15%	657.50
10%	800.64
5%	1,056.29
0%	1,799.91

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	11.80	12.8
Standard Deviation	4.58	4.58
Selected range is from -Infinity to 35.00		1.00 to 36.00



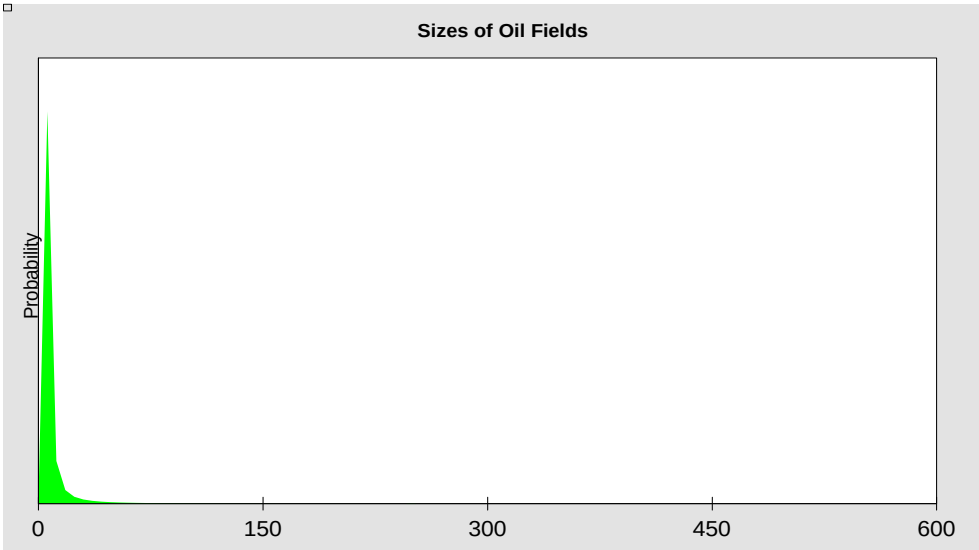
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	12.78	12.77
Median	12.00	11.99
Mode	---	---
Standard Deviation	4.53	4.50
Variance	20.51	20.23
Skewness	1.10	1.07
Kurtosis	4.77	4.65
Coefficient of Variability	0.3543	0.3522
Minimum	3.14	1.00
Maximum	35.93	36.00
Range Width	32.79	35.00
Mean Standard Error	0.02	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	3.14	1.00
95%	6.94	6.94
90%	7.79	7.80
85%	8.46	8.46
80%	9.01	9.02
75%	9.54	9.54
70%	10.04	10.04
65%	10.52	10.52
60%	11.02	11.00
55%	11.50	11.49
50%	12.00	11.99
45%	12.53	12.52
40%	13.09	13.09
35%	13.69	13.70
30%	14.38	14.38
25%	15.16	15.15
20%	16.05	16.06
15%	17.22	17.20
10%	18.79	18.74
5%	21.34	21.30
0%	35.93	36.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	8.52	9.02
Standard Deviation	72.07	72.07
Selected range is from -Infinity to 599.50		0.50 to 600.00



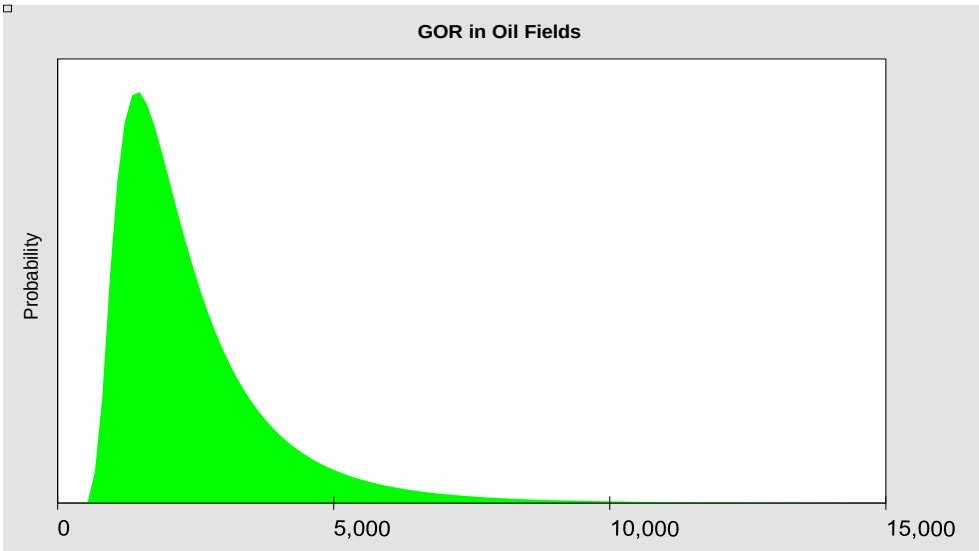
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	7.81	8.02
Median	1.51	1.50
Mode	---	---
Standard Deviation	27.51	26.80
Variance	756.92	718.35
Skewness	10.27	10.24
Kurtosis	144.01	144.99
Coefficient of Variability	3.52	3.34
Minimum	0.50	0.50
Maximum	588.70	600.00
Range Width	588.20	599.50
Mean Standard Error	0.12	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	0.50	0.50
95%	0.53	0.53
90%	0.57	0.57
85%	0.62	0.62
80%	0.68	0.67
75%	0.75	0.75
70%	0.84	0.84
65%	0.95	0.95
60%	1.10	1.09
55%	1.28	1.27
50%	1.51	1.50
45%	1.81	1.79
40%	2.20	2.18
35%	2.75	2.71
30%	3.49	3.45
25%	4.55	4.52
20%	6.22	6.18
15%	9.02	8.98
10%	14.68	14.54
5%	30.62	30.04
0%	588.70	600.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	1,931.47	2,431.47
Standard Deviation	1,566.78	1,566.78
Selected range is from -Infinity to 13,500.00		500.00 to 14,000.00



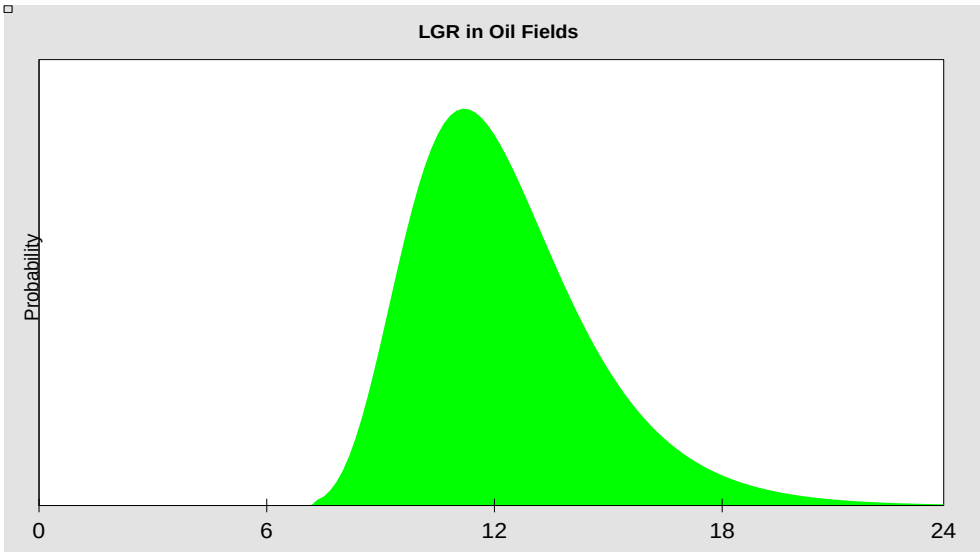
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	2,422.28	2,416.61
Median	2,007.98	1,998.66
Mode	---	---
Standard Deviation	1,496.31	1,491.04
Variance	2,238,941.53	2,223,185.72
Skewness	2.22	2.26
Kurtosis	10.36	10.70
Coefficient of Variability	0.6177	0.6170
Minimum	564.85	500.00
Maximum	13,745.85	14,000.00
Range Width	13,181.00	13,500.00
Mean Standard Error	6.69	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	564.85	500.00
95%	965.56	965.57
90%	1,097.21	1,102.77
85%	1,210.69	1,217.50
80%	1,317.96	1,324.07
75%	1,423.60	1,428.01
70%	1,525.79	1,532.48
65%	1,639.52	1,639.74
60%	1,754.14	1,751.80
55%	1,875.93	1,870.67
50%	2,007.97	1,998.66
45%	2,145.96	2,138.58
40%	2,302.92	2,294.11
35%	2,477.50	2,470.35
30%	2,679.83	2,674.77
25%	2,927.90	2,919.11
20%	3,239.62	3,223.43
15%	3,638.01	3,626.33
10%	4,220.45	4,217.71
5%	5,331.59	5,299.80
0%	13,745.85	14,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	7.38	12.38
Standard Deviation	2.45	2.45
Selected range is from -Infinity to 19.00		5.00 to 24.00



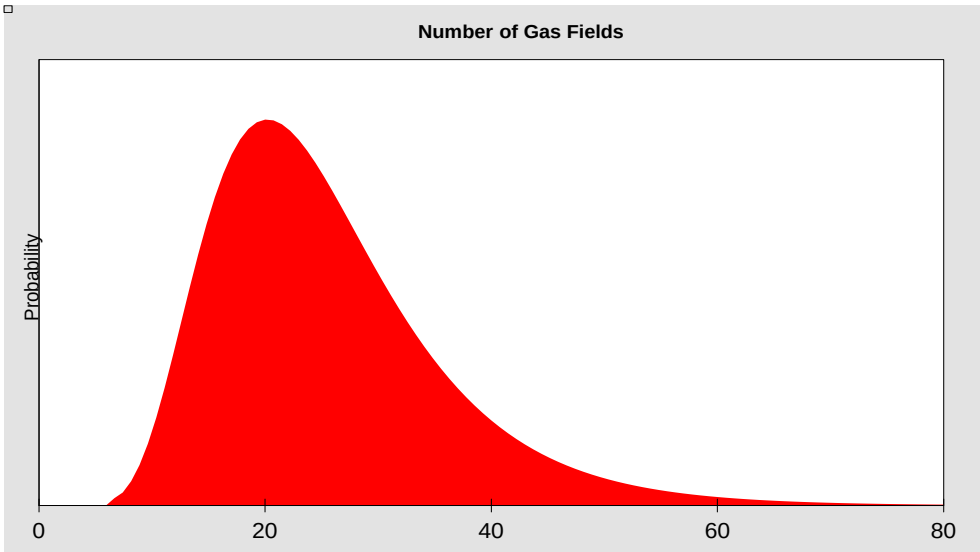
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	12.36	12.36
Median	12.00	12.00
Mode	---	---
Standard Deviation	2.40	2.41
Variance	5.75	5.81
Skewness	0.8795	0.9111
Kurtosis	4.05	4.16
Coefficient of Variability	0.1939	0.1950
Minimum	6.99	5.00
Maximum	23.90	24.00
Range Width	16.91	19.00
Mean Standard Error	0.01	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.99	5.00
95%	9.11	9.11
90%	9.62	9.63
85%	10.01	10.01
80%	10.35	10.33
75%	10.64	10.63
70%	10.91	10.91
65%	11.19	11.18
60%	11.46	11.45
55%	11.73	11.72
50%	12.00	12.00
45%	12.29	12.29
40%	12.60	12.59
35%	12.94	12.92
30%	13.29	13.29
25%	13.70	13.70
20%	14.18	14.18
15%	14.77	14.77
10%	15.55	15.57
5%	16.87	16.88
0%	23.90	24.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	24.91	25.91
Standard Deviation	10.36	10.36
Selected range is from -Infinity to 79.00		1.00 to 80.00



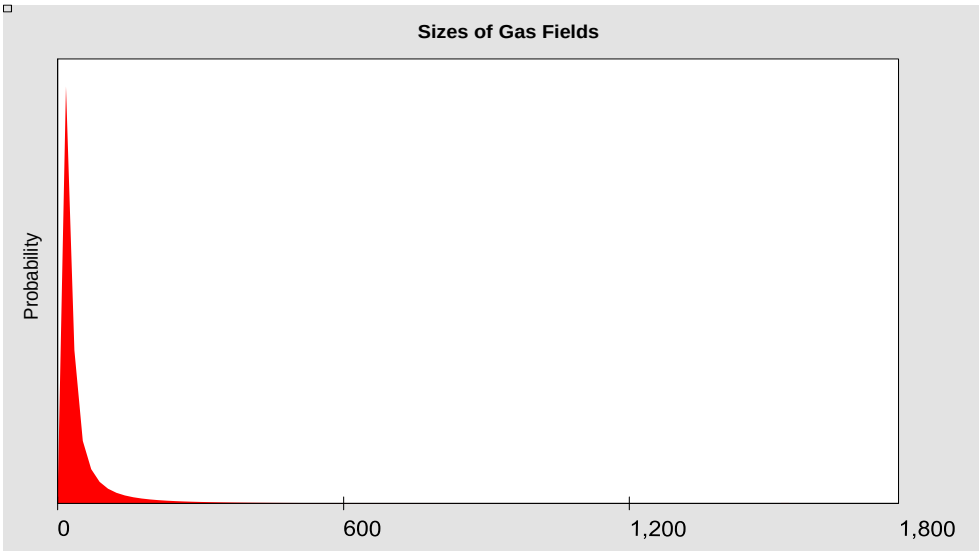
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	25.92	25.85
Median	24.04	23.99
Mode	---	---
Standard Deviation	10.23	10.16
Variance	104.71	103.20
Skewness	1.14	1.15
Kurtosis	4.83	4.92
Coefficient of Variability	0.3948	0.3931
Minimum	5.51	1.00
Maximum	79.66	80.00
Range Width	74.15	79.00
Mean Standard Error	0.05	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.51	1.00
95%	12.90	12.92
90%	14.79	14.78
85%	16.22	16.20
80%	17.45	17.43
75%	18.58	18.56
70%	19.65	19.65
65%	20.74	20.71
60%	21.80	21.78
55%	22.88	22.86
50%	24.04	23.99
45%	25.23	25.17
40%	26.48	26.43
35%	27.90	27.81
30%	29.44	29.34
25%	31.20	31.08
20%	33.26	33.15
15%	35.86	35.74
10%	39.54	39.29
5%	45.52	45.20
0%	79.66	80.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	49.77	52.77
Standard Deviation	157.47	157.47
Selected range is from -Infinity to 1,797.00		3.00 to 1,800.00



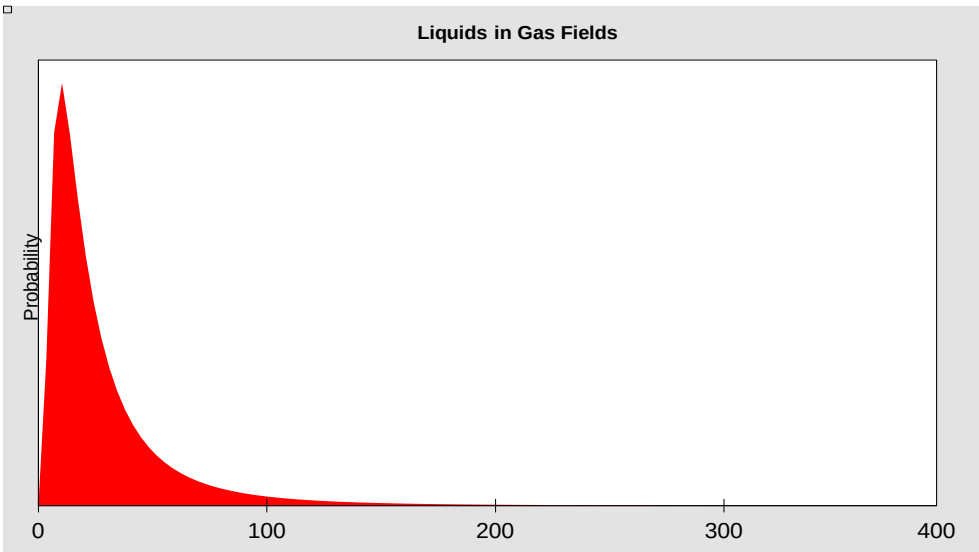
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	49.82	49.88
Median	17.99	17.97
Mode	---	---
Standard Deviation	105.68	106.64
Variance	11,167.25	11,372.71
Skewness	6.50	6.71
Kurtosis	63.18	67.35
Coefficient of Variability	2.12	2.14
Minimum	3.02	3.00
Maximum	1,763.93	1,800.00
Range Width	1,760.91	1,797.00
Mean Standard Error	0.47	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	3.02	3.00
95%	4.17	4.17
90%	5.06	5.06
85%	6.01	6.01
80%	7.05	7.07
75%	8.28	8.27
70%	9.63	9.65
65%	11.22	11.25
60%	13.10	13.12
55%	15.38	15.33
50%	17.99	17.97
45%	21.31	21.18
40%	25.34	25.15
35%	30.35	30.17
30%	36.87	36.69
25%	45.77	45.48
20%	58.58	57.99
15%	77.81	77.27
10%	111.06	111.31
5%	191.82	191.94
0%	1,763.93	1,800.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	27.37	30.37
Standard Deviation	34.55	34.55
Selected range is from -Infinity to 347.00		3.00 to 350.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	29.86	29.93
Median	19.89	19.98
Mode	---	---
Standard Deviation	31.29	31.17
Variance	979.08	971.66
Skewness	3.50	3.43
Kurtosis	21.44	20.67
Coefficient of Variability	1.05	1.04
Minimum	3.27	3.00
Maximum	347.66	350.00
Range Width	344.39	347.00
Mean Standard Error	0.14	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	3.27	3.00
95%	6.36	6.41
90%	7.82	7.86
85%	9.17	9.18
80%	10.46	10.47
75%	11.79	11.79
70%	13.13	13.18
65%	14.59	14.66
60%	16.19	16.26
55%	17.91	18.02
50%	19.89	19.98
45%	22.16	22.19
40%	24.65	24.74
35%	27.62	27.72
30%	31.16	31.31
25%	35.56	35.76
20%	41.51	41.55
15%	49.55	49.59
10%	61.95	62.09
5%	86.57	86.92
0%	347.66	350.00

End of Assumptions

Simulation started on 11/21/2008 at 15:07:32
Simulation stopped on 11/21/2008 at 15:29:43