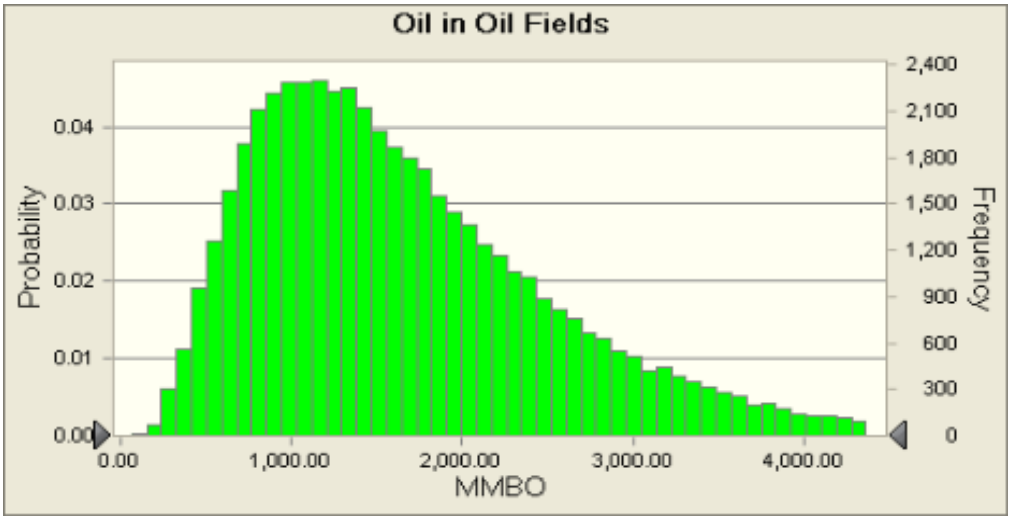
60980106
Orinoco Delta and Offshore
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 66.81 to 8,470.58
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 4.26



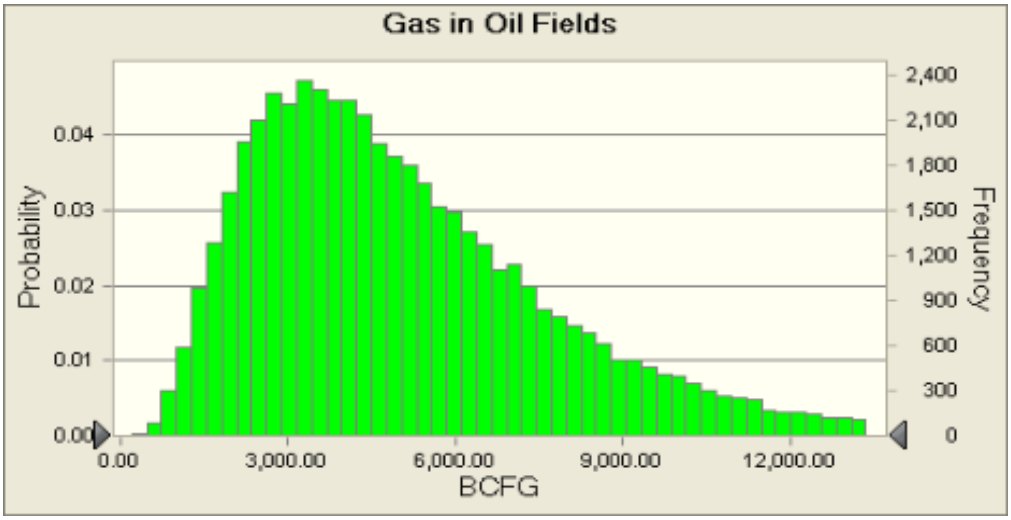
Statistics:	Forecast values
Trials	50,000
Mean	1,697.80
Median	1,494.21
Mode	---
Standard Deviation	952.56
Variance	907,377.71
Skewness	1.30
Kurtosis	5.43
Coefficient of Variability	0.5611
Minimum	66.81
Maximum	8,470.58
Range Width	8,403.77
Mean Standard Error	4.26

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	66.81
95%	549.96
90%	691.51
85%	803.24
80%	906.84
75%	1,003.23
70%	1,099.13
65%	1,193.72
60%	1,291.60
55%	1,389.18
50%	1,494.20
45%	1,609.08
40%	1,728.63
35%	1,861.01
30%	2,009.60
25%	2,178.44
20%	2,377.31
15%	2,626.50
10%	2,969.05
5%	3,522.82
0%	8,470.58

Forecast: Gas in Oil Fields

Summary:
Entire range is from 201.85 to 25,224.93
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 13.07



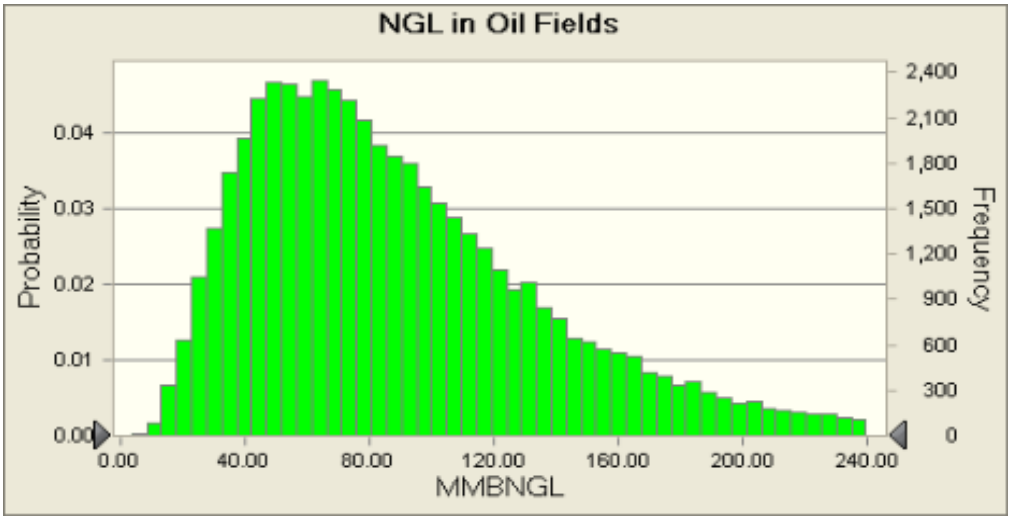
Statistics:	Forecast values
Trials	50,000
Mean	5,171.37
Median	4,537.34
Mode	---
Standard Deviation	2,923.22
Variance	8,545,202.26
Skewness	1.32
Kurtosis	5.56
Coefficient of Variability	0.5653
Minimum	201.85
Maximum	25,224.93
Range Width	25,023.08
Mean Standard Error	13.07

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	201.85
95%	1,665.81
90%	2,100.97
85%	2,433.80
80%	2,746.65
75%	3,046.78
70%	3,333.33
65%	3,627.46
60%	3,925.68
55%	4,224.34
50%	4,537.31
45%	4,895.40
40%	5,260.75
35%	5,663.73
30%	6,117.34
25%	6,627.80
20%	7,227.98
15%	8,013.42
10%	9,078.47
5%	10,765.94
0%	25,224.93

Forecast: NGL in Oil Fields

Summary:
Entire range is from 3.38 to 506.02
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.24



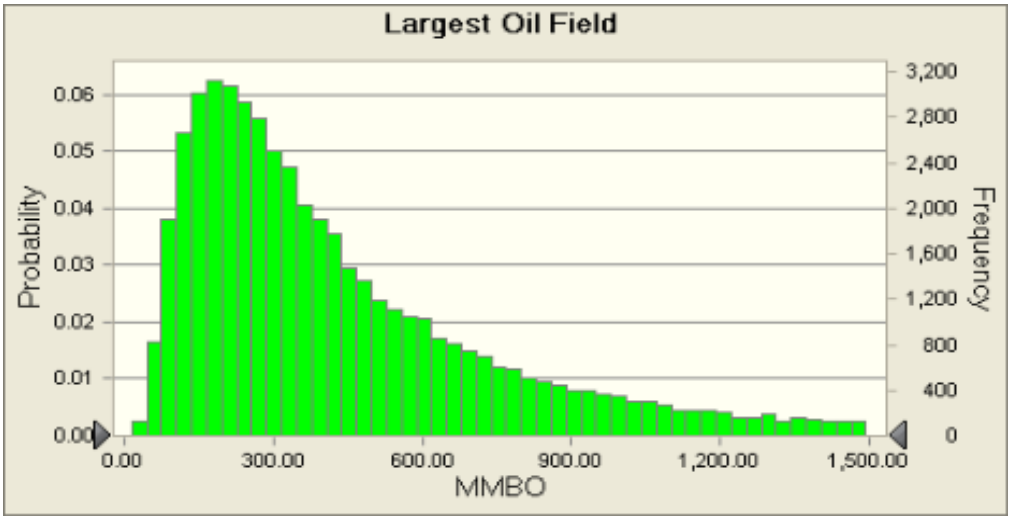
Statistics:	Forecast values
Trials	50,000
Mean	91.64
Median	80.08
Mode	---
Standard Deviation	52.94
Variance	2,802.47
Skewness	1.39
Kurtosis	5.90
Coefficient of Variability	0.5777
Minimum	3.38
Maximum	506.02
Range Width	502.64
Mean Standard Error	0.24

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	3.38
95%	29.11
90%	36.60
85%	42.75
80%	48.14
75%	53.20
70%	58.55
65%	63.72
60%	68.92
55%	74.25
50%	80.08
45%	86.32
40%	92.86
35%	100.05
30%	108.02
25%	117.07
20%	128.58
15%	142.04
10%	161.70
5%	193.55
0%	506.02

Forecast: Largest Oil Field

Summary:
Entire range is from 14.20 to 1,999.55
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.65



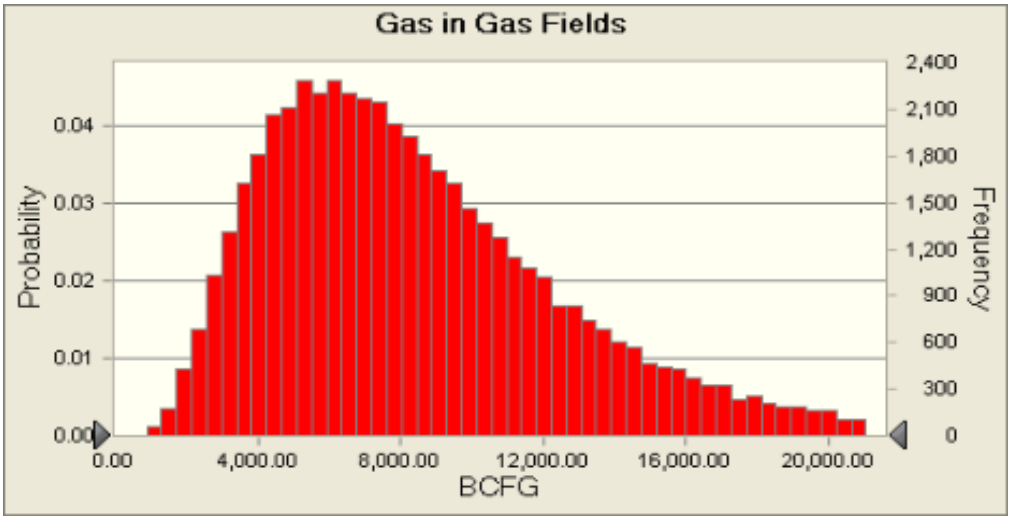
Statistics:	Forecast values
Trials	50,000
Mean	460.66
Median	341.99
Mode	---
Standard Deviation	368.74
Variance	135,971.23
Skewness	1.67
Kurtosis	5.77
Coefficient of Variability	0.8005
Minimum	14.20
Maximum	1,999.55
Range Width	1,985.35
Mean Standard Error	1.65

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	14.20
95%	100.09
90%	129.57
85%	155.09
80%	179.38
75%	203.56
70%	228.13
65%	253.70
60%	280.23
55%	310.04
50%	341.99
45%	378.53
40%	418.03
35%	466.55
30%	525.55
25%	595.27
20%	682.00
15%	797.04
10%	969.29
5%	1,271.21
0%	1,999.55

Forecast: Gas in Gas Fields

Summary:
Entire range is from 438.93 to 39,665.76
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 19.97



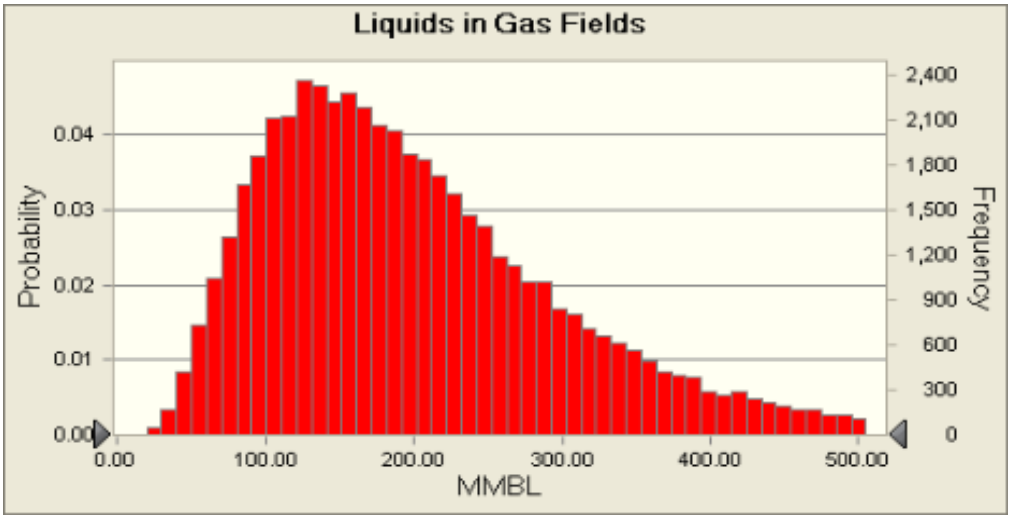
Statistics:	Forecast values
Trials	50,000
Mean	8,562.05
Median	7,679.84
Mode	---
Standard Deviation	4,464.59
Variance	19,932,552.24
Skewness	1.18
Kurtosis	5.00
Coefficient of Variability	0.5214
Minimum	438.93
Maximum	39,665.76
Range Width	39,226.83
Mean Standard Error	19.97

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	438.93
95%	3,011.00
90%	3,730.56
85%	4,309.49
80%	4,807.12
75%	5,291.79
70%	5,761.43
65%	6,228.52
60%	6,705.13
55%	7,187.82
50%	7,679.84
45%	8,215.81
40%	8,787.74
35%	9,403.45
30%	10,091.36
25%	10,880.50
20%	11,817.70
15%	12,993.94
10%	14,550.93
5%	17,125.52
0%	39,665.76

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 9.23 to 1,039.10
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.48



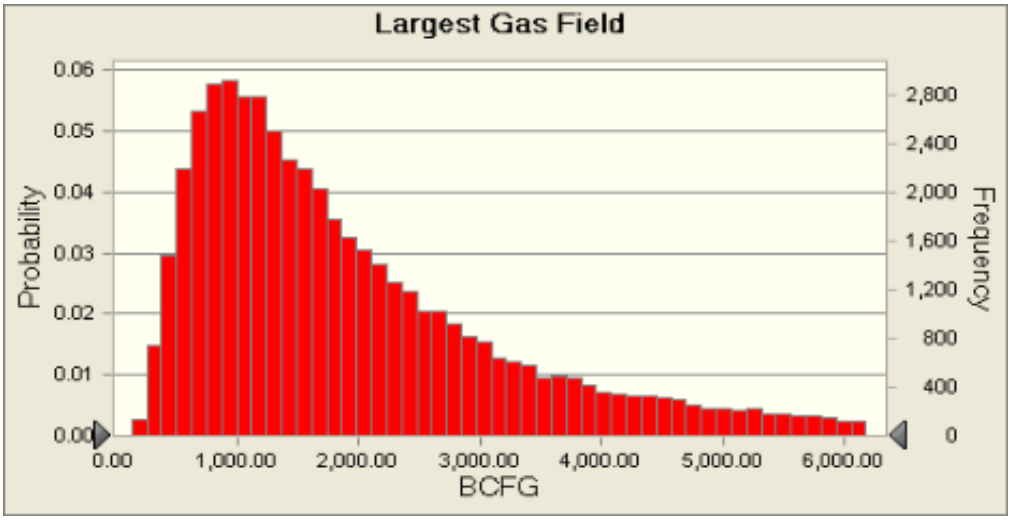
Statistics:	Forecast values
Trials	50,000
Mean	203.55
Median	182.05
Mode	---
Standard Deviation	107.77
Variance	11,613.73
Skewness	1.23
Kurtosis	5.20
Coefficient of Variability	0.5294
Minimum	9.23
Maximum	1,039.10
Range Width	1,029.87
Mean Standard Error	0.48

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	9.23
95%	70.73
90%	88.10
85%	101.63
80%	113.48
75%	125.05
70%	135.92
65%	147.03
60%	158.30
55%	169.81
50%	182.05
45%	194.71
40%	208.14
35%	222.85
30%	239.42
25%	258.07
20%	281.71
15%	309.77
10%	348.20
5%	413.29
0%	1,039.10

Forecast: Largest Gas Field

Summary:
Entire range is from 130.29 to 7,999.40
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 6.62



Statistics:	Forecast values
Trials	50,000
Mean	2,027.39
Median	1,581.17
Mode	---
Standard Deviation	1,480.45
Variance	2,191,731.70
Skewness	1.53
Kurtosis	5.26
Coefficient of Variability	0.7302
Minimum	130.29
Maximum	7,999.40
Range Width	7,869.11
Mean Standard Error	6.62

Forecast: Largest Gas Field (continued)

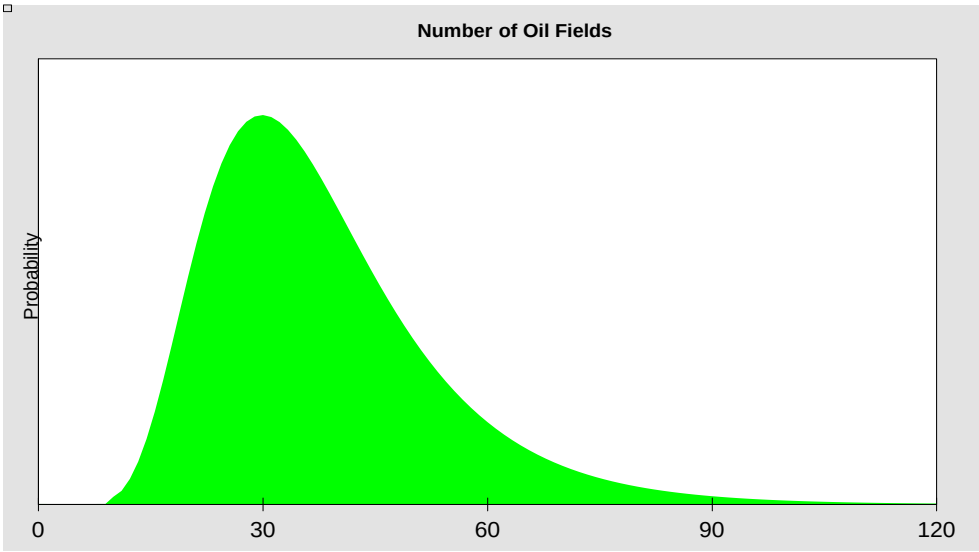
Percentiles:	BCFG
100%	130.29
95%	507.83
90%	645.52
85%	760.35
80%	866.37
75%	970.18
70%	1,079.55
65%	1,191.73
60%	1,309.92
55%	1,440.67
50%	1,581.13
45%	1,729.93
40%	1,906.49
35%	2,104.28
30%	2,337.71
25%	2,616.47
20%	2,951.51
15%	3,418.79
10%	4,114.53
5%	5,246.40
0%	7,999.40

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	36.91	37.91
Standard Deviation	15.60	15.6
Selected range is from -Infinity to 119.00		1.00 to 120.00



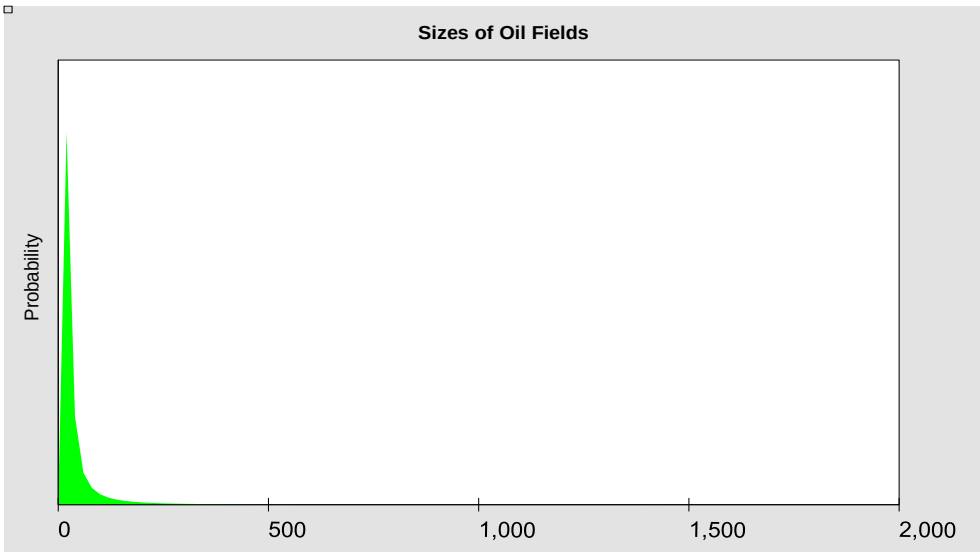
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	37.89	37.82
Median	35.07	34.98
Mode	---	---
Standard Deviation	15.31	15.30
Variance	234.53	233.99
Skewness	1.18	1.17
Kurtosis	5.01	4.99
Coefficient of Variability	0.4041	0.4045
Minimum	7.60	1.00
Maximum	119.37	120.00
Range Width	111.76	119.00
Mean Standard Error	0.07	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	7.60	1.00
95%	18.53	18.45
90%	21.29	21.22
85%	23.45	23.33
80%	25.33	25.16
75%	26.96	26.86
70%	28.55	28.48
65%	30.15	30.07
60%	31.70	31.67
55%	33.33	33.30
50%	35.07	34.98
45%	36.84	36.76
40%	38.72	38.65
35%	40.75	40.72
30%	42.99	43.02
25%	45.74	45.65
20%	48.77	48.77
15%	52.79	52.68
10%	58.25	58.05
5%	66.99	66.99
0%	119.37	120.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	43.43	48.43
Standard Deviation	183.58	183.58
Selected range is from -Infinity to 1,995.00		5.00 to 2,000.00



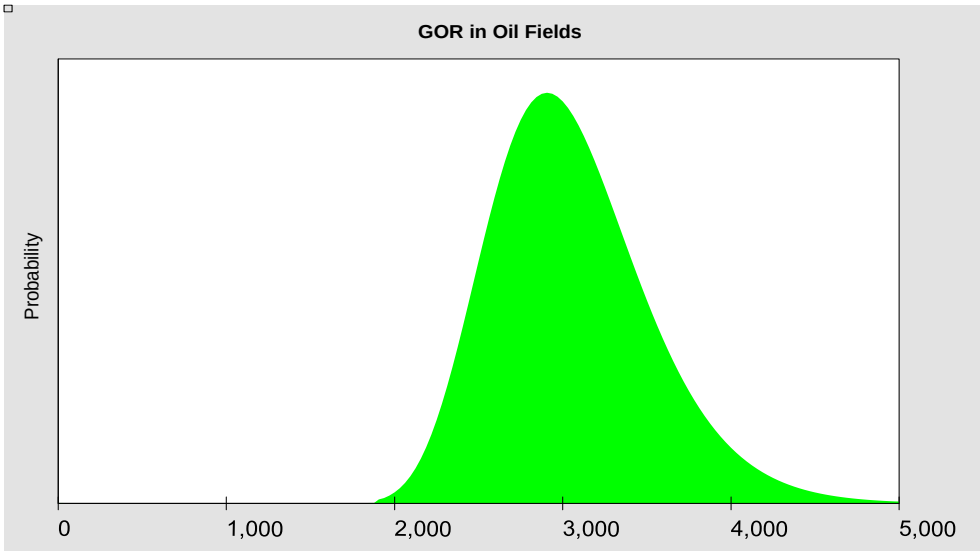
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	44.71	45.17
Median	15.06	14.98
Mode	---	---
Standard Deviation	105.93	107.20
Variance	11,221.57	11,491.96
Skewness	7.86	7.80
Kurtosis	92.06	88.40
Coefficient of Variability	2.37	2.37
Minimum	5.00	5.00
Maximum	1,977.43	2,000.00
Range Width	1,972.43	1,995.00
Mean Standard Error	0.47	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.00	5.00
95%	5.61	5.60
90%	6.14	6.11
85%	6.70	6.69
80%	7.38	7.36
75%	8.14	8.14
70%	9.08	9.06
65%	10.18	10.16
60%	11.49	11.47
55%	13.08	13.05
50%	15.06	14.98
45%	17.58	17.37
40%	20.62	20.40
35%	24.51	24.30
30%	29.59	29.48
25%	36.73	36.64
20%	46.91	47.10
15%	63.95	63.71
10%	94.40	94.14
5%	170.88	170.00
0%	1,977.43	2,000.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	2,248.70	3,048.70
Standard Deviation	475.77	475.77
Selected range is from -Infinity to 4,200.00		800.00 to 5,000.00



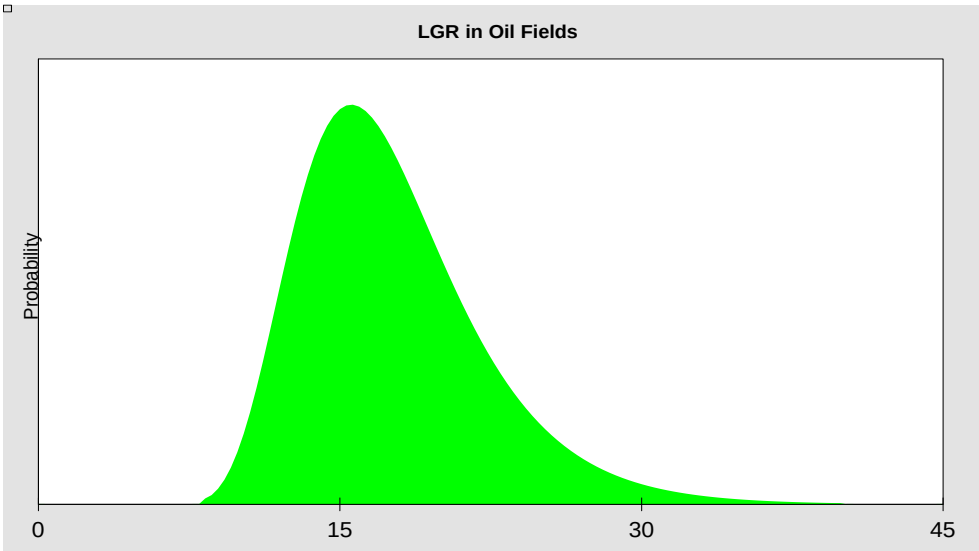
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	3,041.97	3,046.49
Median	2,999.29	2,999.42
Mode	---	---
Standard Deviation	467.95	470.79
Variance	218,973.40	221,644.97
Skewness	0.5432	0.5717
Kurtosis	3.32	3.39
Coefficient of Variability	0.1538	0.1545
Minimum	1,612.73	800.00
Maximum	4,997.98	5,000.00
Range Width	3,385.24	4,200.00
Mean Standard Error	2.09	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1,612.73	800.00
95%	2,355.05	2,359.16
90%	2,475.80	2,482.29
85%	2,566.84	2,570.80
80%	2,638.32	2,644.46
75%	2,705.43	2,710.08
70%	2,765.75	2,770.99
65%	2,827.54	2,829.17
60%	2,883.67	2,885.95
55%	2,940.44	2,942.39
50%	2,999.28	2,999.42
45%	3,057.15	3,057.96
40%	3,115.80	3,119.03
35%	3,181.62	3,183.87
30%	3,251.55	3,254.13
25%	3,330.03	3,332.25
20%	3,418.31	3,422.11
15%	3,526.89	3,530.77
10%	3,664.89	3,673.61
5%	3,882.61	3,897.99
0%	4,997.98	5,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	13.73	17.73
Standard Deviation	4.65	4.65
Selected range is from -Infinity to 36.00		4.00 to 40.00



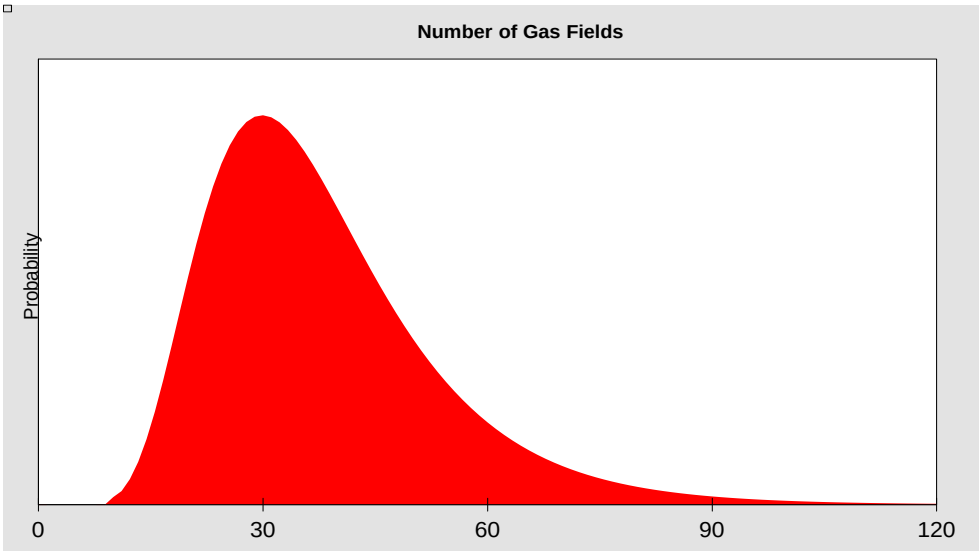
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	17.74	17.70
Median	17.02	16.99
Mode	---	---
Standard Deviation	4.60	4.58
Variance	21.12	20.96
Skewness	0.9443	0.9309
Kurtosis	4.26	4.22
Coefficient of Variability	0.2590	0.2587
Minimum	6.84	4.00
Maximum	39.98	40.00
Range Width	33.14	36.00
Mean Standard Error	0.02	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.84	4.00
95%	11.62	11.56
90%	12.57	12.52
85%	13.29	13.24
80%	13.88	13.85
75%	14.42	14.41
70%	14.95	14.93
65%	15.47	15.45
60%	15.98	15.95
55%	16.48	16.47
50%	17.02	16.99
45%	17.57	17.54
40%	18.17	18.13
35%	18.79	18.75
30%	19.49	19.44
25%	20.26	20.22
20%	21.18	21.14
15%	22.32	22.27
10%	23.91	23.80
5%	26.34	26.29
0%	39.98	40.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	36.91	37.91
Standard Deviation	15.60	15.6
Selected range is from -Infinity to 119.00		1.00 to 120.00



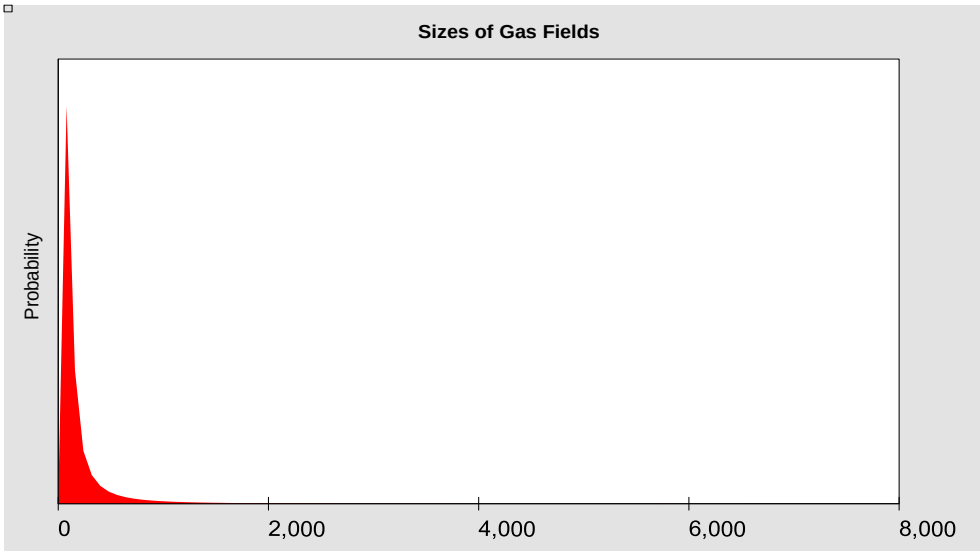
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	37.82	37.82
Median	35.05	34.98
Mode	---	---
Standard Deviation	15.21	15.30
Variance	231.45	233.99
Skewness	1.15	1.17
Kurtosis	4.90	4.99
Coefficient of Variability	0.4022	0.4045
Minimum	8.22	1.00
Maximum	119.63	120.00
Range Width	111.41	119.00
Mean Standard Error	0.07	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	8.22	1.00
95%	18.48	18.45
90%	21.24	21.22
85%	23.38	23.33
80%	25.24	25.16
75%	26.92	26.86
70%	28.52	28.48
65%	30.15	30.07
60%	31.71	31.67
55%	33.34	33.30
50%	35.05	34.98
45%	36.80	36.76
40%	38.63	38.65
35%	40.70	40.72
30%	43.03	43.02
25%	45.65	45.65
20%	48.70	48.77
15%	52.64	52.68
10%	57.99	58.05
5%	66.96	66.99
0%	119.63	120.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	209.78	239.78
Standard Deviation	702.84	702.84
Selected range is from -Infinity to 7,970.00		30.00 to 8,000.00



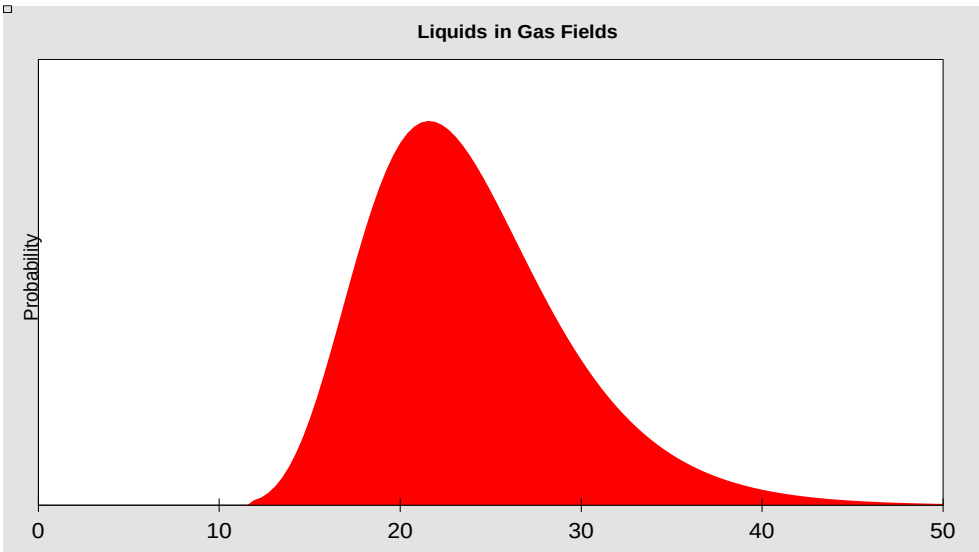
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	223.44	226.91
Median	89.91	89.88
Mode	---	---
Standard Deviation	450.91	463.21
Variance	203,323.10	214,563.22
Skewness	6.77	6.93
Kurtosis	68.08	71.33
Coefficient of Variability	2.02	2.04
Minimum	30.06	30.00
Maximum	7,980.57	8,000.00
Range Width	7,950.51	7,970.00
Mean Standard Error	2.02	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.06	30.00
95%	34.40	34.44
90%	37.89	37.89
85%	41.63	41.63
80%	45.82	45.82
75%	50.63	50.61
70%	55.96	56.13
65%	62.35	62.56
60%	69.97	70.12
55%	78.94	79.09
50%	89.90	89.88
45%	102.75	103.04
40%	118.53	119.37
35%	139.10	140.08
30%	165.71	167.12
25%	202.19	203.78
20%	253.29	256.21
15%	333.76	337.50
10%	479.56	482.13
5%	823.83	828.24
0%	7,980.57	8,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	18.81	23.81
Standard Deviation	5.70	5.7
Selected range is from -Infinity to 45.00		5.00 to 50.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	23.76	23.78
Median	23.00	22.99
Mode	---	---
Standard Deviation	5.60	5.62
Variance	31.33	31.62
Skewness	0.8222	0.8303
Kurtosis	3.92	3.95
Coefficient of Variability	0.2356	0.2365
Minimum	10.90	5.00
Maximum	49.72	50.00
Range Width	38.82	45.00
Mean Standard Error	0.03	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	10.90	5.00
95%	16.07	16.05
90%	17.28	17.31
85%	18.23	18.23
80%	19.00	19.02
75%	19.72	19.73
70%	20.41	20.40
65%	21.05	21.05
60%	21.69	21.69
55%	22.34	22.34
50%	23.00	22.99
45%	23.65	23.68
40%	24.38	24.40
35%	25.16	25.17
30%	25.99	26.02
25%	26.95	26.97
20%	28.04	28.08
15%	29.40	29.45
10%	31.25	31.28
5%	34.18	34.24
0%	49.72	50.00

End of Assumptions

Simulation started on 2/27/2009 at 15:30:53
Simulation stopped on 2/27/2009 at 16:01:28