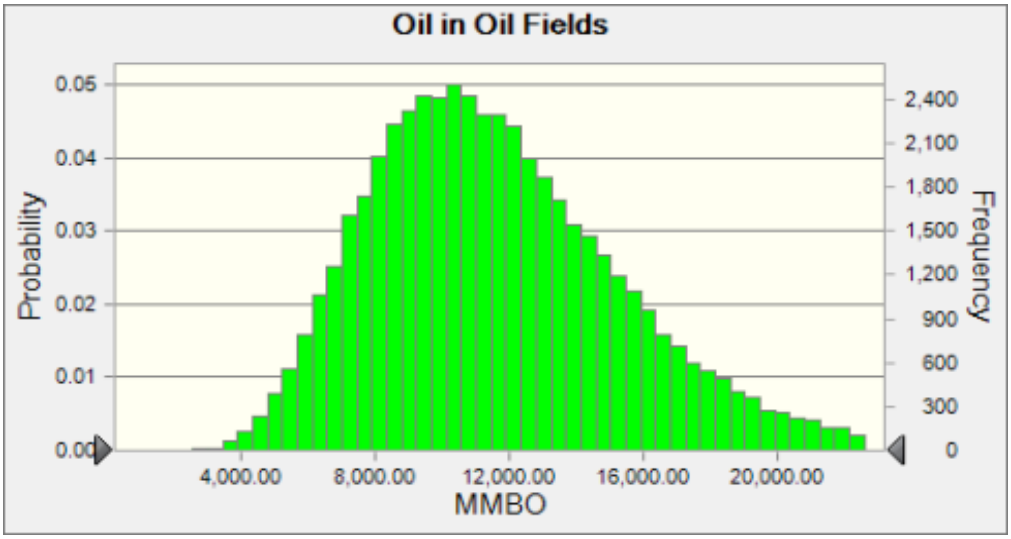
73430101
Mesozoic-Cenozoic Reservoirs
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 40.68 to 34,184.22
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 17.40



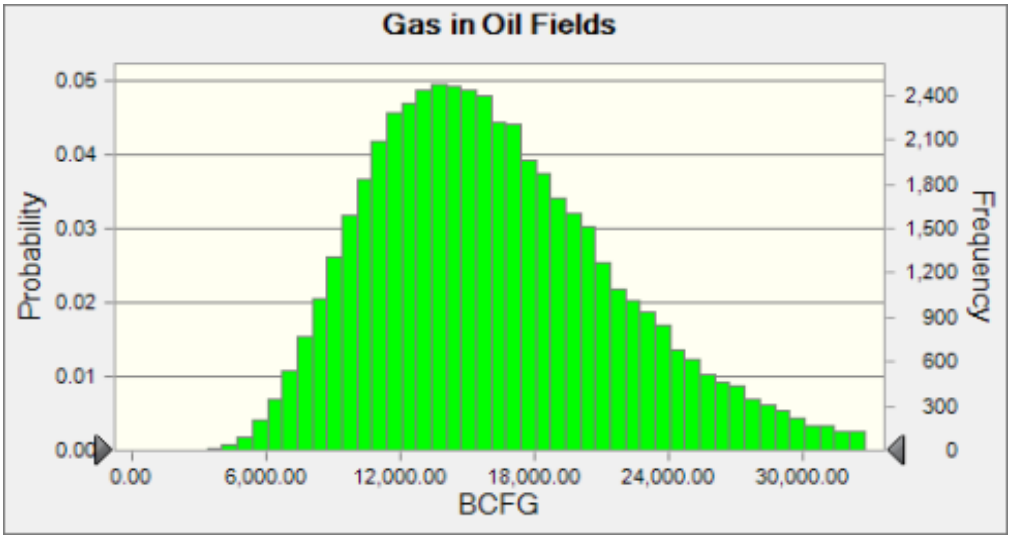
Statistics:	Forecast values
Trials	50,000
Mean	11,682.21
Median	11,174.08
Mode	---
Standard Deviation	3,890.21
Variance	15,133,713.71
Skewness	0.7842
Kurtosis	3.87
Coefficient of Variability	0.3330
Minimum	40.68
Maximum	34,184.22
Range Width	34,143.54
Mean Standard Error	17.40

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	40.68
95%	6,267.96
90%	7,151.54
85%	7,819.33
80%	8,375.98
75%	8,869.24
70%	9,347.17
65%	9,809.04
60%	10,249.62
55%	10,710.11
50%	11,174.04
45%	11,654.96
40%	12,144.05
35%	12,687.54
30%	13,278.13
25%	13,957.42
20%	14,724.36
15%	15,622.98
10%	16,842.46
5%	18,856.91
0%	34,184.22

Forecast: Gas in Oil Fields

Summary:
Entire range is from 42.52 to 51,121.49
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 26.11



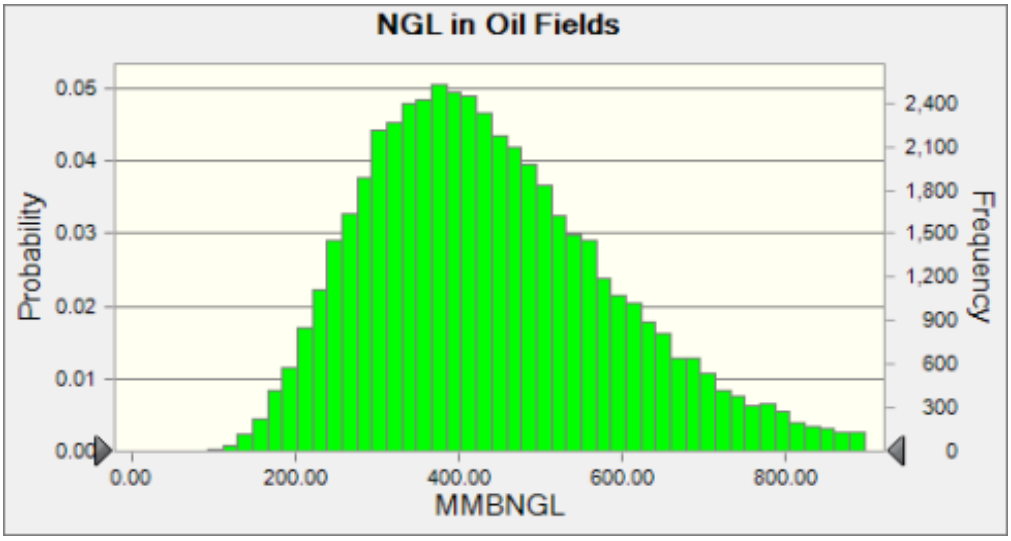
Statistics:	Forecast values
Trials	50,000
Mean	16,425.16
Median	15,615.21
Mode	---
Standard Deviation	5,838.49
Variance	34,087,944.15
Skewness	0.8496
Kurtosis	4.08
Coefficient of Variability	0.3555
Minimum	42.52
Maximum	51,121.49
Range Width	51,078.97
Mean Standard Error	26.11

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	42.52
95%	8,422.98
90%	9,705.90
85%	10,665.74
80%	11,456.44
75%	12,187.49
70%	12,891.36
65%	13,575.46
60%	14,245.82
55%	14,928.28
50%	15,614.65
45%	16,328.13
40%	17,085.04
35%	17,893.22
30%	18,779.67
25%	19,769.33
20%	20,872.45
15%	22,332.27
10%	24,160.65
5%	27,237.57
0%	51,121.49

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.87 to 1,628.84
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.72



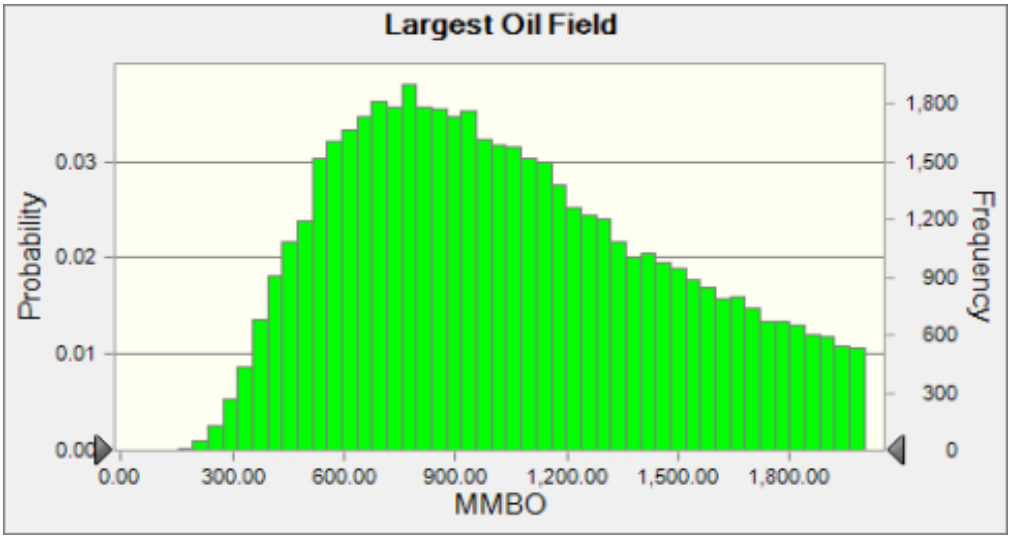
Statistics:	Forecast values
Trials	50,000
Mean	444.36
Median	420.89
Mode	---
Standard Deviation	161.55
Variance	26,099.13
Skewness	0.8973
Kurtosis	4.26
Coefficient of Variability	0.3636
Minimum	0.87
Maximum	1,628.84
Range Width	1,627.97
Mean Standard Error	0.72

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.87
95%	224.96
90%	259.30
85%	285.78
80%	307.55
75%	327.56
70%	346.98
65%	365.65
60%	383.67
55%	402.22
50%	420.88
45%	440.42
40%	461.11
35%	483.59
30%	507.72
25%	535.61
20%	567.15
15%	607.62
10%	658.35
5%	743.75
0%	1,628.84

Forecast: Largest Oil Field

Summary:
Entire range is from 31.00 to 1,999.99
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.90



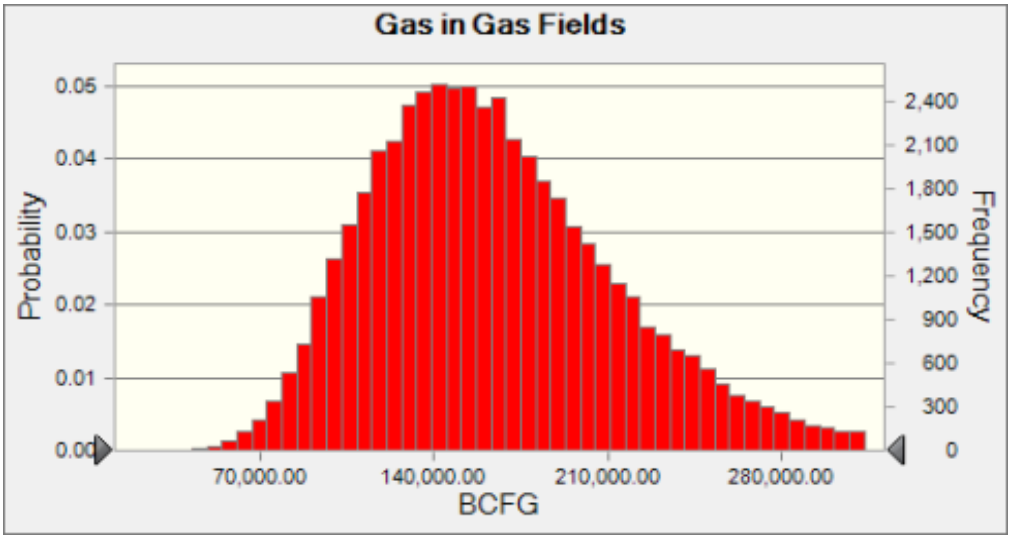
Statistics:	Forecast values
Trials	50,000
Mean	1,041.34
Median	984.44
Mode	---
Standard Deviation	425.06
Variance	180,675.34
Skewness	0.3761
Kurtosis	2.24
Coefficient of Variability	0.4082
Minimum	31.00
Maximum	1,999.99
Range Width	1,968.99
Mean Standard Error	1.90

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	31.00
95%	433.89
90%	519.94
85%	585.18
80%	644.97
75%	701.51
70%	757.28
65%	810.44
60%	868.43
55%	926.04
50%	984.44
45%	1,048.86
40%	1,112.91
35%	1,182.93
30%	1,261.71
25%	1,347.69
20%	1,446.07
15%	1,554.19
10%	1,678.01
5%	1,825.29
0%	1,999.99

Forecast: Gas in Gas Fields

Summary:
Entire range is from 141.44 to 454,031.33
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 235.56



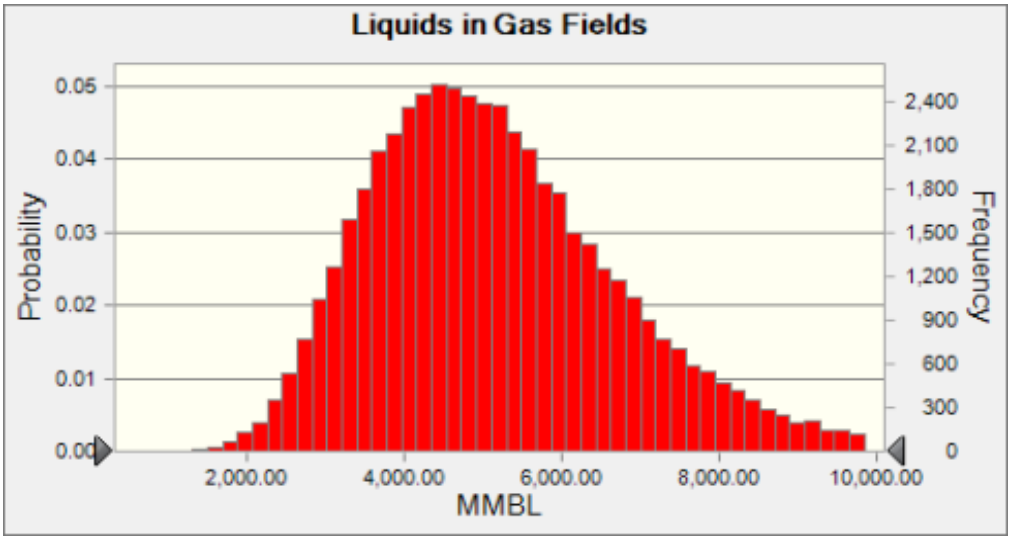
Statistics:	Forecast values
Trials	50,000
Mean	165,923.67
Median	158,654.37
Mode	---
Standard Deviation	52,672.90
Variance	2,774,434,360.80
Skewness	0.8339
Kurtosis	4.01
Coefficient of Variability	0.3175
Minimum	141.44
Maximum	454,031.33
Range Width	453,889.89
Mean Standard Error	235.56

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	141.44
95%	93,485.55
90%	105,247.75
85%	113,961.62
80%	121,360.80
75%	128,311.27
70%	134,512.23
65%	140,720.08
60%	146,573.99
55%	152,671.97
50%	158,652.63
45%	165,042.56
40%	171,441.25
35%	178,851.91
30%	186,800.34
25%	195,812.70
20%	206,131.29
15%	218,996.39
10%	236,260.94
5%	263,301.38
0%	454,031.33

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 3.92 to 14,227.14
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 7.42



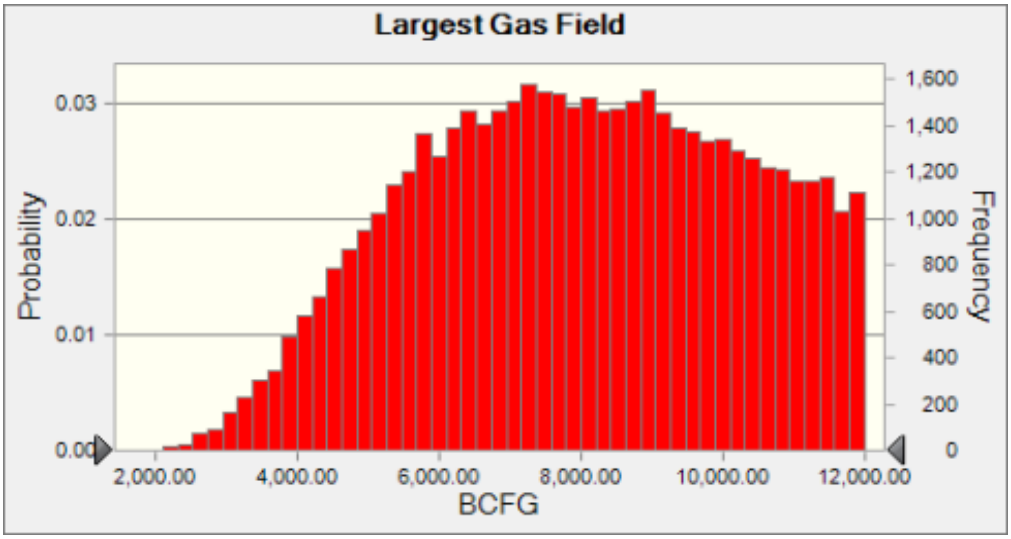
Statistics:	Forecast values
Trials	50,000
Mean	5,201.08
Median	4,978.42
Mode	---
Standard Deviation	1,658.31
Variance	2,749,999.31
Skewness	0.8308
Kurtosis	4.00
Coefficient of Variability	0.3188
Minimum	3.92
Maximum	14,227.14
Range Width	14,223.22
Mean Standard Error	7.42

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	3.92
95%	2,915.42
90%	3,289.38
85%	3,563.35
80%	3,795.85
75%	4,011.07
70%	4,212.68
65%	4,405.05
60%	4,591.99
55%	4,783.06
50%	4,978.41
45%	5,174.46
40%	5,388.99
35%	5,610.12
30%	5,858.30
25%	6,139.39
20%	6,468.13
15%	6,872.48
10%	7,408.71
5%	8,270.29
0%	14,227.14

Forecast: Largest Gas Field

Summary:
Entire range is from 100.92 to 11,999.93
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 10.06



Statistics:	Forecast values
Trials	50,000
Mean	7,975.94
Median	8,000.25
Mode	---
Standard Deviation	2,249.51
Variance	5,060,283.30
Skewness	-0.1128
Kurtosis	2.11
Coefficient of Variability	0.2820
Minimum	100.92
Maximum	11,999.93
Range Width	11,899.01
Mean Standard Error	10.06

Forecast: Largest Gas Field (continued)

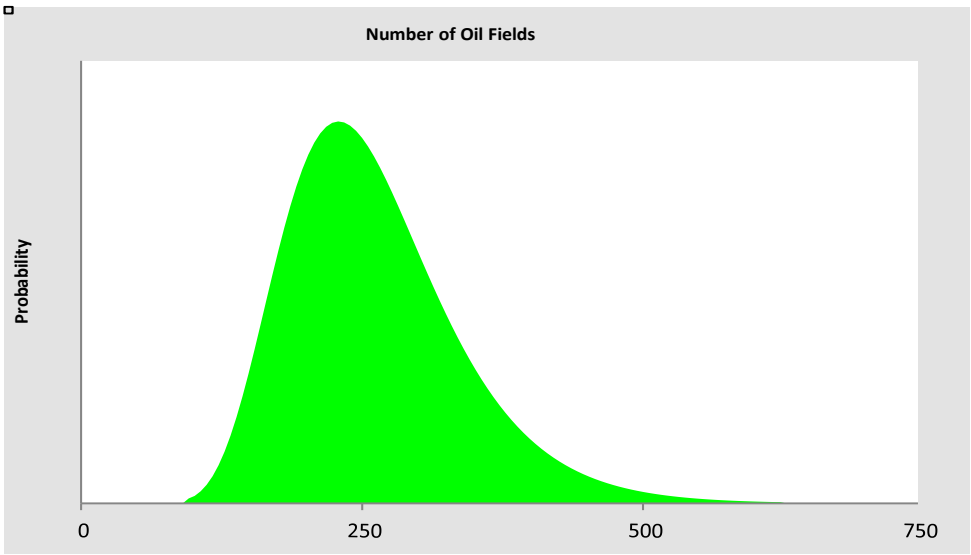
Percentiles:	BCFG
100%	100.92
95%	4,255.56
90%	4,913.83
85%	5,416.43
80%	5,842.66
75%	6,235.06
70%	6,603.96
65%	6,968.00
60%	7,308.44
55%	7,649.04
50%	8,000.24
45%	8,350.05
40%	8,710.80
35%	9,052.94
30%	9,417.53
25%	9,806.48
20%	10,203.47
15%	10,628.28
10%	11,065.59
5%	11,511.29
0%	11,999.93

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	260.25	261.25
Standard Deviation	79.12	79.12
Selected range is from -Infinity to 624.00		1.00 to 625.00



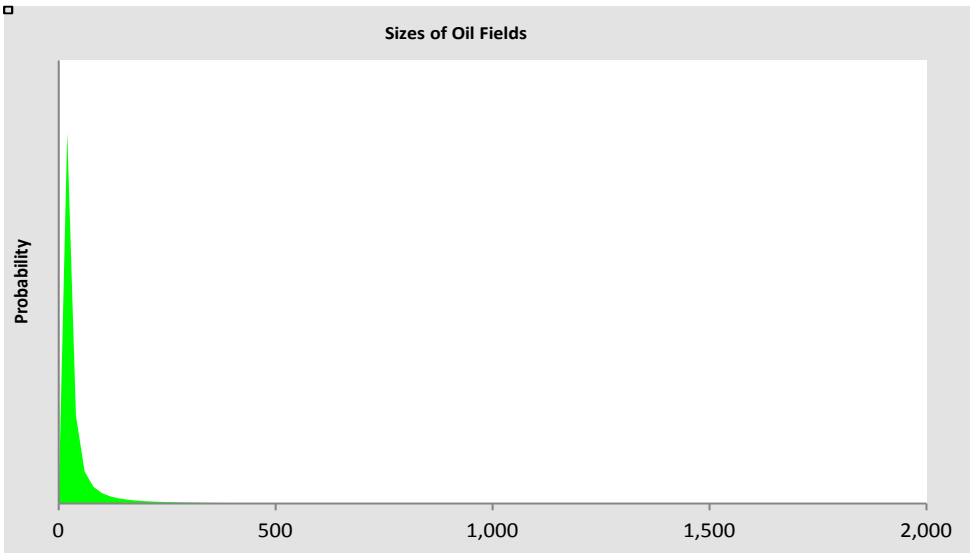
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	260.96	260.83
Median	249.78	249.91
Mode	---	---
Standard Deviation	77.98	78.02
Variance	6,081.42	6,086.79
Skewness	0.8214	0.8326
Kurtosis	3.89	3.95
Coefficient of Variability	0.2988	0.2991
Minimum	71.64	1.00
Maximum	623.01	625.00
Range Width	551.38	624.00
Mean Standard Error	0.35	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	71.64	1.00
95%	154.38	153.67
90%	171.28	171.08
85%	183.98	183.93
80%	194.97	194.84
75%	204.65	204.71
70%	213.85	214.00
65%	222.88	222.99
60%	231.88	231.86
55%	240.71	240.79
50%	249.78	249.91
45%	259.38	259.37
40%	269.81	269.36
35%	280.50	280.08
30%	292.33	291.84
25%	305.46	305.08
20%	320.75	320.52
15%	339.63	339.50
10%	365.06	364.93
5%	406.51	405.95
0%	623.01	625.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
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



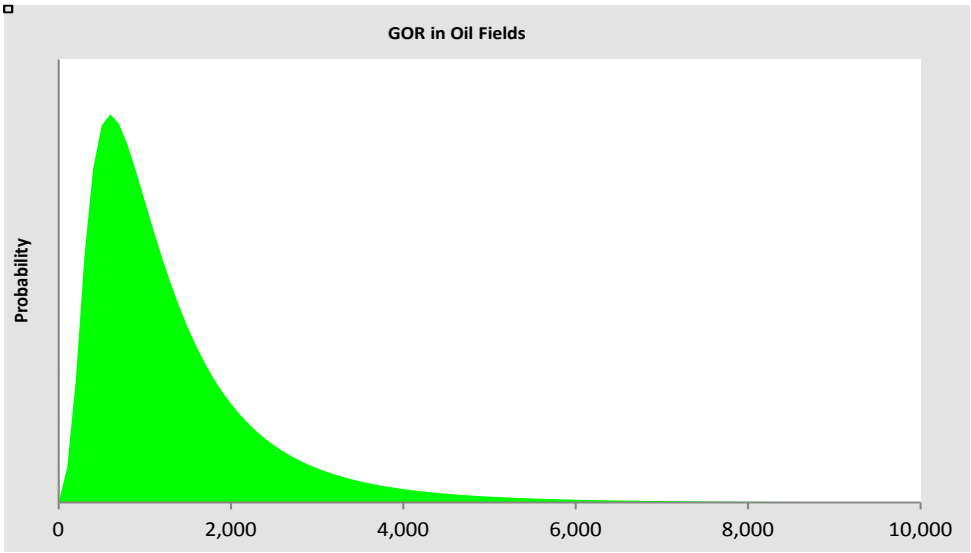
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	44.19	45.17
Median	14.96	14.98
Mode	---	---
Standard Deviation	106.20	107.20
Variance	11,278.36	11,491.96
Skewness	7.94	7.80
Kurtosis	90.27	88.40
Coefficient of Variability	2.40	2.37
Minimum	5.00	5.00
Maximum	1,985.68	2,000.00
Range Width	1,980.67	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%	5.60	5.60
90%	6.12	6.11
85%	6.68	6.69
80%	7.36	7.36
75%	8.16	8.14
70%	9.08	9.06
65%	10.19	10.16
60%	11.50	11.47
55%	13.08	13.05
50%	14.96	14.98
45%	17.41	17.37
40%	20.44	20.40
35%	24.25	24.30
30%	29.46	29.48
25%	36.67	36.64
20%	46.84	47.10
15%	62.78	63.71
10%	92.59	94.14
5%	166.46	170.00
0%	1,985.68	2,000.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	100
Mean	1,316.82	1,416.82
Standard Deviation	1,128.19	1,128.19
Selected range is from -Infinity to 9,900.00		100.00 to 10,000.00



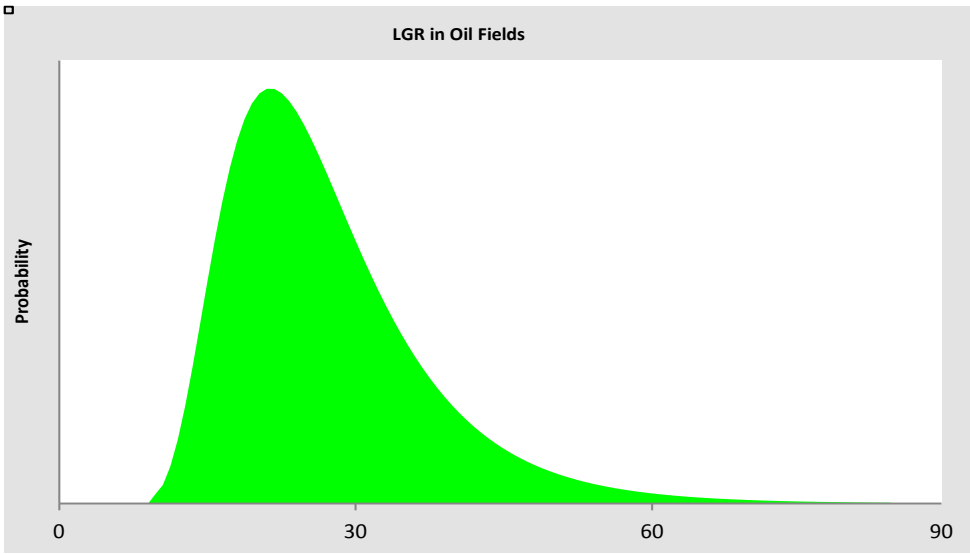
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	1,404.28	1,405.70
Median	1,102.09	1,099.07
Mode	---	---
Standard Deviation	1,064.14	1,068.74
Variance	1,132,401.14	1,142,204.98
Skewness	2.39	2.38
Kurtosis	11.71	11.58
Coefficient of Variability	0.7578	0.7603
Minimum	142.92	100.00
Maximum	9,970.56	10,000.00
Range Width	9,827.65	9,900.00
Mean Standard Error	4.76	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	142.92	100.00
95%	397.10	395.02
90%	486.78	486.26
85%	562.12	563.28
80%	632.95	635.29
75%	706.87	705.92
70%	778.37	777.26
65%	849.54	850.83
60%	927.96	928.01
55%	1,012.15	1,010.21
50%	1,102.04	1,099.07
45%	1,200.94	1,196.58
40%	1,308.36	1,305.40
35%	1,431.87	1,429.20
30%	1,578.99	1,573.40
25%	1,748.64	1,746.52
20%	1,960.78	1,963.20
15%	2,241.19	2,251.68
10%	2,671.34	2,678.00
5%	3,454.02	3,465.45
0%	9,970.56	10,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	22.12	27.12
Standard Deviation	10.44	10.44
Selected range is from -Infinity to 80.00		5.00 to 85.00



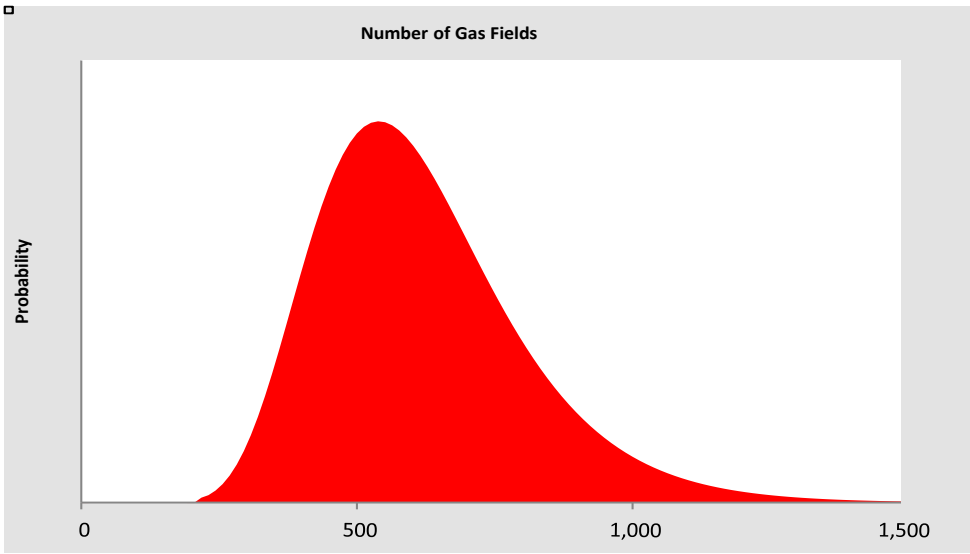
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	27.05	27.05
Median	24.96	24.99
Mode	---	---
Standard Deviation	10.21	10.21
Variance	104.20	104.25
Skewness	1.30	1.31
Kurtosis	5.50	5.52
Coefficient of Variability	0.3774	0.3775
Minimum	8.21	5.00
Maximum	84.67	85.00
Range Width	76.46	80.00
Mean Standard Error	0.05	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	8.21	5.00
95%	14.57	14.56
90%	16.25	16.25
85%	17.57	17.56
80%	18.68	18.71
75%	19.75	19.77
70%	20.79	20.80
65%	21.82	21.82
60%	22.87	22.84
55%	23.89	23.89
50%	24.96	24.99
45%	26.12	26.15
40%	27.37	27.39
35%	28.74	28.76
30%	30.28	30.28
25%	32.10	32.04
20%	34.13	34.14
15%	36.76	36.79
10%	40.55	40.46
5%	46.73	46.66
0%	84.67	85.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	615.53	616.53
Standard Deviation	186.83	186.83
Selected range is from -Infinity to 1,474.00		1.00 to 1,475.00



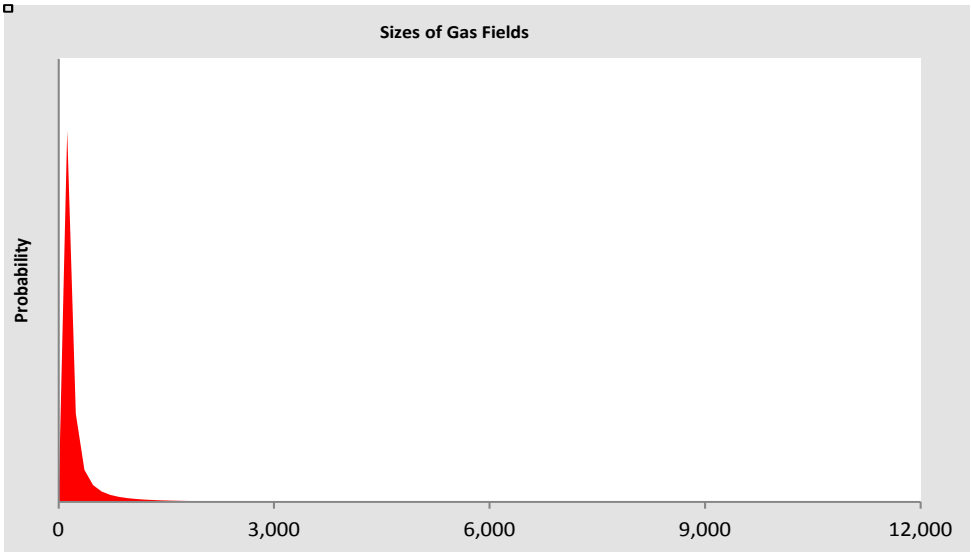
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	616.81	615.54
Median	590.74	589.78
Mode	---	---
Standard Deviation	186.56	184.24
Variance	34,804.37	33,942.91
Skewness	0.8527	0.8313
Kurtosis	4.00	3.95
Coefficient of Variability	0.3025	0.2993
Minimum	173.58	1.00
Maximum	1,474.13	1,475.00
Range Width	1,300.56	1,474.00
Mean Standard Error	0.83	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	173.58	1.00
95%	362.37	362.40
90%	402.83	403.55
85%	433.02	433.92
80%	459.04	459.69
75%	482.52	483.01
70%	504.61	504.96
65%	526.37	526.19
60%	548.00	547.16
55%	568.62	568.24
50%	590.73	589.78
45%	613.27	612.13
40%	636.78	635.71
35%	661.66	661.03
30%	689.15	688.80
25%	721.05	720.07
20%	758.51	756.53
15%	805.25	801.33
10%	865.34	861.36
5%	965.76	958.20
0%	1,474.13	1,475.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	30
Mean	260.60	290.6
Standard Deviation	1,101.48	1,101.48
Selected range is from -Infinity to 11,970.00		30.00 to 12,000.00



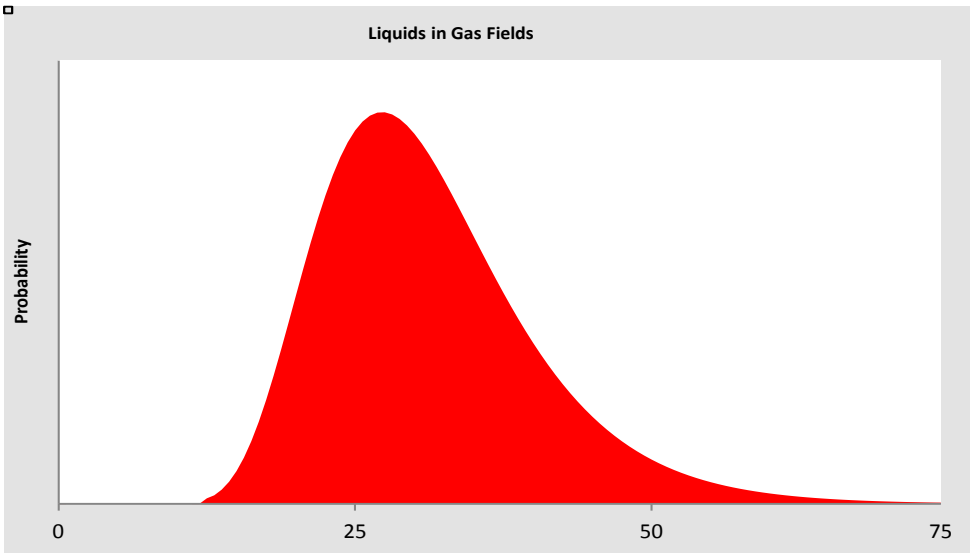
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	268.00	271.04
Median	90.06	89.87
Mode	---	---
Standard Deviation	641.79	643.20
Variance	411,892.54	413,710.64
Skewness	7.67	7.80
Kurtosis	84.90	88.40
Coefficient of Variability	2.39	2.37
Minimum	30.04	30.00
Maximum	11,823.35	12,000.00
Range Width	11,793.31	11,970.00
Mean Standard Error	2.87	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.04	30.00
95%	33.51	33.58
90%	36.70	36.67
85%	40.16	40.14
80%	44.12	44.16
75%	48.82	48.86
70%	54.41	54.39
65%	60.86	60.95
60%	68.97	68.80
55%	78.60	78.28
50%	90.06	89.87
45%	103.93	104.24
40%	121.34	122.38
35%	145.05	145.78
30%	175.30	176.88
25%	217.24	219.86
20%	279.94	282.62
15%	378.14	382.27
10%	561.52	564.84
5%	1,019.51	1,020.00
0%	11,823.35	12,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	3
Mean	28.40	31.4
Standard Deviation	9.25	9.25
Selected range is from -Infinity to 72.00		3.00 to 75.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	31.34	31.34
Median	29.97	29.99
Mode	---	---
Standard Deviation	9.11	9.11
Variance	82.97	82.96
Skewness	0.8897	0.8936
Kurtosis	4.10	4.11
Coefficient of Variability	0.2907	0.2906
Minimum	10.31	3.00
Maximum	74.91	75.00
Range Width	64.60	72.00
Mean Standard Error	0.04	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	10.31	3.00
95%	18.99	19.02
90%	20.96	20.97
85%	22.41	22.43
80%	23.64	23.67
75%	24.76	24.79
70%	25.86	25.85
65%	26.91	26.88
60%	27.91	27.91
55%	28.93	28.93
50%	29.97	29.99
45%	31.07	31.09
40%	32.20	32.25
35%	33.48	33.50
30%	34.87	34.87
25%	36.46	36.42
20%	38.25	38.24
15%	40.54	40.47
10%	43.51	43.49
5%	48.44	48.38
0%	74.91	75.00

End of Assumptions

Oil field simulation:
Simulation started on 9/21/2011 at 2:52 PM
Simulation stopped on 9/21/2011 at 3:15 PM

Gas field simulation:
Simulation started on 9/21/2011 at 1:19 PM
Simulation stopped on 9/21/2011 at 1:50 PM