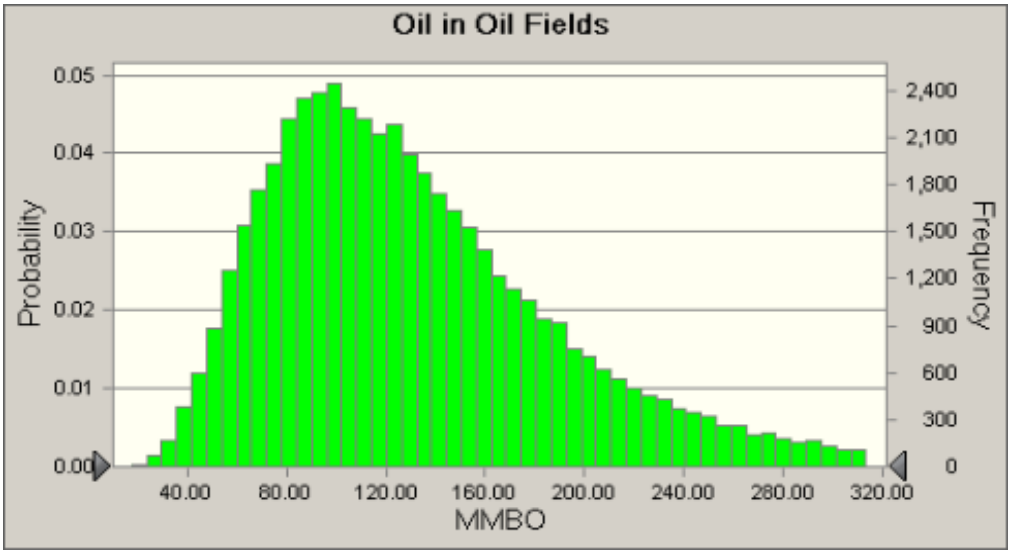
39100103
Vulcan Sub-Basin
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 17.14 to 564.17
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.29



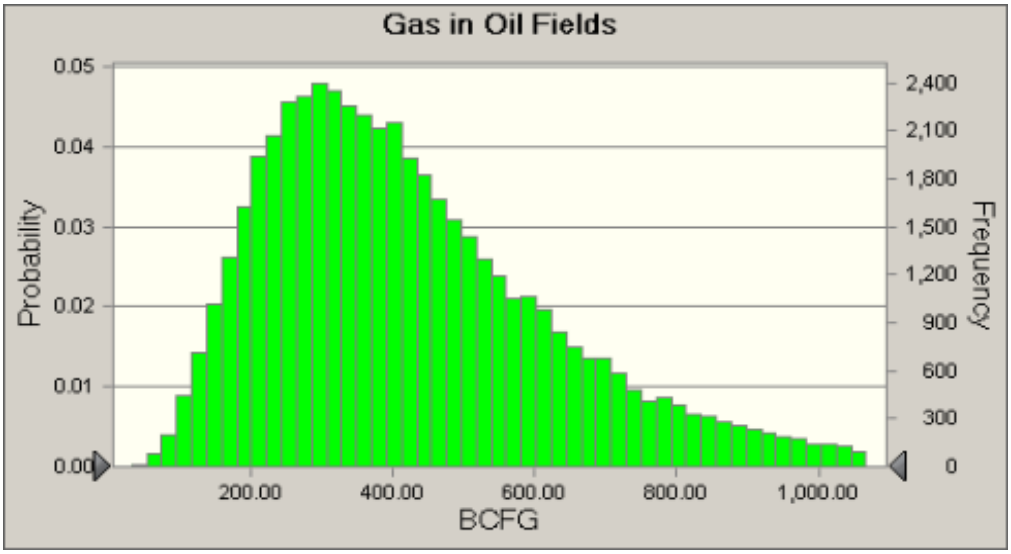
Statistics:	Forecast values
Trials	50,000
Mean	133.72
Median	120.97
Mode	---
Standard Deviation	64.28
Variance	4,131.48
Skewness	1.35
Kurtosis	5.78
Coefficient of Variability	0.4807
Minimum	17.14
Maximum	564.17
Range Width	547.03
Mean Standard Error	0.29

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	17.14
95%	55.42
90%	65.89
85%	74.36
80%	81.43
75%	88.03
70%	94.26
65%	100.54
60%	107.13
55%	113.88
50%	120.97
45%	128.06
40%	135.77
35%	144.39
30%	153.97
25%	164.77
20%	178.22
15%	194.38
10%	217.66
5%	257.03
0%	564.17

Forecast: Gas in Oil Fields

Summary:
Entire range is from 32.82 to 2,208.22
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.01



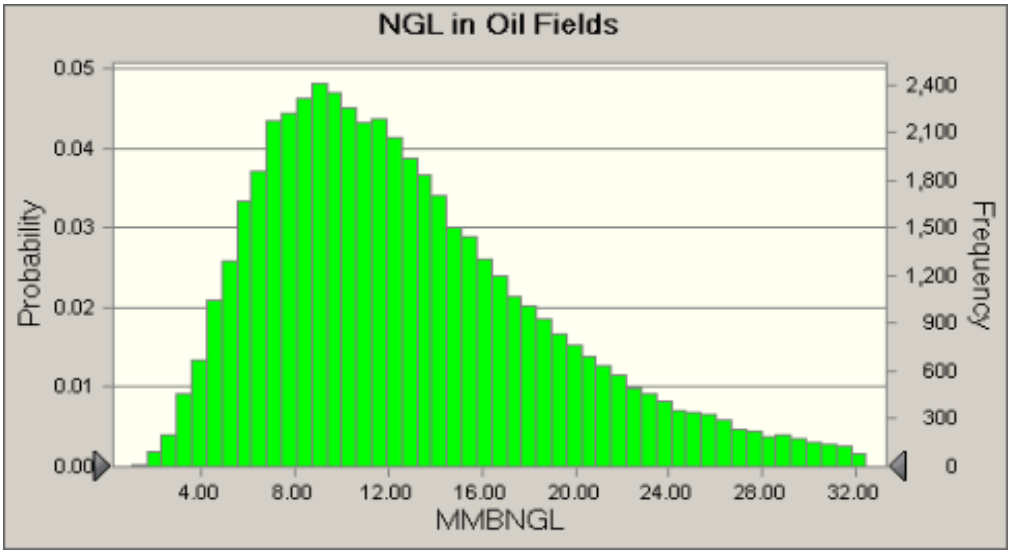
Statistics:	Forecast values
Trials	50,000
Mean	434.72
Median	388.64
Mode	---
Standard Deviation	225.80
Variance	50,985.95
Skewness	1.33
Kurtosis	5.68
Coefficient of Variability	0.5194
Minimum	32.82
Maximum	2,208.22
Range Width	2,175.40
Mean Standard Error	1.01

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	32.82
95%	160.43
90%	197.41
85%	225.01
80%	249.46
75%	272.80
70%	295.30
65%	317.69
60%	340.36
55%	363.48
50%	388.64
45%	413.49
40%	441.49
35%	471.69
30%	505.54
25%	545.64
20%	593.00
15%	651.45
10%	731.92
5%	870.27
0%	2,208.22

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.98 to 68.24
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.03



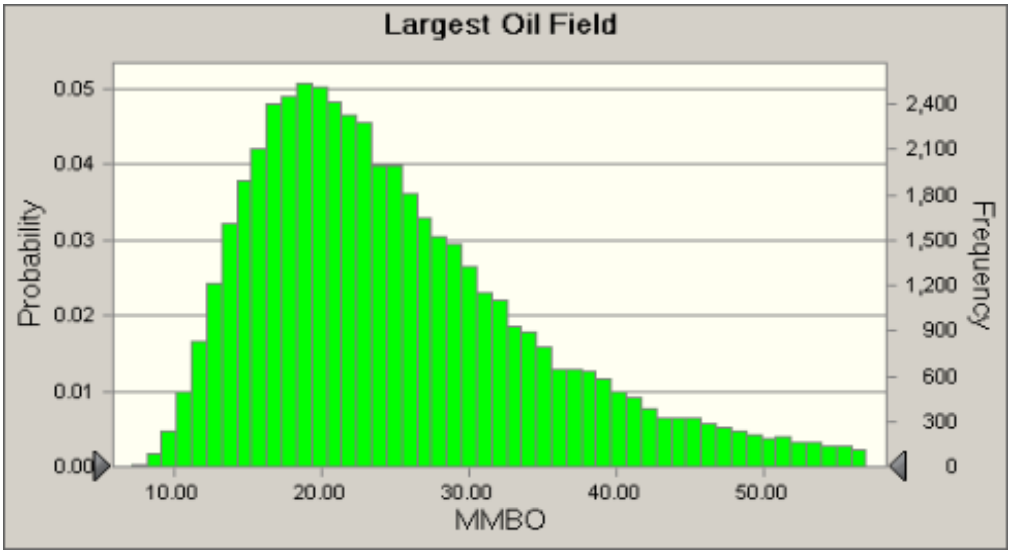
Statistics:	Forecast values
Trials	50,000
Mean	13.20
Median	11.79
Mode	---
Standard Deviation	6.88
Variance	47.32
Skewness	1.33
Kurtosis	5.71
Coefficient of Variability	0.5212
Minimum	0.98
Maximum	68.24
Range Width	67.27
Mean Standard Error	0.03

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.98
95%	4.84
90%	5.96
85%	6.82
80%	7.56
75%	8.27
70%	8.95
65%	9.62
60%	10.31
55%	11.06
50%	11.79
45%	12.56
40%	13.39
35%	14.31
30%	15.37
25%	16.55
20%	18.02
15%	19.83
10%	22.29
5%	26.42
0%	68.24

Forecast: Largest Oil Field

Summary:
Entire range is from 7.04 to 74.99
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.05



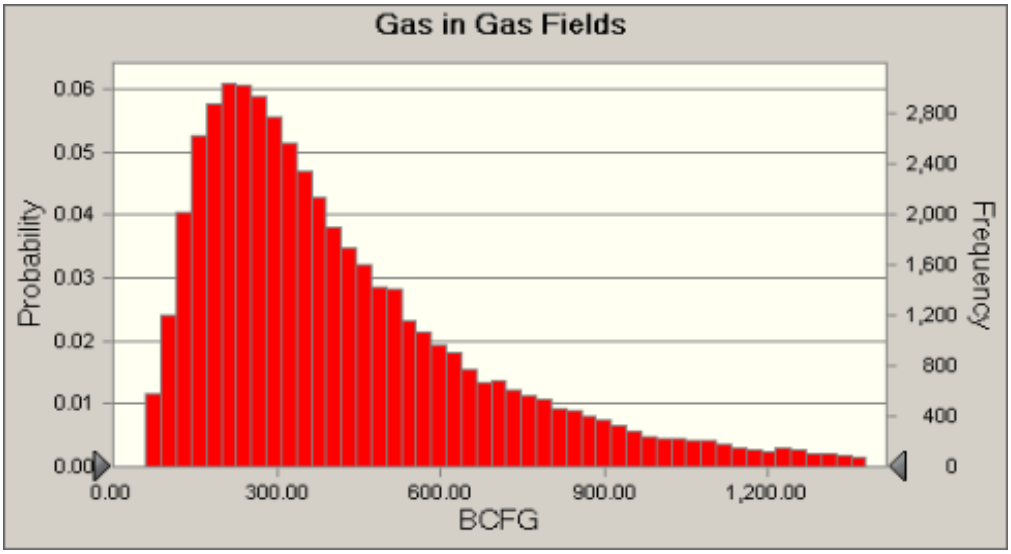
Statistics:	Forecast values
Trials	50,000
Mean	25.82
Median	23.18
Mode	---
Standard Deviation	11.14
Variance	124.09
Skewness	1.37
Kurtosis	5.18
Coefficient of Variability	0.4314
Minimum	7.04
Maximum	74.99
Range Width	67.95
Mean Standard Error	0.05

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	7.04
95%	12.88
90%	14.47
85%	15.76
80%	16.88
75%	17.92
70%	18.94
65%	19.94
60%	20.98
55%	22.07
50%	23.18
45%	24.44
40%	25.78
35%	27.23
30%	28.89
25%	30.80
20%	33.18
15%	36.40
10%	40.69
5%	48.47
0%	74.99

Forecast: Gas in Gas Fields

Summary:
Entire range is from 33.14 to 3,996.96
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.49



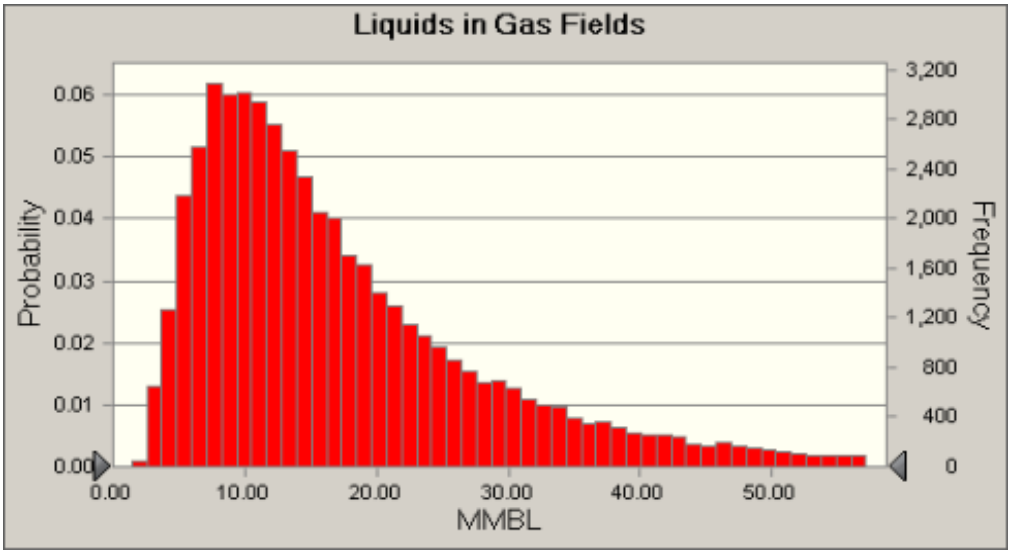
Statistics:	Forecast values
Trials	50,000
Mean	446.73
Median	350.31
Mode	---
Standard Deviation	333.26
Variance	111,062.69
Skewness	2.29
Kurtosis	11.08
Coefficient of Variability	0.7460
Minimum	33.14
Maximum	3,996.96
Range Width	3,963.82
Mean Standard Error	1.49

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	33.14
95%	126.91
90%	155.95
85%	180.63
80%	203.64
75%	226.59
70%	249.43
65%	272.82
60%	296.43
55%	322.62
50%	350.29
45%	381.39
40%	416.56
35%	456.32
30%	502.69
25%	557.14
20%	626.31
15%	720.06
10%	850.98
5%	1,091.11
0%	3,996.96

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 1.34 to 172.22
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.06



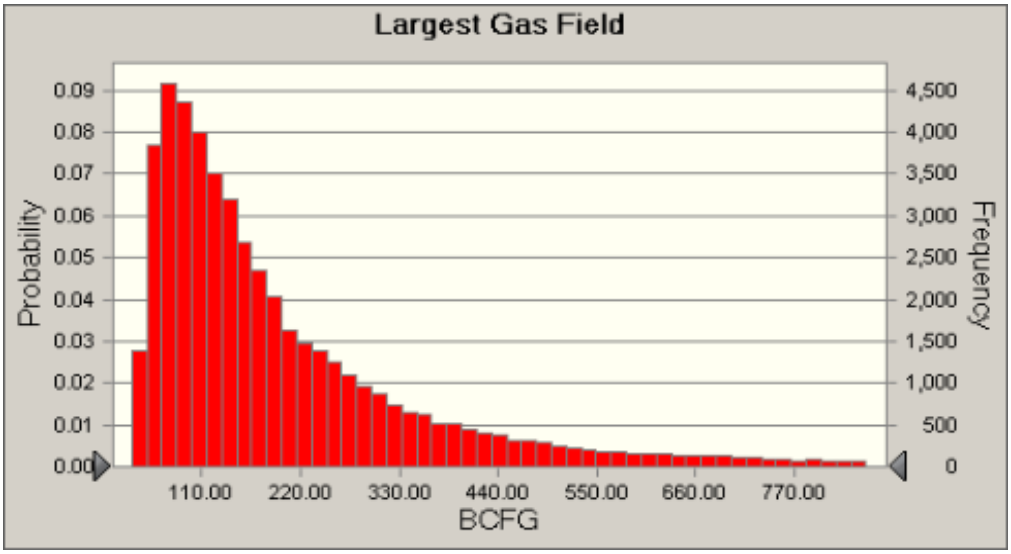
Statistics:	Forecast values
Trials	50,000
Mean	18.31
Median	14.31
Mode	---
Standard Deviation	13.89
Variance	192.83
Skewness	2.40
Kurtosis	12.29
Coefficient of Variability	0.7586
Minimum	1.34
Maximum	172.22
Range Width	170.88
Mean Standard Error	0.06

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	1.34
95%	5.09
90%	6.30
85%	7.33
80%	8.25
75%	9.20
70%	10.15
65%	11.10
60%	12.09
55%	13.12
50%	14.31
45%	15.59
40%	17.01
35%	18.64
30%	20.54
25%	22.84
20%	25.69
15%	29.57
10%	34.88
5%	45.02
0%	172.22

Forecast: Largest Gas Field

Summary:
Entire range is from 31.36 to 1,999.28
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.00



Statistics:	Forecast values
Trials	50,000
Mean	222.24
Median	149.15
Mode	---
Standard Deviation	224.24
Variance	50,285.54
Skewness	3.18
Kurtosis	16.77
Coefficient of Variability	1.01
Minimum	31.36
Maximum	1,999.28
Range Width	1,967.91
Mean Standard Error	1.00

Forecast: Largest Gas Field (continued)

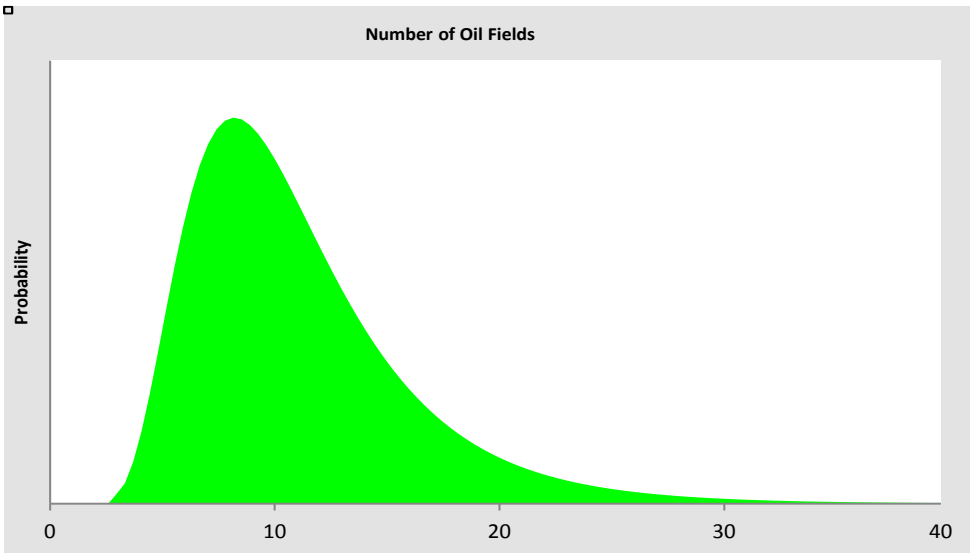
Percentiles:	BCFG
100%	31.36
95%	53.71
90%	63.89
85%	72.95
80%	82.14
75%	91.40
70%	101.39
65%	111.94
60%	123.61
55%	135.77
50%	149.14
45%	164.76
40%	182.53
35%	203.55
30%	230.90
25%	262.17
20%	303.06
15%	362.06
10%	453.61
5%	645.52
0%	1,999.28

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	10.07	11.07
Standard Deviation	5.06	5.06
Selected range is from -Infinity to 39.00		1.00 to 40.00



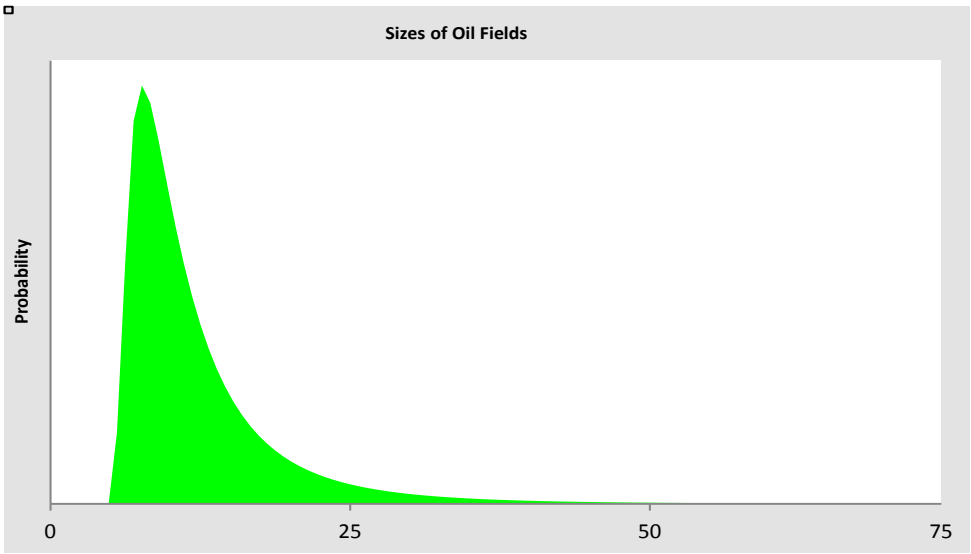
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	11.03	11.04
Median	10.00	9.99
Mode	---	---
Standard Deviation	4.94	4.94
Variance	24.44	24.40
Skewness	1.41	1.39
Kurtosis	6.02	5.88
Coefficient of Variability	0.4481	0.4475
Minimum	2.02	1.00
Maximum	39.97	40.00
Range Width	37.94	39.00
Mean Standard Error	0.02	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	2.02	1.00
95%	5.13	5.12
90%	5.90	5.90
85%	6.52	6.50
80%	7.04	7.03
75%	7.53	7.53
70%	8.01	8.01
65%	8.49	8.49
60%	8.97	8.98
55%	9.48	9.47
50%	10.00	9.99
45%	10.53	10.55
40%	11.13	11.14
35%	11.78	11.80
30%	12.52	12.53
25%	13.36	13.38
20%	14.38	14.40
15%	15.70	15.69
10%	17.47	17.49
5%	20.51	20.56
0%	39.97	40.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	7.20	12.2
Standard Deviation	7.46	7.46
Selected range is from -Infinity to 70.00		5.00 to 75.00



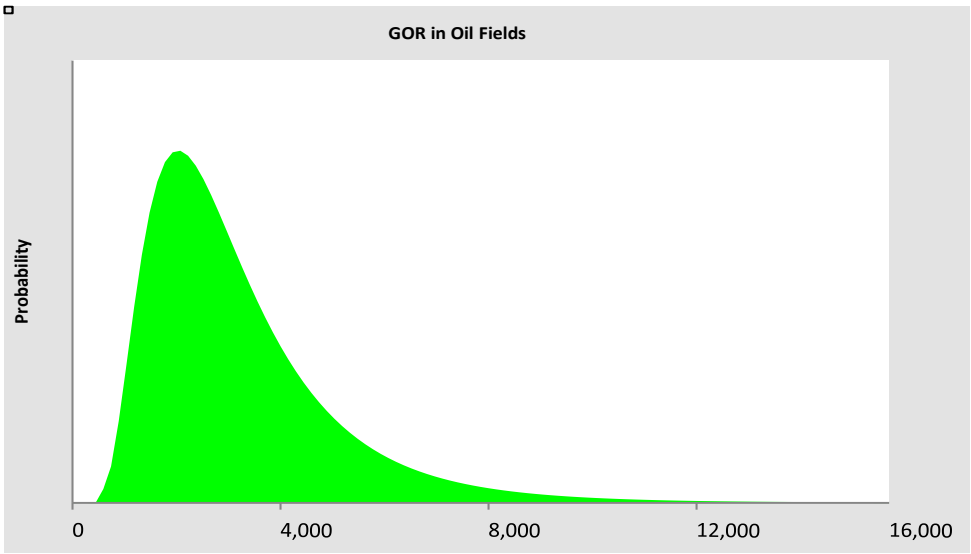
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	12.12	12.12
Median	10.00	9.99
Mode	---	---
Standard Deviation	6.92	6.93
Variance	47.92	48.01
Skewness	2.87	2.86
Kurtosis	15.54	15.36
Coefficient of Variability	0.5714	0.5719
Minimum	5.12	5.00
Maximum	74.91	75.00
Range Width	69.79	70.00
Mean Standard Error	0.03	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.12	5.00
95%	6.23	6.23
90%	6.68	6.67
85%	7.07	7.06
80%	7.44	7.44
75%	7.81	7.81
70%	8.19	8.19
65%	8.61	8.59
60%	9.04	9.02
55%	9.50	9.49
50%	10.00	9.99
45%	10.55	10.56
40%	11.17	11.20
35%	11.89	11.94
30%	12.76	12.81
25%	13.85	13.88
20%	15.21	15.23
15%	17.14	17.08
10%	20.01	19.87
5%	25.23	25.22
0%	74.91	75.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	230
Mean	3,034.95	3,264.95
Standard Deviation	1,906.36	1,906.36
Selected range is from -Infinity to 15,270.00		230.00 to 15,500.00



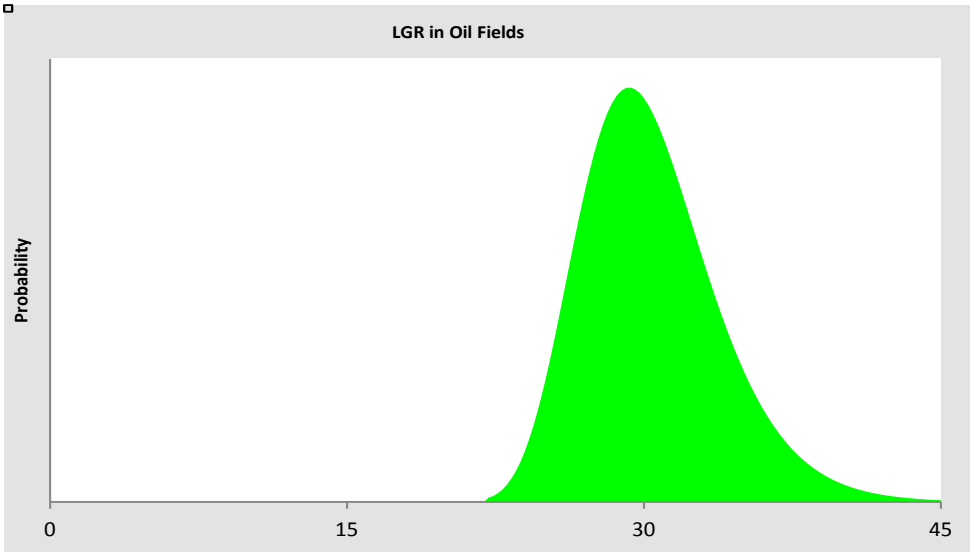
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	3,258.01	3,249.81
Median	2,806.57	2,798.14
Mode	---	---
Standard Deviation	1,851.20	1,843.78
Variance	3,426,927.71	3,399,540.52
Skewness	1.76	1.75
Kurtosis	7.72	7.59
Coefficient of Variability	0.5682	0.5674
Minimum	441.47	230.00
Maximum	15,464.02	15,500.00
Range Width	15,022.54	15,270.00
Mean Standard Error	8.28	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	441.47	230.00
95%	1,229.17	1,225.06
90%	1,458.27	1,456.93
85%	1,639.97	1,643.16
80%	1,809.67	1,811.12
75%	1,970.70	1,971.03
70%	2,130.39	2,128.36
65%	2,290.21	2,286.79
60%	2,457.39	2,449.33
55%	2,630.98	2,618.78
50%	2,806.53	2,798.14
45%	3,001.45	2,990.94
40%	3,213.70	3,201.64
35%	3,450.18	3,436.26
30%	3,715.27	3,703.50
25%	4,036.31	4,016.79
20%	4,419.21	4,398.75
15%	4,889.46	4,892.31
10%	5,615.70	5,595.66
5%	6,833.04	6,830.90
0%	15,464.02	15,500.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	15
Mean	15.38	30.38
Standard Deviation	3.49	3.49
Selected range is from -Infinity to 30.00		15.00 to 45.00



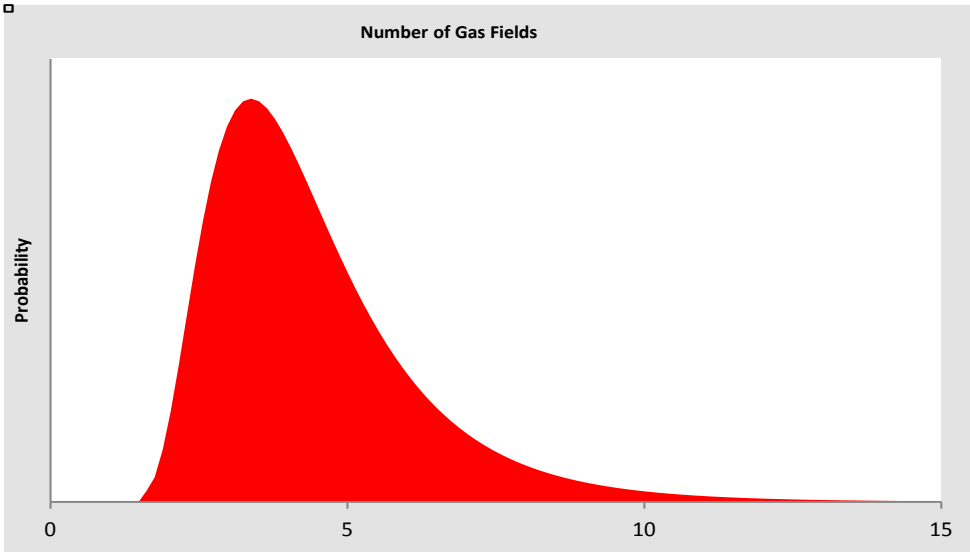
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	30.37	30.37
Median	30.01	30.00
Mode	---	---
Standard Deviation	3.46	3.46
Variance	11.95	11.94
Skewness	0.6020	0.6157
Kurtosis	3.44	3.47
Coefficient of Variability	0.1138	0.1138
Minimum	20.32	15.00
Maximum	44.99	45.00
Range Width	24.67	30.00
Mean Standard Error	0.02	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	20.32	15.00
95%	25.39	25.37
90%	26.24	26.25
85%	26.89	26.89
80%	27.43	27.42
75%	27.89	27.89
70%	28.35	28.33
65%	28.76	28.76
60%	29.18	29.17
55%	29.59	29.58
50%	30.01	30.00
45%	30.44	30.42
40%	30.88	30.87
35%	31.37	31.35
30%	31.88	31.86
25%	32.46	32.44
20%	33.13	33.11
15%	33.91	33.91
10%	34.98	34.97
5%	36.66	36.65
0%	44.99	45.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	3.40	4.4
Standard Deviation	1.80	1.8
Selected range is from -Infinity to 14.00		1.00 to 15.00



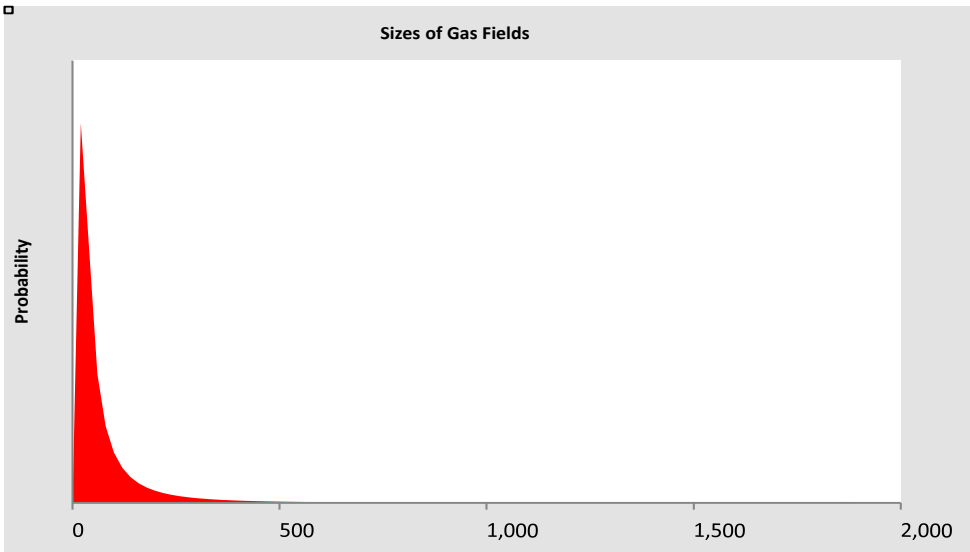
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	4.38	4.38
Median	4.00	4.00
Mode	---	---
Standard Deviation	1.75	1.76
Variance	3.07	3.09
Skewness	1.46	1.47
Kurtosis	6.14	6.24
Coefficient of Variability	0.3998	0.4009
Minimum	1.35	1.00
Maximum	14.99	15.00
Range Width	13.64	14.00
Mean Standard Error	0.01	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.35	1.00
95%	2.32	2.32
90%	2.58	2.58
85%	2.79	2.79
80%	2.97	2.97
75%	3.14	3.14
70%	3.31	3.31
65%	3.47	3.47
60%	3.64	3.64
55%	3.82	3.82
50%	4.00	4.00
45%	4.19	4.19
40%	4.40	4.40
35%	4.63	4.63
30%	4.89	4.89
25%	5.19	5.19
20%	5.55	5.56
15%	6.02	6.02
10%	6.66	6.67
5%	7.77	7.78
0%	14.99	15.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	30
Mean	75.05	105.05
Standard Deviation	172.11	172.11
Selected range is from -Infinity to 1,970.00		30.00 to 2,000.00



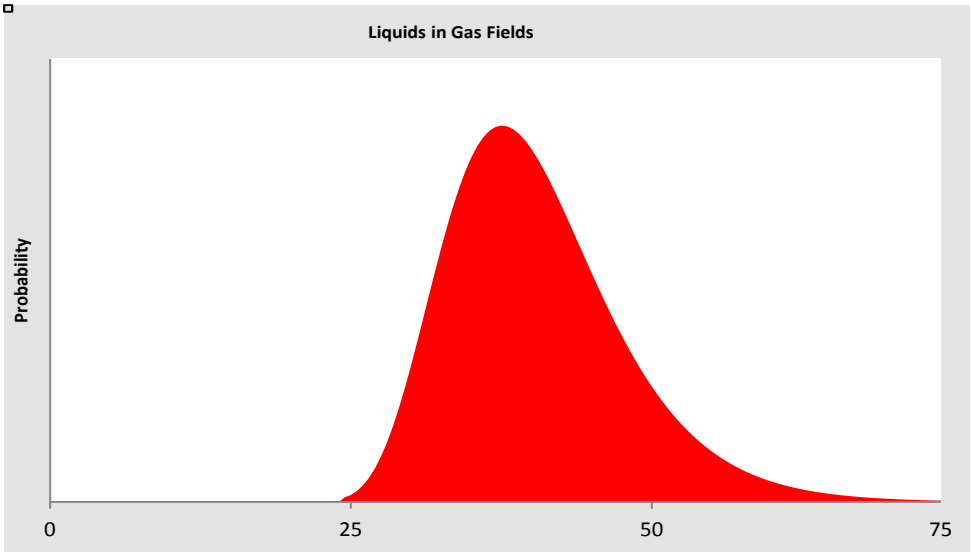
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	101.54	102.04
Median	59.82	59.95
Mode	---	---
Standard Deviation	131.94	133.04
Variance	17,408.01	17,700.94
Skewness	5.48	5.50
Kurtosis	47.06	47.02
Coefficient of Variability	1.30	1.30
Minimum	30.06	30.00
Maximum	1,953.39	2,000.00
Range Width	1,923.33	1,970.00
Mean Standard Error	0.59	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.06	30.00
95%	33.23	33.23
90%	35.30	35.29
85%	37.30	37.37
80%	39.51	39.59
75%	41.86	42.02
70%	44.57	44.73
65%	47.62	47.78
60%	51.25	51.26
55%	55.17	55.27
50%	59.82	59.95
45%	65.15	65.50
40%	71.63	72.19
35%	79.49	80.43
30%	89.95	90.86
25%	103.87	104.55
20%	123.34	123.42
15%	150.78	151.49
10%	198.58	198.98
5%	303.32	304.88
0%	1,953.39	2,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	15
Mean	26.02	41.02
Standard Deviation	7.52	7.52
Selected range is from -Infinity to 60.00		15.00 to 75.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	41.02	40.98
Median	40.06	39.99
Mode	---	---
Standard Deviation	7.39	7.42
Variance	54.67	55.11
Skewness	0.7700	0.7906
Kurtosis	3.80	3.85
Coefficient of Variability	0.1803	0.1811
Minimum	22.46	15.00
Maximum	74.81	75.00
Range Width	52.35	60.00
Mean Standard Error	0.03	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	22.46	15.00
95%	30.65	30.69
90%	32.44	32.39
85%	33.68	33.64
80%	34.75	34.69
75%	35.71	35.65
70%	36.64	36.54
65%	37.51	37.41
60%	38.34	38.26
55%	39.16	39.12
50%	40.06	39.99
45%	40.95	40.90
40%	41.90	41.85
35%	42.91	42.87
30%	44.02	43.99
25%	45.25	45.24
20%	46.74	46.71
15%	48.49	48.50
10%	50.91	50.89
5%	54.79	54.74
0%	74.81	75.00

End of Assumptions

Simulation started on 6/22/2011 at 11:52 AM
Simulation stopped on 6/22/2011 at 12:10 PM