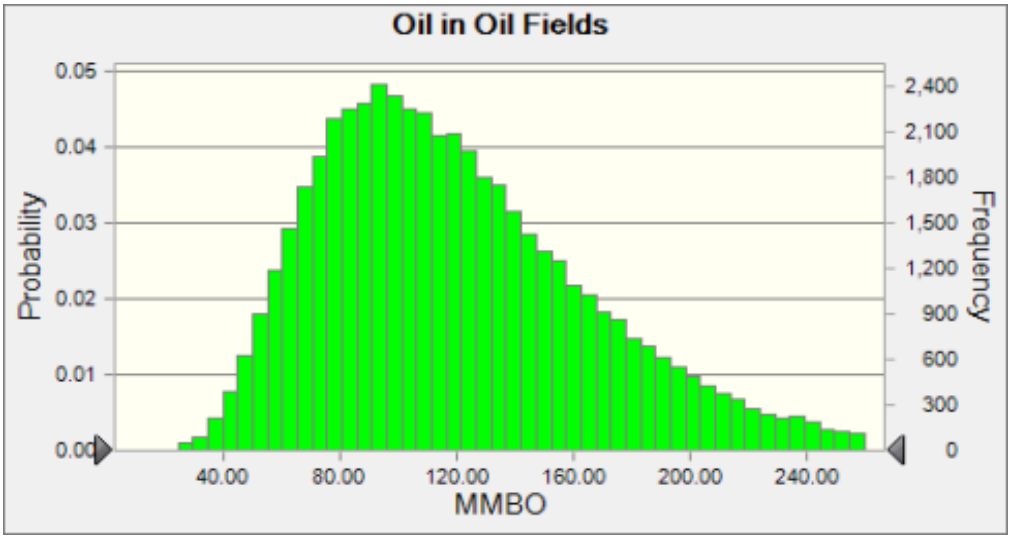
40360102
Southern Permian Basin Europe Onshore
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 8.86 to 436.19
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.22



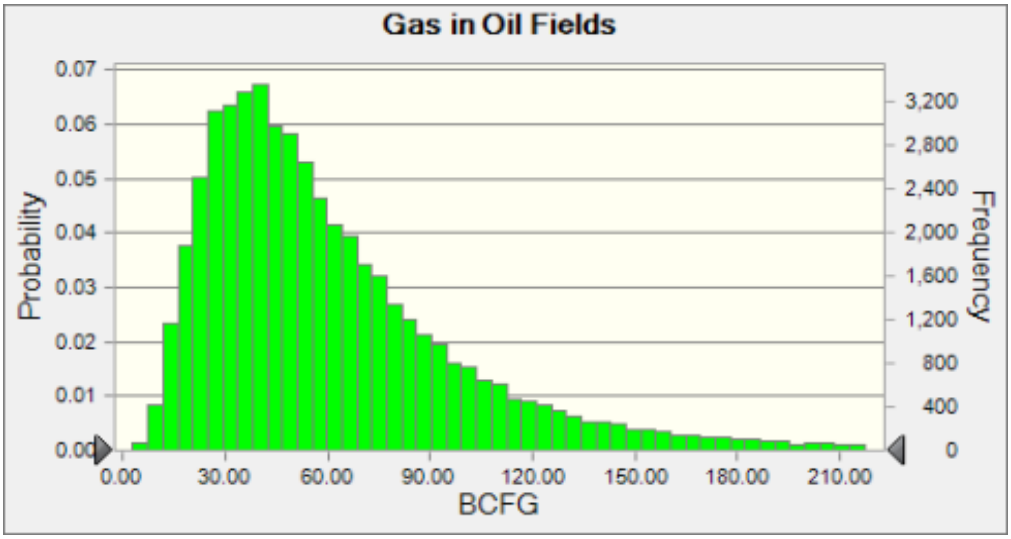
Statistics:	Forecast values
Trials	50,000
Mean	120.93
Median	112.54
Mode	---
Standard Deviation	49.62
Variance	2,461.67
Skewness	0.9899
Kurtosis	4.35
Coefficient of Variability	0.4103
Minimum	8.86
Maximum	436.19
Range Width	427.33
Mean Standard Error	0.22

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	8.86
95%	56.04
90%	65.46
85%	72.71
80%	78.86
75%	84.58
70%	90.21
65%	95.50
60%	100.97
55%	106.63
50%	112.54
45%	118.68
40%	124.97
35%	132.00
30%	139.59
25%	148.43
20%	158.47
15%	171.37
10%	187.90
5%	214.31
0%	436.19

Forecast: Gas in Oil Fields

Summary:
Entire range is from 2.96 to 1,333.46
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.24



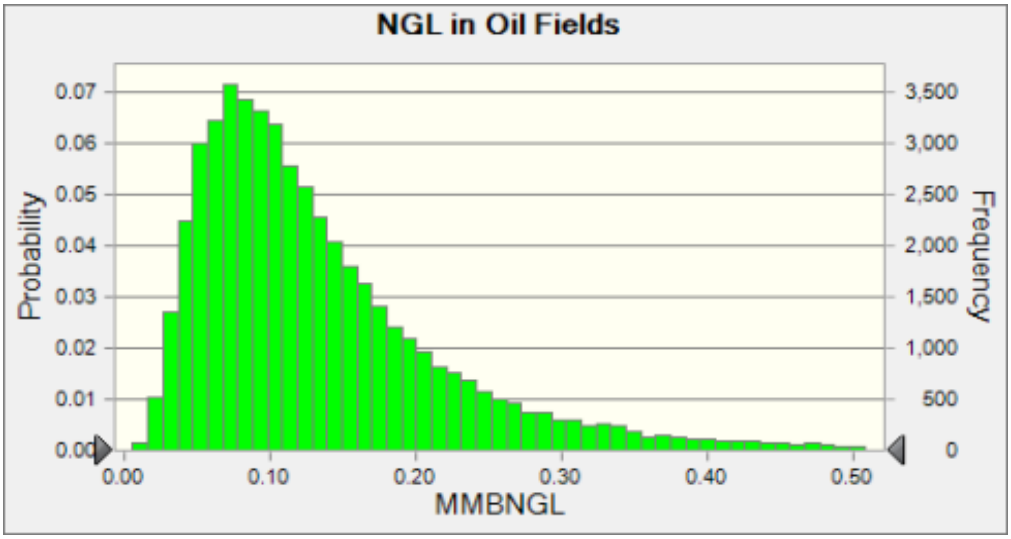
Statistics:	Forecast values
Trials	50,000
Mean	64.64
Median	51.25
Mode	---
Standard Deviation	54.50
Variance	2,970.71
Skewness	5.25
Kurtosis	64.24
Coefficient of Variability	0.8432
Minimum	2.96
Maximum	1,333.46
Range Width	1,330.50
Mean Standard Error	0.24

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	2.96
95%	18.22
90%	23.17
85%	26.92
80%	30.33
75%	33.83
70%	37.17
65%	40.31
60%	43.79
55%	47.49
50%	51.25
45%	55.39
40%	60.17
35%	65.42
30%	71.37
25%	78.30
20%	87.17
15%	98.82
10%	116.16
5%	150.37
0%	1,333.46

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.01 to 5.24
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.00



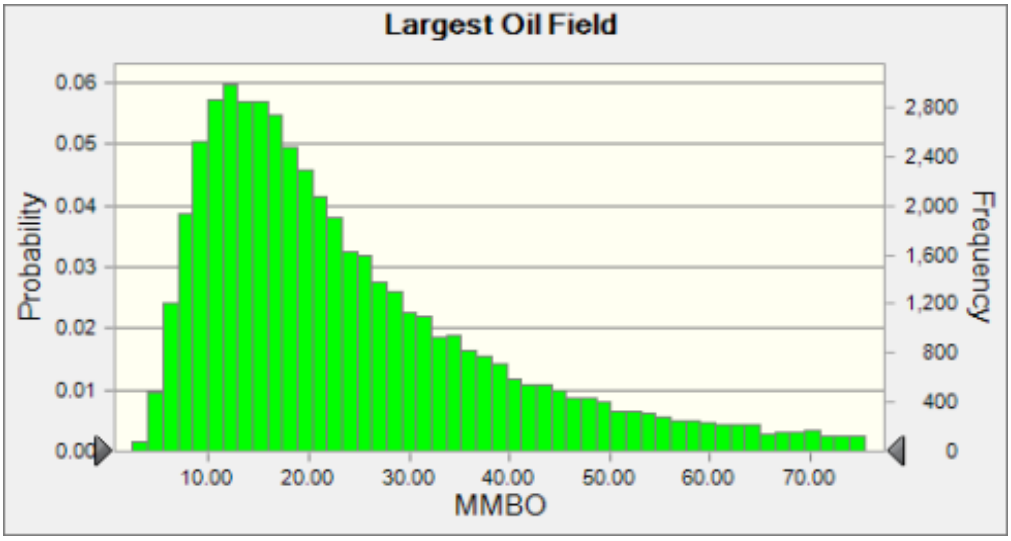
Statistics:	Forecast values
Trials	50,000
Mean	0.14
Median	0.11
Mode	---
Standard Deviation	0.13
Variance	0.02
Skewness	7.43
Kurtosis	151.92
Coefficient of Variability	0.9069
Minimum	0.01
Maximum	5.24
Range Width	5.23
Mean Standard Error	0.00

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.01
95%	0.04
90%	0.05
85%	0.06
80%	0.07
75%	0.07
70%	0.08
65%	0.09
60%	0.10
55%	0.10
50%	0.11
45%	0.12
40%	0.13
35%	0.14
30%	0.16
25%	0.17
20%	0.19
15%	0.22
10%	0.26
5%	0.34
0%	5.24

Forecast: Largest Oil Field

Summary:
Entire range is from 2.45 to 100.00
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.08



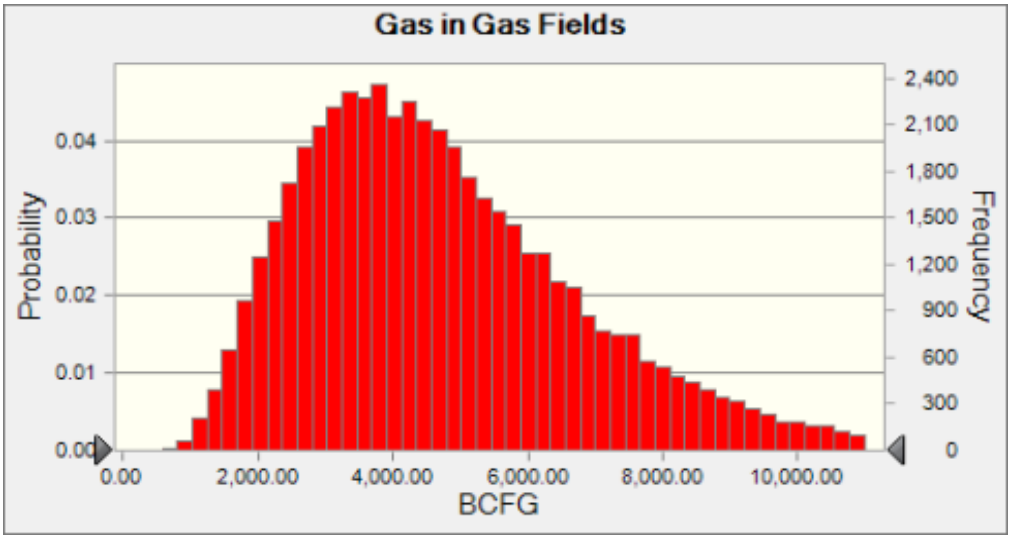
Statistics:	Forecast values
Trials	50,000
Mean	25.59
Median	20.11
Mode	---
Standard Deviation	17.78
Variance	316.13
Skewness	1.60
Kurtosis	5.59
Coefficient of Variability	0.6947
Minimum	2.45
Maximum	100.00
Range Width	97.54
Mean Standard Error	0.08

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	2.45
95%	7.58
90%	9.22
85%	10.57
80%	11.86
75%	13.10
70%	14.41
65%	15.71
60%	17.05
55%	18.53
50%	20.11
45%	21.90
40%	23.92
35%	26.29
30%	29.04
25%	32.41
20%	36.52
15%	42.03
10%	50.08
5%	63.96
0%	100.00

Forecast: Gas in Gas Fields

Summary:
Entire range is from 141.71 to 19,128.08
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 9.88



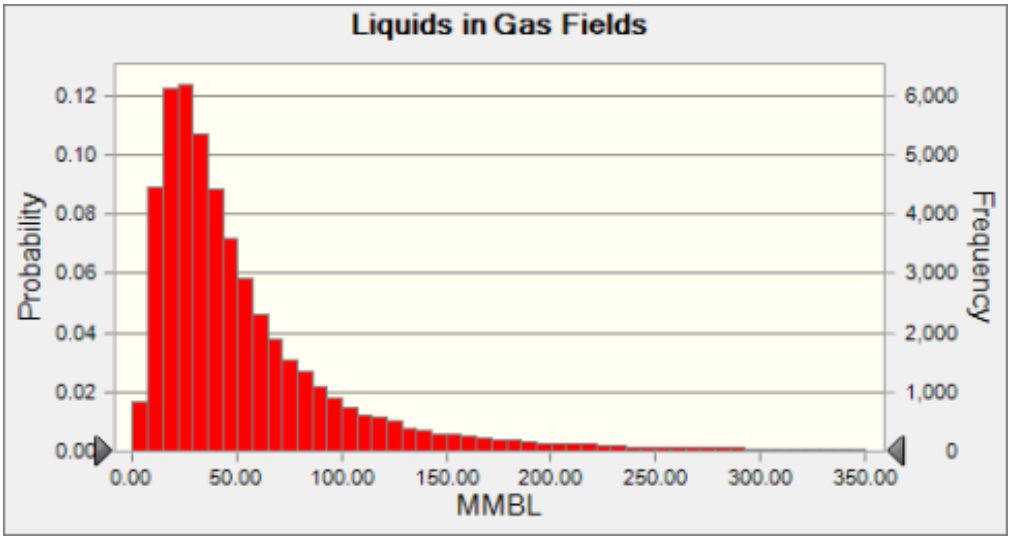
Statistics:	Forecast values
Trials	50,000
Mean	4,800.17
Median	4,409.37
Mode	---
Standard Deviation	2,208.64
Variance	4,878,073.61
Skewness	1.07
Kurtosis	4.65
Coefficient of Variability	0.4601
Minimum	141.71
Maximum	19,128.08
Range Width	18,986.37
Mean Standard Error	9.88

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	141.71
95%	1,952.66
90%	2,352.86
85%	2,662.39
80%	2,933.77
75%	3,187.35
70%	3,430.31
65%	3,671.15
60%	3,906.17
55%	4,163.04
50%	4,409.32
45%	4,673.61
40%	4,951.79
35%	5,259.31
30%	5,609.43
25%	5,987.83
20%	6,442.56
15%	7,010.83
10%	7,763.72
5%	8,975.37
0%	19,128.08

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 0.27 to 3,491.99
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.46



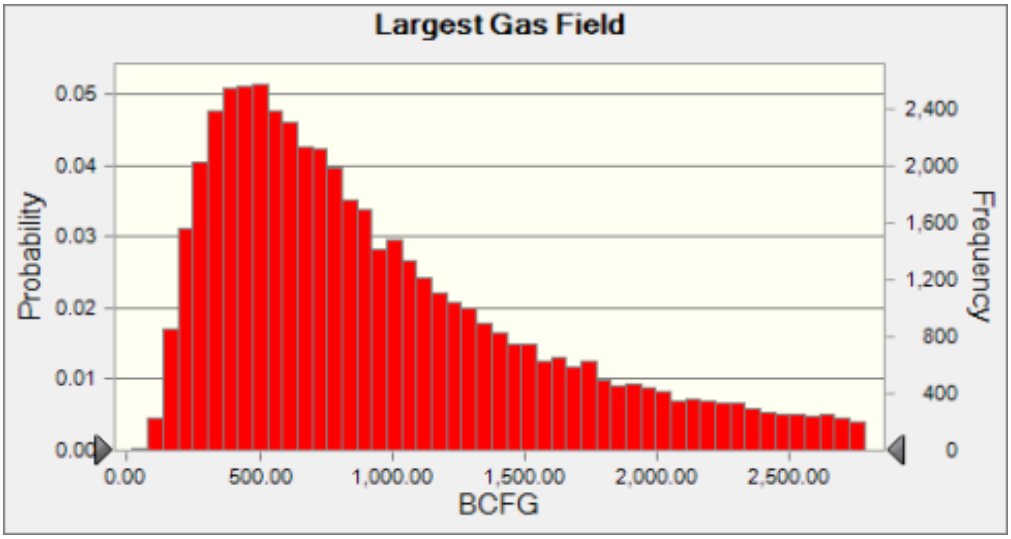
Statistics:	Forecast values
Trials	50,000
Mean	63.61
Median	39.08
Mode	---
Standard Deviation	102.18
Variance	10,439.76
Skewness	10.41
Kurtosis	193.99
Coefficient of Variability	1.61
Minimum	0.27
Maximum	3,491.99
Range Width	3,491.73
Mean Standard Error	0.46

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	0.27
95%	10.67
90%	14.15
85%	17.25
80%	20.07
75%	22.87
70%	25.66
65%	28.65
60%	31.78
55%	35.22
50%	39.08
45%	43.24
40%	48.12
35%	53.53
30%	60.43
25%	68.85
20%	80.27
15%	96.00
10%	122.70
5%	183.74
0%	3,491.99

Forecast: Largest Gas Field

Summary:
Entire range is from 22.86 to 2,999.41
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 2.88



Statistics:	Forecast values
Trials	50,000
Mean	973.74
Median	790.48
Mode	---
Standard Deviation	645.09
Variance	416,146.98
Skewness	1.07
Kurtosis	3.49
Coefficient of Variability	0.6625
Minimum	22.86
Maximum	2,999.41
Range Width	2,976.56
Mean Standard Error	2.88

Forecast: Largest Gas Field (continued)

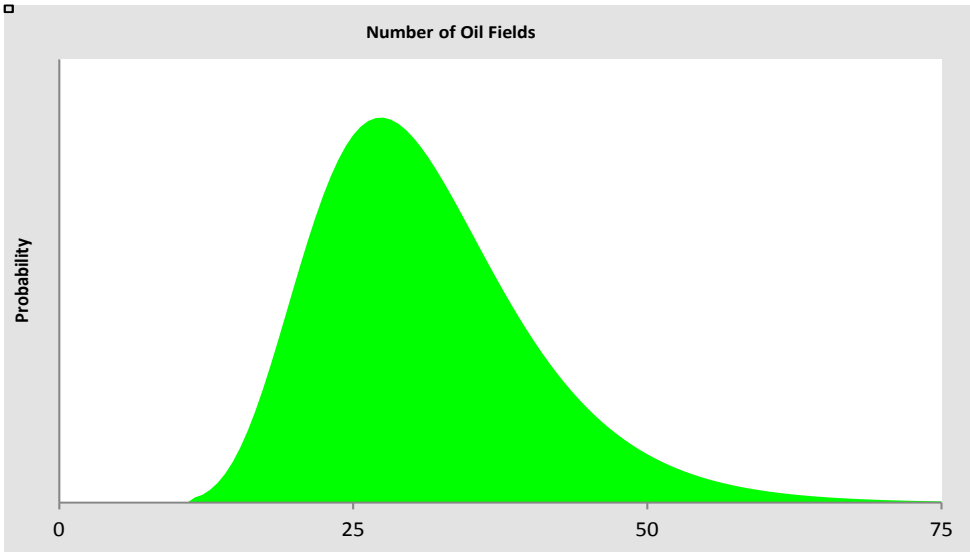
Percentiles:	BCFG
100%	22.86
95%	243.58
90%	312.41
85%	371.25
80%	425.22
75%	480.45
70%	535.90
65%	594.65
60%	656.76
55%	723.28
50%	790.46
45%	868.99
40%	956.23
35%	1,056.33
30%	1,170.76
25%	1,307.24
20%	1,473.11
15%	1,684.88
10%	1,961.73
5%	2,356.58
0%	2,999.41

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	30.36	31.36
Standard Deviation	9.42	9.42
Selected range is from -Infinity to 74.00		1.00 to 75.00



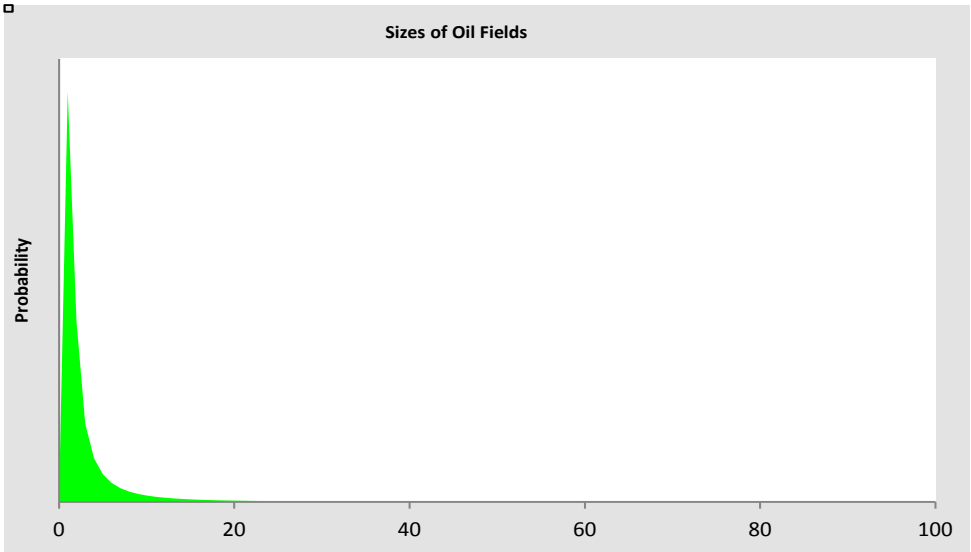
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	31.36	31.31
Median	30.00	29.99
Mode	---	---
Standard Deviation	9.33	9.29
Variance	87.06	86.25
Skewness	0.8655	0.8503
Kurtosis	4.06	4.00
Coefficient of Variability	0.2975	0.2966
Minimum	8.88	1.00
Maximum	74.89	75.00
Range Width	66.01	74.00
Mean Standard Error	0.04	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	8.88	1.00
95%	18.61	18.61
90%	20.72	20.66
85%	22.21	22.18
80%	23.48	23.46
75%	24.64	24.63
70%	25.77	25.73
65%	26.82	26.80
60%	27.89	27.85
55%	28.94	28.91
50%	30.00	29.99
45%	31.13	31.11
40%	32.34	32.30
35%	33.60	33.58
30%	35.02	34.98
25%	36.63	36.55
20%	38.42	38.40
15%	40.69	40.66
10%	43.82	43.70
5%	48.76	48.62
0%	74.89	75.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	3.02	4.02
Standard Deviation	8.61	8.61
Selected range is from -Infinity to 99.00		1.00 to 100.00



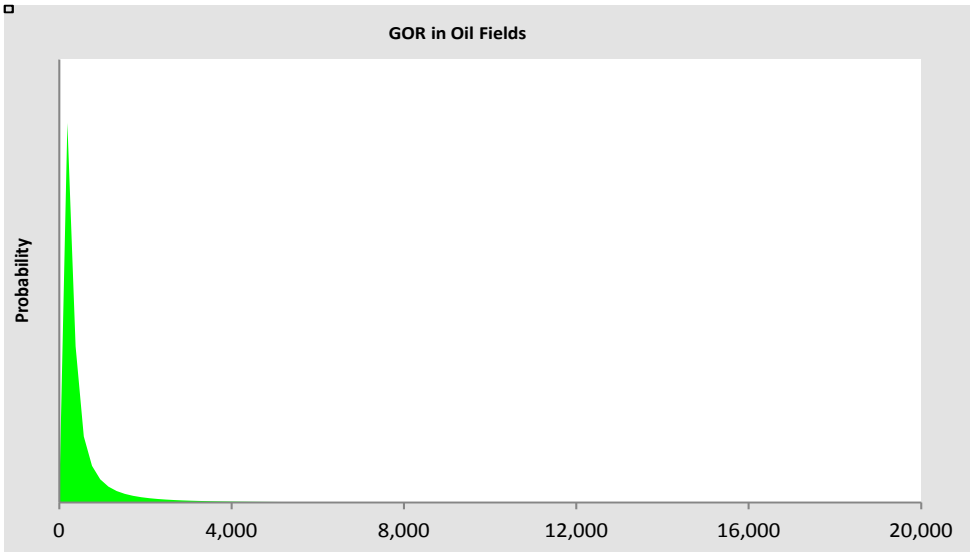
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	3.87	3.86
Median	1.98	2.00
Mode	---	---
Standard Deviation	6.21	6.11
Variance	38.52	37.36
Skewness	6.33	6.32
Kurtosis	59.92	60.37
Coefficient of Variability	1.60	1.58
Minimum	1.00	1.00
Maximum	100.00	100.00
Range Width	98.99	99.00
Mean Standard Error	0.03	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.00	1.00
95%	1.09	1.09
90%	1.15	1.15
85%	1.21	1.21
80%	1.28	1.29
75%	1.36	1.37
70%	1.45	1.46
65%	1.55	1.56
60%	1.67	1.69
55%	1.82	1.83
50%	1.98	2.00
45%	2.18	2.20
40%	2.44	2.45
35%	2.76	2.77
30%	3.16	3.17
25%	3.69	3.72
20%	4.47	4.48
15%	5.62	5.65
10%	7.71	7.67
5%	12.46	12.39
0%	100.00	100.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	6
Mean	559.33	565.33
Standard Deviation	1,655.88	1,655.88
Selected range is from -Infinity to 18,994.00		6.00 to 19,000.00



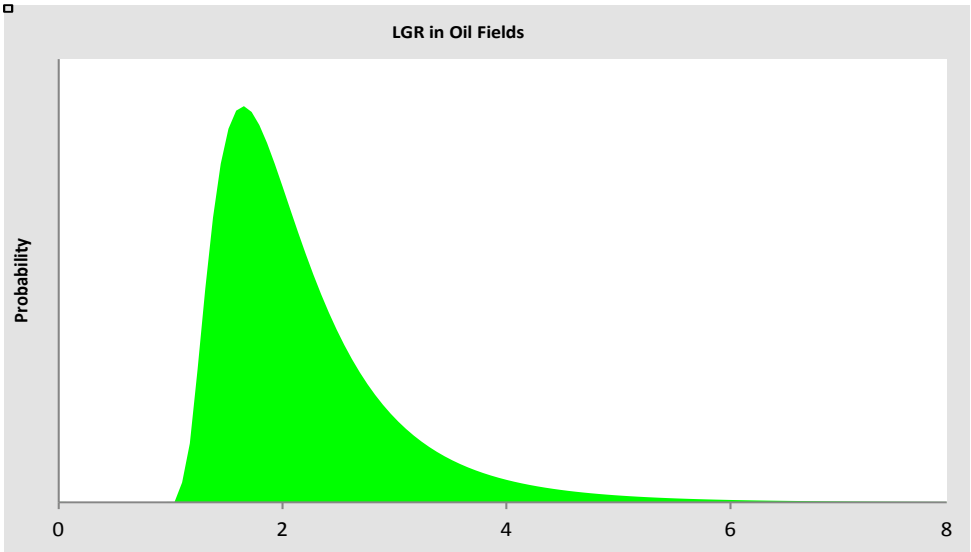
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	536.50	535.03
Median	186.46	184.66
Mode	---	---
Standard Deviation	1,164.26	1,155.76
Variance	1,355,500.00	1,335,778.88
Skewness	6.49	6.46
Kurtosis	62.68	62.85
Coefficient of Variability	2.17	2.16
Minimum	6.28	6.00
Maximum	18,983.61	19,000.00
Range Width	18,977.33	18,994.00
Mean Standard Error	5.21	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.28	6.00
95%	21.71	20.93
90%	32.37	31.84
85%	44.13	43.41
80%	57.18	56.19
75%	71.47	70.59
70%	88.07	87.00
65%	107.45	105.91
60%	129.63	127.92
55%	155.40	153.82
50%	186.44	184.66
45%	224.99	221.94
40%	270.36	267.77
35%	329.88	325.38
30%	402.80	399.84
25%	502.15	499.73
20%	641.99	640.95
15%	857.18	857.02
10%	1,243.05	1,235.33
5%	2,098.92	2,120.46
0%	18,983.61	19,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	1.22	2.22
Standard Deviation	0.85	0.85
Selected range is from -Infinity to 7.00		1.00 to 8.00



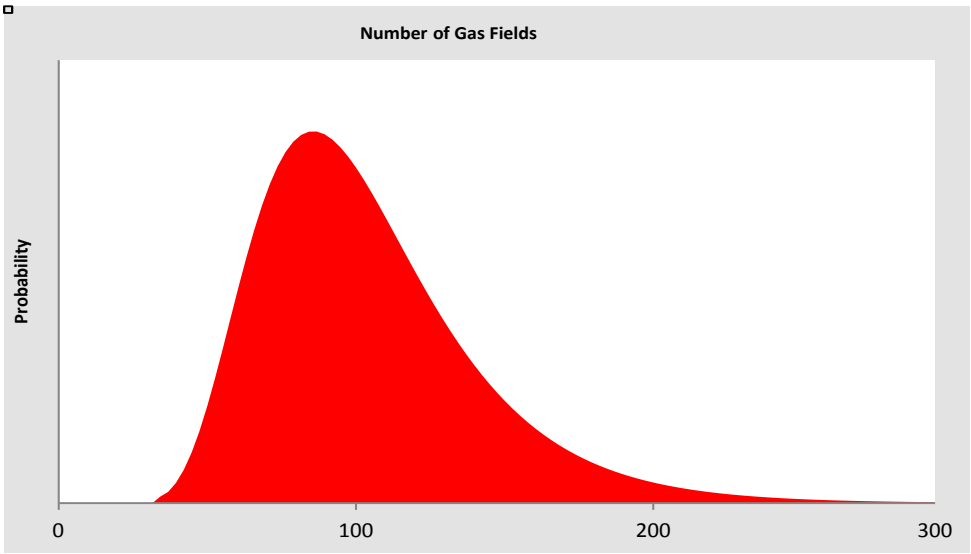
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	2.21	2.21
Median	2.00	2.00
Mode	---	---
Standard Deviation	0.83	0.82
Variance	0.68	0.67
Skewness	1.98	1.94
Kurtosis	8.93	8.69
Coefficient of Variability	0.3731	0.3698
Minimum	1.07	1.00
Maximum	7.99	8.00
Range Width	6.92	7.00
Mean Standard Error	0.00	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.07	1.00
95%	1.35	1.35
90%	1.44	1.45
85%	1.52	1.52
80%	1.59	1.59
75%	1.65	1.65
70%	1.72	1.72
65%	1.78	1.78
60%	1.85	1.85
55%	1.93	1.92
50%	2.00	2.00
45%	2.08	2.08
40%	2.17	2.17
35%	2.28	2.27
30%	2.39	2.39
25%	2.53	2.53
20%	2.70	2.70
15%	2.92	2.92
10%	3.24	3.23
5%	3.81	3.80
0%	7.99	8.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	10
Mean	96.69	106.69
Standard Deviation	37.97	37.97
Selected range is from -Infinity to 290.00		10.00 to 300.00



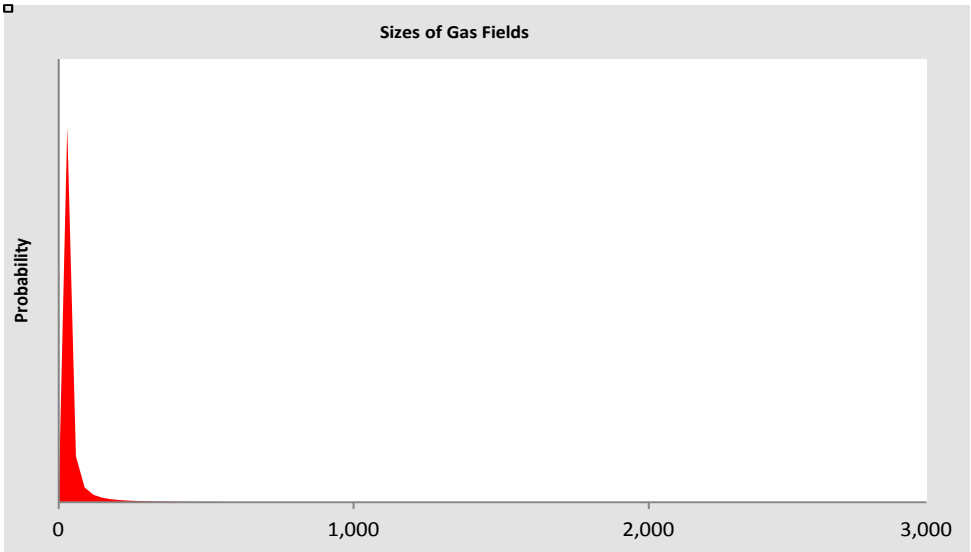
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	106.54	106.46
Median	100.03	99.96
Mode	---	---
Standard Deviation	37.25	37.28
Variance	1,387.63	1,389.99
Skewness	1.07	1.08
Kurtosis	4.62	4.69
Coefficient of Variability	0.3496	0.3502
Minimum	30.98	10.00
Maximum	299.78	300.00
Range Width	268.81	290.00
Mean Standard Error	0.17	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.98	10.00
95%	58.36	58.27
90%	65.43	65.39
85%	70.79	70.77
80%	75.38	75.42
75%	79.72	79.69
70%	83.81	83.77
65%	87.76	87.75
60%	91.76	91.74
55%	95.82	95.78
50%	100.02	99.96
45%	104.56	104.34
40%	109.24	109.00
35%	114.28	114.07
30%	119.91	119.69
25%	126.27	126.08
20%	134.06	133.65
15%	143.45	143.07
10%	156.01	155.93
5%	176.69	177.20
0%	299.78	300.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	6
Mean	45.28	51.28
Standard Deviation	338.74	338.74
Selected range is from -Infinity to 2,994.00		6.00 to 3,000.00



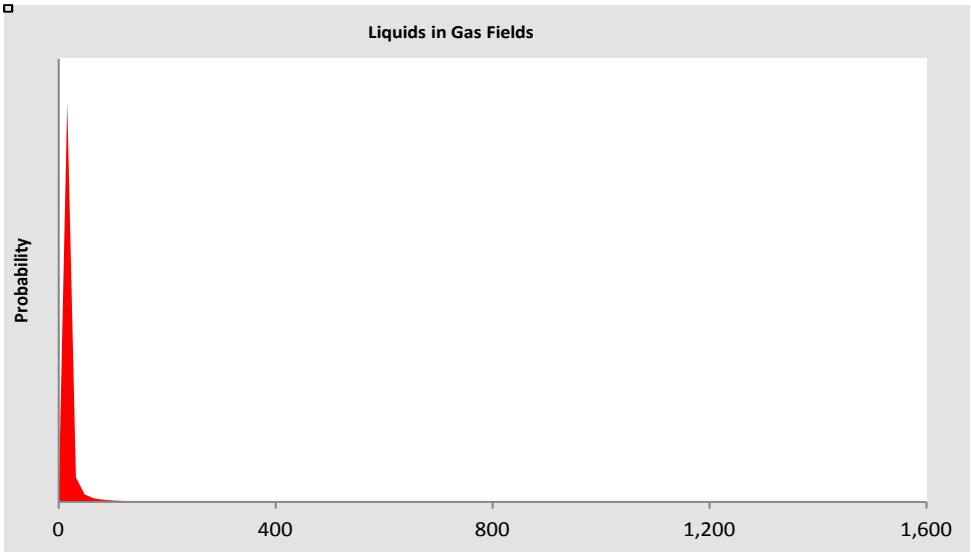
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	44.99	46.33
Median	12.02	11.98
Mode	---	---
Standard Deviation	137.09	137.65
Variance	18,792.35	18,948.85
Skewness	9.82	9.83
Kurtosis	134.79	134.58
Coefficient of Variability	3.05	2.97
Minimum	6.00	6.00
Maximum	2,974.83	3,000.00
Range Width	2,968.83	2,994.00
Mean Standard Error	0.61	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.00	6.00
95%	6.23	6.22
90%	6.46	6.46
85%	6.76	6.75
80%	7.11	7.10
75%	7.55	7.54
70%	8.10	8.09
65%	8.79	8.76
60%	9.63	9.60
55%	10.67	10.65
50%	12.02	11.98
45%	13.71	13.70
40%	15.93	15.95
35%	18.98	18.97
30%	23.42	23.15
25%	29.41	29.18
20%	38.71	38.40
15%	53.96	53.86
10%	83.84	84.11
5%	168.80	166.84
0%	2,974.83	3,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	0
Mean	17.29	17.29
Standard Deviation	298.59	298.59
Selected range is from -Infinity to 1,600.00		0.00 to 1,600.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	13.52	14.42
Median	0.98	1.00
Mode	---	---
Standard Deviation	68.22	62.55
Variance	4,654.41	3,912.84
Skewness	12.76	12.42
Kurtosis	209.48	206.27
Coefficient of Variability	5.05	4.34
Minimum	0.00	0.00
Maximum	1,597.12	1,600.00
Range Width	1,597.12	1,600.00
Mean Standard Error	0.31	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	0.00	0.00
95%	0.02	0.02
90%	0.05	0.05
85%	0.08	0.08
80%	0.13	0.13
75%	0.20	0.20
70%	0.29	0.29
65%	0.40	0.40
60%	0.54	0.54
55%	0.73	0.74
50%	0.98	1.00
45%	1.34	1.35
40%	1.83	1.82
35%	2.53	2.50
30%	3.53	3.48
25%	5.01	4.98
20%	7.37	7.41
15%	11.67	11.77
10%	20.89	21.07
5%	48.66	49.67
0%	1,597.12	1,600.00

End of Assumptions

Simulation started on 1/30/2012 at 2:30 PM
Simulation stopped on 1/30/2012 at 2:39 PM