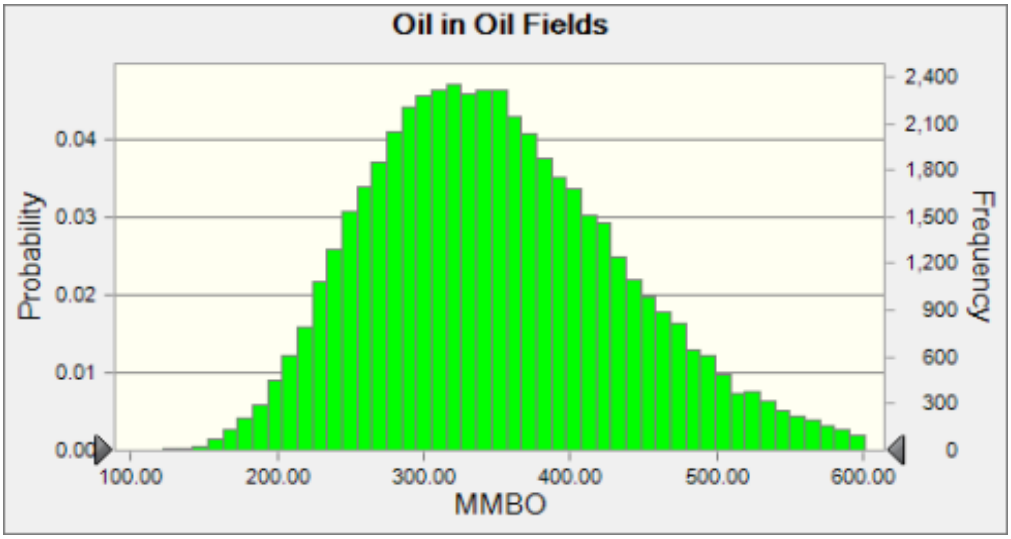
20770101
Palmyra Fold Belt Reservoirs
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 8.09 to 824.75
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.40



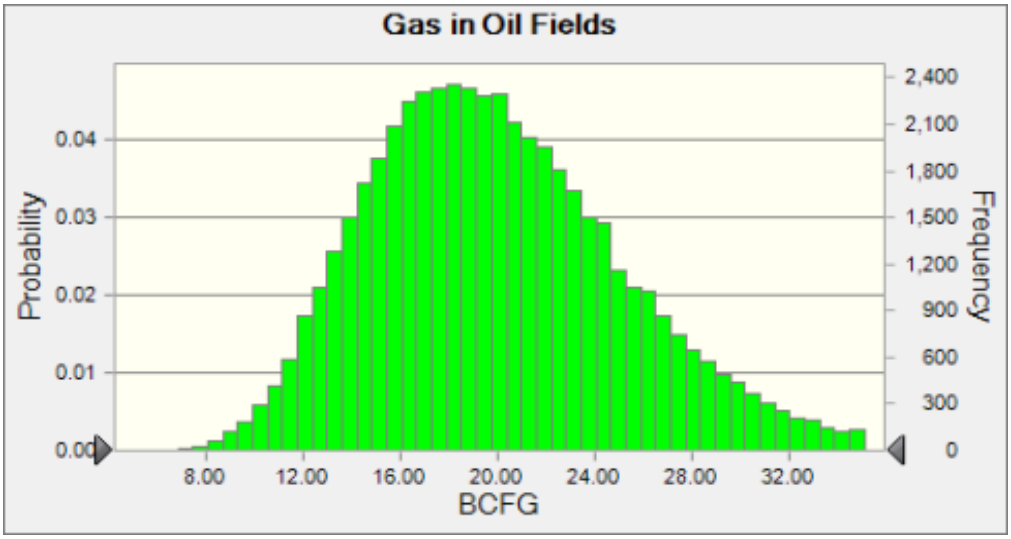
Statistics:	Forecast values
Trials	50,000
Mean	351.07
Median	342.12
Mode	---
Standard Deviation	89.06
Variance	7,932.32
Skewness	0.5929
Kurtosis	3.44
Coefficient of Variability	0.2537
Minimum	8.09
Maximum	824.75
Range Width	816.66
Mean Standard Error	0.40

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	8.09
95%	222.26
90%	244.26
85%	260.43
80%	274.40
75%	286.77
70%	298.27
65%	309.08
60%	320.08
55%	330.90
50%	342.12
45%	353.00
40%	364.65
35%	377.25
30%	391.14
25%	405.89
20%	422.95
15%	443.22
10%	469.68
5%	510.93
0%	824.75

Forecast: Gas in Oil Fields

Summary:
Entire range is from 0.37 to 47.63
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.02



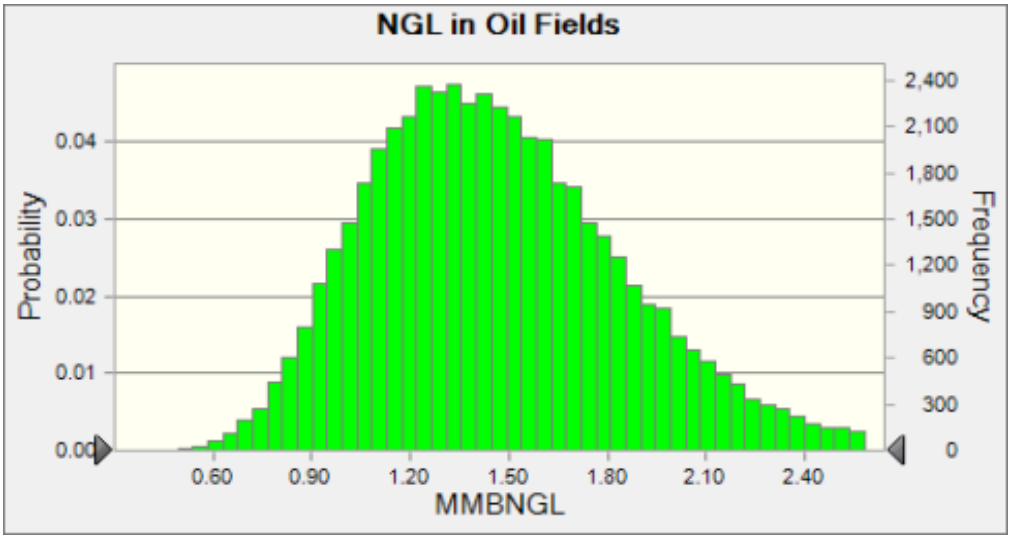
Statistics:	Forecast values
Trials	50,000
Mean	20.04
Median	19.46
Mode	---
Standard Deviation	5.38
Variance	28.95
Skewness	0.6305
Kurtosis	3.54
Coefficient of Variability	0.2685
Minimum	0.37
Maximum	47.63
Range Width	47.26
Mean Standard Error	0.02

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	0.37
95%	12.30
90%	13.62
85%	14.58
80%	15.42
75%	16.15
70%	16.83
65%	17.49
60%	18.15
55%	18.81
50%	19.46
45%	20.14
40%	20.85
35%	21.61
30%	22.40
25%	23.28
20%	24.31
15%	25.56
10%	27.19
5%	29.76
0%	47.63

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.02 to 3.61
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.00



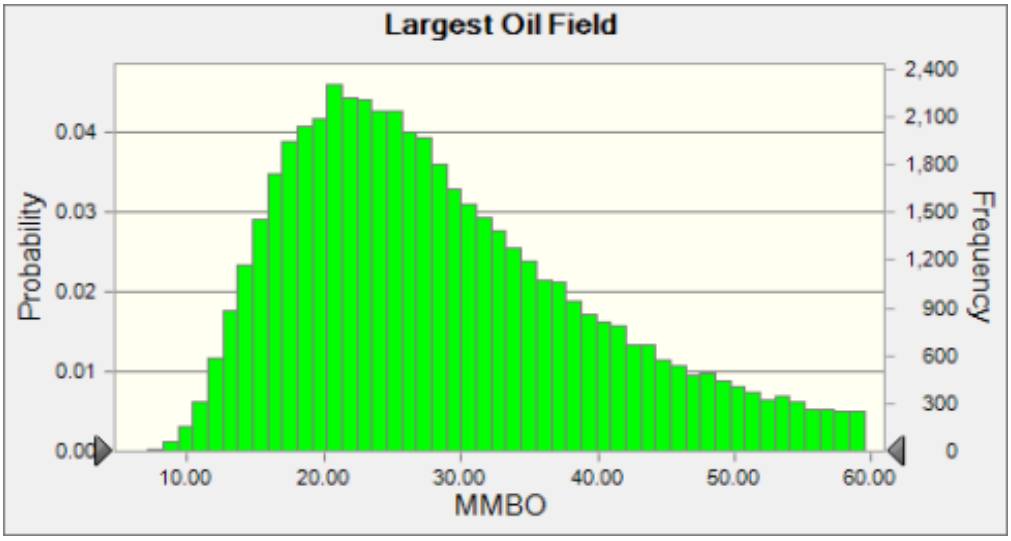
Statistics:	Forecast values
Trials	50,000
Mean	1.47
Median	1.43
Mode	---
Standard Deviation	0.40
Variance	0.16
Skewness	0.6433
Kurtosis	3.59
Coefficient of Variability	0.2704
Minimum	0.02
Maximum	3.61
Range Width	3.59
Mean Standard Error	0.00

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.02
95%	0.90
90%	1.00
85%	1.07
80%	1.13
75%	1.18
70%	1.23
65%	1.28
60%	1.33
55%	1.38
50%	1.43
45%	1.48
40%	1.53
35%	1.58
30%	1.64
25%	1.71
20%	1.79
15%	1.88
10%	1.99
5%	2.19
0%	3.61

Forecast: Largest Oil Field

Summary:
Entire range is from 6.07 to 59.99
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.05



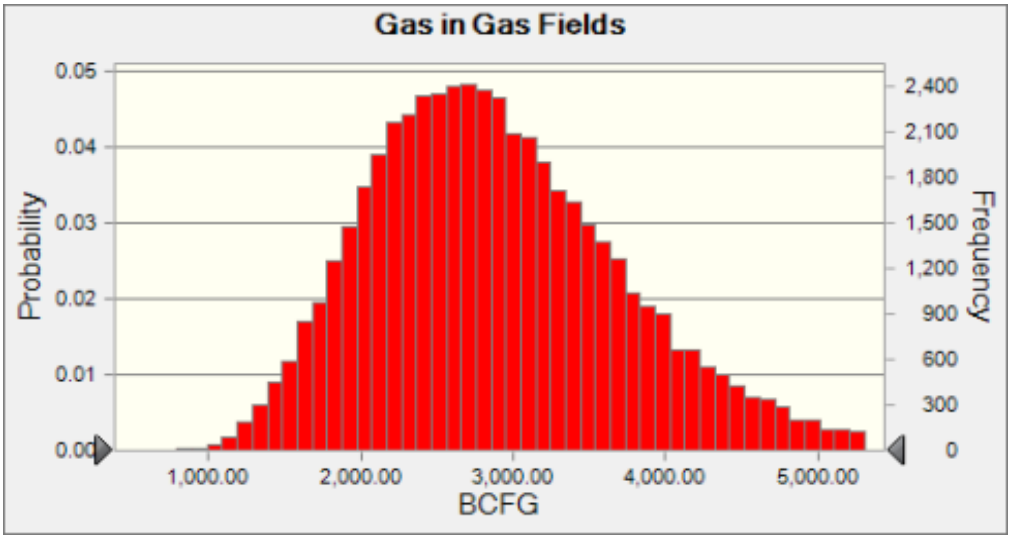
Statistics:	Forecast values
Trials	50,000
Mean	28.65
Median	26.53
Mode	---
Standard Deviation	11.00
Variance	121.03
Skewness	0.7297
Kurtosis	2.92
Coefficient of Variability	0.3840
Minimum	6.07
Maximum	59.99
Range Width	53.92
Mean Standard Error	0.05

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	6.07
95%	14.21
90%	16.11
85%	17.60
80%	18.98
75%	20.27
70%	21.46
65%	22.70
60%	23.92
55%	25.19
50%	26.53
45%	27.92
40%	29.48
35%	31.18
30%	33.10
25%	35.26
20%	37.82
15%	40.97
10%	44.94
5%	50.70
0%	59.99

Forecast: Gas in Gas Fields

Summary:
Entire range is from 28.97 to 8,018.73
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 3.84



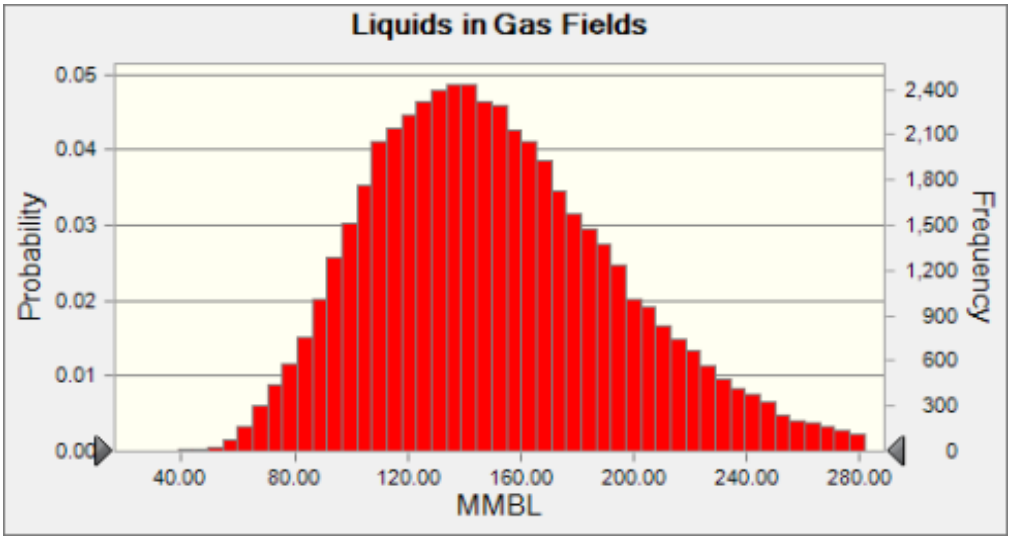
Statistics:	Forecast values
Trials	50,000
Mean	2,903.32
Median	2,804.38
Mode	---
Standard Deviation	857.98
Variance	736,133.53
Skewness	0.6940
Kurtosis	3.74
Coefficient of Variability	0.2955
Minimum	28.97
Maximum	8,018.73
Range Width	7,989.76
Mean Standard Error	3.84

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	28.97
95%	1,674.15
90%	1,891.47
85%	2,045.93
80%	2,171.79
75%	2,283.70
70%	2,394.31
65%	2,497.22
60%	2,600.98
55%	2,701.00
50%	2,804.37
45%	2,908.69
40%	3,022.34
35%	3,141.11
30%	3,270.34
25%	3,416.13
20%	3,582.16
15%	3,776.73
10%	4,041.91
5%	4,463.86
0%	8,018.73

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 1.85 to 448.57
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.21



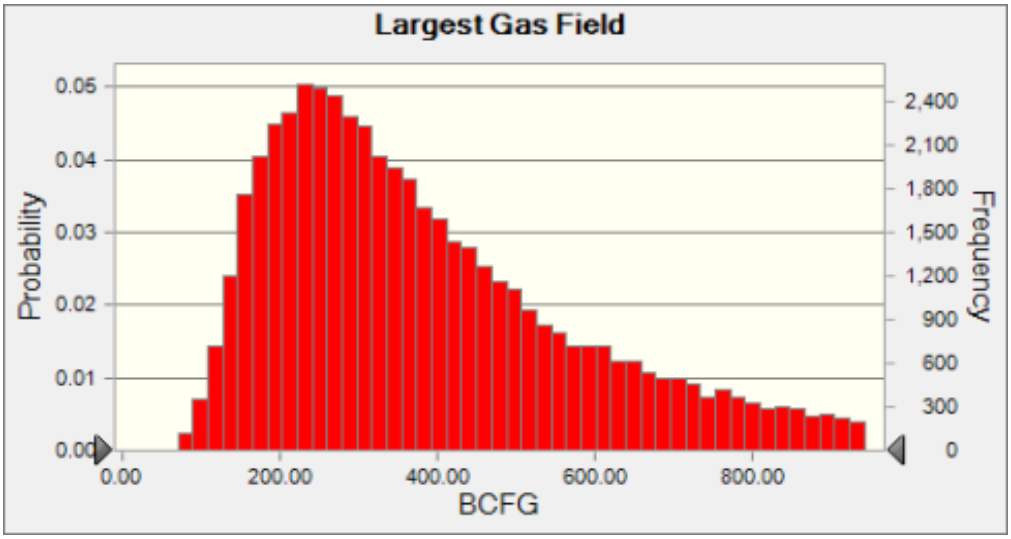
Statistics:	Forecast values
Trials	50,000
Mean	152.18
Median	146.71
Mode	---
Standard Deviation	46.19
Variance	2,133.41
Skewness	0.7298
Kurtosis	3.86
Coefficient of Variability	0.3035
Minimum	1.85
Maximum	448.57
Range Width	446.72
Mean Standard Error	0.21

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	1.85
95%	86.88
90%	98.06
85%	106.00
80%	112.60
75%	118.81
70%	124.62
65%	130.23
60%	135.61
55%	141.09
50%	146.71
45%	152.38
40%	158.37
35%	164.72
30%	171.66
25%	179.52
20%	188.66
15%	199.33
10%	213.77
5%	236.20
0%	448.57

Forecast: Largest Gas Field

Summary:
Entire range is from 14.57 to 999.53
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.89



Statistics:	Forecast values
Trials	50,000
Mean	387.24
Median	338.92
Mode	---
Standard Deviation	198.40
Variance	39,362.17
Skewness	0.9492
Kurtosis	3.29
Coefficient of Variability	0.5123
Minimum	14.57
Maximum	999.53
Range Width	984.97
Mean Standard Error	0.89

Forecast: Largest Gas Field (continued)

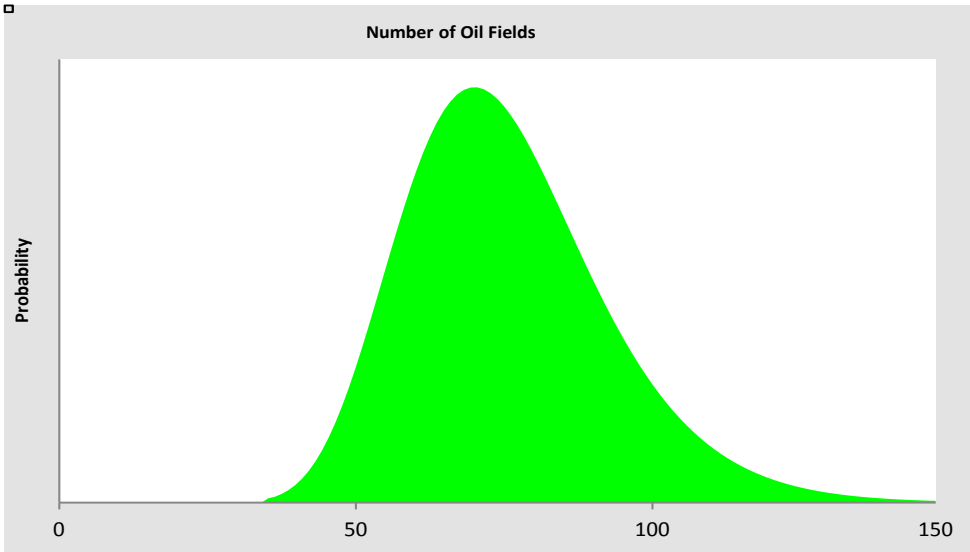
Percentiles:	BCFG
100%	14.57
95%	148.49
90%	174.31
85%	196.41
80%	216.79
75%	236.29
70%	254.67
65%	273.83
60%	294.55
55%	315.77
50%	338.91
45%	363.58
40%	390.74
35%	421.00
30%	455.10
25%	495.32
20%	544.44
15%	607.54
10%	687.28
5%	799.56
0%	999.53

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	75.92	76.92
Standard Deviation	17.42	17.42
Selected range is from -Infinity to 149.00		1.00 to 150.00



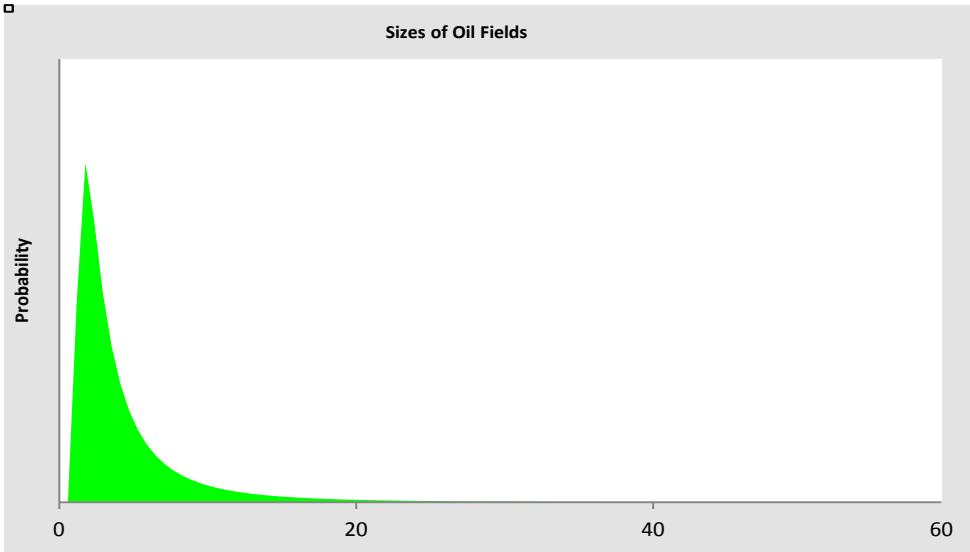
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	76.88	76.84
Median	75.02	74.98
Mode	---	---
Standard Deviation	17.21	17.23
Variance	296.09	296.75
Skewness	0.6242	0.6221
Kurtosis	3.46	3.48
Coefficient of Variability	0.2238	0.2242
Minimum	30.26	1.00
Maximum	149.44	150.00
Range Width	119.18	149.00
Mean Standard Error	0.08	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.26	1.00
95%	52.08	51.98
90%	56.36	56.35
85%	59.50	59.51
80%	62.20	62.15
75%	64.52	64.50
70%	66.71	66.70
65%	68.86	68.80
60%	70.90	70.86
55%	72.97	72.90
50%	75.02	74.98
45%	77.17	77.11
40%	79.41	79.34
35%	81.72	81.72
30%	84.24	84.29
25%	87.20	87.17
20%	90.53	90.48
15%	94.58	94.50
10%	99.81	99.81
5%	108.25	108.18
0%	149.44	150.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	3.64	4.64
Standard Deviation	5.55	5.55
Selected range is from -Infinity to 59.00		1.00 to 60.00



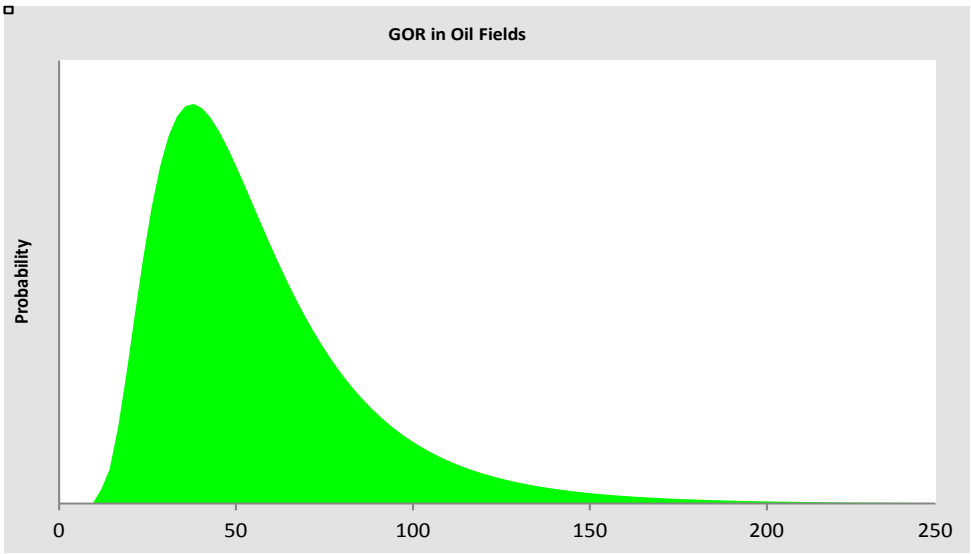
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	4.58	4.56
Median	3.00	3.00
Mode	---	---
Standard Deviation	4.80	4.83
Variance	23.06	23.29
Skewness	3.88	4.03
Kurtosis	25.17	27.25
Coefficient of Variability	1.05	1.06
Minimum	1.03	1.00
Maximum	59.51	60.00
Range Width	58.48	59.00
Mean Standard Error	0.02	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.03	1.00
95%	1.33	1.33
90%	1.49	1.49
85%	1.65	1.64
80%	1.80	1.79
75%	1.97	1.95
70%	2.14	2.13
65%	2.32	2.31
60%	2.52	2.51
55%	2.75	2.74
50%	3.00	3.00
45%	3.30	3.29
40%	3.66	3.64
35%	4.06	4.04
30%	4.57	4.54
25%	5.20	5.18
20%	6.06	6.01
15%	7.27	7.20
10%	9.20	9.09
5%	13.02	13.00
0%	59.51	60.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	52.30	57.3
Standard Deviation	30.98	30.98
Selected range is from -Infinity to 245.00		5.00 to 250.00



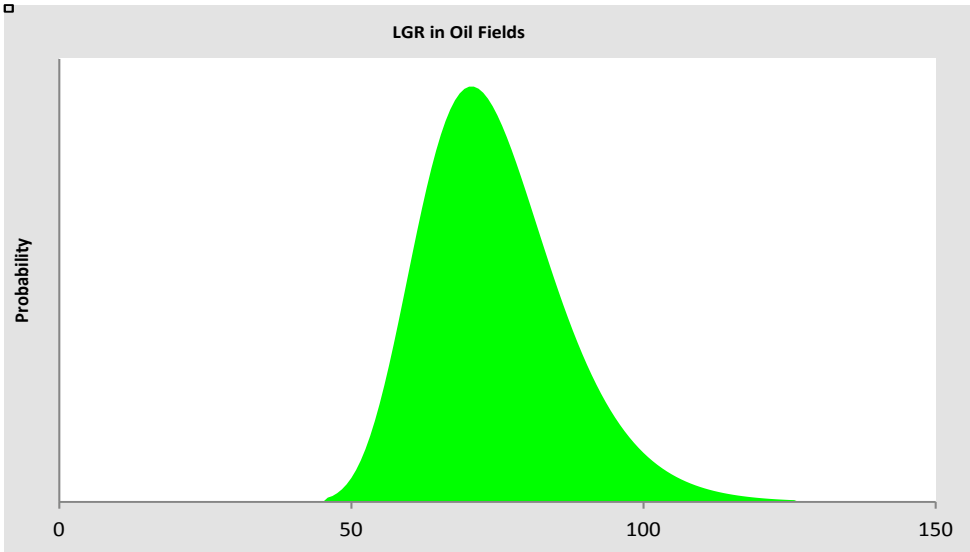
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	56.92	57.07
Median	49.90	49.97
Mode	---	---
Standard Deviation	30.10	30.05
Variance	906.21	902.77
Skewness	1.66	1.65
Kurtosis	7.16	7.06
Coefficient of Variability	0.5288	0.5265
Minimum	9.65	5.00
Maximum	249.22	250.00
Range Width	239.57	245.00
Mean Standard Error	0.13	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	9.65	5.00
95%	23.15	23.25
90%	27.09	27.28
85%	30.26	30.48
80%	33.15	33.35
75%	35.88	36.07
70%	38.54	38.74
65%	41.20	41.41
60%	43.94	44.14
55%	46.87	46.98
50%	49.90	49.97
45%	52.97	53.17
40%	56.48	56.66
35%	60.40	60.54
30%	64.84	64.93
25%	70.11	70.06
20%	76.38	76.28
15%	84.26	84.29
10%	95.11	95.62
5%	115.23	115.36
0%	249.22	250.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	20
Mean	53.36	73.36
Standard Deviation	12.29	12.29
Selected range is from -Infinity to 105.00		20.00 to 125.00



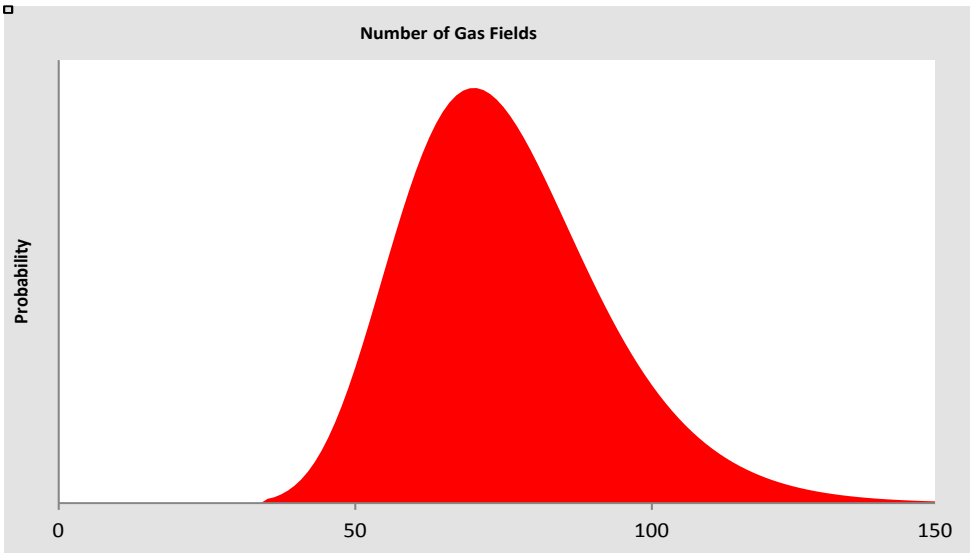
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	73.27	73.30
Median	71.97	71.99
Mode	---	---
Standard Deviation	12.15	12.16
Variance	147.67	147.81
Skewness	0.6274	0.6248
Kurtosis	3.51	3.49
Coefficient of Variability	0.1658	0.1659
Minimum	37.20	20.00
Maximum	124.91	125.00
Range Width	87.71	105.00
Mean Standard Error	0.05	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	37.20	20.00
95%	55.73	55.77
90%	58.84	58.85
85%	61.04	61.07
80%	62.92	62.93
75%	64.60	64.60
70%	66.13	66.15
65%	67.62	67.63
60%	69.08	69.08
55%	70.52	70.52
50%	71.97	71.99
45%	73.46	73.49
40%	75.00	75.06
35%	76.69	76.74
30%	78.48	78.56
25%	80.55	80.59
20%	82.89	82.93
15%	85.69	85.77
10%	89.44	89.51
5%	95.35	95.43
0%	124.91	125.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	75.92	76.92
Standard Deviation	17.42	17.42
Selected range is from -Infinity to 149.00		1.00 to 150.00



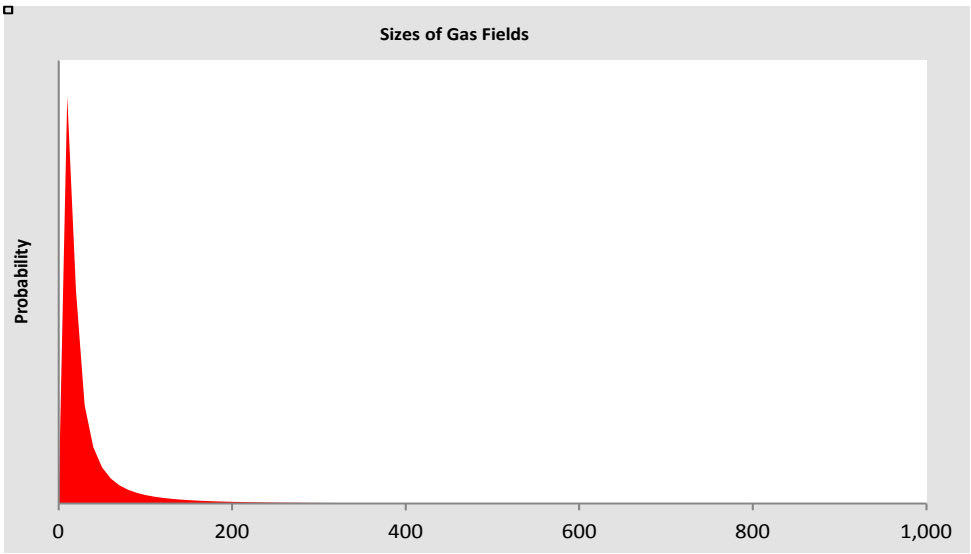
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	76.92	76.84
Median	75.06	74.98
Mode	---	---
Standard Deviation	17.29	17.23
Variance	299.01	296.75
Skewness	0.6252	0.6221
Kurtosis	3.49	3.48
Coefficient of Variability	0.2248	0.2242
Minimum	29.99	1.00
Maximum	149.96	150.00
Range Width	119.97	149.00
Mean Standard Error	0.08	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	29.99	1.00
95%	51.95	51.98
90%	56.32	56.35
85%	59.49	59.51
80%	62.18	62.15
75%	64.63	64.50
70%	66.82	66.70
65%	68.85	68.80
60%	70.92	70.86
55%	72.97	72.90
50%	75.06	74.98
45%	77.24	77.11
40%	79.46	79.34
35%	81.83	81.72
30%	84.38	84.29
25%	87.23	87.17
20%	90.42	90.48
15%	94.53	94.50
10%	99.87	99.81
5%	108.59	108.18
0%	149.96	150.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	6
Mean	33.33	39.33
Standard Deviation	86.37	86.37
Selected range is from -Infinity to 994.00		6.00 to 1,000.00



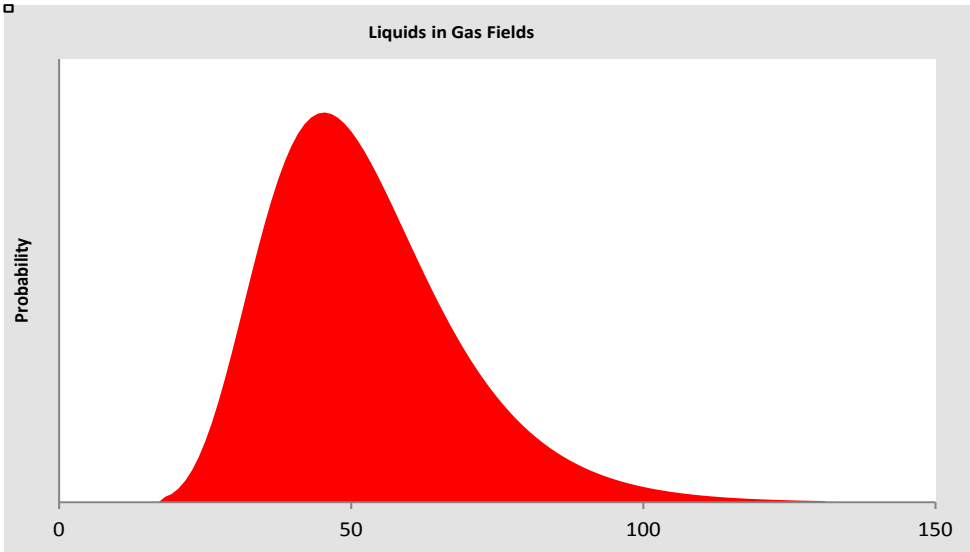
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	37.97	37.78
Median	18.06	17.98
Mode	---	---
Standard Deviation	63.01	63.76
Variance	3,970.10	4,065.35
Skewness	5.65	5.96
Kurtosis	48.46	54.30
Coefficient of Variability	1.66	1.69
Minimum	6.02	6.00
Maximum	963.98	1,000.00
Range Width	957.96	994.00
Mean Standard Error	0.28	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.02	6.00
95%	7.12	7.14
90%	7.93	7.92
85%	8.72	8.73
80%	9.64	9.60
75%	10.64	10.57
70%	11.73	11.66
65%	12.94	12.91
60%	14.38	14.34
55%	16.06	16.01
50%	18.06	17.98
45%	20.47	20.33
40%	23.41	23.20
35%	27.02	26.76
30%	31.70	31.32
25%	37.82	37.36
20%	46.39	45.80
15%	59.64	58.52
10%	80.90	80.40
5%	130.96	130.33
0%	963.98	1,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	51.46	52.46
Standard Deviation	16.53	16.53
Selected range is from -Infinity to 129.00		1.00 to 130.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	52.51	52.37
Median	50.10	49.98
Mode	---	---
Standard Deviation	16.37	16.28
Variance	267.93	265.17
Skewness	0.8795	0.8809
Kurtosis	4.06	4.08
Coefficient of Variability	0.3117	0.3109
Minimum	12.64	1.00
Maximum	129.85	130.00
Range Width	117.20	129.00
Mean Standard Error	0.07	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	12.64	1.00
95%	30.24	30.26
90%	33.80	33.79
85%	36.39	36.41
80%	38.67	38.64
75%	40.72	40.66
70%	42.70	42.57
65%	44.55	44.42
60%	46.41	46.25
55%	48.27	48.09
50%	50.10	49.98
45%	52.05	51.95
40%	54.17	54.02
35%	56.43	56.26
30%	58.96	58.71
25%	61.62	61.48
20%	64.82	64.72
15%	68.76	68.72
10%	74.20	74.09
5%	83.21	82.80
0%	129.85	130.00

End of Assumptions

Simulation started on 1/30/2012 at 11:45 AM
Simulation stopped on 1/30/2012 at 11:52 AM