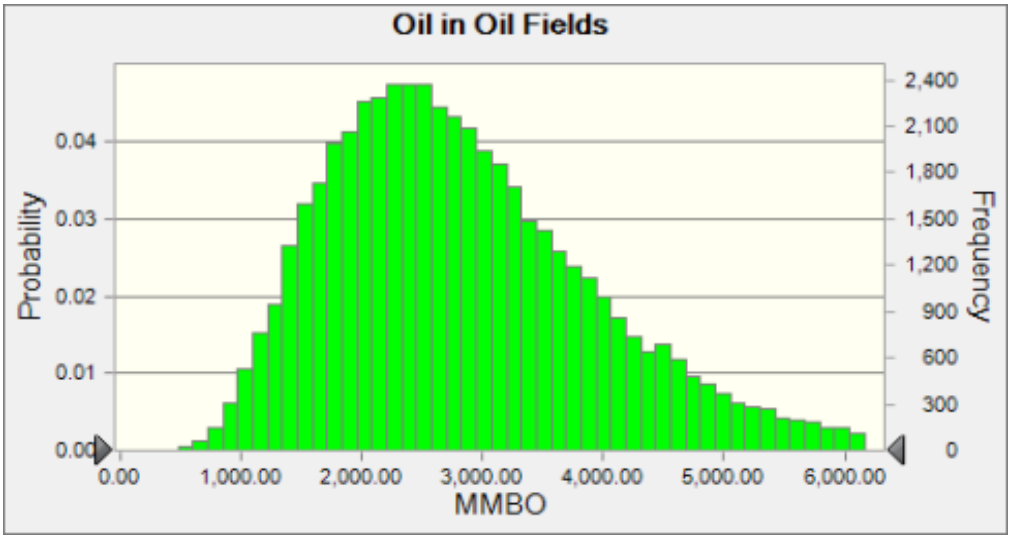
53070101
Salt Structures
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 98.78 to 9,486.07
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 5.27



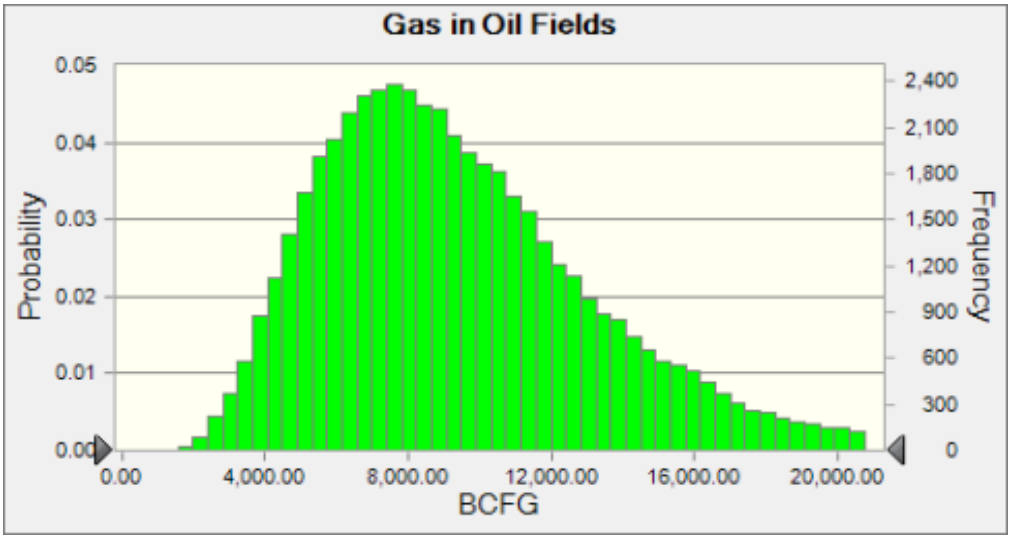
Statistics:	Forecast values
Trials	50,000
Mean	2,864.63
Median	2,676.77
Mode	---
Standard Deviation	1,177.89
Variance	1,387,423.58
Skewness	0.9608
Kurtosis	4.29
Coefficient of Variability	0.4112
Minimum	98.78
Maximum	9,486.07
Range Width	9,387.29
Mean Standard Error	5.27

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	98.78
95%	1,303.54
90%	1,531.36
85%	1,711.04
80%	1,865.75
75%	2,011.98
70%	2,148.04
65%	2,277.95
60%	2,410.29
55%	2,540.53
50%	2,676.76
45%	2,819.58
40%	2,966.89
35%	3,131.55
30%	3,307.49
25%	3,513.75
20%	3,755.40
15%	4,038.79
10%	4,453.17
5%	5,078.69
0%	9,486.07

Forecast: Gas in Oil Fields

Summary:
Entire range is from 303.21 to 34,746.51
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 17.98



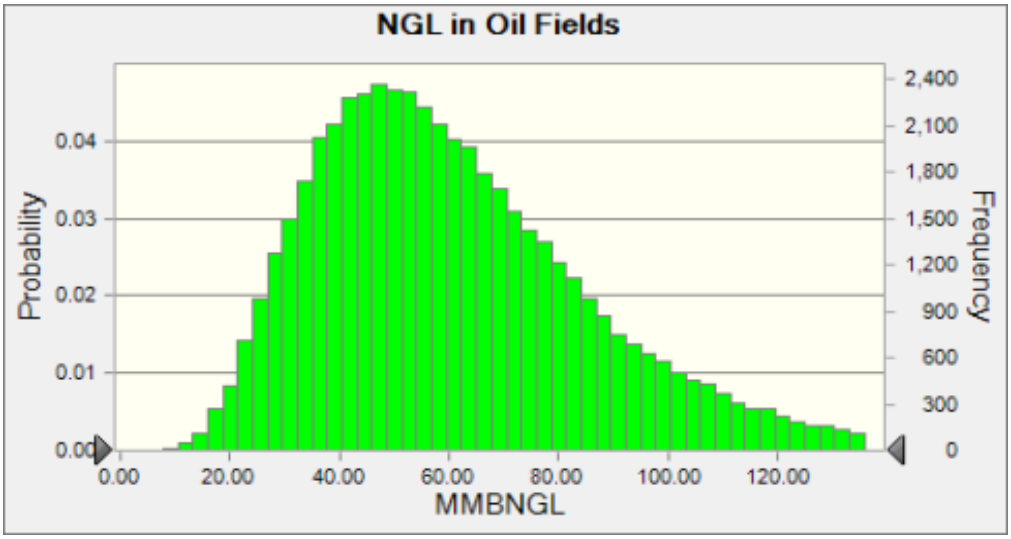
Statistics:	Forecast values
Trials	50,000
Mean	9,483.90
Median	8,805.41
Mode	---
Standard Deviation	4,019.98
Variance	16,160,220.33
Skewness	0.9827
Kurtosis	4.31
Coefficient of Variability	0.4239
Minimum	303.21
Maximum	34,746.51
Range Width	34,443.31
Mean Standard Error	17.98

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	303.21
95%	4,197.60
90%	4,973.04
85%	5,564.29
80%	6,085.35
75%	6,562.92
70%	7,011.98
65%	7,461.17
60%	7,895.75
55%	8,345.38
50%	8,805.37
45%	9,298.86
40%	9,825.55
35%	10,385.34
30%	10,978.11
25%	11,660.32
20%	12,491.11
15%	13,542.31
10%	14,898.87
5%	17,043.29
0%	34,746.51

Forecast: NGL in Oil Fields

Summary:
Entire range is from 2.23 to 250.25
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.12



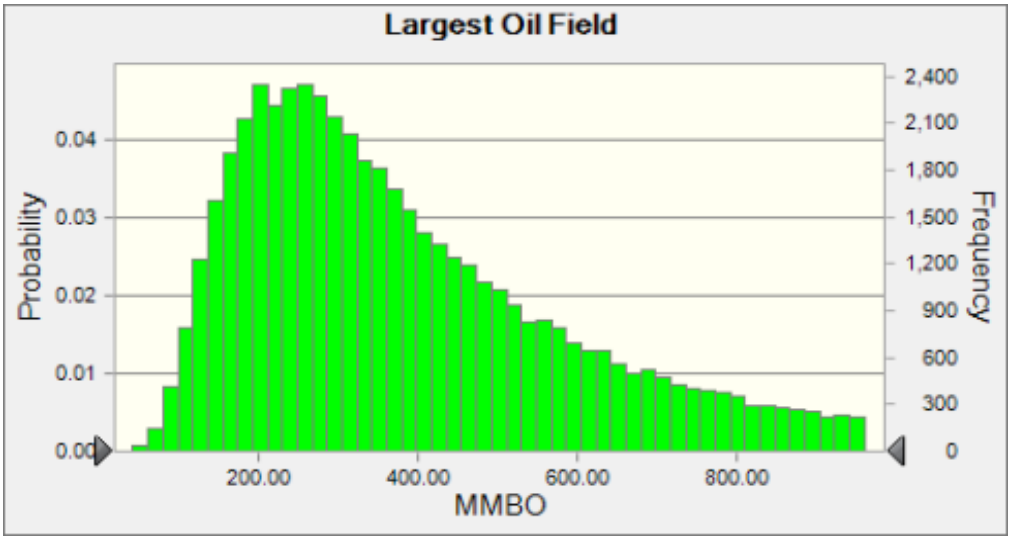
Statistics:	Forecast values
Trials	50,000
Mean	61.38
Median	56.79
Mode	---
Standard Deviation	26.63
Variance	708.95
Skewness	1.03
Kurtosis	4.52
Coefficient of Variability	0.4338
Minimum	2.23
Maximum	250.25
Range Width	248.02
Mean Standard Error	0.12

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	2.23
95%	26.67
90%	31.72
85%	35.55
80%	38.89
75%	42.09
70%	44.97
65%	47.90
60%	50.83
55%	53.72
50%	56.79
45%	60.06
40%	63.53
35%	67.15
30%	71.20
25%	75.86
20%	81.14
15%	87.87
10%	97.18
5%	111.85
0%	250.25

Forecast: Largest Oil Field

Summary:
Entire range is from 44.03 to 999.99
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.92



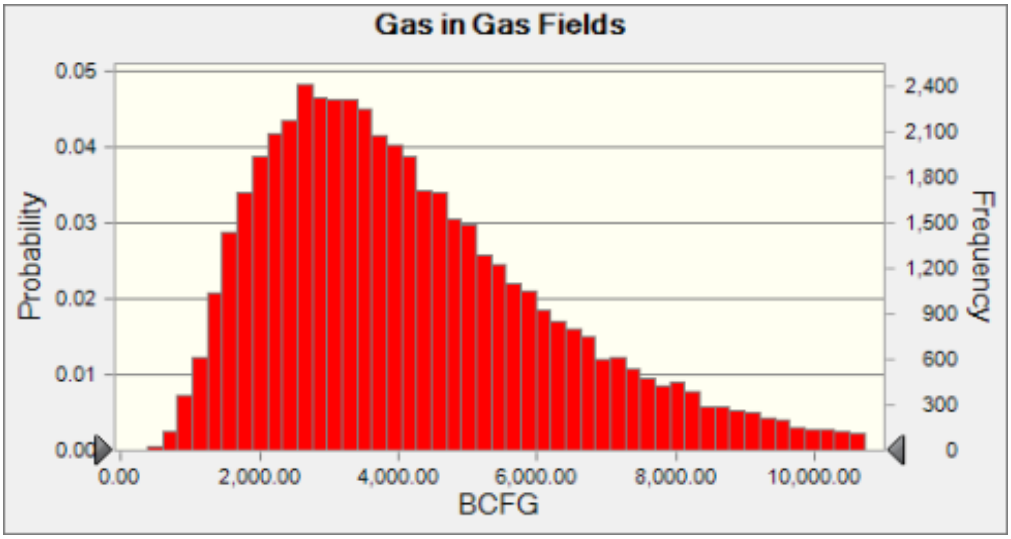
Statistics:	Forecast values
Trials	50,000
Mean	384.63
Median	334.58
Mode	---
Standard Deviation	204.93
Variance	41,997.54
Skewness	0.9214
Kurtosis	3.21
Coefficient of Variability	0.5328
Minimum	44.03
Maximum	999.99
Range Width	955.97
Mean Standard Error	0.92

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	44.03
95%	135.66
90%	163.90
85%	186.86
80%	207.11
75%	227.75
70%	248.01
65%	268.04
60%	288.64
55%	310.91
50%	334.56
45%	360.01
40%	388.49
35%	420.65
30%	457.36
25%	499.19
20%	550.34
15%	612.77
10%	694.21
5%	809.32
0%	999.99

Forecast: Gas in Gas Fields

Summary:
Entire range is from 166.16 to 27,331.19
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 10.26



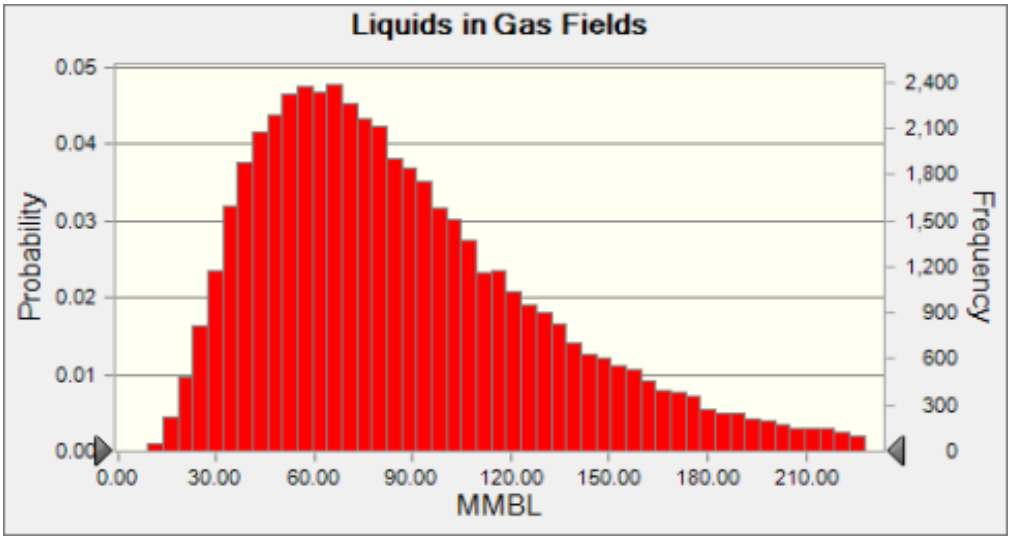
Statistics:	Forecast values
Trials	50,000
Mean	4,297.40
Median	3,812.45
Mode	---
Standard Deviation	2,294.68
Variance	5,265,551.54
Skewness	1.27
Kurtosis	5.38
Coefficient of Variability	0.5340
Minimum	166.16
Maximum	27,331.19
Range Width	27,165.03
Mean Standard Error	10.26

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	166.16
95%	1,518.52
90%	1,853.60
85%	2,138.09
80%	2,392.53
75%	2,632.62
70%	2,857.73
65%	3,085.78
60%	3,320.10
55%	3,561.15
50%	3,812.36
45%	4,081.02
40%	4,371.81
35%	4,690.02
30%	5,042.53
25%	5,455.53
20%	5,942.55
15%	6,559.52
10%	7,392.17
5%	8,747.37
0%	27,331.19

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 4.57 to 518.61
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.22



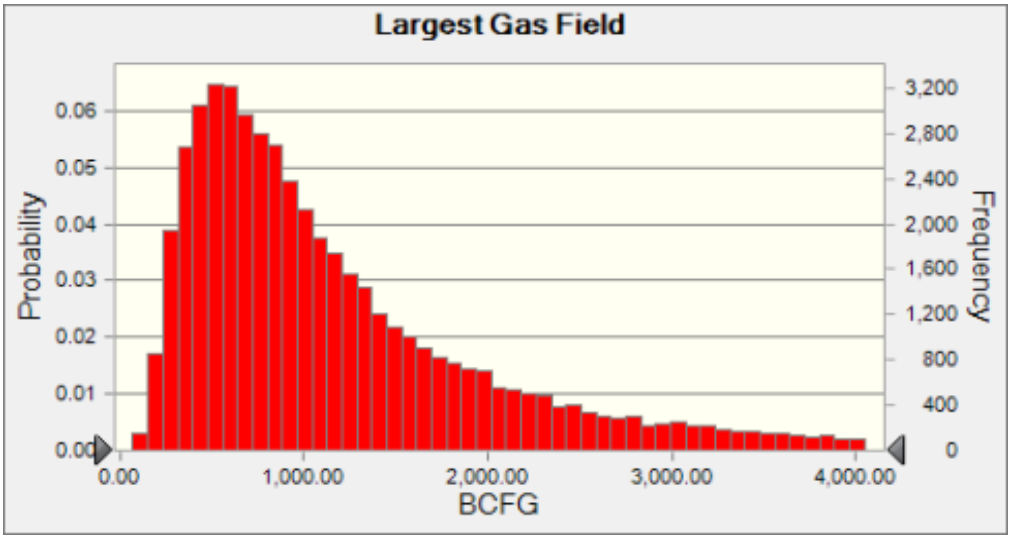
Statistics:	Forecast values
Trials	50,000
Mean	89.69
Median	78.98
Mode	---
Standard Deviation	49.33
Variance	2,433.73
Skewness	1.36
Kurtosis	5.73
Coefficient of Variability	0.5501
Minimum	4.57
Maximum	518.61
Range Width	514.03
Mean Standard Error	0.22

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	4.57
95%	31.02
90%	38.07
85%	43.95
80%	49.18
75%	54.11
70%	58.91
65%	63.79
60%	68.57
55%	73.66
50%	78.98
45%	84.56
40%	90.76
35%	97.36
30%	104.82
25%	113.80
20%	124.10
15%	137.30
10%	155.59
5%	185.43
0%	518.61

Forecast: Largest Gas Field

Summary:
Entire range is from 72.90 to 5,998.49
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 4.47



Statistics:	Forecast values
Trials	50,000
Mean	1,248.51
Median	930.21
Mode	---
Standard Deviation	999.04
Variance	998,081.42
Skewness	1.88
Kurtosis	6.98
Coefficient of Variability	0.8002
Minimum	72.90
Maximum	5,998.49
Range Width	5,925.59
Mean Standard Error	4.47

Forecast: Largest Gas Field (continued)

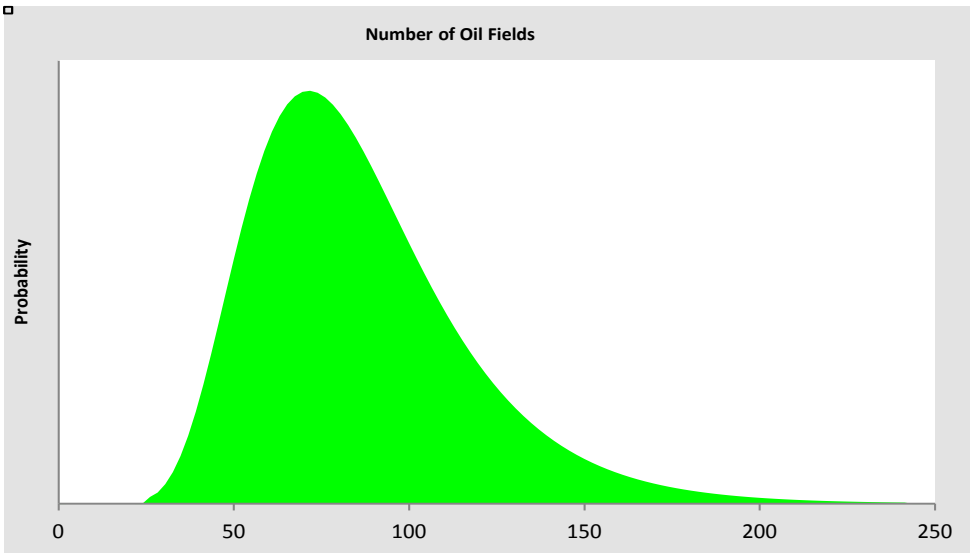
Percentiles:	BCFG
100%	72.90
95%	300.31
90%	379.20
85%	446.83
80%	510.82
75%	573.66
70%	636.59
65%	704.22
60%	775.71
55%	850.73
50%	930.21
45%	1,021.04
40%	1,128.17
35%	1,246.57
30%	1,387.97
25%	1,570.83
20%	1,802.65
15%	2,103.07
10%	2,554.15
5%	3,391.88
0%	5,998.49

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	84.24	85.24
Standard Deviation	31.17	31.17
Selected range is from -Infinity to 239.00		1.00 to 240.00



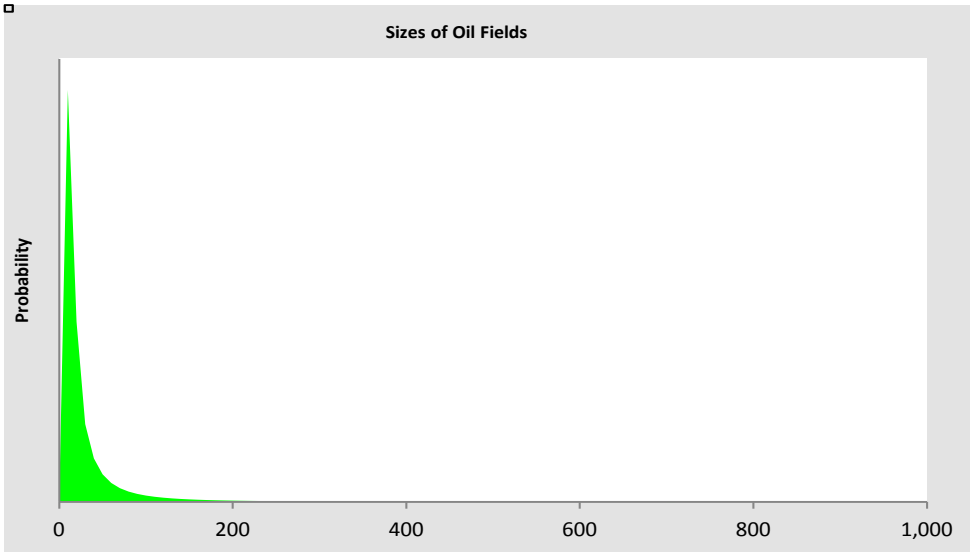
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	85.09	85.05
Median	79.97	79.96
Mode	---	---
Standard Deviation	30.68	30.65
Variance	941.02	939.25
Skewness	0.9961	1.02
Kurtosis	4.37	4.48
Coefficient of Variability	0.3605	0.3603
Minimum	17.47	1.00
Maximum	238.96	240.00
Range Width	221.49	239.00
Mean Standard Error	0.14	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	17.47	1.00
95%	44.76	44.82
90%	50.80	50.90
85%	55.42	55.48
80%	59.41	59.42
75%	62.95	63.02
70%	66.43	66.45
65%	69.81	69.79
60%	73.21	73.12
55%	76.59	76.49
50%	79.97	79.96
45%	83.59	83.60
40%	87.39	87.46
35%	91.72	91.64
30%	96.17	96.26
25%	101.44	101.51
20%	107.94	107.69
15%	115.86	115.37
10%	126.10	125.80
5%	143.44	142.95
0%	238.96	240.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	30.29	35.29
Standard Deviation	86.59	86.59
Selected range is from -Infinity to 995.00		5.00 to 1,000.00



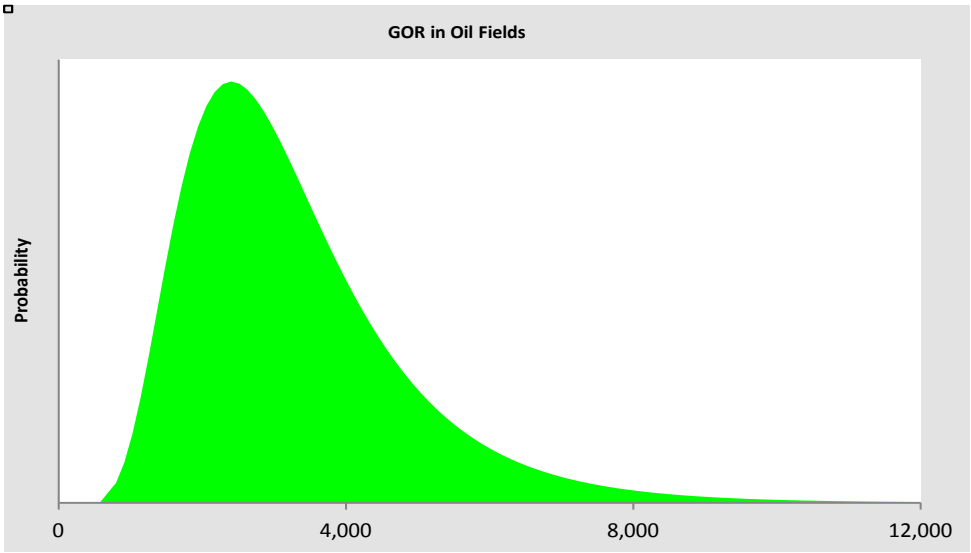
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	33.68	33.71
Median	14.92	14.98
Mode	---	---
Standard Deviation	61.87	61.37
Variance	3,828.27	3,765.85
Skewness	6.40	6.33
Kurtosis	61.79	60.55
Coefficient of Variability	1.84	1.82
Minimum	5.02	5.00
Maximum	993.80	1,000.00
Range Width	988.78	995.00
Mean Standard Error	0.28	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.02	5.00
95%	5.90	5.86
90%	6.52	6.48
85%	7.15	7.14
80%	7.87	7.85
75%	8.67	8.66
70%	9.58	9.58
65%	10.60	10.63
60%	11.83	11.85
55%	13.25	13.28
50%	14.92	14.98
45%	16.95	17.03
40%	19.45	19.55
35%	22.52	22.70
30%	26.60	26.76
25%	32.01	32.20
20%	39.60	39.86
15%	51.54	51.53
10%	72.03	71.88
5%	119.92	119.17
0%	993.80	1,000.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	100
Mean	3,219.06	3,319.06
Standard Deviation	1,551.00	1,551.00
Selected range is from -Infinity to 11,900.00		100.00 to 12,000.00



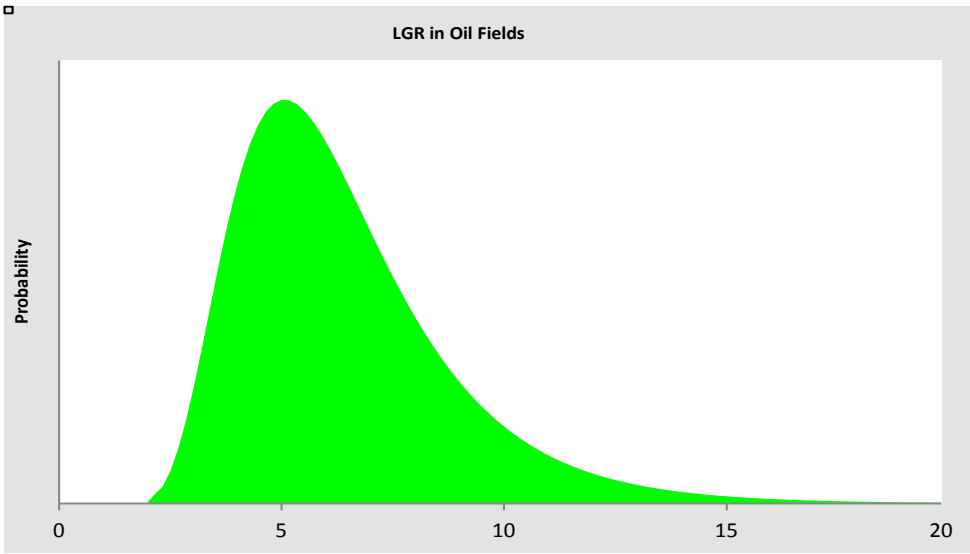
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	3,313.66	3,308.65
Median	2,997.76	2,998.34
Mode	---	---
Standard Deviation	1,524.96	1,515.48
Variance	2,325,502.78	2,296,686.81
Skewness	1.34	1.34
Kurtosis	5.58	5.63
Coefficient of Variability	0.4602	0.4580
Minimum	457.34	100.00
Maximum	11,983.49	12,000.00
Range Width	11,526.15	11,900.00
Mean Standard Error	6.82	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	457.34	100.00
95%	1,466.04	1,467.46
90%	1,714.07	1,714.31
85%	1,909.22	1,905.55
80%	2,075.01	2,073.57
75%	2,226.97	2,230.11
70%	2,379.27	2,381.23
65%	2,526.53	2,530.81
60%	2,676.46	2,681.79
55%	2,830.81	2,836.76
50%	2,997.75	2,998.34
45%	3,167.09	3,169.43
40%	3,352.06	3,353.58
35%	3,556.05	3,555.48
30%	3,790.06	3,781.76
25%	4,054.25	4,042.47
20%	4,369.26	4,354.36
15%	4,758.96	4,748.74
10%	5,327.30	5,296.15
5%	6,249.72	6,223.09
0%	11,983.49	12,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	5.49	6.49
Standard Deviation	2.49	2.49
Selected range is from -Infinity to 19.00		1.00 to 20.00



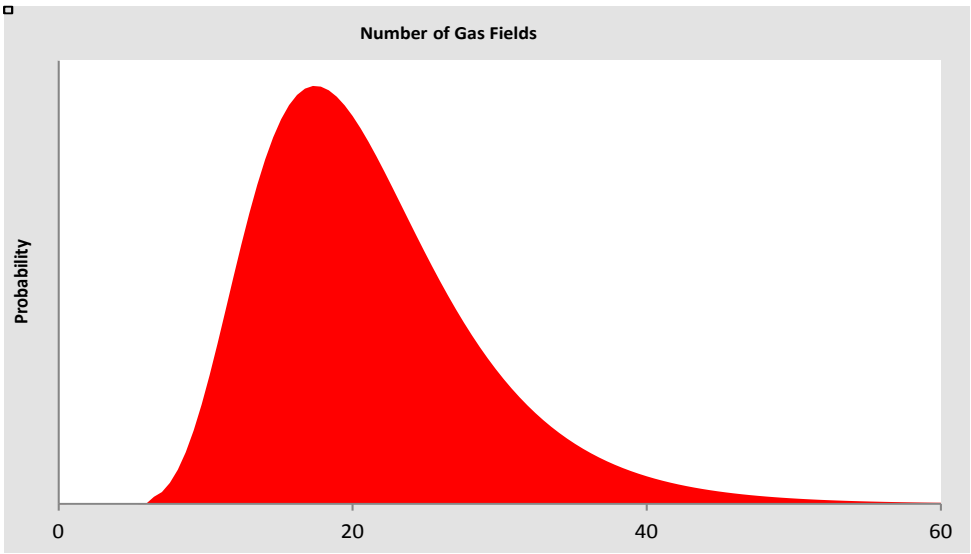
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	6.47	6.47
Median	6.00	6.00
Mode	---	---
Standard Deviation	2.41	2.43
Variance	5.81	5.92
Skewness	1.22	1.25
Kurtosis	5.16	5.31
Coefficient of Variability	0.3727	0.3760
Minimum	1.86	1.00
Maximum	20.00	20.00
Range Width	18.13	19.00
Mean Standard Error	0.01	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.86	1.00
95%	3.45	3.46
90%	3.89	3.87
85%	4.20	4.19
80%	4.48	4.47
75%	4.74	4.73
70%	5.00	4.98
65%	5.25	5.23
60%	5.49	5.48
55%	5.74	5.73
50%	6.00	6.00
45%	6.27	6.28
40%	6.56	6.57
35%	6.89	6.90
30%	7.26	7.27
25%	7.67	7.68
20%	8.17	8.18
15%	8.80	8.81
10%	9.67	9.68
5%	11.08	11.14
0%	20.00	20.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	20.32	21.32
Standard Deviation	7.71	7.71
Selected range is from -Infinity to 59.00		1.00 to 60.00



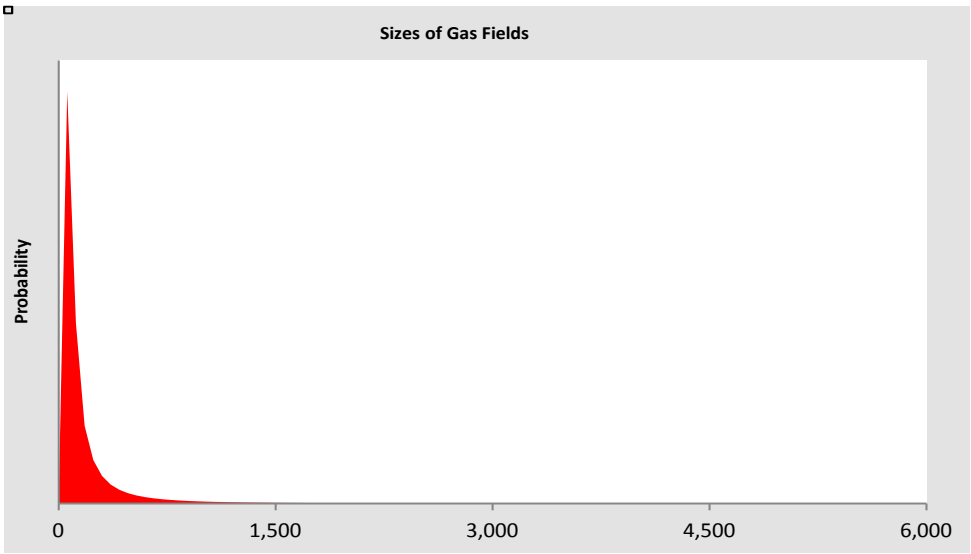
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	21.27	21.28
Median	19.98	19.99
Mode	---	---
Standard Deviation	7.58	7.58
Variance	57.52	57.40
Skewness	1.05	1.05
Kurtosis	4.61	4.57
Coefficient of Variability	0.3566	0.3561
Minimum	4.80	1.00
Maximum	59.92	60.00
Range Width	55.12	59.00
Mean Standard Error	0.03	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	4.80	1.00
95%	11.38	11.39
90%	12.85	12.87
85%	13.95	13.99
80%	14.92	14.95
75%	15.82	15.83
70%	16.68	16.67
65%	17.50	17.49
60%	18.31	18.31
55%	19.14	19.14
50%	19.98	19.99
45%	20.87	20.89
40%	21.85	21.84
35%	22.87	22.87
30%	23.98	24.01
25%	25.28	25.31
20%	26.84	26.84
15%	28.70	28.75
10%	31.32	31.34
5%	35.61	35.61
0%	59.92	60.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	30
Mean	181.72	211.72
Standard Deviation	519.53	519.53
Selected range is from -Infinity to 5,970.00		30.00 to 6,000.00



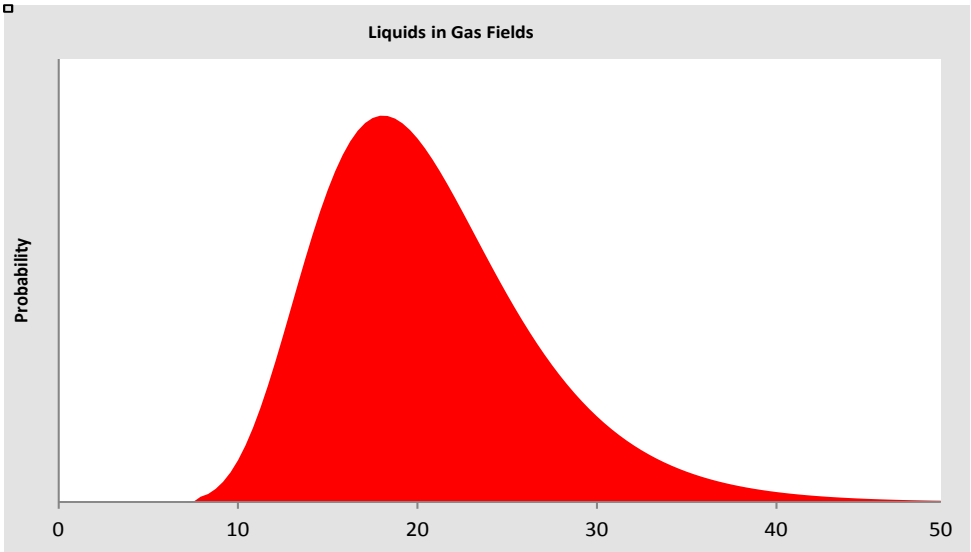
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	201.93	202.24
Median	89.74	89.89
Mode	---	---
Standard Deviation	367.83	368.20
Variance	135,302.46	135,570.57
Skewness	6.30	6.33
Kurtosis	59.78	60.55
Coefficient of Variability	1.82	1.82
Minimum	30.06	30.00
Maximum	5,957.13	6,000.00
Range Width	5,927.07	5,970.00
Mean Standard Error	1.65	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.06	30.00
95%	35.24	35.18
90%	38.97	38.90
85%	42.98	42.81
80%	47.28	47.12
75%	52.03	51.96
70%	57.50	57.45
65%	63.69	63.76
60%	70.99	71.08
55%	79.66	79.68
50%	89.74	89.89
45%	102.11	102.19
40%	117.75	117.29
35%	136.86	136.20
30%	161.48	160.59
25%	194.83	193.20
20%	239.07	239.15
15%	310.56	309.19
10%	430.18	431.26
5%	709.99	715.03
0%	5,957.13	6,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	19.91	20.91
Standard Deviation	6.25	6.25
Selected range is from -Infinity to 49.00		1.00 to 50.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	20.89	20.88
Median	20.00	19.99
Mode	---	---
Standard Deviation	6.18	6.16
Variance	38.25	37.98
Skewness	0.8754	0.8607
Kurtosis	4.05	4.03
Coefficient of Variability	0.2961	0.2951
Minimum	6.28	1.00
Maximum	49.94	50.00
Range Width	43.66	49.00
Mean Standard Error	0.03	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.28	1.00
95%	12.47	12.47
90%	13.84	13.82
85%	14.81	14.82
80%	15.69	15.68
75%	16.45	16.45
70%	17.16	17.17
65%	17.86	17.88
60%	18.58	18.57
55%	19.26	19.28
50%	20.00	19.99
45%	20.73	20.74
40%	21.53	21.52
35%	22.35	22.37
30%	23.28	23.30
25%	24.32	24.35
20%	25.55	25.57
15%	27.07	27.08
10%	29.11	29.10
5%	32.46	32.37
0%	49.94	50.00

End of Assumptions

Simulation started on 9/13/2011 at 3:23 PM
Simulation stopped on 9/13/2011 at 3:36 PM