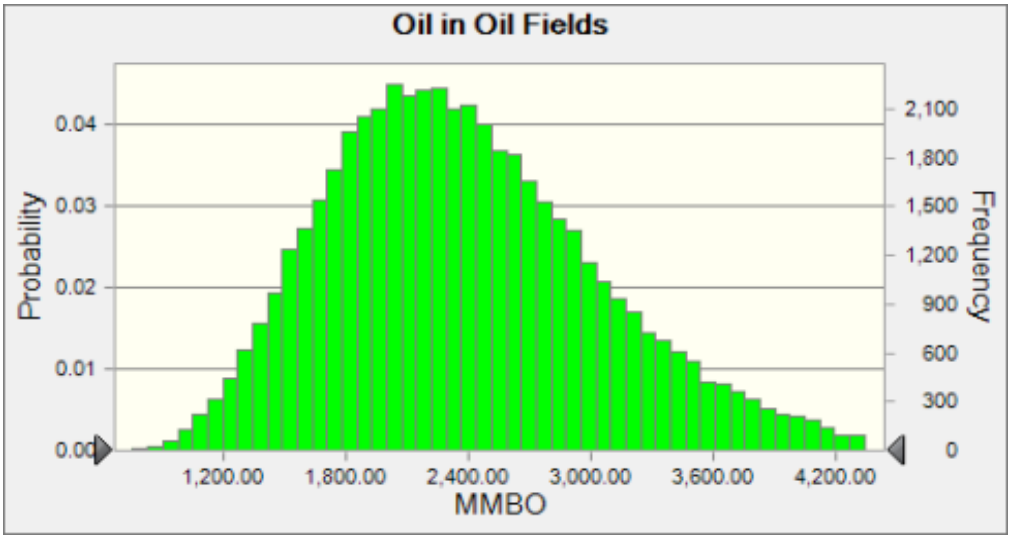
40250101
Viking Graben
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 752.49 to 6,563.48
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 3.11



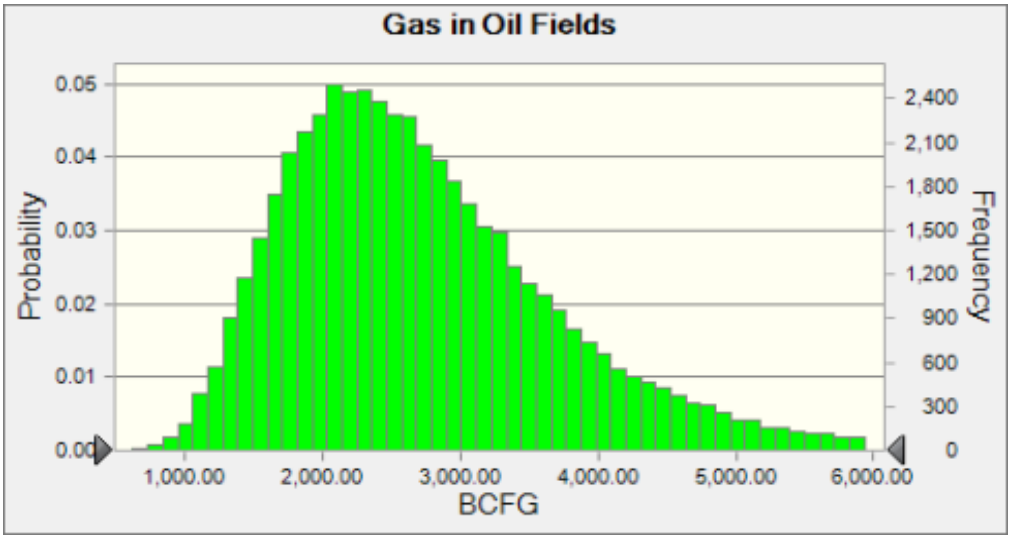
Statistics:	Forecast values
Trials	50,000
Mean	2,393.48
Median	2,311.67
Mode	---
Standard Deviation	696.28
Variance	484,810.32
Skewness	0.7116
Kurtosis	3.75
Coefficient of Variability	0.2909
Minimum	752.49
Maximum	6,563.48
Range Width	5,810.99
Mean Standard Error	3.11

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	752.49
95%	1,402.76
90%	1,571.44
85%	1,695.24
80%	1,800.88
75%	1,891.50
70%	1,979.74
65%	2,061.95
60%	2,146.25
55%	2,229.16
50%	2,311.64
45%	2,399.49
40%	2,486.49
35%	2,585.51
30%	2,688.47
25%	2,805.97
20%	2,937.74
15%	3,101.78
10%	3,323.73
5%	3,667.46
0%	6,563.48

Forecast: Gas in Oil Fields

Summary:
Entire range is from 621.65 to 15,695.50
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 5.04



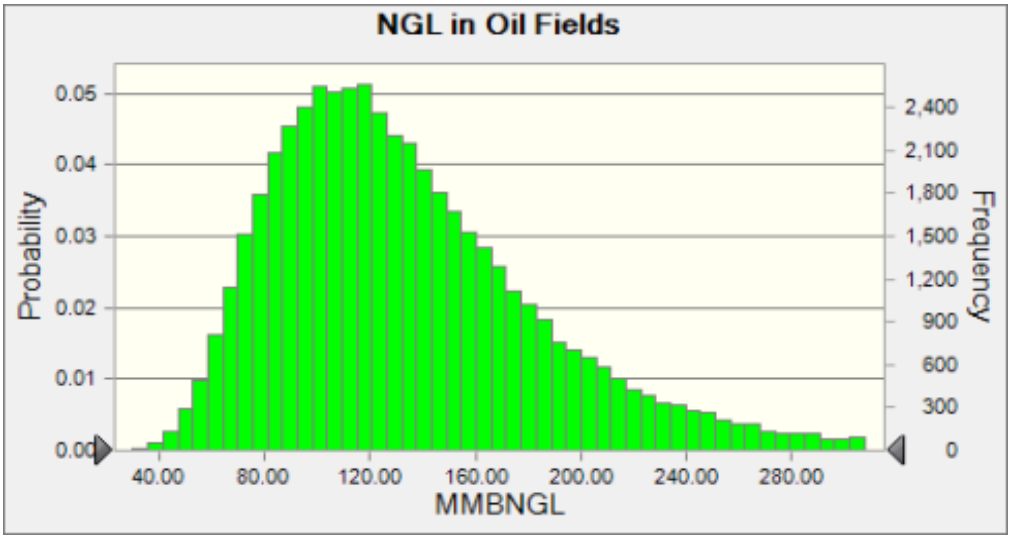
Statistics:	Forecast values
Trials	50,000
Mean	2,774.81
Median	2,567.16
Mode	---
Standard Deviation	1,127.37
Variance	1,270,964.57
Skewness	1.76
Kurtosis	9.88
Coefficient of Variability	0.4063
Minimum	621.65
Maximum	15,695.50
Range Width	15,073.85
Mean Standard Error	5.04

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	621.65
95%	1,412.80
90%	1,610.32
85%	1,757.54
80%	1,885.36
75%	2,007.18
70%	2,115.67
65%	2,225.91
60%	2,335.15
55%	2,449.92
50%	2,567.12
45%	2,686.24
40%	2,818.79
35%	2,956.18
30%	3,115.26
25%	3,294.08
20%	3,509.99
15%	3,777.23
10%	4,161.86
5%	4,815.92
0%	15,695.50

Forecast: NGL in Oil Fields

Summary:
Entire range is from 30.02 to 1,617.45
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.27



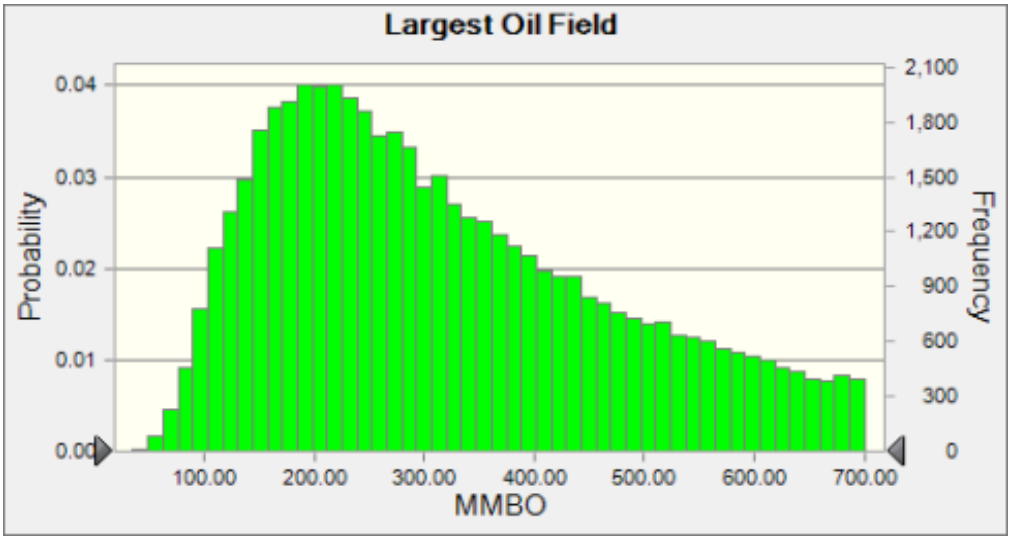
Statistics:	Forecast values
Trials	50,000
Mean	137.14
Median	125.10
Mode	---
Standard Deviation	60.81
Variance	3,697.97
Skewness	2.42
Kurtosis	20.54
Coefficient of Variability	0.4434
Minimum	30.02
Maximum	1,617.45
Range Width	1,587.43
Mean Standard Error	0.27

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	30.02
95%	67.73
90%	77.18
85%	84.41
80%	90.99
75%	96.82
70%	102.45
65%	108.08
60%	113.63
55%	119.17
50%	125.10
45%	131.32
40%	138.00
35%	145.36
30%	153.52
25%	162.90
20%	173.85
15%	188.00
10%	208.57
5%	245.12
0%	1,617.45

Forecast: Largest Oil Field

Summary:
Entire range is from 35.04 to 699.92
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.69



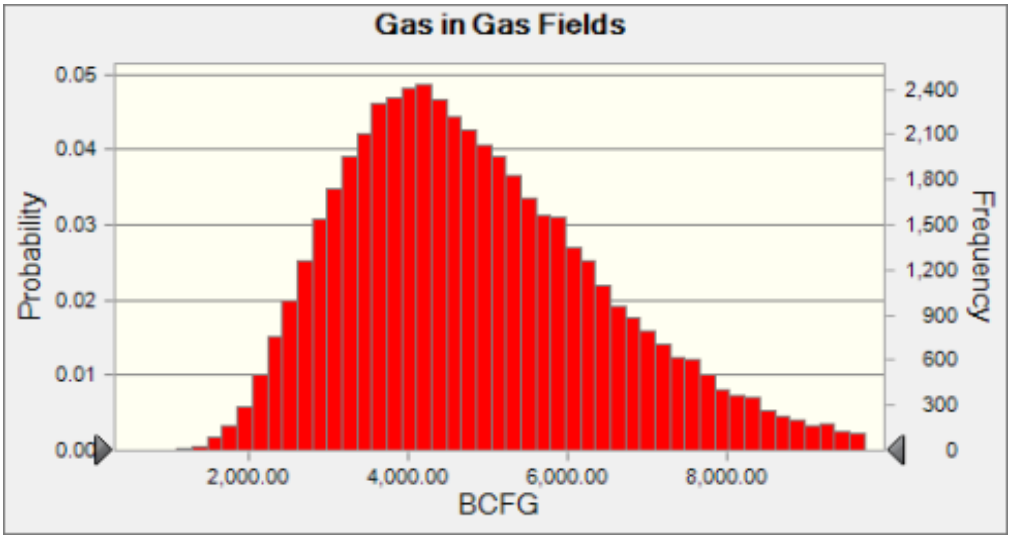
Statistics:	Forecast values
Trials	50,000
Mean	317.08
Median	285.32
Mode	---
Standard Deviation	154.09
Variance	23,743.61
Skewness	0.6124
Kurtosis	2.48
Coefficient of Variability	0.4860
Minimum	35.04
Maximum	699.92
Range Width	664.88
Mean Standard Error	0.69

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	35.04
95%	114.66
90%	139.24
85%	159.36
80%	177.24
75%	194.23
70%	211.40
65%	228.31
60%	246.39
55%	265.51
50%	285.31
45%	307.51
40%	331.30
35%	357.67
30%	386.85
25%	420.19
20%	457.80
15%	503.32
10%	555.33
5%	617.84
0%	699.92

Forecast: Gas in Gas Fields

Summary:
Entire range is from 531.73 to 15,037.21
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 7.74



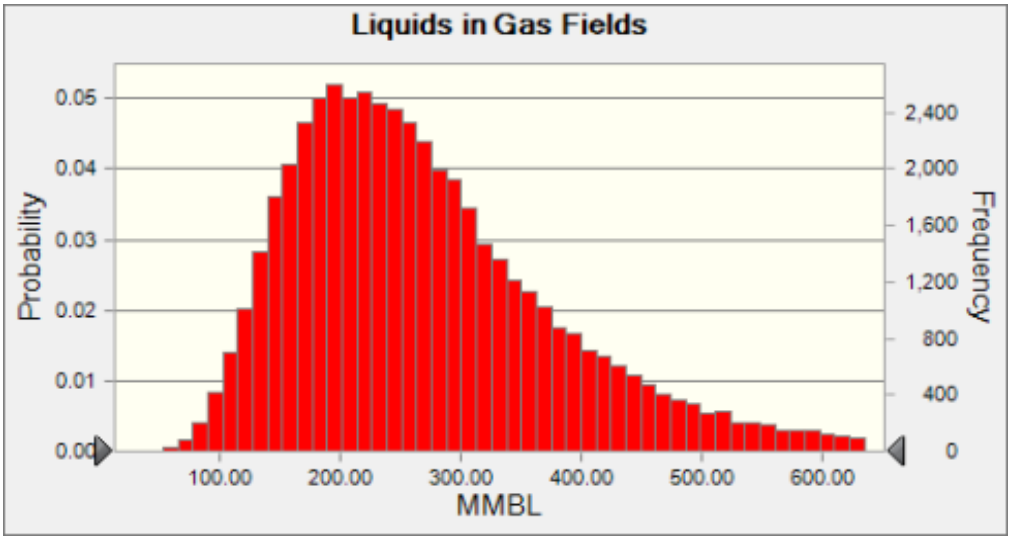
Statistics:	Forecast values
Trials	50,000
Mean	4,888.31
Median	4,622.64
Mode	---
Standard Deviation	1,731.55
Variance	2,998,265.31
Skewness	0.8632
Kurtosis	4.02
Coefficient of Variability	0.3542
Minimum	531.73
Maximum	15,037.21
Range Width	14,505.48
Mean Standard Error	7.74

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	531.73
95%	2,543.14
90%	2,898.01
85%	3,172.72
80%	3,413.10
75%	3,624.64
70%	3,826.75
65%	4,023.67
60%	4,218.35
55%	4,417.67
50%	4,622.63
45%	4,840.87
40%	5,073.88
35%	5,319.83
30%	5,594.72
25%	5,888.67
20%	6,235.62
15%	6,662.32
10%	7,222.04
5%	8,098.39
0%	15,037.21

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 28.59 to 2,094.67
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.57



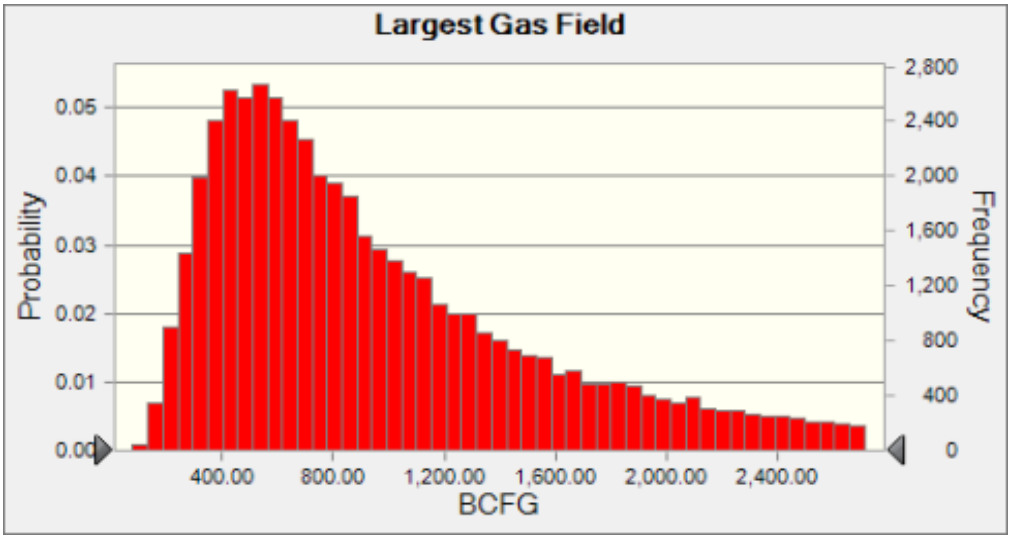
Statistics:	Forecast values
Trials	50,000
Mean	277.05
Median	251.15
Mode	---
Standard Deviation	127.81
Variance	16,336.24
Skewness	1.85
Kurtosis	10.35
Coefficient of Variability	0.4613
Minimum	28.59
Maximum	2,094.67
Range Width	2,066.07
Mean Standard Error	0.57

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	28.59
95%	128.23
90%	148.07
85%	163.81
80%	177.10
75%	189.45
70%	201.31
65%	213.73
60%	225.86
55%	238.45
50%	251.15
45%	264.57
40%	278.75
35%	294.50
30%	311.52
25%	333.10
20%	358.64
15%	391.09
10%	435.46
5%	513.68
0%	2,094.67

Forecast: Largest Gas Field

Summary:
Entire range is from 79.49 to 2,999.51
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 2.77



Statistics:	Forecast values
Trials	50,000
Mean	977.10
Median	798.81
Mode	---
Standard Deviation	619.61
Variance	383,917.83
Skewness	1.15
Kurtosis	3.75
Coefficient of Variability	0.6341
Minimum	79.49
Maximum	2,999.51
Range Width	2,920.01
Mean Standard Error	2.77

Forecast: Largest Gas Field (continued)

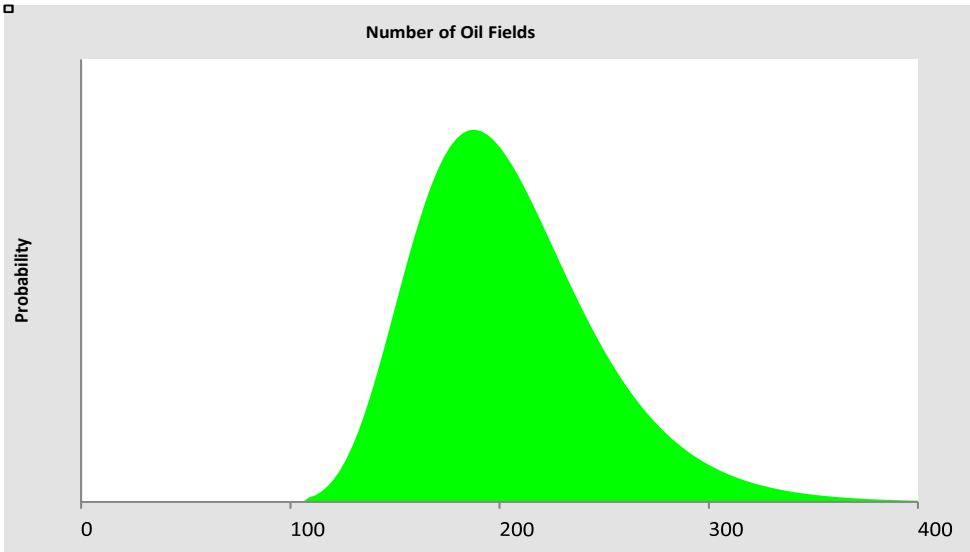
Percentiles:	BCFG
100%	79.49
95%	286.74
90%	354.72
85%	409.83
80%	460.75
75%	512.36
70%	563.06
65%	615.08
60%	671.15
55%	731.51
50%	798.80
45%	869.82
40%	952.56
35%	1,047.78
30%	1,152.31
25%	1,283.15
20%	1,438.83
15%	1,646.58
10%	1,912.62
5%	2,314.99
0%	2,999.51

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	50
Mean	155.75	205.75
Standard Deviation	43.52	43.52
Selected range is from -Infinity to 350.00		50.00 to 400.00



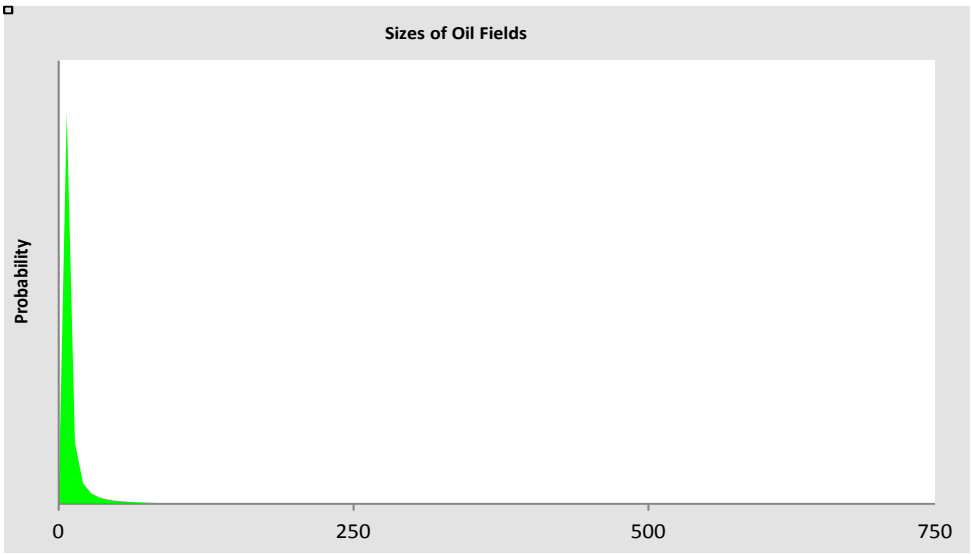
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	205.37	205.52
Median	200.07	199.95
Mode	---	---
Standard Deviation	42.72	42.96
Variance	1,825.33	1,845.57
Skewness	0.7551	0.7633
Kurtosis	3.80	3.78
Coefficient of Variability	0.2080	0.2090
Minimum	92.64	50.00
Maximum	399.63	400.00
Range Width	306.99	350.00
Mean Standard Error	0.19	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	92.64	50.00
95%	145.25	145.53
90%	155.36	155.54
85%	162.96	162.87
80%	169.05	169.06
75%	174.75	174.65
70%	180.05	179.88
65%	184.95	184.92
60%	189.90	189.89
55%	194.77	194.87
50%	200.06	199.95
45%	205.17	205.20
40%	210.65	210.72
35%	216.30	216.64
30%	222.88	223.10
25%	230.03	230.36
20%	238.62	238.79
15%	248.97	249.11
10%	262.25	262.86
5%	283.89	284.90
0%	399.63	400.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	12.05	13.05
Standard Deviation	71.62	71.62
Selected range is from -Infinity to 699.00		1.00 to 700.00



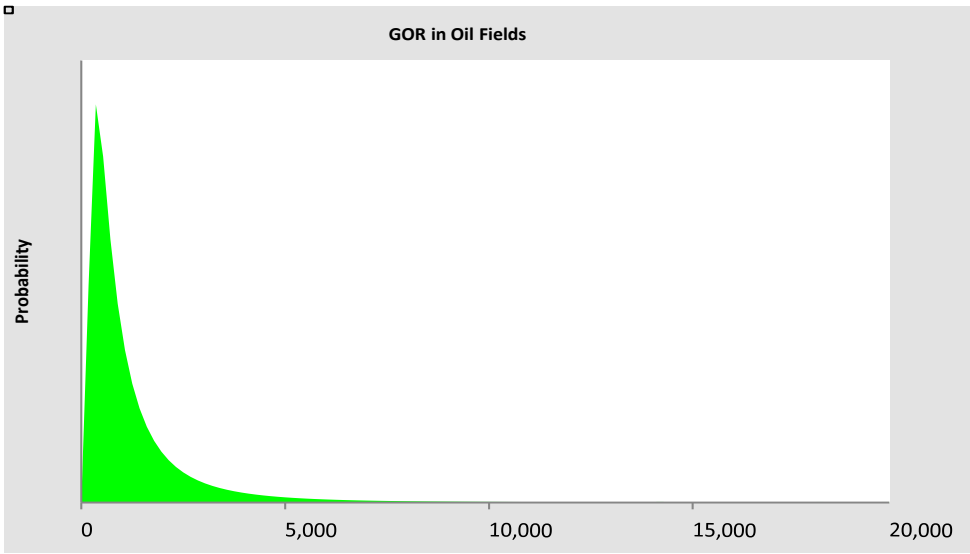
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	11.70	11.90
Median	3.03	3.00
Mode	---	---
Standard Deviation	33.86	34.03
Variance	1,146.35	1,158.22
Skewness	8.62	9.04
Kurtosis	104.01	115.44
Coefficient of Variability	2.89	2.86
Minimum	1.00	1.00
Maximum	667.84	700.00
Range Width	666.84	699.00
Mean Standard Error	0.15	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.00	1.00
95%	1.09	1.09
90%	1.17	1.18
85%	1.28	1.28
80%	1.40	1.41
75%	1.55	1.56
70%	1.73	1.74
65%	1.96	1.96
60%	2.24	2.23
55%	2.60	2.57
50%	3.03	3.00
45%	3.55	3.53
40%	4.25	4.22
35%	5.17	5.14
30%	6.45	6.38
25%	8.23	8.15
20%	10.88	10.80
15%	15.33	15.16
10%	23.60	23.47
5%	45.37	45.40
0%	667.84	700.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	30
Mean	1,151.66	1,181.66
Standard Deviation	1,703.57	1,703.57
Selected range is from -Infinity to 17,970.00		30.00 to 18,000.00



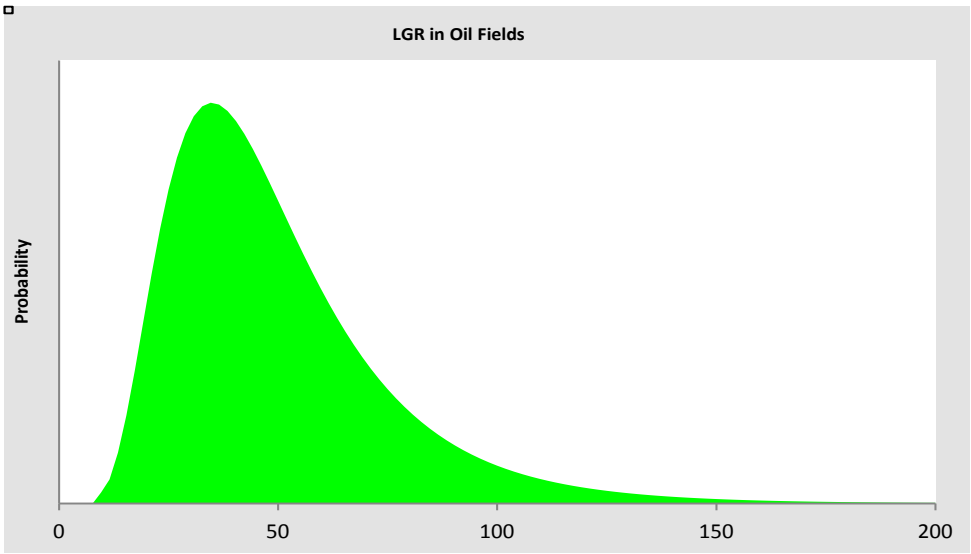
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	1,160.78	1,157.37
Median	679.54	674.13
Mode	---	---
Standard Deviation	1,487.45	1,491.09
Variance	2,212,517.31	2,223,342.19
Skewness	3.89	3.94
Kurtosis	25.64	26.13
Coefficient of Variability	1.28	1.29
Minimum	37.80	30.00
Maximum	17,936.83	18,000.00
Range Width	17,899.02	17,970.00
Mean Standard Error	6.65	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	37.80	30.00
95%	137.58	139.68
90%	191.75	192.18
85%	240.69	241.15
80%	290.75	290.41
75%	341.76	341.73
70%	397.90	396.38
65%	456.04	455.53
60%	522.57	520.46
55%	594.24	592.68
50%	679.51	674.13
45%	773.64	767.35
40%	881.51	875.88
35%	1,009.01	1,004.83
30%	1,168.53	1,162.00
25%	1,364.92	1,360.06
20%	1,627.28	1,621.46
15%	1,998.76	1,991.23
10%	2,584.42	2,579.55
5%	3,843.79	3,783.79
0%	17,936.83	18,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	0.9
Mean	48.72	49.62
Standard Deviation	25.69	25.69
Selected range is from -Infinity to 199.10		0.90 to 200.00



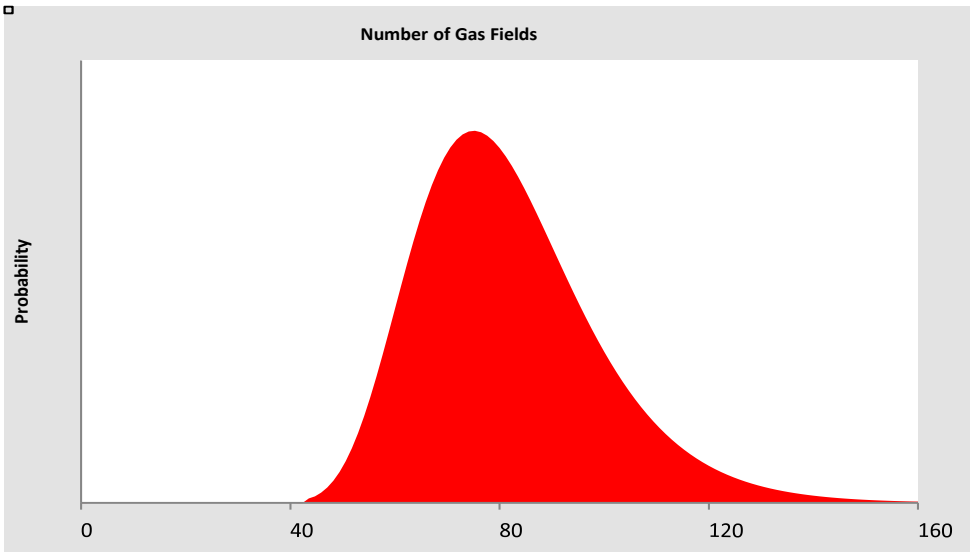
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	49.37	49.44
Median	44.04	43.97
Mode	---	---
Standard Deviation	24.77	25.03
Variance	613.66	626.32
Skewness	1.43	1.46
Kurtosis	6.07	6.19
Coefficient of Variability	0.5018	0.5062
Minimum	5.56	0.90
Maximum	198.08	200.00
Range Width	192.52	199.10
Mean Standard Error	0.11	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.56	0.90
95%	20.03	19.98
90%	23.73	23.74
85%	26.62	26.69
80%	29.31	29.30
75%	31.79	31.75
70%	34.14	34.13
65%	36.57	36.50
60%	38.90	38.90
55%	41.42	41.38
50%	44.04	43.97
45%	46.81	46.74
40%	49.74	49.72
35%	53.01	53.02
30%	56.74	56.73
25%	61.15	61.02
20%	66.29	66.19
15%	72.73	72.78
10%	81.51	82.00
5%	96.91	97.79
0%	198.08	200.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	20
Mean	62.30	82.3
Standard Deviation	17.41	17.41
Selected range is from -Infinity to 140.00		20.00 to 160.00



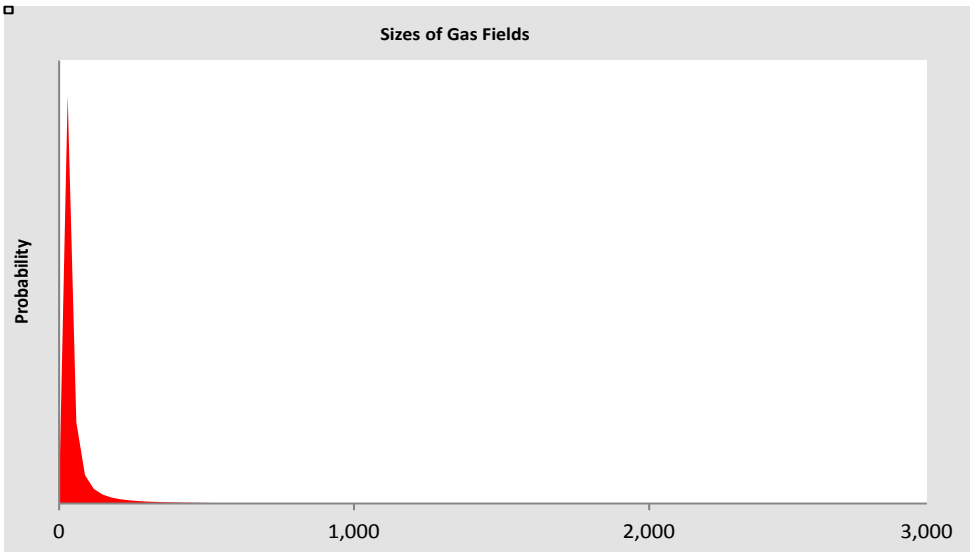
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	82.09	82.21
Median	79.76	79.98
Mode	---	---
Standard Deviation	17.21	17.18
Variance	296.19	295.29
Skewness	0.7643	0.7633
Kurtosis	3.76	3.78
Coefficient of Variability	0.2097	0.2090
Minimum	39.74	20.00
Maximum	159.95	160.00
Range Width	120.21	140.00
Mean Standard Error	0.08	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	39.74	20.00
95%	57.99	58.21
90%	62.10	62.22
85%	64.95	65.15
80%	67.48	67.63
75%	69.80	69.86
70%	71.91	71.95
65%	73.88	73.97
60%	75.80	75.96
55%	77.74	77.95
50%	79.76	79.98
45%	81.86	82.08
40%	84.16	84.29
35%	86.47	86.65
30%	89.04	89.24
25%	92.00	92.14
20%	95.41	95.52
15%	99.62	99.64
10%	105.19	105.14
5%	114.02	113.96
0%	159.95	160.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	6
Mean	59.16	65.16
Standard Deviation	285.58	285.58
Selected range is from -Infinity to 2,994.00		6.00 to 3,000.00



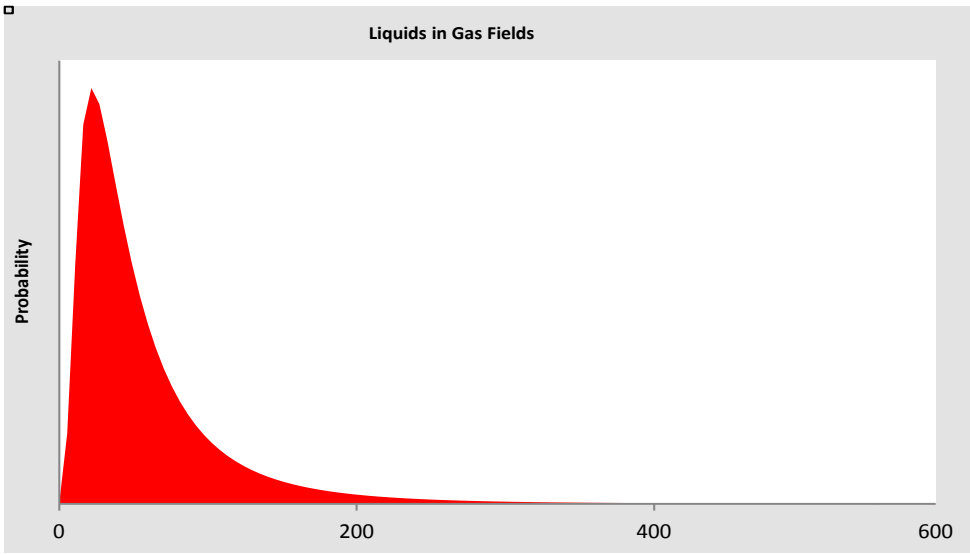
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	59.49	60.25
Median	17.86	17.97
Mode	---	---
Standard Deviation	155.08	154.48
Variance	24,051.04	23,862.89
Skewness	8.19	8.29
Kurtosis	96.15	98.71
Coefficient of Variability	2.61	2.56
Minimum	6.00	6.00
Maximum	2,986.52	3,000.00
Range Width	2,980.51	2,994.00
Mean Standard Error	0.69	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.00	6.00
95%	6.63	6.64
90%	7.19	7.21
85%	7.87	7.88
80%	8.63	8.67
75%	9.55	9.59
70%	10.67	10.70
65%	11.98	12.02
60%	13.54	13.62
55%	15.47	15.57
50%	17.86	17.97
45%	20.82	20.98
40%	24.58	24.82
35%	29.72	29.81
30%	36.26	36.51
25%	45.72	45.86
20%	59.58	59.69
15%	80.66	81.92
10%	120.83	123.32
5%	230.65	228.88
0%	2,986.52	3,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	0.5
Mean	56.78	57.28
Standard Deviation	58.65	58.65
Selected range is from -Infinity to 549.50		0.50 to 550.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	56.72	56.62
Median	40.10	39.96
Mode	---	---
Standard Deviation	54.45	54.48
Variance	2,964.32	2,967.99
Skewness	2.86	2.85
Kurtosis	15.36	15.28
Coefficient of Variability	0.9599	0.9621
Minimum	1.86	0.50
Maximum	548.70	550.00
Range Width	546.84	549.50
Mean Standard Error	0.24	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.86	0.50
95%	10.31	10.22
90%	13.81	13.75
85%	16.82	16.83
80%	19.75	19.77
75%	22.71	22.72
70%	25.74	25.75
65%	28.97	28.92
60%	32.45	32.30
55%	36.16	35.96
50%	40.10	39.96
45%	44.73	44.41
40%	49.71	49.45
35%	55.49	55.27
30%	62.34	62.14
25%	70.81	70.53
20%	81.35	81.22
15%	96.02	95.73
10%	117.88	117.69
5%	159.42	159.66
0%	548.70	550.00

End of Assumptions

Simulation started on 1/30/2012 at 1:19 PM
Simulation stopped on 1/30/2012 at 1:29 PM