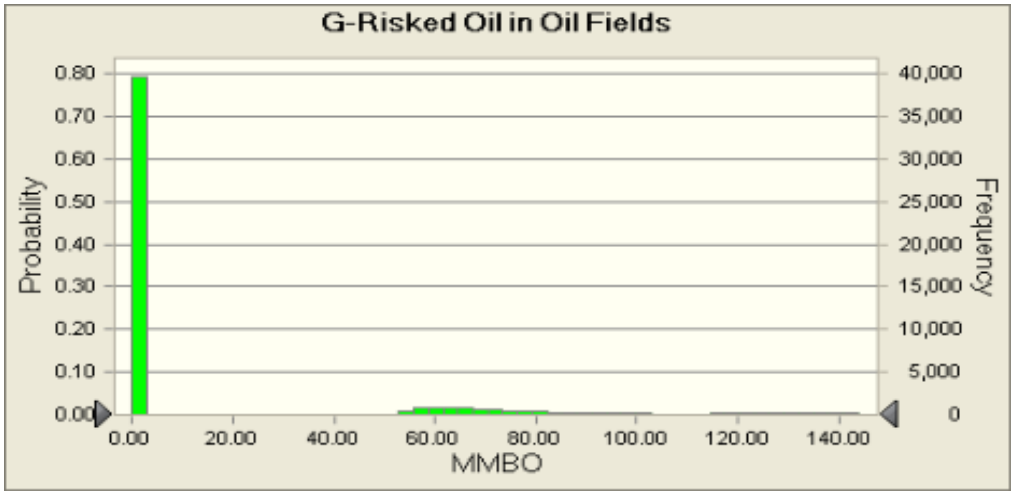
12540101
East Siberian Sea Basin
Monte Carlo Results

Forecast: G-Risked Oil in Oil Fields

Summary:
Entire range is from 0.00 to 438.27
After 50,000 trials, the standard error of the mean is 0.20



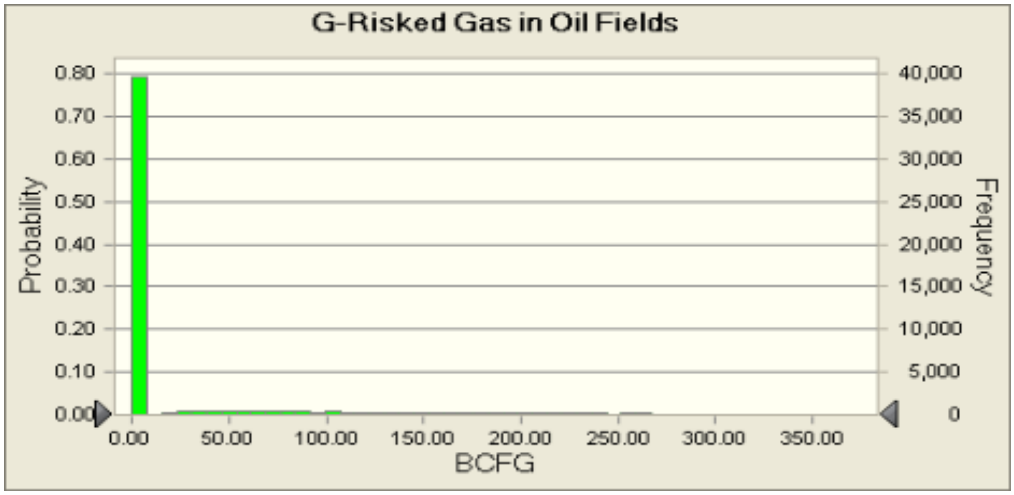
Statistics:	Forecast values
Trials	50,000
Mean	19.73
Median	0.00
Mode	0.00
Standard Deviation	44.31
Variance	1,963.58
Skewness	2.71
Kurtosis	11.81
Coefficient of Variability	2.25
Minimum	0.00
Maximum	438.27
Range Width	438.27
Mean Standard Error	0.20

Forecast: G-Risked Oil in Oil Fields (cont'd)

Percentiles:	MMBO
P100	0.00
P95	0.00
P90	0.00
P85	0.00
P80	0.00
P75	0.00
P70	0.00
P65	0.00
P60	0.00
P55	0.00
P50	0.00
P45	0.00
P40	0.00
P35	0.00
P30	0.00
P25	0.00
P20	54.68
P15	64.33
P10	76.72
P5	118.32
P0	438.27

Forecast: G-Risked Gas in Oil Fields

Summary:
Entire range is from 0.00 to 2,834.03
After 50,000 trials, the standard error of the mean is 0.53



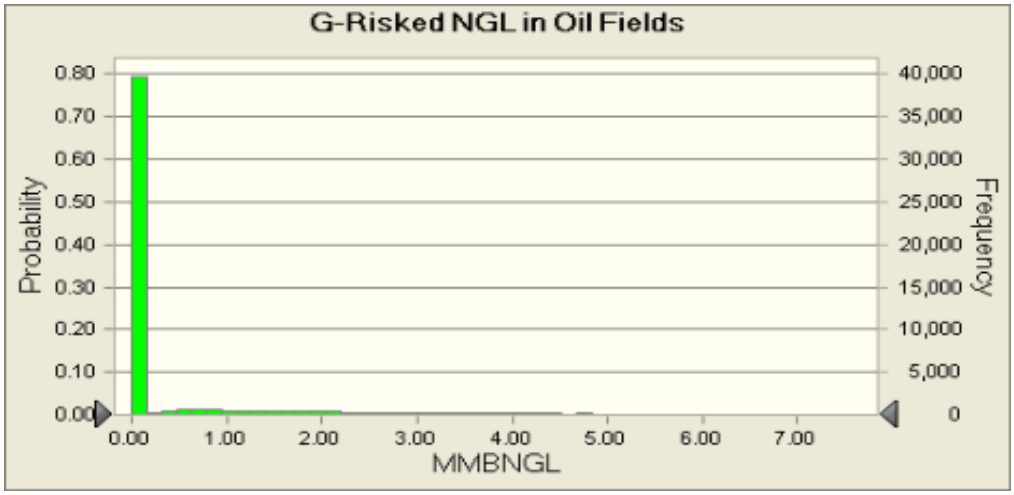
Statistics:	Forecast values
Trials	50,000
Mean	39.40
Median	0.00
Mode	0.00
Standard Deviation	119.18
Variance	14,203.28
Skewness	5.49
Kurtosis	49.31
Coefficient of Variability	3.02
Minimum	0.00
Maximum	2,834.03
Range Width	2,834.03
Mean Standard Error	0.53

Forecast: G-Risked Gas in Oil Fields (cont'd)

Percentiles:	BCFG
P100	0.00
P95	0.00
P90	0.00
P85	0.00
P80	0.00
P75	0.00
P70	0.00
P65	0.00
P60	0.00
P55	0.00
P50	0.00
P45	0.00
P40	0.00
P35	0.00
P30	0.00
P25	0.00
P20	24.70
P15	70.78
P10	131.40
P5	246.24
P0	2,834.03

Forecast: G-Risked NGL in Oil Fields

Summary:
Entire range is from 0.00 to 69.16
After 50,000 trials, the standard error of the mean is 0.01



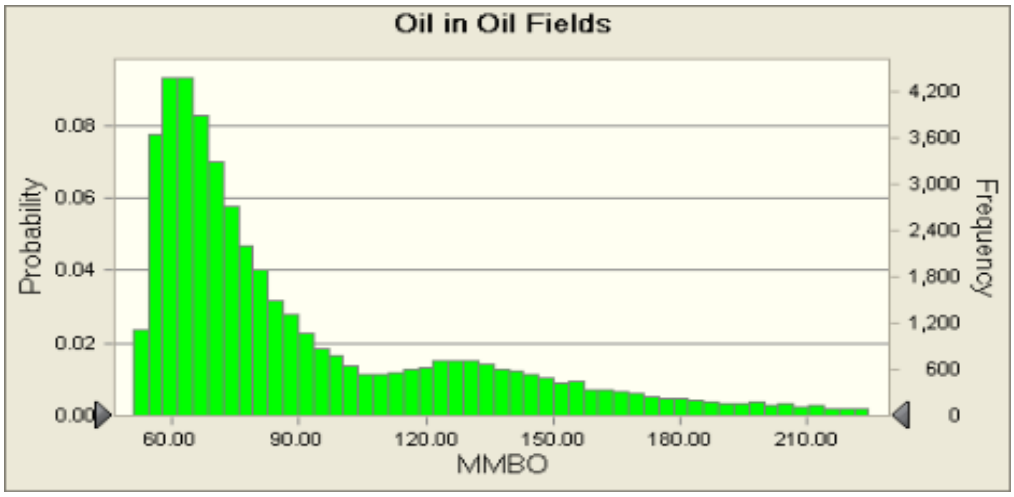
Statistics:	Forecast values
Trials	50,000
Mean	0.73
Median	0.00
Mode	0.00
Standard Deviation	2.47
Variance	6.08
Skewness	7.17
Kurtosis	87.35
Coefficient of Variability	3.38
Minimum	0.00
Maximum	69.16
Range Width	69.16
Mean Standard Error	0.01

Forecast: G-Risked NGL in Oil Fields (cont'd)

Percentiles:	MMBNGL
P100	0.00
P95	0.00
P90	0.00
P85	0.00
P80	0.00
P75	0.00
P70	0.00
P65	0.00
P60	0.00
P55	0.00
P50	0.00
P45	0.00
P40	0.00
P35	0.00
P30	0.00
P25	0.00
P20	0.31
P15	1.09
P10	2.16
P5	4.41
P0	69.16

Forecast: Conditional Oil in Oil Fields

Summary:
Entire range is from 50.72 to 502.47 (filtered)
Filter range is from 0.00 to Infinity
After 46,971 trials, the standard error of the mean is 0.21



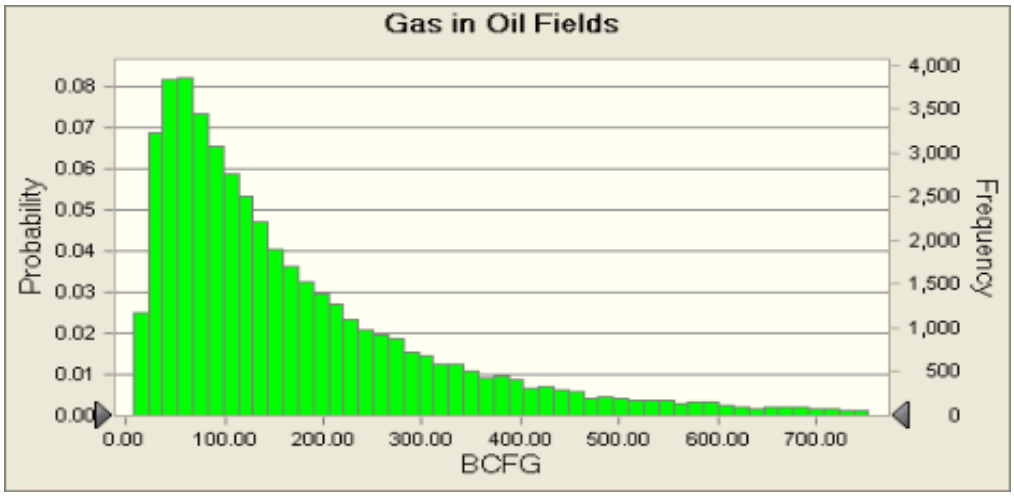
Statistics:	Forecast values
Trials	46,971
Mean	94.77
Median	75.75
Mode	---
Standard Deviation	46.34
Variance	2,147.31
Skewness	1.97
Kurtosis	7.89
Coefficient of Variability	0.4889
Minimum	50.72
Maximum	502.47
Range Width	451.75
Mean Standard Error	0.21
Filtered Values	3029

Forecast: Conditional Oil in Oil Fields (cont'd)

Percentiles:	MMBO
P100	50.72
P95	55.68
P90	57.78
P85	59.70
P80	61.58
P75	63.47
P70	65.45
P65	67.61
P60	69.88
P55	72.57
P50	75.75
P45	79.53
P40	84.36
P35	90.64
P30	100.07
P25	114.74
P20	127.51
P15	140.08
P10	157.24
P5	189.91
P0	502.47

Forecast: Conditional Gas in Oil Fields

Summary:
Entire range is from 6.94 to 4,074.81 (filtered)
Filter range is from 0.00 to Infinity
After 46,971 trials, the standard error of the mean is 0.93



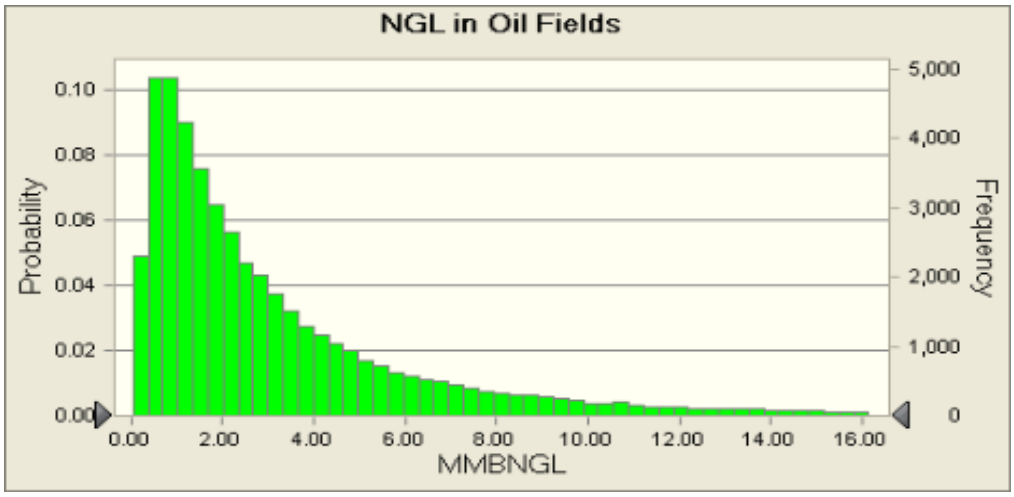
Statistics:	Forecast values
Trials	46,971
Mean	189.31
Median	126.10
Mode	---
Standard Deviation	201.08
Variance	40,431.97
Skewness	3.47
Kurtosis	26.34
Coefficient of Variability	1.06
Minimum	6.94
Maximum	4,074.81
Range Width	4,067.87
Mean Standard Error	0.93
Filtered Values	3029

Forecast: Conditional Gas in Oil Fields (cont'd)

Percentiles:	BCFG
P100	6.94
P95	28.58
P90	38.36
P85	47.76
P80	56.79
P75	66.20
P70	76.24
P65	87.25
P60	99.21
P55	112.07
P50	126.09
P45	141.91
P40	160.36
P35	182.28
P30	207.29
P25	238.10
P20	276.74
P15	329.67
P10	407.35
P5	564.73
P0	4,074.81

Forecast: Conditional NGL in Oil Fields

Summary:
Entire range is from 0.04 to 172.85 (filtered)
Filter range is from 0.00 to Infinity
After 46,971 trials, the standard error of the mean is 0.02



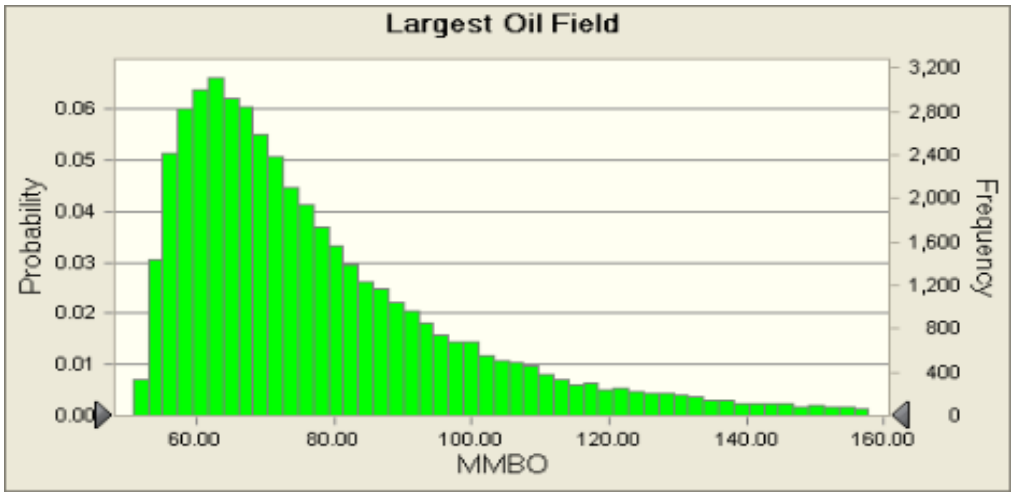
Statistics:	Forecast values
Trials	46,971
Mean	3.51
Median	2.09
Mode	---
Standard Deviation	4.51
Variance	20.36
Skewness	5.29
Kurtosis	78.58
Coefficient of Variability	1.29
Minimum	0.04
Maximum	172.85
Range Width	172.81
Mean Standard Error	0.02
Filtered Values	3029

Forecast: Conditional NGL in Oil Fields (cont'd)

Percentiles:	MMBNGL
P100	0.04
P95	0.37
P90	0.54
P85	0.69
P80	0.84
P75	1.00
P70	1.18
P65	1.37
P60	1.58
P55	1.82
P50	2.09
P45	2.38
P40	2.74
P35	3.14
P30	3.63
P25	4.25
P20	5.04
P15	6.20
P10	7.93
P5	11.26
P0	172.85

Forecast: Largest Oil Field

Summary:
Entire range is from 50.72 to 299.79 (filtered)
Filter range is from 0.00 to Infinity
After 46,971 trials, the standard error of the mean is 0.13



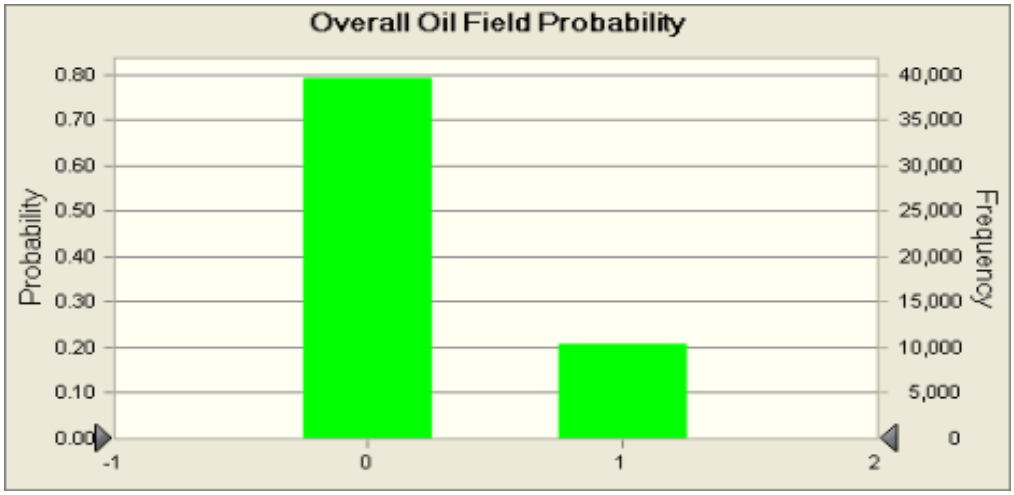
Statistics:	Forecast values
Trials	46,971
Mean	80.42
Median	72.23
Mode	---
Standard Deviation	27.62
Variance	762.62
Skewness	2.61
Kurtosis	13.09
Coefficient of Variability	0.3434
Minimum	50.72
Maximum	299.79
Range Width	249.07
Mean Standard Error	0.13
Filtered Values	3029

Forecast: Largest Oil Field (cont'd)

Percentiles:	MMBO
P100	50.72
P95	55.65
P90	57.67
P85	59.48
P80	61.19
P75	62.86
P70	64.51
P65	66.31
P60	68.13
P55	70.09
P50	72.23
P45	74.64
P40	77.31
P35	80.35
P30	83.98
P25	88.33
P20	93.68
P15	100.92
P10	111.69
P5	132.74
P0	299.79

Forecast: Overall Oil Field Probability

Summary:
Entire range is from 0.00 to 1.00
After 50,000 trials, the standard error of the mean is 0.00



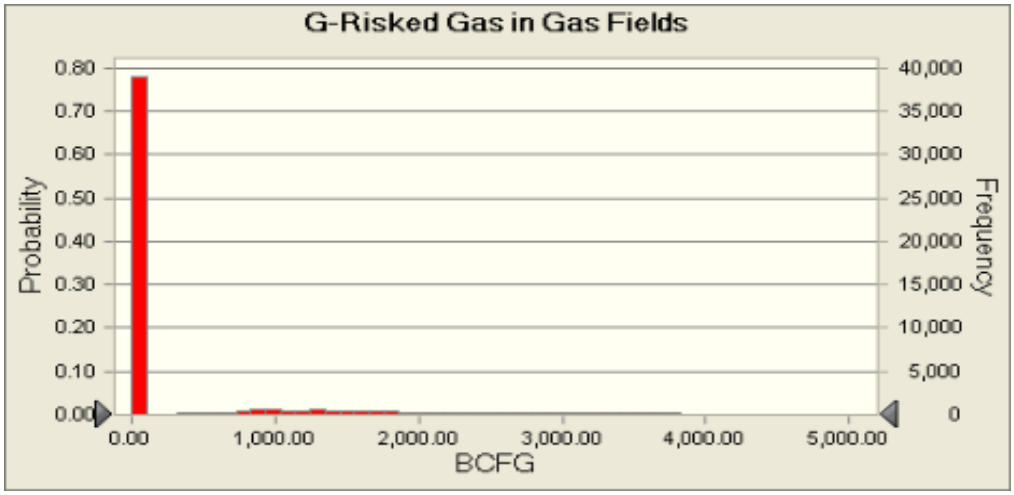
Statistics:	Forecast values	
Trials	50,000	
Mean	0.2070	= the probability of at least one undiscovered oil accumulation of minimum size or larger
Median	0.00	
Mode	0.00	
Standard Deviation	0.41	
Variance	0.16	
Skewness	1.45	
Kurtosis	3.09	
Coefficient of Variability	1.96	
Minimum	0.00	
Maximum	1.00	
Range Width	1.00	
Mean Standard Error	0.00	

Forecast: Overall Oil Field Probability (cont'd)

Percentiles:	Forecast values
P100	0.00
P95	0.00
P90	0.00
P85	0.00
P80	0.00
P75	0.00
P70	0.00
P65	0.00
P60	0.00
P55	0.00
P50	0.00
P45	0.00
P40	0.00
P35	0.00
P30	0.00
P25	0.00
P20	1.00
P15	1.00
P10	1.00
P5	1.00
P0	1.00

Forecast: G-Risked Gas in Gas Fields

Summary:
Entire range is from 0.00 to 26,364.99
After 50,000 trials, the standard error of the mean is 7.16



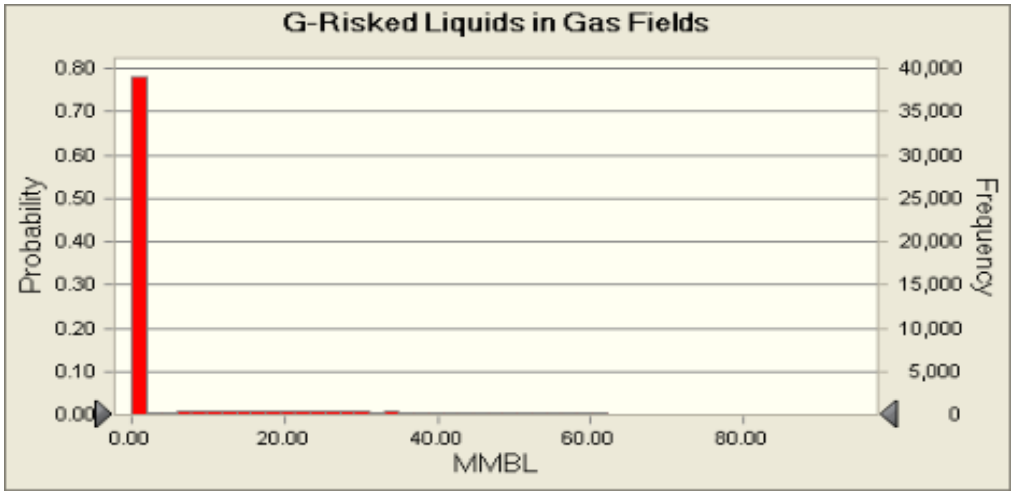
Statistics:	Forecast values
Trials	50,000
Mean	579.43
Median	0.00
Mode	0.00
Standard Deviation	1,600.49
Variance	2,561,562.24
Skewness	5.15
Kurtosis	43.22
Coefficient of Variability	2.76
Minimum	0.00
Maximum	26,364.99
Range Width	26,364.99
Mean Standard Error	7.16

Forecast: G-Risked Gas in Gas Fields (cont'd)

Percentiles:	BCFG
P100	0.00
P95	0.00
P90	0.00
P85	0.00
P80	0.00
P75	0.00
P70	0.00
P65	0.00
P60	0.00
P55	0.00
P50	0.00
P45	0.00
P40	0.00
P35	0.00
P30	0.00
P25	0.00
P20	785.09
P15	1,319.69
P10	2,035.91
P5	3,377.49
P0	26,364.99

Forecast: G-Risked Liquids in Gas Fields

Summary:
Entire range is from 0.00 to 623.38
After 50,000 trials, the standard error of the mean is 0.14



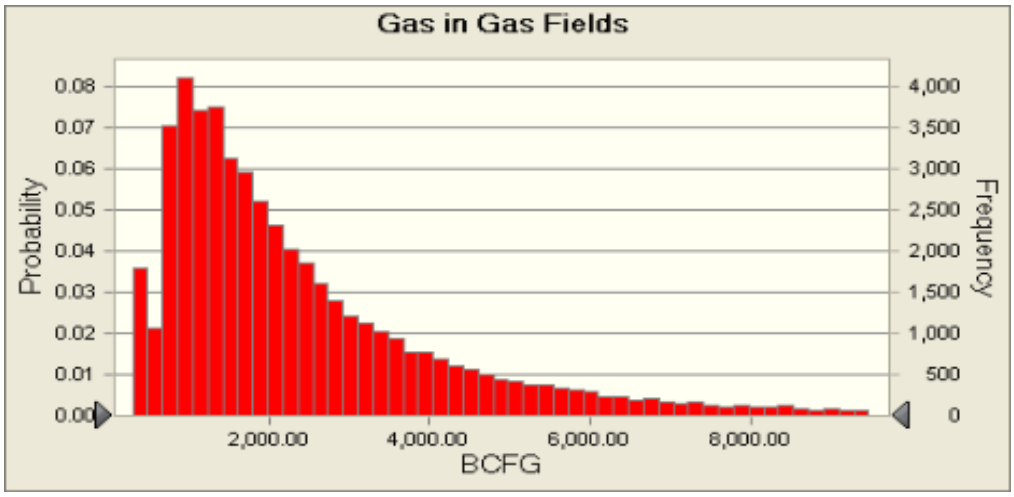
Statistics:	Forecast values
Trials	50,000
Mean	10.18
Median	0.00
Mode	0.00
Standard Deviation	30.29
Variance	917.49
Skewness	5.73
Kurtosis	53.38
Coefficient of Variability	2.97
Minimum	0.00
Maximum	623.38
Range Width	623.38
Mean Standard Error	0.14

Forecast: G-Risked Liquids in Gas Fields (cont'd)

Percentiles:	MMBL
P100	0.00
P95	0.00
P90	0.00
P85	0.00
P80	0.00
P75	0.00
P70	0.00
P65	0.00
P60	0.00
P55	0.00
P50	0.00
P45	0.00
P40	0.00
P35	0.00
P30	0.00
P25	0.00
P20	8.83
P15	19.85
P10	34.28
P5	60.77
P0	623.38

Forecast: Conditional Gas in Gas Fields

Summary:
Entire range is from 306.29 to 27,194.90
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 10.92



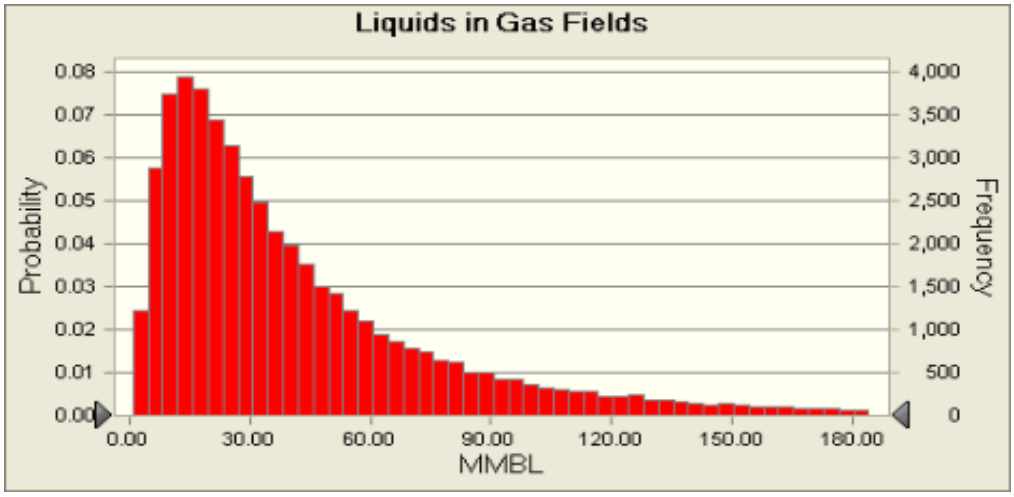
Statistics:	Forecast values
Trials	50,000
Mean	2,624.44
Median	1,868.03
Mode	---
Standard Deviation	2,442.84
Variance	5,967,485.51
Skewness	3.14
Kurtosis	18.00
Coefficient of Variability	0.9308
Minimum	306.29
Maximum	27,194.90
Range Width	26,888.62
Mean Standard Error	10.92

Forecast: Conditional Gas in Gas Fields (cont'd)

Percentiles:	BCFG
P100	306.29
P95	615.82
P90	808.41
P85	917.24
P80	1,029.86
P75	1,157.60
P70	1,281.73
P65	1,405.40
P60	1,548.38
P55	1,700.75
P50	1,868.02
P45	2,057.47
P40	2,270.56
P35	2,524.14
P30	2,820.96
P25	3,196.96
P20	3,662.79
P15	4,300.76
P10	5,276.16
P5	7,099.88
P0	27,194.90

Forecast: Conditional Liquids in Gas Fields

Summary:
Entire range is from 0.66 to 623.38
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.22



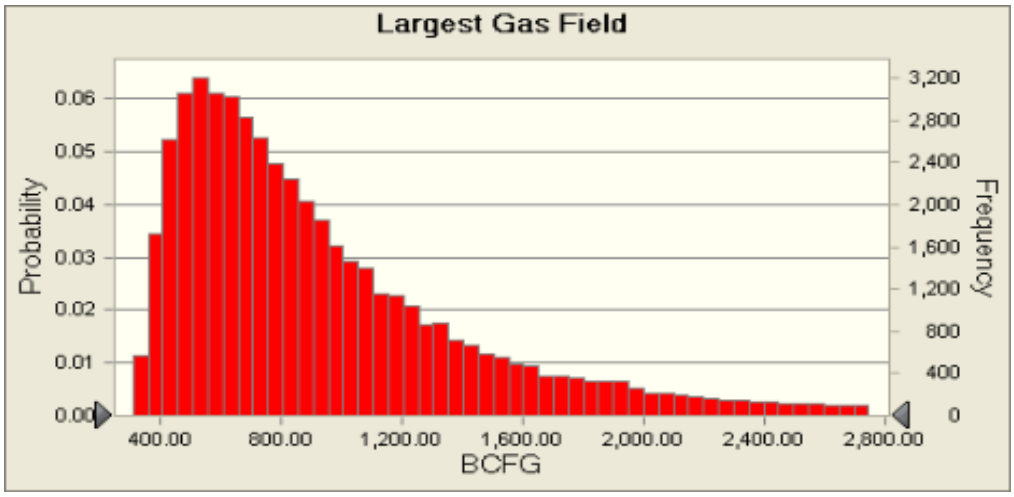
Statistics:	Forecast values
Trials	50,000
Mean	46.13
Median	30.81
Mode	---
Standard Deviation	49.30
Variance	2,430.79
Skewness	3.20
Kurtosis	19.07
Coefficient of Variability	1.07
Minimum	0.66
Maximum	623.38
Range Width	622.72
Mean Standard Error	0.22

Forecast: Conditional Liquids in Gas Fields (cont'd)

Percentiles:	MMBL
P100	0.66
P95	6.29
P90	9.14
P85	11.59
P80	13.98
P75	16.37
P70	18.82
P65	21.49
P60	24.32
P55	27.34
P50	30.81
P45	34.61
P40	39.00
P35	44.01
P30	50.06
P25	57.25
P20	66.96
P15	79.80
P10	99.58
P5	136.48
P0	623.38

Forecast: Largest Gas Field

Summary:
Entire range is from 306.29 to 4,979.62
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 2.81



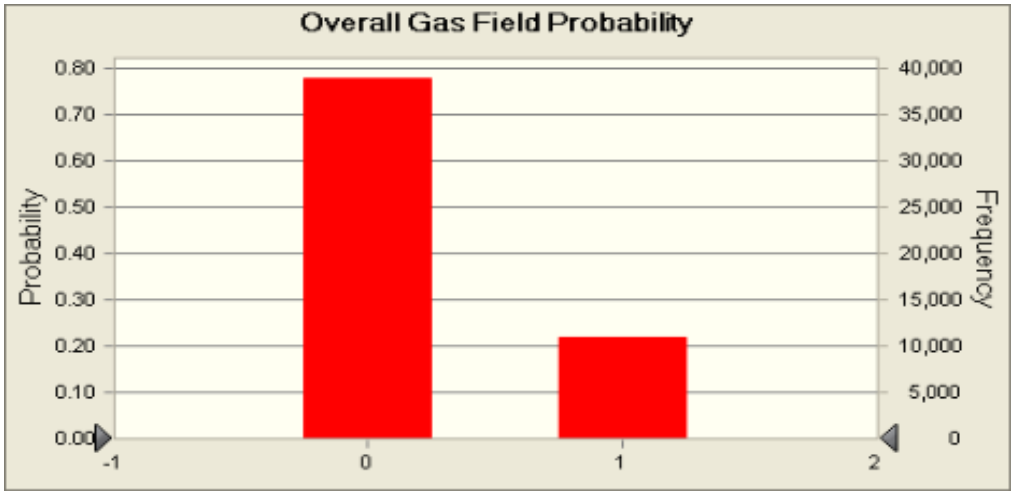
Statistics:	Forecast values
Trials	50,000
Mean	989.47
Median	801.78
Mode	---
Standard Deviation	627.56
Variance	393,834.33
Skewness	2.27
Kurtosis	9.96
Coefficient of Variability	0.6342
Minimum	306.29
Maximum	4,979.62
Range Width	4,673.33
Mean Standard Error	2.81

Forecast: Largest Gas Field (cont'd)

Percentiles:	BCFG
P100	306.29
P95	410.30
P90	457.26
P85	498.08
P80	537.13
P75	576.91
P70	617.31
P65	658.78
P60	703.03
P55	750.27
P50	801.77
P45	858.61
P40	919.14
P35	994.09
P30	1,077.45
P25	1,182.23
P20	1,309.39
P15	1,480.90
P10	1,751.44
P5	2,227.48
P0	4,979.62

Forecast: Overall Gas Field Probability

Summary:
Entire range is from 0.00 to 1.00
After 50,000 trials, the standard error of the mean is 0.00



Statistics:	Forecast values	
Trials	50,000	
Mean	0.2199	= the probability of at least one undiscovered gas accumulation of minimum size or larger
Median	0.00	
Mode	0.00	
Standard Deviation	0.41	
Variance	0.17	
Skewness	1.35	
Kurtosis	2.83	
Coefficient of Variability	1.88	
Minimum	0.00	
Maximum	1.00	
Range Width	1.00	
Mean Standard Error	0.00	

Forecast: Overall Gas Field Probability (cont'd)

Percentiles:	Forecast values
P100	0.00
P95	0.00
P90	0.00
P85	0.00
P80	0.00
P75	0.00
P70	0.00
P65	0.00
P60	0.00
P55	0.00
P50	0.00
P45	0.00
P40	0.00
P35	0.00
P30	0.00
P25	0.00
P20	1.00
P15	1.00
P10	1.00
P5	1.00
P0	1.00

End of Forecasts

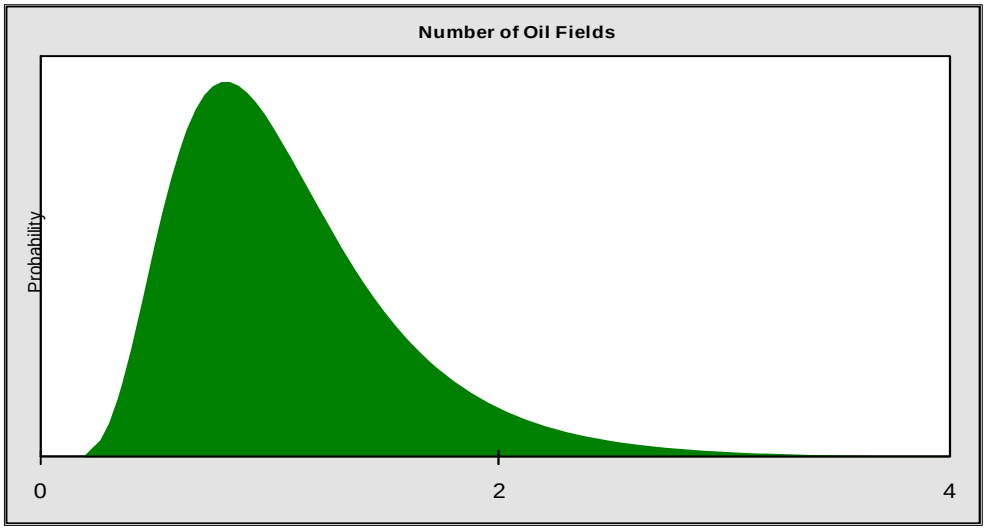
Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:

Mean	1.11
Standard Deviation	0.52

Selected range is from 0.00 to 4.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	1.11	1.10
Median	1.01	1.00
Mode	---	---
Standard Deviation	0.51	0.51
Variance	0.26	0.26
Skewness	1.29	1.31
Kurtosis	5.50	5.52
Coefficient of Variability	0.4607	0.4631
Minimum	0.16	0.00
Maximum	4.00	4.00
Range Width	3.84	4.00
Mean Standard Error	0.00	---

Assumption: Number of Oil Fields (cont'd)

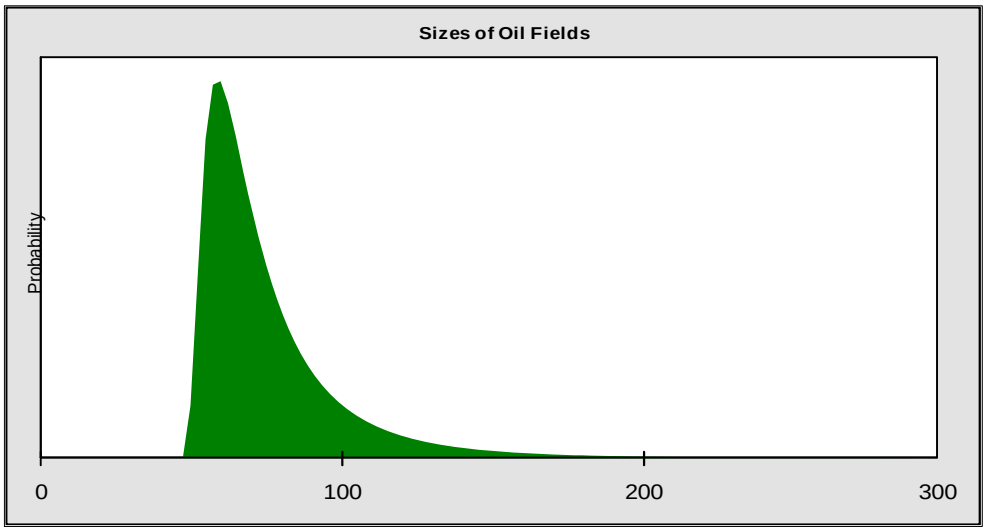
Percentiles:	Simulated values	Theoretical values
P100	0.16	0.00
P95	0.48	0.48
P90	0.56	0.56
P85	0.63	0.63
P80	0.69	0.69
P75	0.74	0.74
P70	0.79	0.79
P65	0.84	0.84
P60	0.90	0.89
P55	0.95	0.94
P50	1.01	1.00
P45	1.06	1.06
P40	1.13	1.12
P35	1.19	1.19
P30	1.27	1.26
P25	1.36	1.35
P20	1.46	1.46
P15	1.59	1.59
P10	1.78	1.77
P5	2.08	2.08
P0	4.00	4.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	77.93
Standard Deviation	27.23

Selected range is from 50.00 to 300.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	77.84	77.64
Median	70.05	69.98
Mode	---	---
Standard Deviation	26.02	25.47
Variance	677.15	648.70
Skewness	2.82	2.70
Kurtosis	14.97	14.02
Coefficient of Variability	0.3343	0.3281
Minimum	50.45	50.00
Maximum	299.79	300.00
Range Width	249.34	250.00
Mean Standard Error	0.12	---

Assumption: Sizes of Oil Fields (cont'd)

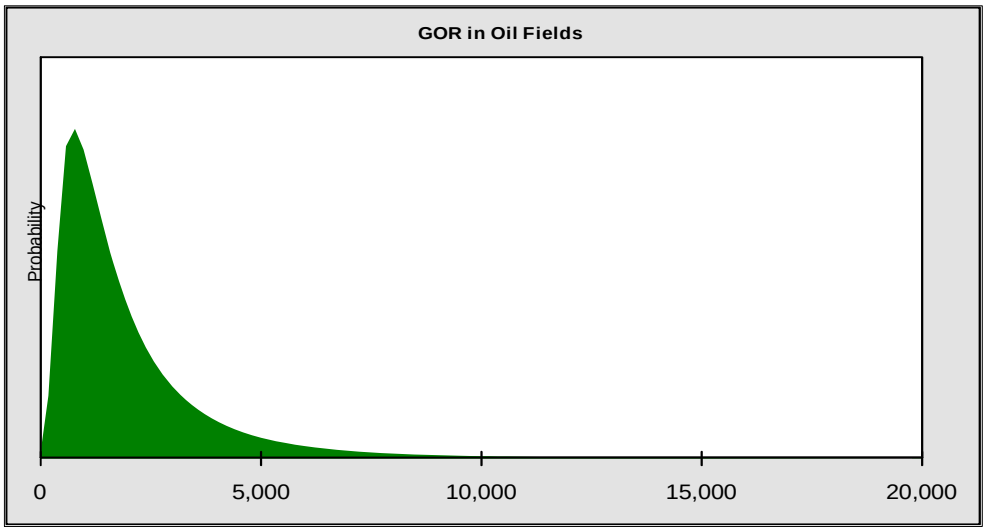
Percentiles:	Simulated values	Theoretical values
P100	50.45	50.00
P95	55.21	55.21
P90	56.98	57.01
P85	58.59	58.57
P80	60.16	60.05
P75	61.63	61.52
P70	63.12	63.02
P65	64.70	64.59
P60	66.36	66.25
P55	68.14	68.03
P50	70.05	69.98
P45	72.18	72.14
P40	74.62	74.57
P35	77.46	77.36
P30	80.76	80.65
P25	84.87	84.64
P20	89.88	89.70
P15	96.82	96.52
P10	106.91	106.77
P5	126.43	126.15
P0	299.79	300.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:

Mean	2,023.71
Standard Deviation	2,105.00

Selected range is from 50.00 to 20,000.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	1,989.57	1,999.47
Median	1,396.17	1,398.52
Mode	---	---
Standard Deviation	1,938.50	1,947.54
Variance	3,757,793.85	3,792,919.98
Skewness	2.95	2.94
Kurtosis	16.23	16.04
Coefficient of Variability	0.9743	0.9740
Minimum	75.74	50.00
Maximum	19,971.00	20,000.00
Range Width	19,895.26	19,950.00
Mean Standard Error	8.67	---

Assumption: GOR in Oil Fields (cont'd)

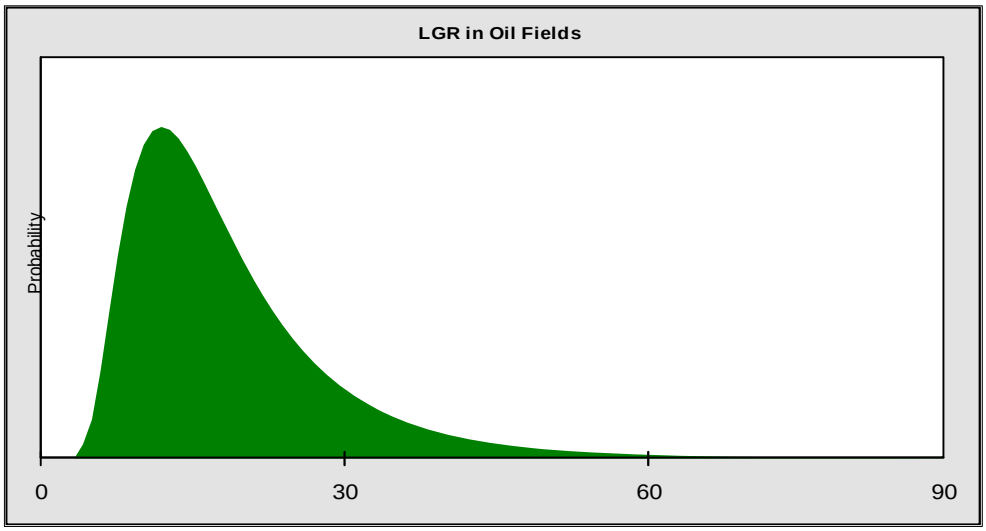
Percentiles:	Simulated values	Theoretical values
P100	75.74	50.00
P95	371.15	371.77
P90	489.37	491.60
P85	594.21	596.75
P80	690.42	697.88
P75	791.89	799.43
P70	898.99	904.11
P65	1,011.11	1,014.11
P60	1,126.58	1,131.55
P55	1,253.23	1,258.76
P50	1,396.16	1,398.52
P45	1,551.37	1,554.43
P40	1,723.97	1,731.28
P35	1,927.86	1,935.90
P30	2,167.98	2,178.46
P25	2,458.33	2,475.18
P20	2,839.07	2,854.26
P15	3,346.83	3,370.93
P10	4,141.26	4,156.61
P5	5,662.39	5,666.57
P0	19,971.00	20,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:

Mean	18.71
Standard Deviation	10.89

Selected range is from 2.00 to 90.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	18.57	18.62
Median	15.98	15.99
Mode	---	---
Standard Deviation	10.39	10.51
Variance	107.93	110.50
Skewness	1.78	1.81
Kurtosis	7.81	7.95
Coefficient of Variability	0.5595	0.5645
Minimum	3.22	2.00
Maximum	89.43	90.00
Range Width	86.21	88.00
Mean Standard Error	0.05	---

Assumption: LGR in Oil Fields (cont'd)

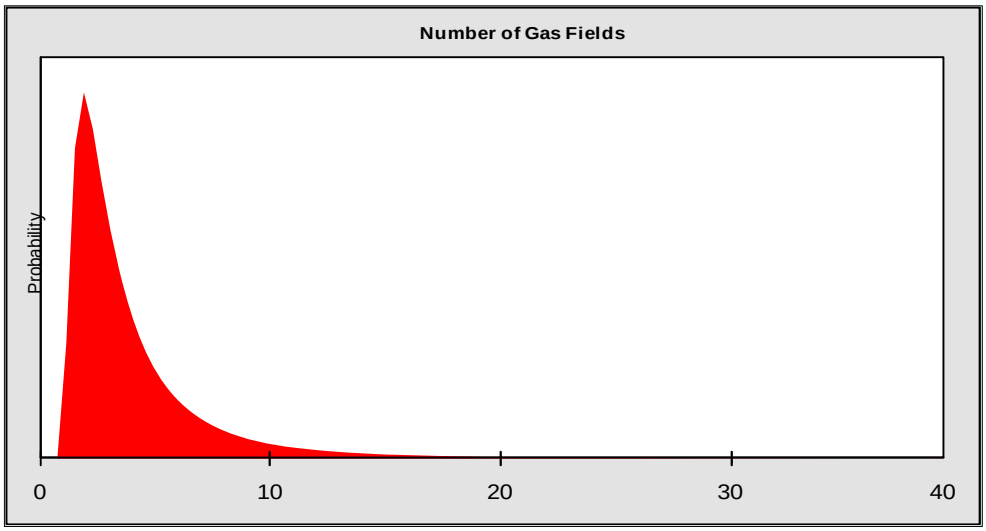
Percentiles:	Simulated values	Theoretical values
P100	3.22	2.00
P95	7.29	7.26
P90	8.54	8.53
P85	9.57	9.55
P80	10.49	10.48
P75	11.35	11.37
P70	12.24	12.24
P65	13.11	13.13
P60	14.01	14.03
P55	14.98	14.98
P50	15.98	15.99
P45	17.08	17.07
P40	18.21	18.26
P35	19.56	19.59
P30	21.10	21.10
P25	22.89	22.88
P20	25.04	25.06
P15	27.78	27.88
P10	31.75	31.92
P5	38.78	39.05
P0	89.43	90.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:

Mean	4.17
Standard Deviation	3.91

Selected range is from 1.00 to 40.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	4.14	4.12
Median	2.99	3.00
Mode	---	---
Standard Deviation	3.61	3.54
Variance	13.05	12.57
Skewness	3.43	3.36
Kurtosis	20.30	19.95
Coefficient of Variability	0.87	0.86
Minimum	1.04	1.00
Maximum	39.41	40.00
Range Width	38.37	39.00
Mean Standard Error	0.02	---

Assumption: Number of Gas Fields (cont'd)

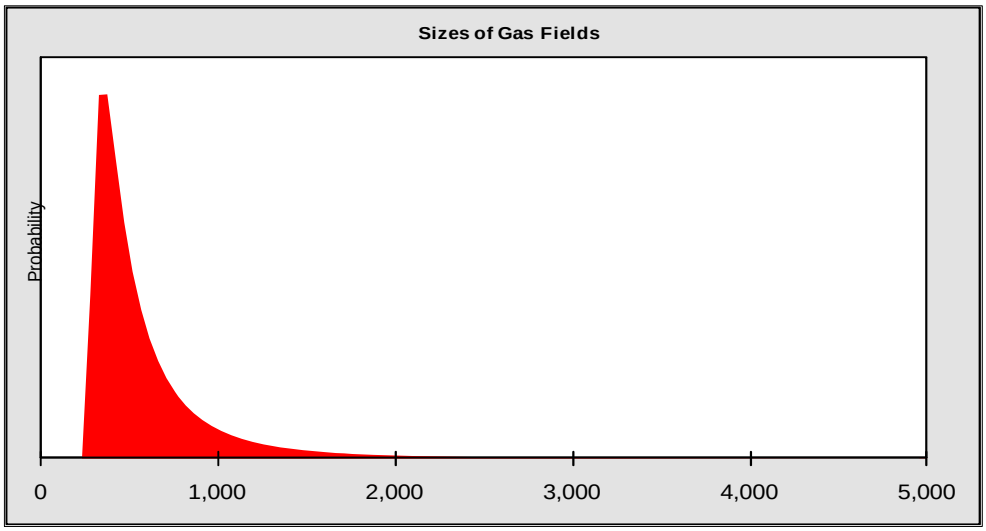
Percentiles:	Simulated values	Theoretical values
P100	1.04	1.00
P95	1.41	1.41
P90	1.58	1.58
P85	1.74	1.74
P80	1.89	1.89
P75	2.04	2.04
P70	2.20	2.21
P65	2.38	2.38
P60	2.57	2.57
P55	2.77	2.77
P50	2.99	3.00
P45	3.25	3.25
P40	3.55	3.55
P35	3.89	3.89
P30	4.30	4.30
P25	4.80	4.82
P20	5.48	5.48
P15	6.42	6.40
P10	7.90	7.82
P5	10.62	10.64
P0	39.41	40.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:

Mean	637.05
Standard Deviation	457.21

Selected range is from 300.00 to 5,000.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	635.53	630.87
Median	499.50	499.74
Mode	---	---
Standard Deviation	414.53	407.22
Variance	171,834.19	165,831.02
Skewness	3.61	3.66
Kurtosis	22.40	23.02
Coefficient of Variability	0.65	0.65
Minimum	303.84	300.00
Maximum	4,979.62	5,000.00
Range Width	4,675.78	4,700.00
Mean Standard Error	1.85	---

Assumption: Sizes of Gas Fields (cont'd)

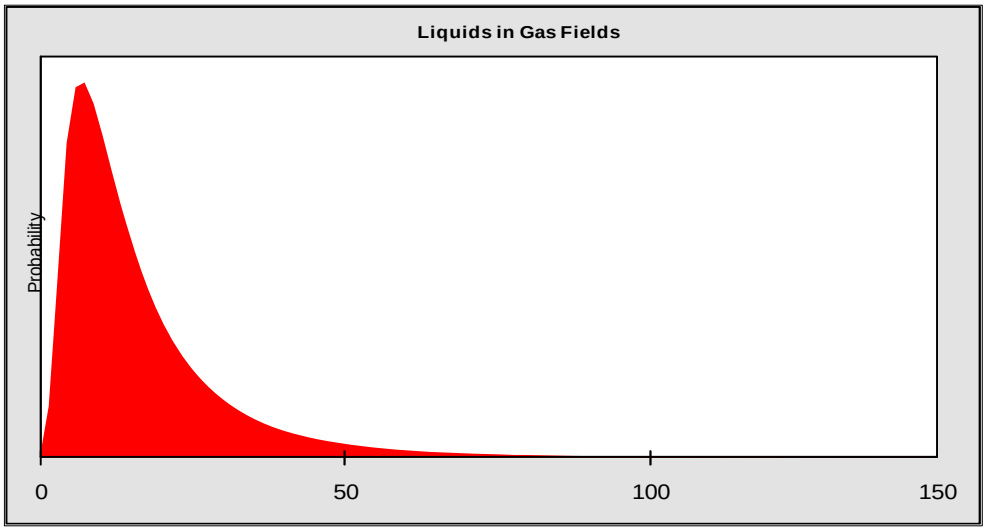
Percentiles:	Simulated values	Theoretical values
P100	303.84	300.00
P95	337.29	337.24
P90	354.23	353.97
P85	370.40	369.32
P80	385.82	384.58
P75	401.42	400.32
P70	417.84	416.94
P65	435.72	434.78
P60	454.30	454.23
P55	475.73	475.70
P50	499.48	499.74
P45	528.30	527.08
P40	560.84	558.67
P35	599.52	595.95
P30	644.50	641.05
P25	701.48	697.43
P20	779.21	771.19
P15	883.77	874.50
P10	1,051.74	1,036.88
P5	1,384.18	1,363.68
P0	4,979.62	5,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:

Mean	17.73
Standard Deviation	16.25

Selected range is from 1.00 to 150.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	17.61	17.55
Median	13.12	12.99
Mode	---	---
Standard Deviation	15.19	15.21
Variance	230.81	231.21
Skewness	2.71	2.69
Kurtosis	14.31	13.94
Coefficient of Variability	0.8626	0.8662
Minimum	1.40	1.00
Maximum	149.40	150.00
Range Width	148.01	149.00
Mean Standard Error	0.07	---

Assumption: Liquids in Gas Fields (cont'd)

Percentiles:	Simulated values	Theoretical values
P100	1.40	1.00
P95	4.14	4.14
P90	5.23	5.22
P85	6.19	6.15
P80	7.06	7.04
P75	7.94	7.92
P70	8.89	8.82
P65	9.85	9.76
P60	10.84	10.75
P55	11.94	11.82
P50	13.12	12.99
P45	14.40	14.28
P40	15.78	15.73
P35	17.48	17.41
P30	19.46	19.37
P25	21.87	21.76
P20	24.95	24.78
P15	28.97	28.85
P10	34.99	34.97
P5	46.43	46.53
P0	149.40	150.00

End of Assumptions

Simulation started on 5/21/2008 at 14:24:12
Simulation stopped on 5/21/2008 at 14:33:15