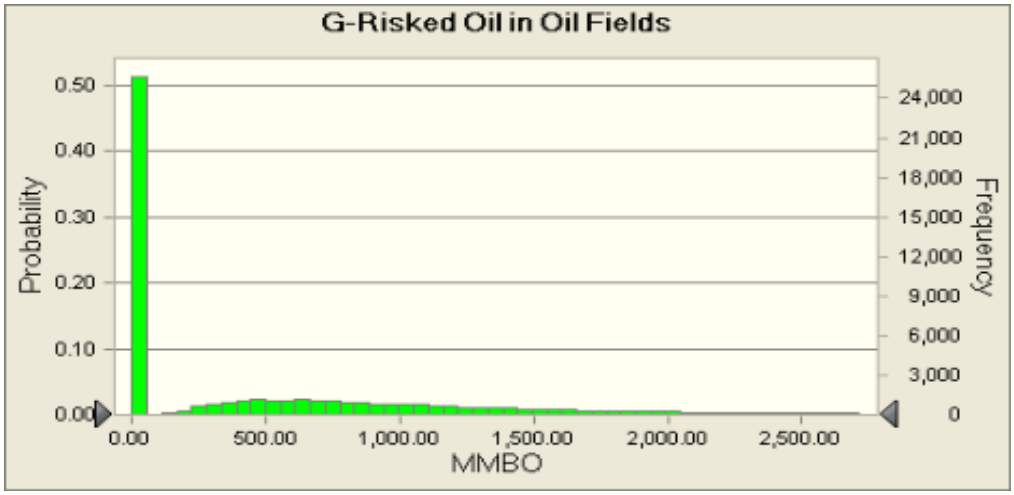
52000201
Thetis Basin
Monte Carlo Results

Forecast: G-Risked Oil in Oil Fields

Summary:
Entire range is from 0.00 to 6,952.38
After 50,000 trials, the standard error of the mean is 3.47



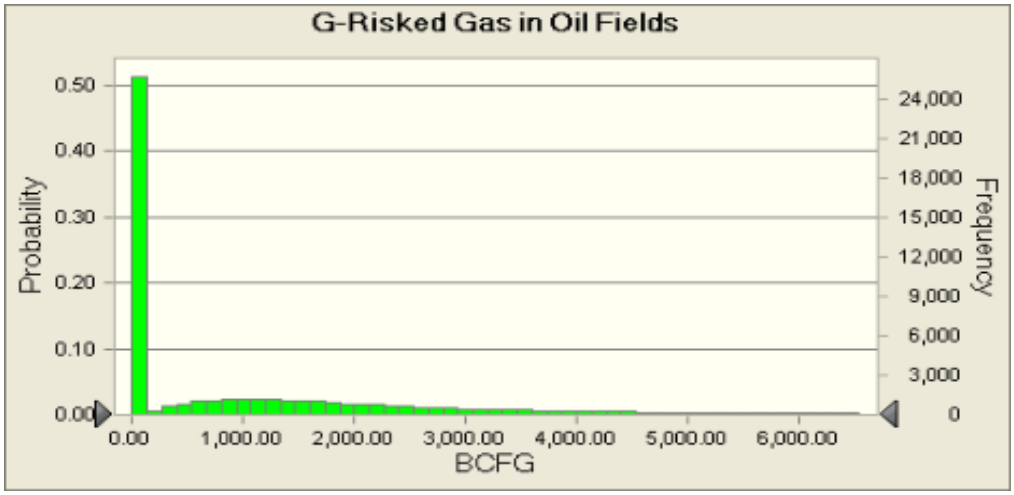
Statistics:	Forecast values
Trials	50,000
Mean	537.01
Median	0.00
Mode	0.00
Standard Deviation	775.99
Variance	602,160.07
Skewness	2.03
Kurtosis	8.65
Coefficient of Variability	1.45
Minimum	0.00
Maximum	6,952.38
Range Width	6,952.38
Mean Standard Error	3.47

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	332.68
P40	469.71
P35	595.70
P30	724.31
P25	870.65
P20	1,043.62
P15	1,252.80
P10	1,556.04
P5	2,095.35
P0	6,952.38

Forecast: G-Risked Gas in Oil Fields

Summary:
Entire range is from 0.00 to 31,803.34
After 50,000 trials, the standard error of the mean is 8.54



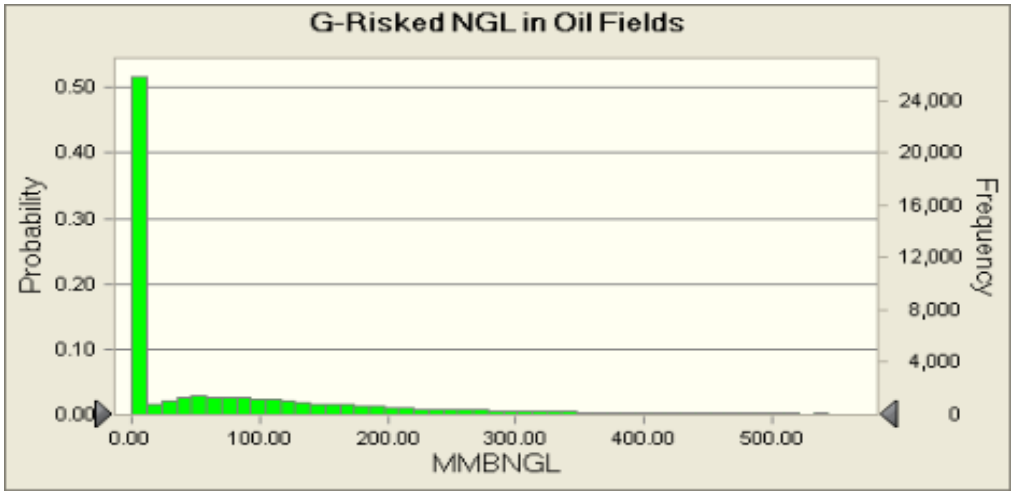
Statistics:	Forecast values
Trials	50,000
Mean	1,184.23
Median	0.00
Mode	0.00
Standard Deviation	1,910.65
Variance	3,650,570.02
Skewness	2.85
Kurtosis	16.39
Coefficient of Variability	1.61
Minimum	0.00
Maximum	31,803.34
Range Width	31,803.34
Mean Standard Error	8.54

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	546.81
P40	855.77
P35	1,138.02
P30	1,434.20
P25	1,763.22
P20	2,175.26
P15	2,712.39
P10	3,504.08
P5	4,907.85
P0	31,803.34

Forecast: G-Risked NGL in Oil Fields

Summary:
Entire range is from 0.00 to 4,153.22
After 50,000 trials, the standard error of the mean is 0.76



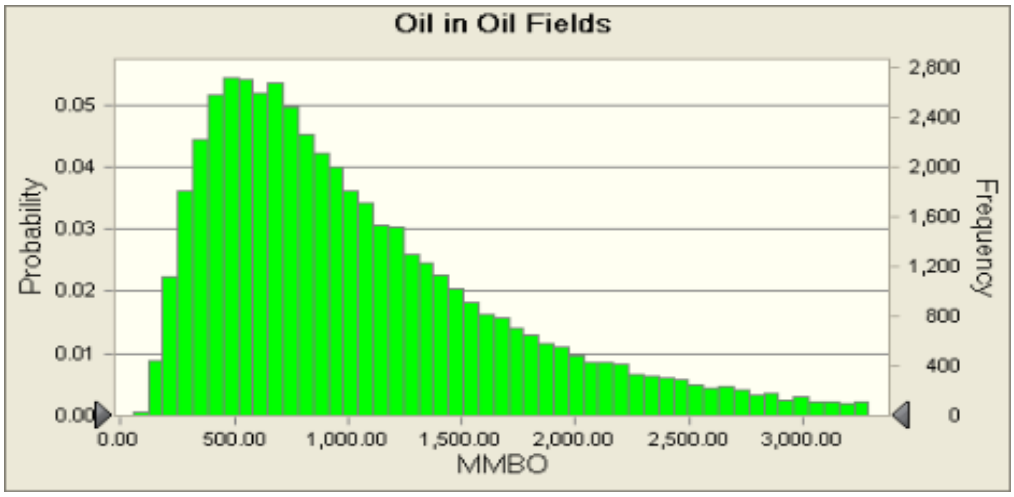
Statistics:	Forecast values
Trials	50,000
Mean	92.86
Median	0.00
Mode	0.00
Standard Deviation	169.52
Variance	28,736.47
Skewness	4.47
Kurtosis	46.12
Coefficient of Variability	1.83
Minimum	0.00
Maximum	4,153.22
Range Width	4,153.22
Mean Standard Error	0.76

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	33.59
P40	55.70
P35	76.71
P30	100.37
P25	127.03
P20	161.21
P15	204.91
P10	272.14
P5	397.48
P0	4,153.22

Forecast: Conditional Oil in Oil Fields

Summary:
Entire range is from 53.69 to 7,697.82
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 3.50



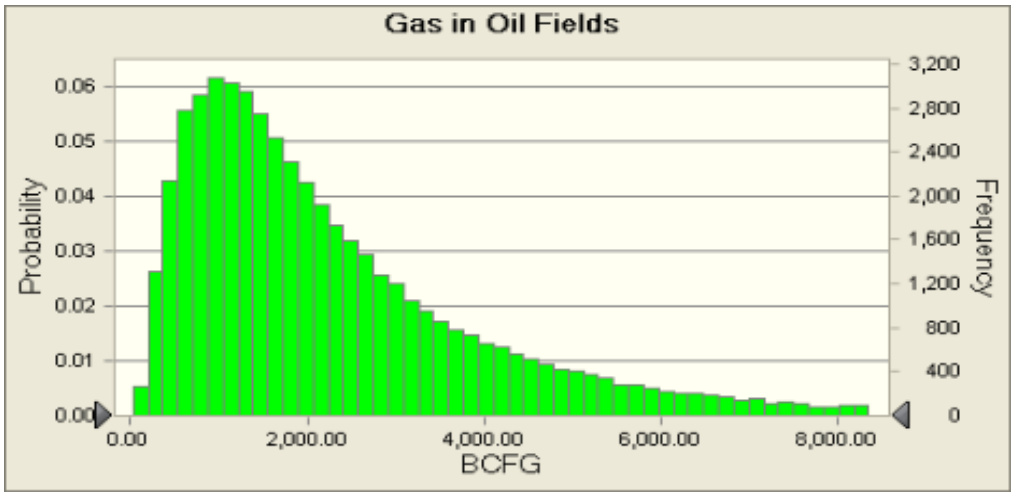
Statistics:	Forecast values
Trials	50,000
Mean	1,101.35
Median	889.40
Mode	---
Standard Deviation	781.79
Variance	611,189.70
Skewness	1.86
Kurtosis	8.18
Coefficient of Variability	0.7098
Minimum	53.69
Maximum	7,697.82
Range Width	7,644.13
Mean Standard Error	3.50

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

Percentiles:	MMBO
P100	53.69
P95	287.10
P90	367.13
P85	432.52
P80	492.89
P75	555.25
P70	616.87
P65	678.71
P60	742.62
P55	811.96
P50	889.39
P45	969.69
P40	1,062.01
P35	1,165.38
P30	1,278.40
P25	1,414.17
P20	1,581.06
P15	1,804.56
P10	2,120.04
P5	2,648.06
P0	7,697.82

Forecast: Conditional Gas in Oil Fields

Summary:
Entire range is from 26.40 to 33,197.08
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 9.46



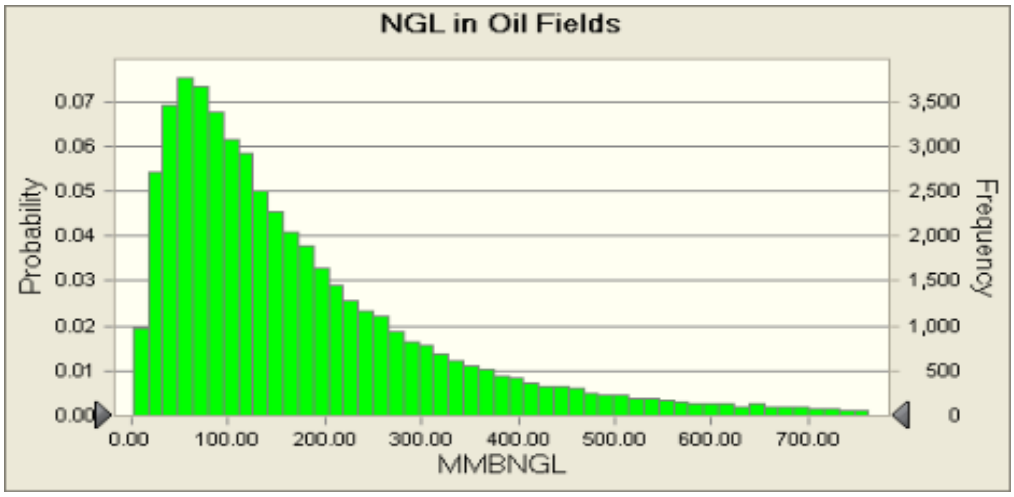
Statistics:	Forecast values
Trials	50,000
Mean	2,434.11
Median	1,816.54
Mode	---
Standard Deviation	2,115.72
Variance	4,476,261.67
Skewness	2.52
Kurtosis	14.10
Coefficient of Variability	0.8692
Minimum	26.40
Maximum	33,197.08
Range Width	33,170.68
Mean Standard Error	9.46

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

Percentiles:	BCFG
P100	26.40
P95	450.33
P90	619.07
P85	768.73
P80	909.34
P75	1,048.64
P70	1,188.57
P65	1,333.73
P60	1,482.53
P55	1,642.50
P50	1,816.52
P45	2,010.84
P40	2,228.67
P35	2,476.94
P30	2,764.59
P25	3,108.70
P20	3,553.14
P15	4,143.09
P10	4,976.43
P5	6,479.02
P0	33,197.08

Forecast: Conditional NGL in Oil Fields

Summary:
Entire range is from 1.19 to 5,983.36
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.91



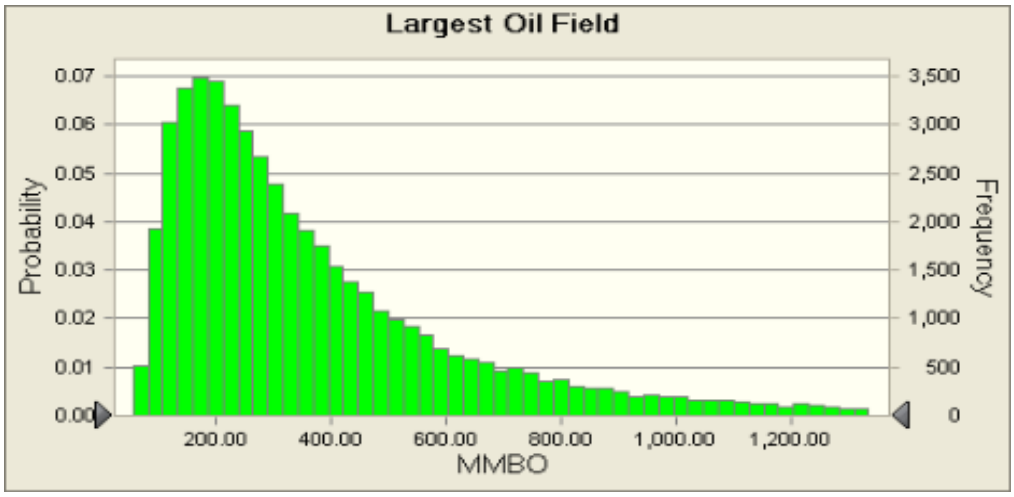
Statistics:	Forecast values
Trials	50,000
Mean	191.30
Median	132.09
Mode	---
Standard Deviation	204.03
Variance	41,627.57
Skewness	4.48
Kurtosis	52.85
Coefficient of Variability	1.07
Minimum	1.19
Maximum	5,983.36
Range Width	5,982.17
Mean Standard Error	0.91

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

Percentiles:	MMBNGL
P100	1.19
P95	26.01
P90	38.62
P85	49.35
P80	59.64
P75	70.08
P70	80.90
P65	92.29
P60	104.84
P55	117.81
P50	132.09
P45	148.34
P40	166.10
P35	186.37
P30	210.54
P25	240.71
P20	277.20
P15	327.34
P10	403.34
P5	550.50
P0	5,983.36

Forecast: Largest Oil Field

Summary:
Entire range is from 53.52 to 2,499.39
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.50



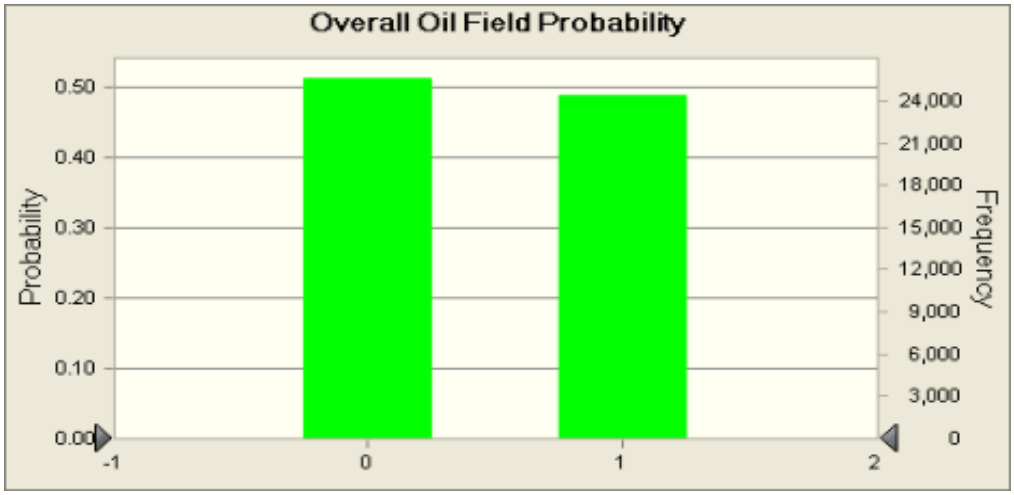
Statistics:	Forecast values
Trials	50,000
Mean	399.39
Median	293.52
Mode	---
Standard Deviation	334.64
Variance	111,981.36
Skewness	2.41
Kurtosis	10.56
Coefficient of Variability	0.8379
Minimum	53.52
Maximum	2,499.39
Range Width	2,445.87
Mean Standard Error	1.50

Forecast: Largest Oil Field (cont'd)

Percentiles:	MMBO
P100	53.52
P95	106.55
P90	128.52
P85	147.86
P80	167.10
P75	185.79
P70	204.80
P65	224.62
P60	245.77
P55	269.06
P50	293.51
P45	321.86
P40	354.13
P35	390.44
P30	434.21
P25	487.68
P20	554.86
P15	650.72
P10	795.08
P5	1,073.00
P0	2,499.39

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



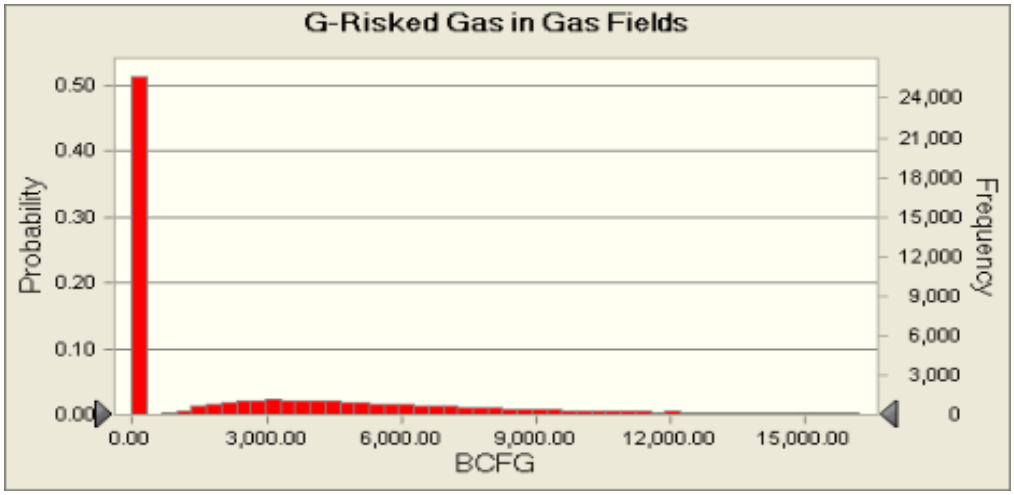
Statistics:	Forecast values	
Trials	50,000	
Mean	0.4873	= the probability of at least one undiscovered oil accumulation of minimum size or larger
Median	0.00	
Mode	0.00	
Standard Deviation	0.50	
Variance	0.25	
Skewness	0.0510	
Kurtosis	1.00	
Coefficient of Variability	1.03	
Minimum	0.00	
Maximum	1.00	
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	1.00
P40	1.00
P35	1.00
P30	1.00
P25	1.00
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 48,701.10
After 50,000 trials, the standard error of the mean is 20.71



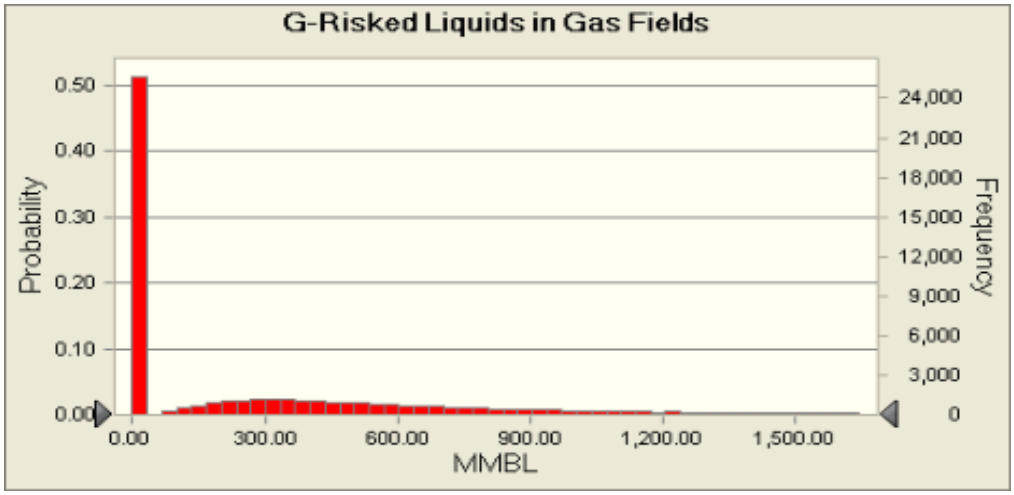
Statistics:	Forecast values
Trials	50,000
Mean	3,206.45
Median	0.00
Mode	0.00
Standard Deviation	4,631.31
Variance	21,448,993.48
Skewness	2.03
Kurtosis	8.62
Coefficient of Variability	1.44
Minimum	0.00
Maximum	48,701.10
Range Width	48,701.10
Mean Standard Error	20.71

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	1,979.64
P40	2,812.43
P35	3,560.82
P30	4,322.38
P25	5,185.41
P20	6,226.28
P15	7,517.50
P10	9,290.94
P5	12,488.54
P0	48,701.10

Forecast: G-Risked Liquids in Gas Fields

Summary:
Entire range is from 0.00 to 5,926.14
After 50,000 trials, the standard error of the mean is 2.11



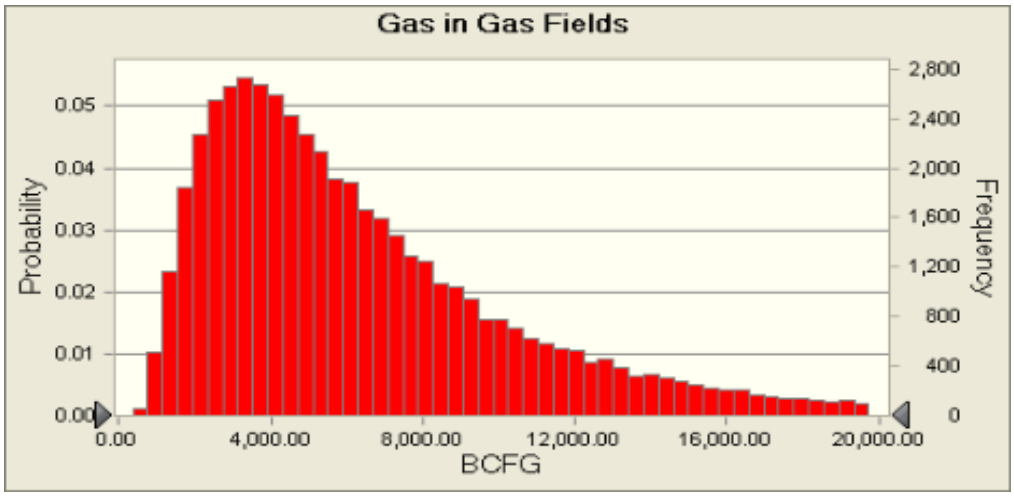
Statistics:	Forecast values
Trials	50,000
Mean	317.40
Median	0.00
Mode	0.00
Standard Deviation	472.30
Variance	223,067.38
Skewness	2.22
Kurtosis	10.09
Coefficient of Variability	1.49
Minimum	0.00
Maximum	5,926.14
Range Width	5,926.14
Mean Standard Error	2.11

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	181.59
P40	262.59
P35	337.05
P30	414.44
P25	502.68
P20	607.65
P15	744.21
P10	931.76
P5	1,251.14
P0	5,926.14

Forecast: Conditional Gas in Gas Fields

Summary:
Entire range is from 360.34 to 48,701.10
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 20.96



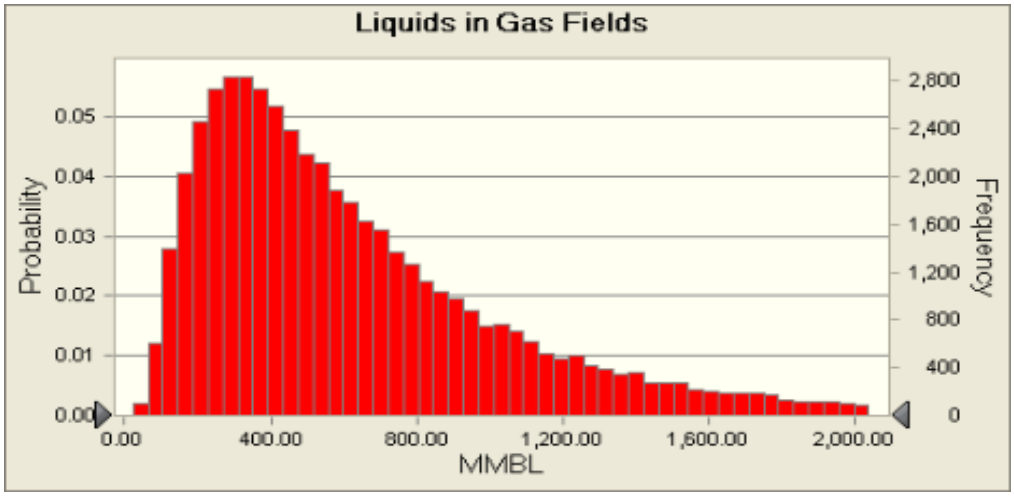
Statistics:	Forecast values
Trials	50,000
Mean	6,615.03
Median	5,335.62
Mode	---
Standard Deviation	4,687.25
Variance	21,970,283.27
Skewness	1.82
Kurtosis	7.89
Coefficient of Variability	0.7086
Minimum	360.34
Maximum	48,701.10
Range Width	48,340.76
Mean Standard Error	20.96

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

Percentiles:	BCFG
P100	360.34
P95	1,725.44
P90	2,190.23
P85	2,594.95
P80	2,973.43
P75	3,336.12
P70	3,700.56
P65	4,079.16
P60	4,466.65
P55	4,884.41
P50	5,335.61
P45	5,837.38
P40	6,370.01
P35	6,983.41
P30	7,677.20
P25	8,500.08
P20	9,491.03
P15	10,847.22
P10	12,720.62
P5	15,911.42
P0	48,701.10

Forecast: Conditional Liquids in Gas Fields

Summary:
Entire range is from 22.61 to 5,926.14
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 2.21



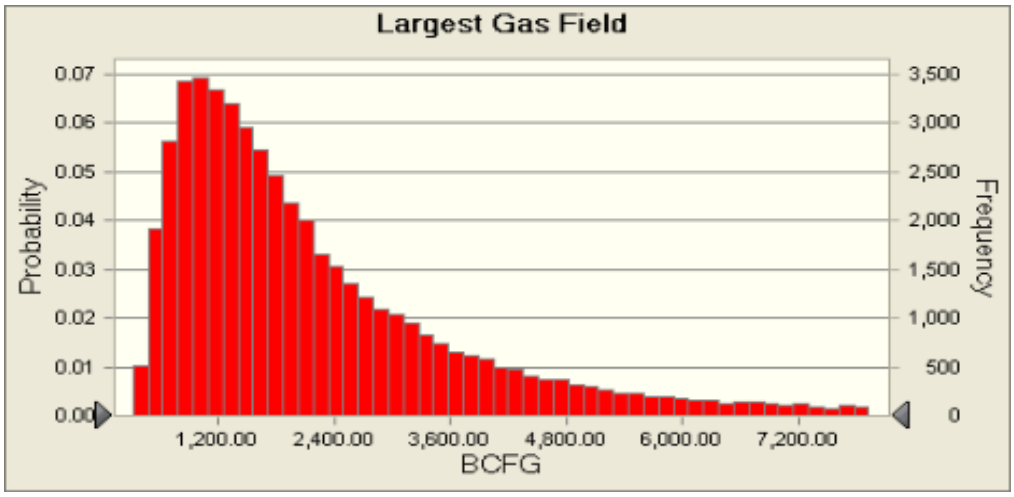
Statistics:	Forecast values
Trials	50,000
Mean	654.80
Median	518.30
Mode	---
Standard Deviation	493.46
Variance	243,501.50
Skewness	2.00
Kurtosis	9.12
Coefficient of Variability	0.7536
Minimum	22.61
Maximum	5,926.14
Range Width	5,903.53
Mean Standard Error	2.21

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

Percentiles:	MMBL
P100	22.61
P95	154.64
P90	202.11
P85	241.93
P80	279.54
P75	315.85
P70	351.91
P65	389.72
P60	429.00
P55	471.73
P50	518.29
P45	567.61
P40	623.93
P35	685.80
P30	756.20
P25	842.02
P20	947.01
P15	1,082.59
P10	1,278.14
P5	1,626.37
P0	5,926.14

Forecast: Largest Gas Field

Summary:
Entire range is from 321.63 to 14,951.95
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 8.85



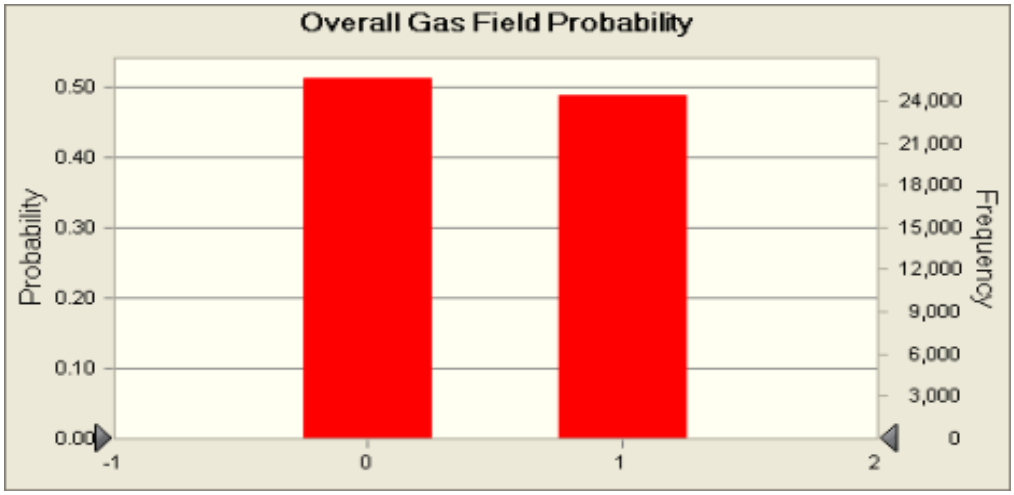
Statistics:	Forecast values
Trials	50,000
Mean	2,381.27
Median	1,761.72
Mode	---
Standard Deviation	1,978.15
Variance	3,913,082.47
Skewness	2.39
Kurtosis	10.44
Coefficient of Variability	0.8307
Minimum	321.63
Maximum	14,951.95
Range Width	14,630.33
Mean Standard Error	8.85

Forecast: Largest Gas Field (cont'd)

Percentiles:	BCFG
P100	321.63
P95	635.96
P90	774.25
P85	889.12
P80	1,004.28
P75	1,114.85
P70	1,231.84
P65	1,351.12
P60	1,477.75
P55	1,613.14
P50	1,761.71
P45	1,923.70
P40	2,111.99
P35	2,330.32
P30	2,593.10
P25	2,919.49
P20	3,316.36
P15	3,867.13
P10	4,696.53
P5	6,385.82
P0	14,951.95

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	0.4873	= the probability of at least one undiscovered gas accumulation of minimum size or larger
Median	0.00	
Mode	0.00	
Standard Deviation	0.50	
Variance	0.25	
Skewness	0.0510	
Kurtosis	1.00	
Coefficient of Variability	1.03	
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	1.00
P40	1.00
P35	1.00
P30	1.00
P25	1.00
P20	1.00
P15	1.00
P10	1.00
P5	1.00
P0	1.00

End of Forecasts

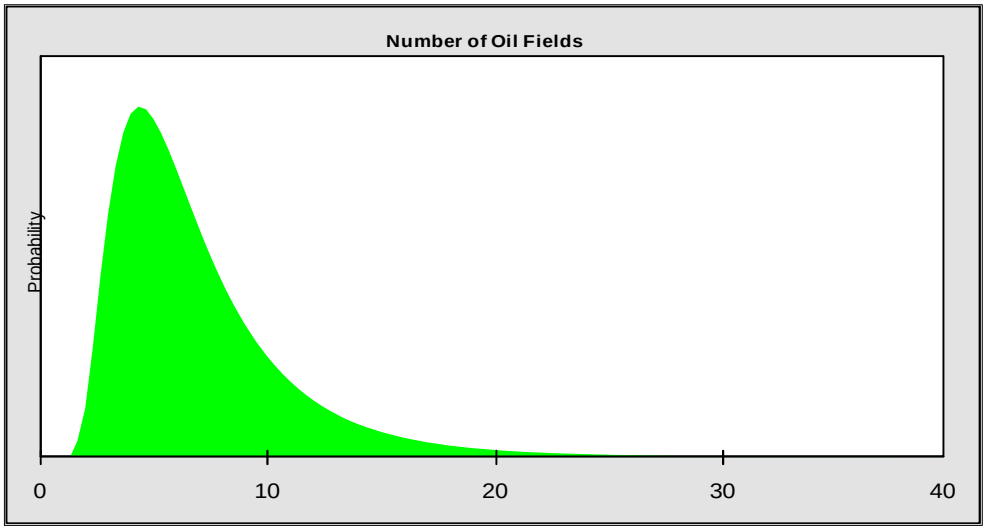
Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:

Mean	7.06
Standard Deviation	4.15

Selected range is from 1.00 to 35.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	7.02	7.03
Median	6.00	6.00
Mode	---	---
Standard Deviation	3.99	4.00
Variance	15.90	15.98
Skewness	1.90	1.91
Kurtosis	8.42	8.48
Coefficient of Variability	0.5678	0.5690
Minimum	1.40	1.00
Maximum	34.96	35.00
Range Width	33.56	34.00
Mean Standard Error	0.02	---

Assumption: Number of Oil Fields (cont'd)

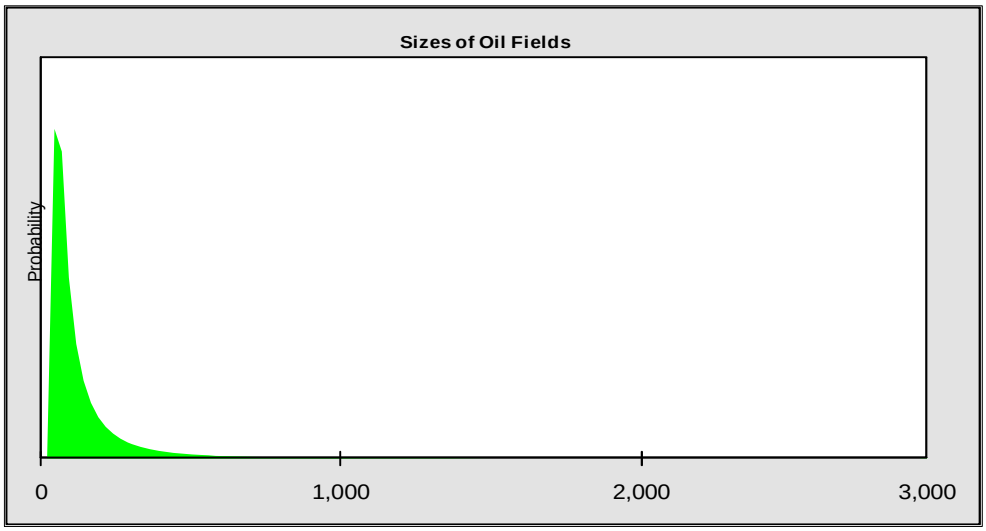
Percentiles:	Simulated values	Theoretical values
P100	1.40	1.00
P95	2.79	2.80
P90	3.25	3.26
P85	3.62	3.63
P80	3.96	3.97
P75	4.28	4.29
P70	4.61	4.61
P65	4.94	4.93
P60	5.27	5.27
P55	5.62	5.62
P50	6.00	6.00
P45	6.41	6.40
P40	6.87	6.85
P35	7.38	7.34
P30	7.93	7.91
P25	8.59	8.59
P20	9.41	9.41
P15	10.48	10.49
P10	11.98	12.04
P5	14.78	14.79
P0	34.96	35.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	160.52
Standard Deviation	217.86

Selected range is from 50.00 to 2,500.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	155.26	156.91
Median	99.36	99.92
Mode	---	---
Standard Deviation	173.27	177.05
Variance	30,022.55	31,345.39
Skewness	4.92	4.94
Kurtosis	38.86	38.86
Coefficient of Variability	1.12	1.13
Minimum	50.29	50.00
Maximum	2,499.39	2,500.00
Range Width	2,449.10	2,450.00
Mean Standard Error	0.77	---

Assumption: Sizes of Oil Fields (cont'd)

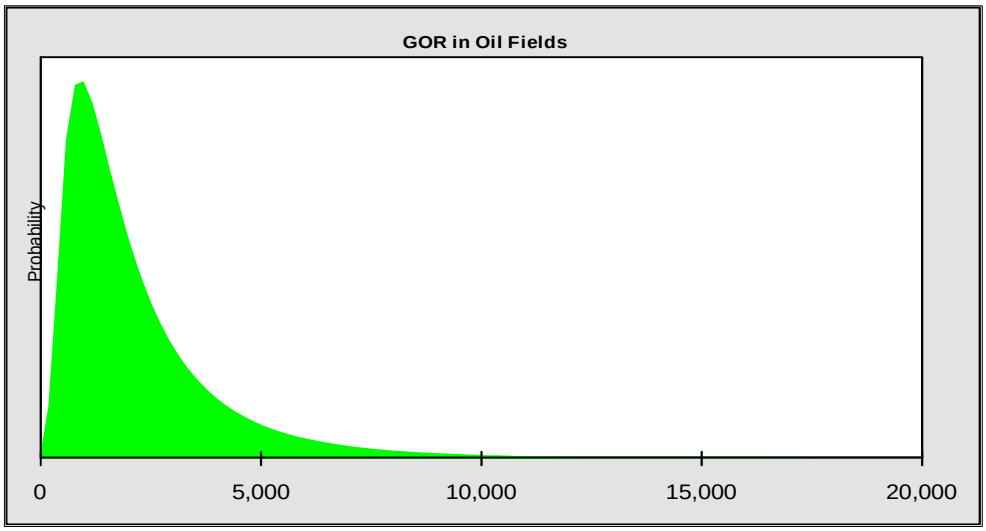
Percentiles:	Simulated values	Theoretical values
P100	50.29	50.00
P95	56.43	56.29
P90	60.00	59.95
P85	63.60	63.54
P80	67.22	67.31
P75	71.31	71.36
P70	75.68	75.80
P65	80.56	80.74
P60	85.98	86.29
P55	92.05	92.62
P50	99.36	99.92
P45	107.89	108.47
P40	117.67	118.66
P35	129.60	131.05
P30	145.18	146.54
P25	164.71	166.58
P20	191.30	193.80
P15	229.94	233.61
P10	296.89	299.56
P5	434.36	442.36
P0	2,499.39	2,500.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:

Mean	2,234.61
Standard Deviation	2,178.68

Selected range is from 0.00 to 20,000.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	2,222.61	2,211.05
Median	1,602.76	1,598.36
Mode	---	---
Standard Deviation	2,053.67	2,037.56
Variance	4,217,540.52	4,151,659.72
Skewness	2.71	2.70
Kurtosis	14.07	14.02
Coefficient of Variability	0.9240	0.9215
Minimum	57.41	0.00
Maximum	19,925.73	20,000.00
Range Width	19,868.31	20,000.00
Mean Standard Error	9.18	---

Assumption: GOR in Oil Fields (cont'd)

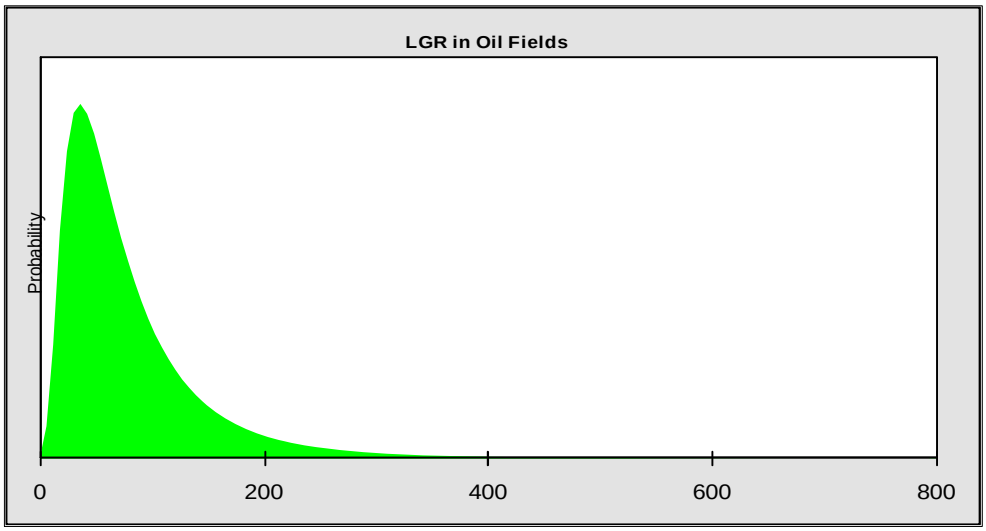
Percentiles:	Simulated values	Theoretical values
P100	57.41	0.00
P95	420.85	416.91
P90	563.63	561.03
P85	690.69	685.44
P80	809.65	803.71
P75	928.81	921.31
P70	1,048.31	1,041.50
P65	1,171.13	1,166.81
P60	1,305.22	1,299.62
P55	1,444.24	1,442.47
P50	1,602.75	1,598.36
P45	1,779.35	1,771.07
P40	1,970.60	1,965.64
P35	2,196.31	2,189.18
P30	2,463.23	2,452.23
P25	2,782.83	2,771.52
P20	3,177.43	3,175.93
P15	3,725.31	3,721.75
P10	4,564.40	4,541.91
P5	6,151.61	6,092.20
P0	19,925.73	20,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:

Mean	79.20
Standard Deviation	68.24

Selected range is from 0.00 to 600.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	78.75	78.53
Median	59.88	59.94
Mode	---	---
Standard Deviation	64.79	64.61
Variance	4,197.19	4,174.99
Skewness	2.39	2.40
Kurtosis	11.73	11.68
Coefficient of Variability	0.8227	0.8228
Minimum	2.16	0.00
Maximum	598.85	600.00
Range Width	596.70	600.00
Mean Standard Error	0.29	---

Assumption: LGR in Oil Fields (cont'd)

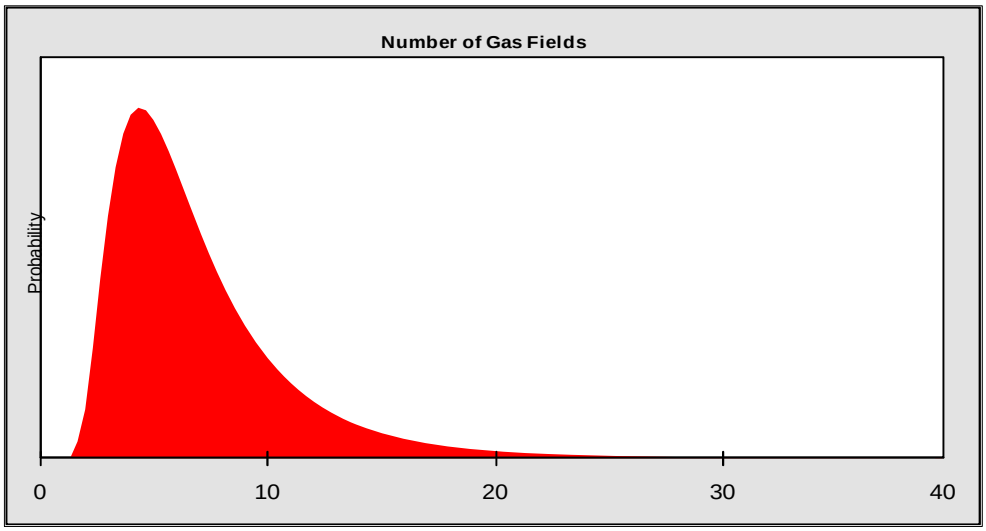
Percentiles:	Simulated values	Theoretical values
P100	2.16	0.00
P95	17.58	17.61
P90	23.10	23.08
P85	27.82	27.70
P80	32.09	32.03
P75	36.34	36.28
P70	40.64	40.57
P65	45.11	44.99
P60	49.77	49.64
P55	54.58	54.59
P50	59.88	59.94
P45	66.05	65.82
P40	72.52	72.38
P35	80.20	79.85
P30	88.83	88.55
P25	99.58	99.01
P20	112.57	112.10
P15	130.35	129.54
P10	155.58	155.32
P5	203.74	203.00
P0	598.85	600.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:

Mean	7.06
Standard Deviation	4.15

Selected range is from 1.00 to 35.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	7.04	7.03
Median	6.02	6.00
Mode	---	---
Standard Deviation	4.00	4.00
Variance	15.99	15.98
Skewness	1.92	1.91
Kurtosis	8.61	8.48
Coefficient of Variability	0.5679	0.5690
Minimum	1.26	1.00
Maximum	34.76	35.00
Range Width	33.50	34.00
Mean Standard Error	0.02	---

Assumption: Number of Gas Fields (cont'd)

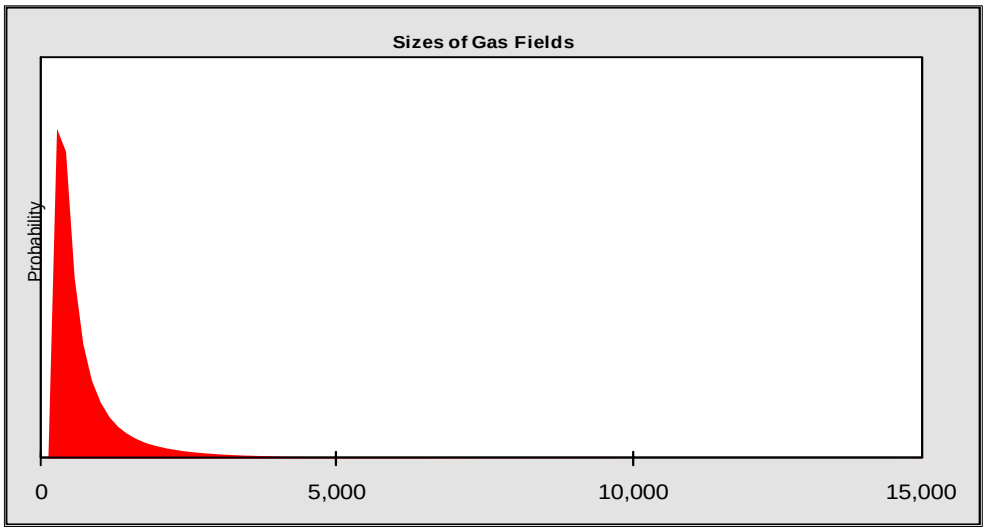
Percentiles:	Simulated values	Theoretical values
P100	1.26	1.00
P95	2.81	2.80
P90	3.26	3.26
P85	3.63	3.63
P80	3.96	3.97
P75	4.30	4.29
P70	4.62	4.61
P65	4.95	4.93
P60	5.29	5.27
P55	5.64	5.62
P50	6.02	6.00
P45	6.43	6.40
P40	6.88	6.85
P35	7.38	7.34
P30	7.94	7.91
P25	8.60	8.59
P20	9.41	9.41
P15	10.52	10.49
P10	12.05	12.04
P5	14.76	14.79
P0	34.76	35.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:

Mean	963.11
Standard Deviation	1,307.13

Selected range is from 300.00 to 15,000.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	938.55	941.47
Median	595.61	599.53
Mode	---	---
Standard Deviation	1,046.72	1,062.28
Variance	1,095,616.70	1,128,433.91
Skewness	4.81	4.94
Kurtosis	37.14	38.86
Coefficient of Variability	1.12	1.13
Minimum	301.73	300.00
Maximum	14,932.27	15,000.00
Range Width	14,630.55	14,700.00
Mean Standard Error	4.68	---

Assumption: Sizes of Gas Fields (cont'd)

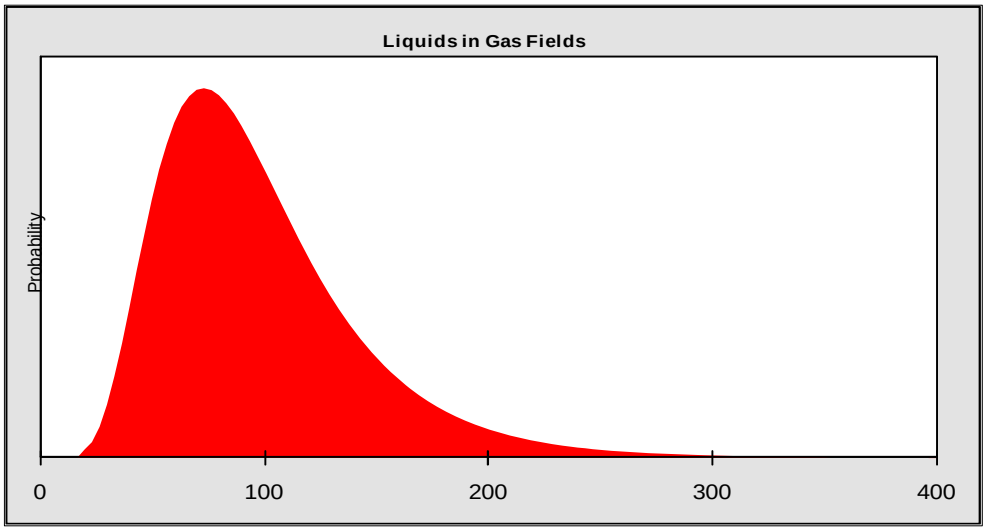
Percentiles:	Simulated values	Theoretical values
P100	301.73	300.00
P95	338.64	337.77
P90	360.61	359.68
P85	380.84	381.26
P80	403.00	403.84
P75	427.22	428.16
P70	452.52	454.81
P65	481.69	484.43
P60	514.80	517.76
P55	552.34	555.72
P50	595.60	599.53
P45	646.84	650.83
P40	709.74	711.95
P35	785.37	786.33
P30	879.13	879.24
P25	1,002.01	999.47
P20	1,166.70	1,162.81
P15	1,409.78	1,401.66
P10	1,798.38	1,797.33
P5	2,665.69	2,654.15
P0	14,932.27	15,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:

Mean	99.13
Standard Deviation	45.76

Selected range is from 0.00 to 350.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	99.38	98.83
Median	90.41	89.95
Mode	---	---
Standard Deviation	45.23	44.77
Variance	2,045.83	2,004.01
Skewness	1.26	1.28
Kurtosis	5.26	5.40
Coefficient of Variability	0.4551	0.4530
Minimum	16.24	0.00
Maximum	349.99	350.00
Range Width	333.76	350.00
Mean Standard Error	0.20	---

Assumption: Liquids in Gas Fields (cont'd)

Percentiles:	Simulated values	Theoretical values
P100	16.24	0.00
P95	43.66	43.67
P90	51.29	51.23
P85	56.99	57.05
P80	62.18	62.15
P75	66.78	66.89
P70	71.60	71.45
P65	76.16	75.95
P60	80.87	80.48
P55	85.55	85.12
P50	90.41	89.95
P45	95.74	95.05
P40	101.23	100.53
P35	107.34	106.53
P30	113.80	113.23
P25	121.69	120.93
P20	131.12	130.12
P15	142.96	141.70
P10	159.28	157.72
P5	185.99	184.70
P0	349.99	350.00

End of Assumptions

Simulation started on 8/8/2007 at 10:10:51
Simulation stopped on 8/8/2007 at 10:33:23