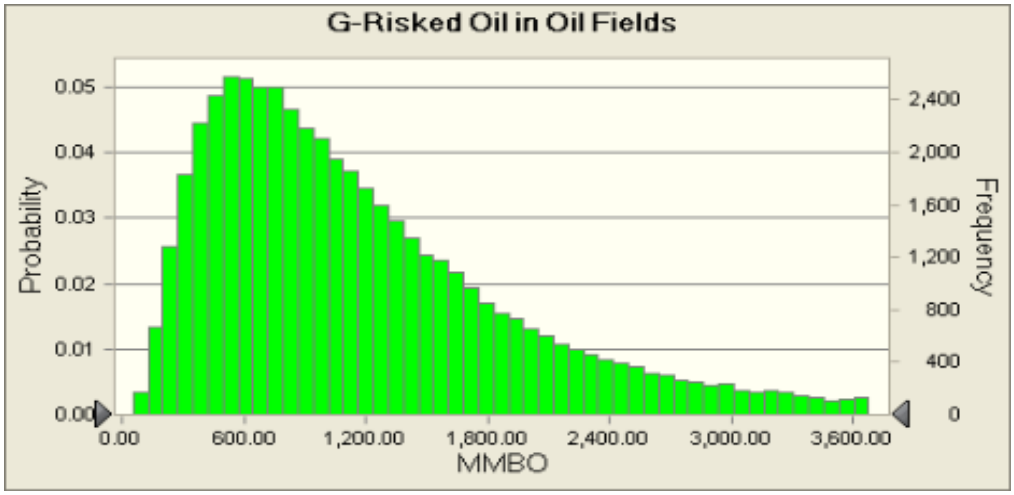
40170104
Arctic Norwegian Sea
Monte Carlo Results

Forecast: G-Risked Oil in Oil Fields

Summary:
Entire range is from 52.42 to 8,876.11
After 50,000 trials, the standard error of the mean is 3.91



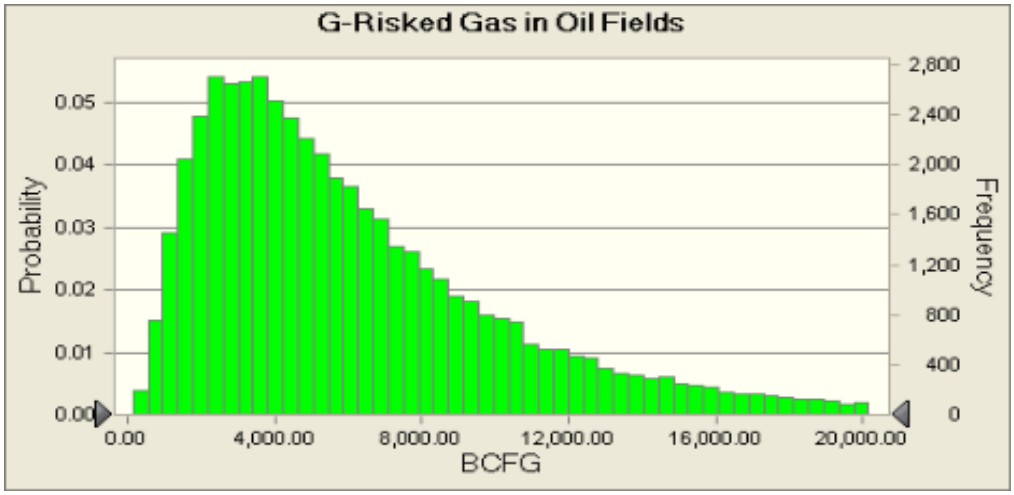
Statistics:	Forecast values
Trials	50,000
Mean	1,227.50
Median	1,000.21
Mode	---
Standard Deviation	875.36
Variance	766,251.89
Skewness	1.74
Kurtosis	7.52
Coefficient of Variability	0.7131
Minimum	52.42
Maximum	8,876.11
Range Width	8,823.69
Mean Standard Error	3.91

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

Percentiles:	MMBO
P100	52.42
P95	290.31
P90	383.38
P85	462.76
P80	535.40
P75	608.73
P70	682.01
P65	754.74
P60	832.06
P55	913.25
P50	1,000.21
P45	1,096.58
P40	1,198.09
P35	1,310.74
P30	1,441.31
P25	1,593.32
P20	1,775.34
P15	2,020.73
P10	2,368.89
P5	2,971.10
P0	8,876.11

Forecast: G-Risked Gas in Oil Fields

Summary:
Entire range is from 111.15 to 76,558.55
After 50,000 trials, the standard error of the mean is 21.99



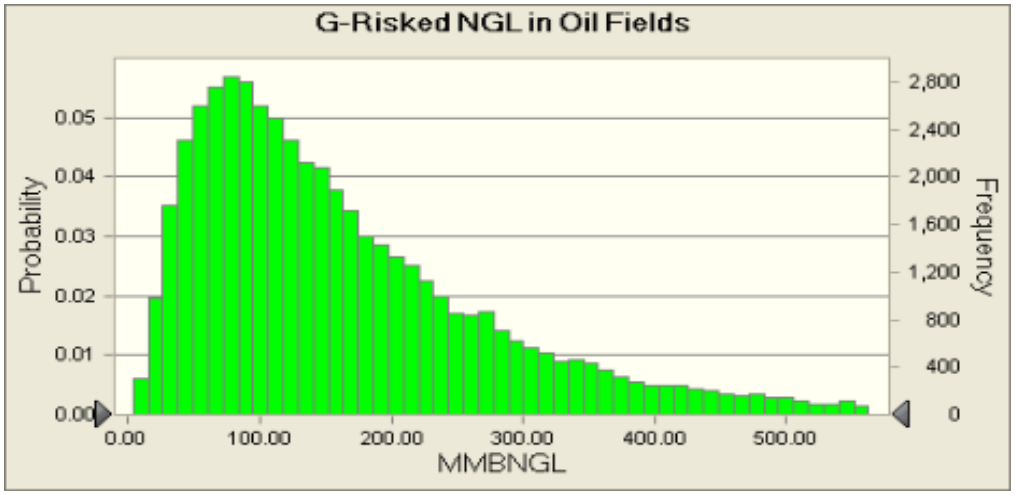
Statistics:	Forecast values
Trials	50,000
Mean	6,409.11
Median	5,089.00
Mode	---
Standard Deviation	4,916.87
Variance	24,175,619.96
Skewness	2.02
Kurtosis	9.78
Coefficient of Variability	0.7672
Minimum	111.15
Maximum	76,558.55
Range Width	76,447.40
Mean Standard Error	21.99

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

Percentiles:	BCFG
P100	111.15
P95	1,359.75
P90	1,845.25
P85	2,262.94
P80	2,636.98
P75	3,026.86
P70	3,411.13
P65	3,788.14
P60	4,193.41
P55	4,628.35
P50	5,088.86
P45	5,600.90
P40	6,149.43
P35	6,766.48
P30	7,478.34
P25	8,303.87
P20	9,323.64
P15	10,624.81
P10	12,573.16
P5	15,963.81
P0	76,558.55

Forecast: G-Risked NGL in Oil Fields

Summary:
Entire range is from 3.07 to 2,495.13
After 50,000 trials, the standard error of the mean is 0.62



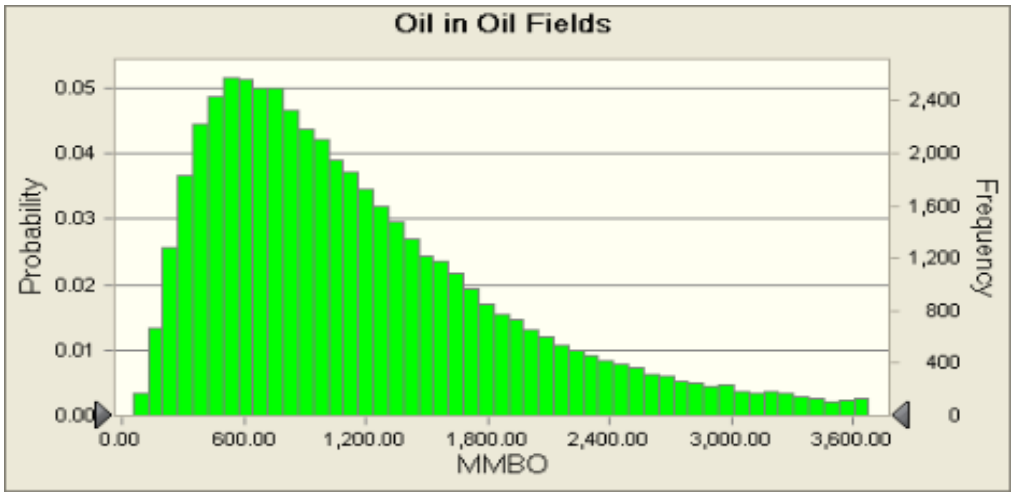
Statistics:	Forecast values
Trials	50,000
Mean	173.18
Median	135.53
Mode	---
Standard Deviation	139.32
Variance	19,411.44
Skewness	2.28
Kurtosis	12.77
Coefficient of Variability	0.8045
Minimum	3.07
Maximum	2,495.13
Range Width	2,492.06
Mean Standard Error	0.62

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

Percentiles:	MMBNGL
P100	3.07
P95	34.26
P90	47.15
P85	58.26
P80	68.68
P75	78.77
P70	88.89
P65	99.51
P60	110.59
P55	122.48
P50	135.53
P45	148.98
P40	164.11
P35	181.30
P30	201.35
P25	224.13
P20	253.88
P15	289.62
P10	344.31
P5	441.65
P0	2,495.13

Forecast: Conditional Oil in Oil Fields

Summary:
Entire range is from 52.42 to 8,876.11
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 3.91



Statistics:	Forecast values
Trials	50,000
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Median	1,000.21
Mode	---
Standard Deviation	875.36
Variance	766,251.89
Skewness	1.74
Kurtosis	7.52
Coefficient of Variability	0.7131
Minimum	52.42
Maximum	8,876.11
Range Width	8,823.69
Mean Standard Error	3.91

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

Percentiles:	MMBO
P100	52.42
P95	290.31
P90	383.38
P85	462.76
P80	535.40
P75	608.73
P70	682.01
P65	754.74
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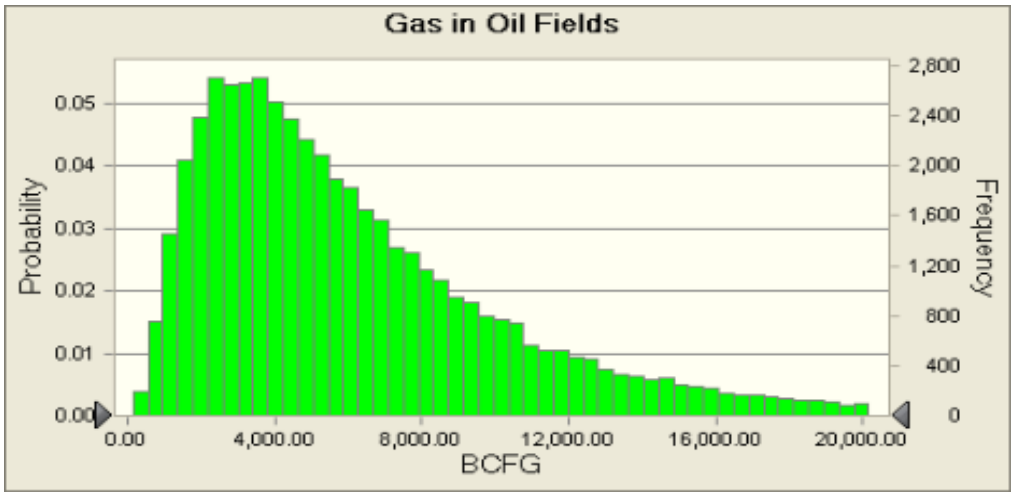
P35	1,310.74
P30	1,441.31
P25	1,593.32
P20	1,775.34
P15	2,020.73
P10	2,368.89
P5	2,971.10
P0	8,876.11

Forecast: Conditional Gas in Oil Fields

Summary:
Entire range is from 111.15 to 76,558.55
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 21.99



Statistics:	Forecast values
Trials	50,000
Mean	6,409.11
Median	5,089.00
Mode	---
Standard Deviation	4,916.87
Variance	24,175,619.96
Skewness	2.02
Kurtosis	9.78
Coefficient of Variability	0.7672
Minimum	111.15
Maximum	76,558.55
Range Width	76,447.40
Mean Standard Error	21.99

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

Percentiles:	BCFG
P100	111.15
P95	1,359.75
P90	1,845.25
P85	2,262.94
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P65	3,788.14
P60	4,193.41
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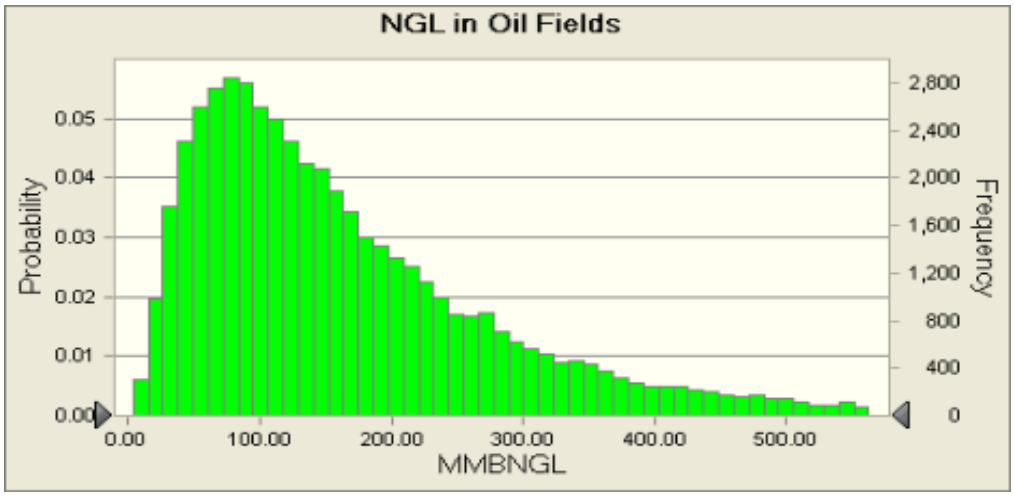
P50	5,088.86
P45	5,600.90
P40	6,149.43
P35	6,766.48
P30	7,478.34
P25	8,303.87
P20	9,323.64
P15	10,624.81
P10	12,573.16
P5	15,963.81
P0	76,558.55

Forecast: Conditional NGL in Oil Fields

Summary:
Entire range is from 3.07 to 2,495.13
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.62



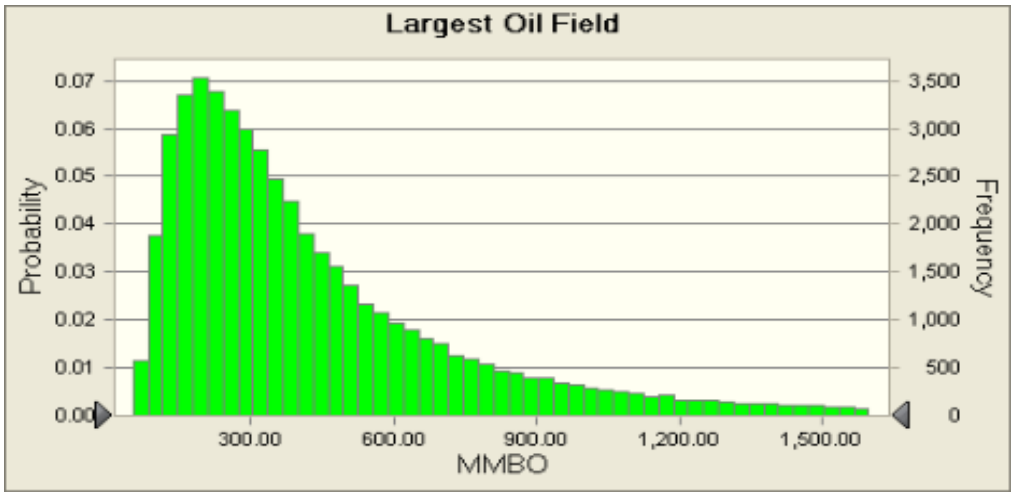
Statistics:	Forecast values
Trials	50,000
Mean	173.18
Median	135.53
Mode	---
Standard Deviation	139.32
Variance	19,411.44
Skewness	2.28
Kurtosis	12.77
Coefficient of Variability	0.8045
Minimum	3.07
Maximum	2,495.13
Range Width	2,492.06
Mean Standard Error	0.62

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

Percentiles:	MMBNGL
P100	3.07
P95	34.26
P90	47.15
P85	58.26
P80	68.68
P75	78.77
P70	88.89
P65	99.51
P60	110.59
P55	122.48
P50	135.53
P45	148.98
P40	164.11
P35	181.30
P30	201.35
P25	224.13
P20	253.88
P15	289.62
P10	344.31
P5	441.65
P0	2,495.13

Forecast: Largest Oil Field

Summary:
Entire range is from 52.42 to 2,999.96
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.80



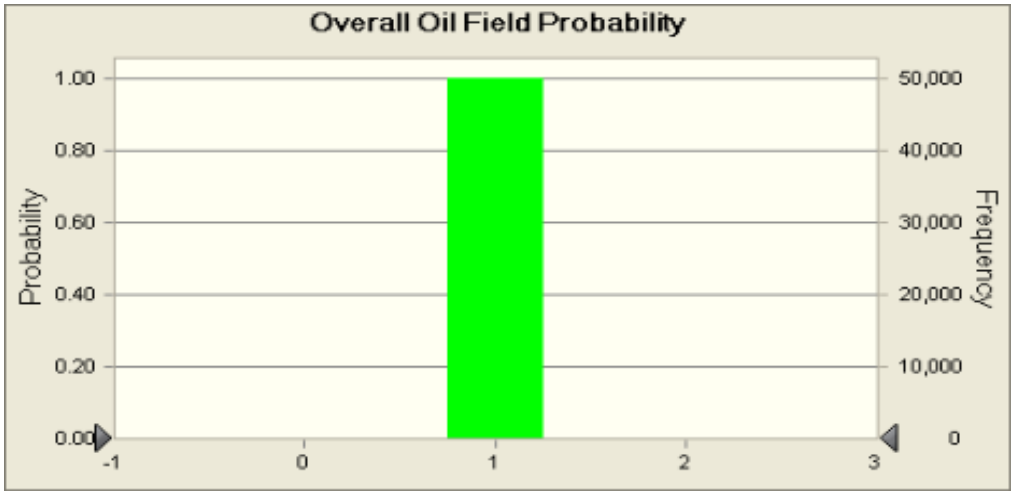
Statistics:	Forecast values
Trials	50,000
Mean	467.25
Median	340.51
Mode	---
Standard Deviation	403.25
Variance	162,608.94
Skewness	2.45
Kurtosis	10.85
Coefficient of Variability	0.8630
Minimum	52.42
Maximum	2,999.96
Range Width	2,947.53
Mean Standard Error	1.80

Forecast: Largest Oil Field (cont'd)

Percentiles:	MMBO
P100	52.42
P95	116.01
P90	143.13
P85	167.51
P80	189.88
P75	211.88
P70	235.21
P65	259.64
P60	284.61
P55	311.41
P50	340.50
P45	372.84
P40	409.77
P35	453.85
P30	504.73
P25	570.66
P20	653.75
P15	766.48
P10	938.92
P5	1,274.71
P0	2,999.96

Forecast: Overall Oil Field Probability

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



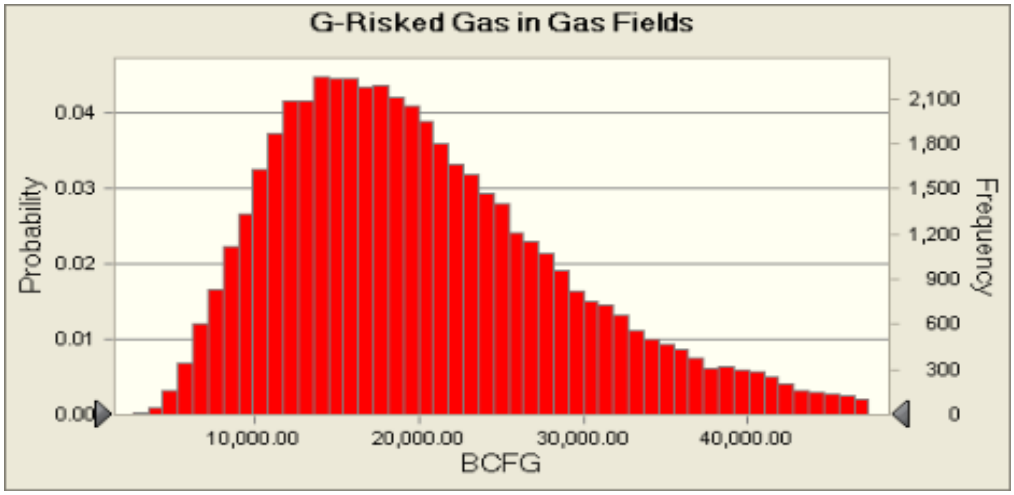
Statistics:	Forecast values	
Trials	50,000	
Mean	1.0000	= the probability of at least one undiscovered oil accumulation of minimum size or larger
Median	1.00	
Mode	1.00	
Standard Deviation	0.00	
Variance	0.00	
Skewness	---	
Kurtosis	---	
Coefficient of Variability	0.00	
Minimum	1.00	
Maximum	1.00	
Range Width	0.00	
Mean Standard Error	0.00	

Forecast: Overall Oil Field Probability (cont'd)

Percentiles:	Forecast values
P100	1.00
P95	1.00
P90	1.00
P85	1.00
P80	1.00
P75	1.00
P70	1.00
P65	1.00
P60	1.00
P55	1.00
P50	1.00
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 2,592.64 to 82,609.14
After 50,000 trials, the standard error of the mean is 42.66



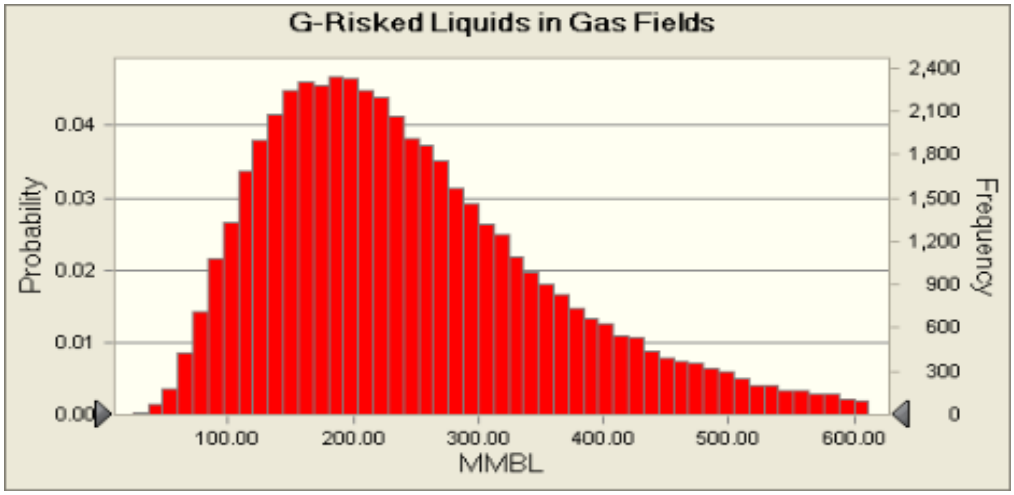
Statistics:	Forecast values
Trials	50,000
Mean	20,645.68
Median	18,901.13
Mode	---
Standard Deviation	9,539.94
Variance	91,010,500.57
Skewness	1.13
Kurtosis	4.88
Coefficient of Variability	0.4621
Minimum	2,592.64
Maximum	82,609.14
Range Width	80,016.50
Mean Standard Error	42.66

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

Percentiles:	BCFG
P100	2,592.64
P95	8,522.54
P90	10,210.04
P85	11,524.88
P80	12,630.65
P75	13,699.57
P70	14,729.72
P65	15,760.82
P60	16,796.01
P55	17,840.28
P50	18,901.05
P45	20,012.41
P40	21,208.20
P35	22,545.95
P30	23,991.52
P25	25,593.32
P20	27,600.64
P15	30,057.02
P10	33,423.73
P5	39,094.37
P0	82,609.14

Forecast: G-Risked Liquids in Gas Fields

Summary:
Entire range is from 23.85 to 1,425.42
After 50,000 trials, the standard error of the mean is 0.58



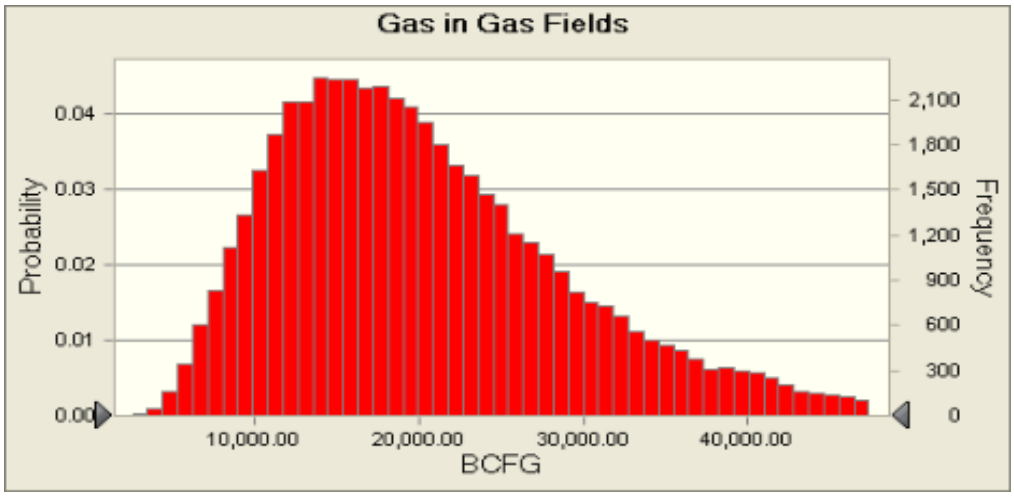
Statistics:	Forecast values
Trials	50,000
Mean	251.66
Median	225.56
Mode	---
Standard Deviation	128.59
Variance	16,536.23
Skewness	1.42
Kurtosis	6.46
Coefficient of Variability	0.5110
Minimum	23.85
Maximum	1,425.42
Range Width	1,401.57
Mean Standard Error	0.58

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

Percentiles:	MMBL
P100	23.85
P95	95.95
P90	116.39
P85	132.45
P80	146.62
P75	159.88
P70	172.95
P65	185.68
P60	199.06
P55	212.10
P50	225.55
P45	240.09
P40	255.87
P35	272.30
P30	291.42
P25	313.23
P20	339.63
P15	373.71
P10	420.66
P5	496.89
P0	1,425.42

Forecast: Conditional Gas in Gas Fields

Summary:
Entire range is from 2,592.64 to 82,609.14
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 42.66



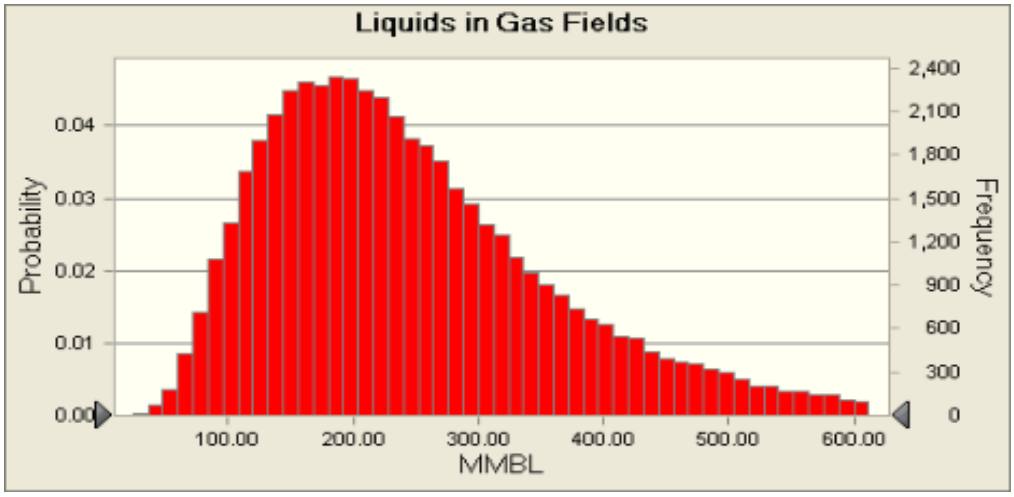
Statistics:	Forecast values
Trials	50,000
Mean	20,645.68
Median	18,901.13
Mode	---
Standard Deviation	9,539.94
Variance	91,010,500.57
Skewness	1.13
Kurtosis	4.88
Coefficient of Variability	0.4621
Minimum	2,592.64
Maximum	82,609.14
Range Width	80,016.50
Mean Standard Error	42.66

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

Percentiles:	BCFG
P100	2,592.64
P95	8,522.54
P90	10,210.04
P85	11,524.88
P80	12,630.65
P75	13,699.57
P70	14,729.72
P65	15,760.82
P60	16,796.01
P55	17,840.28
P50	18,901.05
P45	20,012.41
P40	21,208.20
P35	22,545.95
P30	23,991.52
P25	25,593.32
P20	27,600.64
P15	30,057.02
P10	33,423.73
P5	39,094.37
P0	82,609.14

Forecast: Conditional Liquids in Gas Fields

Summary:
Entire range is from 23.85 to 1,425.42
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.58



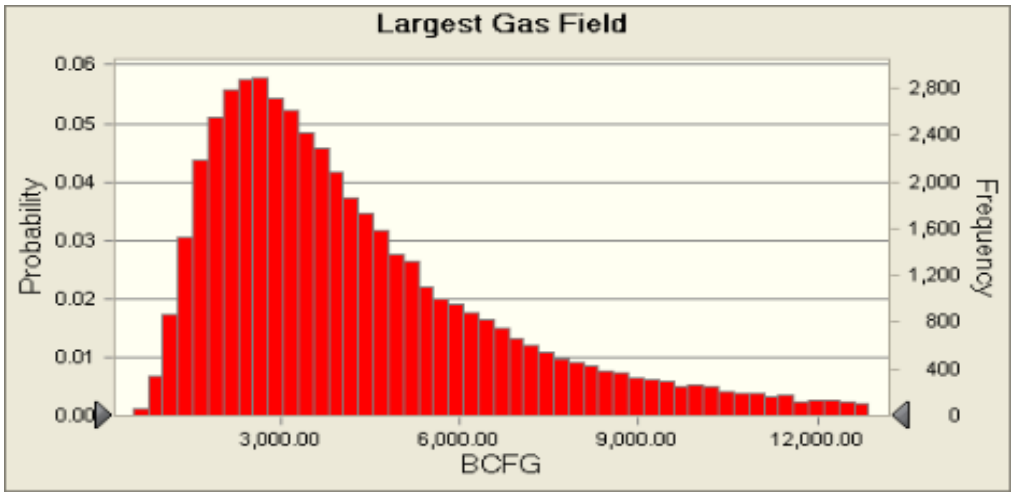
Statistics:	Forecast values
Trials	50,000
Mean	251.66
Median	225.56
Mode	---
Standard Deviation	128.59
Variance	16,536.23
Skewness	1.42
Kurtosis	6.46
Coefficient of Variability	0.5110
Minimum	23.85
Maximum	1,425.42
Range Width	1,401.57
Mean Standard Error	0.58

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

Percentiles:	MMBL
P100	23.85
P95	95.95
P90	116.39
P85	132.45
P80	146.62
P75	159.88
P70	172.95
P65	185.68
P60	199.06
P55	212.10
P50	225.55
P45	240.09
P40	255.87
P35	272.30
P30	291.42
P25	313.23
P20	339.63
P15	373.71
P10	420.66
P5	496.89
P0	1,425.42

Forecast: Largest Gas Field

Summary:
Entire range is from 518.70 to 17,980.95
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 13.30



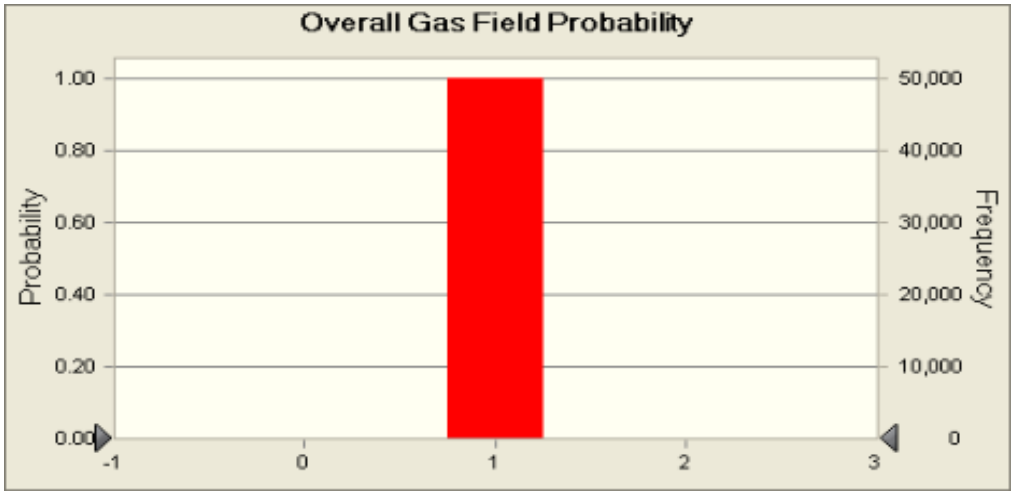
Statistics:	Forecast values
Trials	50,000
Mean	4,531.35
Median	3,661.23
Mode	---
Standard Deviation	2,973.59
Variance	8,842,245.56
Skewness	1.68
Kurtosis	6.13
Coefficient of Variability	0.6562
Minimum	518.70
Maximum	17,980.95
Range Width	17,462.25
Mean Standard Error	13.30

Forecast: Largest Gas Field (cont'd)

Percentiles:	BCFG
P100	518.70
P95	1,484.76
P90	1,780.93
P85	2,027.29
P80	2,252.99
P75	2,473.43
P70	2,692.58
P65	2,912.81
P60	3,152.42
P55	3,401.84
P50	3,661.19
P45	3,955.74
P40	4,284.95
P35	4,655.96
P30	5,100.18
P25	5,646.28
P20	6,316.16
P15	7,183.29
P10	8,521.00
P5	10,796.53
P0	17,980.95

Forecast: Overall Gas Field Probability

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



Statistics:	Forecast values	
Trials	50,000	
Mean	1.0000	= the probability of at least one undiscovered gas accumulation of minimum size or larger
Median	1.00	
Mode	1.00	
Standard Deviation	0.00	
Variance	0.00	
Skewness	---	
Kurtosis	---	
Coefficient of Variability	0.00	
Minimum	1.00	
Maximum	1.00	
Range Width	0.00	
Mean Standard Error	0.00	

Forecast: Overall Gas Field Probability (cont'd)

Percentiles:	Forecast values
P100	1.00
P95	1.00
P90	1.00
P85	1.00
P80	1.00
P75	1.00
P70	1.00
P65	1.00
P60	1.00
P55	1.00
P50	1.00
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

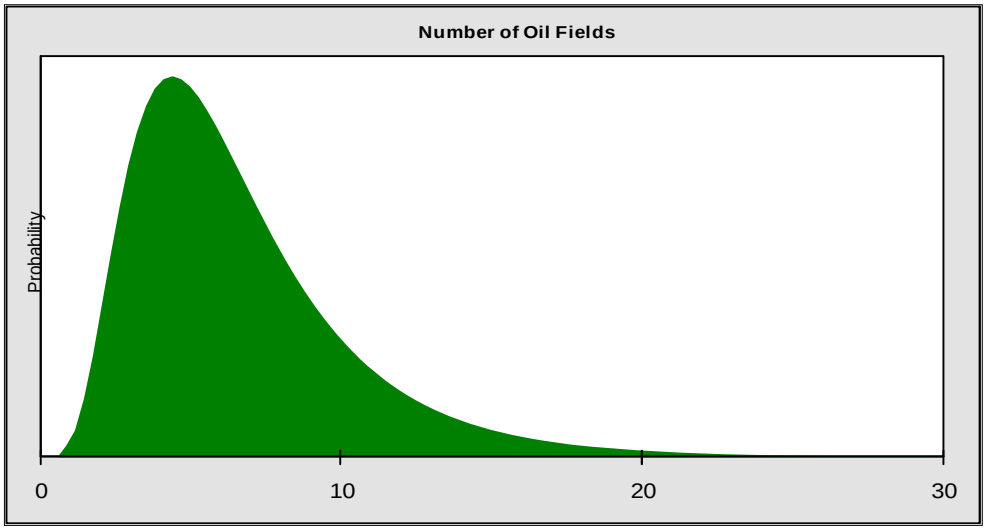
Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:

Mean	6.87
Standard Deviation	3.84

Selected range is from 0.00 to 30.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	6.85	6.84
Median	6.00	6.00
Mode	---	---
Standard Deviation	3.73	3.73
Variance	13.94	13.91
Skewness	1.57	1.55
Kurtosis	6.70	6.59
Coefficient of Variability	0.5448	0.5450
Minimum	0.69	0.00
Maximum	29.90	30.00
Range Width	29.21	30.00
Mean Standard Error	0.02	---

Assumption: Number of Oil Fields (cont'd)

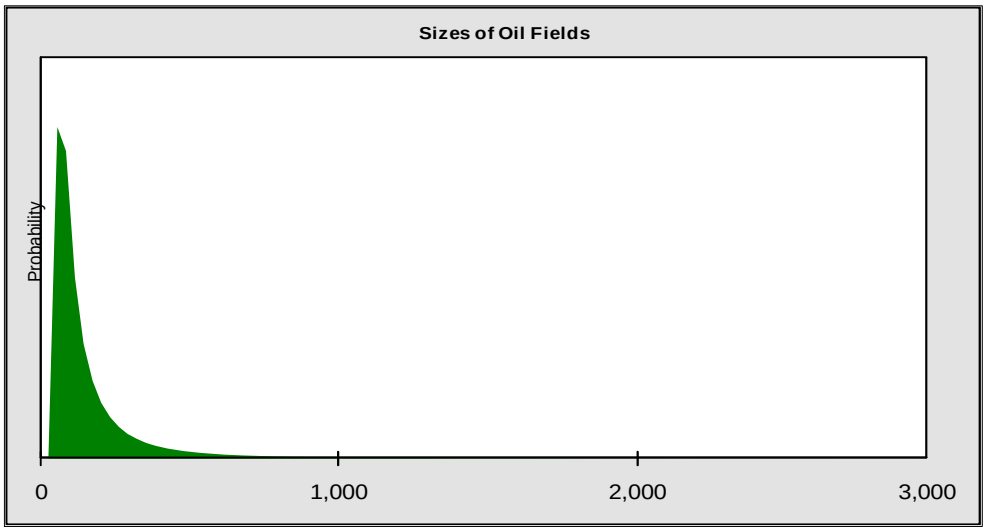
Percentiles:	Simulated values	Theoretical values
P100	0.69	0.00
P95	2.55	2.55
P90	3.08	3.08
P85	3.51	3.50
P80	3.88	3.87
P75	4.24	4.22
P70	4.59	4.56
P65	4.92	4.91
P60	5.27	5.26
P55	5.63	5.62
P50	6.00	6.00
P45	6.40	6.40
P40	6.85	6.84
P35	7.34	7.33
P30	7.89	7.88
P25	8.51	8.52
P20	9.29	9.29
P15	10.28	10.27
P10	11.67	11.67
P5	14.09	14.07
P0	29.90	30.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	182.81
Standard Deviation	262.24

Selected range is from 50.00 to 3,000.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	179.27	178.46
Median	110.34	109.91
Mode	---	---
Standard Deviation	217.00	213.01
Variance	47,089.48	45,372.12
Skewness	5.16	4.95
Kurtosis	41.96	38.95
Coefficient of Variability	1.21	1.19
Minimum	50.28	50.00
Maximum	2,997.68	3,000.00
Range Width	2,947.40	2,950.00
Mean Standard Error	0.97	---

Assumption: Sizes of Oil Fields (cont'd)

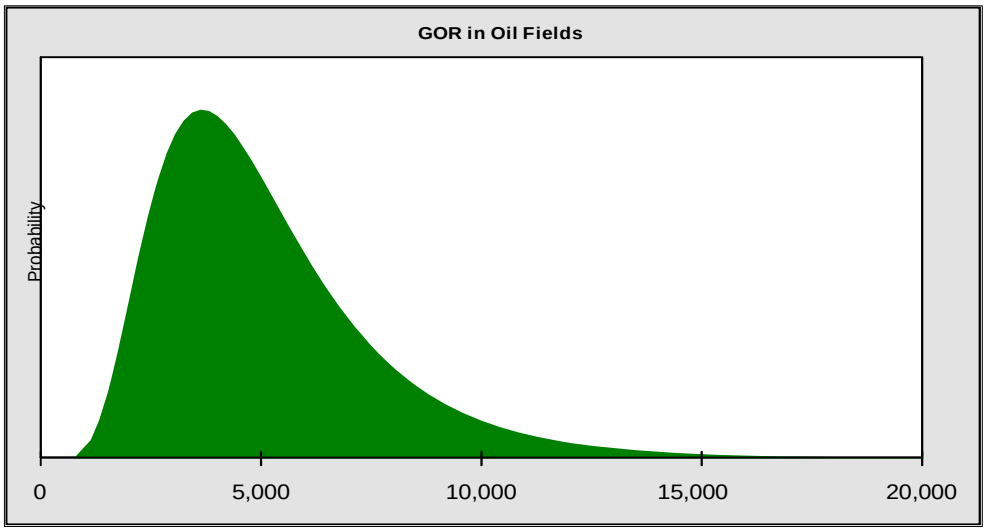
Percentiles:	Simulated values	Theoretical values
P100	50.28	50.00
P95	57.55	57.54
P90	61.90	61.92
P85	66.33	66.23
P80	70.81	70.75
P75	75.50	75.61
P70	80.86	80.94
P65	87.12	86.87
P60	93.77	93.54
P55	101.47	101.14
P50	110.33	109.91
P45	120.69	120.18
P40	133.06	132.41
P35	148.16	147.31
P30	167.19	165.92
P25	191.76	190.00
P20	224.24	222.72
P15	271.10	270.58
P10	350.27	349.89
P5	517.50	521.68
P0	2,997.68	3,000.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:

Mean	5,246.90
Standard Deviation	2,583.31

Selected range is from 100.00 to 20,000.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	5,226.77	5,229.13
Median	4,684.55	4,697.27
Mode	---	---
Standard Deviation	2,517.34	2,520.97
Variance	6,336,997.61	6,355,308.53
Skewness	1.39	1.39
Kurtosis	5.85	5.87
Coefficient of Variability	0.4816	0.4821
Minimum	805.09	100.00
Maximum	19,942.62	20,000.00
Range Width	19,137.53	19,900.00
Mean Standard Error	11.26	---

Assumption: GOR in Oil Fields (cont'd)

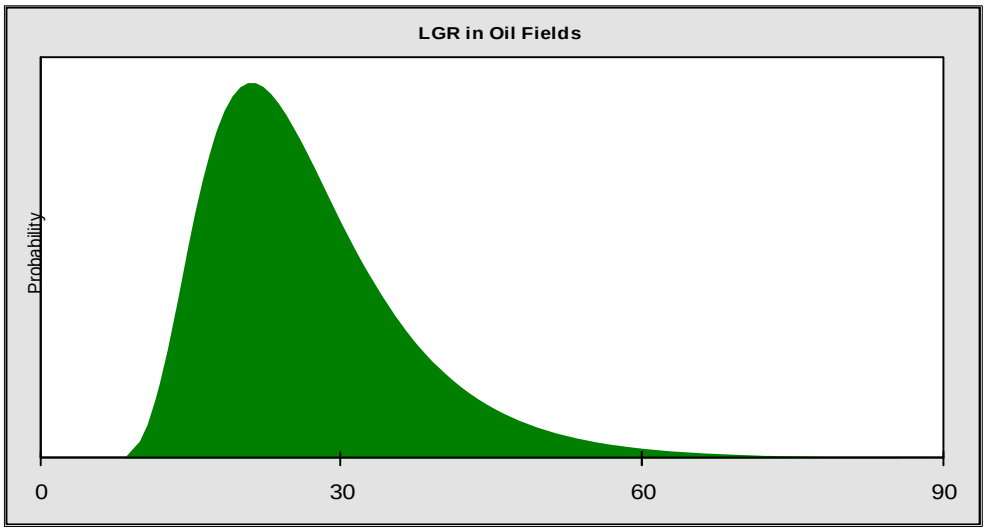
Percentiles:	Simulated values	Theoretical values
P100	805.09	100.00
P95	2,221.78	2,208.89
P90	2,611.58	2,605.10
P85	2,923.89	2,913.64
P80	3,190.54	3,185.73
P75	3,435.09	3,440.01
P70	3,683.14	3,686.15
P65	3,925.35	3,930.39
P60	4,165.28	4,177.48
P55	4,416.57	4,431.67
P50	4,684.52	4,697.27
P45	4,974.44	4,979.10
P40	5,271.68	5,283.12
P35	5,607.74	5,617.18
P30	5,989.08	5,992.43
P25	6,415.85	6,425.86
P20	6,946.91	6,945.78
P15	7,624.98	7,605.23
P10	8,535.33	8,524.03
P5	10,115.68	10,087.98
P0	19,942.62	20,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:

Mean	27.12
Standard Deviation	10.44

Selected range is from 5.00 to 85.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	27.05	27.05
Median	24.88	24.99
Mode	---	---
Standard Deviation	10.29	10.21
Variance	105.92	104.25
Skewness	1.32	1.31
Kurtosis	5.54	5.52
Coefficient of Variability	0.3805	0.3775
Minimum	7.98	5.00
Maximum	84.41	85.00
Range Width	76.42	80.00
Mean Standard Error	0.05	---

Assumption: LGR in Oil Fields (cont'd)

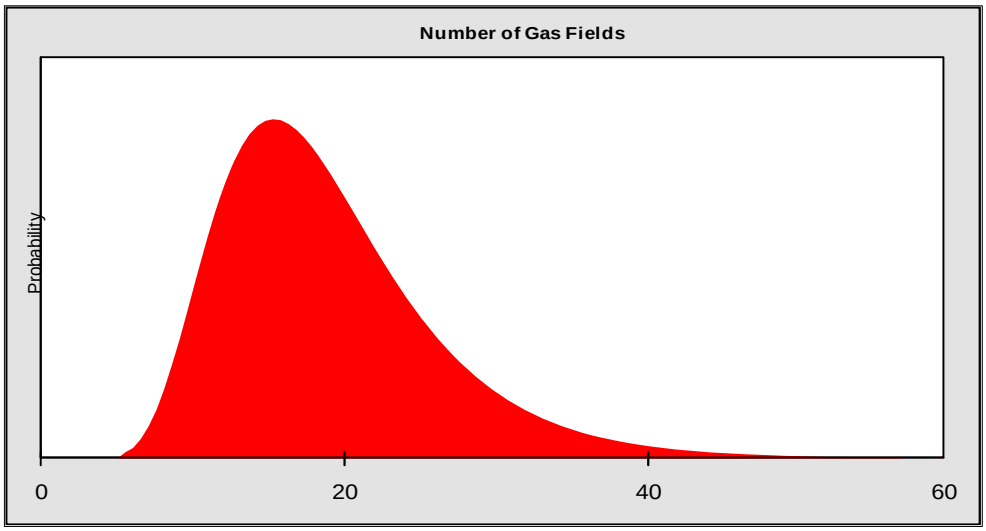
Percentiles:	Simulated values	Theoretical values
P100	7.98	5.00
P95	14.54	14.56
P90	16.25	16.25
P85	17.54	17.56
P80	18.65	18.71
P75	19.72	19.77
P70	20.72	20.80
P65	21.73	21.82
P60	22.76	22.84
P55	23.81	23.89
P50	24.88	24.99
P45	26.08	26.15
P40	27.37	27.39
P35	28.74	28.76
P30	30.31	30.28
P25	32.12	32.04
P20	34.17	34.14
P15	36.85	36.79
P10	40.59	40.46
P5	46.93	46.66
P0	84.41	85.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:

Mean	19.31
Standard Deviation	7.34

Selected range is from 1.00 to 57.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	19.29	19.27
Median	18.01	17.99
Mode	---	---
Standard Deviation	7.20	7.20
Variance	51.80	51.87
Skewness	1.11	1.11
Kurtosis	4.71	4.77
Coefficient of Variability	0.3732	0.3737
Minimum	4.52	1.00
Maximum	56.93	57.00
Range Width	52.41	56.00
Mean Standard Error	0.03	---

Assumption: Number of Gas Fields (cont'd)

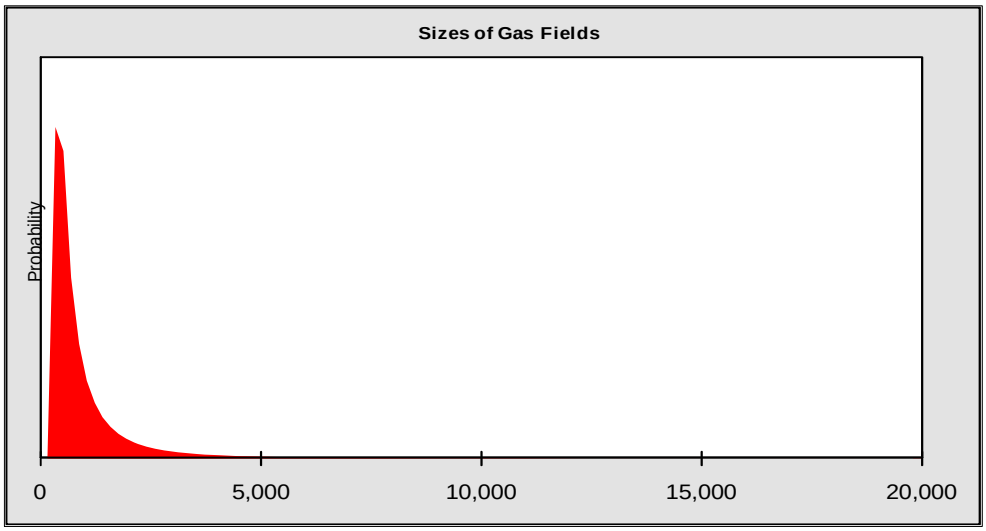
Percentiles:	Simulated values	Theoretical values
P100	4.52	1.00
P95	10.05	10.01
P90	11.41	11.37
P85	12.45	12.39
P80	13.33	13.28
P75	14.15	14.10
P70	14.91	14.88
P65	15.70	15.65
P60	16.45	16.41
P55	17.21	17.19
P50	18.01	17.99
P45	18.82	18.83
P40	19.71	19.73
P35	20.67	20.71
P30	21.74	21.80
P25	22.95	23.03
P20	24.45	24.50
P15	26.32	26.32
P10	28.86	28.82
P5	33.13	32.95
P0	56.93	57.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:

Mean	1,096.83
Standard Deviation	1,573.47

Selected range is from 300.00 to 18,000.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	1,058.62	1,070.77
Median	657.78	659.43
Mode	---	---
Standard Deviation	1,248.83	1,278.04
Variance	1,559,571.34	1,633,396.34
Skewness	4.99	4.95
Kurtosis	39.93	38.95
Coefficient of Variability	1.18	1.19
Minimum	302.21	300.00
Maximum	17,822.95	18,000.00
Range Width	17,520.74	17,700.00
Mean Standard Error	5.58	---

Assumption: Sizes of Gas Fields (cont'd)

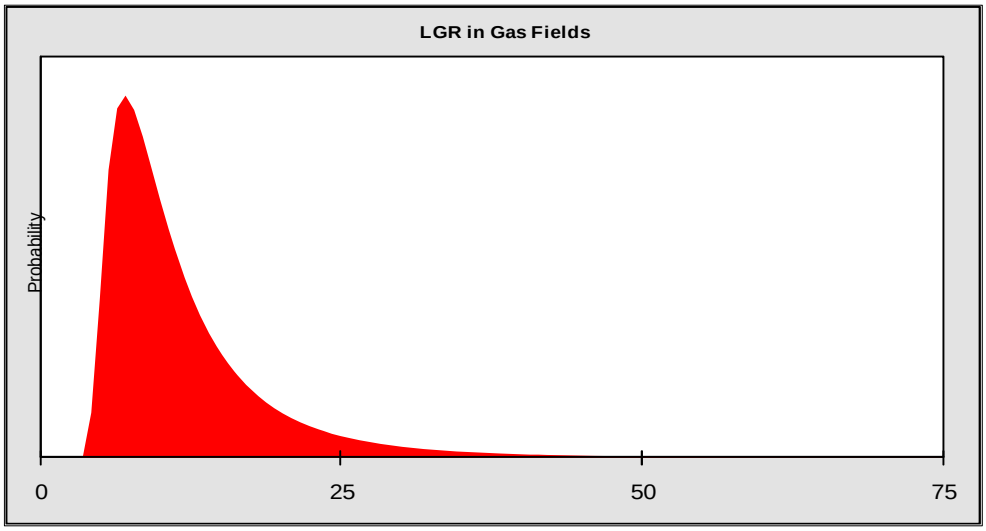
Percentiles:	Simulated values	Theoretical values
P100	302.21	300.00
P95	345.59	345.24
P90	371.46	371.51
P85	398.07	397.40
P80	424.39	424.49
P75	453.63	453.68
P70	486.11	485.67
P65	521.05	521.23
P60	561.38	561.24
P55	605.33	606.82
P50	657.77	659.43
P45	719.55	721.05
P40	789.83	794.48
P35	878.07	883.84
P30	989.47	995.49
P25	1,130.42	1,139.98
P20	1,319.84	1,336.33
P15	1,604.49	1,623.49
P10	2,062.13	2,099.32
P5	3,074.66	3,130.06
P0	17,822.95	18,000.00

Assumption: LGR in Gas Fields

Lognormal distribution with parameters:

Mean	12.26
Standard Deviation	7.82

Selected range is from 4.00 to 75.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	12.13	12.18
Median	9.96	9.99
Mode	---	---
Standard Deviation	7.30	7.33
Variance	53.26	53.79
Skewness	2.68	2.62
Kurtosis	14.04	13.40
Coefficient of Variability	0.6015	0.6022
Minimum	4.12	4.00
Maximum	74.14	75.00
Range Width	70.02	71.00
Mean Standard Error	0.03	---

Assumption: LGR in Gas Fields (cont'd)

Percentiles:	Simulated values	Theoretical values
P100	4.12	4.00
P95	5.64	5.61
P90	6.17	6.15
P85	6.62	6.62
P80	7.05	7.06
P75	7.48	7.50
P70	7.93	7.94
P65	8.38	8.41
P60	8.88	8.90
P55	9.39	9.42
P50	9.96	9.99
P45	10.60	10.63
P40	11.33	11.34
P35	12.12	12.15
P30	13.08	13.11
P25	14.21	14.27
P20	15.64	15.73
P15	17.54	17.70
P10	20.46	20.65
P5	26.01	26.19
P0	74.14	75.00

End of Assumptions

Simulation started on 3/26/2008 at 16:07:32
Simulation stopped on 3/26/2008 at 16:19:31