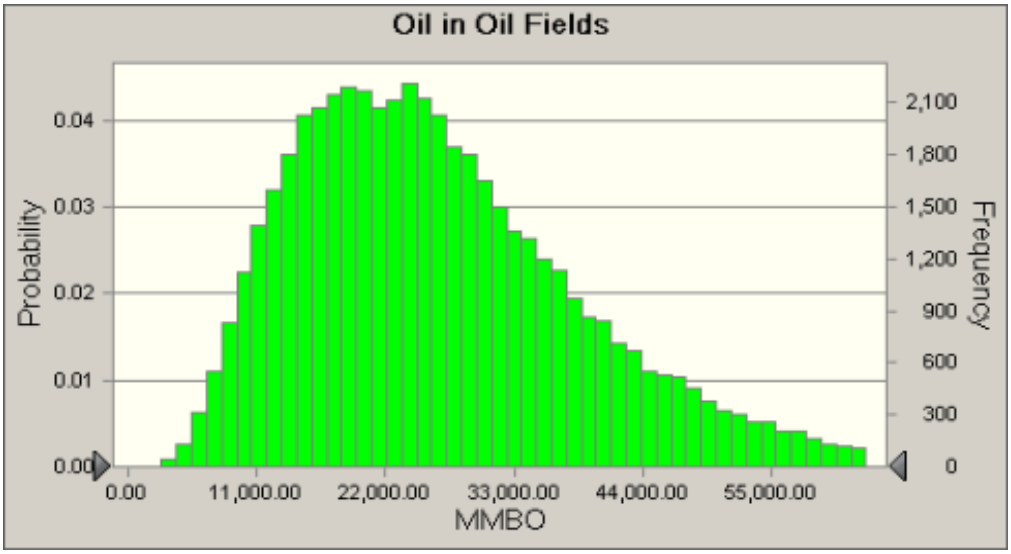
20240101
Mesopotamian Basin Anticlines
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 298.76 to 120,312.84
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 57.75



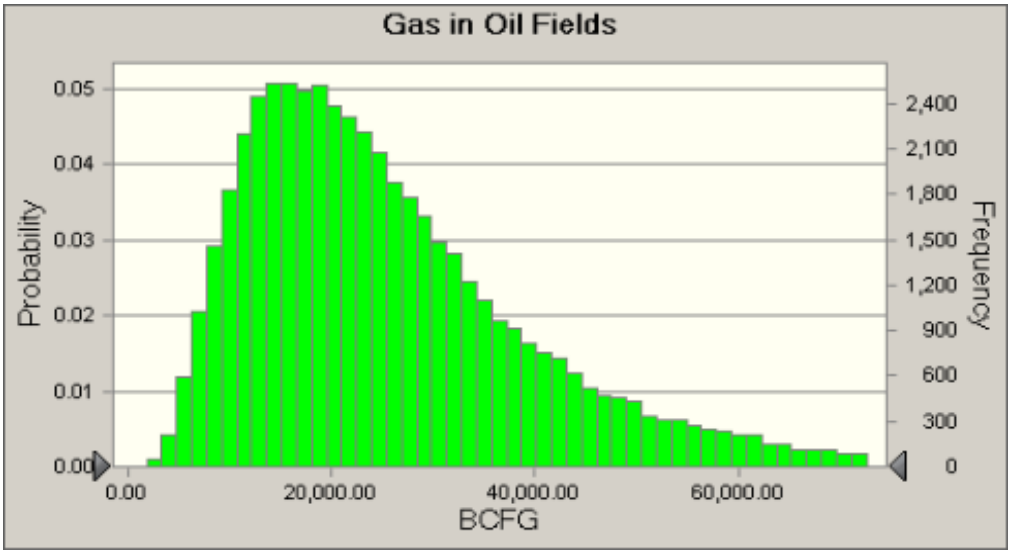
Statistics:	Forecast values
Trials	50,000
Mean	26,855.59
Median	24,736.84
Mode	---
Standard Deviation	12,912.46
Variance	166,731,521.09
Skewness	1.01
Kurtosis	4.47
Coefficient of Variability	0.4808
Minimum	298.76
Maximum	120,312.84
Range Width	120,014.08
Mean Standard Error	57.75

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	298.76
95%	9,984.76
90%	12,319.96
85%	14,196.75
80%	15,786.63
75%	17,300.56
70%	18,795.29
65%	20,246.53
60%	21,776.73
55%	23,295.17
50%	24,735.57
45%	26,240.86
40%	27,935.26
35%	29,688.90
30%	31,677.24
25%	33,995.51
20%	36,571.62
15%	39,885.97
10%	44,303.14
5%	51,257.35
0%	120,312.84

Forecast: Gas in Oil Fields

Summary:
Entire range is from 318.04 to 236,407.94
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 73.61



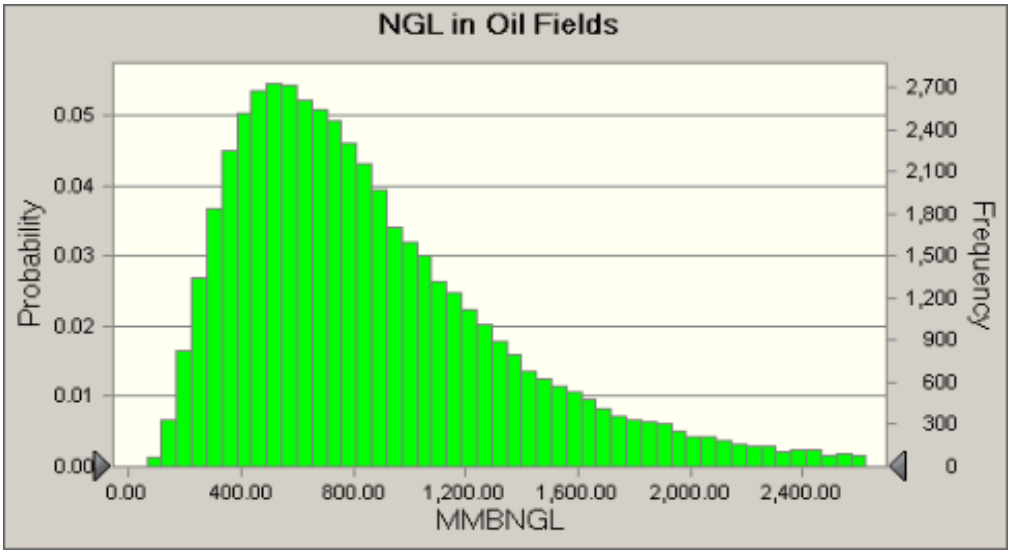
Statistics:	Forecast values
Trials	50,000
Mean	26,467.40
Median	22,679.03
Mode	---
Standard Deviation	16,460.43
Variance	270,945,895.23
Skewness	2.03
Kurtosis	11.08
Coefficient of Variability	0.6219
Minimum	318.04
Maximum	236,407.94
Range Width	236,089.90
Mean Standard Error	73.61

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	318.04
95%	8,359.42
90%	10,511.48
85%	12,193.07
80%	13,680.47
75%	15,153.76
70%	16,610.15
65%	18,078.95
60%	19,543.91
55%	21,101.15
50%	22,678.88
45%	24,370.92
40%	26,241.99
35%	28,287.47
30%	30,573.19
25%	33,222.59
20%	36,556.48
15%	40,801.88
10%	46,852.83
5%	57,503.95
0%	236,407.94

Forecast: NGL in Oil Fields

Summary:
Entire range is from 9.30 to 10,321.43
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 2.75



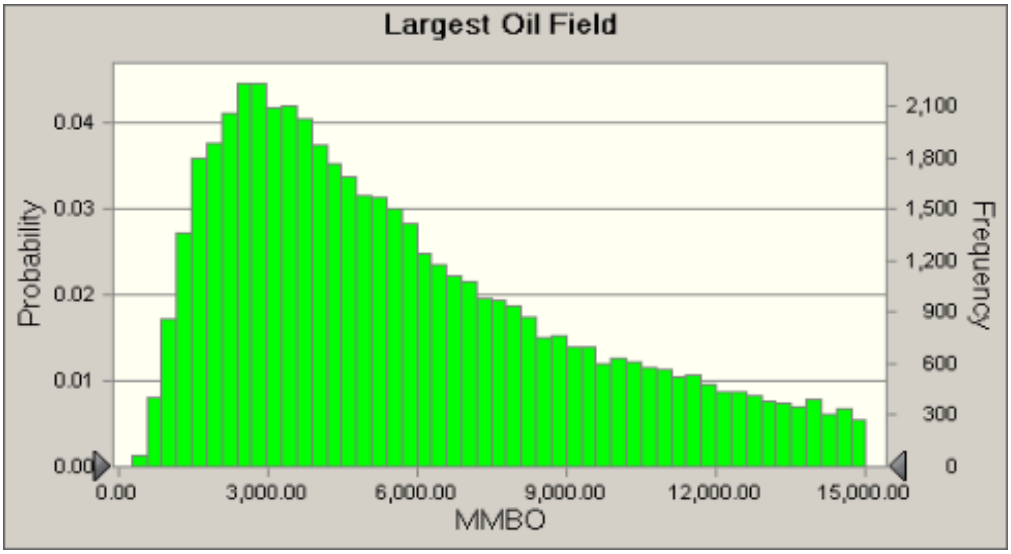
Statistics:	Forecast values
Trials	50,000
Mean	905.12
Median	758.52
Mode	---
Standard Deviation	614.10
Variance	377,123.65
Skewness	2.71
Kurtosis	18.87
Coefficient of Variability	0.6785
Minimum	9.30
Maximum	10,321.43
Range Width	10,312.13
Mean Standard Error	2.75

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	9.30
95%	273.51
90%	345.32
85%	401.22
80%	453.36
75%	502.65
70%	551.15
65%	600.74
60%	652.62
55%	704.38
50%	758.51
45%	816.70
40%	879.61
35%	953.64
30%	1,035.10
25%	1,131.85
20%	1,246.23
15%	1,396.31
10%	1,617.20
5%	2,015.56
0%	10,321.43

Forecast: Largest Oil Field

Summary:
Entire range is from 247.07 to 14,998.44
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 15.67



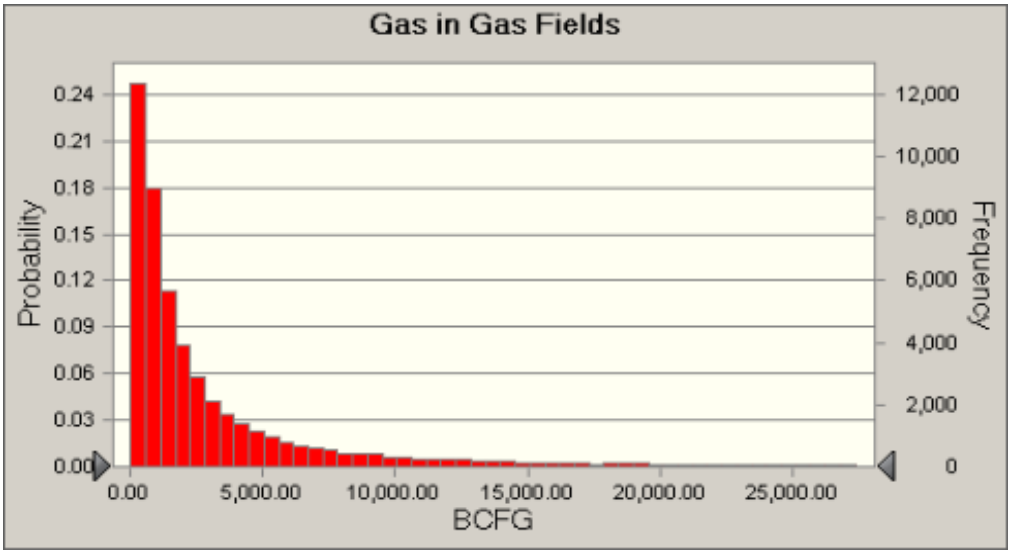
Statistics:	Forecast values
Trials	50,000
Mean	5,714.50
Median	4,863.51
Mode	---
Standard Deviation	3,504.77
Variance	12,283,415.71
Skewness	0.7695
Kurtosis	2.70
Coefficient of Variability	0.6133
Minimum	247.07
Maximum	14,998.44
Range Width	14,751.37
Mean Standard Error	15.67

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	247.07
95%	1,416.09
90%	1,834.90
85%	2,220.15
80%	2,568.08
75%	2,904.72
70%	3,259.46
65%	3,622.60
60%	4,004.32
55%	4,419.33
50%	4,863.46
45%	5,345.71
40%	5,865.11
35%	6,451.41
30%	7,136.30
25%	7,911.09
20%	8,813.65
15%	9,926.19
10%	11,207.99
5%	12,803.61
0%	14,998.44

Forecast: Gas in Gas Fields

Summary:
Entire range is from 50.93 to 118,695.48
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 37.07



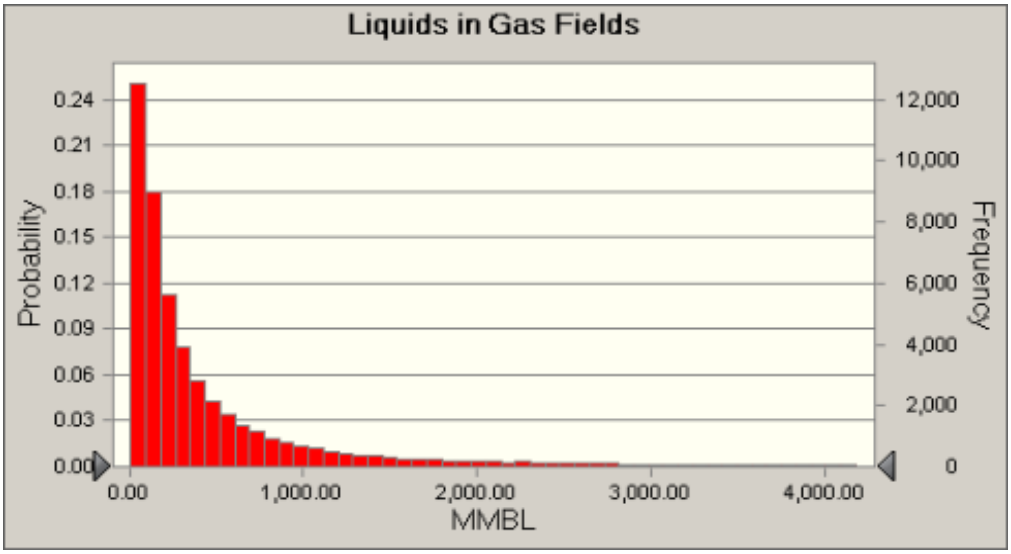
Statistics:	Forecast values
Trials	50,000
Mean	4,140.52
Median	1,493.48
Mode	---
Standard Deviation	8,288.11
Variance	68,692,779.67
Skewness	5.10
Kurtosis	36.84
Coefficient of Variability	2.00
Minimum	50.93
Maximum	118,695.48
Range Width	118,644.56
Mean Standard Error	37.07

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	50.93
95%	207.70
90%	299.03
85%	391.88
80%	495.82
75%	614.74
70%	743.66
65%	891.01
60%	1,062.35
55%	1,257.35
50%	1,493.45
45%	1,776.13
40%	2,130.54
35%	2,568.83
30%	3,137.44
25%	3,888.21
20%	4,959.63
15%	6,606.94
10%	9,539.57
5%	16,750.79
0%	118,695.48

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 7.61 to 18,897.76
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 5.67



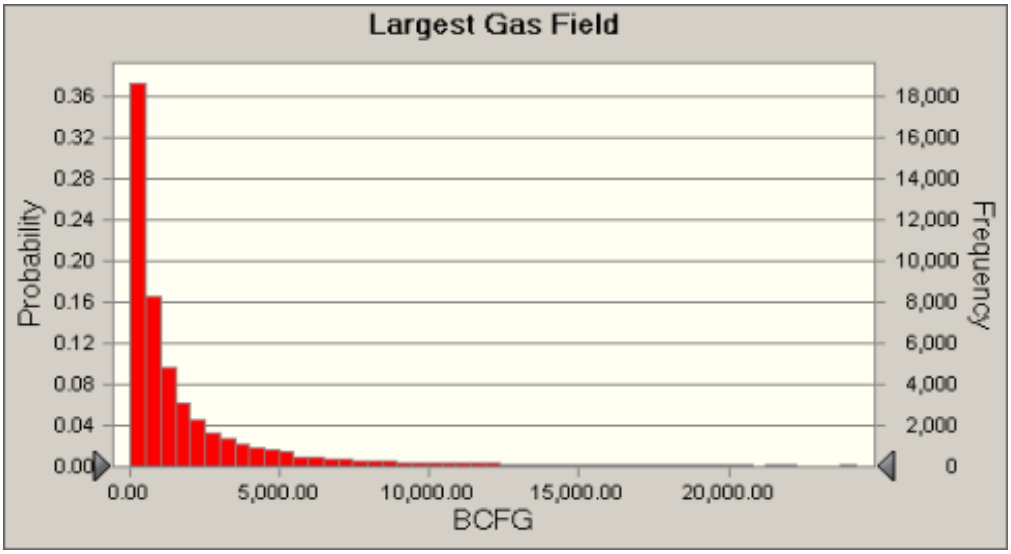
Statistics:	Forecast values
Trials	50,000
Mean	628.84
Median	225.93
Mode	---
Standard Deviation	1,267.14
Variance	1,605,642.60
Skewness	5.23
Kurtosis	39.53
Coefficient of Variability	2.02
Minimum	7.61
Maximum	18,897.76
Range Width	18,890.15
Mean Standard Error	5.67

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	7.61
95%	31.41
90%	45.04
85%	58.96
80%	74.86
75%	92.54
70%	112.17
65%	134.02
60%	160.14
55%	189.93
50%	225.92
45%	268.88
40%	322.37
35%	386.00
30%	473.18
25%	588.91
20%	751.67
15%	1,004.77
10%	1,451.75
5%	2,542.04
0%	18,897.76

Forecast: Largest Gas Field

Summary:
Entire range is from 30.07 to 89,872.43
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 33.56



Statistics:	Forecast values
Trials	50,000
Mean	3,202.93
Median	876.16
Mode	---
Standard Deviation	7,504.44
Variance	56,316,632.53
Skewness	5.54
Kurtosis	42.00
Coefficient of Variability	2.34
Minimum	30.07
Maximum	89,872.43
Range Width	89,842.35
Mean Standard Error	33.56

Forecast: Largest Gas Field (continued)

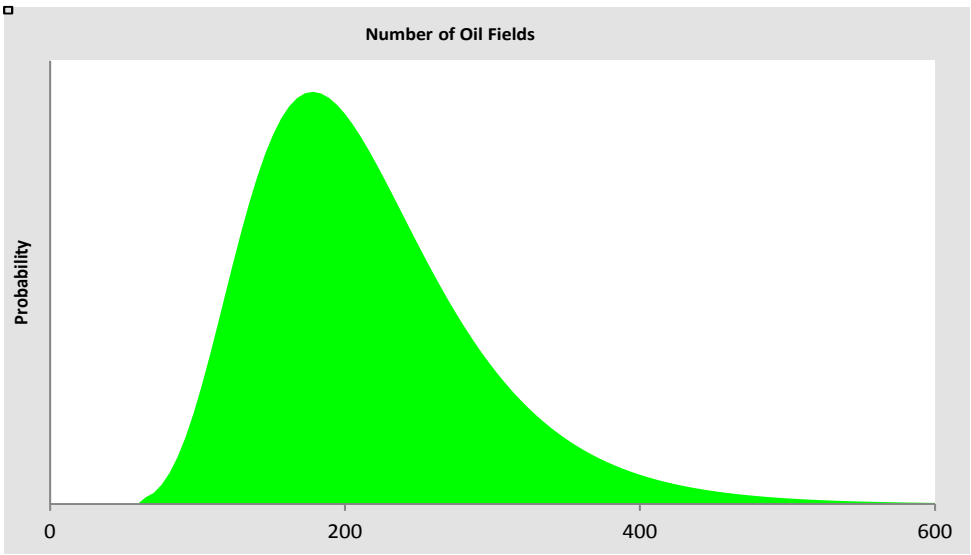
Percentiles:	BCFG
100%	30.07
95%	86.59
90%	133.10
85%	183.56
80%	242.58
75%	310.71
70%	388.75
65%	479.00
60%	585.32
55%	714.90
50%	876.15
45%	1,076.58
40%	1,321.02
35%	1,637.08
30%	2,065.82
25%	2,630.12
20%	3,498.23
15%	4,805.00
10%	7,369.39
5%	13,720.12
0%	89,872.43

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	212.07	213.07
Standard Deviation	78.10	78.1
Selected range is from -Infinity to 599.00		1.00 to 600.00



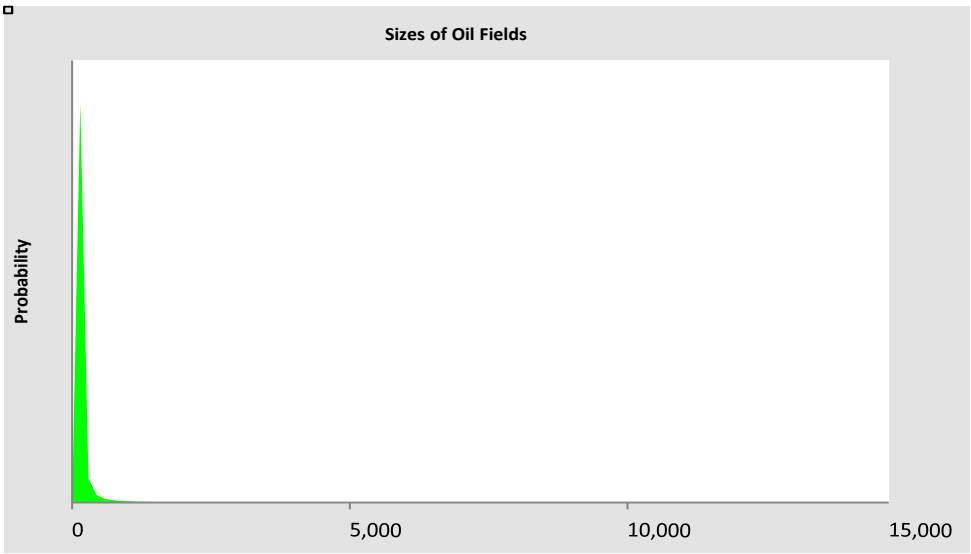
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	212.29	212.61
Median	200.04	199.91
Mode	---	---
Standard Deviation	76.34	76.79
Variance	5,828.30	5,896.05
Skewness	1.00	1.01
Kurtosis	4.44	4.47
Coefficient of Variability	0.3596	0.3612
Minimum	42.33	1.00
Maximum	599.89	600.00
Range Width	557.56	599.00
Mean Standard Error	0.34	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	42.33	1.00
95%	111.65	111.67
90%	126.85	126.97
85%	138.37	138.48
80%	148.29	148.36
75%	157.22	157.41
70%	165.84	166.01
65%	174.52	174.39
60%	182.80	182.74
55%	191.40	191.20
50%	200.04	199.91
45%	209.18	209.02
40%	218.55	218.70
35%	229.09	229.17
30%	240.36	240.75
25%	253.38	253.90
20%	268.99	269.39
15%	288.40	288.61
10%	313.82	314.72
5%	355.74	357.61
0%	599.89	600.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	160.61	165.61
Standard Deviation	2,861.62	2,861.62
Selected range is from -Infinity to 14,995.00		5.00 to 15,000.00



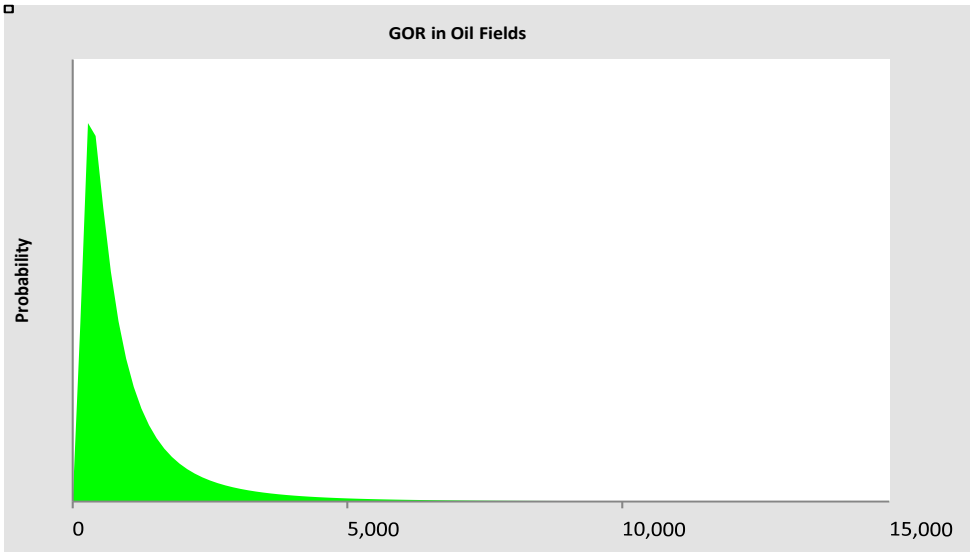
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	124.87	138.52
Median	13.91	13.97
Mode	---	---
Standard Deviation	569.33	583.30
Variance	324,132.57	340,240.42
Skewness	12.01	12.51
Kurtosis	192.32	208.98
Coefficient of Variability	4.56	4.21
Minimum	5.00	5.00
Maximum	14,499.67	15,000.00
Range Width	14,494.67	14,995.00
Mean Standard Error	2.55	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.00	5.00
95%	5.17	5.17
90%	5.41	5.41
85%	5.73	5.75
80%	6.17	6.19
75%	6.75	6.78
70%	7.52	7.55
65%	8.53	8.56
60%	9.86	9.89
55%	11.58	11.64
50%	13.91	13.97
45%	17.08	17.13
40%	21.64	21.47
35%	27.67	27.60
30%	36.65	36.54
25%	49.90	50.19
20%	72.51	72.42
15%	112.80	112.41
10%	198.88	197.79
5%	456.13	461.74
0%	14,499.67	15,000.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	30
Mean	974.13	1,004.13
Standard Deviation	1,350.03	1,350.03
Selected range is from -Infinity to 13,970.00		30.00 to 14,000.00



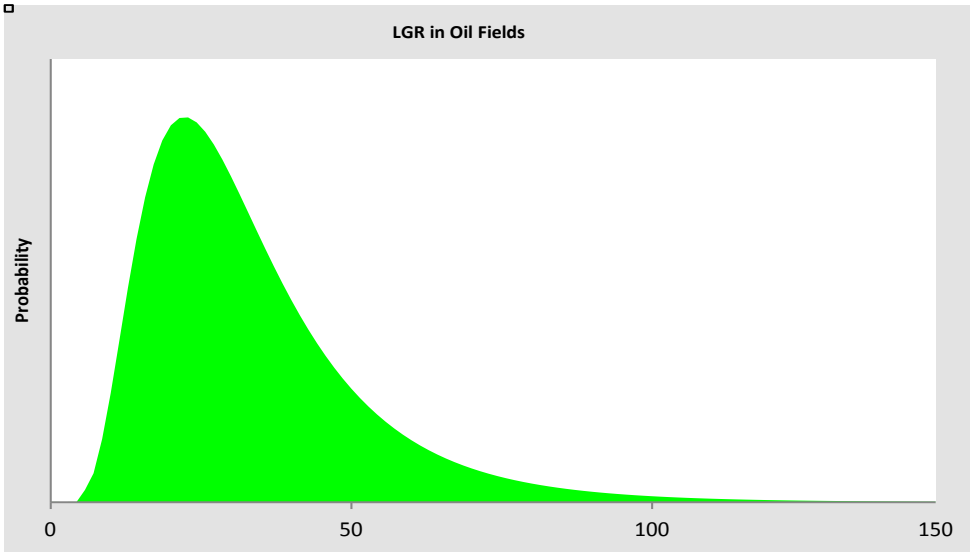
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	996.97	985.63
Median	604.48	599.26
Mode	---	---
Standard Deviation	1,223.46	1,197.49
Variance	1,496,860.39	1,433,988.71
Skewness	3.74	3.72
Kurtosis	23.41	23.76
Coefficient of Variability	1.23	1.21
Minimum	36.60	30.00
Maximum	13,995.86	14,000.00
Range Width	13,959.26	13,970.00
Mean Standard Error	5.47	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	36.60	30.00
95%	133.32	133.78
90%	182.11	181.15
85%	226.06	224.80
80%	270.95	268.31
75%	315.70	313.31
70%	363.74	360.91
65%	415.54	412.12
60%	471.16	468.03
55%	533.68	529.88
50%	604.47	599.26
45%	684.75	678.26
40%	774.30	769.75
35%	883.51	877.88
30%	1,010.61	1,008.93
25%	1,177.22	1,173.08
20%	1,393.95	1,388.31
15%	1,703.49	1,690.49
10%	2,189.53	2,166.90
5%	3,171.99	3,129.69
0%	13,995.86	14,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	33.37	34.37
Standard Deviation	18.99	18.99
Selected range is from -Infinity to 149.00		1.00 to 150.00



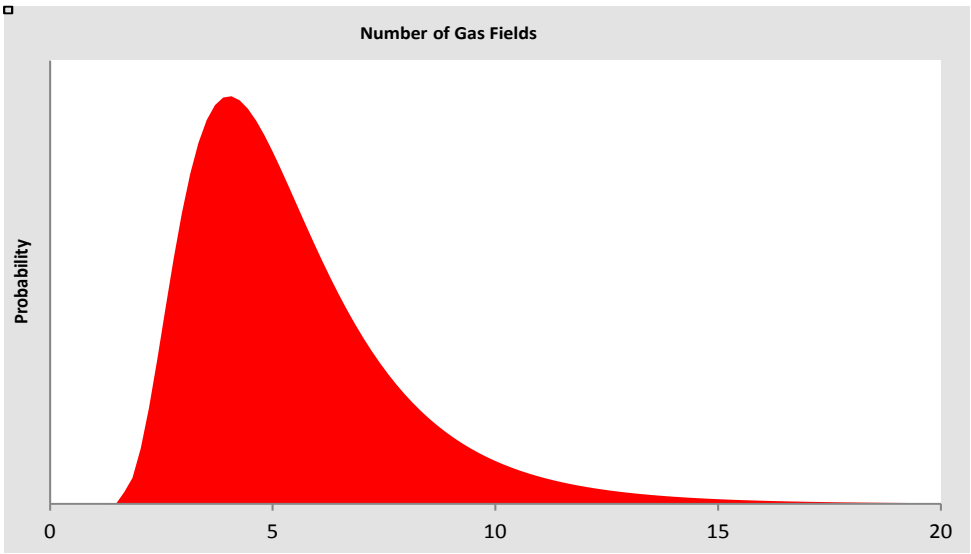
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	34.12	34.23
Median	29.96	29.98
Mode	---	---
Standard Deviation	18.24	18.45
Variance	332.84	340.26
Skewness	1.56	1.58
Kurtosis	6.60	6.74
Coefficient of Variability	0.5346	0.5390
Minimum	4.42	1.00
Maximum	149.80	150.00
Range Width	145.38	149.00
Mean Standard Error	0.08	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	4.42	1.00
95%	13.17	13.13
90%	15.68	15.71
85%	17.71	17.74
80%	19.59	19.56
75%	21.30	21.28
70%	23.02	22.96
65%	24.67	24.63
60%	26.37	26.34
55%	28.09	28.12
50%	29.96	29.98
45%	31.95	31.97
40%	34.13	34.14
35%	36.47	36.53
30%	39.22	39.24
25%	42.30	42.40
20%	46.06	46.22
15%	50.77	51.12
10%	57.59	58.02
5%	69.40	69.97
0%	149.80	150.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	4.54	5.54
Standard Deviation	2.44	2.44
Selected range is from -Infinity to 19.00		1.00 to 20.00



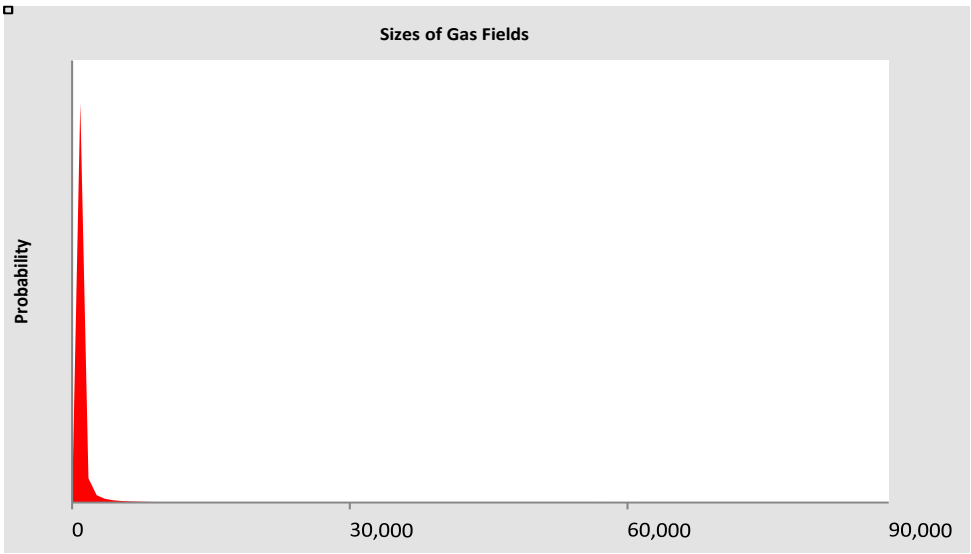
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	5.51	5.52
Median	4.99	5.00
Mode	---	---
Standard Deviation	2.37	2.38
Variance	5.62	5.66
Skewness	1.50	1.49
Kurtosis	6.35	6.32
Coefficient of Variability	0.4301	0.4307
Minimum	1.49	1.00
Maximum	19.91	20.00
Range Width	18.42	19.00
Mean Standard Error	0.01	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.49	1.00
95%	2.74	2.74
90%	3.09	3.10
85%	3.38	3.37
80%	3.61	3.62
75%	3.83	3.85
70%	4.06	4.07
65%	4.29	4.29
60%	4.51	4.52
55%	4.74	4.75
50%	4.99	5.00
45%	5.25	5.26
40%	5.53	5.54
35%	5.85	5.85
30%	6.19	6.21
25%	6.60	6.61
20%	7.11	7.11
15%	7.71	7.73
10%	8.57	8.61
5%	10.10	10.13
0%	19.91	20.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	30
Mean	963.65	993.65
Standard Deviation	17,169.73	17,169.73
Selected range is from -Infinity to 89,970.00		30.00 to 90,000.00



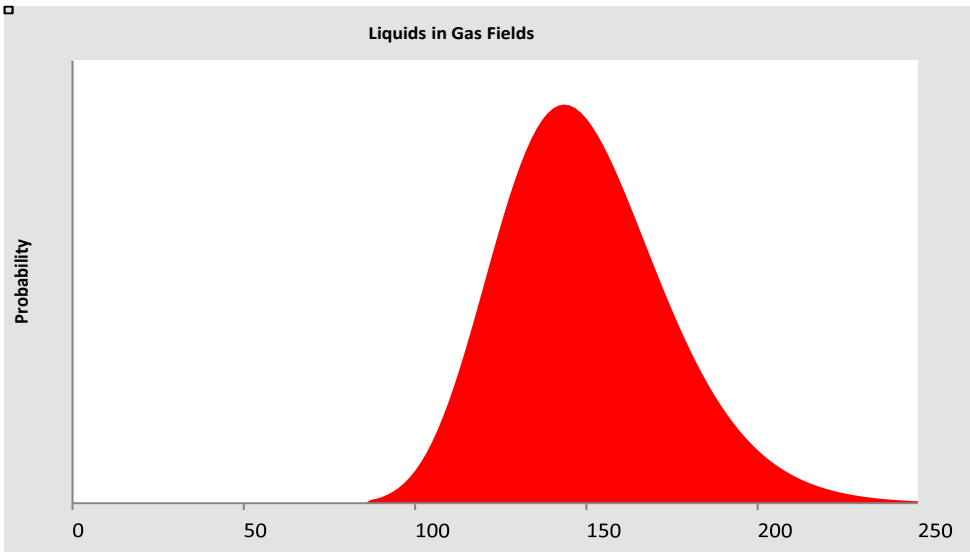
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	754.83	831.13
Median	84.15	83.84
Mode	---	---
Standard Deviation	3,468.03	3,499.81
Variance	12,027,220.05	12,248,654.95
Skewness	12.14	12.51
Kurtosis	197.37	208.98
Coefficient of Variability	4.59	4.21
Minimum	30.00	30.00
Maximum	89,872.43	90,000.00
Range Width	89,842.43	89,970.00
Mean Standard Error	15.51	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	30.00	30.00
95%	31.07	31.04
90%	32.52	32.49
85%	34.61	34.48
80%	37.30	37.15
75%	40.69	40.67
70%	45.21	45.30
65%	51.44	51.36
60%	59.46	59.32
55%	69.93	69.83
50%	84.15	83.84
45%	102.91	102.77
40%	128.56	128.84
35%	165.63	165.61
30%	217.25	219.25
25%	298.43	301.13
20%	429.47	434.49
15%	662.82	674.47
10%	1,195.92	1,186.74
5%	2,777.65	2,770.41
0%	89,872.43	90,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	10
Mean	142.15	152.15
Standard Deviation	24.98	24.98
Selected range is from -Infinity to 240.00		10.00 to 250.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	151.89	152.04
Median	149.77	149.97
Mode	---	---
Standard Deviation	24.77	24.75
Variance	613.73	612.63
Skewness	0.4836	0.4706
Kurtosis	3.24	3.23
Coefficient of Variability	0.1631	0.1628
Minimum	76.58	10.00
Maximum	249.99	250.00
Range Width	173.41	240.00
Mean Standard Error	0.11	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	76.58	10.00
95%	115.00	115.07
90%	121.79	121.94
85%	126.73	126.83
80%	130.74	130.87
75%	134.33	134.44
70%	137.62	137.74
65%	140.73	140.88
60%	143.75	143.92
55%	146.82	146.94
50%	149.76	149.97
45%	152.78	153.07
40%	155.94	156.29
35%	159.38	159.69
30%	163.10	163.36
25%	167.18	167.41
20%	171.85	172.06
15%	177.57	177.64
10%	184.95	184.91
5%	196.36	196.23
0%	249.99	250.00

End of Assumptions

Simulation started on 6/14/2011 at 3:23 AM
Simulation stopped on 6/14/2011 at 4:11 PM