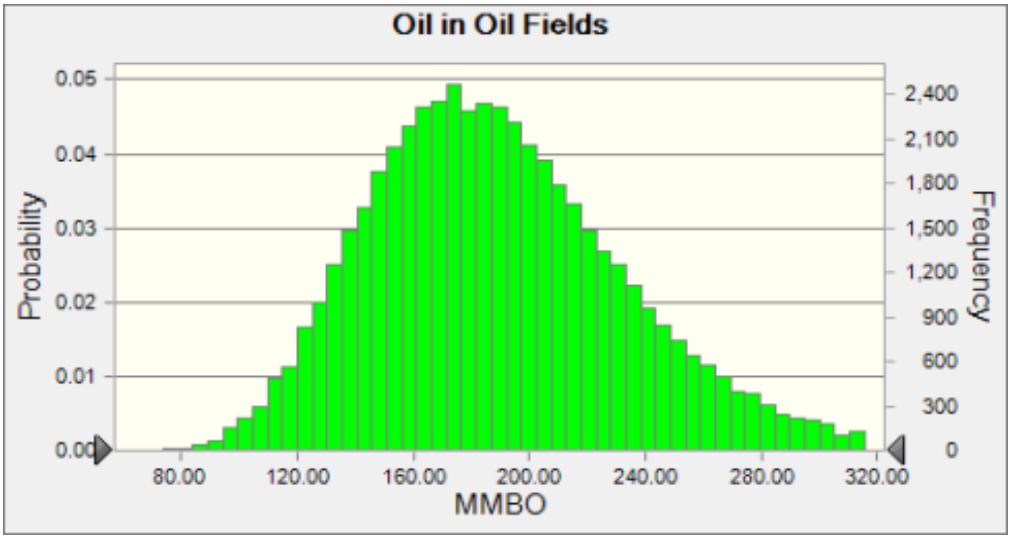
20140102
Butabul-Ghudun Fold Belt Reservoirs
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 11.05 to 402.46
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.20



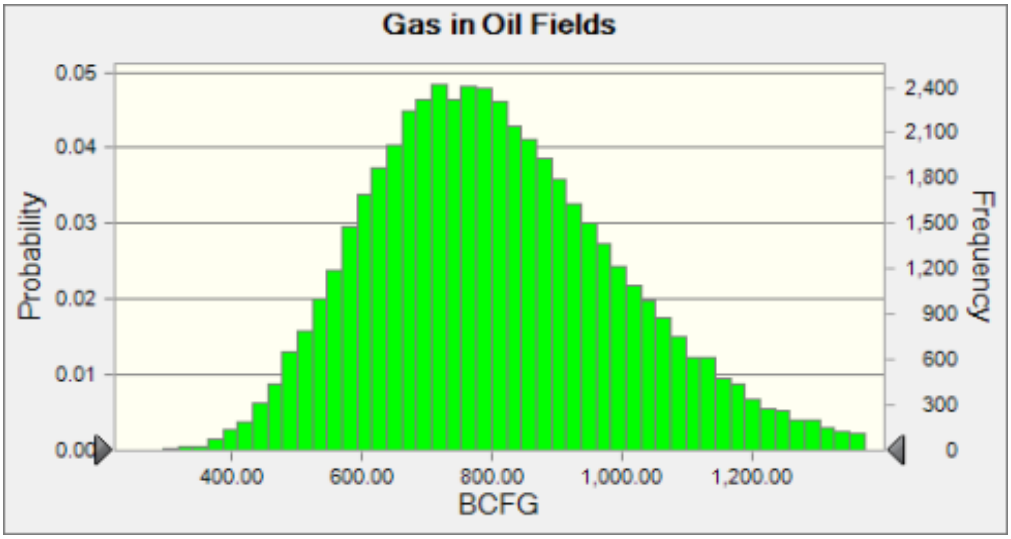
Statistics:	Forecast values
Trials	50,000
Mean	189.42
Median	184.83
Mode	---
Standard Deviation	45.05
Variance	2,029.66
Skewness	0.6098
Kurtosis	3.49
Coefficient of Variability	0.2378
Minimum	11.05
Maximum	402.46
Range Width	391.41
Mean Standard Error	0.20

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	11.05
95%	124.17
90%	135.63
85%	144.11
80%	151.00
75%	157.23
70%	163.01
65%	168.48
60%	173.84
55%	179.24
50%	184.83
45%	190.38
40%	196.13
35%	202.29
30%	208.93
25%	216.52
20%	225.16
15%	235.35
10%	249.31
5%	271.26
0%	402.46

Forecast: Gas in Oil Fields

Summary:
Entire range is from 61.65 to 1,856.72
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.90



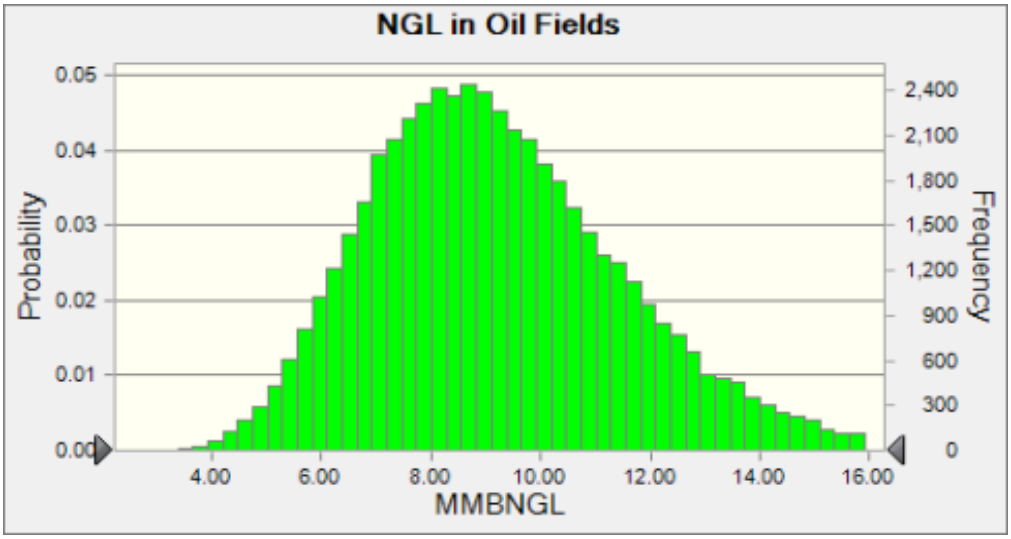
Statistics:	Forecast values
Trials	50,000
Mean	810.42
Median	789.51
Mode	---
Standard Deviation	200.26
Variance	40,105.31
Skewness	0.6192
Kurtosis	3.53
Coefficient of Variability	0.2471
Minimum	61.65
Maximum	1,856.72
Range Width	1,795.07
Mean Standard Error	0.90

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	61.65
95%	519.59
90%	572.63
85%	609.41
80%	639.84
75%	667.83
70%	692.91
65%	717.15
60%	741.23
55%	765.72
50%	789.50
45%	813.65
40%	839.61
35%	867.33
30%	897.61
25%	930.98
20%	969.24
15%	1,015.92
10%	1,076.17
5%	1,172.21
0%	1,856.72

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.46 to 22.89
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.01



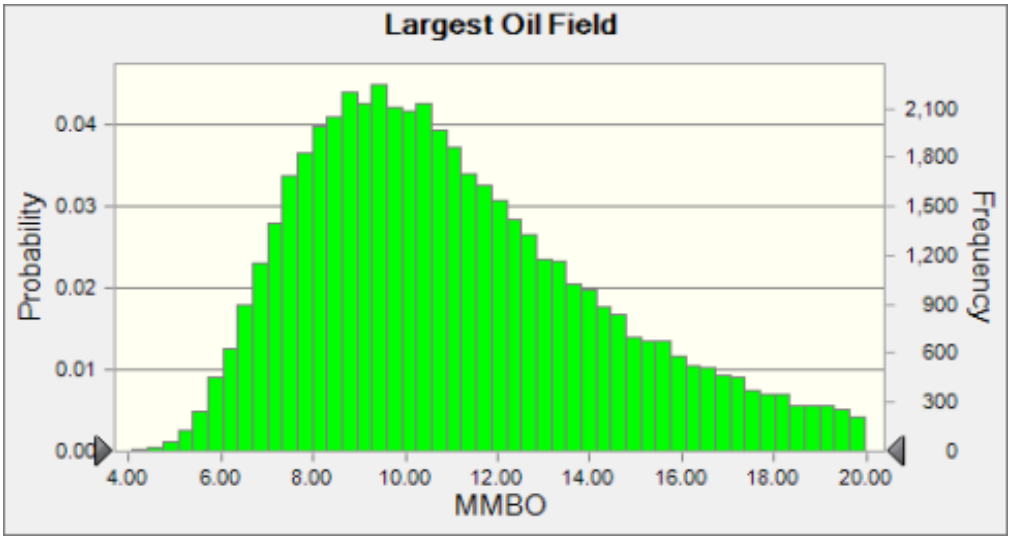
Statistics:	Forecast values
Trials	50,000
Mean	9.23
Median	8.97
Mode	---
Standard Deviation	2.38
Variance	5.68
Skewness	0.6436
Kurtosis	3.59
Coefficient of Variability	0.2580
Minimum	0.46
Maximum	22.89
Range Width	22.43
Mean Standard Error	0.01

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.46
95%	5.80
90%	6.41
85%	6.85
80%	7.20
75%	7.53
70%	7.83
65%	8.12
60%	8.41
55%	8.69
50%	8.97
45%	9.26
40%	9.58
35%	9.90
30%	10.26
25%	10.65
20%	11.13
15%	11.68
10%	12.40
5%	13.57
0%	22.89

Forecast: Largest Oil Field

Summary:
Entire range is from 4.09 to 20.00
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.01



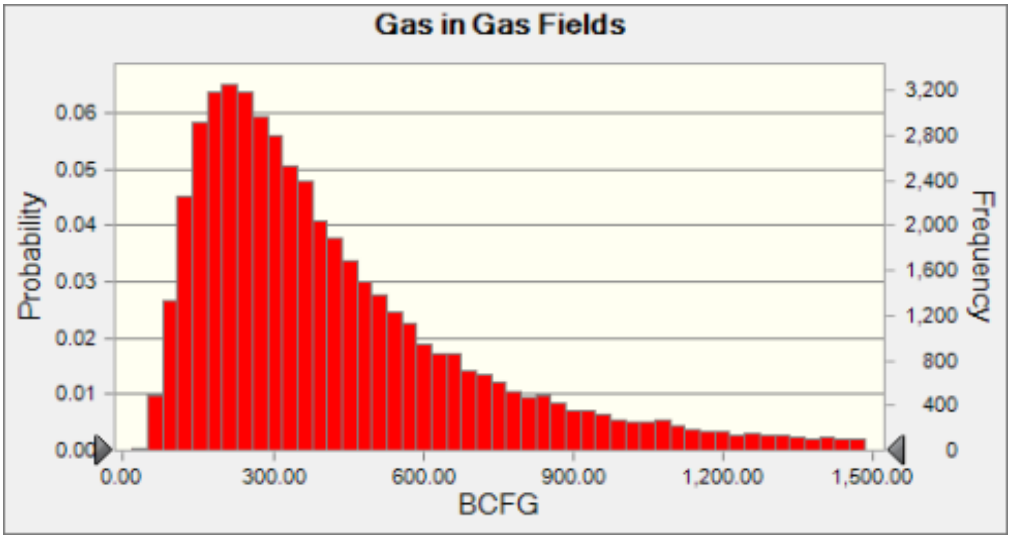
Statistics:	Forecast values
Trials	50,000
Mean	11.03
Median	10.49
Mode	---
Standard Deviation	3.19
Variance	10.18
Skewness	0.6418
Kurtosis	2.84
Coefficient of Variability	0.2893
Minimum	4.09
Maximum	20.00
Range Width	15.91
Mean Standard Error	0.01

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	4.09
95%	6.69
90%	7.32
85%	7.79
80%	8.22
75%	8.61
70%	8.98
65%	9.36
60%	9.72
55%	10.11
50%	10.49
45%	10.90
40%	11.34
35%	11.83
30%	12.37
25%	12.99
20%	13.70
15%	14.58
10%	15.72
5%	17.28
0%	20.00

Forecast: Gas in Gas Fields

Summary:
Entire range is from 19.52 to 3,788.19
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.63



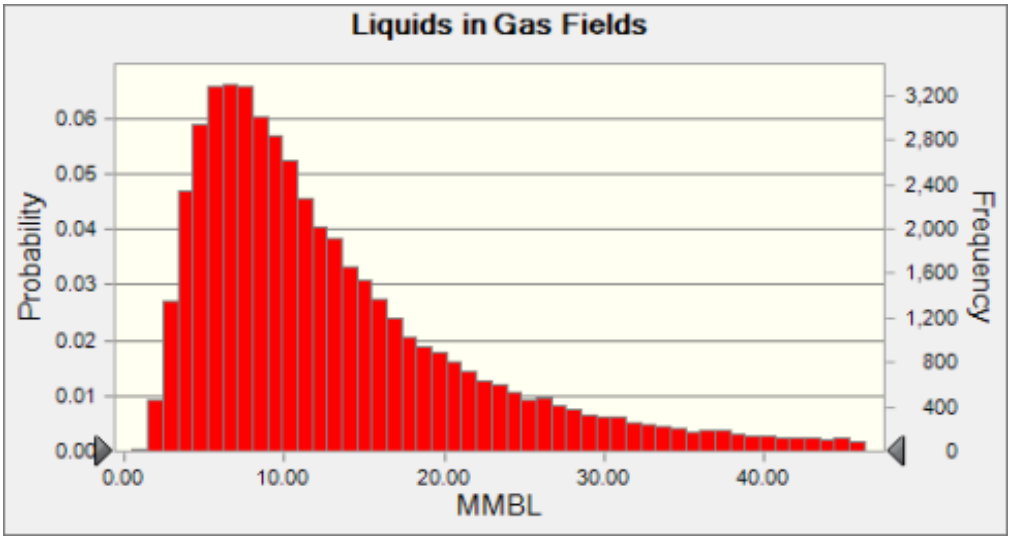
Statistics:	Forecast values
Trials	50,000
Mean	458.13
Median	348.33
Mode	---
Standard Deviation	365.42
Variance	133,528.41
Skewness	2.27
Kurtosis	10.20
Coefficient of Variability	0.7976
Minimum	19.52
Maximum	3,788.19
Range Width	3,768.67
Mean Standard Error	1.63

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	19.52
95%	118.90
90%	148.39
85%	173.61
80%	196.82
75%	219.57
70%	242.62
65%	266.29
60%	292.00
55%	318.78
50%	348.33
45%	379.76
40%	416.95
35%	458.97
30%	507.01
25%	566.49
20%	645.27
15%	745.98
10%	902.82
5%	1,191.02
0%	3,788.19

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 0.49 to 140.13
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.05



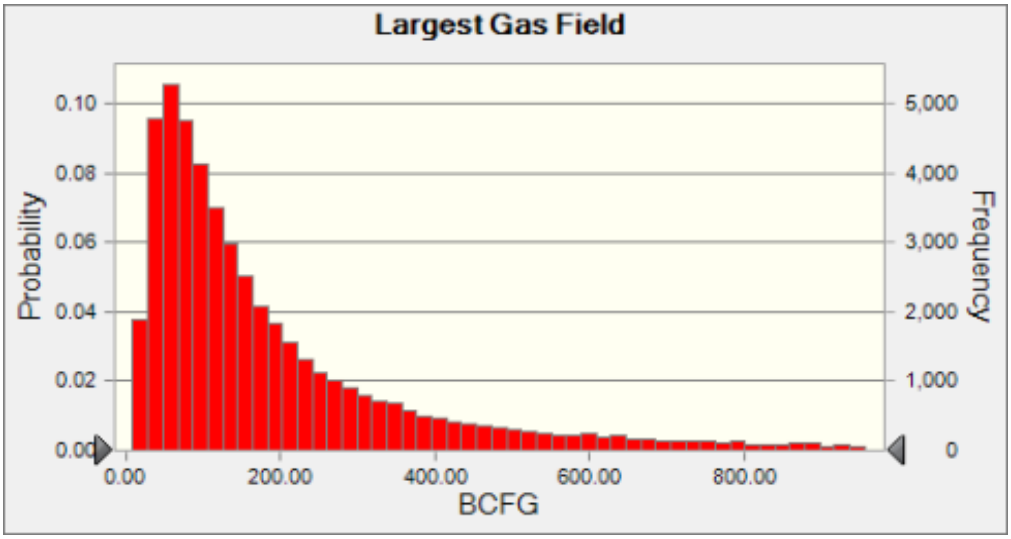
Statistics:	Forecast values
Trials	50,000
Mean	14.10
Median	10.62
Mode	---
Standard Deviation	11.49
Variance	132.13
Skewness	2.42
Kurtosis	11.62
Coefficient of Variability	0.8152
Minimum	0.49
Maximum	140.13
Range Width	139.63
Mean Standard Error	0.05

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	0.49
95%	3.60
90%	4.52
85%	5.28
80%	5.98
75%	6.68
70%	7.41
65%	8.13
60%	8.91
55%	9.73
50%	10.62
45%	11.62
40%	12.77
35%	14.03
30%	15.55
25%	17.38
20%	19.83
15%	23.03
10%	27.90
5%	36.90
0%	140.13

Forecast: Largest Gas Field

Summary:
Entire range is from 9.06 to 1,995.33
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.17



Statistics:	Forecast values
Trials	50,000
Mean	220.21
Median	129.02
Mode	---
Standard Deviation	262.74
Variance	69,029.86
Skewness	2.96
Kurtosis	13.86
Coefficient of Variability	1.19
Minimum	9.06
Maximum	1,995.33
Range Width	1,986.27
Mean Standard Error	1.17

Forecast: Largest Gas Field (continued)

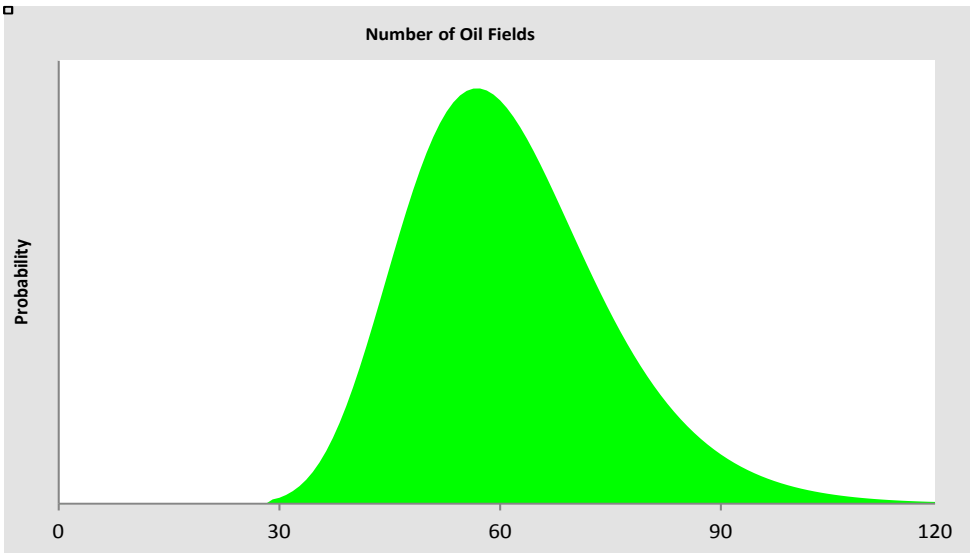
Percentiles:	BCFG
100%	9.06
95%	31.24
90%	41.53
85%	50.77
80%	59.77
75%	69.09
70%	79.05
65%	89.87
60%	101.44
55%	114.66
50%	129.01
45%	145.65
40%	165.19
35%	189.19
30%	217.53
25%	256.27
20%	307.58
15%	379.75
10%	501.70
5%	747.92
0%	1,995.33

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	60.54	61.54
Standard Deviation	13.92	13.92
Selected range is from -Infinity to 119.00		1.00 to 120.00



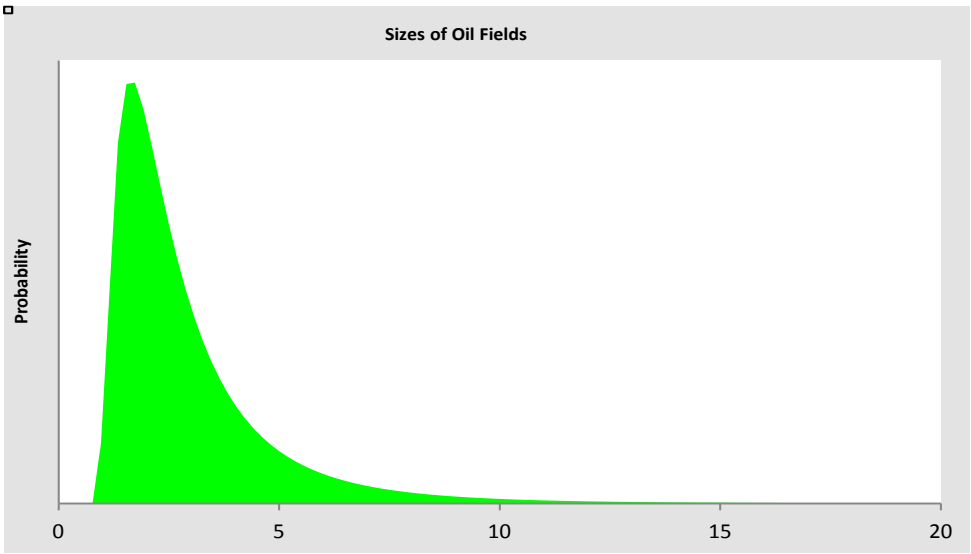
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	61.51	61.47
Median	59.96	59.98
Mode	---	---
Standard Deviation	13.77	13.77
Variance	189.52	189.62
Skewness	0.6401	0.6237
Kurtosis	3.52	3.49
Coefficient of Variability	0.2238	0.2240
Minimum	23.24	1.00
Maximum	120.00	120.00
Range Width	96.76	119.00
Mean Standard Error	0.06	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	23.24	1.00
95%	41.71	41.61
90%	45.23	45.10
85%	47.70	47.62
80%	49.80	49.73
75%	51.65	51.61
70%	53.40	53.37
65%	55.08	55.05
60%	56.70	56.69
55%	58.34	58.33
50%	59.96	59.98
45%	61.68	61.69
40%	63.49	63.47
35%	65.39	65.37
30%	67.45	67.43
25%	69.68	69.73
20%	72.35	72.38
15%	75.60	75.59
10%	79.83	79.83
5%	86.52	86.53
0%	120.00	120.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	2.10	3.1
Standard Deviation	2.06	2.06
Selected range is from -Infinity to 19.00		1.00 to 20.00



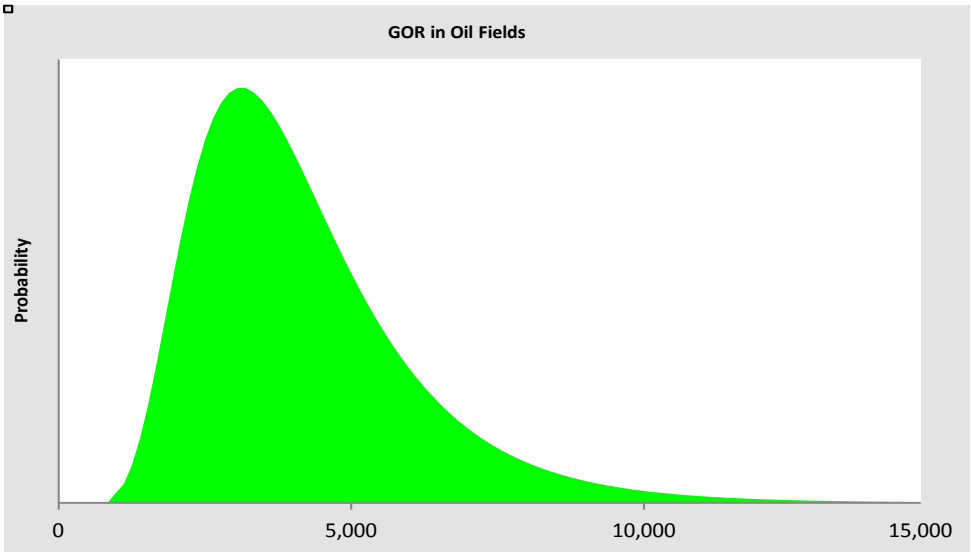
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	3.09	3.08
Median	2.50	2.50
Mode	---	---
Standard Deviation	1.94	1.93
Variance	3.75	3.72
Skewness	2.70	2.72
Kurtosis	13.99	14.17
Coefficient of Variability	0.6258	0.6264
Minimum	1.05	1.00
Maximum	19.93	20.00
Range Width	18.88	19.00
Mean Standard Error	0.01	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.05	1.00
95%	1.39	1.39
90%	1.52	1.52
85%	1.64	1.64
80%	1.76	1.75
75%	1.87	1.86
70%	1.98	1.97
65%	2.10	2.09
60%	2.22	2.22
55%	2.36	2.35
50%	2.50	2.50
45%	2.67	2.66
40%	2.86	2.84
35%	3.08	3.06
30%	3.33	3.30
25%	3.63	3.61
20%	4.01	3.99
15%	4.53	4.50
10%	5.30	5.28
5%	6.79	6.75
0%	19.93	20.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	200
Mean	4,091.74	4,291.74
Standard Deviation	1,932.08	1,932.08
Selected range is from -Infinity to 14,800.00		200.00 to 15,000.00



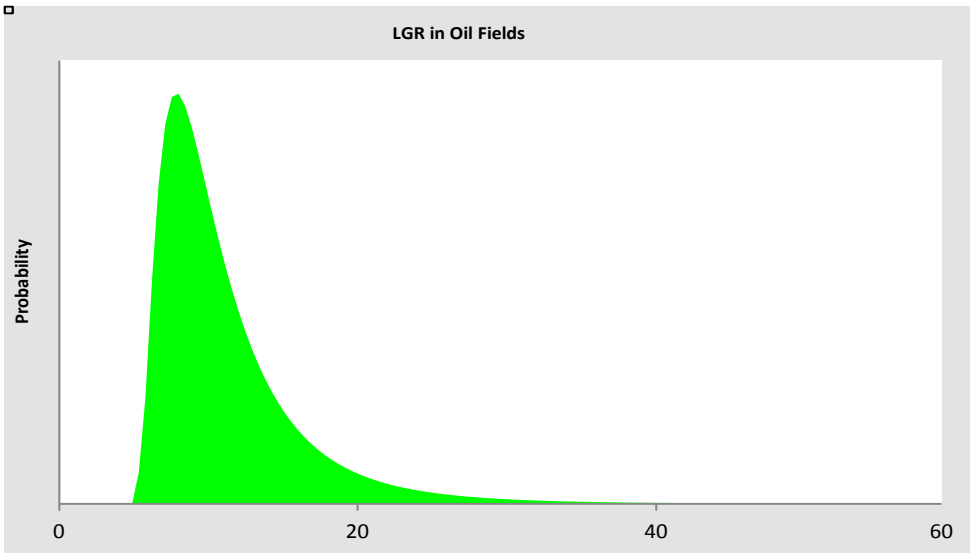
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	4,278.01	4,278.93
Median	3,903.09	3,897.92
Mode	---	---
Standard Deviation	1,884.71	1,888.94
Variance	3,552,134.50	3,568,086.36
Skewness	1.30	1.31
Kurtosis	5.52	5.52
Coefficient of Variability	0.4406	0.4415
Minimum	775.31	200.00
Maximum	14,976.07	15,000.00
Range Width	14,200.75	14,800.00
Mean Standard Error	8.43	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	775.31	200.00
95%	1,972.77	1,968.57
90%	2,288.25	2,281.57
85%	2,520.24	2,523.46
80%	2,728.86	2,735.59
75%	2,929.16	2,932.94
70%	3,116.77	3,123.20
65%	3,305.53	3,311.29
60%	3,497.23	3,500.94
55%	3,699.39	3,695.39
50%	3,903.05	3,897.92
45%	4,127.16	4,112.14
40%	4,360.22	4,342.49
35%	4,607.00	4,594.77
30%	4,887.86	4,877.18
25%	5,200.16	5,202.19
20%	5,589.81	5,590.49
15%	6,084.02	6,080.75
10%	6,750.46	6,760.01
5%	7,892.58	7,907.34
0%	14,976.07	15,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	6.44	11.44
Standard Deviation	5.22	5.22
Selected range is from -Infinity to 45.00		5.00 to 50.00



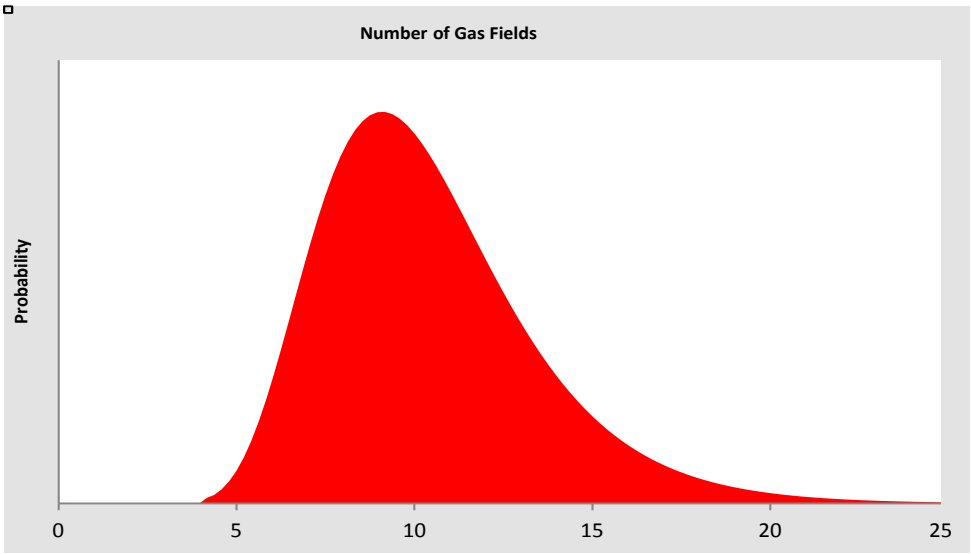
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	11.37	11.39
Median	10.00	10.00
Mode	---	---
Standard Deviation	4.91	4.97
Variance	24.16	24.70
Skewness	2.25	2.26
Kurtosis	10.70	10.70
Coefficient of Variability	0.4324	0.4364
Minimum	5.27	5.00
Maximum	49.83	50.00
Range Width	44.57	45.00
Mean Standard Error	0.02	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.27	5.00
95%	6.56	6.55
90%	7.01	7.01
85%	7.39	7.39
80%	7.75	7.75
75%	8.10	8.09
70%	8.44	8.44
65%	8.81	8.80
60%	9.18	9.17
55%	9.58	9.57
50%	10.00	10.00
45%	10.46	10.46
40%	10.99	10.98
35%	11.56	11.57
30%	12.23	12.25
25%	13.04	13.06
20%	14.00	14.08
15%	15.39	15.42
10%	17.35	17.39
5%	20.90	21.00
0%	49.83	50.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	9.47	10.47
Standard Deviation	3.08	3.08
Selected range is from -Infinity to 24.00		1.00 to 25.00



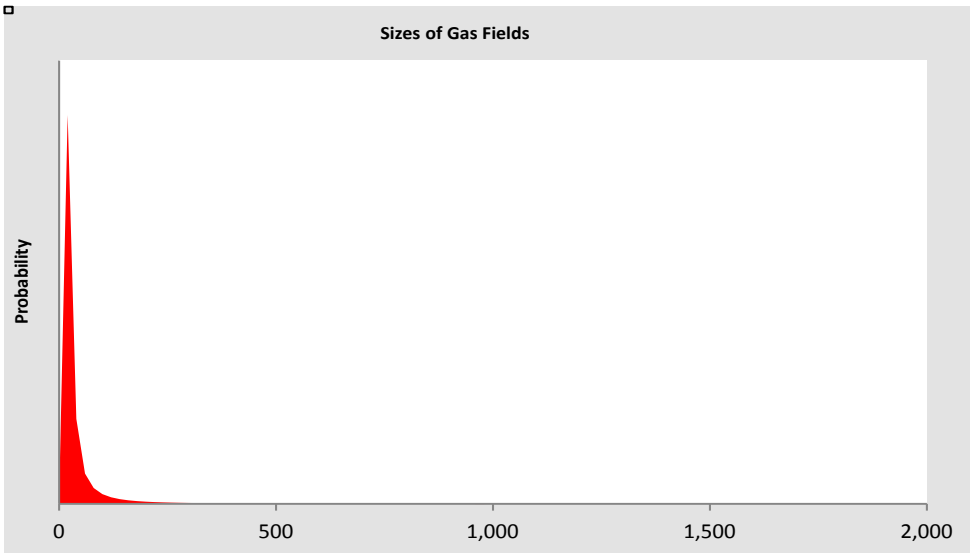
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	10.48	10.45
Median	10.02	10.00
Mode	---	---
Standard Deviation	3.06	3.04
Variance	9.39	9.22
Skewness	0.9140	0.8936
Kurtosis	4.15	4.11
Coefficient of Variability	0.2924	0.2906
Minimum	3.45	1.00
Maximum	24.99	25.00
Range Width	21.55	24.00
Mean Standard Error	0.01	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	3.45	1.00
95%	6.36	6.34
90%	6.99	6.99
85%	7.48	7.48
80%	7.90	7.89
75%	8.28	8.26
70%	8.63	8.62
65%	8.97	8.96
60%	9.32	9.30
55%	9.67	9.64
50%	10.02	10.00
45%	10.38	10.36
40%	10.76	10.75
35%	11.18	11.17
30%	11.65	11.62
25%	12.17	12.14
20%	12.78	12.75
15%	13.56	13.49
10%	14.59	14.50
5%	16.22	16.13
0%	24.99	25.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	6
Mean	41.46	47.46
Standard Deviation	186.39	186.39
Selected range is from -Infinity to 1,994.00		6.00 to 2,000.00



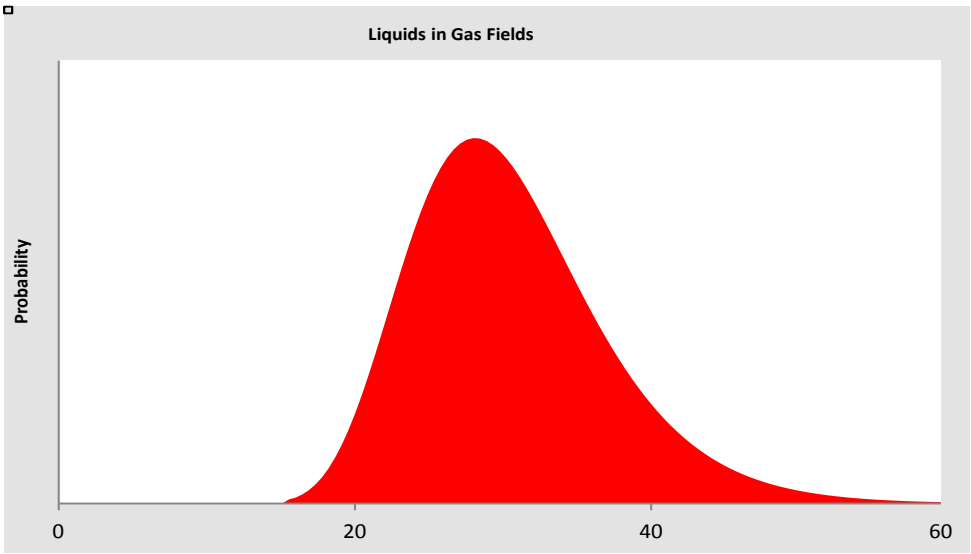
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	43.78	44.19
Median	14.91	14.98
Mode	---	---
Standard Deviation	105.39	105.10
Variance	11,106.96	11,046.49
Skewness	7.91	8.03
Kurtosis	89.24	93.16
Coefficient of Variability	2.41	2.38
Minimum	6.00	6.00
Maximum	1,990.89	2,000.00
Range Width	1,984.89	1,994.00
Mean Standard Error	0.47	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.00	6.00
95%	6.50	6.51
90%	6.95	6.96
85%	7.44	7.47
80%	8.04	8.06
75%	8.75	8.76
70%	9.58	9.59
65%	10.58	10.58
60%	11.77	11.77
55%	13.20	13.21
50%	14.91	14.98
45%	17.08	17.18
40%	19.81	19.98
35%	23.46	23.60
30%	28.26	28.43
25%	34.91	35.14
20%	45.12	44.99
15%	60.60	60.73
10%	89.37	89.78
5%	164.10	162.98
0%	1,990.89	2,000.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	25.83	30.83
Standard Deviation	6.70	6.7
Selected range is from -Infinity to 55.00		5.00 to 60.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	30.81	30.79
Median	29.99	29.99
Mode	---	---
Standard Deviation	6.62	6.62
Variance	43.80	43.79
Skewness	0.7084	0.7066
Kurtosis	3.66	3.66
Coefficient of Variability	0.2148	0.2149
Minimum	14.10	5.00
Maximum	59.99	60.00
Range Width	45.90	55.00
Mean Standard Error	0.03	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	14.10	5.00
95%	21.41	21.43
90%	23.06	23.02
85%	24.26	24.19
80%	25.21	25.16
75%	26.08	26.04
70%	26.88	26.86
65%	27.65	27.65
60%	28.42	28.43
55%	29.19	29.20
50%	29.99	29.99
45%	30.81	30.81
40%	31.64	31.66
35%	32.57	32.57
30%	33.56	33.56
25%	34.72	34.68
20%	36.00	35.97
15%	37.56	37.54
10%	39.60	39.63
5%	43.02	42.95
0%	59.99	60.00

End of Assumptions

Simulation started on 1/26/2012 at 1:37 PM
Simulation stopped on 1/26/2012 at 1:50 PM