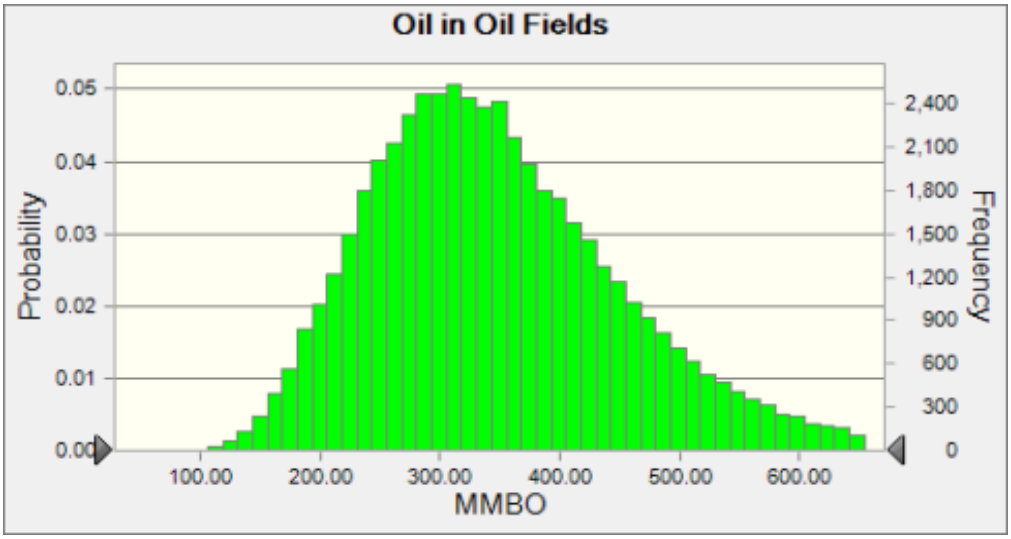
38050102
Sulawati Basin
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 11.75 to 960.13
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.49



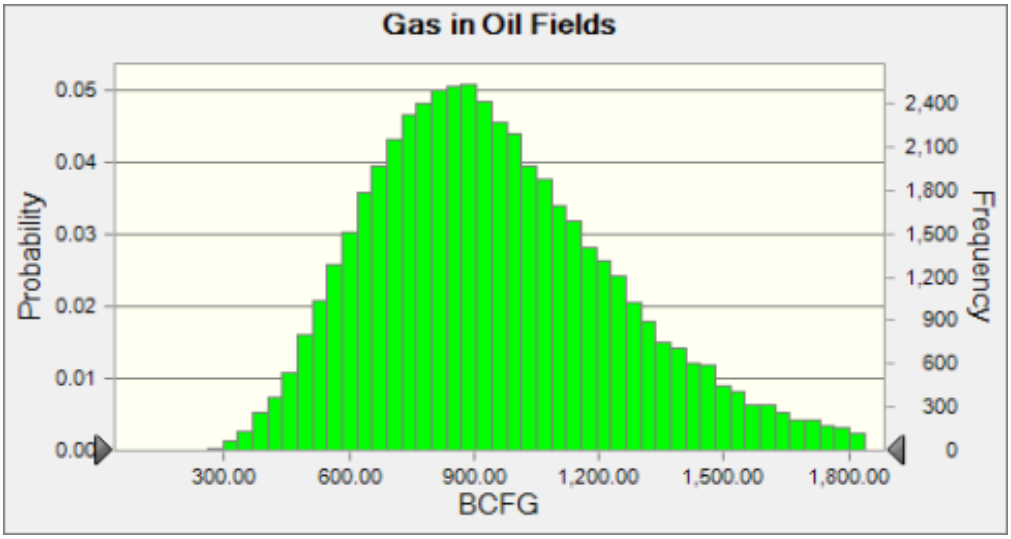
Statistics:	Forecast values
Trials	50,000
Mean	349.01
Median	334.68
Mode	---
Standard Deviation	108.84
Variance	11,847.11
Skewness	0.7869
Kurtosis	3.87
Coefficient of Variability	0.3119
Minimum	11.75
Maximum	960.13
Range Width	948.38
Mean Standard Error	0.49

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	11.75
95%	196.73
90%	223.05
85%	241.36
80%	256.95
75%	271.14
70%	284.44
65%	296.90
60%	309.43
55%	321.69
50%	334.67
45%	348.05
40%	361.00
35%	376.35
30%	393.22
25%	411.70
20%	432.92
15%	459.37
10%	494.02
5%	551.11
0%	960.13

Forecast: Gas in Oil Fields

Summary:
Entire range is from 21.61 to 2,640.83
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.40



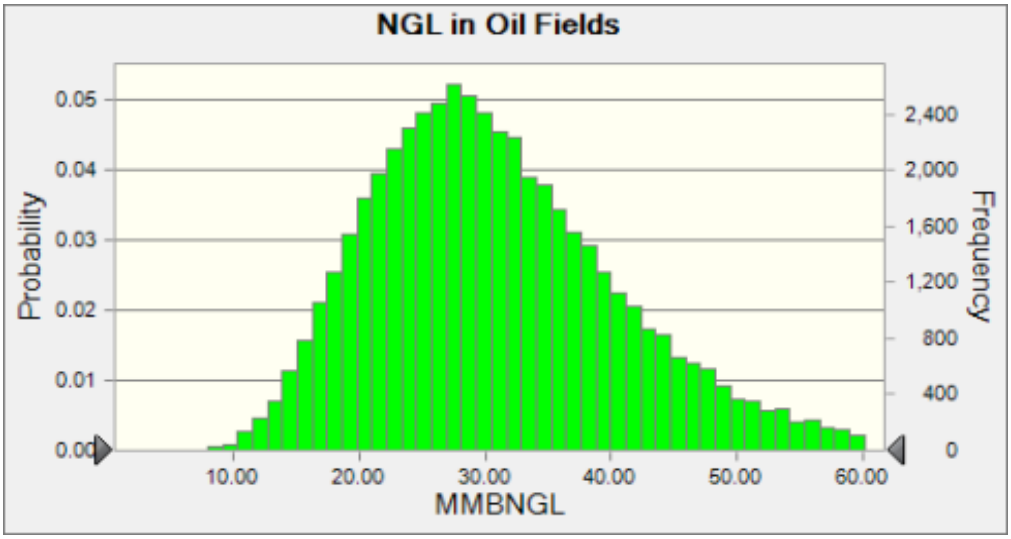
Statistics:	Forecast values
Trials	50,000
Mean	959.39
Median	916.80
Mode	---
Standard Deviation	313.54
Variance	98,307.91
Skewness	0.7970
Kurtosis	3.89
Coefficient of Variability	0.3268
Minimum	21.61
Maximum	2,640.83
Range Width	2,619.21
Mean Standard Error	1.40

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	21.61
95%	523.01
90%	595.25
85%	648.76
80%	694.33
75%	735.80
70%	773.57
65%	810.01
60%	845.53
55%	880.44
50%	916.80
45%	954.46
40%	994.89
35%	1,038.41
30%	1,085.52
25%	1,138.52
20%	1,200.64
15%	1,274.25
10%	1,379.06
5%	1,540.46
0%	2,640.83

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.48 to 97.63
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.05



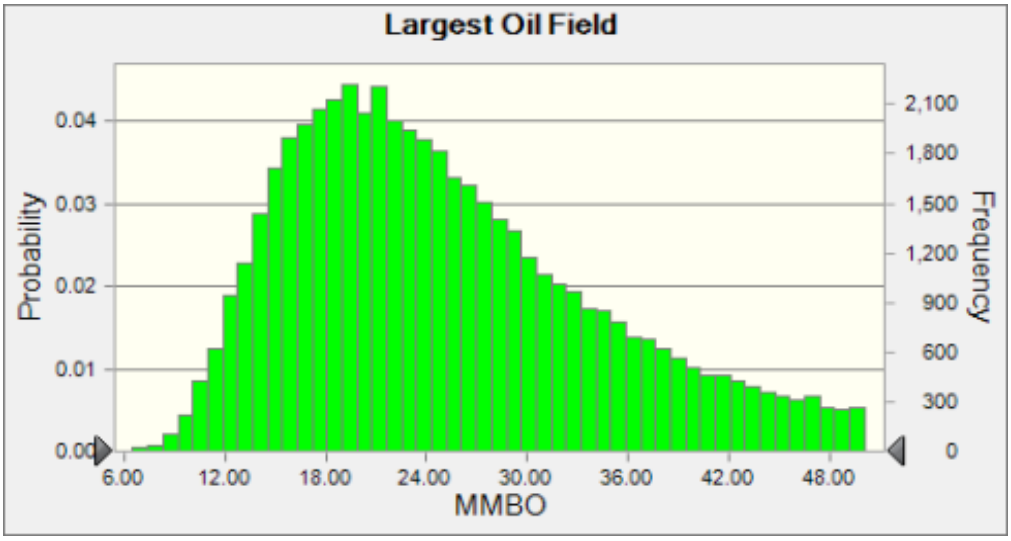
Statistics:	Forecast values
Trials	50,000
Mean	31.06
Median	29.65
Mode	---
Standard Deviation	10.37
Variance	107.48
Skewness	0.8193
Kurtosis	4.00
Coefficient of Variability	0.3338
Minimum	0.48
Maximum	97.63
Range Width	97.15
Mean Standard Error	0.05

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.48
95%	16.67
90%	19.00
85%	20.78
80%	22.28
75%	23.66
70%	24.92
65%	26.15
60%	27.30
55%	28.42
50%	29.65
45%	30.89
40%	32.22
35%	33.63
30%	35.19
25%	36.97
20%	38.98
15%	41.52
10%	44.88
5%	50.29
0%	97.63

Forecast: Largest Oil Field

Summary:
Entire range is from 6.56 to 49.99
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.04



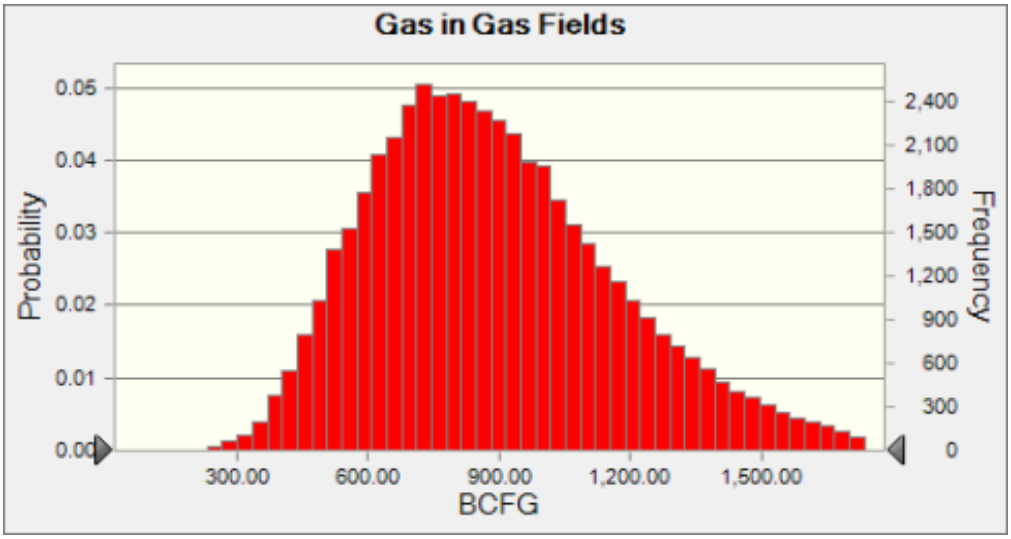
Statistics:	Forecast values
Trials	50,000
Mean	24.95
Median	23.32
Mode	---
Standard Deviation	9.03
Variance	81.62
Skewness	0.6724
Kurtosis	2.82
Coefficient of Variability	0.3621
Minimum	6.56
Maximum	49.99
Range Width	43.44
Mean Standard Error	0.04

Forecast: Largest Oil Field (continued)

Percentiles:	MMBO
100%	6.56
95%	12.87
90%	14.56
85%	15.82
80%	16.97
75%	18.03
70%	19.07
65%	20.08
60%	21.12
55%	22.18
50%	23.32
45%	24.49
40%	25.76
35%	27.17
30%	28.69
25%	30.46
20%	32.56
15%	35.13
10%	38.34
5%	42.89
0%	49.99

Forecast: Gas in Gas Fields

Summary:
Entire range is from 21.66 to 2,796.12
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.33



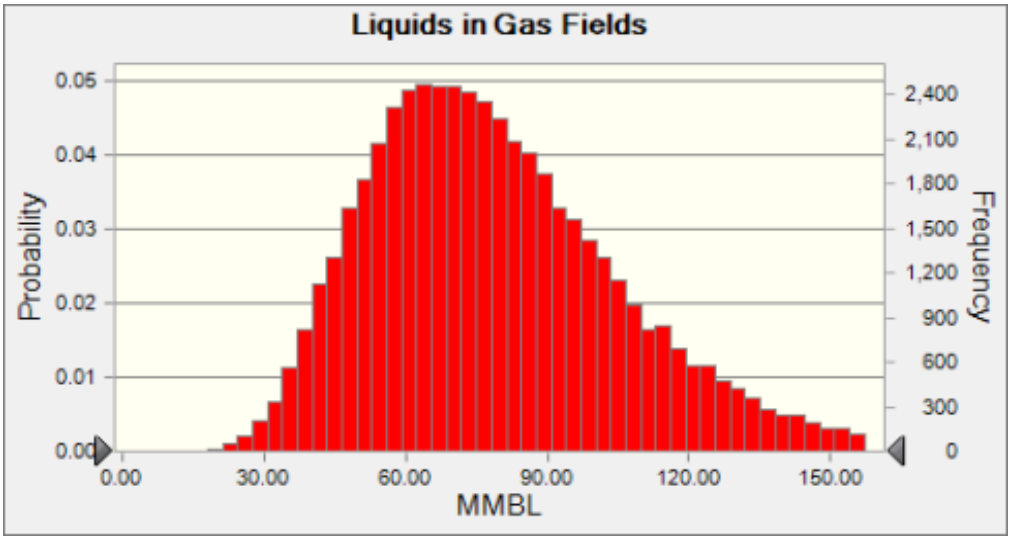
Statistics:	Forecast values
Trials	50,000
Mean	898.42
Median	858.60
Mode	---
Standard Deviation	298.38
Variance	89,032.62
Skewness	0.8070
Kurtosis	3.94
Coefficient of Variability	0.3321
Minimum	21.66
Maximum	2,796.12
Range Width	2,774.45
Mean Standard Error	1.33

Forecast: Gas in Gas Fields (continued)

Percentiles:	BCFG
100%	21.66
95%	484.87
90%	550.29
85%	601.82
80%	644.90
75%	683.47
70%	719.55
65%	752.58
60%	787.40
55%	822.43
50%	858.60
45%	895.55
40%	934.15
35%	974.95
30%	1,018.95
25%	1,070.51
20%	1,129.52
15%	1,202.99
10%	1,297.44
5%	1,448.93
0%	2,796.12

Forecast: Liquids in Gas Fields

Summary:
Entire range is from 2.09 to 263.03
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.12



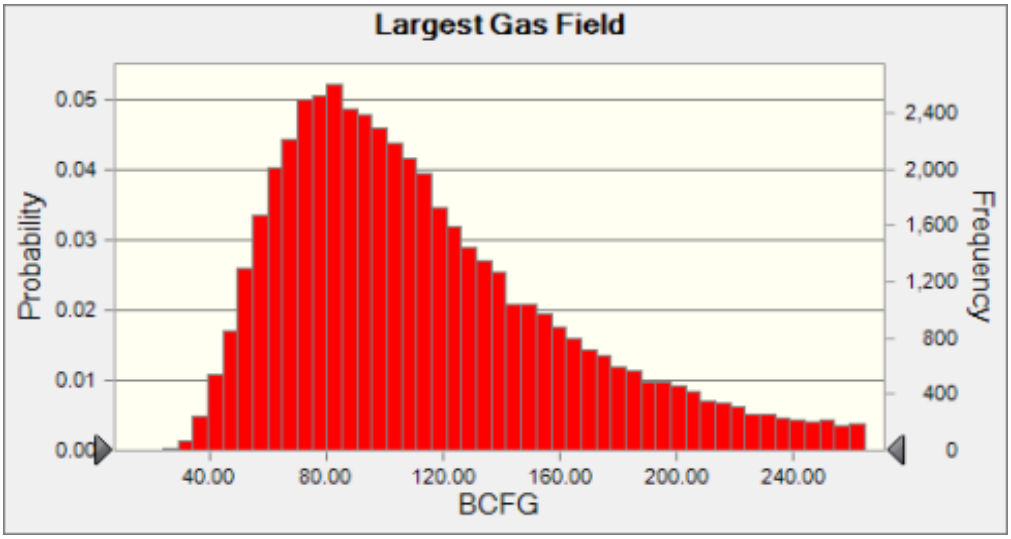
Statistics:	Forecast values
Trials	50,000
Mean	79.38
Median	75.45
Mode	---
Standard Deviation	27.80
Variance	773.07
Skewness	0.8485
Kurtosis	4.04
Coefficient of Variability	0.3503
Minimum	2.09
Maximum	263.03
Range Width	260.93
Mean Standard Error	0.12

Forecast: Liquids in Gas Fields (continued)

Percentiles:	MMBL
100%	2.09
95%	41.31
90%	47.34
85%	51.95
80%	55.80
75%	59.21
70%	62.51
65%	65.67
60%	68.94
55%	72.13
50%	75.45
45%	78.85
40%	82.53
35%	86.26
30%	90.44
25%	95.32
20%	100.80
15%	107.45
10%	116.58
5%	130.85
0%	263.03

Forecast: Largest Gas Field

Summary:
Entire range is from 13.72 to 299.98
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.24



Statistics:	Forecast values
Trials	50,000
Mean	116.22
Median	103.71
Mode	---
Standard Deviation	52.80
Variance	2,787.41
Skewness	1.08
Kurtosis	3.87
Coefficient of Variability	0.4543
Minimum	13.72
Maximum	299.98
Range Width	286.26
Mean Standard Error	0.24

Forecast: Largest Gas Field (continued)

Percentiles:	BCFG
100%	13.72
95%	52.75
90%	60.58
85%	66.75
80%	72.34
75%	77.28
70%	82.36
65%	87.26
60%	92.47
55%	98.08
50%	103.71
45%	109.84
40%	116.36
35%	123.98
30%	132.74
25%	142.85
20%	155.30
15%	170.91
10%	192.60
5%	226.27
0%	299.98

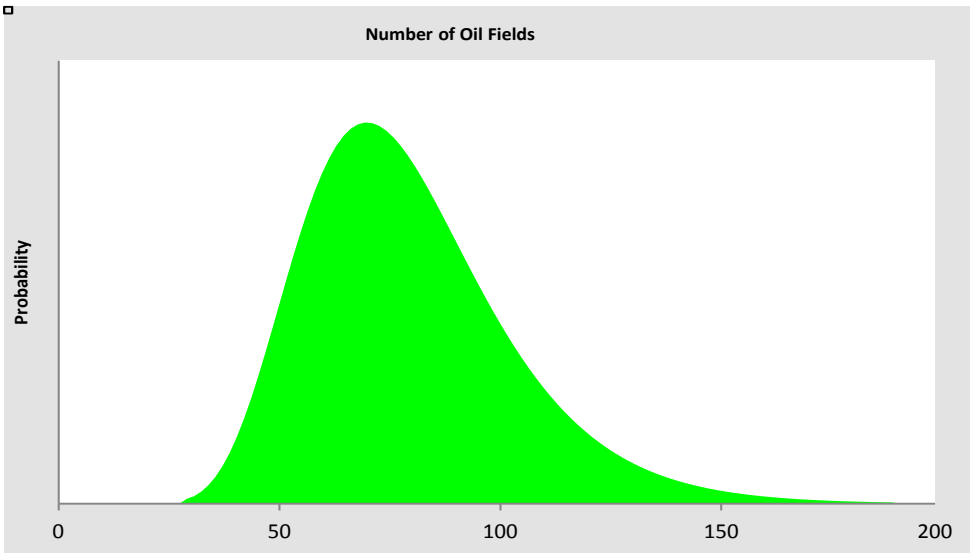
End of Forecasts

38050102
Sulawati Basin
Monte Carlo Results

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	79.38	80.38
Standard Deviation	23.92	23.92
Selected range is from -Infinity to 189.00		1.00 to 190.00



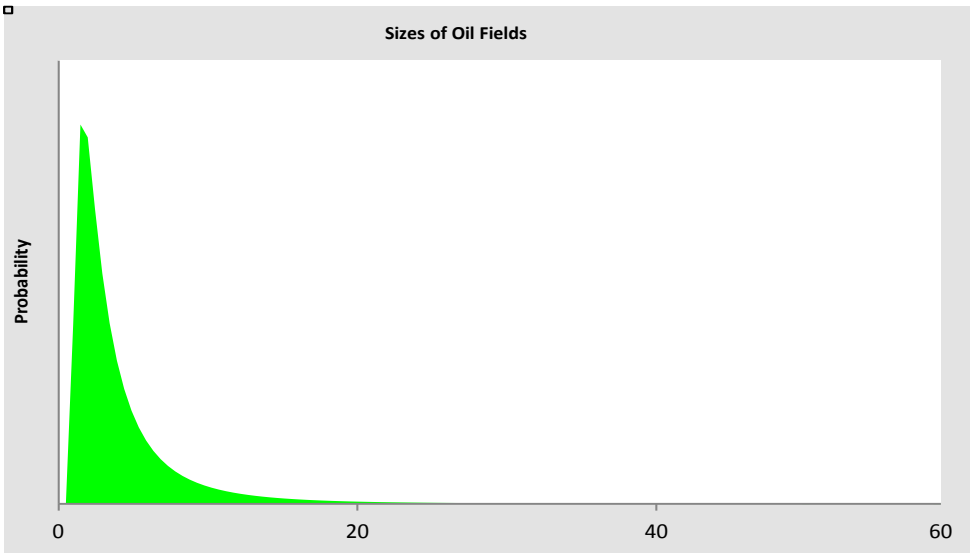
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	80.24	80.25
Median	76.89	76.97
Mode	---	---
Standard Deviation	23.49	23.59
Variance	551.62	556.49
Skewness	0.8207	0.8251
Kurtosis	3.94	3.93
Coefficient of Variability	0.2927	0.2940
Minimum	19.95	1.00
Maximum	189.65	190.00
Range Width	169.70	189.00
Mean Standard Error	0.11	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	19.95	1.00
95%	47.72	47.79
90%	53.09	53.08
85%	57.09	56.98
80%	60.49	60.29
75%	63.53	63.28
70%	66.26	66.10
65%	68.99	68.82
60%	71.56	71.51
55%	74.25	74.21
50%	76.89	76.97
45%	79.84	79.84
40%	82.81	82.86
35%	86.11	86.10
30%	89.56	89.65
25%	93.47	93.66
20%	98.15	98.32
15%	103.93	104.05
10%	111.75	111.73
5%	123.64	124.10
0%	189.65	190.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	3.42	4.42
Standard Deviation	4.74	4.74
Selected range is from -Infinity to 49.00		1.00 to 50.00



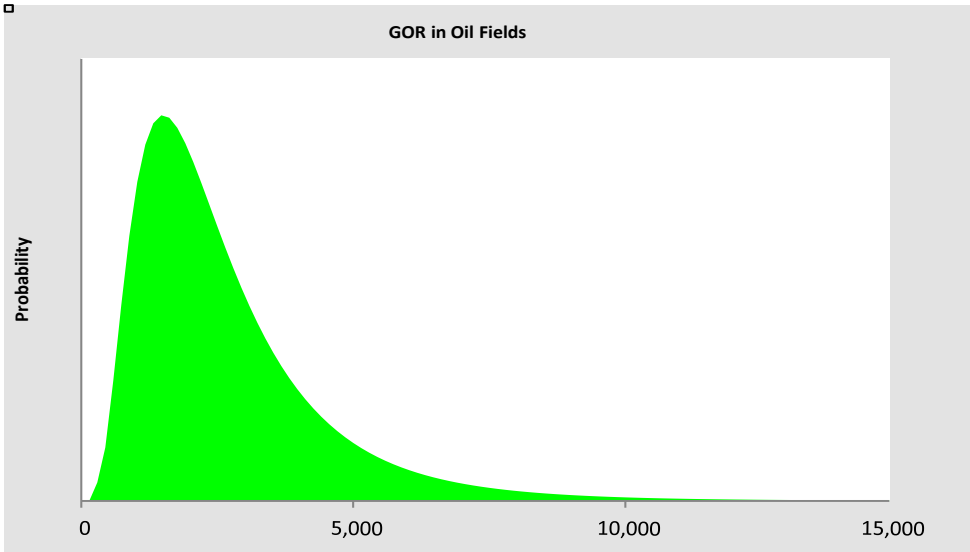
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	4.34	4.35
Median	3.00	3.00
Mode	---	---
Standard Deviation	4.14	4.20
Variance	17.12	17.65
Skewness	3.67	3.72
Kurtosis	23.42	23.75
Coefficient of Variability	0.95	0.97
Minimum	1.02	1.00
Maximum	49.46	50.00
Range Width	48.44	49.00
Mean Standard Error	0.02	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	1.02	1.00
95%	1.37	1.36
90%	1.53	1.53
85%	1.68	1.68
80%	1.84	1.84
75%	2.00	1.99
70%	2.16	2.16
65%	2.34	2.34
60%	2.53	2.54
55%	2.76	2.75
50%	3.00	3.00
45%	3.28	3.27
40%	3.60	3.60
35%	3.97	3.97
30%	4.47	4.43
25%	5.04	5.01
20%	5.81	5.77
15%	6.85	6.83
10%	8.50	8.50
5%	11.83	11.87
0%	49.46	50.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	100
Mean	2,664.66	2,764.66
Standard Deviation	1,821.01	1,821.01
Selected range is from -Infinity to 14,900.00		100.00 to 15,000.00



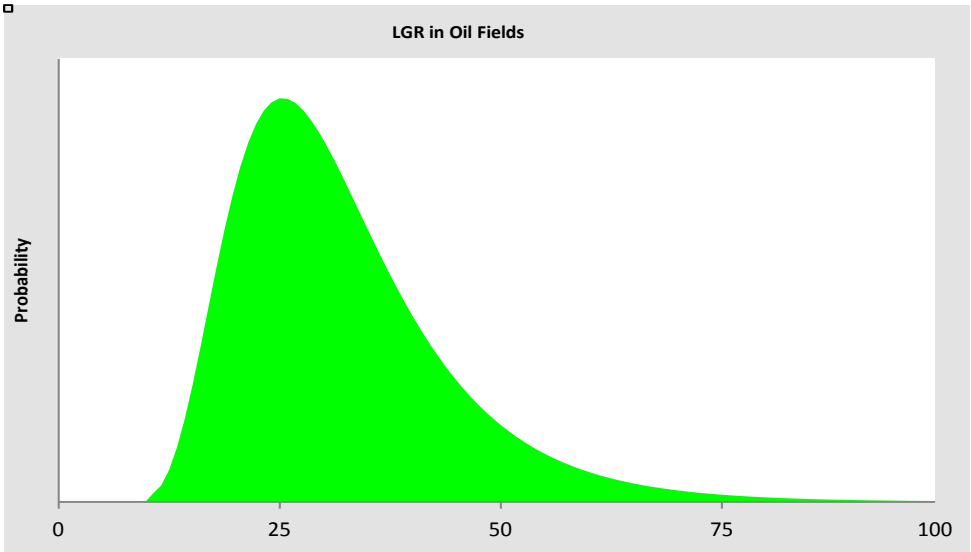
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	2,743.27	2,749.35
Median	2,300.00	2,298.29
Mode	---	---
Standard Deviation	1,744.49	1,753.34
Variance	3,043,242.62	3,074,210.97
Skewness	1.91	1.90
Kurtosis	8.49	8.46
Coefficient of Variability	0.6359	0.6377
Minimum	244.57	100.00
Maximum	14,993.08	15,000.00
Range Width	14,748.51	14,900.00
Mean Standard Error	7.80	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	244.57	100.00
95%	897.06	894.45
90%	1,096.64	1,094.76
85%	1,259.32	1,257.71
80%	1,407.97	1,406.04
75%	1,547.59	1,548.34
70%	1,686.63	1,689.29
65%	1,828.48	1,832.10
60%	1,980.22	1,979.45
55%	2,135.57	2,133.91
50%	2,299.98	2,298.29
45%	2,476.82	2,475.93
40%	2,669.56	2,671.10
35%	2,884.27	2,889.63
30%	3,126.75	3,139.97
25%	3,419.84	3,435.25
20%	3,782.87	3,797.68
15%	4,240.06	4,269.60
10%	4,934.65	4,948.41
5%	6,147.11	6,156.07
0%	14,993.08	15,000.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	27.45	32.45
Standard Deviation	12.43	12.43
Selected range is from -Infinity to 95.00		5.00 to 100.00



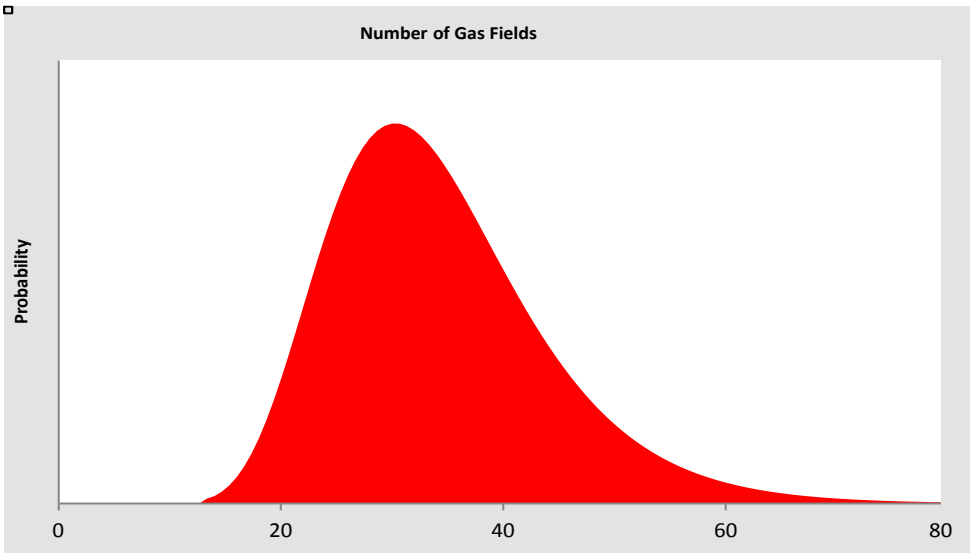
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	32.49	32.37
Median	30.12	29.99
Mode	---	---
Standard Deviation	12.23	12.17
Variance	149.61	148.09
Skewness	1.28	1.25
Kurtosis	5.50	5.31
Coefficient of Variability	0.3765	0.3760
Minimum	8.61	5.00
Maximum	99.80	100.00
Range Width	91.19	95.00
Mean Standard Error	0.05	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	8.61	5.00
95%	17.33	17.28
90%	19.43	19.37
85%	21.04	20.97
80%	22.45	22.37
75%	23.81	23.67
70%	25.02	24.92
65%	26.24	26.16
60%	27.54	27.40
55%	28.80	28.67
50%	30.12	29.99
45%	31.54	31.38
40%	33.03	32.87
35%	34.72	34.51
30%	36.50	36.33
25%	38.51	38.42
20%	41.03	40.92
15%	44.20	44.06
10%	48.48	48.40
5%	55.71	55.68
0%	99.80	100.00

Assumption: Number of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	33.40	34.4
Standard Deviation	9.98	9.98
Selected range is from -Infinity to 79.00		1.00 to 80.00



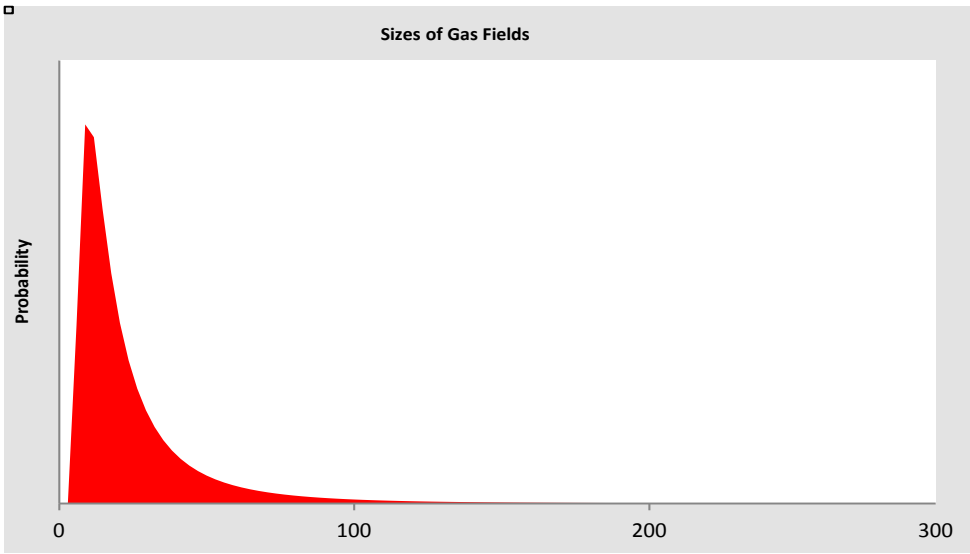
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	34.38	34.35
Median	32.97	32.99
Mode	---	---
Standard Deviation	9.89	9.84
Variance	97.83	96.90
Skewness	0.8141	0.8180
Kurtosis	3.86	3.92
Coefficient of Variability	0.2877	0.2866
Minimum	9.60	1.00
Maximum	79.53	80.00
Range Width	69.93	79.00
Mean Standard Error	0.04	---

Assumption: Number of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	9.60	1.00
95%	20.77	20.78
90%	22.97	22.99
85%	24.61	24.63
80%	26.00	26.01
75%	27.26	27.27
70%	28.44	28.44
65%	29.54	29.58
60%	30.65	30.71
55%	31.78	31.84
50%	32.97	32.99
45%	34.20	34.18
40%	35.51	35.45
35%	36.82	36.80
30%	38.30	38.28
25%	40.03	39.95
20%	42.04	41.90
15%	44.46	44.28
10%	47.66	47.48
5%	52.76	52.63
0%	79.53	80.00

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	6
Mean	20.51	26.51
Standard Deviation	28.41	28.41
Selected range is from -Infinity to 294.00		6.00 to 300.00



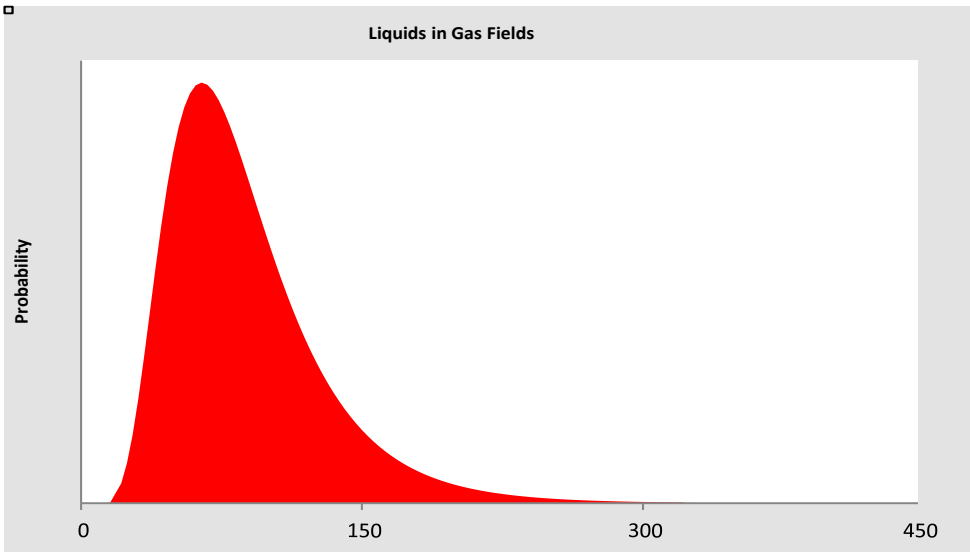
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	26.04	26.12
Median	17.84	17.98
Mode	---	---
Standard Deviation	25.18	25.20
Variance	634.25	635.22
Skewness	3.66	3.72
Kurtosis	22.67	23.75
Coefficient of Variability	0.97	0.97
Minimum	6.21	6.00
Maximum	298.53	300.00
Range Width	292.33	294.00
Mean Standard Error	0.11	---

Assumption: Sizes of Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	6.21	6.00
95%	8.19	8.19
90%	9.18	9.18
85%	10.06	10.10
80%	10.96	11.02
75%	11.88	11.96
70%	12.86	12.97
65%	13.94	14.05
60%	15.11	15.22
55%	16.42	16.52
50%	17.84	17.98
45%	19.51	19.65
40%	21.45	21.57
35%	23.80	23.85
30%	26.56	26.61
25%	29.98	30.06
20%	34.48	34.59
15%	40.76	40.95
10%	50.77	50.98
5%	71.50	71.24
0%	298.53	300.00

Assumption: Liquids in Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	87.68	88.68
Standard Deviation	42.23	42.23
Selected range is from -Infinity to 324.00		1.00 to 325.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	88.85	88.40
Median	80.24	79.95
Mode	---	---
Standard Deviation	41.66	41.26
Variance	1,735.33	1,702.71
Skewness	1.33	1.33
Kurtosis	5.57	5.63
Coefficient of Variability	0.4688	0.4668
Minimum	13.20	1.00
Maximum	324.79	325.00
Range Width	311.59	324.00
Mean Standard Error	0.19	---

Assumption: Liquids in Gas Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	13.20	1.00
95%	38.37	38.26
90%	45.02	44.99
85%	50.23	50.19
80%	54.83	54.77
75%	59.20	59.03
70%	63.40	63.15
65%	67.43	67.22
60%	71.58	71.33
55%	75.78	75.55
50%	80.24	79.95
45%	84.89	84.61
40%	90.08	89.63
35%	95.56	95.13
30%	101.92	101.29
25%	109.10	108.39
20%	117.64	116.88
15%	128.73	127.62
10%	143.64	142.52
5%	168.66	167.75
0%	324.79	325.00

End of Assumptions

Simulation started on 9/14/2011 at 11:38 AM
Simulation stopped on 9/14/2011 at 11:47 AM