Go to Table of Contents

Go to index map

Cretaceous-Paleogene Basin, Assessment Unit 60810101
Assessment Results Summary

[MMBO, million barrels of oil. BCFG, billion cubic feet of gas. MMBNGL, million barrels of natural gas liquids. MFS, minimum field size assessed (MMBO or BCFG). Prob., probability (including both geologic and accessibility probabilities) of at least one field equal to or greater than the MFS. Results shown are fully risked estimates. For gas fields, all liquids are included under the NGL (natural gas liquids) category. F95 represents a 95 percent chance of at least the amount tabulated. Other fractiles are defined similarly. Fractiles are additive under the assumption of perfect positive correlation. Shading indicates not applicable]

Field Type	MFS	Prob. (0-1)	Undiscovered Resources												Largest Undiscovered Field (MMBO or BCFG)			
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)							
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	1	1.00	484	1,625	3,214	1,711	719	2,517	5,504	2,739	40	147	347	164	80	242	635	283
Gas Fields	6						523	1,887	4,133	2,057	21	81	192	90	126	368	1,063	446
Total		1.00	484	1,625	3,214	1,711	1,243	4,404	9,637	4,795	62	227	539	255				

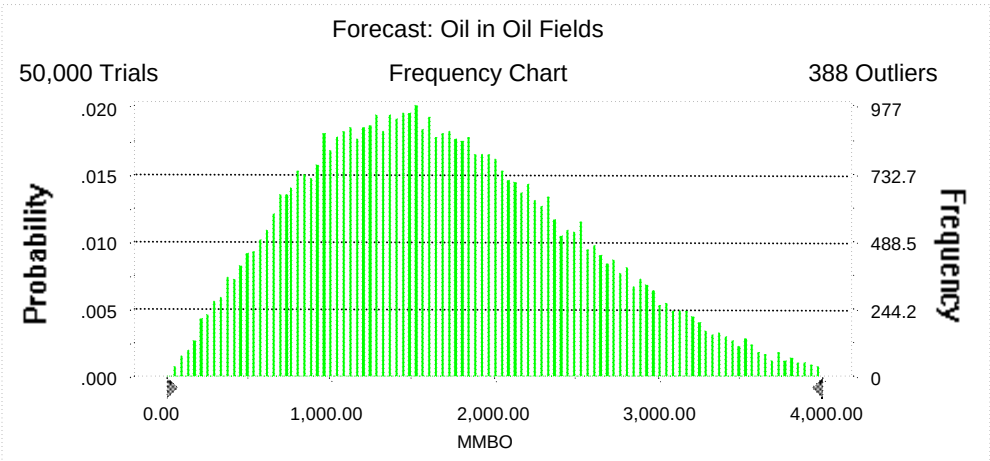
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 4,000.00 MMBO
Entire range is from 21.68 to 5,748.65 MMBO
After 50,000 trials, the standard error of the mean is 3.74

Statistics:	Value
Trials	50000
Mean	1,711.26
Median	1,625.09
Mode	---
Standard Deviation	837.23
Variance	700,945.97
Skewness	0.52
Kurtosis	3.01
Coefficient of Variability	0.49
Range Minimum	21.68
Range Maximum	5,748.65
Range Width	5,726.98
Mean Standard Error	3.74



60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	21.68
95%	483.98
90%	682.23
85%	829.78
80%	963.37
75%	1,081.14
70%	1,194.77
65%	1,302.97
60%	1,412.36
55%	1,517.97
50%	1,625.09
45%	1,737.03
40%	1,853.82
35%	1,976.09
30%	2,107.66
25%	2,252.26
20%	2,420.48
15%	2,613.59
10%	2,859.52
5%	3,213.74
0%	5,748.65

End of Forecast

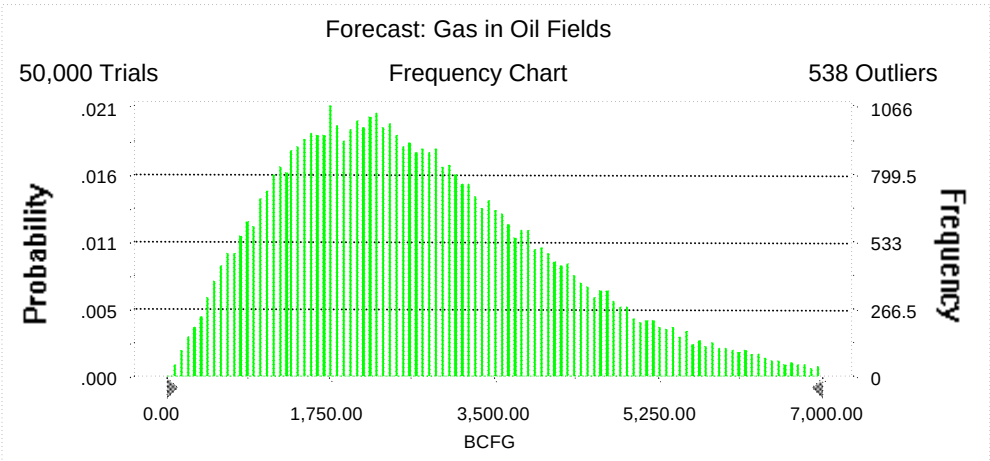
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 7,000.00 BCFG
Entire range is from 30.36 to 11,634.29 BCFG
After 50,000 trials, the standard error of the mean is 6.62

Statistics:	Value
Trials	50000
Mean	2,738.52
Median	2,516.76
Mode	---
Standard Deviation	1,481.18
Variance	2,193,882.69
Skewness	0.83
Kurtosis	3.79
Coefficient of Variability	0.54
Range Minimum	30.36
Range Maximum	11,634.29
Range Width	11,603.93
Mean Standard Error	6.62



60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	30.36
95%	719.23
90%	1,015.01
85%	1,245.80
80%	1,448.62
75%	1,633.50
70%	1,811.60
65%	1,990.13
60%	2,165.89
55%	2,339.33
50%	2,516.76
45%	2,712.48
40%	2,905.58
35%	3,113.27
30%	3,345.63
25%	3,604.75
20%	3,904.75
15%	4,269.20
10%	4,747.14
5%	5,503.86
0%	11,634.29

End of Forecast

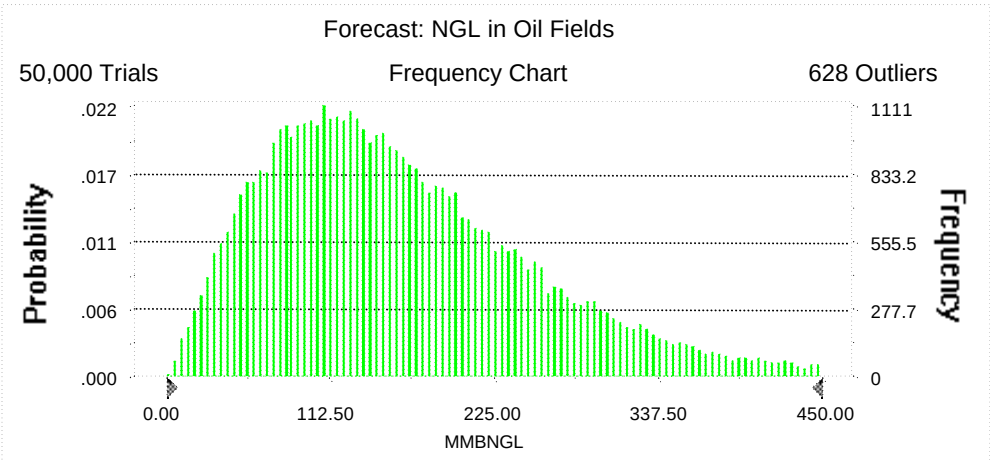
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 450.00 MMBNGL
Entire range is from 2.45 to 850.63 MMBNGL
After 50,000 trials, the standard error of the mean is 0.43

Statistics:	Value
Trials	50000
Mean	164.29
Median	146.78
Mode	---
Standard Deviation	96.88
Variance	9,385.06
Skewness	1.10
Kurtosis	4.74
Coefficient of Variability	0.59
Range Minimum	2.45
Range Maximum	850.63
Range Width	848.19
Mean Standard Error	0.43



60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	2.45
95%	40.42
90%	56.59
85%	70.32
80%	81.86
75%	92.97
70%	103.76
65%	114.25
60%	124.94
55%	135.31
50%	146.78
45%	158.32
40%	170.78
35%	184.89
30%	199.59
25%	216.78
20%	237.12
15%	260.44
10%	294.42
5%	347.18
0%	850.63

End of Forecast

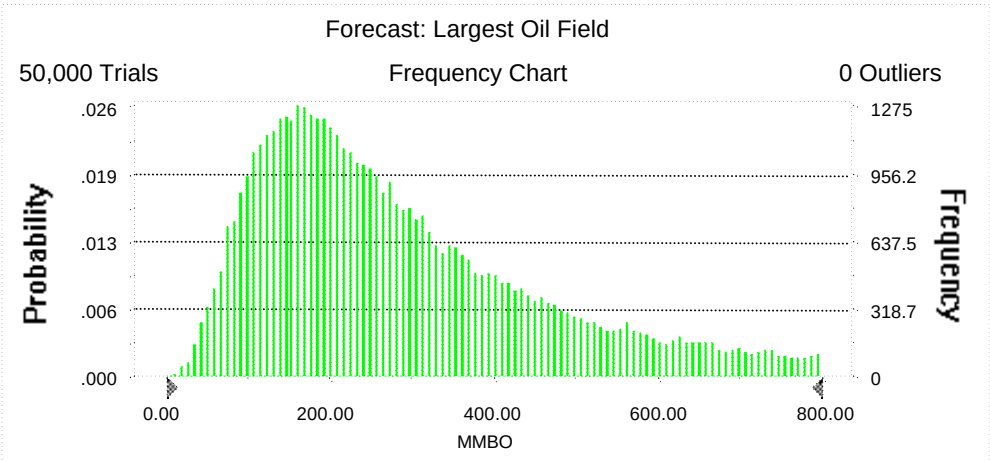
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 800.00 MMBO
Entire range is from 7.47 to 799.96 MMBO
After 50,000 trials, the standard error of the mean is 0.75

Statistics:	Value
Trials	50000
Mean	282.91
Median	241.65
Mode	---
Standard Deviation	167.82
Variance	28,162.25
Skewness	0.96
Kurtosis	3.34
Coefficient of Variability	0.59
Range Minimum	7.47
Range Maximum	799.96
Range Width	792.49
Mean Standard Error	0.75



60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	7.47
95%	80.08
90%	103.75
85%	122.26
80%	139.50
75%	155.83
70%	171.82
65%	187.96
60%	204.58
55%	222.53
50%	241.65
45%	262.24
40%	285.03
35%	310.40
30%	340.03
25%	373.56
20%	415.60
15%	466.49
10%	535.18
5%	635.20
0%	799.96

End of Forecast

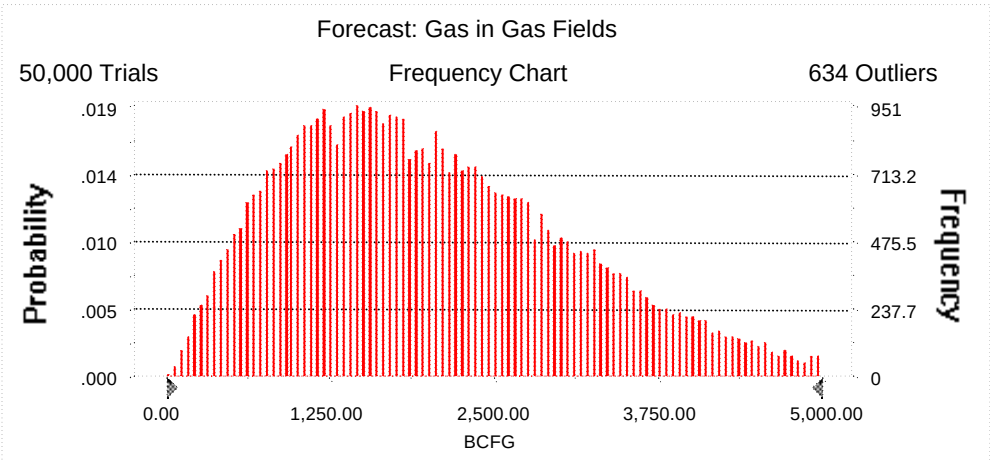
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 5,000.00 BCFG
Entire range is from 27.99 to 8,166.60 BCFG
After 50,000 trials, the standard error of the mean is 5.01

Statistics:	Value
Trials	50000
Mean	2,056.69
Median	1,886.82
Mode	---
Standard Deviation	1,119.39
Variance	1,253,030.91
Skewness	0.72
Kurtosis	3.30
Coefficient of Variability	0.54
Range Minimum	27.99
Range Maximum	8,166.60
Range Width	8,138.61
Mean Standard Error	5.01



60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	27.99
95%	523.28
90%	734.68
85%	905.72
80%	1,057.06
75%	1,198.23
70%	1,339.41
65%	1,474.24
60%	1,607.56
55%	1,743.56
50%	1,886.82
45%	2,048.00
40%	2,204.02
35%	2,372.27
30%	2,556.04
25%	2,753.16
20%	2,989.22
15%	3,264.64
10%	3,601.62
5%	4,133.05
0%	8,166.60

End of Forecast

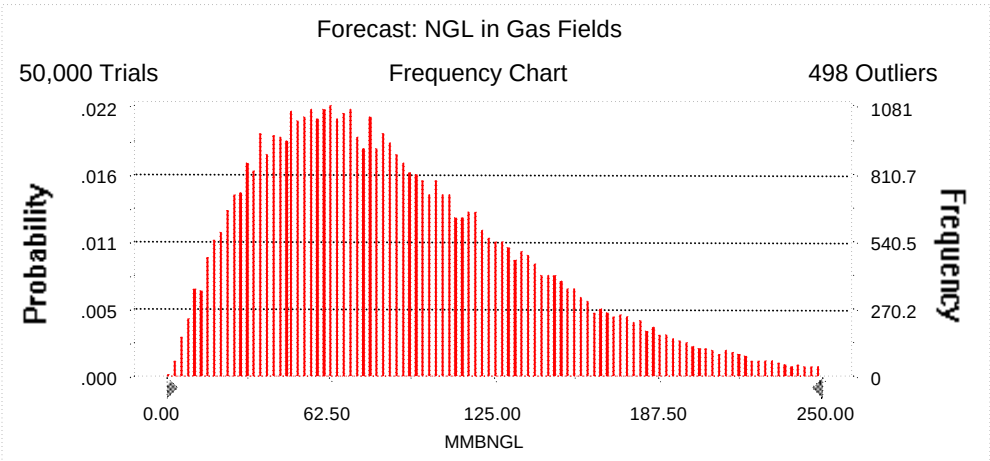
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 250.00 MMBNGL
Entire range is from 1.10 to 498.22 MMBNGL
After 50,000 trials, the standard error of the mean is 0.24

Statistics:	Value
Trials	50000
Mean	90.45
Median	80.69
Mode	---
Standard Deviation	53.49
Variance	2,861.02
Skewness	0.97
Kurtosis	4.12
Coefficient of Variability	0.59
Range Minimum	1.10
Range Maximum	498.22
Range Width	497.12
Mean Standard Error	0.24



60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.10
95%	21.36
90%	30.27
85%	37.31
80%	44.07
75%	50.27
70%	56.33
65%	62.23
60%	68.20
55%	74.20
50%	80.69
45%	87.30
40%	94.62
35%	102.64
30%	111.08
25%	120.92
20%	132.37
15%	145.90
10%	163.67
5%	191.97
0%	498.22

End of Forecast

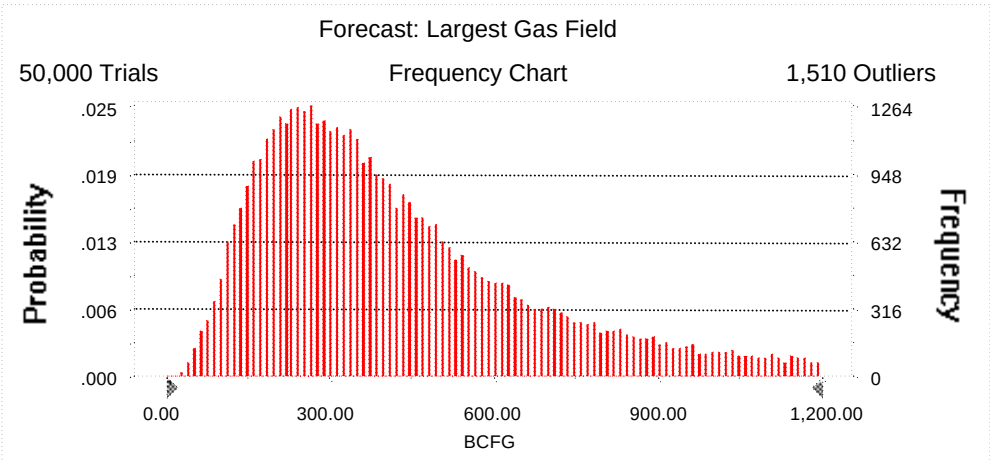
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 1,200.00 BCFG
Entire range is from 12.66 to 1,599.98 BCFG
After 50,000 trials, the standard error of the mean is 1.29

Statistics:	Value
Trials	50000
Mean	445.82
Median	367.81
Mode	---
Standard Deviation	289.22
Variance	83,650.22
Skewness	1.41
Kurtosis	4.95
Coefficient of Variability	0.65
Range Minimum	12.66
Range Maximum	1,599.98
Range Width	1,587.32
Mean Standard Error	1.29



60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	12.66
95%	126.19
90%	161.71
85%	190.09
80%	215.64
75%	240.15
70%	264.16
65%	288.59
60%	314.18
55%	340.60
50%	367.81
45%	398.21
40%	433.03
35%	470.56
30%	513.39
25%	567.62
20%	634.46
15%	723.41
10%	847.92
5%	1,062.63
0%	1,599.98

End of Forecast

60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

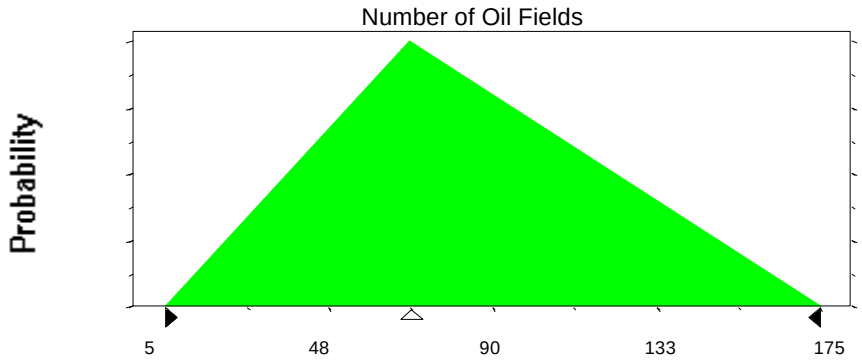
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	5
Likeliest	69
Maximum	175

Selected range is from 5 to 175
Mean value in simulation was 83



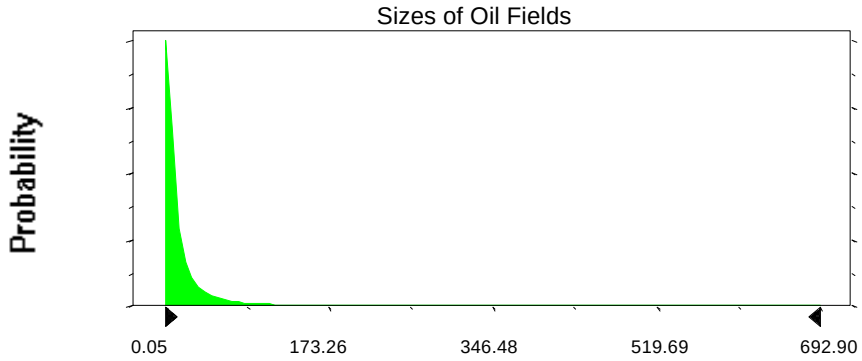
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	21.01	22.01
Standard Deviation	70.47	70.47

Selected range is from 0.00 to 799.00	1.00 to 800.00
Mean value in simulation was 20.07	21.07

60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)

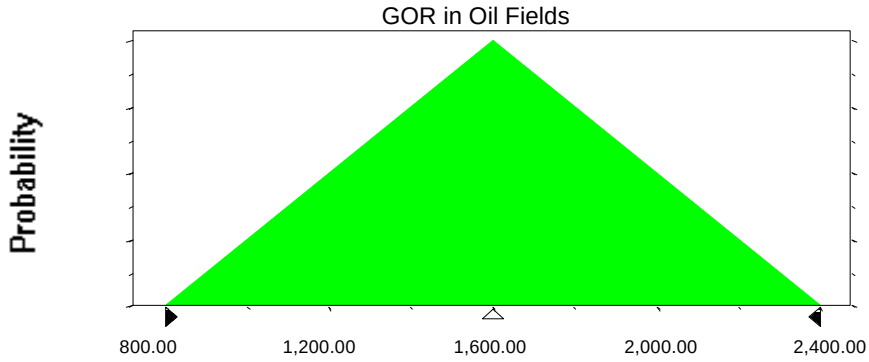


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	800.00
Likeliest	1,600.00
Maximum	2,400.00

Selected range is from 800.00 to 2,400.00
Mean value in simulation was 1,599.57



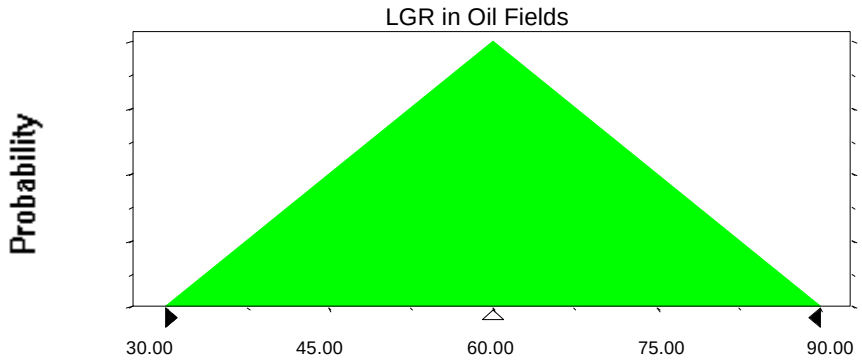
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	30.00
Likeliest	60.00
Maximum	90.00

Selected range is from 30.00 to 90.00
Mean value in simulation was 59.99



Assumption: Number of Gas Fields

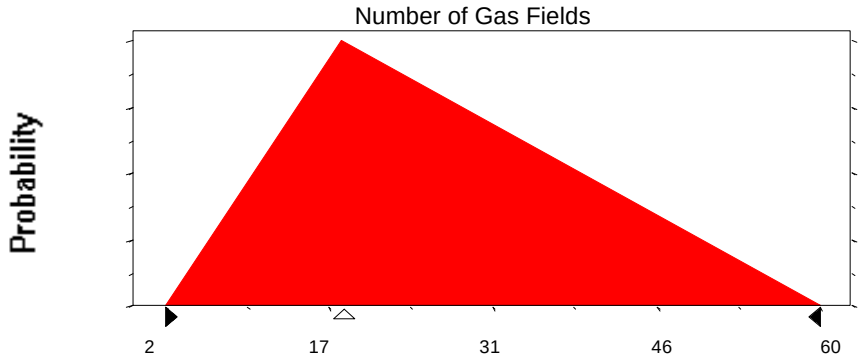
Triangular distribution with parameters:

Minimum	2
Likeliest	18
Maximum	60

Selected range is from 2 to 60
Mean value in simulation was 27

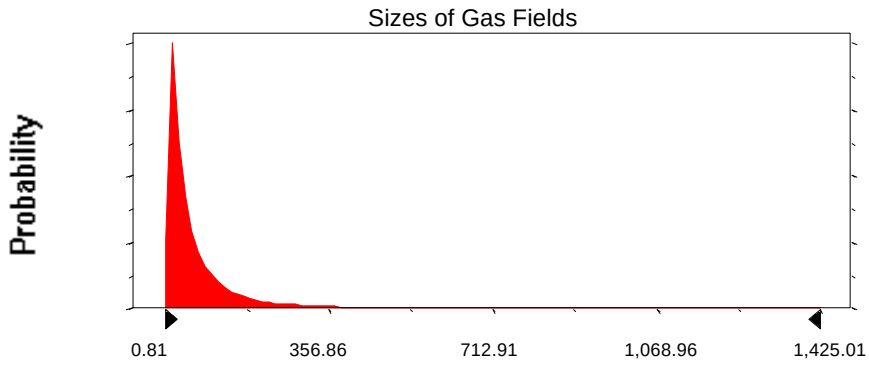
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	73.82	79.82
Standard Deviation	142.26	142.26
Selected range is from 0.00 to 1,594.00		6.00 to 1,600.00
Mean value in simulation was 71.68		77.68



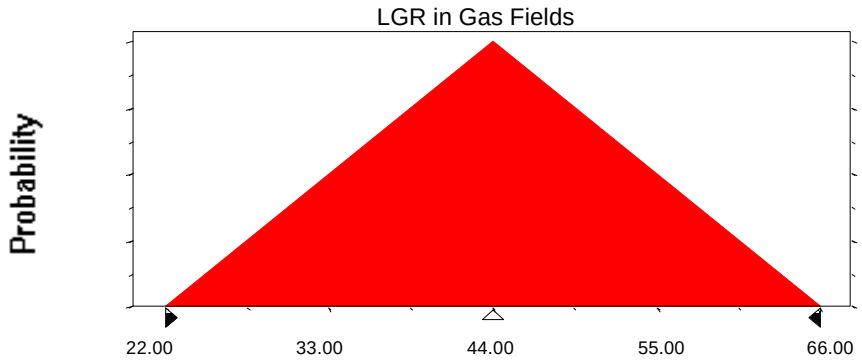
60810101
Cretaceous-Paleogene Basin
Monte Carlo Results

Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	22.00
Likeliest	44.00
Maximum	66.00

Selected range is from 22.00 to 66.00
Mean value in simulation was 43.96



End of Assumptions

Simulation started on 1/3/00 at 16:04:44
Simulation stopped on 1/3/00 at 17:01:42