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Cretaceous Carbonates, Assessment Unit 60210102
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	10	0.80	0	1,998	5,505	2,200	0	3,835	11,501	4,400	0	222	718	264	156	544	1,838	701
Gas Fields	60						0	1,841	5,920	2,195	0	78	269	96	223	740	2,755	1,000
Total		0.80	0	1,998	5,505	2,200	0	5,676	17,421	6,595	0	300	987	360				

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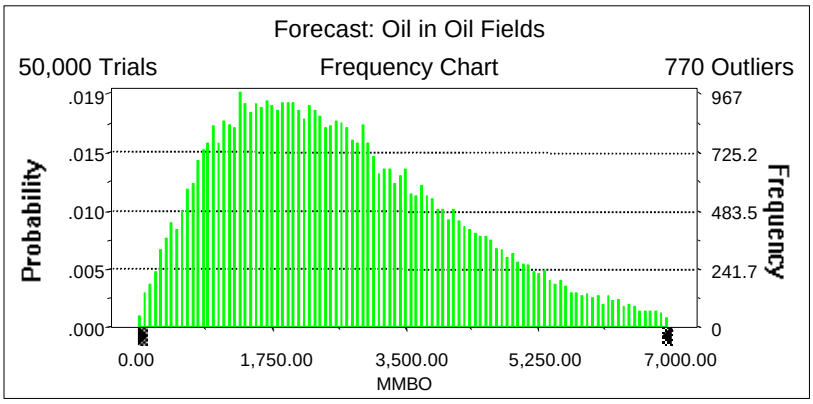
Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 7,000.00 MMBO
Entire range is from 14.82 to 12,018.50 MMBO
After 50,000 trials, the standard error of the mean is 7.21

Statistics:	Value
Trials	50000
Mean	2,744.12
Median	2,482.40
Mode	---
Standard Deviation	1,612.06
Variance	2,598,734.58
Skewness	0.87
Kurtosis	3.78
Coefficient of Variability	0.59
Range Minimum	14.82
Range Maximum	12,018.50
Range Width	12,003.68
Mean Standard Error	7.21



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Cretaceous Carbonates
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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	14.82
95%	611.05
90%	889.82
85%	1,116.66
80%	1,325.34
75%	1,514.22
70%	1,707.07
65%	1,896.95
60%	2,086.91
55%	2,282.35
50%	2,482.40
45%	2,694.83
40%	2,911.37
35%	3,140.98
30%	3,416.38
25%	3,710.07
20%	4,041.36
15%	4,440.14
10%	4,945.42
5%	5,755.88
0%	12,018.50

End of Forecast

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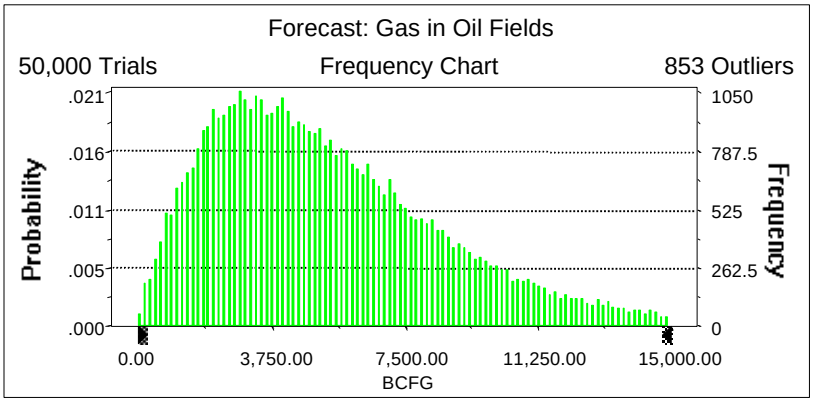
Cretaceous Carbonates
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 15,000.00 BCFG
Entire range is from 31.31 to 28,891.16 BCFG
After 50,000 trials, the standard error of the mean is 15.56

Statistics:	Value
Trials	50000
Mean	5,490.76
Median	4,821.09
Mode	---
Standard Deviation	3,478.47
Variance	12,099,762.42
Skewness	1.12
Kurtosis	4.70
Coefficient of Variability	0.63
Range Minimum	31.31
Range Maximum	28,891.16
Range Width	28,859.85
Mean Standard Error	15.56



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Cretaceous Carbonates
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	31.31
95%	1,133.25
90%	1,688.72
85%	2,116.07
80%	2,512.48
75%	2,893.66
70%	3,259.93
65%	3,630.44
60%	4,022.90
55%	4,401.83
50%	4,821.09
45%	5,250.56
40%	5,717.28
35%	6,212.42
30%	6,762.16
25%	7,371.65
20%	8,115.16
15%	8,991.47
10%	10,175.23
5%	12,159.08
0%	28,891.16

End of Forecast

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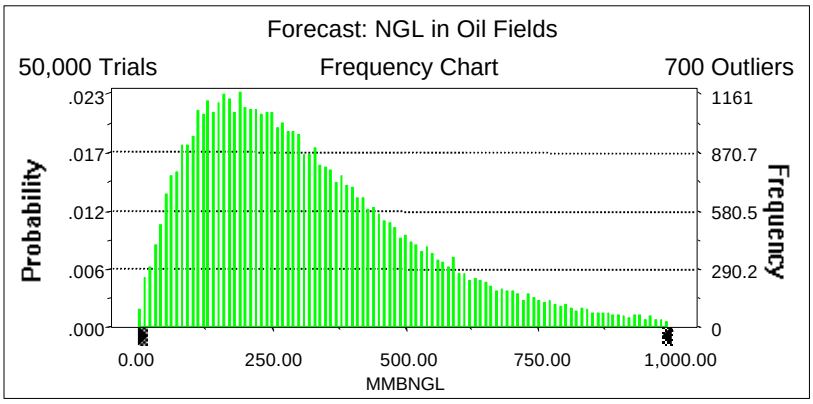
Cretaceous Carbonates
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 1,000.00 MMBNGL
Entire range is from 1.49 to 2,181.46 MMBNGL
After 50,000 trials, the standard error of the mean is 1.00

Statistics:	Value
Trials	50000
Mean	329.44
Median	281.39
Mode	---
Standard Deviation	223.98
Variance	50,168.54
Skewness	1.39
Kurtosis	6.04
Coefficient of Variability	0.68
Range Minimum	1.49
Range Maximum	2,181.46
Range Width	2,179.97
Mean Standard Error	1.00



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Cretaceous Carbonates
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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.49
95%	64.06
90%	94.10
85%	119.44
80%	142.46
75%	165.07
70%	187.72
65%	210.00
60%	233.05
55%	256.71
50%	281.39
45%	307.30
40%	336.08
35%	367.24
30%	401.55
25%	441.05
20%	487.01
15%	545.23
10%	624.24
5%	758.79
0%	2,181.46

End of Forecast

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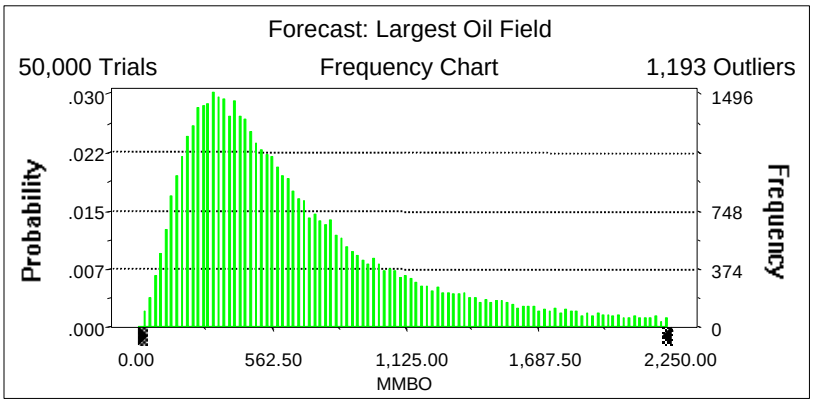
Cretaceous Carbonates
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 2,250.00 MMBO
Entire range is from 13.35 to 2,998.72 MMBO
After 50,000 trials, the standard error of the mean is 2.38

Statistics:	Value
Trials	50000
Mean	701.09
Median	543.74
Mode	---
Standard Deviation	531.50
Variance	282,495.67
Skewness	1.63
Kurtosis	5.81
Coefficient of Variability	0.76
Range Minimum	13.35
Range Maximum	2,998.72
Range Width	2,985.37
Mean Standard Error	2.38



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Cretaceous Carbonates
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Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	13.35
95%	155.54
90%	208.86
85%	253.39
80%	293.30
75%	331.91
70%	370.55
65%	410.11
60%	450.70
55%	494.73
50%	543.74
45%	596.31
40%	654.27
35%	722.10
30%	803.26
25%	897.12
20%	1,022.73
15%	1,184.42
10%	1,426.99
5%	1,837.95
0%	2,998.72

End of Forecast

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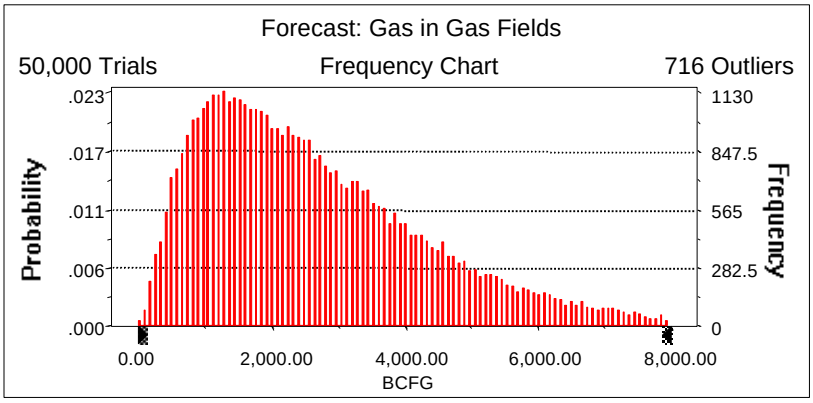
Cretaceous Carbonates
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 8,000.00 BCFG
Entire range is from 65.04 to 15,610.22 BCFG
After 50,000 trials, the standard error of the mean is 8.09

Statistics:	Value
Trials	50000
Mean	2,739.69
Median	2,348.25
Mode	---
Standard Deviation	1,809.69
Variance	3,274,989.73
Skewness	1.22
Kurtosis	4.97
Coefficient of Variability	0.66
Range Minimum	65.04
Range Maximum	15,610.22
Range Width	15,545.19
Mean Standard Error	8.09



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Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	65.04
95%	576.55
90%	810.62
85%	1,008.98
80%	1,193.06
75%	1,369.73
70%	1,553.75
65%	1,742.77
60%	1,932.04
55%	2,139.28
50%	2,348.25
45%	2,571.37
40%	2,810.39
35%	3,084.14
30%	3,373.99
25%	3,700.14
20%	4,083.45
15%	4,564.42
10%	5,198.50
5%	6,231.46
0%	15,610.22

End of Forecast

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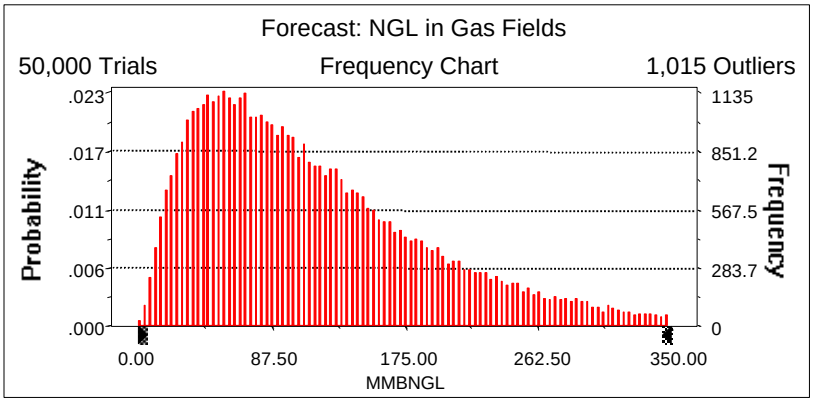
Cretaceous Carbonates
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 350.00 MMBNGL
Entire range is from 1.84 to 778.38 MMBNGL
After 50,000 trials, the standard error of the mean is 0.38

Statistics:	Value
Trials	50000
Mean	120.52
Median	100.48
Mode	---
Standard Deviation	84.79
Variance	7,189.50
Skewness	1.44
Kurtosis	5.98
Coefficient of Variability	0.70
Range Minimum	1.84
Range Maximum	778.38
Range Width	776.54
Mean Standard Error	0.38



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Cretaceous Carbonates
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.84
95%	23.74
90%	33.66
85%	42.04
80%	49.99
75%	57.91
70%	65.84
65%	73.72
60%	82.29
55%	91.15
50%	100.48
45%	110.50
40%	121.38
35%	133.18
30%	146.46
25%	161.63
20%	180.43
15%	202.82
10%	234.37
5%	285.68
0%	778.38

End of Forecast

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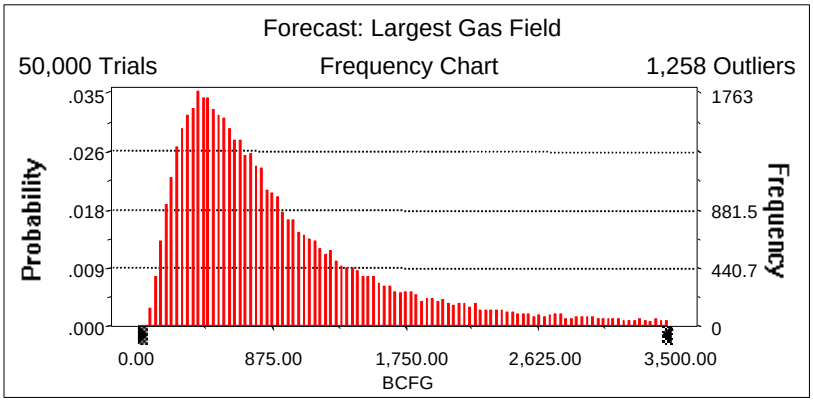
Cretaceous Carbonates
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 3,500.00 BCFG
Entire range is from 62.97 to 5,989.74 BCFG
After 50,000 trials, the standard error of the mean is 3.81

Statistics:	Value
Trials	50000
Mean	1,000.19
Median	740.28
Mode	---
Standard Deviation	851.96
Variance	725,829.23
Skewness	2.25
Kurtosis	9.46
Coefficient of Variability	0.85
Range Minimum	62.97
Range Maximum	5,989.74
Range Width	5,926.77
Mean Standard Error	3.81



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Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	62.97
95%	222.63
90%	290.07
85%	347.51
80%	399.40
75%	449.78
70%	501.33
65%	555.95
60%	611.10
55%	673.21
50%	740.28
45%	810.11
40%	891.11
35%	985.51
30%	1,099.91
25%	1,237.62
20%	1,415.74
15%	1,653.27
10%	2,030.72
5%	2,754.57
0%	5,989.74

End of Forecast

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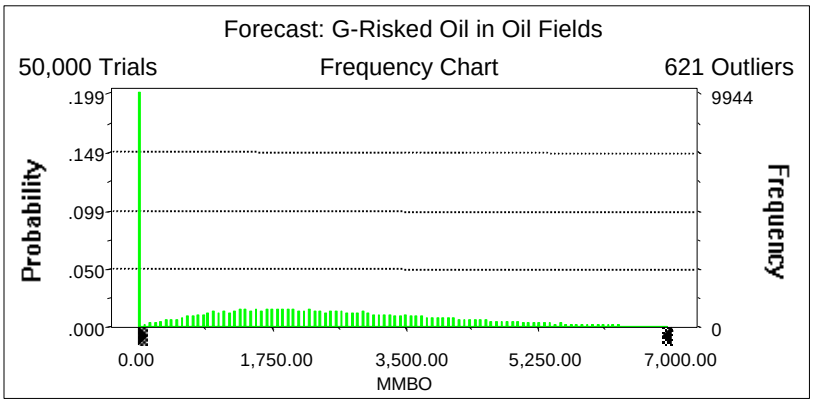
Cretaceous Carbonates
Monte Carlo Results

Forecast: G-Risked Oil in Oil Fields

Summary:

Display range is from 0.00 to 7,000.00 MMBO
Entire range is from 0.00 to 11,321.45 MMBO
After 50,000 trials, the standard error of the mean is 8.09

Statistics:	Value
Trials	50000
Mean	2,200.48
Median	1,997.62
Mode	0.00
Standard Deviation	1,810.02
Variance	3,276,171.38
Skewness	0.72
Kurtosis	3.26
Coefficient of Variability	0.82
Range Minimum	0.00
Range Maximum	11,321.45
Range Width	11,321.45
Mean Standard Error	8.09



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Cretaceous Carbonates
Monte Carlo Results

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

Percentiles:

Percentile	MMBO
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	104.72
75%	705.29
70%	1,014.74
65%	1,284.02
60%	1,526.18
55%	1,763.55
50%	1,997.62
45%	2,238.50
40%	2,484.71
35%	2,751.83
30%	3,025.74
25%	3,346.95
20%	3,714.47
15%	4,141.92
10%	4,668.38
5%	5,505.15
0%	11,321.45

End of Forecast

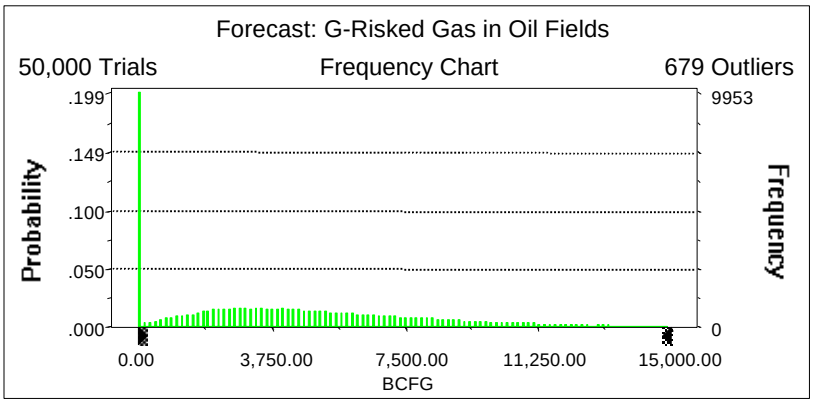
60210102
Cretaceous Carbonates
Monte Carlo Results

Forecast: G-Risked Gas in Oil Fields

Summary:

Display range is from 0.00 to 15,000.00 BCFG
Entire range is from 0.00 to 28,891.16 BCFG
After 50,000 trials, the standard error of the mean is 17.00

Statistics:	Value
Trials	50000
Mean	4,399.72
Median	3,835.30
Mode	0.00
Standard Deviation	3,801.76
Variance	14,453,389.51
Skewness	0.96
Kurtosis	4.05
Coefficient of Variability	0.86
Range Minimum	0.00
Range Maximum	28,891.16
Range Width	28,891.16
Mean Standard Error	17.00



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Cretaceous Carbonates
Monte Carlo Results

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

Percentiles:

Percentile	BCFG
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	200.57
75%	1,303.91
70%	1,921.50
65%	2,428.90
60%	2,904.02
55%	3,366.06
50%	3,835.30
45%	4,311.09
40%	4,828.20
35%	5,369.36
30%	5,959.76
25%	6,613.16
20%	7,379.18
15%	8,328.04
10%	9,534.64
5%	11,500.68
0%	28,891.16

End of Forecast

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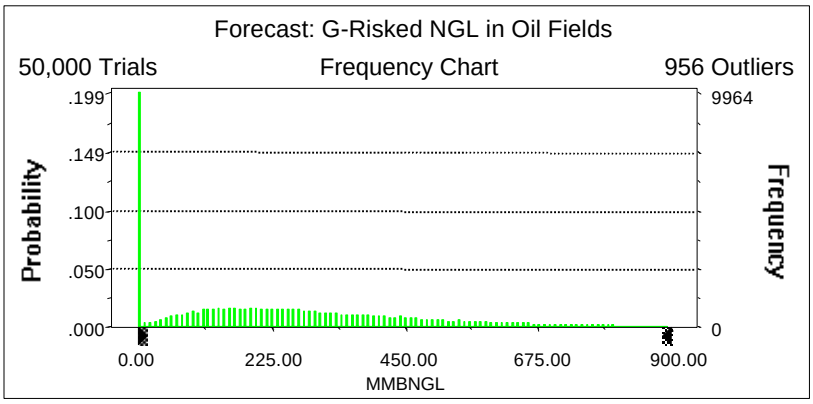
Cretaceous Carbonates
Monte Carlo Results

Forecast: G-Risked NGL in Oil Fields

Summary:

Display range is from 0.00 to 900.00 MMBNGL
Entire range is from 0.00 to 2,181.46 MMBNGL
After 50,000 trials, the standard error of the mean is 1.07

Statistics:	Value
Trials	50000
Mean	264.01
Median	221.89
Mode	0.00
Standard Deviation	239.82
Variance	57,514.66
Skewness	1.24
Kurtosis	5.33
Coefficient of Variability	0.91
Range Minimum	0.00
Range Maximum	2,181.46
Range Width	2,181.46
Mean Standard Error	1.07



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Cretaceous Carbonates
Monte Carlo Results

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

Percentiles:

Percentile	MMBNGL
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	11.01
75%	73.38
70%	108.94
65%	137.79
60%	165.90
55%	193.97
50%	221.89
45%	251.20
40%	281.64
35%	314.32
30%	351.25
25%	392.52
20%	441.41
15%	500.37
10%	580.84
5%	717.81
0%	2,181.46

End of Forecast

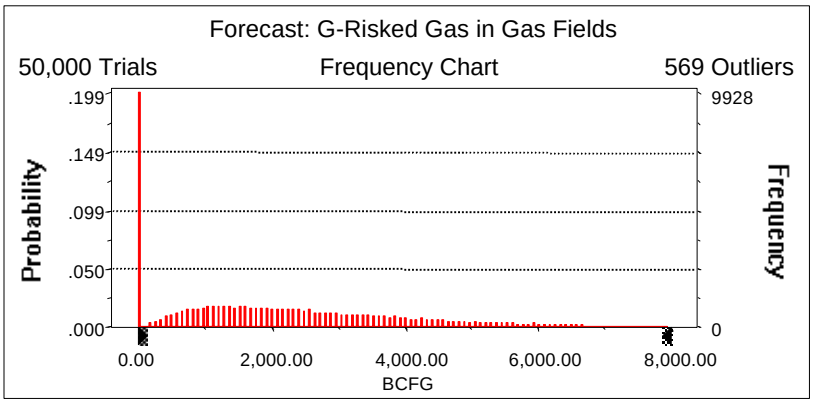
60210102
Cretaceous Carbonates
Monte Carlo Results

Forecast: G-Risked Gas in Gas Fields

Summary:

Display range is from 0.00 to 8,000.00 BCFG
Entire range is from 0.00 to 14,870.94 BCFG
After 50,000 trials, the standard error of the mean is 8.72

Statistics:	Value
Trials	50000
Mean	2,194.95
Median	1,841.11
Mode	0.00
Standard Deviation	1,950.97
Variance	3,806,271.83
Skewness	1.08
Kurtosis	4.40
Coefficient of Variability	0.89
Range Minimum	0.00
Range Maximum	14,870.94
Range Width	14,870.94
Mean Standard Error	8.72



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Cretaceous Carbonates
Monte Carlo Results

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

Percentiles:

Percentile	BCFG
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	163.59
75%	651.94
70%	922.68
65%	1,157.39
60%	1,376.97
55%	1,606.46
50%	1,841.11
45%	2,088.83
40%	2,355.27
35%	2,628.95
30%	2,943.43
25%	3,299.05
20%	3,698.16
15%	4,195.64
10%	4,839.47
5%	5,920.31
0%	14,870.94

End of Forecast

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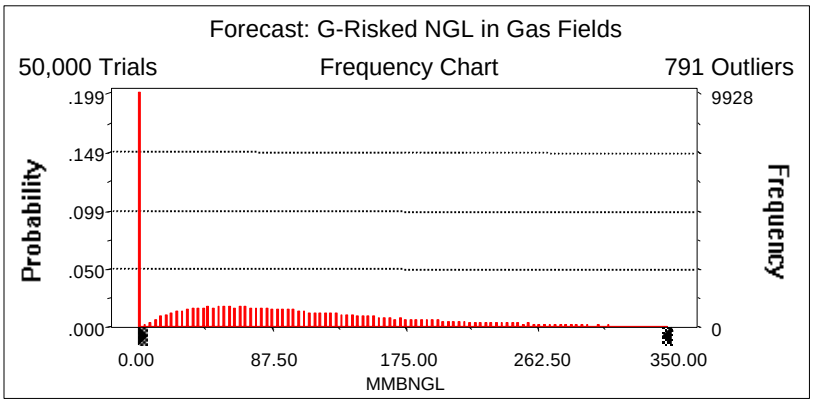
Cretaceous Carbonates
Monte Carlo Results

Forecast: G-Risked NGL in Gas Fields

Summary:

Display range is from 0.00 to 350.00 MMBNGL
Entire range is from 0.00 to 764.75 MMBNGL
After 50,000 trials, the standard error of the mean is 0.40

Statistics:	Value
Trials	50000
Mean	96.48
Median	78.16
Mode	0.00
Standard Deviation	89.59
Variance	8,026.86
Skewness	1.30
Kurtosis	5.38
Coefficient of Variability	0.93
Range Minimum	0.00
Range Maximum	764.75
Range Width	764.75
Mean Standard Error	0.40



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Cretaceous Carbonates
Monte Carlo Results

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

Percentiles:

Percentile	MMBNGL
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	6.71
75%	26.83
70%	38.29
65%	48.49
60%	58.34
55%	68.22
50%	78.16
45%	88.97
40%	100.44
35%	113.06
30%	127.29
25%	142.76
20%	161.60
15%	185.59
10%	216.95
5%	269.02
0%	764.75

End of Forecast

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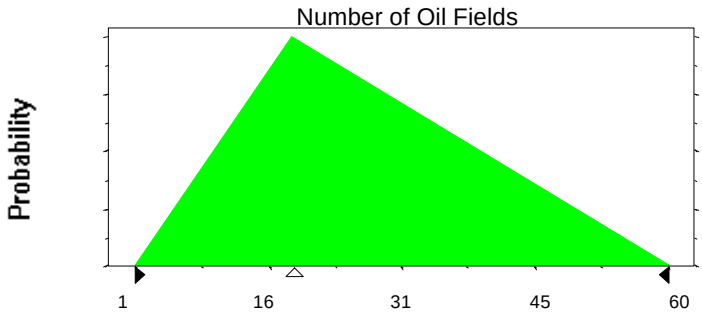
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	18
Maximum	60

Selected range is from 1 to 60
Mean value in simulation was 26



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	98.62	108.62
Standard Deviation	259.78	259.78

Selected range is from 0.00 to 2,990.00	10.00 to 3,000.00
Mean value in simulation was 93.31	103.31

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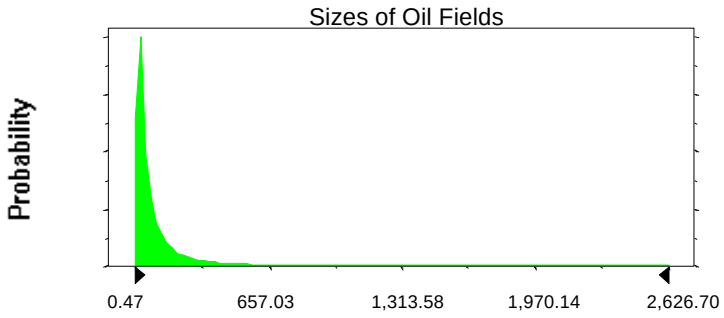
Assumption: Sizes of Oil Fields (cont'd)

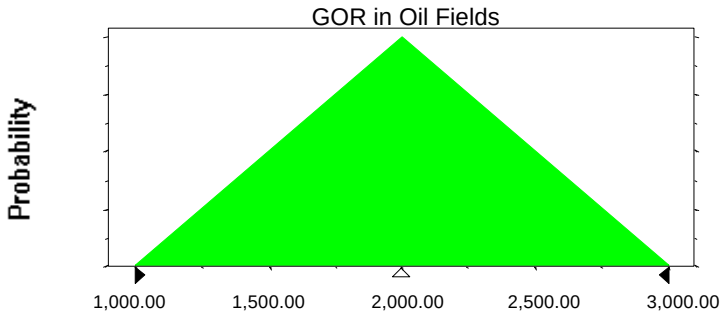


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,000.00
Likeliest	2,000.00
Maximum	3,000.00

Selected range is from 1,000.00 to 3,000.00
Mean value in simulation was 2,000.71



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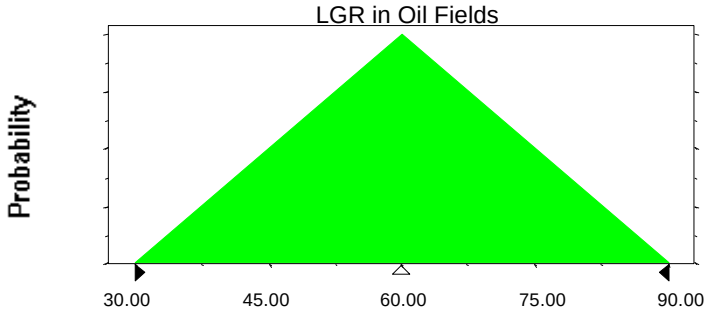
Assumption: LGR in Oil Fields

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 60.00



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	5
Maximum	20

Selected range is from 1 to 20
Mean value in simulation was 9

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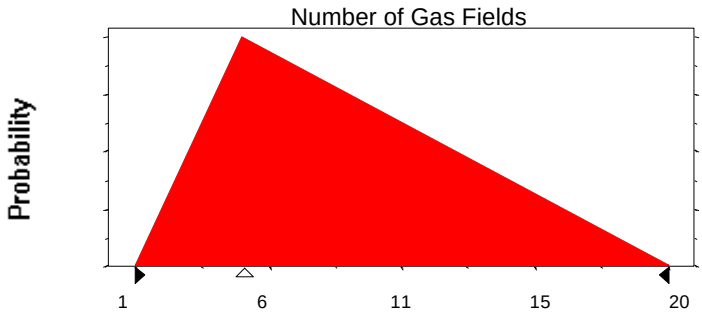
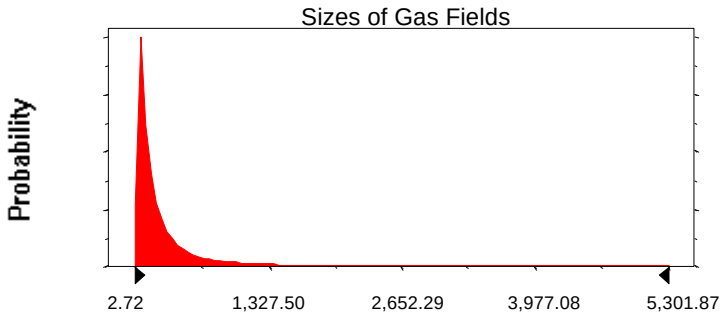
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	266.34	326.34
Standard Deviation	527.76	527.76
Selected range is from 0.00 to 5,940.00		60.00 to 6,000.00
Mean value in simulation was 259.81		319.81



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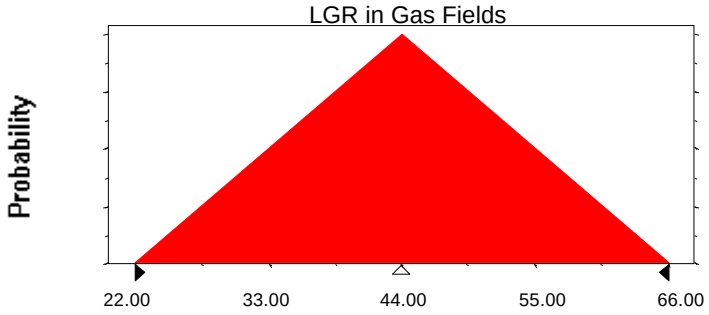
Assumption: LGR in Gas Fields

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 44.01



End of Assumptions

Simulation started on 11/1/99 at 15:05:44
Simulation stopped on 11/1/99 at 15:29:00