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Southern Permian Basin-Offshore, Assessment Unit 40360103
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	4	1.00	13	55	133	62	4	19	51	22	0	1	4	2	5	8	16	9
Gas Fields	24						2,828	11,662	27,682	13,006	8	34	88	39	234	602	1,096	626
Total		1.00	13	55	133	62	2,833	11,682	27,733	13,029	8	35	92	41				

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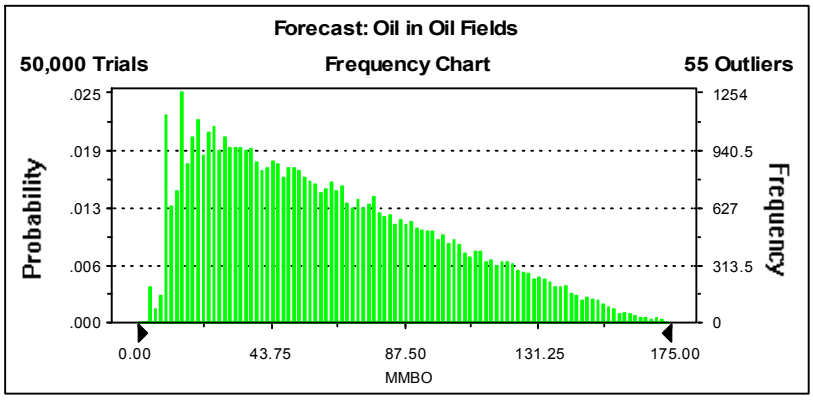
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Display range is from 0.00 to 175.00 MMBO
Entire range is from 4.07 to 199.48 MMBO
After 50,000 trials, the standard error of the mean is 0.17

Statistics:	Value
Trials	50000
Mean	62.10
Median	55.41
Mode	---
Standard Deviation	37.87
Variance	1,434.23
Skewness	0.61
Kurtosis	2.54
Coefficient of Variability	0.61
Range Minimum	4.07
Range Maximum	199.48
Range Width	195.42
Mean Standard Error	0.17



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Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	4.07
95%	13.33
90%	17.46
85%	21.60
80%	25.97
75%	30.43
70%	35.02
65%	39.76
60%	44.88
55%	50.11
50%	55.41
45%	61.25
40%	67.21
35%	73.76
30%	80.53
25%	88.30
20%	96.73
15%	106.25
10%	118.33
5%	133.38
0%	199.48

End of Forecast

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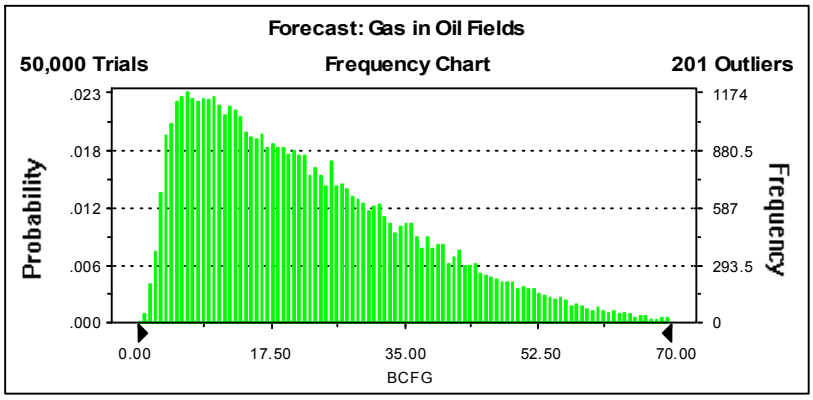
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 70.00 BCFG
Entire range is from 0.88 to 102.53 BCFG
After 50,000 trials, the standard error of the mean is 0.07

Statistics:	Value
Trials	50000
Mean	22.36
Median	19.41
Mode	---
Standard Deviation	14.64
Variance	214.20
Skewness	0.89
Kurtosis	3.39
Coefficient of Variability	0.65
Range Minimum	0.88
Range Maximum	102.53
Range Width	101.65
Mean Standard Error	0.07



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Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	0.88
95%	4.40
90%	5.99
85%	7.49
80%	9.02
75%	10.56
70%	12.18
65%	13.80
60%	15.59
55%	17.47
50%	19.41
45%	21.41
40%	23.60
35%	25.89
30%	28.44
25%	31.32
20%	34.60
15%	38.40
10%	43.29
5%	50.68
0%	102.53

End of Forecast

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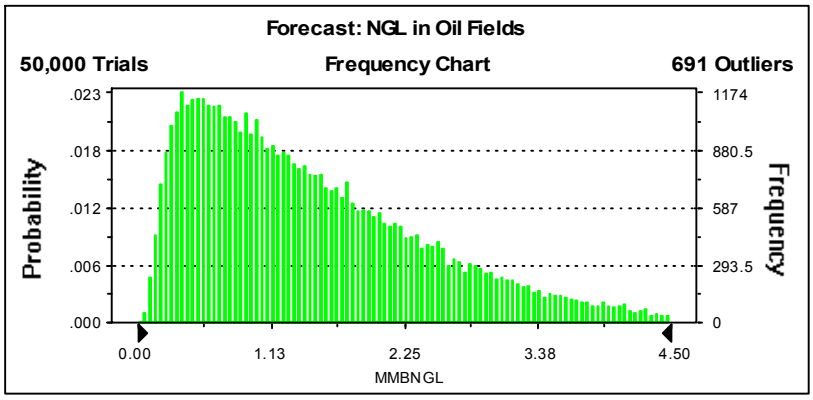
Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 4.50 MMBNGL
Entire range is from 0.05 to 7.95 MMBNGL
After 50,000 trials, the standard error of the mean is 0.00

Statistics:	Value
Trials	50000
Mean	1.50
Median	1.26
Mode	---
Standard Deviation	1.05
Variance	1.09
Skewness	1.12
Kurtosis	4.25
Coefficient of Variability	0.70
Range Minimum	0.05
Range Maximum	7.95
Range Width	7.90
Mean Standard Error	0.00



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Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.05
95%	0.28
90%	0.38
85%	0.48
80%	0.58
75%	0.68
70%	0.79
65%	0.90
60%	1.01
55%	1.13
50%	1.26
45%	1.40
40%	1.54
35%	1.70
30%	1.88
25%	2.08
20%	2.31
15%	2.59
10%	2.97
5%	3.55
0%	7.95

End of Forecast

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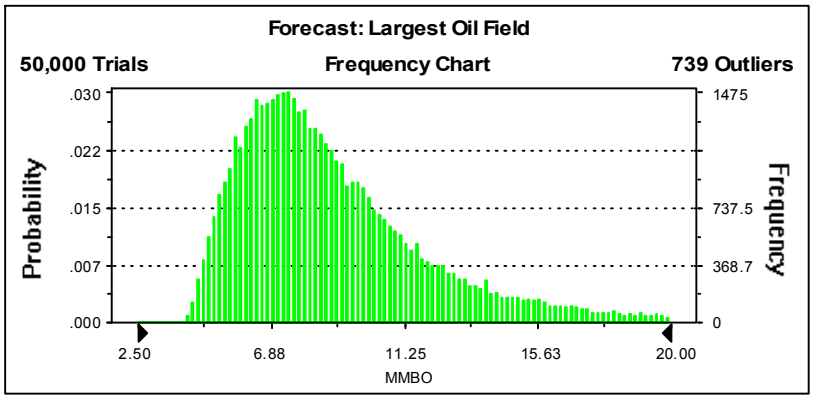
Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: Largest Oil Field

Summary:
Display range is from 2.50 to 20.00 MMBO
Entire range is from 4.07 to 24.97 MMBO
After 50,000 trials, the standard error of the mean is 0.02

Statistics:	Value
Trials	50000
Mean	9.07
Median	8.25
Mode	---
Standard Deviation	3.39
Variance	11.51
Skewness	1.50
Kurtosis	5.77
Coefficient of Variability	0.37
Range Minimum	4.07
Range Maximum	24.97
Range Width	20.90
Mean Standard Error	0.02



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Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	4.07
95%	5.20
90%	5.67
85%	6.05
80%	6.39
75%	6.70
70%	7.00
65%	7.31
60%	7.60
55%	7.92
50%	8.25
45%	8.61
40%	8.99
35%	9.44
30%	9.93
25%	10.49
20%	11.21
15%	12.15
10%	13.52
5%	15.97
0%	24.97

End of Forecast

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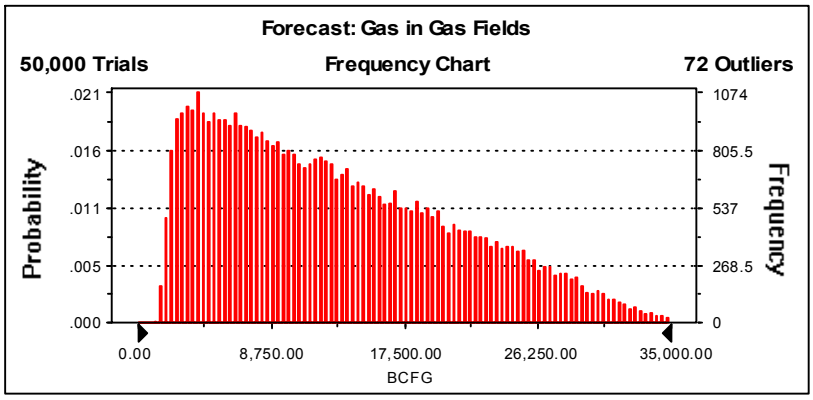
Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:
Display range is from 0.00 to 35,000.00 BCFG
Entire range is from 1,186.25 to 38,681.03 BCFG
After 50,000 trials, the standard error of the mean is 35.06

Statistics:	Value
Trials	50000
Mean	13,006.33
Median	11,662.47
Mode	---
Standard Deviation	7,840.65
Variance	61,475,842.92
Skewness	0.59
Kurtosis	2.46
Coefficient of Variability	0.60
Range Minimum	1,186.25
Range Maximum	38,681.03
Range Width	37,494.78
Mean Standard Error	35.06



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Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	1,186.25
95%	2,828.36
90%	3,707.93
85%	4,560.76
80%	5,481.08
75%	6,397.20
70%	7,351.44
65%	8,341.99
60%	9,381.05
55%	10,481.98
50%	11,662.47
45%	12,812.34
40%	14,070.17
35%	15,450.50
30%	16,951.52
25%	18,542.57
20%	20,269.96
15%	22,295.87
10%	24,650.17
5%	27,681.93
0%	38,681.03

End of Forecast

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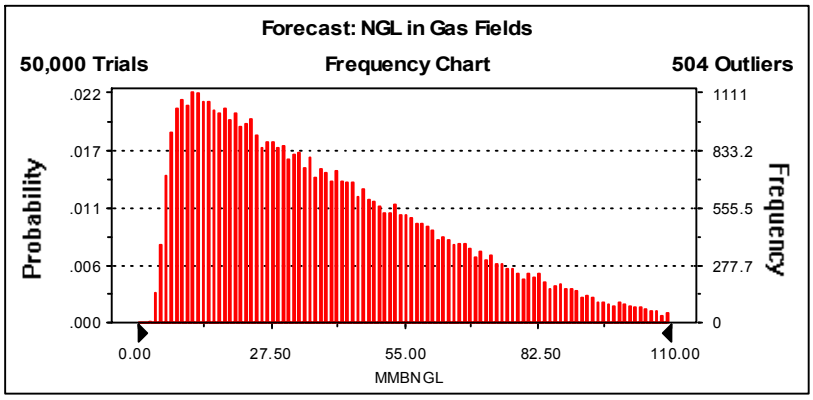
Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 110.00 MMBNGL
Entire range is from 2.49 to 157.91 MMBNGL
After 50,000 trials, the standard error of the mean is 0.11

Statistics:	Value
Trials	50000
Mean	39.03
Median	33.73
Mode	---
Standard Deviation	25.33
Variance	641.63
Skewness	0.86
Kurtosis	3.27
Coefficient of Variability	0.65
Range Minimum	2.49
Range Maximum	157.91
Range Width	155.42
Mean Standard Error	0.11



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Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	2.49
95%	8.06
90%	10.63
85%	13.14
80%	15.71
75%	18.41
70%	21.19
65%	24.06
60%	27.15
55%	30.39
50%	33.73
45%	37.38
40%	41.20
35%	45.23
30%	49.72
25%	54.80
20%	60.36
15%	67.12
10%	75.49
5%	87.95
0%	157.91

End of Forecast

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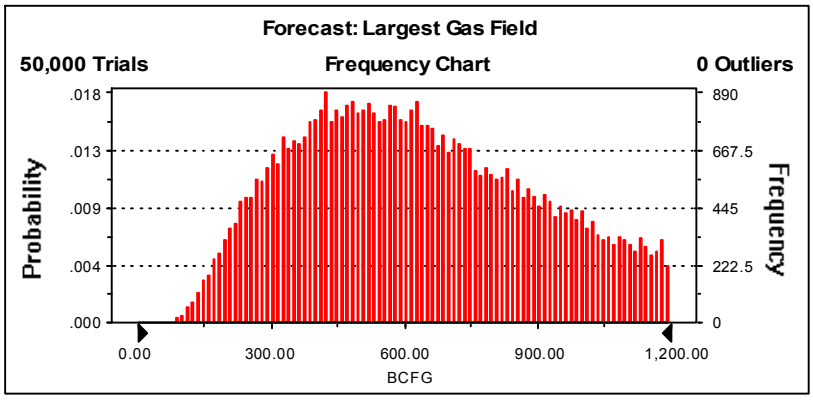
Southern Permian Basin-Offshore
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 1,200.00 BCFG
Entire range is from 71.59 to 1,199.99 BCFG
After 50,000 trials, the standard error of the mean is 1.17

Statistics:	Value
Trials	50000
Mean	625.84
Median	602.23
Mode	---
Standard Deviation	262.26
Variance	68,782.46
Skewness	0.26
Kurtosis	2.19
Coefficient of Variability	0.42
Range Minimum	71.59
Range Maximum	1,199.99
Range Width	1,128.41
Mean Standard Error	1.17



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Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	71.59
95%	233.91
90%	291.64
85%	337.60
80%	380.79
75%	419.03
70%	455.15
65%	491.22
60%	527.43
55%	565.45
50%	602.23
45%	639.09
40%	679.07
35%	722.16
30%	767.86
25%	820.05
20%	875.42
15%	937.31
10%	1,007.97
5%	1,095.99
0%	1,199.99

End of Forecast

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Monte Carlo Results

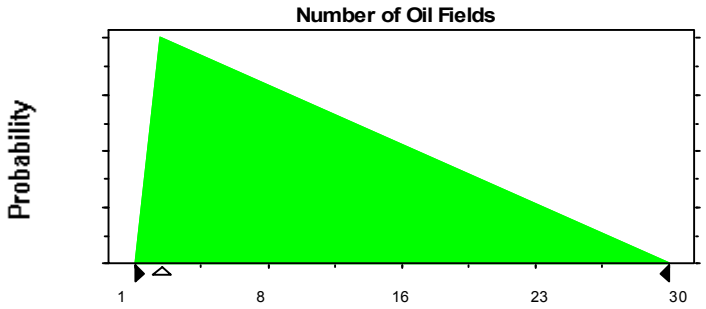
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	2
Maximum	30

Selected range is from 1 to 30
Mean value in simulation was 11



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	1.62	5.62
Standard Deviation	2.08	2.08

Selected range is from 0.00 to 21.00	4.00 to 25.00
Mean value in simulation was 1.59	5.59

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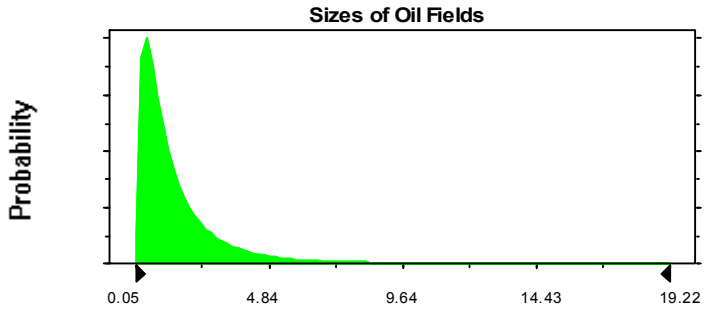
Assumption: Sizes of Oil Fields (cont'd)

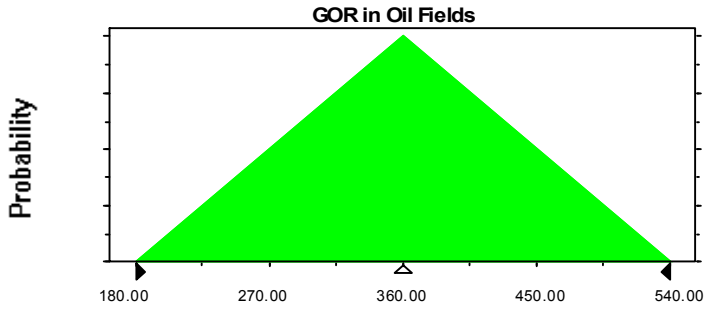


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	180.00
Likeliest	360.00
Maximum	540.00

Selected range is from 180.00 to 540.00
Mean value in simulation was 360.47



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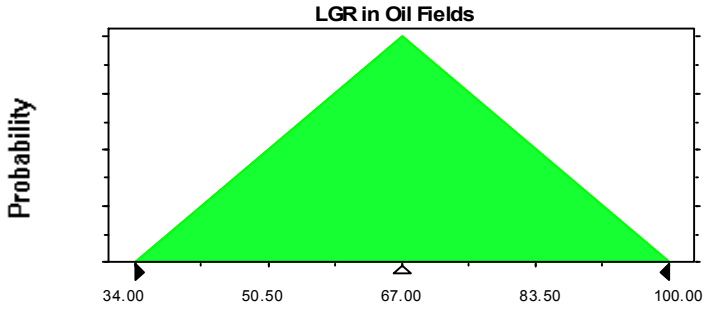
Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	34.00
Likeliest	67.00
Maximum	100.00

Selected range is from 34.00 to 100.00
Mean value in simulation was 67.09



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	30
Likeliest	41
Maximum	600

Selected range is from 30 to 600
Mean value in simulation was 224

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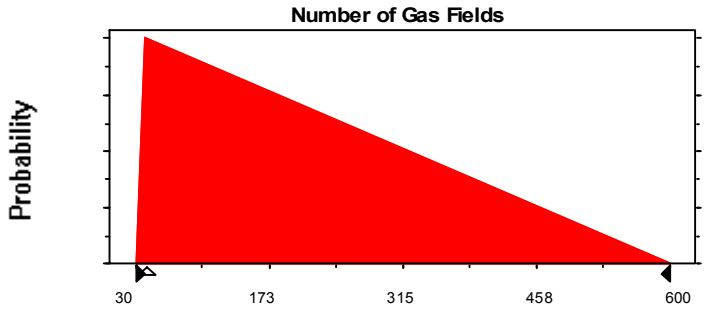
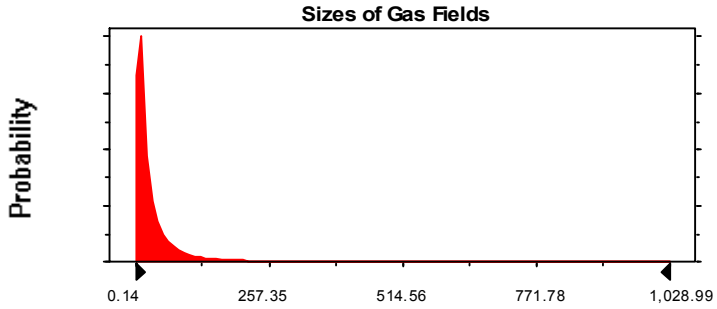
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	36.08	60.08
Standard Deviation	102.31	102.31
Selected range is from 0.00 to 1,176.00		24.00 to 1,200.00
Mean value in simulation was 34.20		58.2



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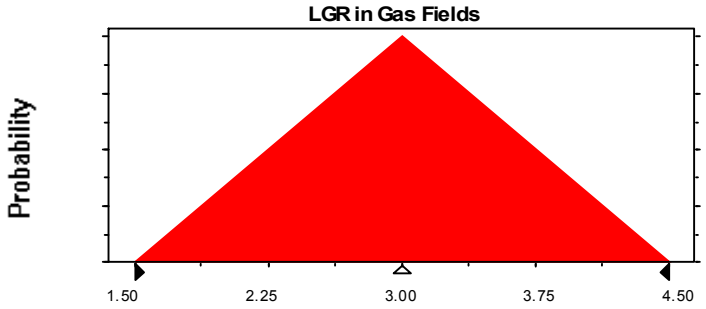
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	1.50
Likeliest	3.00
Maximum	4.50

Selected range is from 1.50 to 4.50
Mean value in simulation was 3.00



End of Assumptions

Simulation started on 12/3/98 at 17:27:49
Simulation stopped on 12/4/98 at 3:01:59