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Neuquen Extensional Structures, Assessment Unit 60550101
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	290	820	1,564	862	807	2,383	5,034	2,586	15	46	107	52	41	111	279	128
Gas Fields	6						1,591	4,901	9,414	5,138	21	70	157	77	244	662	1,664	765
Total		1.00	290	820	1,564	862	2,398	7,284	14,447	7,724	36	116	264	129				

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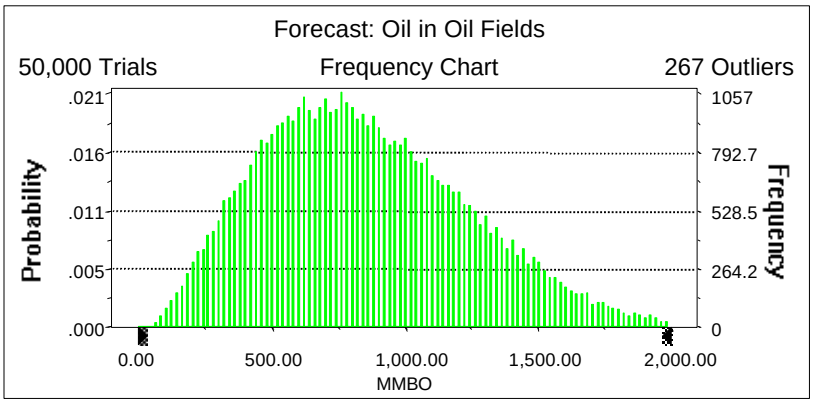
Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 2,000.00 MMBO
Entire range is from 46.29 to 2,798.09 MMBO
After 50,000 trials, the standard error of the mean is 1.75

Statistics:	Value
Trials	50000
Mean	862.16
Median	819.53
Mode	---
Standard Deviation	391.90
Variance	153,581.79
Skewness	0.52
Kurtosis	3.00
Coefficient of Variability	0.45
Range Minimum	46.29
Range Maximum	2,798.09
Range Width	2,751.80
Mean Standard Error	1.75



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Neuquen Extensional Structures
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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	46.29
95%	290.37
90%	381.03
85%	452.83
80%	512.48
75%	567.32
70%	619.33
65%	670.12
60%	719.89
55%	770.31
50%	819.53
45%	873.17
40%	927.81
35%	987.18
30%	1,048.92
25%	1,117.06
20%	1,195.40
15%	1,285.30
10%	1,400.85
5%	1,563.58
0%	2,798.09

End of Forecast

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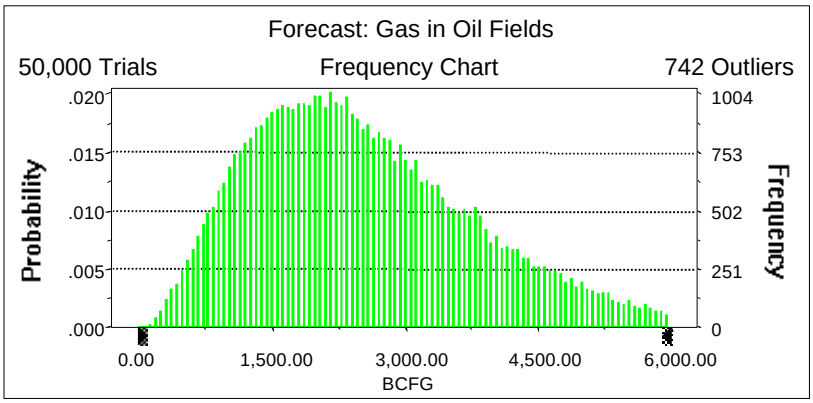
Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 6,000.00 BCFG
Entire range is from 126.02 to 10,211.79 BCFG
After 50,000 trials, the standard error of the mean is 5.86

Statistics:	Value
Trials	50000
Mean	2,585.84
Median	2,383.29
Mode	---
Standard Deviation	1,310.02
Variance	1,716,148.47
Skewness	0.80
Kurtosis	3.65
Coefficient of Variability	0.51
Range Minimum	126.02
Range Maximum	10,211.79
Range Width	10,085.77
Mean Standard Error	5.86



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	126.02
95%	807.21
90%	1,062.24
85%	1,262.56
80%	1,440.67
75%	1,604.57
70%	1,760.94
65%	1,920.93
60%	2,075.15
55%	2,227.98
50%	2,383.29
45%	2,551.54
40%	2,731.94
35%	2,920.33
30%	3,127.90
25%	3,364.58
20%	3,642.49
15%	3,953.45
10%	4,388.06
5%	5,033.58
0%	10,211.79

End of Forecast

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Neuquen Extensional Structures
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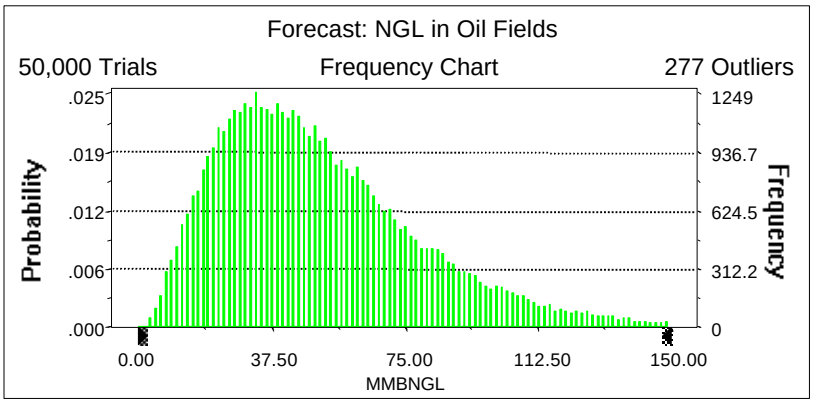
Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 150.00 MMBNGL
Entire range is from 1.54 to 242.10 MMBNGL
After 50,000 trials, the standard error of the mean is 0.13

Statistics:	Value
Trials	50000
Mean	51.71
Median	46.49
Mode	---
Standard Deviation	28.71
Variance	824.10
Skewness	1.04
Kurtosis	4.43
Coefficient of Variability	0.56
Range Minimum	1.54
Range Maximum	242.10
Range Width	240.56
Mean Standard Error	0.13



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.54
95%	14.82
90%	19.82
85%	23.64
80%	27.13
75%	30.39
70%	33.50
65%	36.66
60%	39.88
55%	43.18
50%	46.49
45%	50.13
40%	53.76
35%	57.90
30%	62.42
25%	67.35
20%	73.34
15%	80.97
10%	90.71
5%	106.53
0%	242.10

End of Forecast

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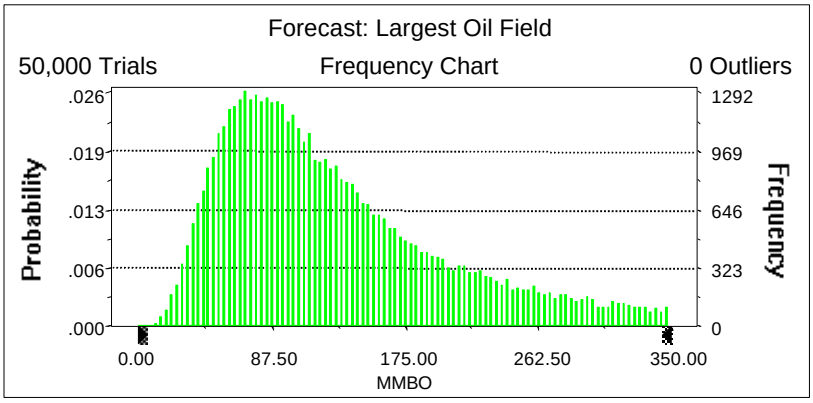
Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 350.00 MMBO
Entire range is from 8.55 to 349.96 MMBO
After 50,000 trials, the standard error of the mean is 0.32

Statistics:	Value
Trials	50000
Mean	128.32
Median	110.68
Mode	---
Standard Deviation	71.66
Variance	5,135.55
Skewness	0.97
Kurtosis	3.37
Coefficient of Variability	0.56
Range Minimum	8.55
Range Maximum	349.96
Range Width	341.41
Mean Standard Error	0.32



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Neuquen Extensional Structures
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Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	8.55
95%	41.42
90%	52.00
85%	60.14
80%	67.29
75%	74.23
70%	81.18
65%	88.14
60%	95.19
55%	102.80
50%	110.68
45%	119.62
40%	129.41
35%	139.99
30%	152.11
25%	166.38
20%	184.10
15%	206.96
10%	236.01
5%	278.97
0%	349.96

End of Forecast

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Neuquen Extensional Structures
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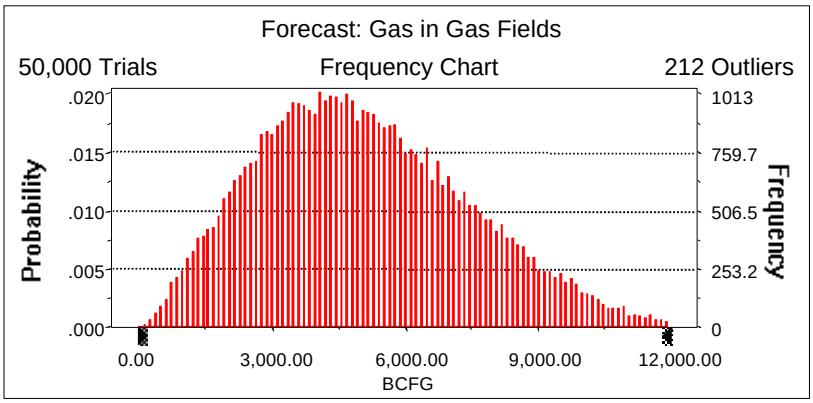
Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 12,000.00 BCFG
Entire range is from 104.80 to 16,248.66 BCFG
After 50,000 trials, the standard error of the mean is 10.65

Statistics:	Value
Trials	50000
Mean	5,138.46
Median	4,901.09
Mode	---
Standard Deviation	2,381.24
Variance	5,670,283.61
Skewness	0.46
Kurtosis	2.86
Coefficient of Variability	0.46
Range Minimum	104.80
Range Maximum	16,248.66
Range Width	16,143.86
Mean Standard Error	10.65



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	104.80
95%	1,591.26
90%	2,187.75
85%	2,633.86
80%	3,010.76
75%	3,356.85
70%	3,670.79
65%	3,990.48
60%	4,296.76
55%	4,597.72
50%	4,901.09
45%	5,228.27
40%	5,555.40
35%	5,903.20
30%	6,294.08
25%	6,717.58
20%	7,185.98
15%	7,733.85
10%	8,414.76
5%	9,413.64
0%	16,248.66

End of Forecast

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Neuquen Extensional Structures
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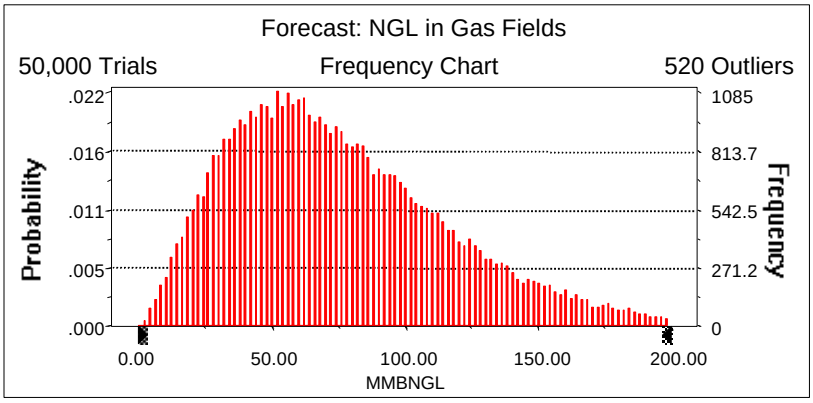
Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 200.00 MMBNGL
Entire range is from 1.27 to 310.65 MMBNGL
After 50,000 trials, the standard error of the mean is 0.19

Statistics:	Value
Trials	50000
Mean	77.00
Median	69.88
Mode	---
Standard Deviation	42.31
Variance	1,789.98
Skewness	0.88
Kurtosis	3.84
Coefficient of Variability	0.55
Range Minimum	1.27
Range Maximum	310.65
Range Width	309.38
Mean Standard Error	0.19



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.27
95%	20.73
90%	28.60
85%	34.72
80%	40.15
75%	45.32
70%	50.26
65%	55.12
60%	59.91
55%	64.69
50%	69.88
45%	75.38
40%	81.13
35%	87.24
30%	94.16
25%	101.59
20%	110.35
15%	120.75
10%	134.78
5%	157.02
0%	310.65

End of Forecast

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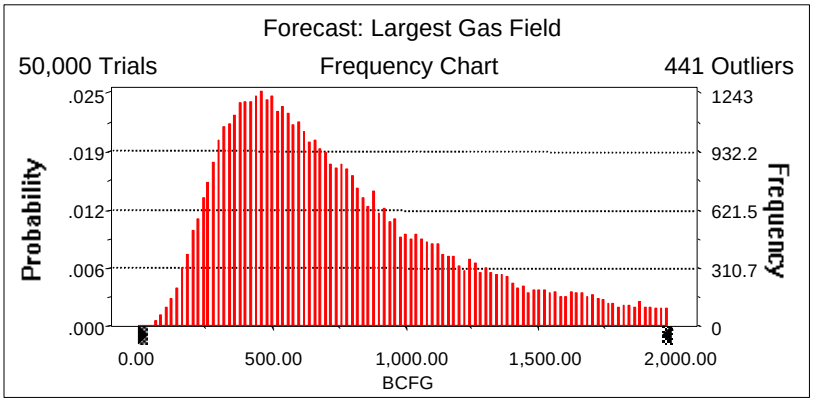
Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 2,000.00 BCFG
Entire range is from 31.90 to 2,099.63 BCFG
After 50,000 trials, the standard error of the mean is 1.92

Statistics:	Value
Trials	50000
Mean	764.92
Median	661.86
Mode	---
Standard Deviation	428.96
Variance	184,006.61
Skewness	0.96
Kurtosis	3.37
Coefficient of Variability	0.56
Range Minimum	31.90
Range Maximum	2,099.63
Range Width	2,067.73
Mean Standard Error	1.92



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Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	31.90
95%	244.32
90%	307.36
85%	355.01
80%	398.96
75%	440.89
70%	481.62
65%	523.06
60%	566.50
55%	611.94
50%	661.86
45%	714.29
40%	772.40
35%	835.13
30%	909.36
25%	997.59
20%	1,103.52
15%	1,234.57
10%	1,401.84
5%	1,663.67
0%	2,099.63

End of Forecast

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Neuquen Extensional Structures
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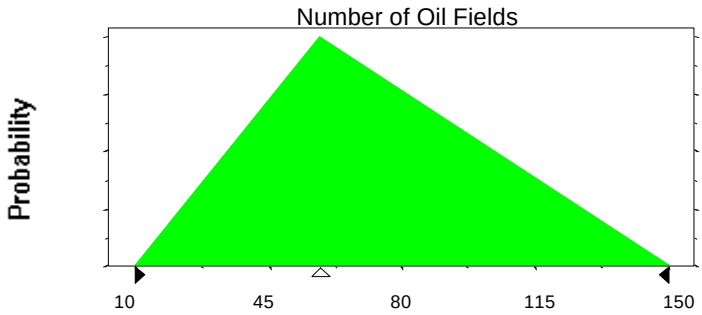
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	10
Likeliest	59
Maximum	150

Selected range is from 10 to 150
Mean value in simulation was 73



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	11.38	12.38
Standard Deviation	30.32	30.32

Selected range is from 0.00 to 349.00	1.00 to 350.00
Mean value in simulation was 10.84	11.84

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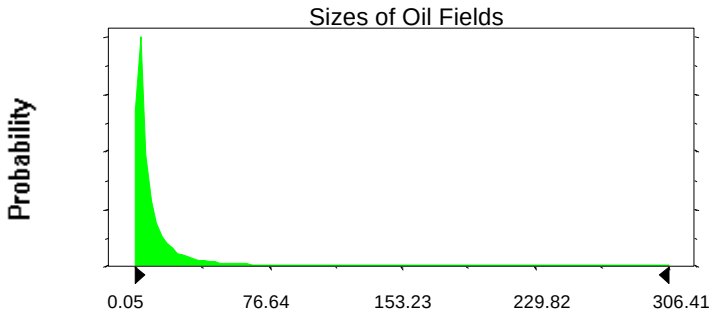
Assumption: Sizes of Oil Fields (cont'd)

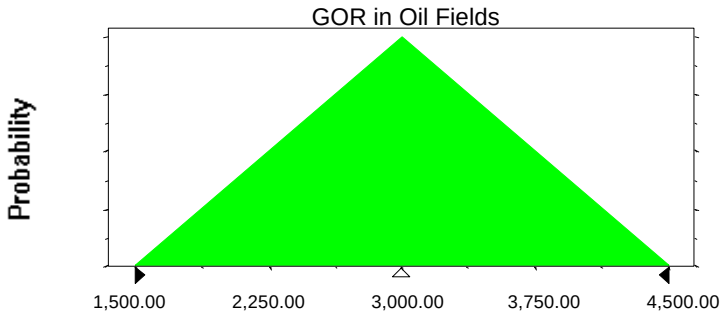


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,500.00
Likeliest	3,000.00
Maximum	4,500.00

Selected range is from 1,500.00 to 4,500.00
Mean value in simulation was 2,998.89



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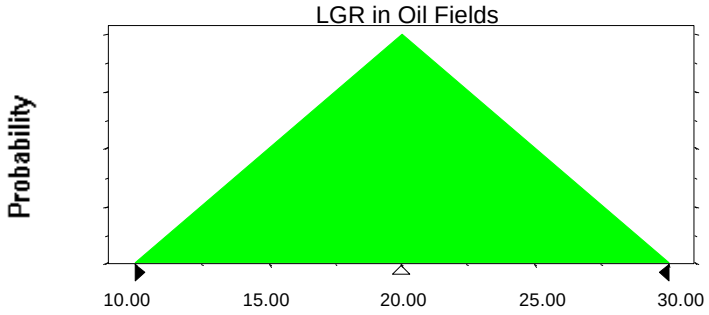
Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	10.00
Likeliest	20.00
Maximum	30.00

Selected range is from 10.00 to 30.00
Mean value in simulation was 20.00



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	6
Likeliest	61
Maximum	150

Selected range is from 6 to 150
Mean value in simulation was 72

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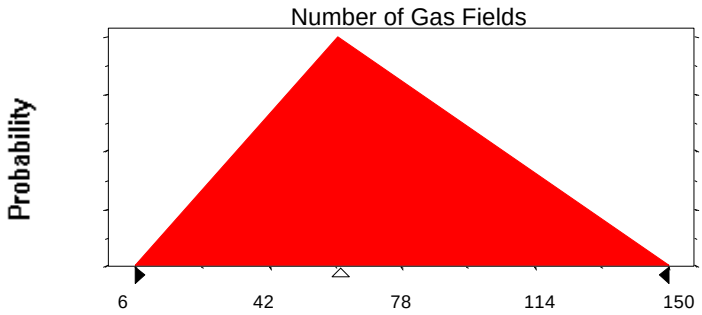
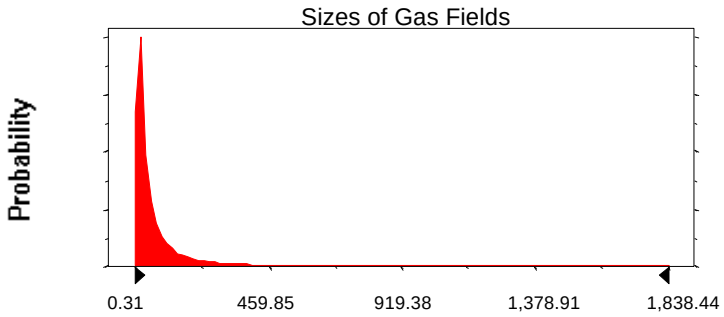
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	68.29	74.29
Standard Deviation	181.94	181.94
Selected range is from 0.00 to 2,094.00		6.00 to 2,100.00
Mean value in simulation was 64.78		70.78



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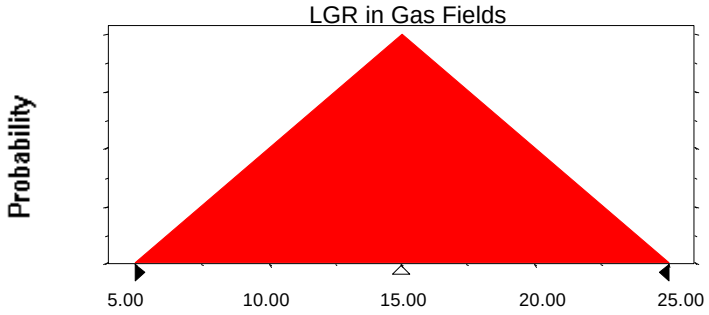
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	5.00
Likeliest	15.00
Maximum	25.00

Selected range is from 5.00 to 25.00
Mean value in simulation was 14.99



End of Assumptions

Simulation started on 2/24/99 at 17:43:19
Simulation stopped on 2/24/99 at 18:52:10