

**Thermal Triassic, Assessment Unit 40600201
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	2	1.00	39	293	916	360	81	625	2,077	792	5	36	129	48	19	96	384	133
Gas Fields	12						111	721	2,346	905	5	31	106	40	68	304	1,189	423
Total		1.00	39	293	916	360	192	1,347	4,423	1,698	9	67	236	87				

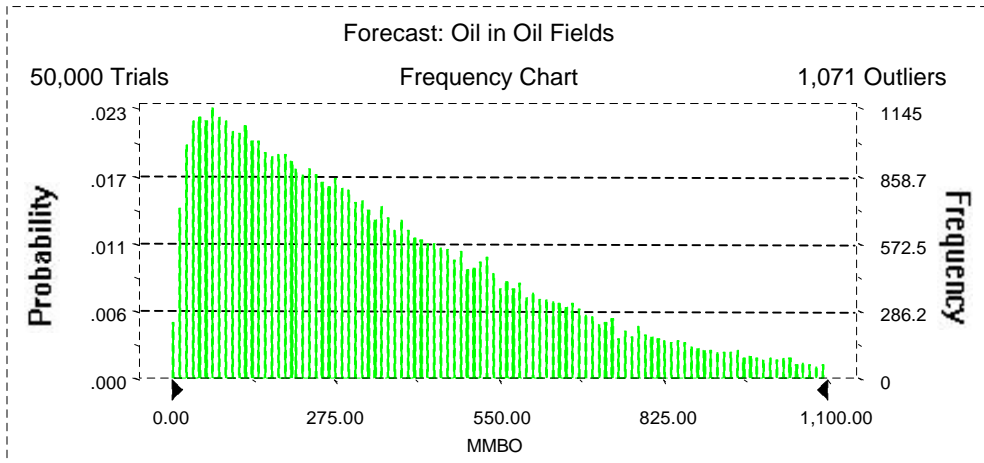
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Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 1,100.00 MMBO
Entire range is from 2.38 to 2,176.56 MMBO
After 50,000 trials, the standard error of the mean is 1.26

Statistics:	Value
Trials	50000
Mean	360.44
Median	293.24
Mode	---
Standard Deviation	282.76
Variance	79,952.41
Skewness	1.25
Kurtosis	4.88
Coefficient of Variability	0.78
Range Minimum	2.38
Range Maximum	2,176.56
Range Width	2,174.18
Mean Standard Error	1.26



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	2.38
95%	38.78
90%	63.63
85%	88.10
80%	113.84
75%	140.27
70%	168.12
65%	197.58
60%	227.88
55%	259.66
50%	293.24
45%	328.95
40%	368.04
35%	410.75
30%	458.35
25%	510.79
20%	572.30
15%	649.16
10%	747.97
5%	915.71
0%	2,176.56

End of Forecast

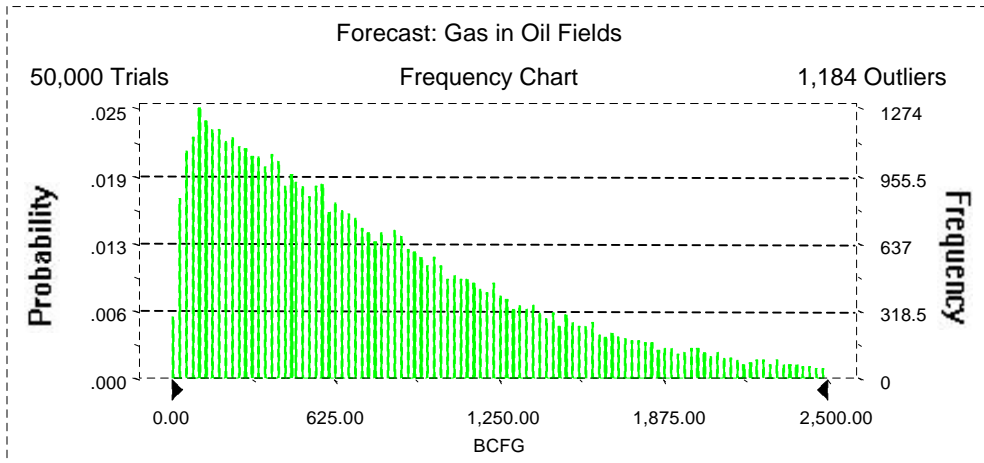
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Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 2,500.00 BCFG
Entire range is from 3.73 to 6,504.70 BCFG
After 50,000 trials, the standard error of the mean is 2.93

Statistics:	Value
Trials	50000
Mean	792.48
Median	625.48
Mode	---
Standard Deviation	654.97
Variance	428,985.89
Skewness	1.49
Kurtosis	6.12
Coefficient of Variability	0.83
Range Minimum	3.73
Range Maximum	6,504.70
Range Width	6,500.98
Mean Standard Error	2.93



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	3.73
95%	81.20
90%	132.88
85%	185.16
80%	239.30
75%	296.53
70%	356.82
65%	418.03
60%	483.14
55%	553.61
50%	625.48
45%	702.91
40%	791.92
35%	885.84
30%	989.42
25%	1,111.07
20%	1,252.36
15%	1,433.48
10%	1,676.78
5%	2,077.19
0%	6,504.70

End of Forecast

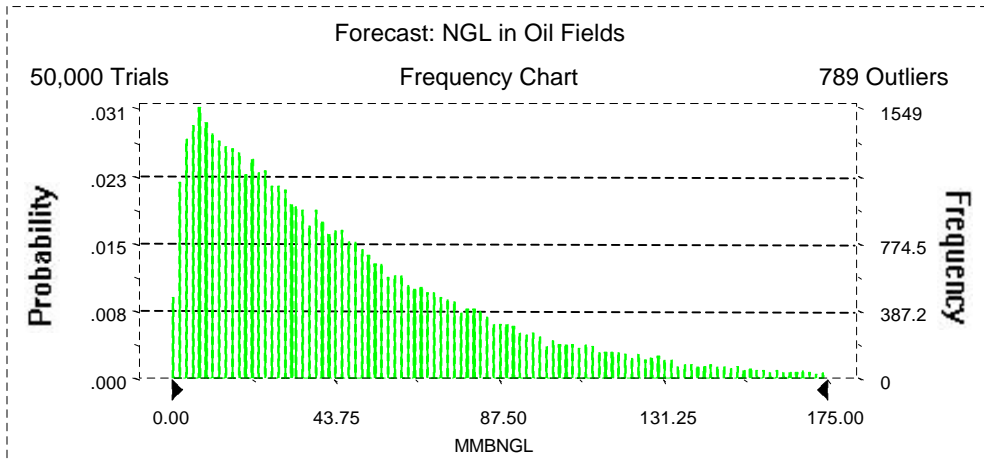
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Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 175.00 MMBNGL
Entire range is from 0.21 to 459.99 MMBNGL
After 50,000 trials, the standard error of the mean is 0.19

Statistics:	Value
Trials	50000
Mean	47.62
Median	36.40
Mode	---
Standard Deviation	41.58
Variance	1,728.63
Skewness	1.73
Kurtosis	7.47
Coefficient of Variability	0.87
Range Minimum	0.21
Range Maximum	459.99
Range Width	459.77
Mean Standard Error	0.19



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.21
95%	4.68
90%	7.60
85%	10.58
80%	13.71
75%	17.03
70%	20.57
65%	24.15
60%	27.93
55%	32.03
50%	36.40
45%	41.14
40%	46.32
35%	51.81
30%	58.37
25%	65.99
20%	74.94
15%	86.03
10%	102.42
5%	129.42
0%	459.99

End of Forecast

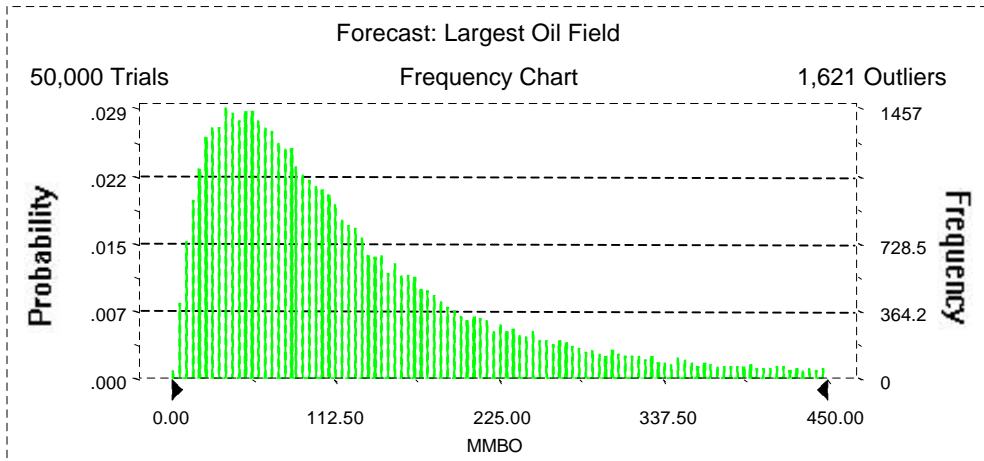
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Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 450.00 MMBO
Entire range is from 2.38 to 799.62 MMBO
After 50,000 trials, the standard error of the mean is 0.54

Statistics:	Value
Trials	50000
Mean	132.87
Median	96.40
Mode	---
Standard Deviation	121.63
Variance	14,794.98
Skewness	2.12
Kurtosis	8.55
Coefficient of Variability	0.92
Range Minimum	2.38
Range Maximum	799.62
Range Width	797.23
Mean Standard Error	0.54



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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	2.38
95%	19.35
90%	28.35
85%	36.58
80%	44.43
75%	52.43
70%	60.20
65%	68.52
60%	77.20
55%	86.26
50%	96.40
45%	107.16
40%	119.04
35%	132.85
30%	149.62
25%	169.12
20%	194.51
15%	229.68
10%	281.18
5%	383.96
0%	799.62

End of Forecast

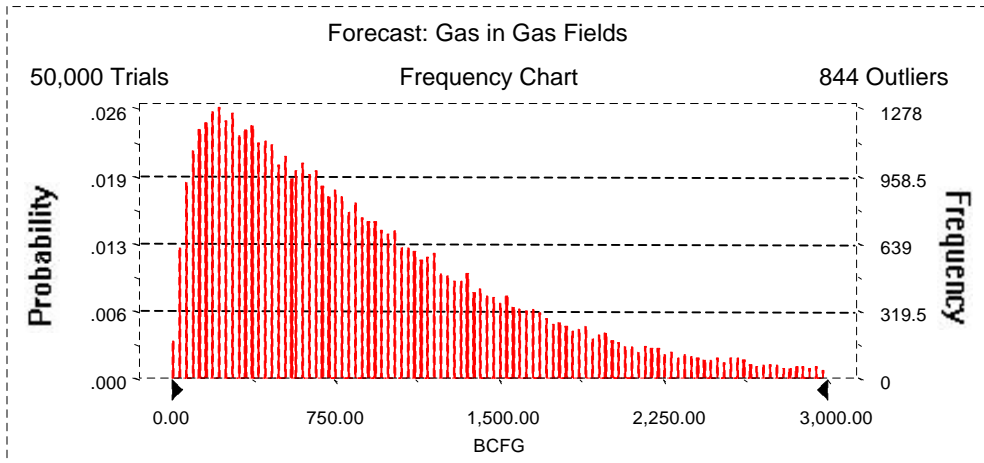
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Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 3,000.00 BCFG
 Entire range is from 13.92 to 8,166.95 BCFG
 After 50,000 trials, the standard error of the mean is 3.25

Statistics:	<u>Value</u>
Trials	50000
Mean	905.09
Median	721.18
Mode	---
Standard Deviation	725.97
Variance	527,028.22
Skewness	1.48
Kurtosis	6.03
Coefficient of Variability	0.80
Range Minimum	13.92
Range Maximum	8,166.95
Range Width	8,153.03
Mean Standard Error	3.25



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	13.92
95%	111.10
90%	174.30
85%	233.86
80%	294.69
75%	358.58
70%	423.46
65%	492.35
60%	566.44
55%	642.12
50%	721.18
45%	806.95
40%	901.15
35%	1,005.17
30%	1,120.97
25%	1,253.42
20%	1,415.05
15%	1,614.15
10%	1,886.22
5%	2,345.64
0%	8,166.95

End of Forecast

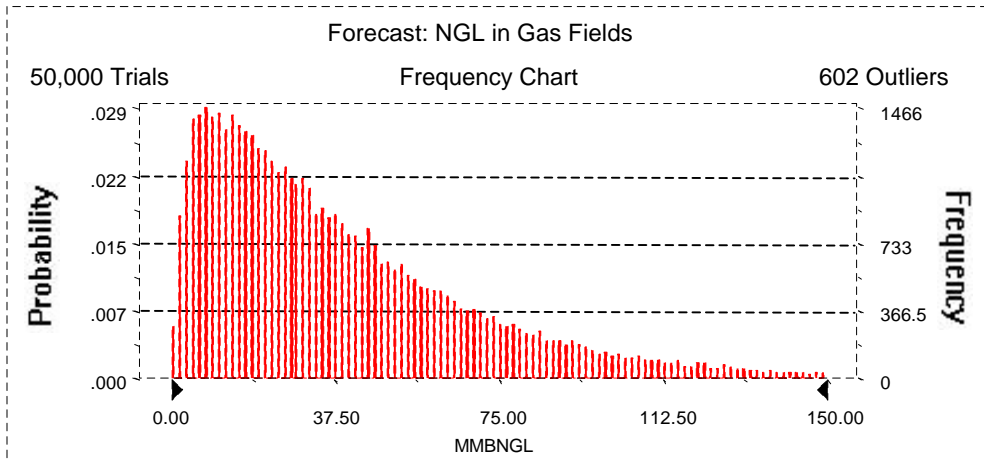
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Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 150.00 MMBNGL
Entire range is from 0.46 to 360.89 MMBNGL
After 50,000 trials, the standard error of the mean is 0.15

Statistics:	Value
Trials	50000
Mean	39.83
Median	30.85
Mode	---
Standard Deviation	33.58
Variance	1,127.70
Skewness	1.70
Kurtosis	7.28
Coefficient of Variability	0.84
Range Minimum	0.46
Range Maximum	360.89
Range Width	360.43
Mean Standard Error	0.15



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.46
95%	4.68
90%	7.31
85%	9.91
80%	12.53
75%	15.23
70%	17.99
65%	20.91
60%	24.01
55%	27.30
50%	30.85
45%	34.62
40%	38.80
35%	43.46
30%	48.54
25%	54.65
20%	62.04
15%	71.28
10%	84.22
5%	106.38
0%	360.89

End of Forecast

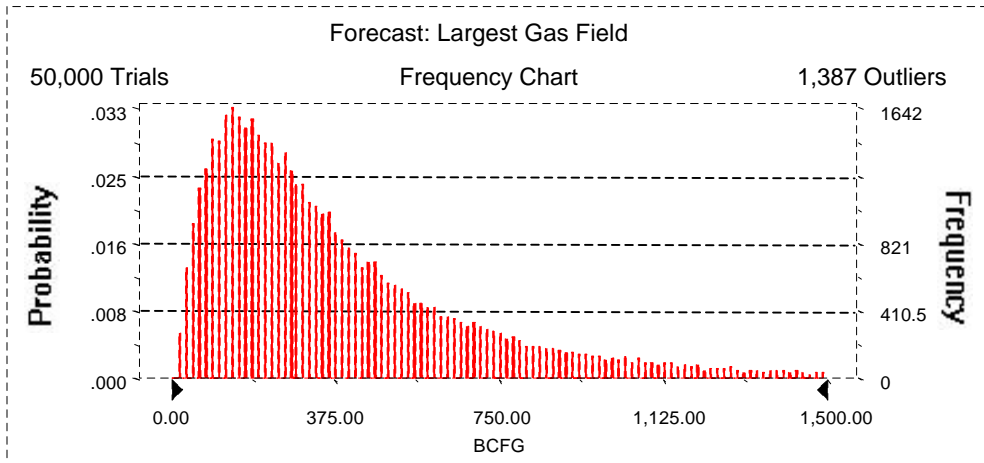
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Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 1,500.00 BCFG
Entire range is from 13.92 to 2,995.90 BCFG
After 50,000 trials, the standard error of the mean is 1.76

Statistics:	Value
Trials	50000
Mean	422.63
Median	303.94
Mode	---
Standard Deviation	392.77
Variance	154,269.79
Skewness	2.41
Kurtosis	10.86
Coefficient of Variability	0.93
Range Minimum	13.92
Range Maximum	2,995.90
Range Width	2,981.99
Mean Standard Error	1.76



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Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	13.92
95%	67.94
90%	97.00
85%	122.57
80%	145.51
75%	168.88
70%	193.38
65%	218.52
60%	245.05
55%	273.26
50%	303.94
45%	338.01
40%	375.14
35%	419.39
30%	471.81
25%	534.12
20%	613.60
15%	721.67
10%	882.58
5%	1,188.58
0%	2,995.90

End of Forecast

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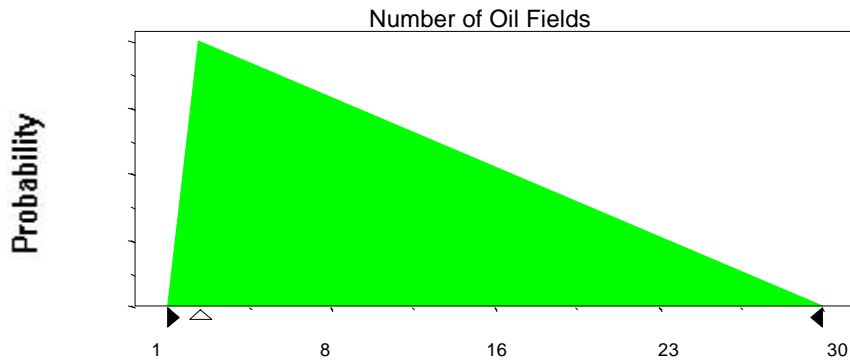
Assumptions

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:

Mean	31.58
Standard Deviation	69.93

Shifted parameters

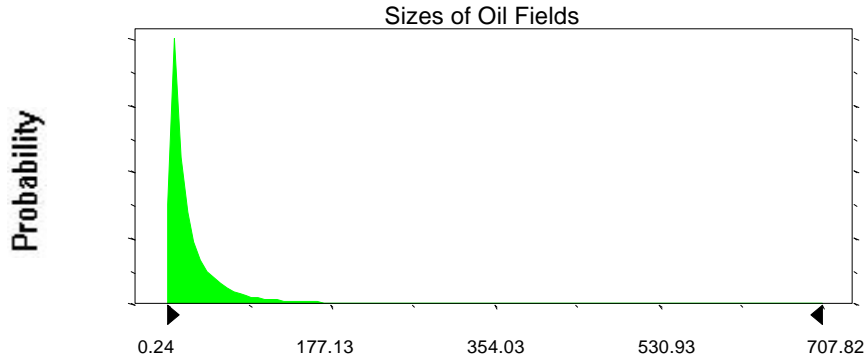
33.58
69.93

Selected range is from 0.00 to 798.00
Mean value in simulation was 30.68

2.00 to 800.00
32.68

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Assumption: Sizes of Oil Fields (cont'd)



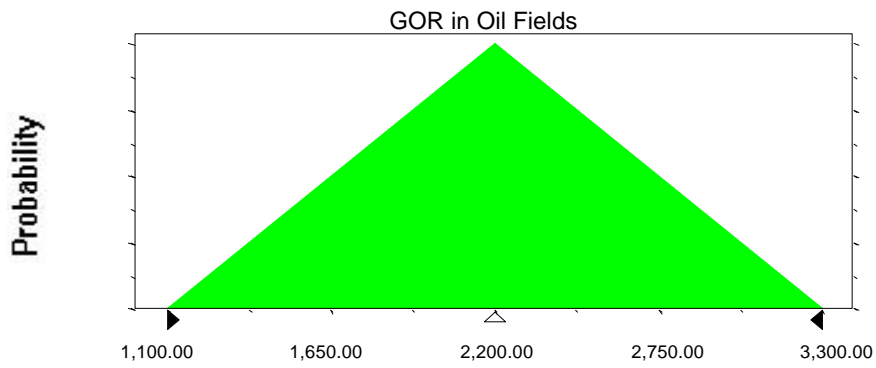
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,100.00
Likeliest	2,200.00
Maximum	3,300.00

Selected range is from 1,100.00 to 3,300.00

Mean value in simulation was 2,198.41



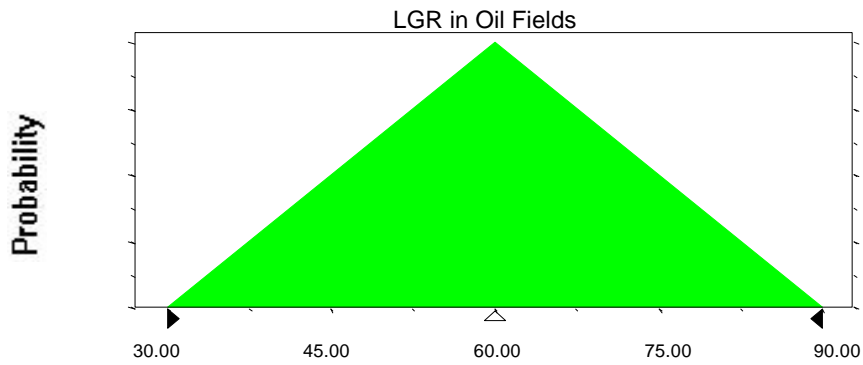
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Assumption: LGR in Oil Fields

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 59.96



Assumption: Number of Gas Fields

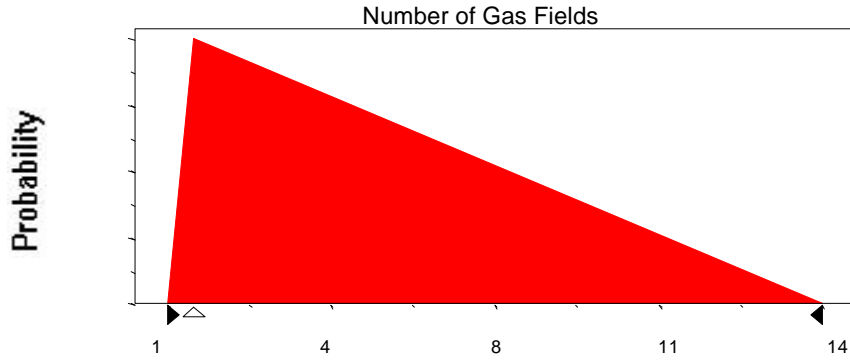
Triangular distribution with parameters:

Minimum	1
Likeliest	2
Maximum	14

Selected range is from 1 to 14
Mean value in simulation was 6

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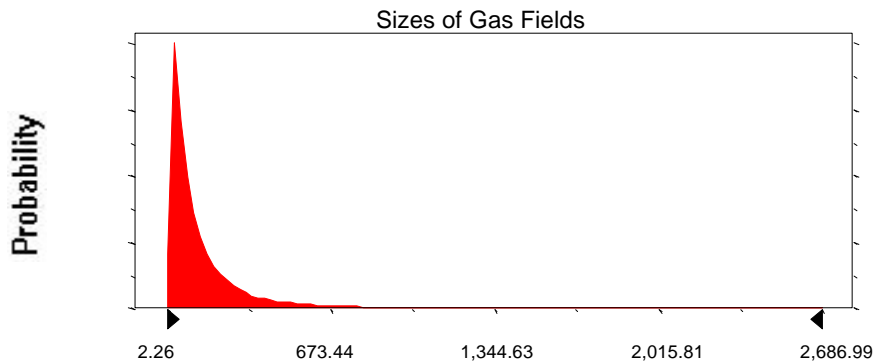
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	156.44	168.44
Standard Deviation	272.00	272

Selected range is from 0.00 to 2,988.00 12.00 to 3,000.00
Mean value in simulation was 151.43 163.43



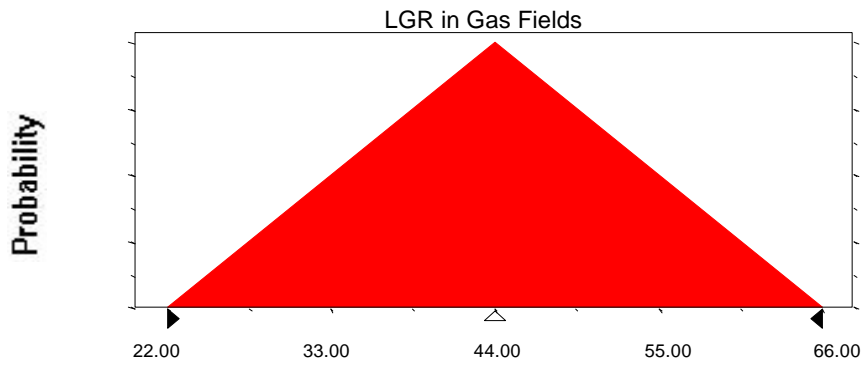
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Assumption: LGR in Gas Fields

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 44.04



End of Assumptions

Simulation started on 8/9/99 at 15:11:43
Simulation stopped on 8/9/99 at 15:30:15