

**Deformed Belt, Assessment Unit 40470201  
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	111	316	660	344	306	925	2,105	1,032	17	54	133	62	14	35	80	39
Gas Fields	6						405	1,211	2,526	1,313	4	12	27	13	56	134	312	152
Total		1.00	111	316	660	344	711	2,136	4,631	2,345	21	66	160	75				

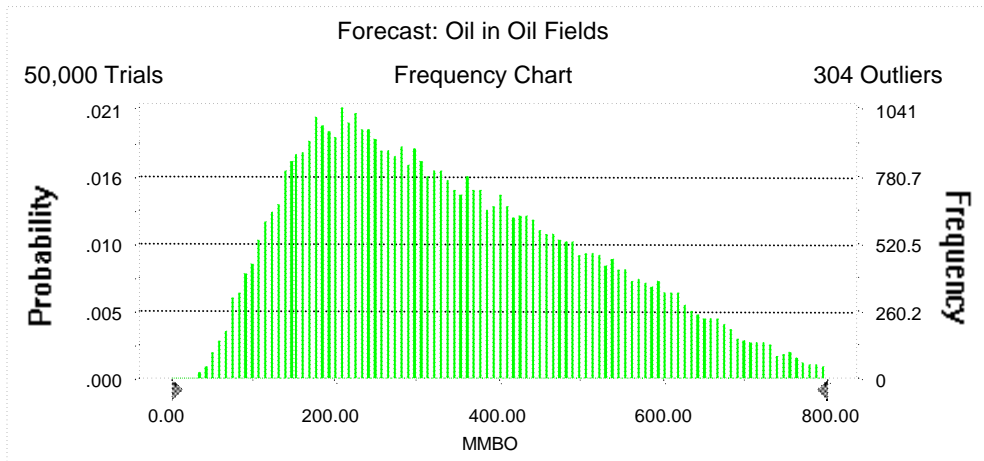
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**Monte Carlo Results**

**Forecast: Oil in Oil Fields**

Summary:

Display range is from 0.00 to 800.00 MMBO  
Entire range is from 27.85 to 1,104.60 MMBO  
After 50,000 trials, the standard error of the mean is 0.77

Statistics:	<u>Value</u>
Trials	50000
Mean	343.91
Median	316.40
Mode	---
Standard Deviation	171.41
Variance	29,382.83
Skewness	0.57
Kurtosis	2.65
Coefficient of Variability	0.50
Range Minimum	27.85
Range Maximum	1,104.60
Range Width	1,076.74
Mean Standard Error	0.77



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**Forecast: Oil in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	27.85
95%	111.35
90%	141.52
85%	164.53
80%	186.02
75%	206.91
70%	226.51
65%	247.11
60%	269.74
55%	292.84
50%	316.40
45%	341.84
40%	368.78
35%	397.40
30%	427.82
25%	461.27
20%	498.35
15%	541.30
10%	592.82
5%	660.05
0%	1,104.60

End of Forecast

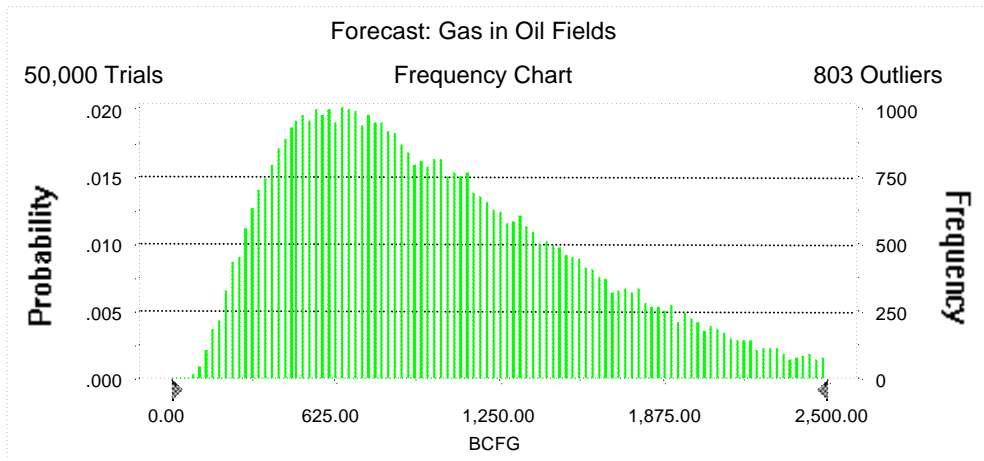
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**Forecast: Gas in Oil Fields**

Summary:

Display range is from 0.00 to 2,500.00 BCFG  
Entire range is from 48.20 to 4,088.88 BCFG  
After 50,000 trials, the standard error of the mean is 2.52

Statistics:	Value
Trials	50000
Mean	1,031.60
Median	925.26
Mode	---
Standard Deviation	564.10
Variance	318,211.14
Skewness	0.86
Kurtosis	3.50
Coefficient of Variability	0.55
Range Minimum	48.20
Range Maximum	4,088.88
Range Width	4,040.68
Mean Standard Error	2.52



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**Forecast: Gas in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	48.20
95%	306.08
90%	393.25
85%	464.82
80%	530.06
75%	593.86
70%	658.73
65%	721.38
60%	786.72
55%	853.27
50%	925.26
45%	1,003.45
40%	1,083.38
35%	1,167.25
30%	1,262.74
25%	1,370.78
20%	1,494.00
15%	1,638.57
10%	1,828.45
5%	2,105.18
0%	4,088.88

End of Forecast

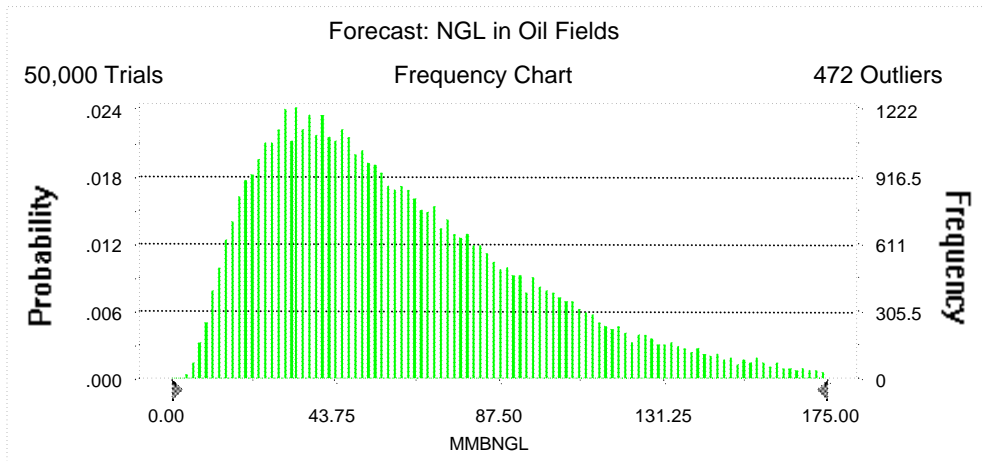
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**Forecast: NGL in Oil Fields**

Summary:

Display range is from 0.00 to 175.00 MMBNGL  
Entire range is from 2.93 to 310.04 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.16

Statistics:	Value
Trials	50000
Mean	61.79
Median	53.93
Mode	---
Standard Deviation	36.67
Variance	1,344.35
Skewness	1.10
Kurtosis	4.38
Coefficient of Variability	0.59
Range Minimum	2.93
Range Maximum	310.04
Range Width	307.11
Mean Standard Error	0.16



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**Forecast: NGL in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	2.93
95%	16.97
90%	22.02
85%	26.32
80%	30.24
75%	34.08
70%	37.81
65%	41.63
60%	45.57
55%	49.58
50%	53.93
45%	58.56
40%	63.62
35%	69.09
30%	75.13
25%	81.97
20%	89.95
15%	99.77
10%	112.18
5%	133.11
0%	310.04

End of Forecast

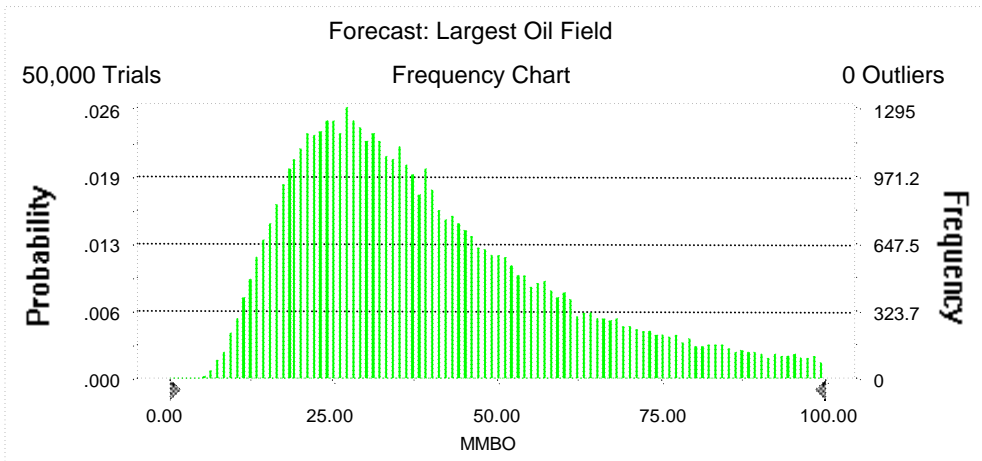
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**Forecast: Largest Oil Field**

Summary:

Display range is from 0.00 to 100.00 MMBO  
Entire range is from 3.82 to 99.99 MMBO  
After 50,000 trials, the standard error of the mean is 0.09

Statistics:	<u>Value</u>
Trials	50000
Mean	39.27
Median	34.93
Mode	---
Standard Deviation	19.83
Variance	393.42
Skewness	0.89
Kurtosis	3.26
Coefficient of Variability	0.51
Range Minimum	3.82
Range Maximum	99.99
Range Width	96.17
Mean Standard Error	0.09





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**Forecast: Largest Oil Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	3.82
95%	14.41
90%	17.53
85%	20.02
80%	22.22
75%	24.32
70%	26.34
65%	28.34
60%	30.45
55%	32.59
50%	34.93
45%	37.30
40%	39.92
35%	42.95
30%	46.29
25%	50.34
20%	55.00
15%	60.73
10%	68.79
5%	80.18
0%	99.99

End of Forecast

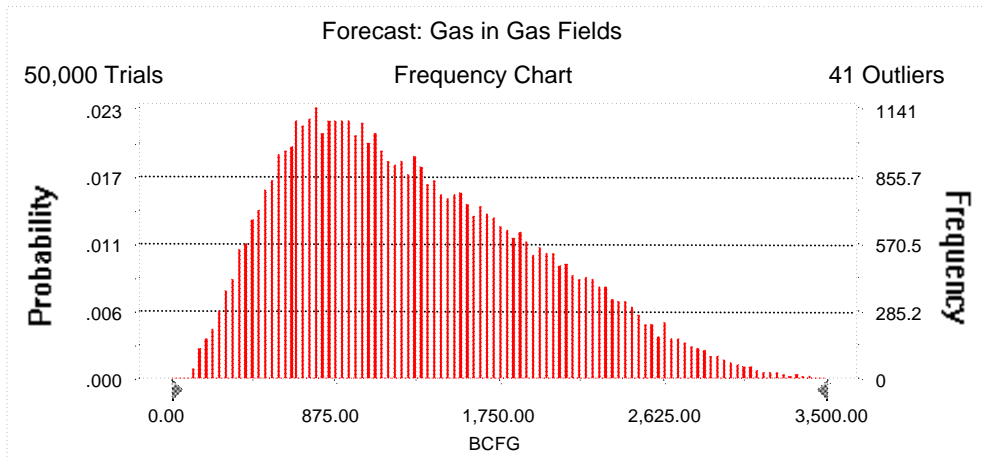
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**Forecast: Gas in Gas Fields**

Summary:

Display range is from 0.00 to 3,500.00 BCFG  
 Entire range is from 83.70 to 4,118.73 BCFG  
 After 50,000 trials, the standard error of the mean is 2.96

Statistics:	<u>Value</u>
Trials	50000
Mean	1,313.13
Median	1,210.81
Mode	---
Standard Deviation	660.99
Variance	436,902.61
Skewness	0.56
Kurtosis	2.69
Coefficient of Variability	0.50
Range Minimum	83.70
Range Maximum	4,118.73
Range Width	4,035.03
Mean Standard Error	2.96



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**Forecast: Gas in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	83.70
95%	405.38
90%	527.61
85%	624.32
80%	708.74
75%	788.44
70%	868.66
65%	949.97
60%	1,033.30
55%	1,117.83
50%	1,210.81
45%	1,308.92
40%	1,409.09
35%	1,520.61
30%	1,637.99
25%	1,761.39
20%	1,905.01
15%	2,068.48
10%	2,265.09
5%	2,526.29
0%	4,118.73

End of Forecast

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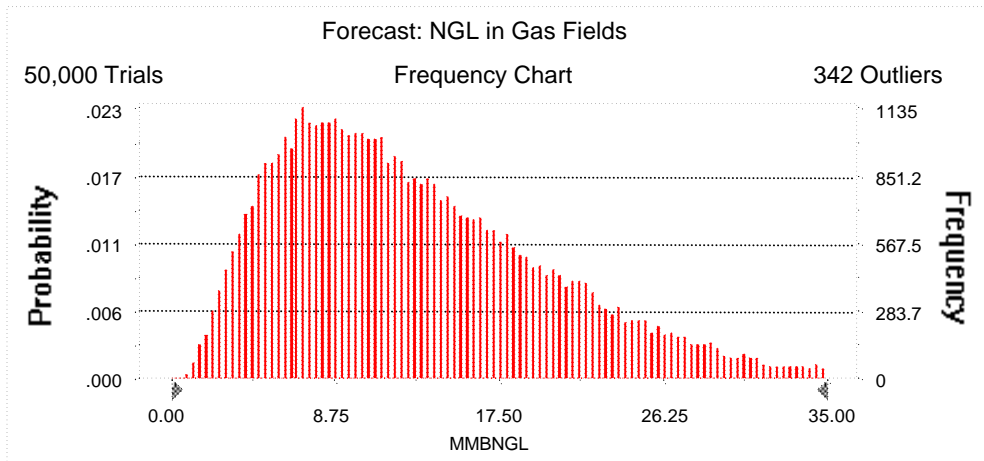
**Forecast: NGL in Gas Fields**

Summary:

Display range is from 0.00 to 35.00 MMBNGL  
Entire range is from 0.77 to 50.56 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.03

Statistics:

	<u>Value</u>
Trials	50000
Mean	13.12
Median	11.77
Mode	---
Standard Deviation	7.23
Variance	52.33
Skewness	0.85
Kurtosis	3.49
Coefficient of Variability	0.55
Range Minimum	0.77
Range Maximum	50.56
Range Width	49.79
Mean Standard Error	0.03



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**Forecast: NGL in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.77
95%	3.76
90%	4.92
85%	5.87
80%	6.75
75%	7.55
70%	8.36
65%	9.17
60%	10.01
55%	10.87
50%	11.77
45%	12.73
40%	13.78
35%	14.89
30%	16.13
25%	17.47
20%	19.04
15%	20.93
10%	23.26
5%	26.96
0%	50.56

End of Forecast

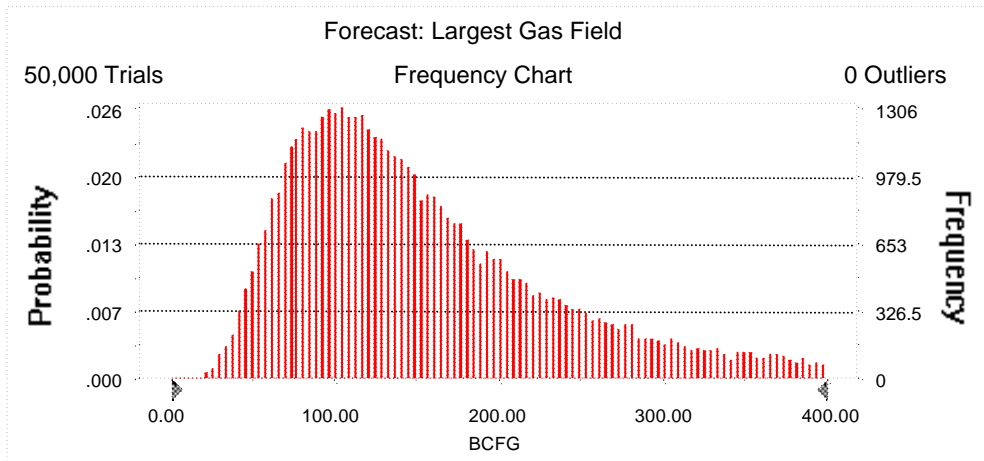
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**Forecast: Largest Gas Field**

Summary:

Display range is from 0.00 to 400.00 BCFG  
Entire range is from 17.39 to 399.93 BCFG  
After 50,000 trials, the standard error of the mean is 0.35

Statistics:	Value
Trials	50000
Mean	151.64
Median	134.03
Mode	---
Standard Deviation	77.57
Variance	6,017.12
Skewness	0.96
Kurtosis	3.46
Coefficient of Variability	0.51
Range Minimum	17.39
Range Maximum	399.93
Range Width	382.54
Mean Standard Error	0.35



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**Forecast: Largest Gas Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	17.39
95%	55.84
90%	67.84
85%	77.10
80%	85.57
75%	93.63
70%	101.50
65%	109.30
60%	117.17
55%	125.29
50%	134.03
45%	143.38
40%	153.47
35%	164.85
30%	177.76
25%	193.52
20%	211.77
15%	235.12
10%	265.67
5%	312.00
0%	399.93

End of Forecast

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**Assumptions**

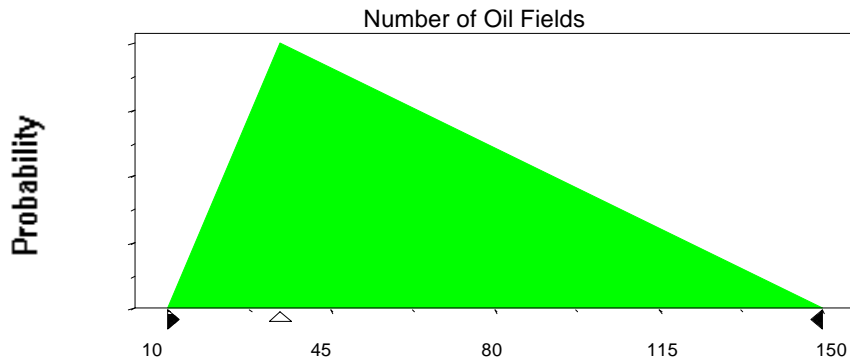
**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	10
Likeliest	34
Maximum	150

Selected range is from 10 to 150

Mean value in simulation was 65



**Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:

Mean	4.44	Shifted parameters	5.44
Standard Deviation	8.80		8.8

Selected range is from 0.00 to 99.00

1.00 to 100.00

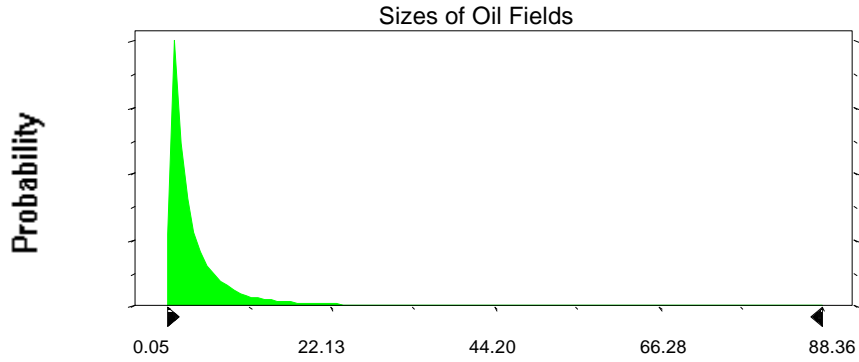
Mean value in simulation was 4.35

5.35



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Assumption: Sizes of Oil Fields (cont'd)



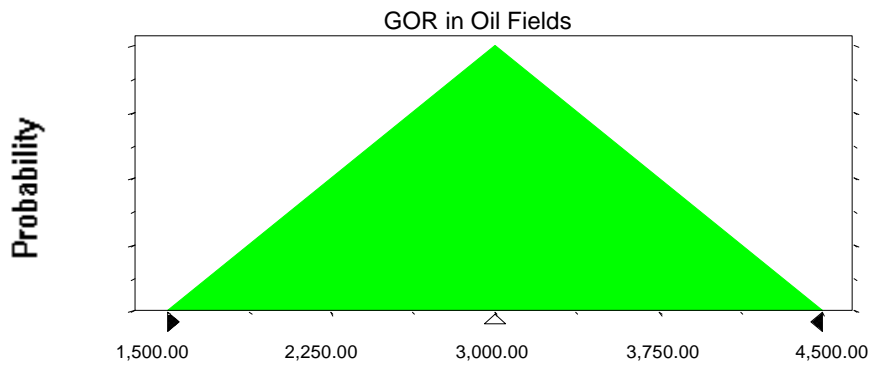
Assumption: GOR in Oil Fields

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 3,000.42



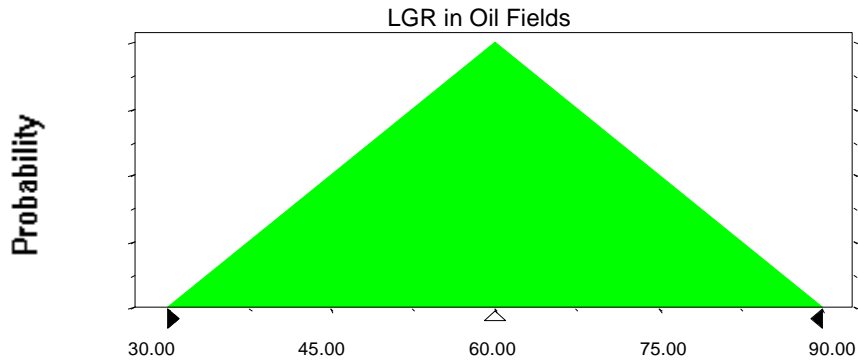
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**Assumption: LGR in Oil Fields**

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 59.92



**Assumption: Number of Gas Fields**

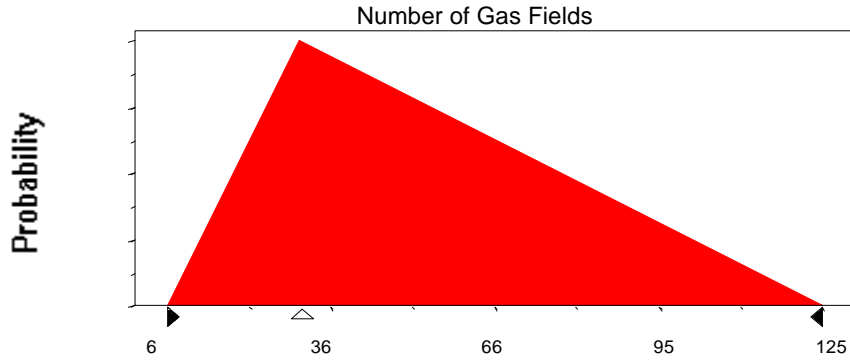
Triangular distribution with parameters:

Minimum	6
Likeliest	30
Maximum	125

Selected range is from 6 to 125  
Mean value in simulation was 54

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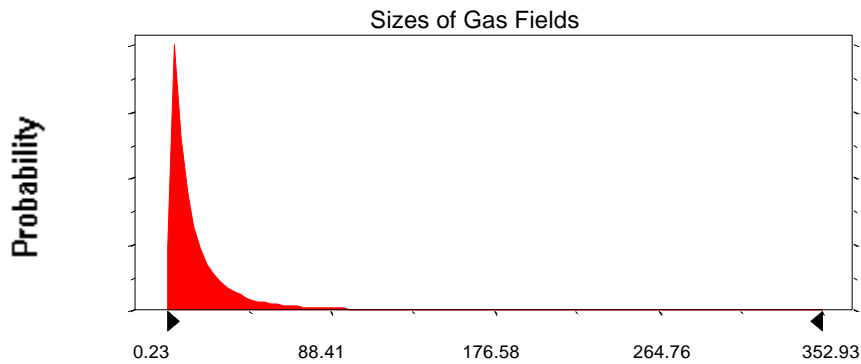
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	19.01	25.01
Standard Deviation	35.38	35.38

Selected range is from 0.00 to 394.00                      6.00 to 400.00  
Mean value in simulation was 18.44                              24.44



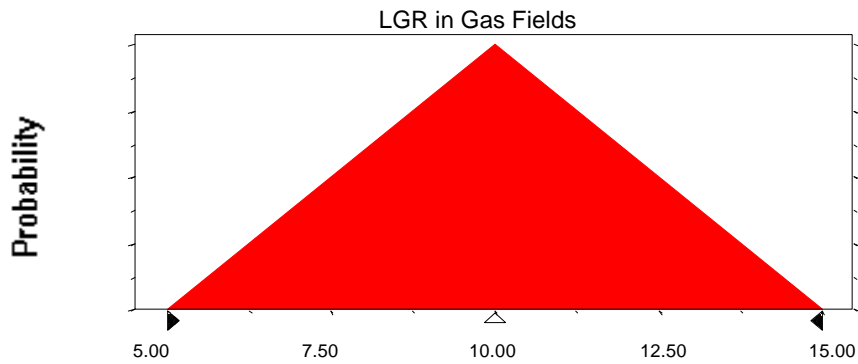
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**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	5.00
Likeliest	10.00
Maximum	15.00

Selected range is from 5.00 to 15.00  
Mean value in simulation was 10.00



End of Assumptions

Simulation started on 9/10/99 at 13:21:56  
Simulation stopped on 9/10/99 at 14:23:43