

**Onshore and Offshore Northeastern Shelf, Assessment Unit 13220101  
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	5	1.00	673	2,356	5,225	2,582	3,279	11,664	26,848	12,903	183	678	1,688	774	135	423	1,266	520
Gas Fields	30						10,736	40,859	90,439	44,548	520	2,001	4,680	2,225	1,973	6,830	19,602	8,217
Total		1.00	673	2,356	5,225	2,582	14,015	52,523	117,287	57,451	703	2,679	6,368	2,999				

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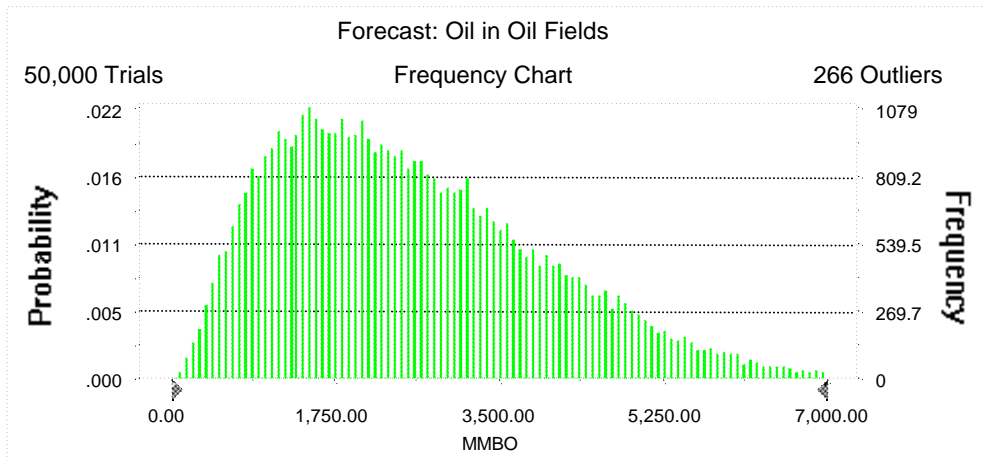
**Forecast: Oil in Oil Fields**

Summary:

Display range is from 0.00 to 7,000.00 MMBO  
Entire range is from 50.08 to 10,621.58 MMBO  
After 50,000 trials, the standard error of the mean is 6.40

Statistics:

	<u>Value</u>
Trials	50000
Mean	2,581.75
Median	2,356.34
Mode	---
Standard Deviation	1,430.24
Variance	2,045,582.05
Skewness	0.75
Kurtosis	3.33
Coefficient of Variability	0.55
Range Minimum	50.08
Range Maximum	10,621.58
Range Width	10,571.50
Mean Standard Error	6.40



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

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	50.08
95%	673.13
90%	908.04
85%	1,110.80
80%	1,290.81
75%	1,467.82
70%	1,633.95
65%	1,812.68
60%	1,987.43
55%	2,163.39
50%	2,356.34
45%	2,553.30
40%	2,755.72
35%	2,982.73
30%	3,211.43
25%	3,473.42
20%	3,777.79
15%	4,144.27
10%	4,588.29
5%	5,224.71
0%	10,621.58

End of Forecast

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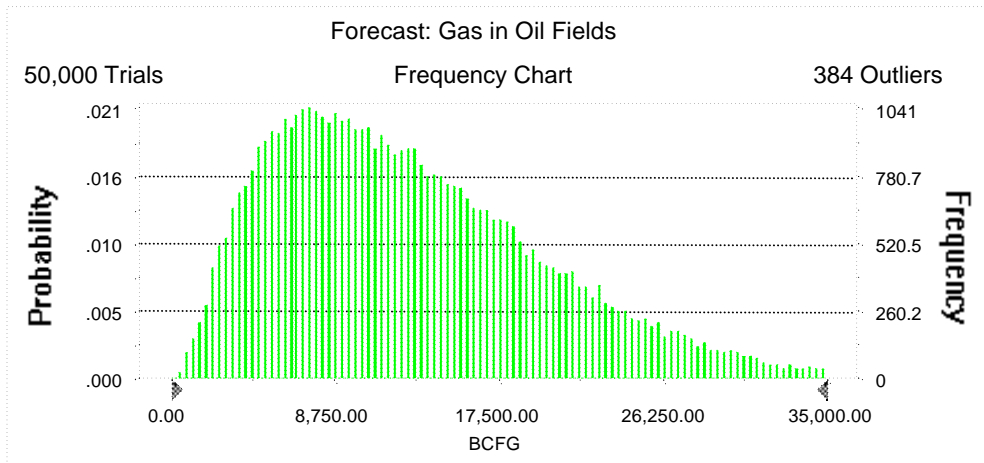
**Forecast: Gas in Oil Fields**

Summary:

Display range is from 0.00 to 35,000.00 BCFG  
 Entire range is from 204.05 to 61,332.96 BCFG  
 After 50,000 trials, the standard error of the mean is 32.98

Statistics:

	<u>Value</u>
Trials	50000
Mean	12,902.98
Median	11,664.11
Mode	---
Standard Deviation	7,373.96
Variance	54,375,356.64
Skewness	0.87
Kurtosis	3.76
Coefficient of Variability	0.57
Range Minimum	204.05
Range Maximum	61,332.96
Range Width	61,128.91
Mean Standard Error	32.98



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	204.05
95%	3,279.09
90%	4,462.90
85%	5,430.09
80%	6,333.42
75%	7,205.91
70%	8,051.52
65%	8,921.49
60%	9,803.32
55%	10,705.74
50%	11,664.11
45%	12,669.72
40%	13,674.22
35%	14,798.09
30%	15,981.19
25%	17,321.63
20%	18,805.59
15%	20,727.70
10%	23,091.78
5%	26,847.55
0%	61,332.96

End of Forecast

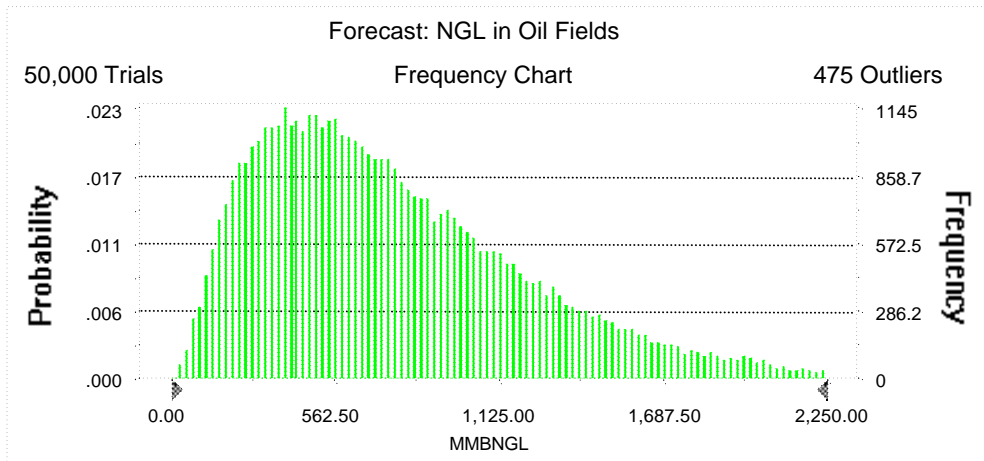
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**Forecast: NGL in Oil Fields**

Summary:

Display range is from 0.00 to 2,250.00 MMBNGL  
Entire range is from 8.21 to 4,279.75 MMBNGL  
After 50,000 trials, the standard error of the mean is 2.14

Statistics:	<u>Value</u>
Trials	50000
Mean	774.39
Median	677.96
Mode	---
Standard Deviation	478.67
Variance	229,128.04
Skewness	1.13
Kurtosis	4.81
Coefficient of Variability	0.62
Range Minimum	8.21
Range Maximum	4,279.75
Range Width	4,271.54
Mean Standard Error	2.14



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

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	8.21
95%	183.23
90%	250.71
85%	308.11
80%	361.42
75%	412.82
70%	465.53
65%	515.85
60%	568.41
55%	621.31
50%	677.96
45%	737.92
40%	800.59
35%	872.63
30%	951.92
25%	1,036.63
20%	1,140.27
15%	1,263.51
10%	1,427.56
5%	1,688.41
0%	4,279.75

End of Forecast

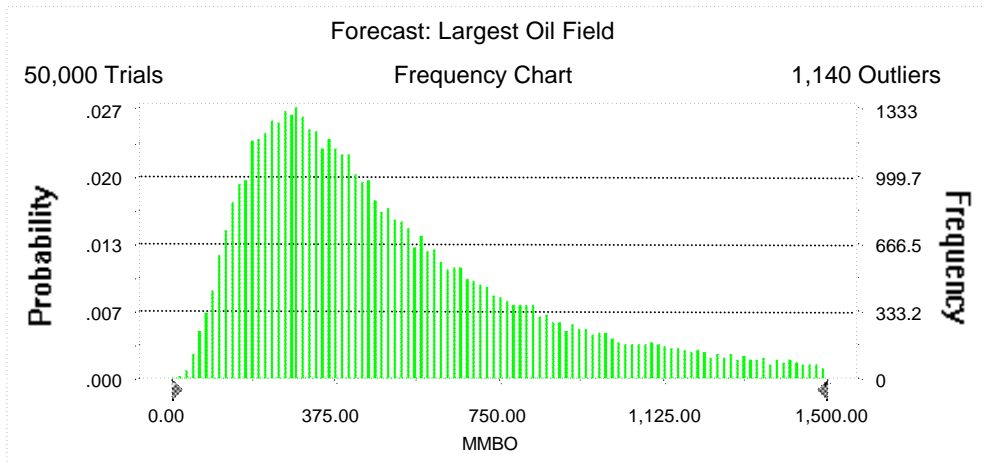
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**Forecast: Largest Oil Field**

Summary:

Display range is from 0.00 to 1,500.00 MMBO  
 Entire range is from 15.20 to 1,799.59 MMBO  
 After 50,000 trials, the standard error of the mean is 1.56

Statistics:	<u>Value</u>
Trials	50000
Mean	520.44
Median	423.45
Mode	---
Standard Deviation	348.06
Variance	121,148.32
Skewness	1.30
Kurtosis	4.42
Coefficient of Variability	0.67
Range Minimum	15.20
Range Maximum	1,799.59
Range Width	1,784.39
Mean Standard Error	1.56





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

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	15.20
95%	134.65
90%	175.06
85%	207.54
80%	238.09
75%	267.21
70%	295.73
65%	325.17
60%	356.79
55%	389.09
50%	423.45
45%	461.33
40%	504.88
35%	553.38
30%	610.71
25%	677.38
20%	761.06
15%	866.80
10%	1,020.06
5%	1,265.94
0%	1,799.59

End of Forecast

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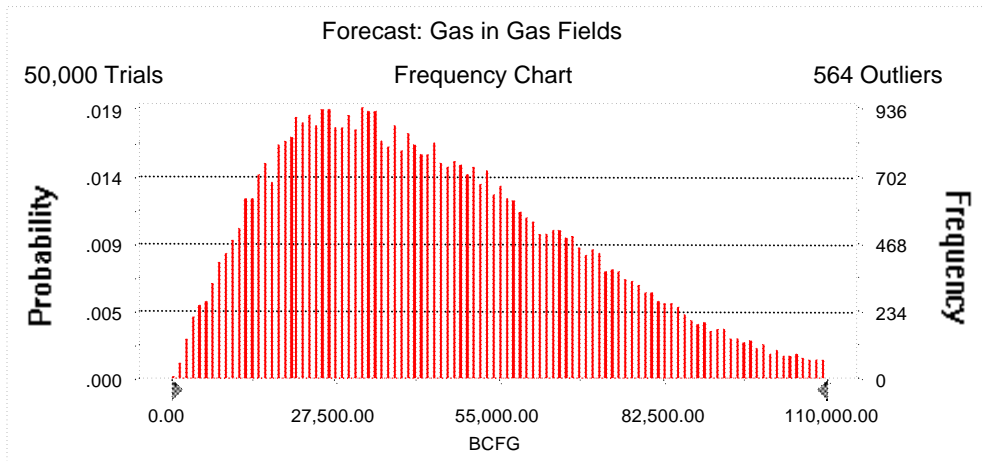
**Forecast: Gas in Gas Fields**

Summary:

Display range is from 0.00 to 110,000.00 BCFG  
Entire range is from 706.15 to 162,595.94 BCFG  
After 50,000 trials, the standard error of the mean is 110.95

Statistics:

	<u>Value</u>
Trials	50000
Mean	44,548.39
Median	40,858.51
Mode	---
Standard Deviation	24,810.08
Variance	615,539,910.71
Skewness	0.68
Kurtosis	3.13
Coefficient of Variability	0.56
Range Minimum	706.15
Range Maximum	162,595.94
Range Width	161,889.79
Mean Standard Error	110.95



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	706.15
95%	10,736.36
90%	15,259.52
85%	18,947.26
80%	22,142.01
75%	25,199.48
70%	28,186.68
65%	31,304.02
60%	34,307.53
55%	37,551.78
50%	40,858.51
45%	44,345.32
40%	47,962.12
35%	51,718.42
30%	55,807.12
25%	60,383.42
20%	65,709.41
15%	71,636.19
10%	79,150.03
5%	90,439.18
0%	162,595.94

End of Forecast

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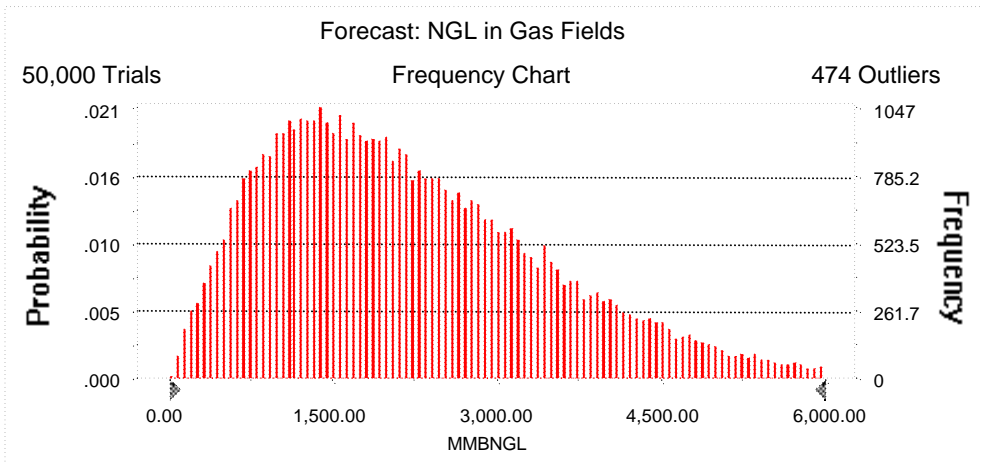
**Forecast: NGL in Gas Fields**

**Summary:**

Display range is from 0.00 to 6,000.00 MMBNGL  
 Entire range is from 32.66 to 10,267.71 MMBNGL  
 After 50,000 trials, the standard error of the mean is 5.83

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	2,224.91
Median	2,000.66
Mode	---
Standard Deviation	1,303.16
Variance	1,698,235.25
Skewness	0.87
Kurtosis	3.75
Coefficient of Variability	0.59
Range Minimum	32.66
Range Maximum	10,267.71
Range Width	10,235.05
Mean Standard Error	5.83



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

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	32.66
95%	520.13
90%	733.37
85%	913.36
80%	1,075.54
75%	1,228.73
70%	1,377.11
65%	1,525.84
60%	1,681.44
55%	1,840.16
50%	2,000.66
45%	2,172.48
40%	2,357.55
35%	2,553.10
30%	2,767.90
25%	2,999.55
20%	3,270.90
15%	3,595.11
10%	4,035.61
5%	4,679.68
0%	10,267.71

End of Forecast

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**Forecast: Largest Gas Field**

Summary:

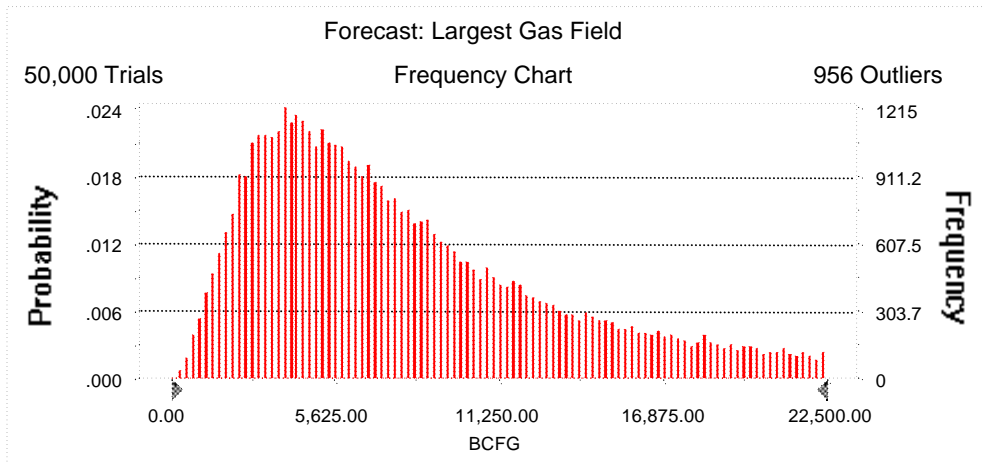
Display range is from 0.00 to 22,500.00 BCFG

Entire range is from 196.19 to 24,998.50 BCFG

After 50,000 trials, the standard error of the mean is 23.91

Statistics:

	<u>Value</u>
Trials	50000
Mean	8,216.94
Median	6,830.42
Mode	---
Standard Deviation	5,346.46
Variance	28,584,673.50
Skewness	1.04
Kurtosis	3.48
Coefficient of Variability	0.65
Range Minimum	196.19
Range Maximum	24,998.50
Range Width	24,802.31
Mean Standard Error	23.91



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	196.19
95%	1,972.64
90%	2,641.48
85%	3,169.20
80%	3,683.76
75%	4,162.07
70%	4,646.21
65%	5,166.22
60%	5,686.31
55%	6,230.64
50%	6,830.42
45%	7,453.98
40%	8,177.11
35%	8,954.16
30%	9,879.56
25%	10,996.21
20%	12,329.29
15%	14,054.32
10%	16,345.21
5%	19,601.72
0%	24,998.50

End of Forecast

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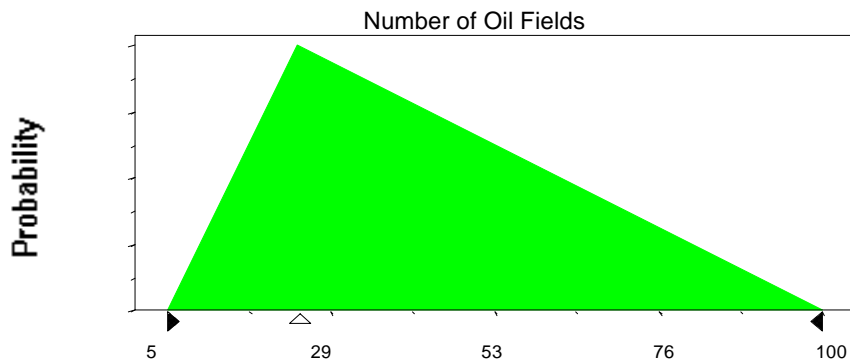
**Assumptions**

**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	5
Likeliest	24
Maximum	100

Selected range is from 5 to 100  
Mean value in simulation was 43



**Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:

Mean	57.67
Standard Deviation	155.98

Shifted parameters

62.67
155.98

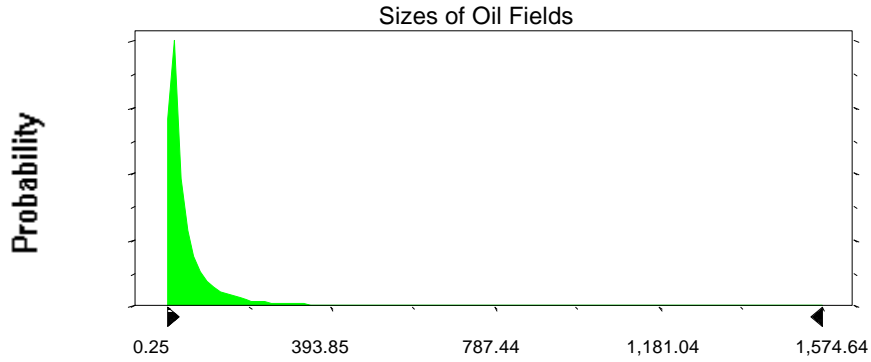
Selected range is from 0.00 to 1,795.00  
Mean value in simulation was 54.47

5.00 to 1,800.00  
59.47



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**Assumption: Sizes of Oil Fields (cont'd)**



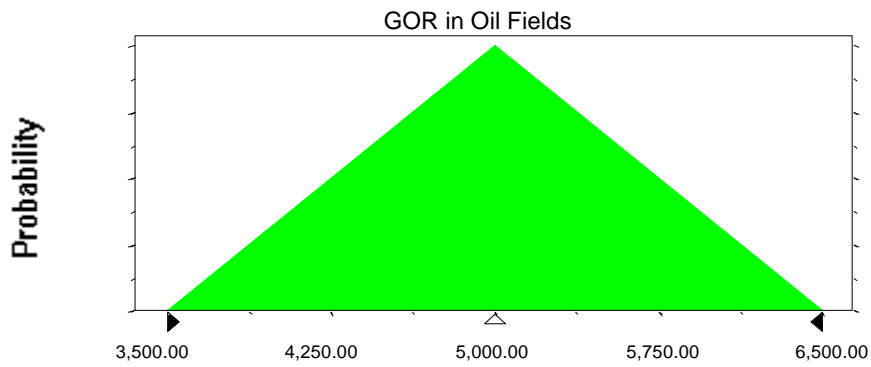
**Assumption: GOR in Oil Fields**

Triangular distribution with parameters:

Minimum	3,500.00
Likeliest	5,000.00
Maximum	6,500.00

Selected range is from 3,500.00 to 6,500.00

Mean value in simulation was 4,997.71



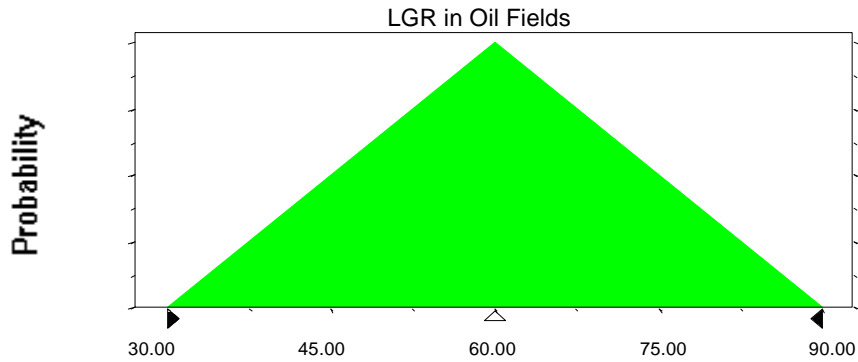
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**Assumption: LGR in Oil Fields**

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 60.02



**Assumption: Number of Gas Fields**

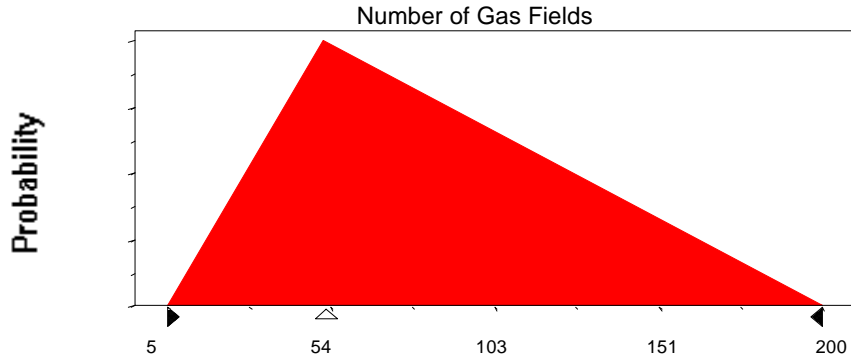
Triangular distribution with parameters:

Minimum	5
Likeliest	52
Maximum	200

Selected range is from 5 to 200  
Mean value in simulation was 86

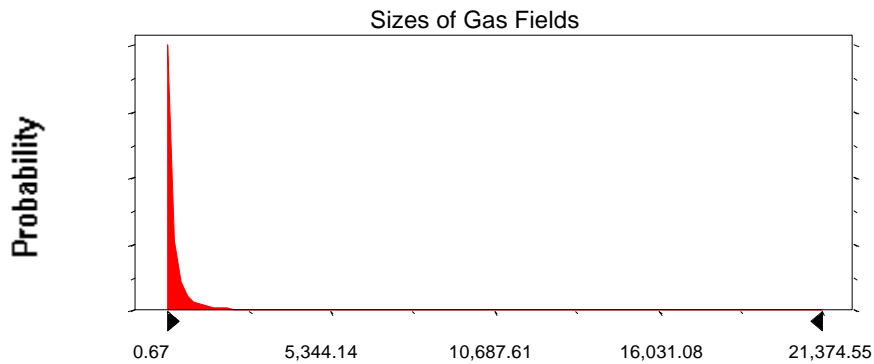
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**Assumption: Number of Gas Fields (cont'd)**



**Assumption: Sizes of Gas Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	533.58	563.58
Standard Deviation	2,311.74	2,311.74
Selected range is from 0.00 to 24,970.00		30.00 to 25,000.00
Mean value in simulation was 491.32		521.32



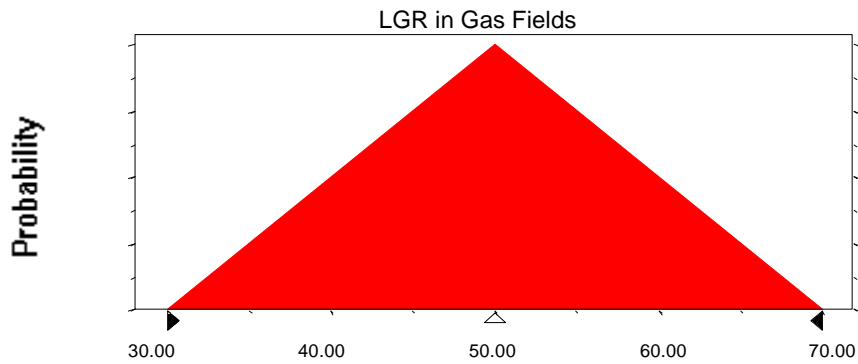
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**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	30.00
Likeliest	50.00
Maximum	70.00

Selected range is from 30.00 to 70.00  
Mean value in simulation was 49.99



End of Assumptions

Simulation started on 11/19/99 at 13:48:19  
Simulation stopped on 11/19/99 at 14:56:24