

**Bou Dabbous-Tertiary Structural/Stratigraphic, Assessment Unit 20480101  
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	171	602	1,369	667	319	1,169	2,898	1,335	9	37	98	43	35	94	246	110
Gas Fields	24						363	1,274	2,904	1,411	5	19	45	21	97	240	626	283
Total		1.00	171	602	1,369	667	682	2,443	5,802	2,746	15	55	142	64				

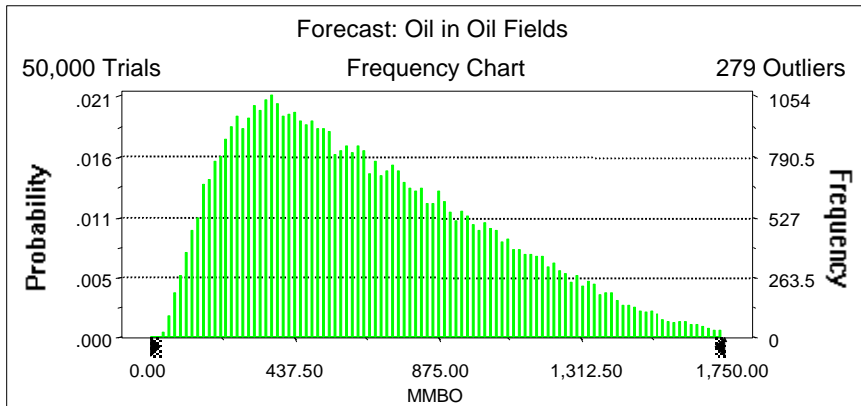
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**Forecast: Oil in Oil Fields**

Summary:

Display range is from 0.00 to 1,750.00 MMBO  
Entire range is from 27.76 to 2,336.24 MMBO  
After 50,000 trials, the standard error of the mean is 1.68

Statistics:	Value
Trials	50000
Mean	667.36
Median	601.87
Mode	---
Standard Deviation	376.23
Variance	141,550.43
Skewness	0.69
Kurtosis	2.96
Coefficient of Variability	0.56
Range Minimum	27.76
Range Maximum	2,336.24
Range Width	2,308.48
Mean Standard Error	1.68



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	27.76
95%	171.48
90%	229.84
85%	277.46
80%	323.46
75%	366.81
70%	409.64
65%	454.43
60%	501.18
55%	549.02
50%	601.87
45%	655.46
40%	714.07
35%	774.12
30%	841.15
25%	915.23
20%	997.45
15%	1,090.42
10%	1,206.56
5%	1,368.89
0%	2,336.24

End of Forecast

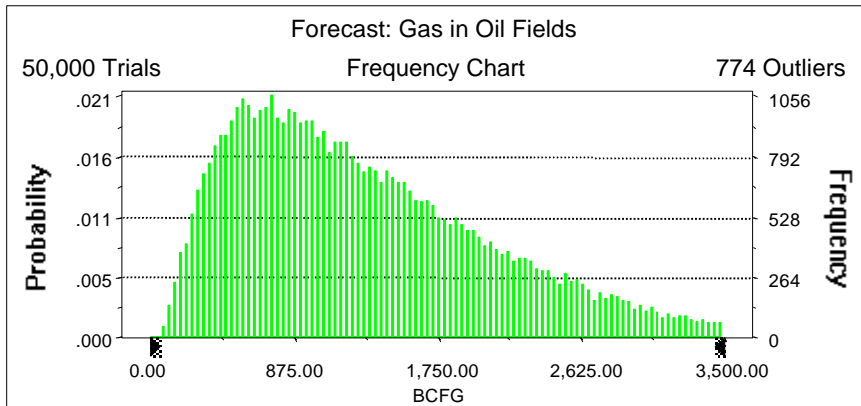
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**Forecast: Gas in Oil Fields**

Summary:

Display range is from 0.00 to 3,500.00 BCFG  
Entire range is from 46.58 to 6,515.15 BCFG  
After 50,000 trials, the standard error of the mean is 3.65

Statistics:	Value
Trials	50000
Mean	1,335.21
Median	1,169.43
Mode	---
Standard Deviation	815.97
Variance	665,799.32
Skewness	0.97
Kurtosis	3.85
Coefficient of Variability	0.61
Range Minimum	46.58
Range Maximum	6,515.15
Range Width	6,468.57
Mean Standard Error	3.65



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	46.58
95%	319.07
90%	429.91
85%	526.84
80%	612.73
75%	701.27
70%	786.93
65%	878.29
60%	969.21
55%	1,065.00
50%	1,169.43
45%	1,276.11
40%	1,394.05
35%	1,519.62
30%	1,657.39
25%	1,814.27
20%	1,990.37
15%	2,207.71
10%	2,485.57
5%	2,897.80
0%	6,515.15

End of Forecast

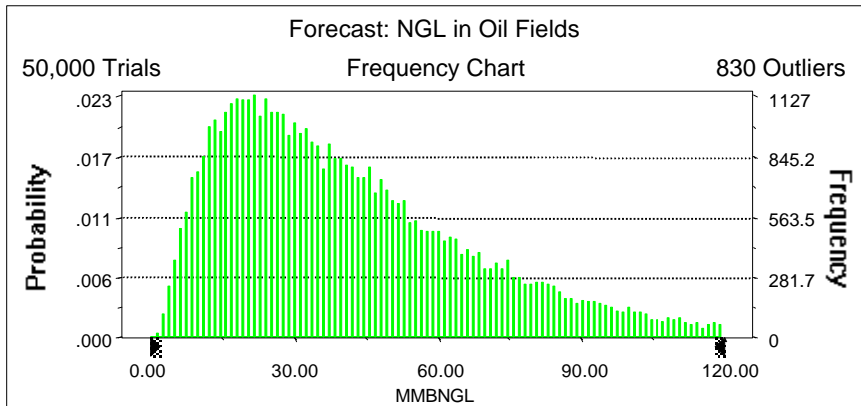
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**Forecast: NGL in Oil Fields**

Summary:

Display range is from 0.00 to 120.00 MMBNGL  
Entire range is from 1.57 to 288.75 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.13

Statistics:	Value
Trials	50000
Mean	42.73
Median	36.52
Mode	---
Standard Deviation	28.00
Variance	783.88
Skewness	1.19
Kurtosis	4.76
Coefficient of Variability	0.66
Range Minimum	1.57
Range Maximum	288.75
Range Width	287.18
Mean Standard Error	0.13



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	1.57
95%	9.45
90%	13.01
85%	15.99
80%	18.78
75%	21.47
70%	24.25
65%	27.03
60%	30.05
55%	33.13
50%	36.52
45%	39.98
40%	43.79
35%	47.82
30%	52.25
25%	57.58
20%	63.80
15%	71.49
10%	81.65
5%	97.61
0%	288.75

End of Forecast

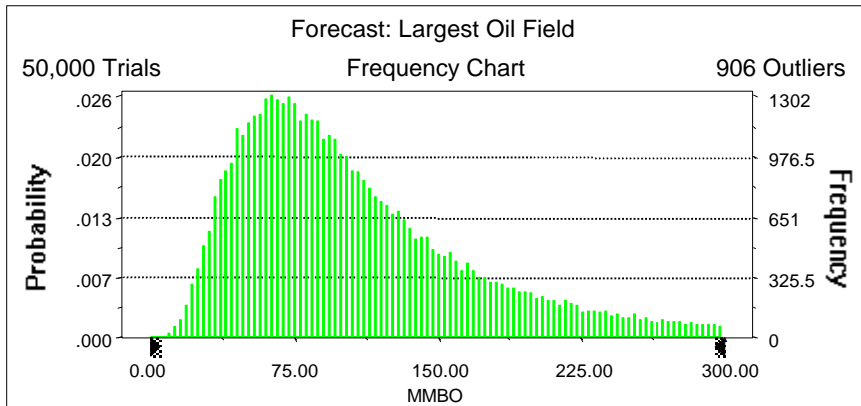
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**Forecast: Largest Oil Field**

Summary:

Display range is from 0.00 to 300.00 MMBO  
Entire range is from 7.60 to 349.99 MMBO  
After 50,000 trials, the standard error of the mean is 0.29

Statistics:	Value
Trials	50000
Mean	109.83
Median	93.55
Mode	---
Standard Deviation	64.89
Variance	4,211.04
Skewness	1.23
Kurtosis	4.32
Coefficient of Variability	0.59
Range Minimum	7.60
Range Maximum	349.99
Range Width	342.38
Mean Standard Error	0.29





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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	7.60
95%	34.70
90%	43.22
85%	50.24
80%	56.75
75%	62.78
70%	68.54
65%	74.45
60%	80.60
55%	86.90
50%	93.55
45%	100.65
40%	108.65
35%	117.73
30%	128.11
25%	140.29
20%	155.07
15%	174.51
10%	201.82
5%	246.43
0%	349.99

End of Forecast

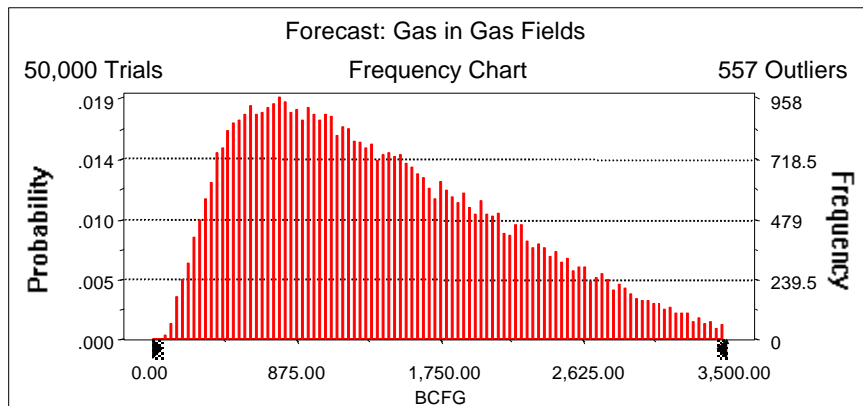
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**Forecast: Gas in Gas Fields**

Summary:

Display range is from 0.00 to 3,500.00 BCFG  
Entire range is from 56.49 to 4,911.78 BCFG  
After 50,000 trials, the standard error of the mean is 3.57

Statistics:	Value
Trials	50000
Mean	1,410.93
Median	1,273.66
Mode	---
Standard Deviation	797.28
Variance	635,662.93
Skewness	0.71
Kurtosis	2.99
Coefficient of Variability	0.57
Range Minimum	56.49
Range Maximum	4,911.78
Range Width	4,855.28
Mean Standard Error	3.57



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	56.49
95%	363.15
90%	483.10
85%	582.55
80%	678.57
75%	773.84
70%	867.58
65%	964.15
60%	1,064.34
55%	1,165.23
50%	1,273.66
45%	1,388.68
40%	1,508.15
35%	1,634.81
30%	1,778.71
25%	1,932.03
20%	2,102.77
15%	2,299.08
10%	2,548.27
5%	2,904.11
0%	4,911.78

End of Forecast

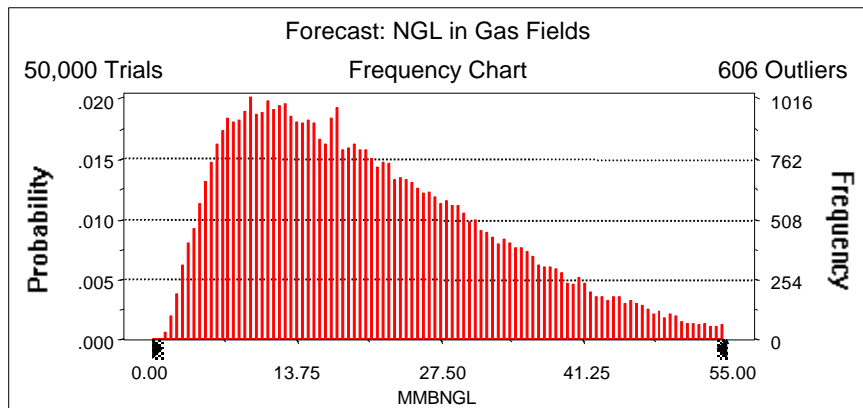
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**Forecast: NGL in Gas Fields**

Summary:

Display range is from 0.00 to 55.00 MMBNGL  
Entire range is from 0.78 to 88.99 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.06

Statistics:	Value
Trials	50000
Mean	21.16
Median	18.86
Mode	---
Standard Deviation	12.41
Variance	153.91
Skewness	0.83
Kurtosis	3.39
Coefficient of Variability	0.59
Range Minimum	0.78
Range Maximum	88.99
Range Width	88.21
Mean Standard Error	0.06



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.78
95%	5.30
90%	7.01
85%	8.52
80%	9.93
75%	11.36
70%	12.76
65%	14.21
60%	15.73
55%	17.32
50%	18.86
45%	20.56
40%	22.40
35%	24.38
30%	26.53
25%	28.86
20%	31.46
15%	34.65
10%	38.60
5%	44.74
0%	88.99

End of Forecast

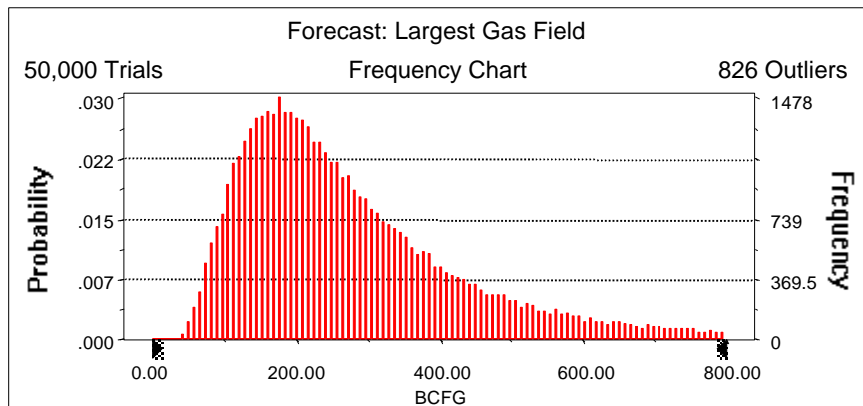
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**Forecast: Largest Gas Field**

Summary:

Display range is from 0.00 to 800.00 BCFG  
Entire range is from 31.23 to 999.99 BCFG  
After 50,000 trials, the standard error of the mean is 0.74

Statistics:	Value
Trials	50000
Mean	282.92
Median	239.97
Mode	---
Standard Deviation	166.11
Variance	27,593.06
Skewness	1.44
Kurtosis	5.32
Coefficient of Variability	0.59
Range Minimum	31.23
Range Maximum	999.99
Range Width	968.76
Mean Standard Error	0.74



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Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	31.23
95%	96.60
90%	118.38
85%	135.56
80%	150.82
75%	165.41
70%	179.68
65%	193.49
60%	208.21
55%	223.44
50%	239.97
45%	257.92
40%	277.31
35%	299.57
30%	325.19
25%	354.51
20%	390.45
15%	438.49
10%	507.03
5%	626.03
0%	999.99

End of Forecast

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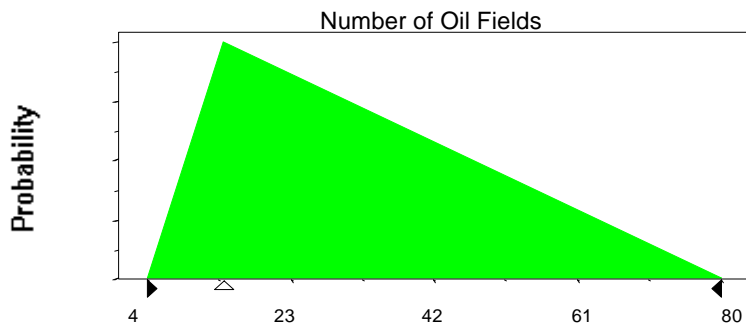
Assumptions

**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	4
Likeliest	14
Maximum	80

Selected range is from 4 to 80  
Mean value in simulation was 33



**Assumption: Sizes of Oil Fields**

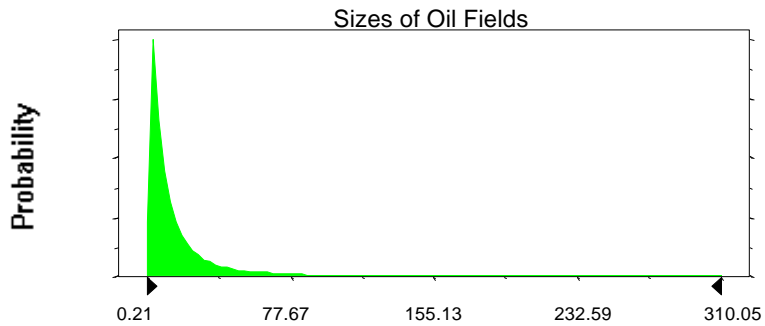
Lognormal distribution with parameters:	Shifted parameters	
Mean	16.82	20.82
Standard Deviation	31.11	31.11

Selected range is from 0.00 to 346.00	4.00 to 350.00
Mean value in simulation was 16.47	20.47



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Assumption: Sizes of Oil Fields (cont'd)



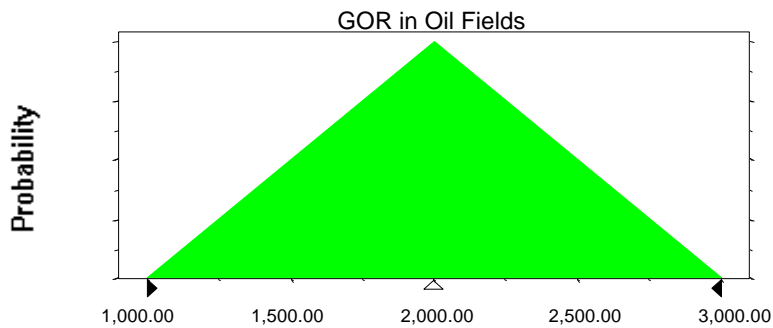
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,000.00
Likeliest	2,000.00
Maximum	3,000.00

Selected range is from 1,000.00 to 3,000.00

Mean value in simulation was 1,999.97



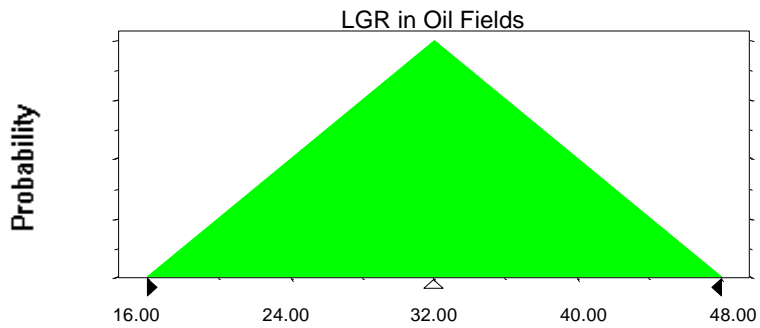
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**Assumption: LGR in Oil Fields**

Triangular distribution with parameters:

Minimum	16.00
Likeliest	32.00
Maximum	48.00

Selected range is from 16.00 to 48.00  
Mean value in simulation was 32.00



**Assumption: Number of Gas Fields**

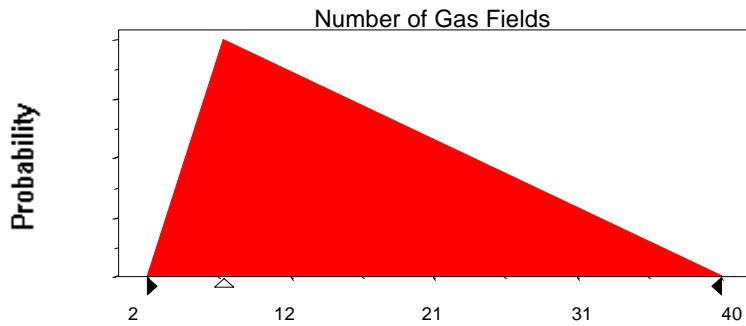
Triangular distribution with parameters:

Minimum	2
Likeliest	7
Maximum	40

Selected range is from 2 to 40  
Mean value in simulation was 16

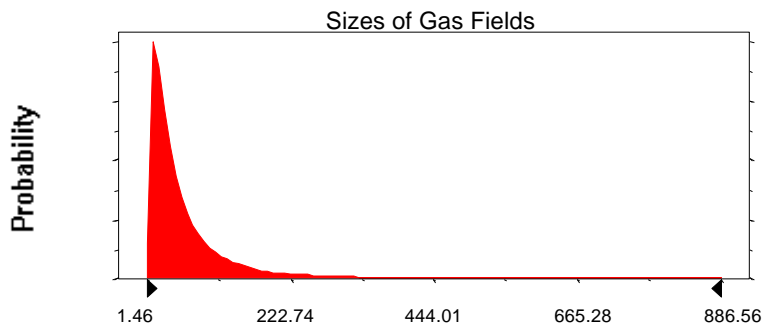
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	63.67	87.67
Standard Deviation	92.89	92.89
Selected range is from 0.00 to 976.00	24.00 to 1,000.00	
Mean value in simulation was 62.80	86.8	



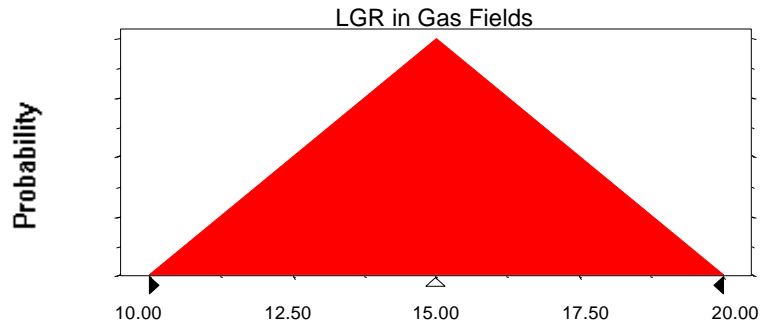
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**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	10.00
Likeliest	15.00
Maximum	20.00

Selected range is from 10.00 to 20.00  
Mean value in simulation was 14.99



End of Assumptions

Simulation started on 10/8/99 at 15:14:39  
Simulation stopped on 10/8/99 at 15:44:32