

**Eocene-Miocene Bombay Shelf, Assessment Unit 80430101**  
**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	533	1,569	2,819	1,612	1,098	3,338	6,690	3,548	20	65	142	71	74	182	407	203
Gas Fields	6						1,853	5,451	10,542	5,751	69	212	450	230	300	692	1,555	774
Total		1.00	533	1,569	2,819	1,612	2,951	8,789	17,233	9,299	89	277	592	301				

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**Forecast: Oil in Oil Fields**

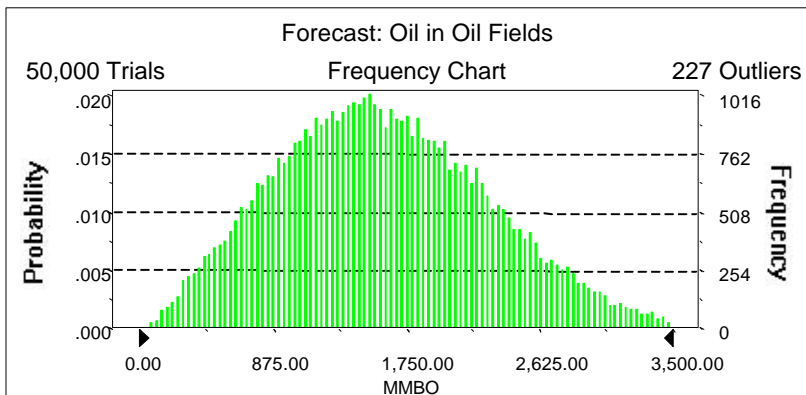
Summary:

Display range is from 0.00 to 3,500.00 MMBO

Entire range is from 46.77 to 4,466.30 MMBO

After 50,000 trials, the standard error of the mean is 3.09

Statistics:	Value
Trials	50000
Mean	1,611.70
Median	1,568.59
Mode	---
Standard Deviation	691.94
Variance	478,778.37
Skewness	0.31
Kurtosis	2.74
Coefficient of Variability	0.43
Range Minimum	46.77
Range Maximum	4,466.30
Range Width	4,419.53
Mean Standard Error	3.09



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

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	46.77
95%	532.91
90%	727.23
85%	870.27
80%	993.81
75%	1,103.12
70%	1,202.27
65%	1,298.78
60%	1,392.43
55%	1,481.23
50%	1,568.59
45%	1,663.62
40%	1,759.52
35%	1,857.57
30%	1,964.38
25%	2,080.36
20%	2,209.26
15%	2,356.32
10%	2,542.74
5%	2,819.26
0%	4,466.30

End of Forecast

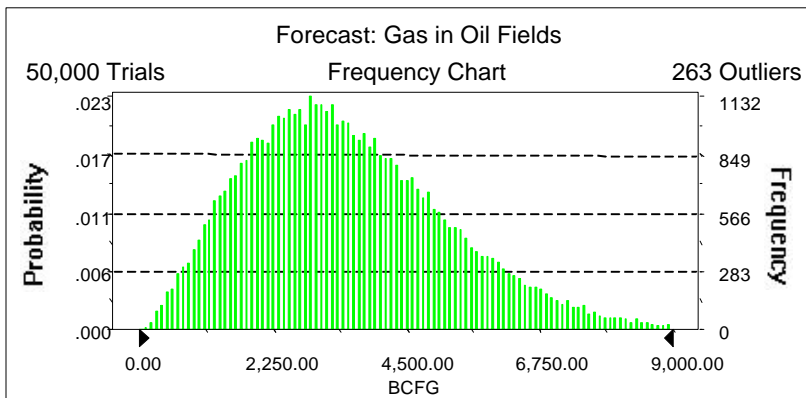
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**Forecast: Gas in Oil Fields**

Summary:

Display range is from 0.00 to 9,000.00 BCFG  
Entire range is from 90.39 to 12,288.06 BCFG  
After 50,000 trials, the standard error of the mean is 7.70

Statistics:	Value
Trials	50000
Mean	3,547.97
Median	3,337.82
Mode	---
Standard Deviation	1,722.18
Variance	2,965,894.47
Skewness	0.66
Kurtosis	3.41
Coefficient of Variability	0.49
Range Minimum	90.39
Range Maximum	12,288.06
Range Width	12,197.66
Mean Standard Error	7.70



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	90.39
95%	1,097.85
90%	1,476.80
85%	1,777.09
80%	2,033.97
75%	2,279.51
70%	2,496.20
65%	2,711.99
60%	2,924.17
55%	3,130.24
50%	3,337.82
45%	3,559.94
40%	3,797.92
35%	4,041.59
30%	4,308.64
25%	4,611.56
20%	4,943.54
15%	5,354.36
10%	5,885.39
5%	6,690.37
0%	12,288.06

End of Forecast

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**Forecast: NGL in Oil Fields**

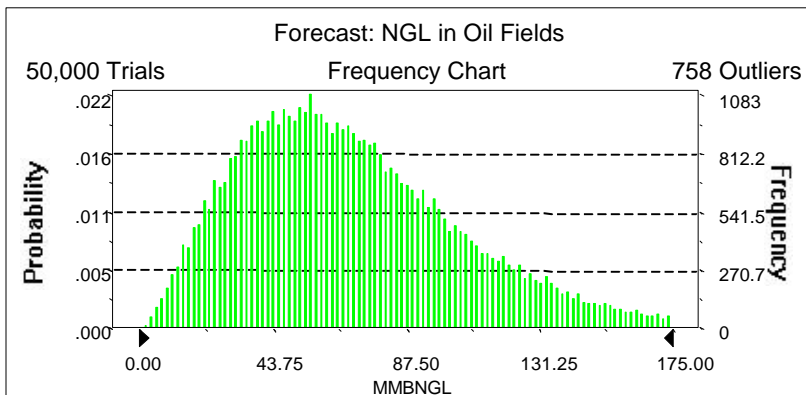
Summary:

Display range is from 0.00 to 175.00 MMBNGL

Entire range is from 1.36 to 308.66 MMBNGL

After 50,000 trials, the standard error of the mean is 0.17

Statistics:	Value
Trials	50000
Mean	70.92
Median	64.98
Mode	---
Standard Deviation	37.99
Variance	1,443.22
Skewness	0.92
Kurtosis	4.10
Coefficient of Variability	0.54
Range Minimum	1.36
Range Maximum	308.66
Range Width	307.30
Mean Standard Error	0.17



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

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	1.36
95%	20.10
90%	27.36
85%	33.27
80%	38.20
75%	42.81
70%	47.34
65%	51.71
60%	56.12
55%	60.33
50%	64.98
45%	69.67
40%	74.62
35%	79.76
30%	85.75
25%	92.57
20%	99.96
15%	109.55
10%	122.32
5%	141.87
0%	308.66

End of Forecast

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**Forecast: Largest Oil Field**

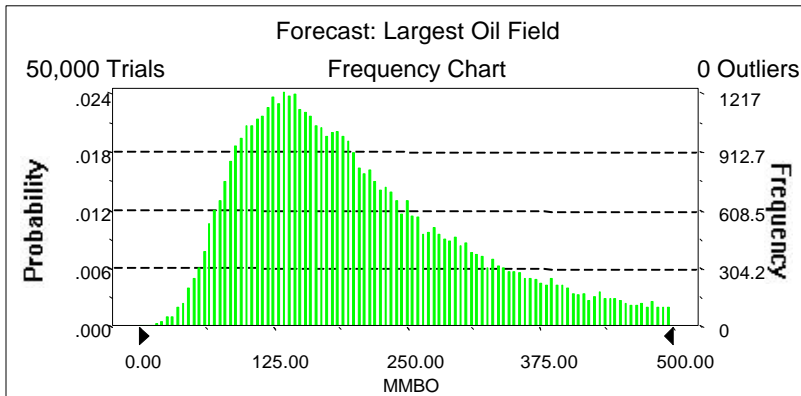
Summary:

Display range is from 0.00 to 500.00 MMBO

Entire range is from 11.58 to 499.94 MMBO

After 50,000 trials, the standard error of the mean is 0.45

Statistics:	Value
Trials	50000
Mean	202.81
Median	181.82
Mode	---
Standard Deviation	100.90
Variance	10,180.71
Skewness	0.80
Kurtosis	3.04
Coefficient of Variability	0.50
Range Minimum	11.58
Range Maximum	499.94
Range Width	488.36
Mean Standard Error	0.45





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

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	11.58
95%	73.80
90%	90.45
85%	103.18
80%	115.01
75%	126.16
70%	136.63
65%	146.96
60%	157.84
55%	169.52
50%	181.82
45%	194.19
40%	208.06
35%	223.57
30%	241.32
25%	261.67
20%	286.49
15%	315.17
10%	353.19
5%	406.78
0%	499.94

End of Forecast

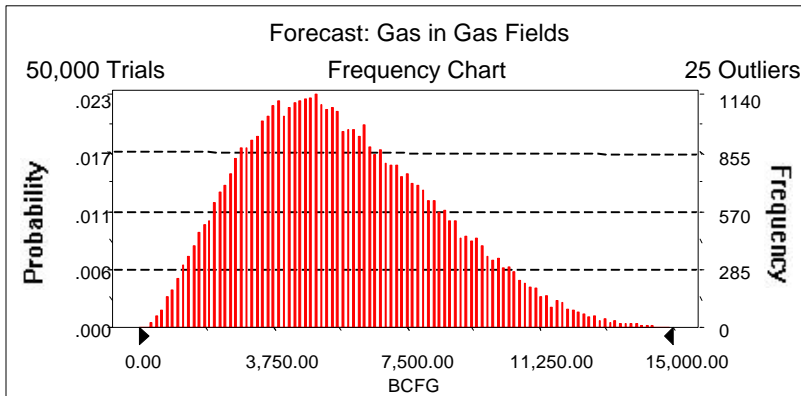
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**Forecast: Gas in Gas Fields**

Summary:

Display range is from 0.00 to 15,000.00 BCFG  
Entire range is from 201.48 to 16,567.48 BCFG  
After 50,000 trials, the standard error of the mean is 11.89

Statistics:	<u>Value</u>
Trials	50000
Mean	5,751.11
Median	5,451.06
Mode	---
Standard Deviation	2,658.35
Variance	7,066,841.02
Skewness	0.47
Kurtosis	2.77
Coefficient of Variability	0.46
Range Minimum	201.48
Range Maximum	16,567.48
Range Width	16,366.00
Mean Standard Error	11.89



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	201.48
95%	1,852.66
90%	2,478.70
85%	2,954.78
80%	3,368.60
75%	3,739.15
70%	4,079.20
65%	4,433.88
60%	4,773.61
55%	5,102.52
50%	5,451.06
45%	5,811.13
40%	6,196.10
35%	6,600.00
30%	7,046.15
25%	7,534.87
20%	8,064.85
15%	8,687.95
10%	9,471.64
5%	10,542.13
0%	16,567.48

End of Forecast

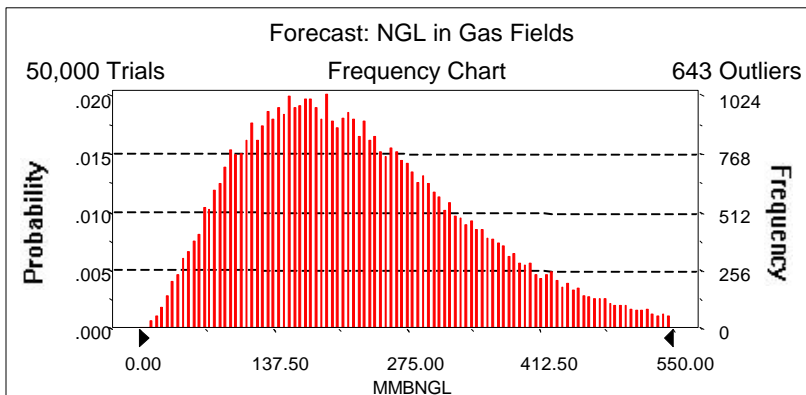
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**Forecast: NGL in Gas Fields**

Summary:

Display range is from 0.00 to 550.00 MMBNGL  
Entire range is from 5.43 to 862.88 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.53

Statistics:	Value
Trials	50000
Mean	229.67
Median	212.43
Mode	---
Standard Deviation	117.99
Variance	13,922.51
Skewness	0.78
Kurtosis	3.54
Coefficient of Variability	0.51
Range Minimum	5.43
Range Maximum	862.88
Range Width	857.46
Mean Standard Error	0.53



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

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	5.43
95%	68.97
90%	91.86
85%	109.85
80%	125.96
75%	141.12
70%	155.44
65%	169.28
60%	183.03
55%	197.34
50%	212.43
45%	227.56
40%	243.48
35%	261.25
30%	279.54
25%	300.36
20%	324.50
15%	353.87
10%	390.81
5%	449.86
0%	862.88

End of Forecast

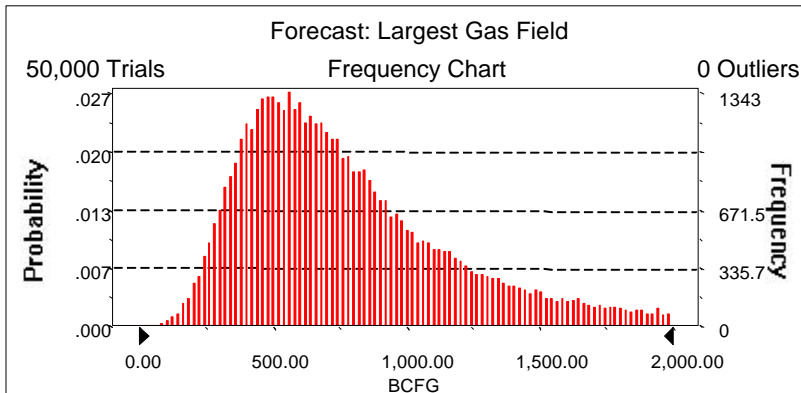
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**Forecast: Largest Gas Field**

Summary:

Display range is from 0.00 to 2,000.00 BCFG  
 Entire range is from 64.56 to 1,999.95 BCFG  
 After 50,000 trials, the standard error of the mean is 1.69

Statistics:	<u>Value</u>
Trials	50000
Mean	774.03
Median	692.16
Mode	---
Standard Deviation	378.53
Variance	143,281.28
Skewness	0.94
Kurtosis	3.49
Coefficient of Variability	0.49
Range Minimum	64.56
Range Maximum	1,999.95
Range Width	1,935.39
Mean Standard Error	1.69



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	64.56
95%	300.06
90%	364.23
85%	411.98
80%	454.28
75%	492.50
70%	530.57
65%	569.87
60%	609.03
55%	649.67
50%	692.16
45%	736.94
40%	786.65
35%	841.81
30%	902.17
25%	975.77
20%	1,066.02
15%	1,175.97
10%	1,325.51
5%	1,555.05
0%	1,999.95

End of Forecast

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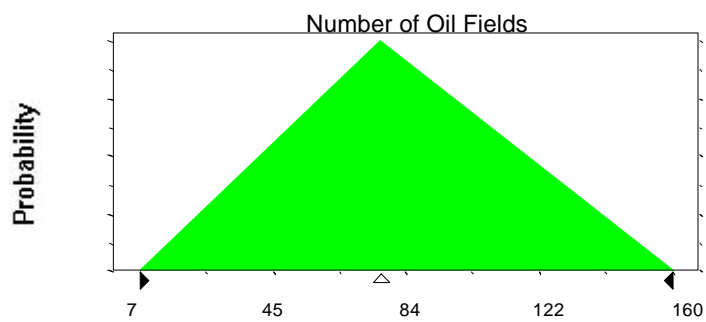
Assumptions

**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	7
Likeliest	76
Maximum	160

Selected range is from 7 to 160  
Mean value in simulation was 81



**Assumption: Sizes of Oil Fields**

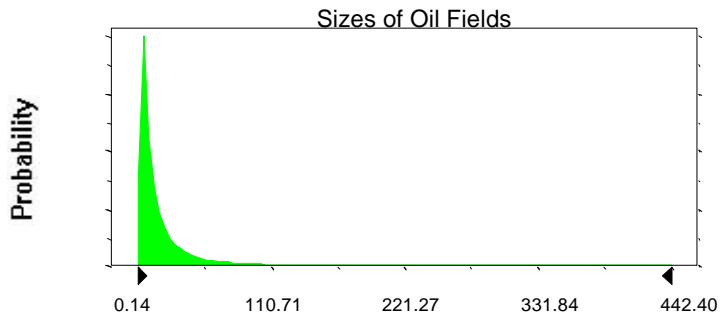
Lognormal distribution with parameters:	Shifted parameters	
Mean	19.57	20.57
Standard Deviation	43.69	43.69

Selected range is from 0.00 to 499.00                      1.00 to 500.00  
Mean value in simulation was 18.89                              19.89



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Assumption: Sizes of Oil Fields (cont'd)

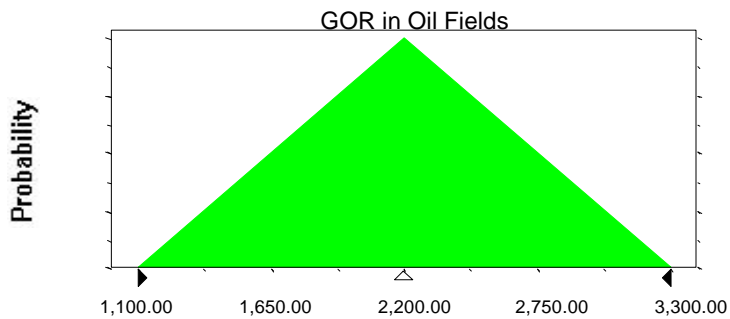


Assumption: GOR in Oil Fields

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 2,200.24



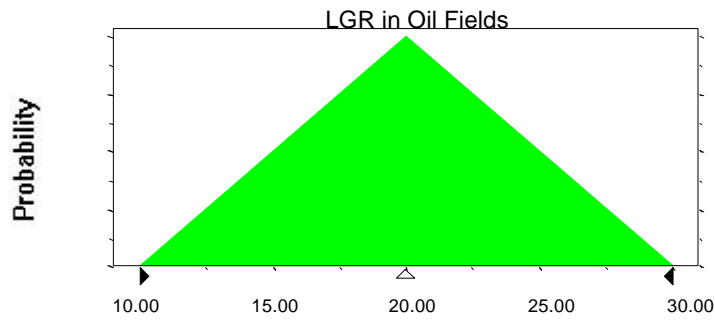
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**Assumption: LGR in Oil Fields**

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 19.98



**Assumption: Number of Gas Fields**

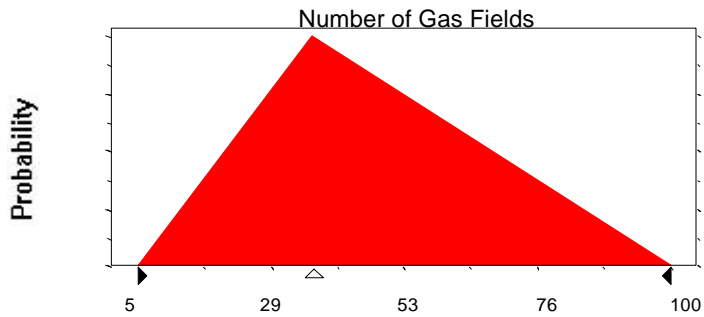
Triangular distribution with parameters:

Minimum	5
Likeliest	36
Maximum	100

Selected range is from 5 to 100  
Mean value in simulation was 47

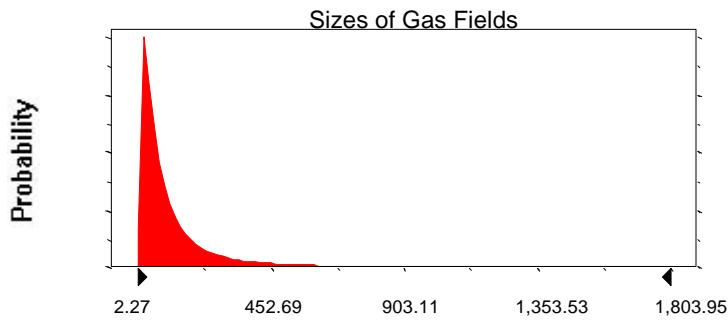
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	118.89	124.89
Standard Deviation	186.13	186.13
Selected range is from 0.00 to 1,994.00	6.00 to 2,000.00	
Mean value in simulation was 116.85	122.85	



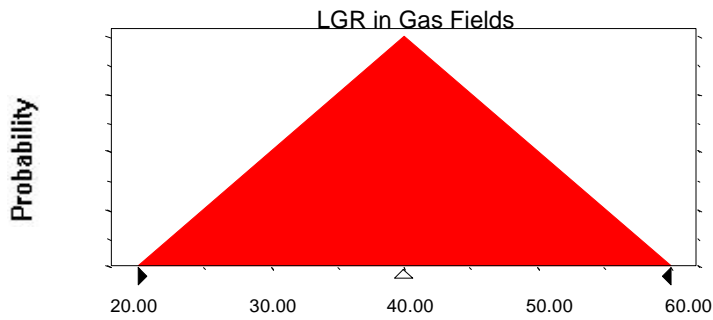
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**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	20.00
Likeliest	40.00
Maximum	60.00

Selected range is from 20.00 to 60.00  
Mean value in simulation was 39.94



End of Assumptions

Simulation started on 8/19/99 at 16:04:09  
Simulation stopped on 8/19/99 at 17:03:15