

Greater Indus Foreland and Foldbelt, Assessment Unit 80420101
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	40	109	229	119	79	232	534	260	4	14	34	16	8	16	36	18
Gas Fields	6						7,592	22,987	49,713	25,145	251	786	1,817	880	1,117	3,309	8,278	3,810
Total		1.00	40	109	229	119	7,671	23,219	50,247	25,405	255	800	1,851	896				

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Forecast: Oil in Oil Fields

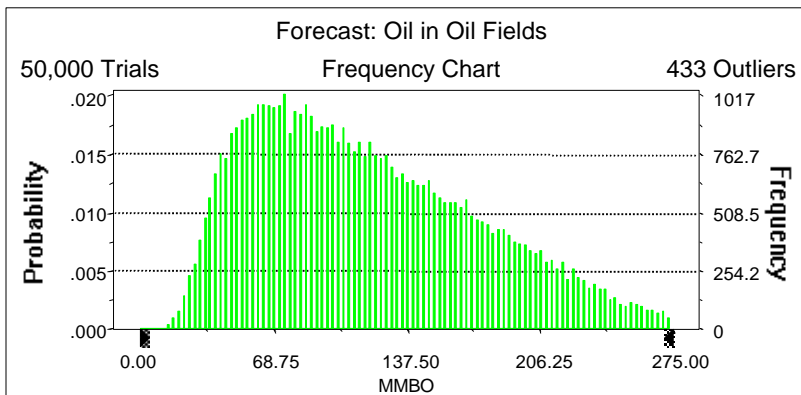
Summary:

Display range is from 0.00 to 275.00 MMBO

Entire range is from 9.69 to 361.42 MMBO

After 50,000 trials, the standard error of the mean is 0.27

Statistics:	Value
Trials	50000
Mean	118.54
Median	108.61
Mode	---
Standard Deviation	59.40
Variance	3,528.79
Skewness	0.63
Kurtosis	2.78
Coefficient of Variability	0.50
Range Minimum	9.69
Range Maximum	361.42
Range Width	351.73
Mean Standard Error	0.27



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	9.69
95%	39.51
90%	48.57
85%	56.39
80%	63.55
75%	70.64
70%	77.77
65%	85.25
60%	92.67
55%	100.35
50%	108.61
45%	117.42
40%	126.40
35%	136.15
30%	147.01
25%	158.64
20%	171.27
15%	186.28
10%	204.12
5%	228.65
0%	361.42

End of Forecast

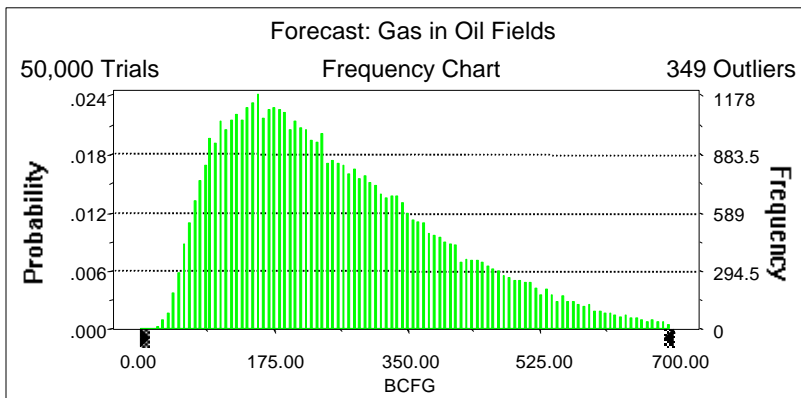
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Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 700.00 BCFG
Entire range is from 20.96 to 1,026.83 BCFG
After 50,000 trials, the standard error of the mean is 0.64

Statistics:	Value
Trials	50000
Mean	260.36
Median	232.18
Mode	---
Standard Deviation	142.73
Variance	20,372.09
Skewness	0.90
Kurtosis	3.60
Coefficient of Variability	0.55
Range Minimum	20.96
Range Maximum	1,026.83
Range Width	1,005.87
Mean Standard Error	0.64



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	20.96
95%	79.50
90%	99.78
85%	117.32
80%	133.86
75%	149.78
70%	165.17
65%	181.17
60%	197.16
55%	214.27
50%	232.18
45%	251.20
40%	272.24
35%	294.72
30%	318.60
25%	345.20
20%	375.86
15%	413.27
10%	462.85
5%	534.13
0%	1,026.83

End of Forecast

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Forecast: NGL in Oil Fields

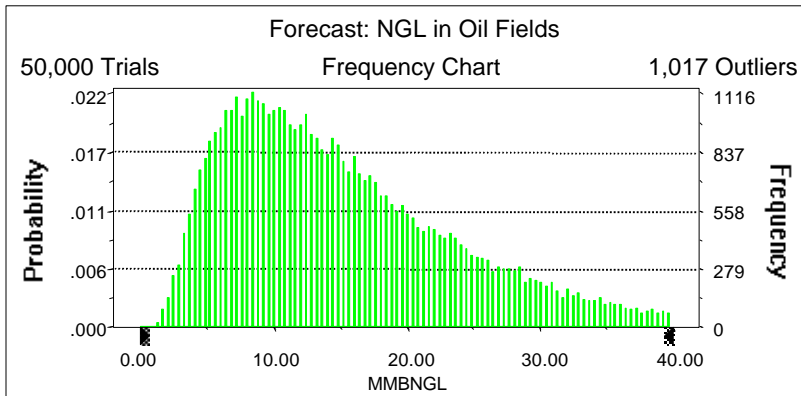
Summary:

Display range is from 0.00 to 40.00 MMBNGL

Entire range is from 0.73 to 72.02 MMBNGL

After 50,000 trials, the standard error of the mean is 0.04

Statistics:	<u>Value</u>
Trials	50000
Mean	15.63
Median	13.56
Mode	---
Standard Deviation	9.32
Variance	86.83
Skewness	1.14
Kurtosis	4.48
Coefficient of Variability	0.60
Range Minimum	0.73
Range Maximum	72.02
Range Width	71.29
Mean Standard Error	0.04



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.73
95%	4.43
90%	5.64
85%	6.69
80%	7.64
75%	8.57
70%	9.50
65%	10.48
60%	11.46
55%	12.49
50%	13.56
45%	14.74
40%	15.98
35%	17.33
30%	18.85
25%	20.63
20%	22.74
15%	25.20
10%	28.57
5%	33.84
0%	72.02

End of Forecast

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Forecast: Largest Oil Field

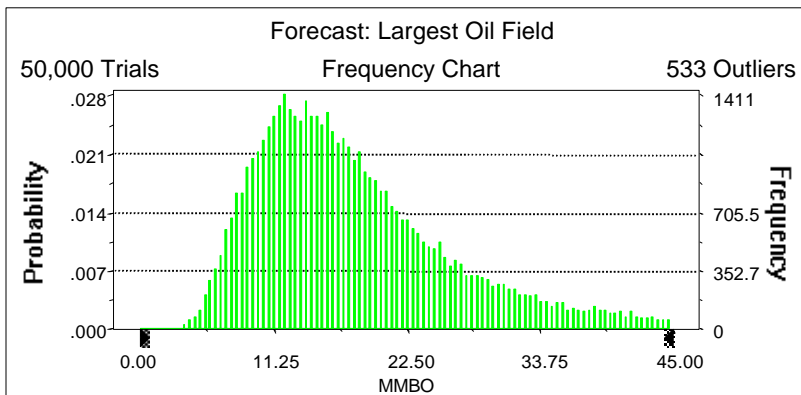
Summary:

Display range is from 0.00 to 45.00 MMBO

Entire range is from 2.59 to 49.97 MMBO

After 50,000 trials, the standard error of the mean is 0.04

Statistics:	<u>Value</u>
Trials	50000
Mean	18.31
Median	16.45
Mode	---
Standard Deviation	8.53
Variance	72.77
Skewness	1.11
Kurtosis	4.12
Coefficient of Variability	0.47
Range Minimum	2.59
Range Maximum	49.97
Range Width	47.38
Mean Standard Error	0.04



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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	2.59
95%	7.85
90%	9.24
85%	10.32
80%	11.28
75%	12.13
70%	12.94
65%	13.82
60%	14.67
55%	15.56
50%	16.45
45%	17.43
40%	18.49
35%	19.66
30%	20.97
25%	22.50
20%	24.38
15%	26.84
10%	30.34
5%	35.83
0%	49.97

End of Forecast

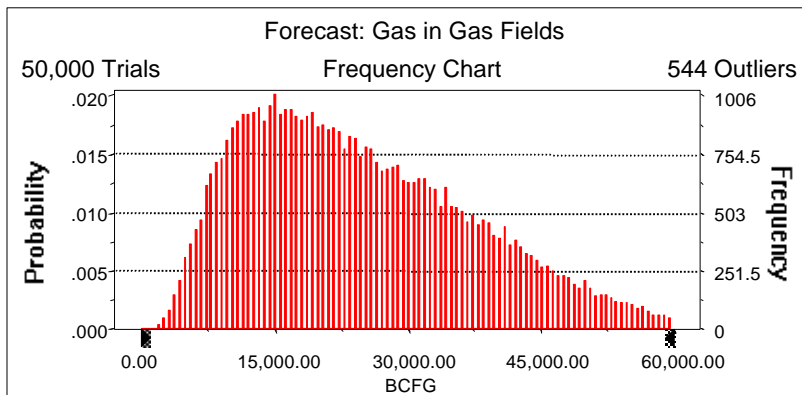
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Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 60,000.00 BCFG
Entire range is from 1,678.32 to 84,200.89 BCFG
After 50,000 trials, the standard error of the mean is 58.88

Statistics:	<u>Value</u>
Trials	50000
Mean	25,144.93
Median	22,986.96
Mode	---
Standard Deviation	13,166.65
Variance	173,360,786.88
Skewness	0.68
Kurtosis	2.98
Coefficient of Variability	0.52
Range Minimum	1,678.32
Range Maximum	84,200.89
Range Width	82,522.57
Mean Standard Error	58.88



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	1,678.32
95%	7,591.75
90%	9,736.16
85%	11,466.68
80%	13,087.67
75%	14,701.86
70%	16,257.08
65%	17,856.86
60%	19,521.61
55%	21,198.67
50%	22,986.96
45%	24,841.27
40%	26,843.47
35%	29,015.59
30%	31,341.25
25%	33,767.56
20%	36,565.90
15%	39,760.90
10%	43,733.56
5%	49,713.13
0%	84,200.89

End of Forecast

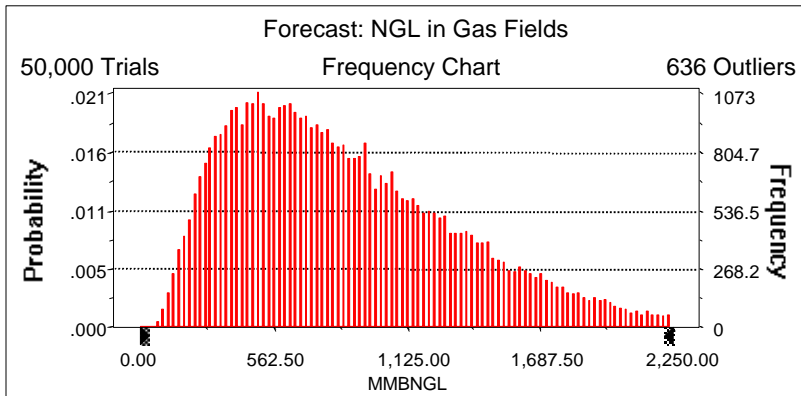
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Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 2,250.00 MMBNGL
Entire range is from 50.88 to 3,675.53 MMBNGL
After 50,000 trials, the standard error of the mean is 2.21

Statistics:	Value
Trials	50000
Mean	880.37
Median	786.46
Mode	---
Standard Deviation	493.20
Variance	243,247.19
Skewness	0.90
Kurtosis	3.66
Coefficient of Variability	0.56
Range Minimum	50.88
Range Maximum	3,675.53
Range Width	3,624.65
Mean Standard Error	2.21



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	50.88
95%	250.70
90%	324.08
85%	385.57
80%	443.57
75%	498.57
70%	553.64
65%	610.52
60%	665.96
55%	724.63
50%	786.46
45%	852.31
40%	923.29
35%	997.29
30%	1,080.73
25%	1,176.17
20%	1,282.26
15%	1,407.84
10%	1,569.96
5%	1,816.90
0%	3,675.53

End of Forecast

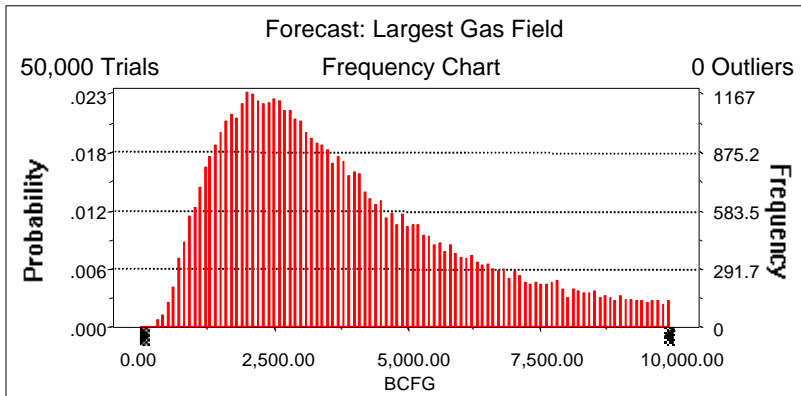
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Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 10,000.00 BCFG
 Entire range is from 245.59 to 9,999.87 BCFG
 After 50,000 trials, the standard error of the mean is 9.67

Statistics:	<u>Value</u>
Trials	50000
Mean	3,810.45
Median	3,309.17
Mode	---
Standard Deviation	2,162.43
Variance	4,676,123.94
Skewness	0.85
Kurtosis	3.02
Coefficient of Variability	0.57
Range Minimum	245.59
Range Maximum	9,999.87
Range Width	9,754.29
Mean Standard Error	9.67



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Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	245.59
95%	1,116.50
90%	1,430.01
85%	1,687.59
80%	1,927.77
75%	2,144.04
70%	2,362.79
65%	2,583.08
60%	2,810.99
55%	3,051.71
50%	3,309.17
45%	3,586.31
40%	3,887.76
35%	4,216.89
30%	4,610.62
25%	5,071.88
20%	5,596.93
15%	6,265.51
10%	7,100.32
5%	8,278.46
0%	9,999.87

End of Forecast

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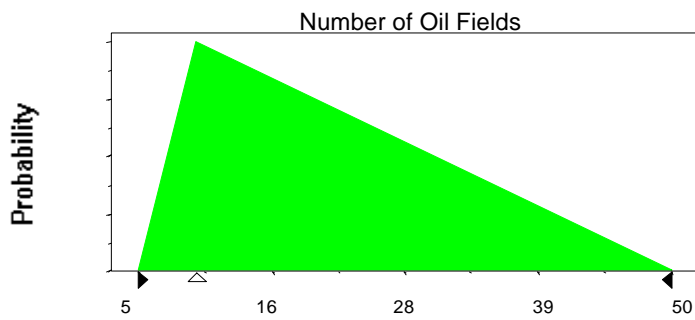
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	5
Likeliest	10
Maximum	50

Selected range is from 5 to 50
Mean value in simulation was 22



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	4.51
Standard Deviation	5.07

Shifted parameters

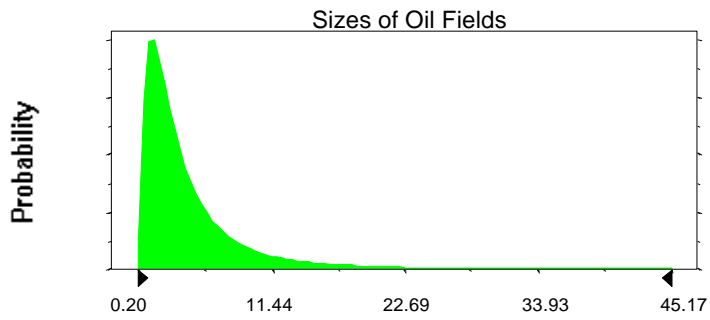
5.51
5.07

Selected range is from 0.00 to 49.00
Mean value in simulation was 4.41

1.00 to 50.00
5.41

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Assumption: Sizes of Oil Fields (cont'd)

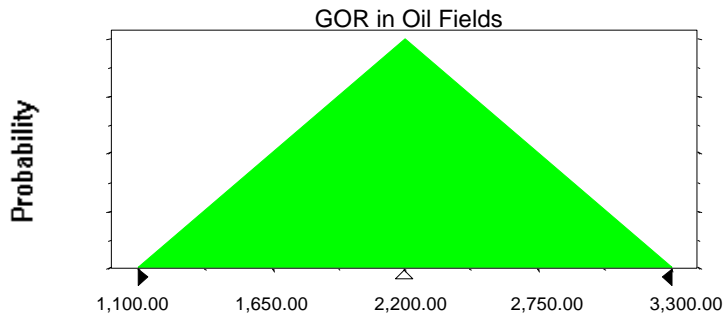


Assumption: GOR in Oil Fields

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 2,198.28

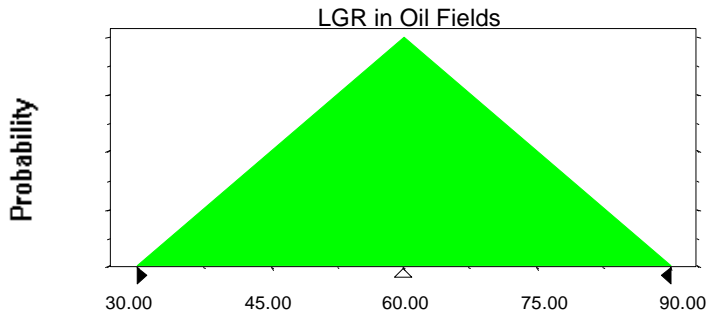


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Assumption: LGR in Oil Fields

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 60.01



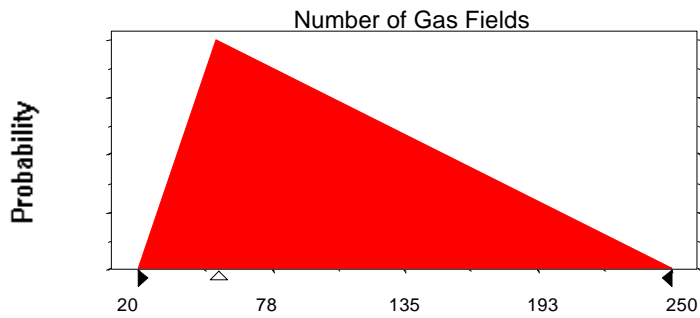
Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum 20
Likeliest 54
Maximum 250

Selected range is from 20 to 250
Mean value in simulation was 108

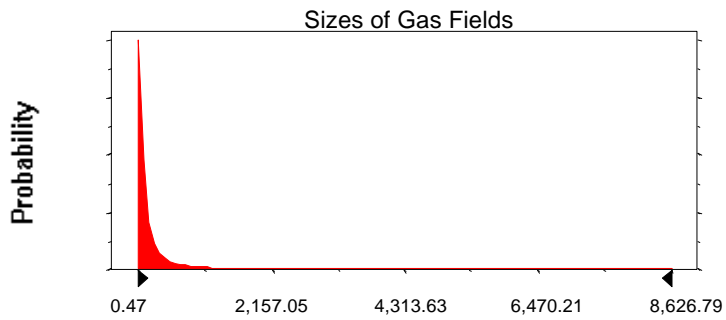
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	243.43	249.43
Standard Deviation	893.30	893.3
Selected range is from 0.00 to 9,994.00	6.00 to 10,000.00	
Mean value in simulation was 224.80	230.8	



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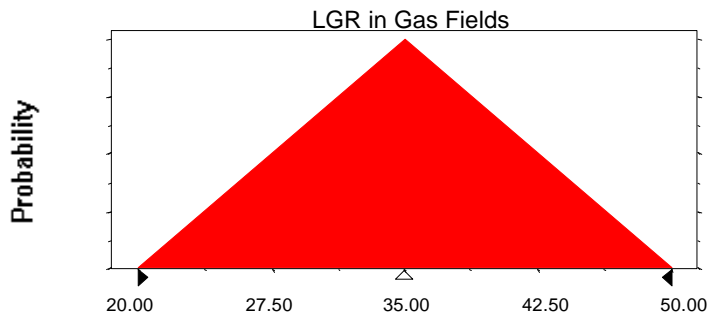
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	20.00
Likeliest	35.00
Maximum	50.00

Selected range is from 20.00 to 50.00

Mean value in simulation was 35.01



End of Assumptions

Simulation started on 10/18/99 at 13:17:14
Simulation stopped on 10/18/99 at 14:25:16