Northern and Western Areas, Assessment Unit 11540101
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			
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)				(MMBO or BCFG)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	3	1.00	22	67	129	70	83	259	551	280	5	15	35	17	6	14	41	18
Gas Fields	18						3,727	8,873	15,882	9,267	53	134	270	144	318	667	1,302	719
Total		1.00	22	67	129	70	3,810	9,132	16,433	9,547	58	149	305	161				

Forecast: Oil in Oil Fields

Summary:
Display range is from 0.00 to 175.00 MMBO
Entire range is from 3.12 to 242.19 MMBO
After 50,000 trials, the standard error of the mean is 0.15

Statistics:	Value
Trials	50000
Mean	70.08
Median	66.53
Mode	---
Standard Deviation	32.84
Variance	1,078.67
Skewness	0.64
Kurtosis	3.52
Coefficient of Variability	0.47
Range Minimum	3.12
Range Maximum	242.19
Range Width	239.07
Mean Standard Error	0.15

Forecast: Oil in Oil Fields

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	3.12
95%	22.29
90%	30.17
85%	36.39
80%	41.46
75%	46.06
70%	50.36
65%	54.50
60%	58.48
55%	62.45
50%	66.53
45%	70.88
40%	75.23
35%	79.86
30%	84.85
25%	90.28
20%	96.54
15%	104.21
10%	113.88
5%	129.03
0%	242.19

End of Forecast

Forecast: Gas in Oil Fields

Summary:
    Display range is from 0.00 to 700.00 BCFG
    Entire range is from 7.93 to 1,211.74 BCFG
    After 50,000 trials, the standard error of the mean is 0.65

Statistics:	Value
Trials	50000
Mean	280.35
Median	258.76
Mode	---
Standard Deviation	146.00
Variance	21,316.52
Skewness	0.93
Kurtosis	4.30
Coefficient of Variability	0.52
Range Minimum	7.93
Range Maximum	1,211.74
Range Width	1,203.82
Mean Standard Error	0.65
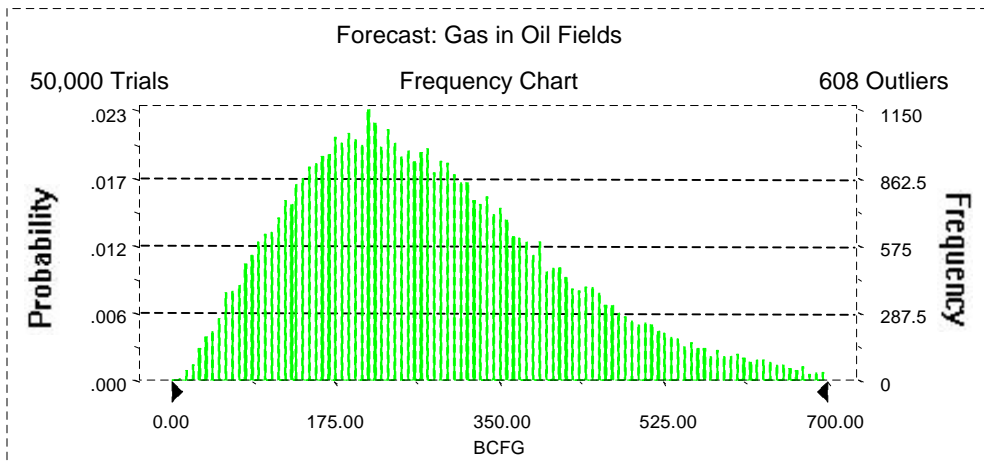
Forecast: Gas in Oil Fields

50,000 Trials   Frequency Chart   608 Outliers

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	7.93
95%	82.81
90%	112.25
85%	135.43
80%	155.69
75%	174.02
70%	191.04
65%	208.10
60%	223.81
55%	240.74
50%	258.76
45%	277.04
40%	295.86
35%	315.95
30%	338.39
25%	362.22
20%	391.78
15%	427.27
10%	474.79
5%	551.06
0%	1,211.74

End of Forecast

Forecast: NGL in Oil Fields

Summary:
    Display range is from 0.00 to 45.00 MMBNGL
    Entire range is from 0.42 to 86.75 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.04

Statistics:	Value
Trials	50000
Mean	16.80
Median	15.08
Mode	---
Standard Deviation	9.55
Variance	91.19
Skewness	1.16
Kurtosis	5.14
Coefficient of Variability	0.57
Range Minimum	0.42
Range Maximum	86.75
Range Width	86.33
Mean Standard Error	0.04
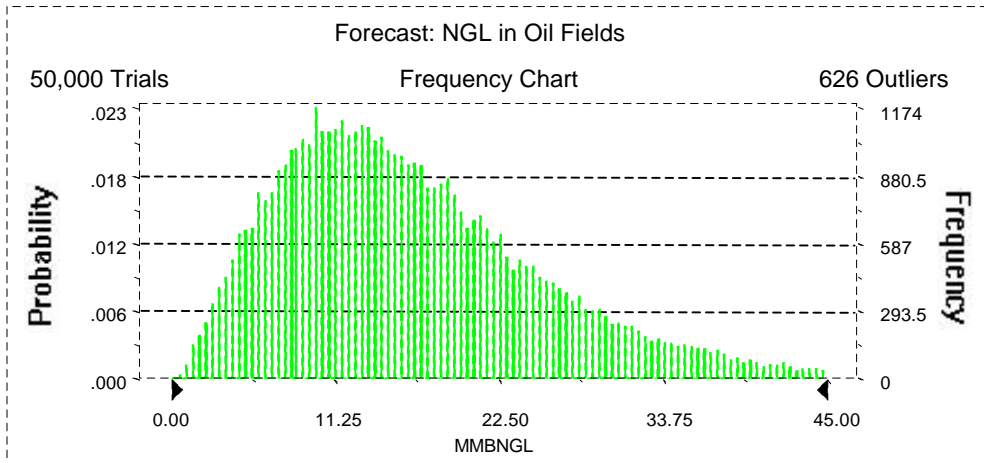
Forecast: NGL in Oil Fields

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.42
95%	4.61
90%	6.25
85%	7.62
80%	8.78
75%	9.88
70%	10.89
65%	11.92
60%	12.96
55%	13.99
50%	15.08
45%	16.24
40%	17.45
35%	18.79
30%	20.19
25%	21.84
20%	23.82
15%	26.21
10%	29.44
5%	34.92
0%	86.75

End of Forecast

Forecast: Largest Oil Field

Summary:
Display range is from 0.00 to 50.00 MMBO
Entire range is from 3.12 to 79.98 MMBO
After 50,000 trials, the standard error of the mean is 0.05

Statistics:	Value
Trials	50000
Mean	17.75
Median	14.37
Mode	---
Standard Deviation	11.56
Variance	133.53
Skewness	1.97
Kurtosis	7.86
Coefficient of Variability	0.65
Range Minimum	3.12
Range Maximum	79.98
Range Width	76.86
Mean Standard Error	0.05
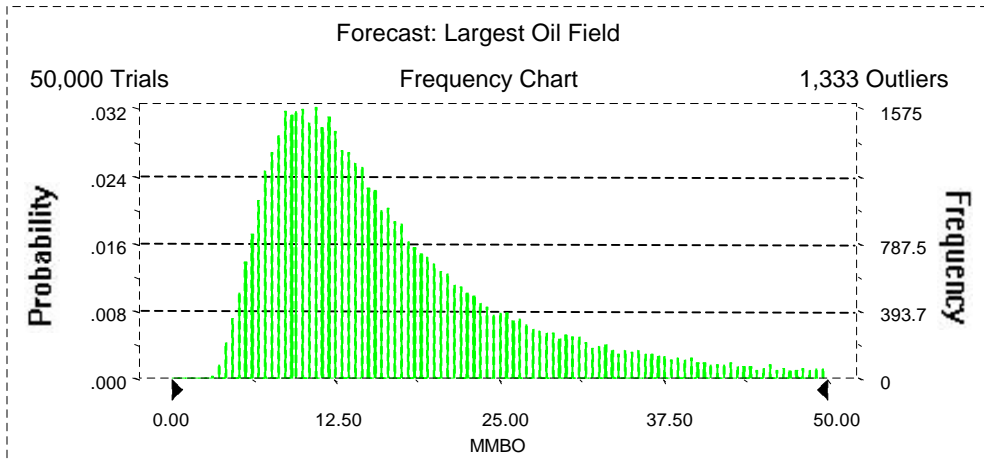
Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	3.12
95%	6.40
90%	7.52
85%	8.43
80%	9.24
75%	10.05
70%	10.86
65%	11.68
60%	12.51
55%	13.41
50%	14.37
45%	15.43
40%	16.62
35%	17.98
30%	19.61
25%	21.52
20%	24.01
15%	27.39
10%	32.37
5%	41.39
0%	79.98

End of Forecast

Forecast: Gas in Gas Fields

Summary:
    Display range is from 0.00 to 20,000.00 BCFG
    Entire range is from 1,120.10 to 23,134.10 BCFG
    After 50,000 trials, the standard error of the mean is 16.60

Statistics:	Value
Trials	50000
Mean	9,266.66
Median	8,873.05
Mode	---
Standard Deviation	3,712.64
Variance	13,783,721.92
Skewness	0.38
Kurtosis	2.60
Coefficient of Variability	0.40
Range Minimum	1,120.10
Range Maximum	23,134.10
Range Width	22,014.00
Mean Standard Error	16.60
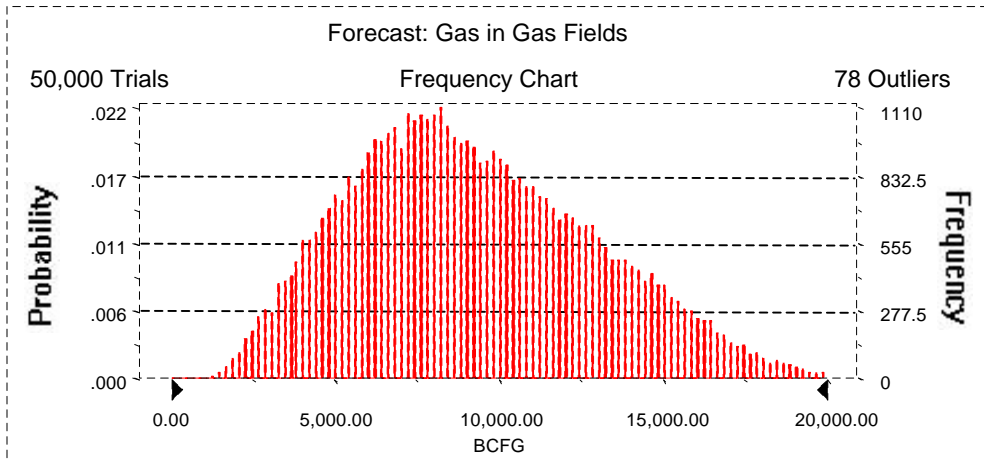
Forecast: Gas in Gas Fields

50,000 Trials   Frequency Chart   78 Outliers

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	1,120.10
95%	3,727.29
90%	4,631.27
85%	5,330.83
80%	5,945.15
75%	6,474.68
70%	6,967.44
65%	7,451.46
60%	7,927.24
55%	8,382.07
50%	8,873.05
45%	9,394.32
40%	9,946.21
35%	10,516.45
30%	11,133.55
25%	11,818.83
20%	12,581.12
15%	13,425.64
10%	14,480.88
5%	15,881.62
0%	23,134.10

End of Forecast

Forecast: NGL in Gas Fields

Summary:
    Display range is from 0.00 to 350.00 MMBNGL
    Entire range is from 13.63 to 508.93 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.30

Statistics:	Value
Trials	50000
Mean	144.32
Median	133.92
Mode	---
Standard Deviation	66.96
Variance	4,484.29
Skewness	0.82
Kurtosis	3.66
Coefficient of Variability	0.46
Range Minimum	13.63
Range Maximum	508.93
Range Width	495.30
Mean Standard Error	0.30
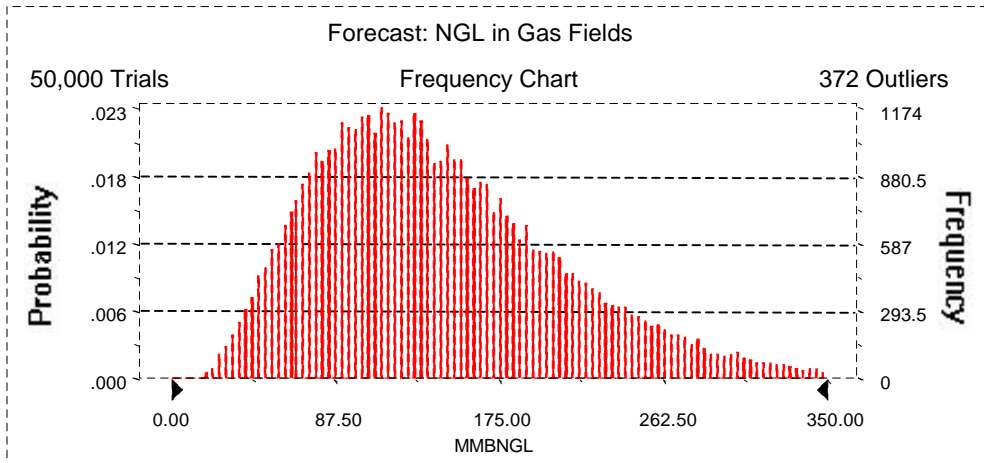
Forecast: NGL in Gas Fields

50,000 Trials	Frequency Chart	372 Outliers

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	13.63
95%	53.37
90%	67.09
85%	77.31
80%	86.33
75%	94.71
70%	102.69
65%	110.44
60%	118.13
55%	125.96
50%	133.92
45%	142.33
40%	151.40
35%	160.71
30%	171.20
25%	183.09
20%	197.26
15%	213.93
10%	236.41
5%	270.38
0%	508.93

End of Forecast

Forecast: Largest Gas Field

Summary:
     Display range is from 0.00 to 1,500.00 BCFG
     Entire range is from 121.86 to 1,499.83 BCFG
     After 50,000 trials, the standard error of the mean is 1.33

Statistics:	Value
Trials	50000
Mean	719.41
Median	667.36
Mode	---
Standard Deviation	296.33
Variance	87,811.44
Skewness	0.60
Kurtosis	2.65
Coefficient of Variability	0.41
Range Minimum	121.86
Range Maximum	1,499.83
Range Width	1,377.97
Mean Standard Error	1.33
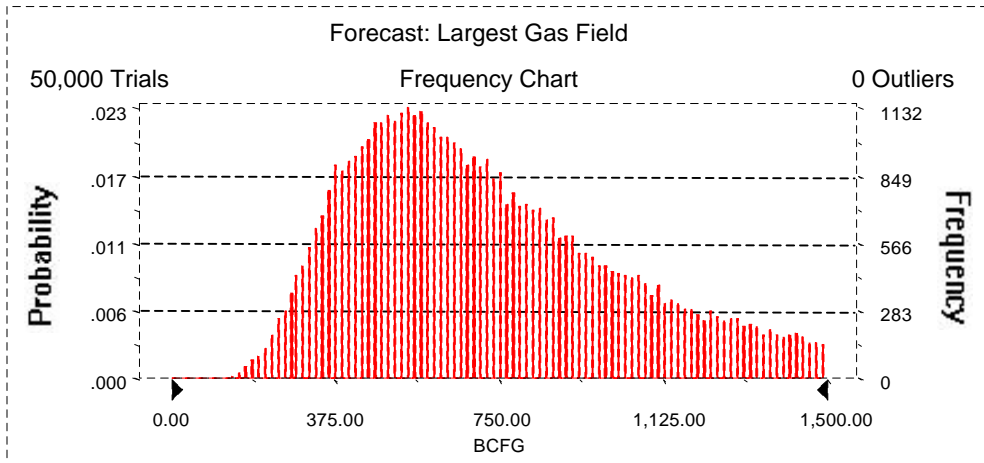
Forecast: Largest Gas Field

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	121.86
95%	317.87
90%	374.28
85%	416.46
80%	455.57
75%	491.35
70%	525.81
65%	559.31
60%	592.78
55%	629.25
50%	667.36
45%	707.68
40%	750.44
35%	798.24
30%	850.06
25%	908.84
20%	977.57
15%	1,060.30
10%	1,161.38
5%	1,301.56
0%	1,499.83

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum	1
Likeliest	9
Maximum	20

Selected range is from 1 to 20
Mean value in simulation was 10

Number of Oil Fields
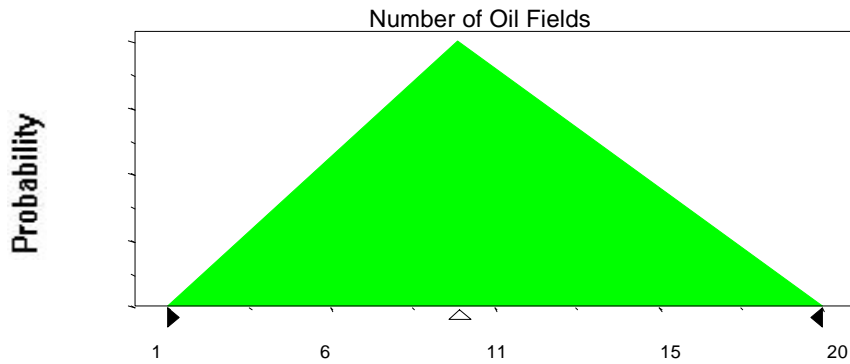
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	4.02		7.02
Standard Deviation	7.01		7.01

Selected range is from 0.00 to 77.00		3.00 to 80.00
Mean value in simulation was 3.88		6.88

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields
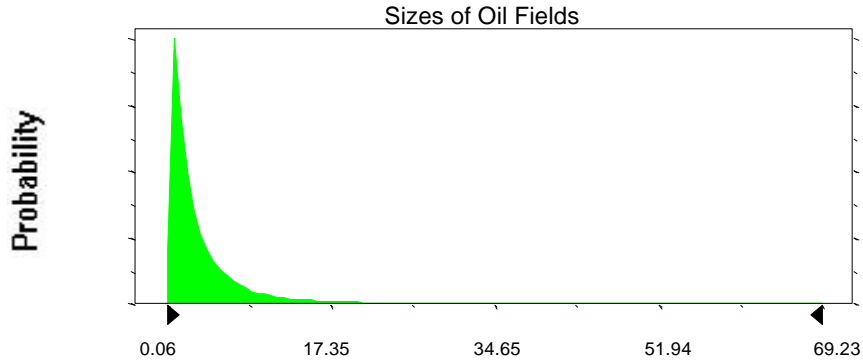
Assumption: GOR in Oil Fields

Triangular distribution with parameters:
Minimum	2,000.00
Likeliest	4,000.00
Maximum	6,000.00

Selected range is from 2,000.00 to 6,000.00
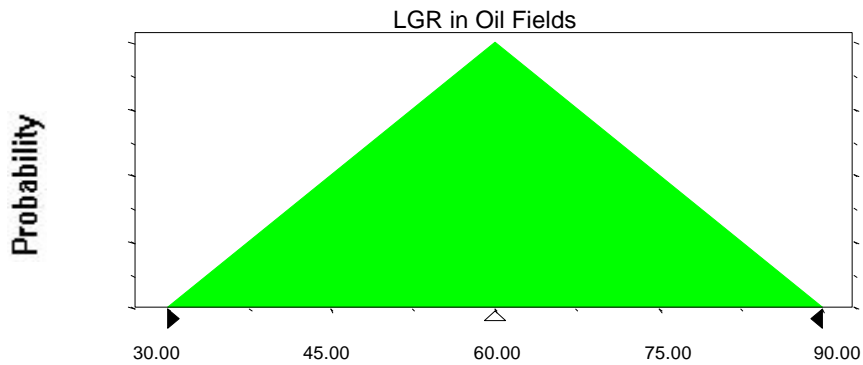Mean value in simulation was 3,999.86
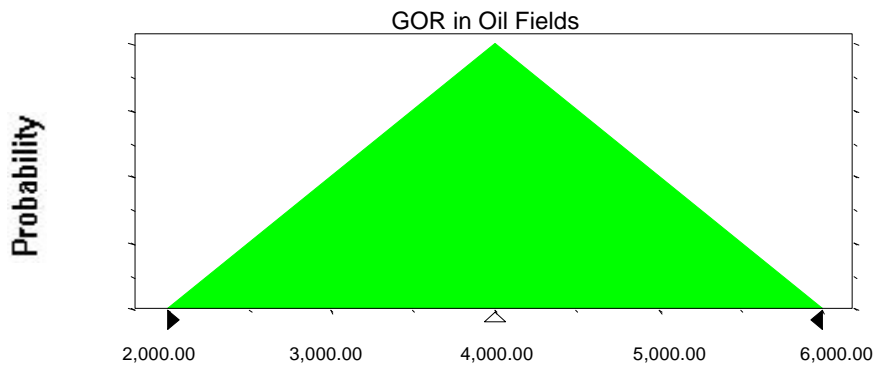
GOR in Oil Fields

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
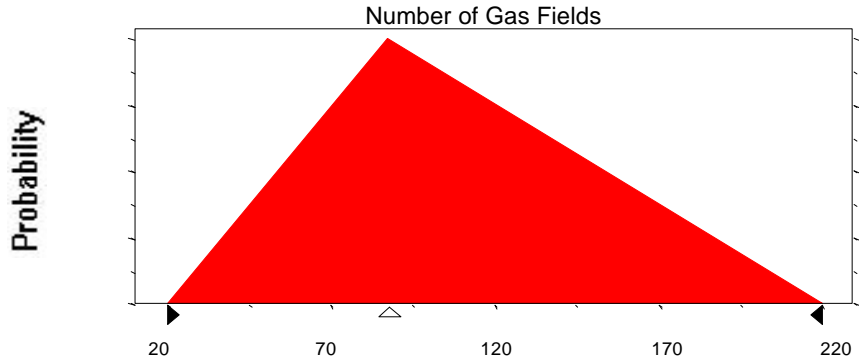Mean value in simulation was 59.95

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum	20
Likeliest	88
Maximum	220

Selected range is from 20 to 220
Mean value in simulation was 109

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	69.14		87.14
Standard Deviation	132.40		132.4

Selected range is from 0.00 to 1,482.00 18.00 to 1,500.00
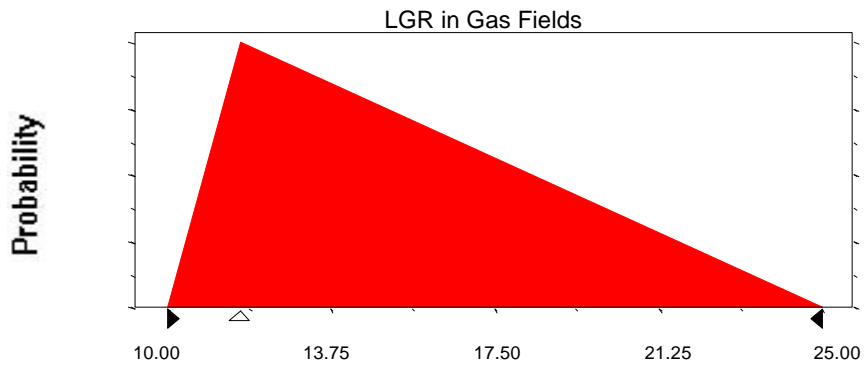Mean value in simulation was 67.00 85

Sizes of Gas Fields
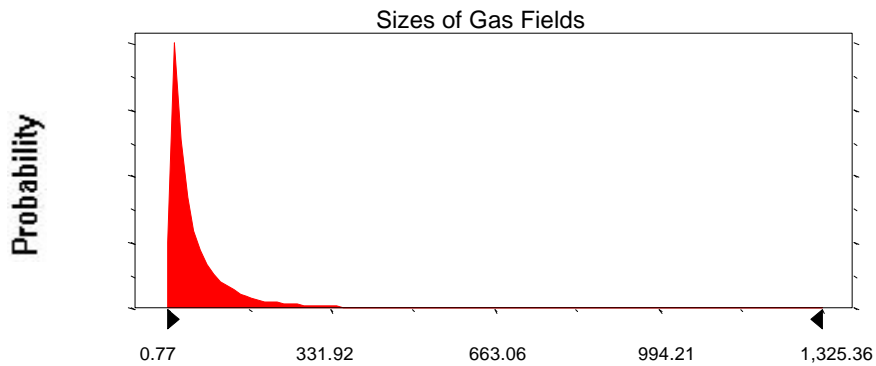
Assumption: LGR in Gas Fields

Triangular distribution with parameters:
Minimum	10.00
Likeliest	11.67
Maximum	25.00

Selected range is from 10.00 to 25.00
Mean value in simulation was 15.57

LGR in Gas Fields

End of Assumptions

Simulation started on 7/30/99 at 10:26:02
Simulation stopped on 7/30/99 at 11:22:53