Lodgepole Oil, Assessment Unit 52440401
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	46	104	200	111	18	44	95	49	1	3	7	3	4	7	13	7
Gas Fields	3						4	12	29	14	0	1	1	1	4	7	20	8
Total		1.00	46	104	200	111	22	56	124	63	1	3	8	4				

Forecast: Oil in Oil Fields

Summary:
    Display range is from 0.00 to 250.00 MMBO
    Entire range is from 19.59 to 306.37 MMBO
    After 50,000 trials, the standard error of the mean is 0.21

Statistics:	Value
Trials	50000
Mean	111.24
Median	103.77
Mode	---
Standard Deviation	48.01
Variance	2,305.37
Skewness	0.53
Kurtosis	2.51
Coefficient of Variability	0.43
Range Minimum	19.59
Range Maximum	306.37
Range Width	286.78
Mean Standard Error	0.21

Forecast: Oil in Oil Fields
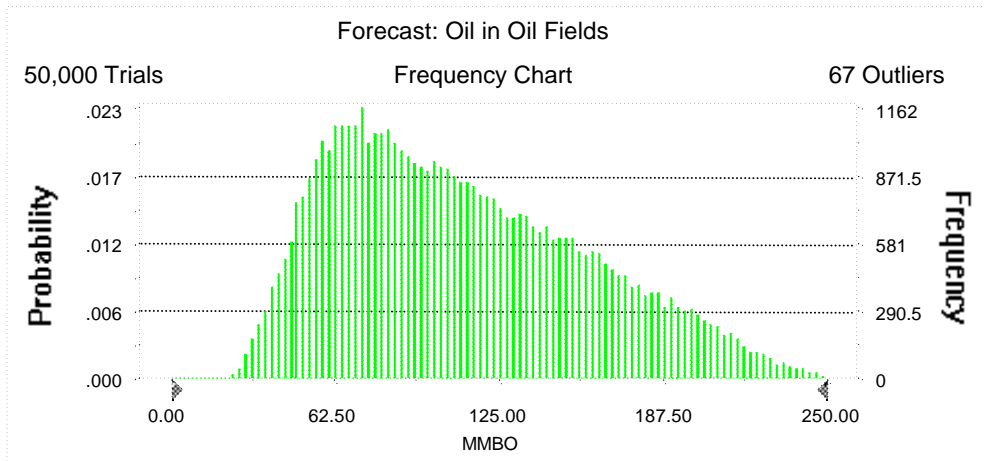
50,000 Trials   Frequency Chart   67 Outliers

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	19.59
95%	46.02
90%	54.34
85%	60.70
80%	66.65
75%	72.39
70%	78.20
65%	84.08
60%	90.24
55%	96.94
50%	103.77
45%	110.85
40%	118.31
35%	126.42
30%	135.30
25%	144.77
20%	155.11
15%	166.80
10%	181.36
5%	200.34
0%	306.37

End of Forecast

Forecast: Gas in Oil Fields

Summary:
    Display range is from 0.00 to 120.00 BCFG
    Entire range is from 6.20 to 162.38 BCFG
    After 50,000 trials, the standard error of the mean is 0.11

Statistics:	Value
Trials	50000
Mean	48.98
Median	44.37
Mode	---
Standard Deviation	23.79
Variance	566.10
Skewness	0.82
Kurtosis	3.34
Coefficient of Variability	0.49
Range Minimum	6.20
Range Maximum	162.38
Range Width	156.18
Mean Standard Error	0.11
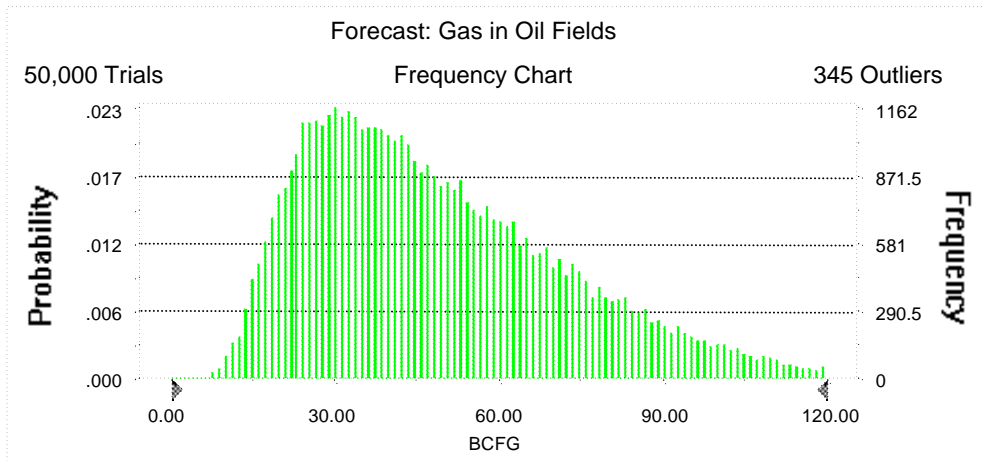
Forecast: Gas in Oil Fields

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

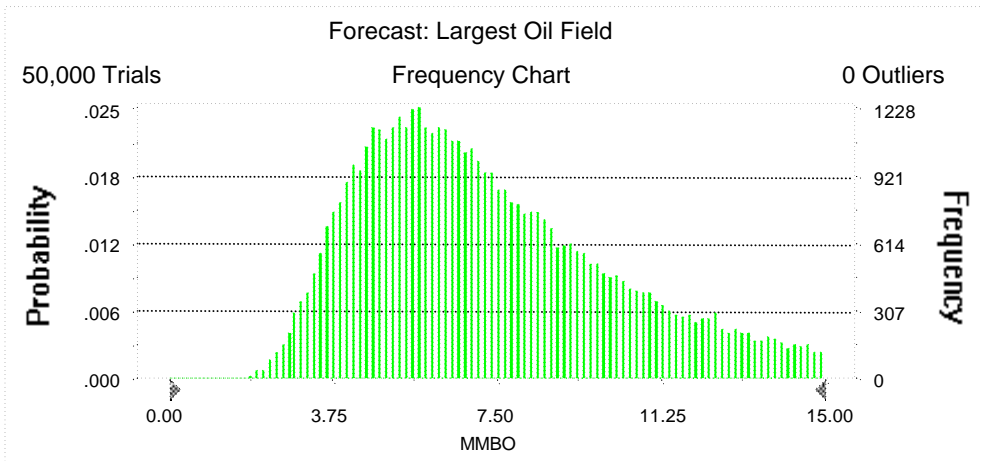| Percentile	BCFG
100%	6.20
95%	18.32
90%	22.08
85%	25.12
80%	27.82
75%	30.50
70%	33.13
65%	35.82
60%	38.56
55%	41.42
50%	44.37
45%	47.64
40%	51.14
35%	54.81
30%	58.97
25%	63.47
20%	68.74
15%	74.79
10%	82.87
5%	94.56
0%	162.38

End of Forecast

Forecast: NGL in Oil Fields

Summary:
Display range is from 0.00 to 8.00 MMBNGL
Entire range is from 0.32 to 14.35 MMBNGL
After 50,000 trials, the standard error of the mean is 0.01

Statistics:	Value
Trials	50000
Mean	3.33
Median	2.96
Mode	---
Standard Deviation	1.79
Variance	3.19
Skewness	1.08
Kurtosis	4.28
Coefficient of Variability	0.54
Range Minimum	0.32
Range Maximum	14.35
Range Width	14.03
Mean Standard Error	0.01
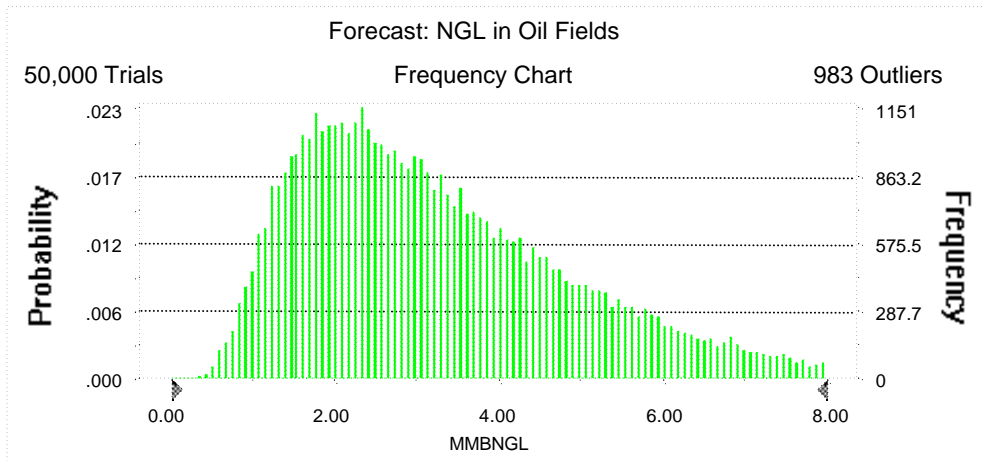
Forecast: NGL in Oil Fields

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.32
95%	1.14
90%	1.39
85%	1.61
80%	1.80
75%	1.98
70%	2.17
65%	2.35
60%	2.54
55%	2.75
50%	2.96
45%	3.18
40%	3.42
35%	3.68
30%	3.98
25%	4.31
20%	4.70
15%	5.19
10%	5.81
5%	6.80
0%	14.35

End of Forecast

Forecast: Largest Oil Field

Summary:
    Display range is from 0.00 to 15.00 MMBO
    Entire range is from 1.40 to 15.00 MMBO
    After 50,000 trials, the standard error of the mean is 0.01

Statistics:	Value
Trials	50000
Mean	7.28
Median	6.77
Mode	---
Standard Deviation	2.80
Variance	7.85
Skewness	0.65
Kurtosis	2.77
Coefficient of Variability	0.38
Range Minimum	1.40
Range Maximum	15.00
Range Width	13.60
Mean Standard Error	0.01

Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	1.40
95%	3.53
90%	4.05
85%	4.45
80%	4.80
75%	5.13
70%	5.46
65%	5.76
60%	6.09
55%	6.42
50%	6.77
45%	7.13
40%	7.53
35%	7.99
30%	8.47
25%	9.04
20%	9.68
15%	10.46
10%	11.45
5%	12.81
0%	15.00

End of Forecast

Forecast: Gas in Gas Fields

Summary:
    Display range is from 0.00 to 40.00 BCFG
    Entire range is from 3.03 to 97.91 BCFG
    After 50,000 trials, the standard error of the mean is 0.04

Statistics:	Value
Trials	50000
Mean	13.59
Median	11.83
Mode	---
Standard Deviation	8.37
Variance	70.08
Skewness	1.92
Kurtosis	9.36
Coefficient of Variability	0.62
Range Minimum	3.03
Range Maximum	97.91
Range Width	94.88
Mean Standard Error	0.04
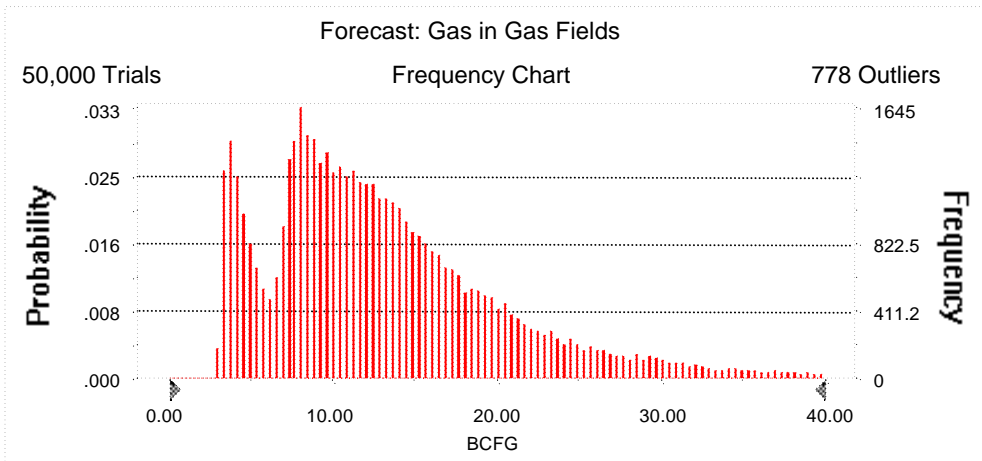
Forecast: Gas in Gas Fields

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	3.03
95%	3.87
90%	4.74
85%	6.25
80%	7.44
75%	8.12
70%	8.77
65%	9.47
60%	10.23
55%	11.01
50%	11.83
45%	12.67
40%	13.57
35%	14.52
30%	15.64
25%	16.94
20%	18.56
15%	20.60
10%	23.60
5%	29.40
0%	97.91

End of Forecast

Forecast: NGL in Gas Fields

Summary:
    Display range is from 0.00 to 1.75 MMBNGL
    Entire range is from 0.08 to 5.14 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.00

Statistics:	Value
Trials	50000
Mean	0.60
Median	0.51
Mode	---
Standard Deviation	0.40
Variance	0.16
Skewness	2.08
Kurtosis	10.52
Coefficient of Variability	0.66
Range Minimum	0.08
Range Maximum	5.14
Range Width	5.06
Mean Standard Error	0.00

Forecast: NGL in Gas Fields
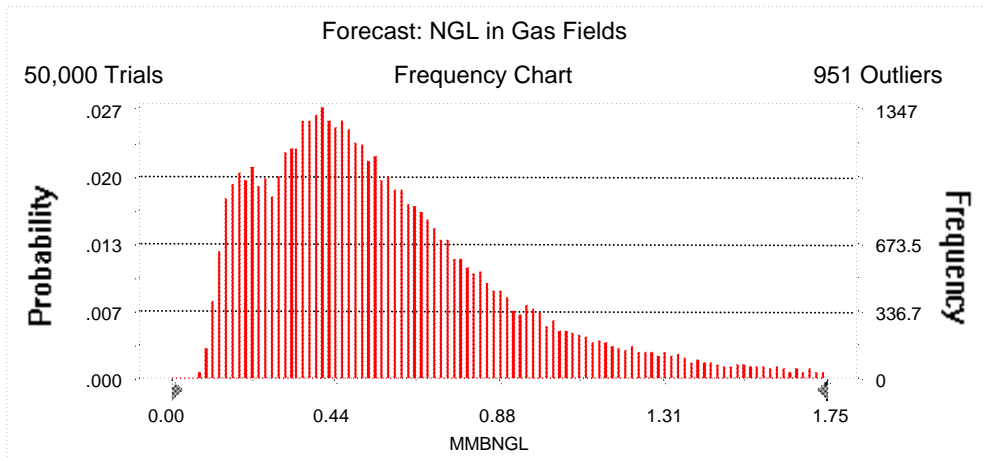
50,000 Trials   Frequency Chart   951 Outliers

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.08
95%	0.16
90%	0.21
85%	0.25
80%	0.30
75%	0.34
70%	0.37
65%	0.40
60%	0.44
55%	0.47
50%	0.51
45%	0.55
40%	0.59
35%	0.64
30%	0.69
25%	0.75
20%	0.83
15%	0.93
10%	1.07
5%	1.34
0%	5.14

End of Forecast

Forecast: Largest Gas Field

Summary:
Display range is from 2.50 to 25.00 BCFG
Entire range is from 3.03 to 59.82 BCFG
After 50,000 trials, the standard error of the mean is 0.03

Statistics:	Value
Trials	50000
Mean	8.43
Median	6.60
Mode	---
Standard Deviation	5.93
Variance	35.18
Skewness	3.08
Kurtosis	16.60
Coefficient of Variability	0.70
Range Minimum	3.03
Range Maximum	59.82
Range Width	56.79
Mean Standard Error	0.03

Forecast: Largest Gas Field
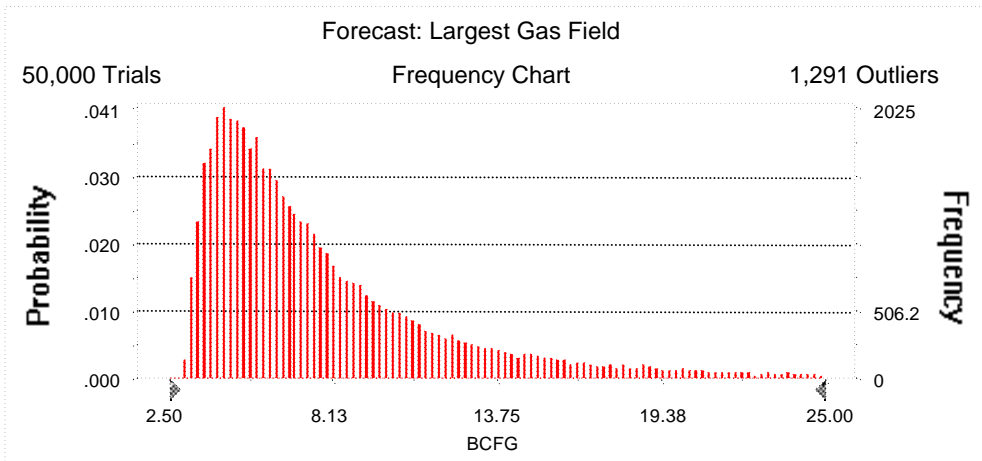
50,000 Trials   Frequency Chart   1,291 Outliers

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	3.03
95%	3.68
90%	4.02
85%	4.31
80%	4.59
75%	4.88
70%	5.18
65%	5.50
60%	5.83
55%	6.20
50%	6.60
45%	7.05
40%	7.54
35%	8.10
30%	8.82
25%	9.67
20%	10.78
15%	12.32
10%	14.76
5%	19.51
0%	59.82

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum   20
Likeliest   46
Maximum   175

Selected range is from 20 to 175
Mean value in simulation was 80

Number of Oil Fields
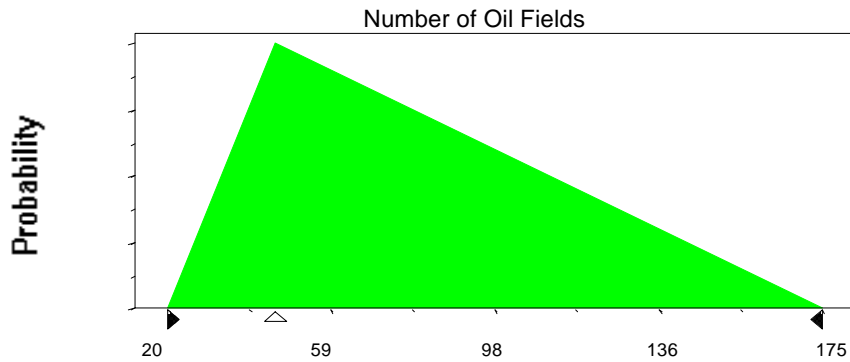
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	0.91		1.41
Standard Deviation	1.37		1.37
Selected range is from 0.00 to 14.50		0.50 to 15.00	
Mean value in simulation was 0.88		1.38	

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields
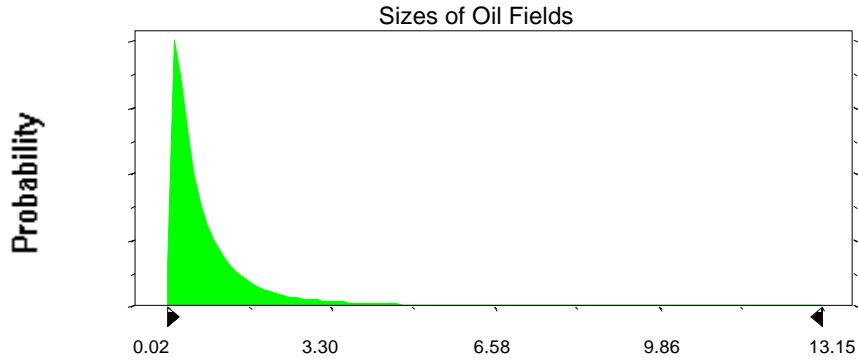
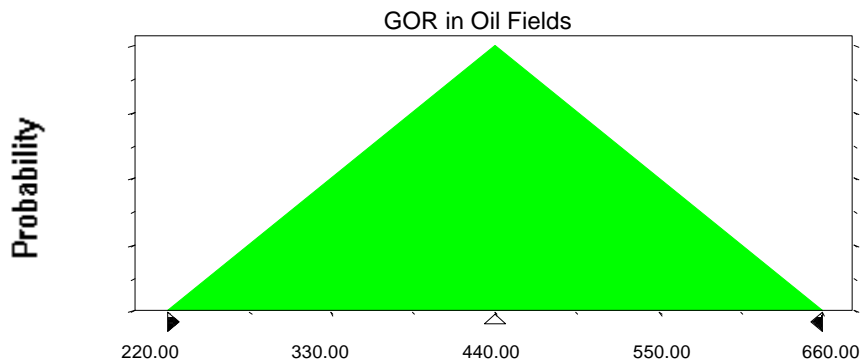**Assumption: GOR in Oil Fields**

Triangular distribution with parameters:
Minimum   220.00
Likeliest   440.00
Maximum   660.00

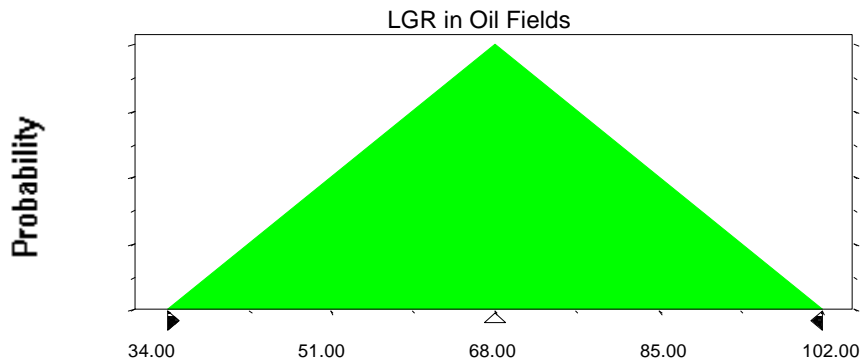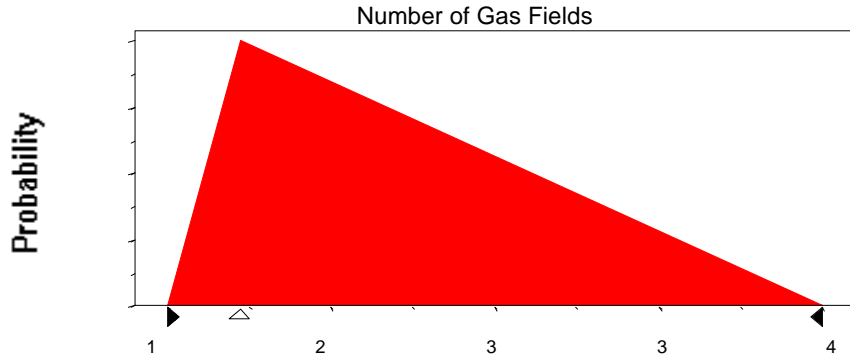Selected range is from 220.00 to 660.00
Mean value in simulation was 440.21

GOR in Oil Fields

Assumption: LGR in Oil Fields

Triangular distribution with parameters:
Minimum	34.00
Likeliest	68.00
Maximum	102.00

Selected range is from 34.00 to 102.00
Mean value in simulation was 68.00

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum	1
Likeliest	1
Maximum	4

Selected range is from 1 to 4
Mean value in simulation was 2

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	3.60		6.6
Standard Deviation	5.39		5.39

Selected range is from 0.00 to 57.00   3.00 to 60.00
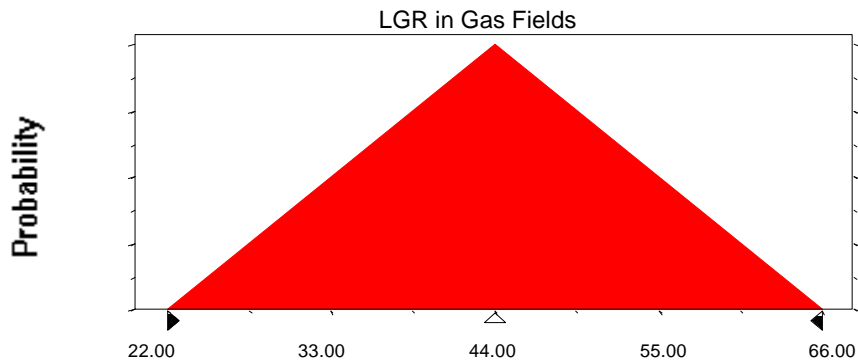Mean value in simulation was 3.50   6.5

Sizes of Gas Fields
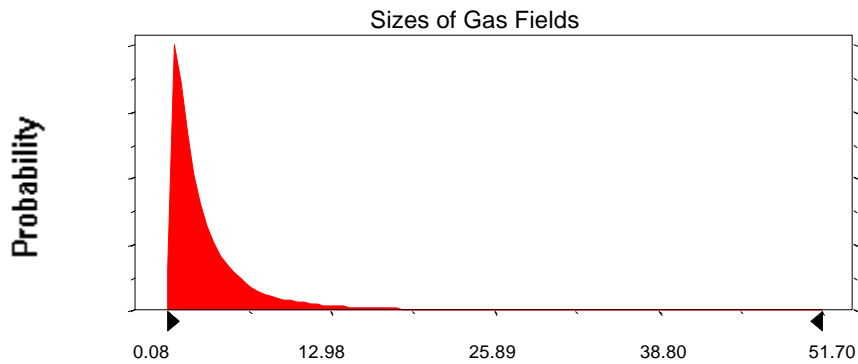
Assumption: LGR in Gas Fields

Triangular distribution with parameters:
Minimum	22.00
Likeliest	44.00
Maximum	66.00

Selected range is from 22.00 to 66.00
Mean value in simulation was 44.00

LGR in Gas Fields

End of Assumptions

Simulation started on 10/20/99 at 16:05:50
Simulation stopped on 10/20/99 at 16:55:32