Balingian, Assessment Unit 37020102
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	130	476	1,103	529	267	1,013	2,568	1,163	15	59	162	70	23	63	155	72
Gas Fields	6						320	966	2,062	1,054	13	41	96	46	58	143	359	166
Total		1.00	130	476	1,103	529	588	1,979	4,630	2,217	28	100	258	116				

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 1,500.00 MMBO

Entire range is from 39.49 to 1,900.19 MMBO

After 50,000 trials, the standard error of the mean is 1.37

Statistics:	Value
Trials	50000
Mean	529.49
Median	476.18
Mode	---
Standard Deviation	307.00
Variance	94,248.05
Skewness	0.67
Kurtosis	2.78
Coefficient of Variability	0.58
Range Minimum	39.49
Range Maximum	1,900.19
Range Width	1,860.70
Mean Standard Error	1.37

Forecast: Oil in Oil Fields
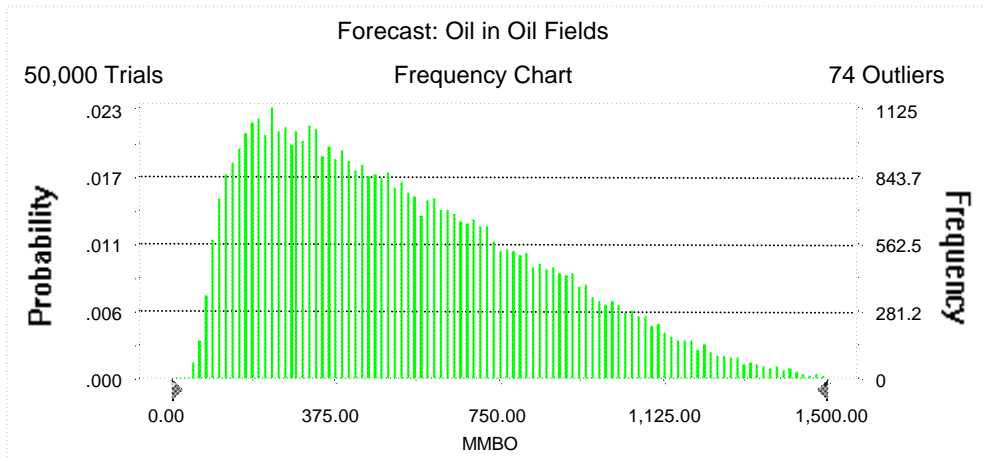
50,000 Trials   Frequency Chart   74 Outliers

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

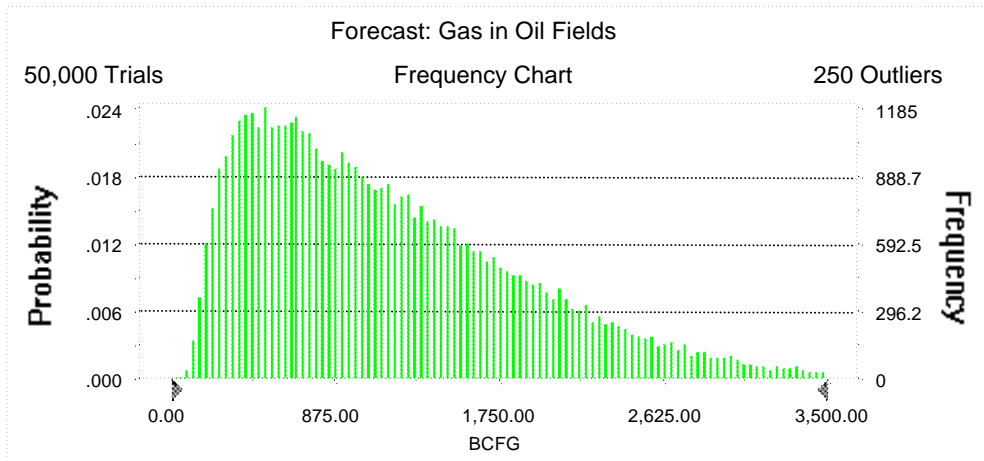| Percentile	MMBO
100%	39.49
95%	129.66
90%	170.74
85%	205.57
80%	240.85
75%	277.11
70%	314.76
65%	351.43
60%	391.24
55%	432.43
50%	476.18
45%	521.42
40%	568.94
35%	620.86
30%	675.91
25%	733.90
20%	803.59
15%	881.05
10%	973.64
5%	1,103.09
0%	1,900.19

End of Forecast

Forecast: Gas in Oil Fields

Summary:
    Display range is from 0.00 to 3,500.00 BCFG
    Entire range is from 66.51 to 5,517.28 BCFG
    After 50,000 trials, the standard error of the mean is 3.26

Statistics:	Value
Trials	50000
Mean	1,163.10
Median	1,012.81
Mode	---
Standard Deviation	728.16
Variance	530,215.05
Skewness	0.93
Kurtosis	3.60
Coefficient of Variability	0.63
Range Minimum	66.51
Range Maximum	5,517.28
Range Width	5,450.77
Mean Standard Error	3.26

Forecast: Gas in Oil Fields

50,000 Trials	Frequency Chart	250 Outliers

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	66.51
95%	267.46
90%	353.84
85%	430.41
80%	506.87
75%	584.93
70%	663.25
65%	742.35
60%	828.34
55%	920.64
50%	1,012.81
45%	1,114.45
40%	1,221.25
35%	1,334.45
30%	1,459.77
25%	1,596.22
20%	1,758.30
15%	1,951.81
10%	2,194.57
5%	2,567.87
0%	5,517.28

End of Forecast
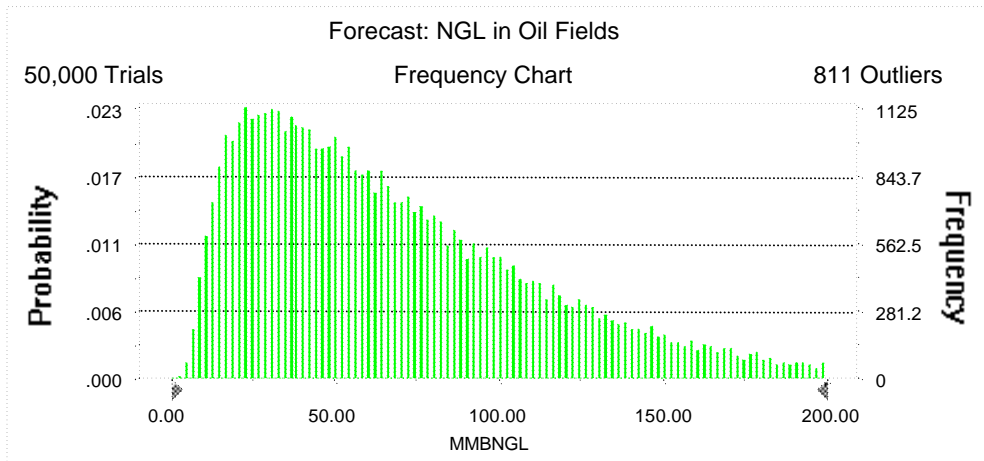
Forecast: NGL in Oil Fields

Summary:
Display range is from 0.00 to 200.00 MMBNGL
Entire range is from 3.14 to 360.85 MMBNGL
After 50,000 trials, the standard error of the mean is 0.21

Statistics:	Value
Trials	50000
Mean	69.87
Median	59.06
Mode	---
Standard Deviation	46.83
Variance	2,192.90
Skewness	1.18
Kurtosis	4.55
Coefficient of Variability	0.67
Range Minimum	3.14
Range Maximum	360.85
Range Width	357.71
Mean Standard Error	0.21

Forecast: NGL in Oil Fields

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	3.14
95%	15.04
90%	20.12
85%	24.67
80%	29.26
75%	33.74
70%	38.44
65%	43.26
60%	48.39
55%	53.58
50%	59.06
45%	65.02
40%	71.53
35%	78.44
30%	86.35
25%	95.40
20%	105.36
15%	118.11
10%	134.88
5%	161.89
0%	360.85

End of Forecast

Forecast: Largest Oil Field

Summary:
Display range is from 0.00 to 200.00 MMBO
Entire range is from 6.04 to 200.00 MMBO
After 50,000 trials, the standard error of the mean is 0.18

Statistics:	Value
Trials	50000
Mean	72.29
Median	62.98
Mode	---
Standard Deviation	39.81
Variance	1,584.82
Skewness	0.96
Kurtosis	3.43
Coefficient of Variability	0.55
Range Minimum	6.04
Range Maximum	200.00
Range Width	193.96
Mean Standard Error	0.18
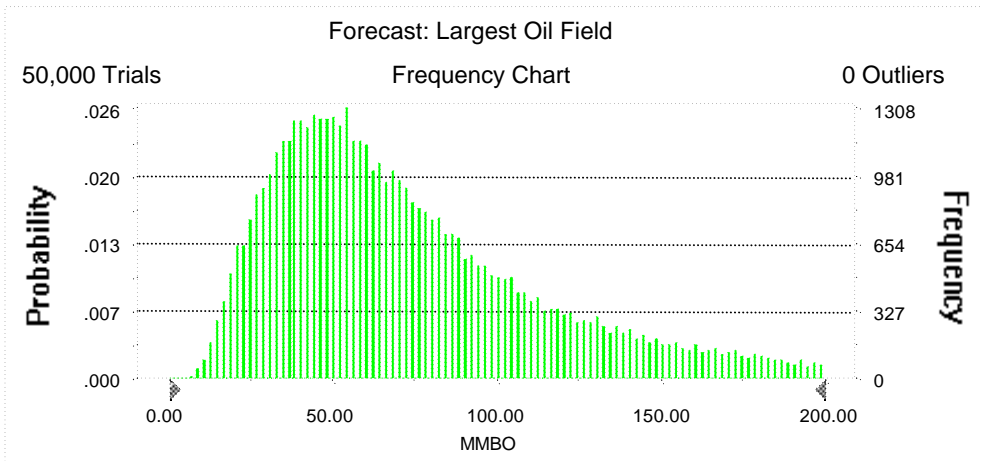
Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	6.04
95%	23.10
90%	29.20
85%	34.10
80%	38.41
75%	42.42
70%	46.39
65%	50.41
60%	54.39
55%	58.54
50%	62.98
45%	68.05
40%	73.22
35%	79.12
30%	85.78
25%	93.55
20%	103.09
15%	115.08
10%	131.42
5%	155.04
0%	200.00

End of Forecast

Forecast: Gas in Gas Fields

Summary:
Display range is from 0.00 to 2,500.00 BCFG
Entire range is from 66.47 to 3,525.96 BCFG
After 50,000 trials, the standard error of the mean is 2.44

Statistics:	Value
Trials	50000
Mean	1,054.30
Median	966.19
Mode	---
Standard Deviation	544.64
Variance	296,633.65
Skewness	0.65
Kurtosis	2.91
Coefficient of Variability	0.52
Range Minimum	66.47
Range Maximum	3,525.96
Range Width	3,459.49
Mean Standard Error	2.44

Forecast: Gas in Gas Fields
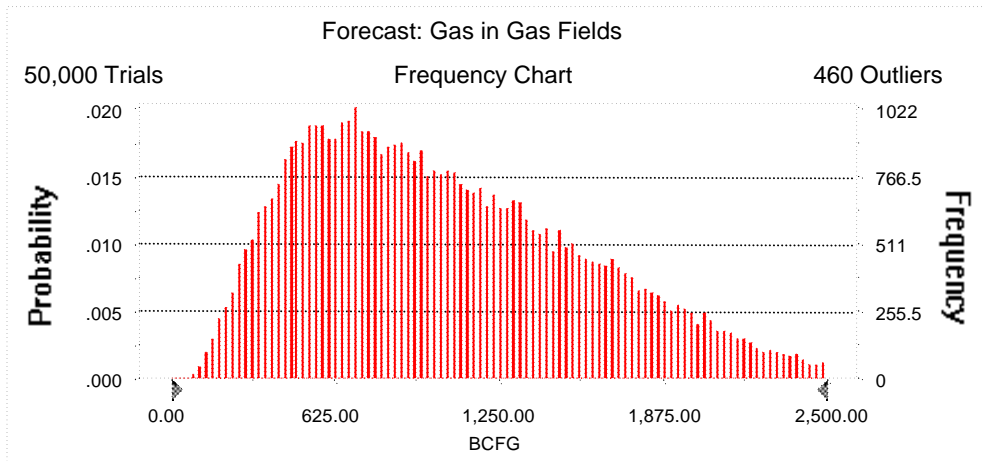
50,000 Trials   Frequency Chart   460 Outliers

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	66.47
95%	320.14
90%	414.41
85%	488.63
80%	556.47
75%	622.69
70%	688.77
65%	752.53
60%	822.09
55%	893.31
50%	966.19
45%	1,046.11
40%	1,127.51
35%	1,216.47
30%	1,310.80
25%	1,412.41
20%	1,531.30
15%	1,668.00
10%	1,829.01
5%	2,061.69
0%	3,525.96

End of Forecast

Forecast: NGL in Gas Fields

Summary:
    Display range is from 0.00 to 120.00 MMBNGL
    Entire range is from 2.04 to 200.81 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.12

Statistics:	Value
Trials	50000
Mean	46.33
Median	41.35
Mode	---
Standard Deviation	26.18
Variance	685.23
Skewness	0.92
Kurtosis	3.76
Coefficient of Variability	0.56
Range Minimum	2.04
Range Maximum	200.81
Range Width	198.77
Mean Standard Error	0.12
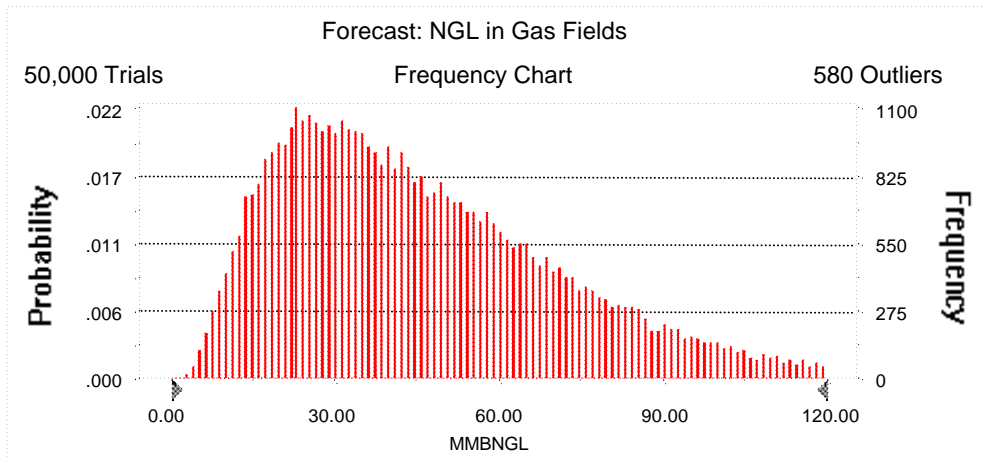
Forecast: NGL in Gas Fields

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	2.04
95%	13.11
90%	17.07
85%	20.29
80%	23.29
75%	26.05
70%	28.99
65%	31.95
60%	34.87
55%	38.04
50%	41.35
45%	44.76
40%	48.61
35%	52.59
30%	56.97
25%	61.75
20%	67.32
15%	74.06
10%	82.94
5%	96.39
0%	200.81

End of Forecast

Forecast: Largest Gas Field

Summary:
    Display range is from 0.00 to 450.00 BCFG
    Entire range is from 12.43 to 499.75 BCFG
    After 50,000 trials, the standard error of the mean is 0.41

Statistics:	Value
Trials	50000
Mean	165.52
Median	143.07
Mode	---
Standard Deviation	91.72
Variance	8,412.28
Skewness	1.19
Kurtosis	4.20
Coefficient of Variability	0.55
Range Minimum	12.43
Range Maximum	499.75
Range Width	487.32
Mean Standard Error	0.41
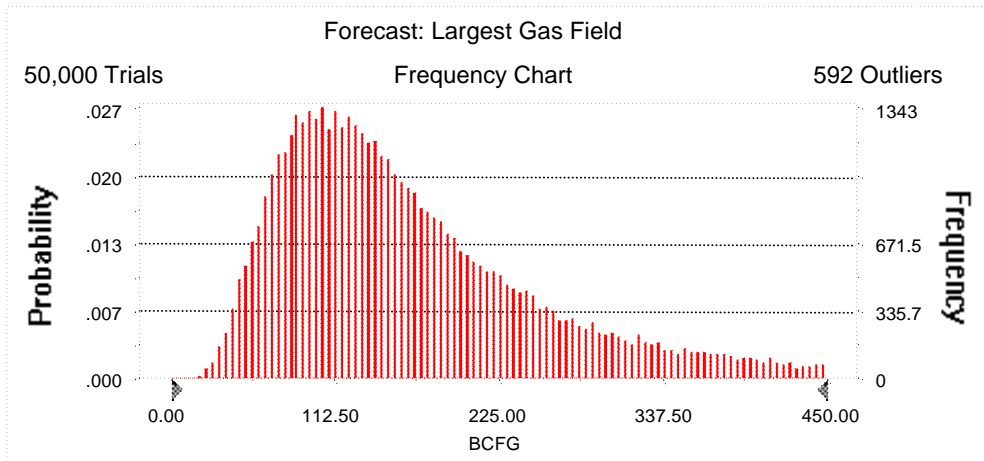
Forecast: Largest Gas Field

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	12.43
95%	57.64
90%	70.64
85%	80.86
80%	89.79
75%	98.48
70%	106.94
65%	115.74
60%	124.68
55%	133.66
50%	143.07
45%	153.39
40%	164.84
35%	177.53
30%	191.97
25%	209.58
20%	230.27
15%	256.89
10%	295.65
5%	359.19
0%	499.75

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum	10
Likeliest	15
Maximum	140

Selected range is from 10 to 140
Mean value in simulation was 55

Number of Oil Fields

10	43	75	108	140
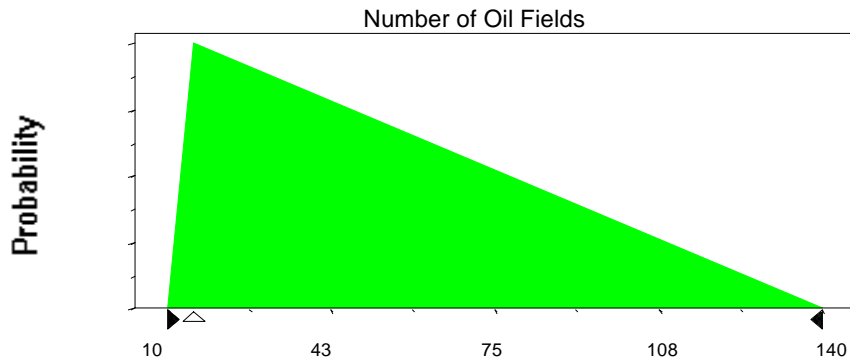
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	8.90	9.9
Standard Deviation	17.67	17.67

Selected range is from 0.00 to 199.00	1.00 to 200.00
Mean value in simulation was 8.50	9.5

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields
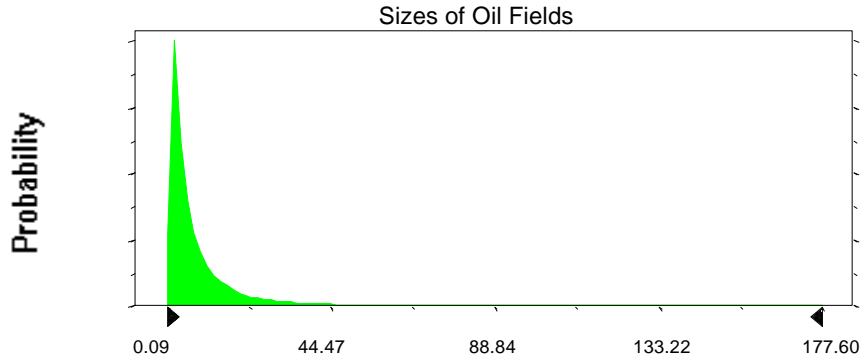
Assumption: GOR in Oil Fields

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
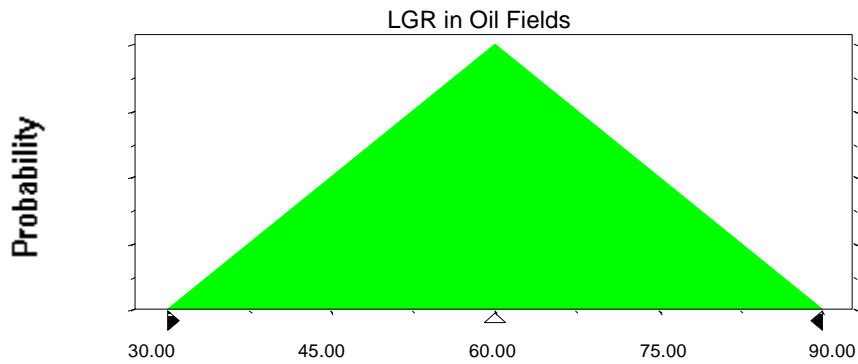Mean value in simulation was 2,195.92
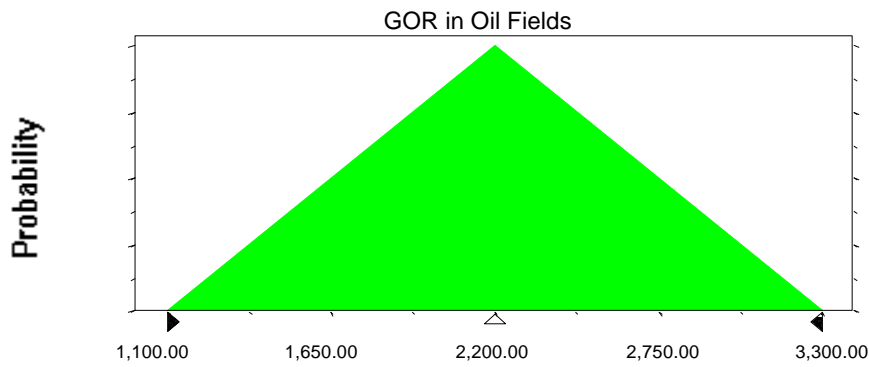
GOR in Oil Fields

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
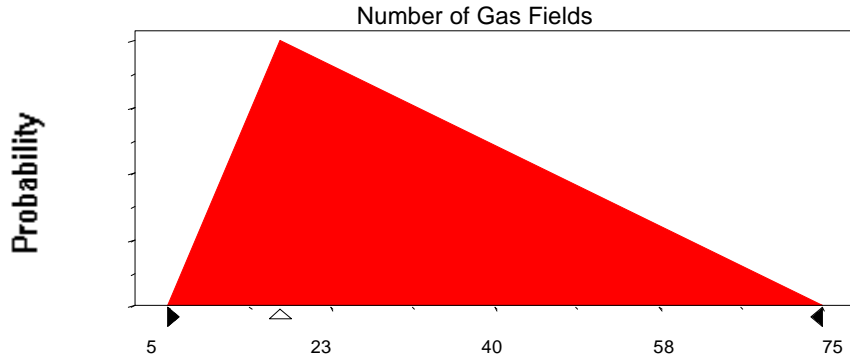Mean value in simulation was 60.06

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum	5
Likeliest	17
Maximum	75

Selected range is from 5 to 75
Mean value in simulation was 32

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Probability

5   23   40   58   75

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	27.22		33.22
Standard Deviation	45.39		45.39

Selected range is from 0.00 to 494.00   6.00 to 500.00
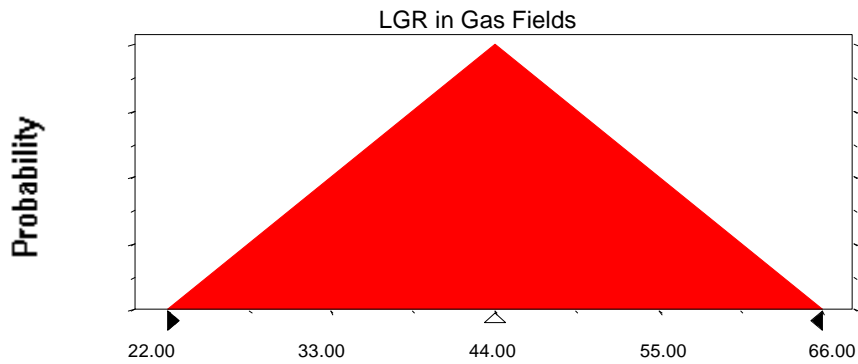Mean value in simulation was 26.32   32.32

Sizes of Gas Fields

Probability

0.44   111.65   222.87   334.08   445.30
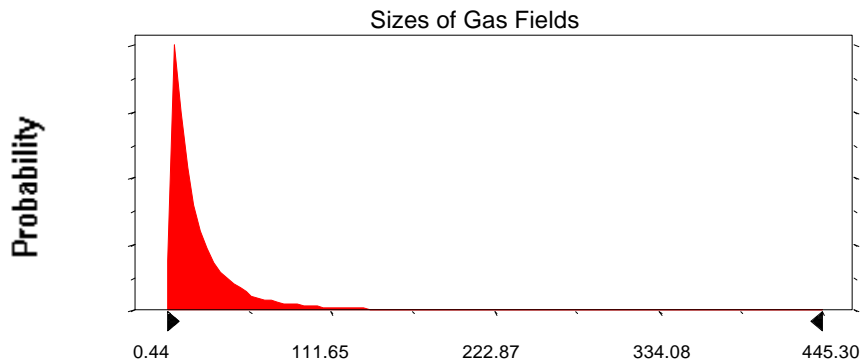
Assumption: LGR in Gas Fields

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 43.95

LGR in Gas Fields

End of Assumptions

Simulation started on 8/23/99 at 9:01:38
Simulation stopped on 8/23/99 at 9:54:05