Gabon Subsalt, Assessment Unit 72030101
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]

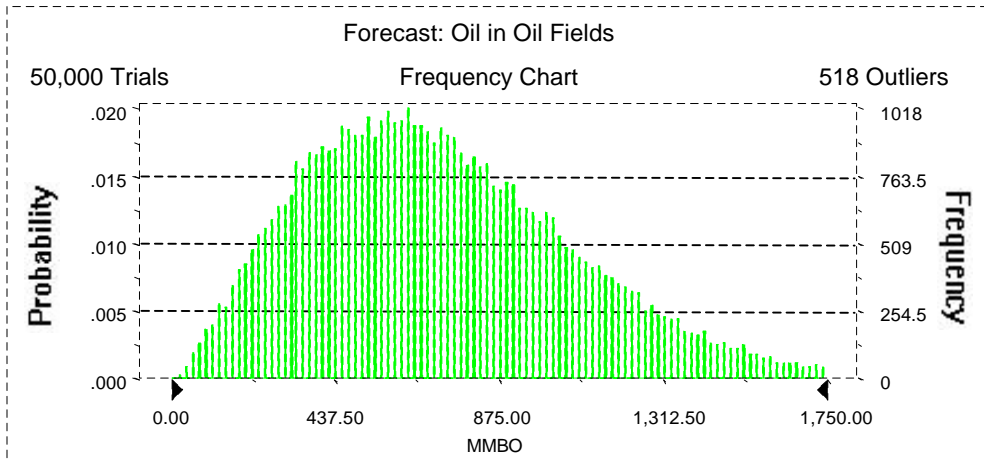| Field Type | MFS | Prob. (0-1) | Undiscovered Resources | | | | | | | | | | | | Largest Undiscovered Field | | | |
| | | | Oil (MMBO) | | | | Gas (BCFG) | | | | NGL (MMBNGL) | | | | (MMBO or BCFG) | | | |
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	1	1.00	212	682	1,392	727	443	1,490	3,327	1,637	20	72	176	82	45	138	434	173
Gas Fields	6						267	1,745	4,794	2,038	11	75	221	90	96	420	1,489	550
Total		1.00	212	682	1,392	727	709	3,235	8,121	3,674	32	147	397	172				

72030101
Gabon Subsalt
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Display range is from 0.00 to 1,750.00 MMBO
Entire range is from 16.11 to 3,011.81 MMBO
After 50,000 trials, the standard error of the mean is 1.64

Statistics:	Value
Trials	50000
Mean	727.16
Median	682.12
Mode	---
Standard Deviation	366.49
Variance	134,317.10
Skewness	0.73
Kurtosis	3.67
Coefficient of Variability	0.50
Range Minimum	16.11
Range Maximum	3,011.81
Range Width	2,995.69
Mean Standard Error	1.64

Forecast: Oil in Oil Fields

50,000 Trials — Frequency Chart — 518 Outliers

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

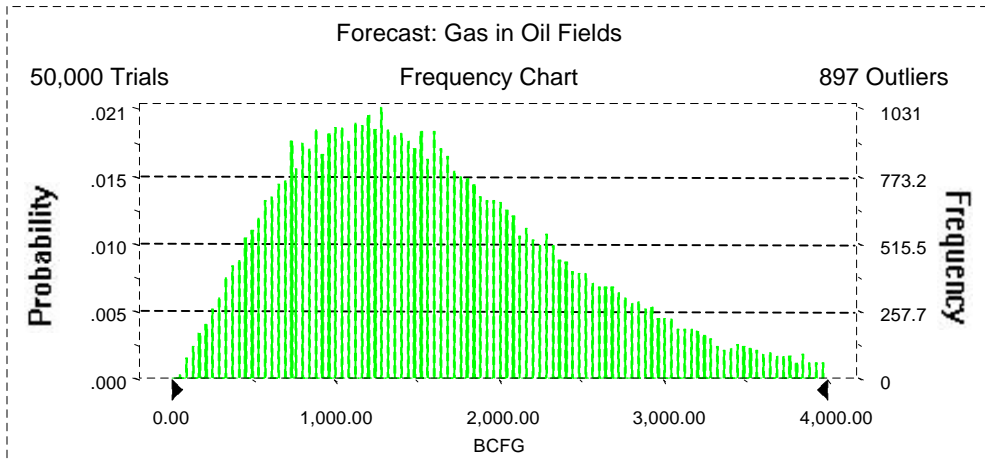| Percentile	MMBO
100%	16.11
95%	212.10
90%	290.45
85%	350.67
80%	403.37
75%	454.12
70%	500.82
65%	546.60
60%	592.28
55%	636.89
50%	682.12
45%	729.74
40%	778.05
35%	831.94
30%	888.58
25%	950.85
20%	1,021.70
15%	1,108.79
10%	1,220.24
5%	1,392.44
0%	3,011.81

End of Forecast

Forecast: Gas in Oil Fields

Summary:
    Display range is from 0.00 to 4,000.00 BCFG
    Entire range is from 38.65 to 8,591.96 BCFG
    After 50,000 trials, the standard error of the mean is 4.06

Statistics:	Value
Trials	50000
Mean	1,636.84
Median	1,489.98
Mode	---
Standard Deviation	907.35
Variance	823,286.33
Skewness	0.99
Kurtosis	4.41
Coefficient of Variability	0.55
Range Minimum	38.65
Range Maximum	8,591.96
Range Width	8,553.31
Mean Standard Error	4.06

Forecast: Gas in Oil Fields

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	38.65
95%	442.59
90%	608.00
85%	738.55
80%	854.31
75%	966.03
70%	1,070.00
65%	1,175.96
60%	1,279.14
55%	1,381.66
50%	1,489.98
45%	1,602.75
40%	1,714.80
35%	1,842.69
30%	1,984.68
25%	2,144.13
20%	2,328.30
15%	2,559.27
10%	2,858.82
5%	3,327.18
0%	8,591.96

End of Forecast

Forecast: NGL in Oil Fields

Summary:
Display range is from 0.00 to 225.00 MMBNGL
Entire range is from 1.67 to 541.86 MMBNGL
After 50,000 trials, the standard error of the mean is 0.22

Statistics:	Value
Trials	50000
Mean	81.81
Median	72.26
Mode	---
Standard Deviation	49.26
Variance	2,426.95
Skewness	1.22
Kurtosis	5.33
Coefficient of Variability	0.60
Range Minimum	1.67
Range Maximum	541.86
Range Width	540.18
Mean Standard Error	0.22
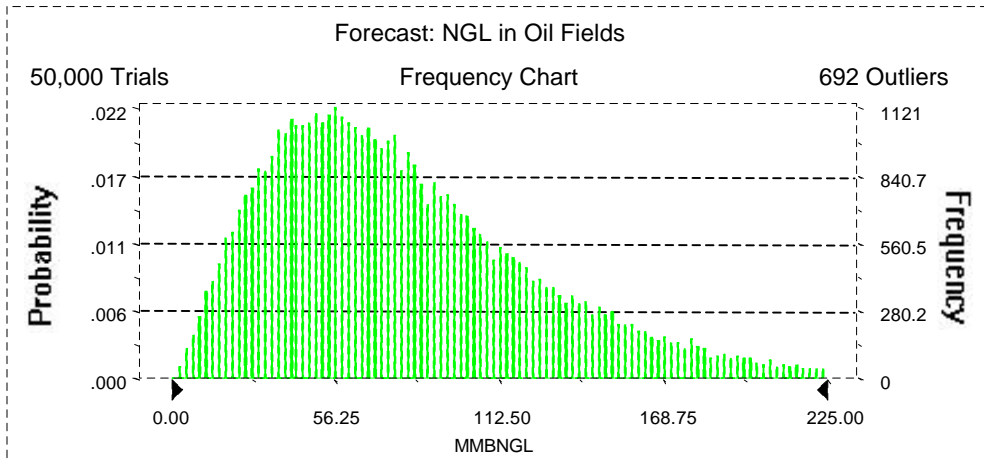
Forecast: NGL in Oil Fields

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.67
95%	20.42
90%	28.39
85%	34.88
80%	40.44
75%	45.67
70%	51.01
65%	56.19
60%	61.29
55%	66.67
50%	72.26
45%	78.00
40%	84.16
35%	91.28
30%	98.68
25%	107.29
20%	117.74
15%	130.70
10%	148.04
5%	175.53
0%	541.86

End of Forecast

Forecast: Largest Oil Field

Summary:
Display range is from 0.00 to 500.00 MMBO
Entire range is from 5.37 to 649.94 MMBO
After 50,000 trials, the standard error of the mean is 0.54

Statistics:	Value
Trials	50000
Mean	172.54
Median	137.62
Mode	---
Standard Deviation	120.85
Variance	14,604.33
Skewness	1.48
Kurtosis	5.11
Coefficient of Variability	0.70
Range Minimum	5.37
Range Maximum	649.94
Range Width	644.57
Mean Standard Error	0.54
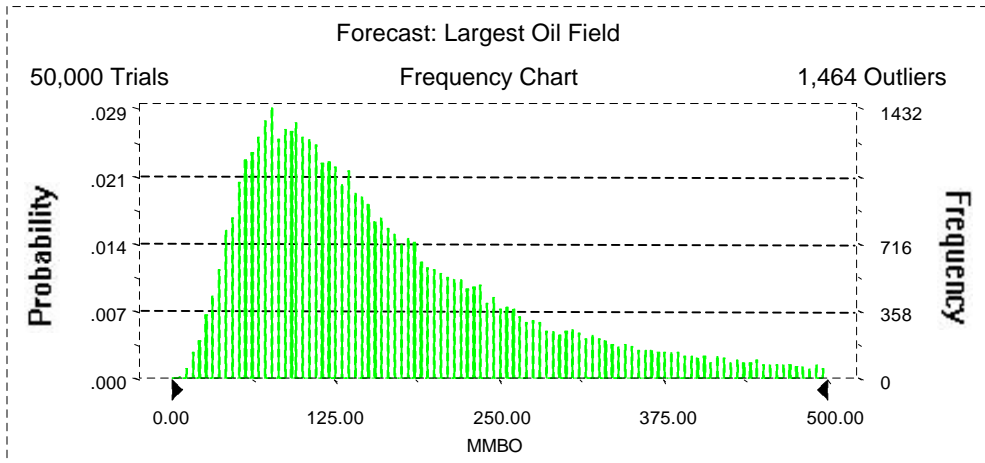
Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	5.37
95%	44.62
90%	57.41
85%	67.74
80%	76.98
75%	86.33
70%	95.75
65%	105.23
60%	115.23
55%	126.11
50%	137.62
45%	150.30
40%	164.73
35%	181.08
30%	199.66
25%	222.30
20%	249.24
15%	286.47
10%	340.48
5%	433.75
0%	649.94

End of Forecast

Forecast: Gas in Gas Fields

Summary:
    Display range is from 0.00 to 6,000.00 BCFG
    Entire range is from 6.72 to 10,604.29 BCFG
    After 50,000 trials, the standard error of the mean is 6.46

Statistics:	Value
Trials	50000
Mean	2,037.65
Median	1,744.66
Mode	---
Standard Deviation	1,445.37
Variance	2,089,085.20
Skewness	0.96
Kurtosis	3.76
Coefficient of Variability	0.71
Range Minimum	6.72
Range Maximum	10,604.29
Range Width	10,597.57
Mean Standard Error	6.46

Forecast: Gas in Gas Fields
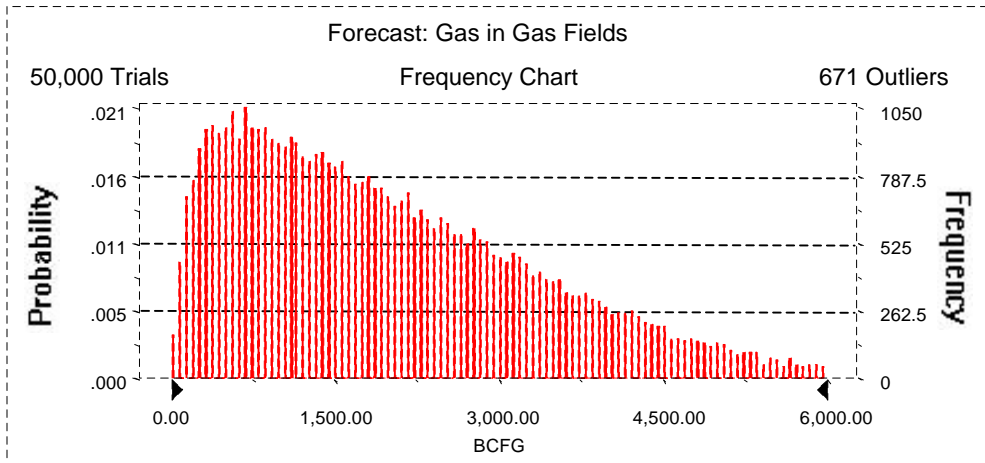
50,000 Trials   Frequency Chart   671 Outliers

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	6.72
95%	266.53
90%	423.16
85%	575.20
80%	726.35
75%	878.14
70%	1,039.92
65%	1,204.41
60%	1,378.28
55%	1,554.83
50%	1,744.66
45%	1,940.39
40%	2,156.15
35%	2,384.27
30%	2,636.22
25%	2,907.34
20%	3,221.14
15%	3,588.48
10%	4,074.53
5%	4,793.89
0%	10,604.29

End of Forecast

Forecast: NGL in Gas Fields

Summary:
    Display range is from 0.00 to 275.00 MMBNGL
    Entire range is from 0.26 to 577.18 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.30

Statistics:	Value
Trials	50000
Mean	89.74
Median	74.55
Mode	---
Standard Deviation	67.39
Variance	4,541.92
Skewness	1.20
Kurtosis	4.73
Coefficient of Variability	0.75
Range Minimum	0.26
Range Maximum	577.18
Range Width	576.92
Mean Standard Error	0.30

Forecast: NGL in Gas Fields
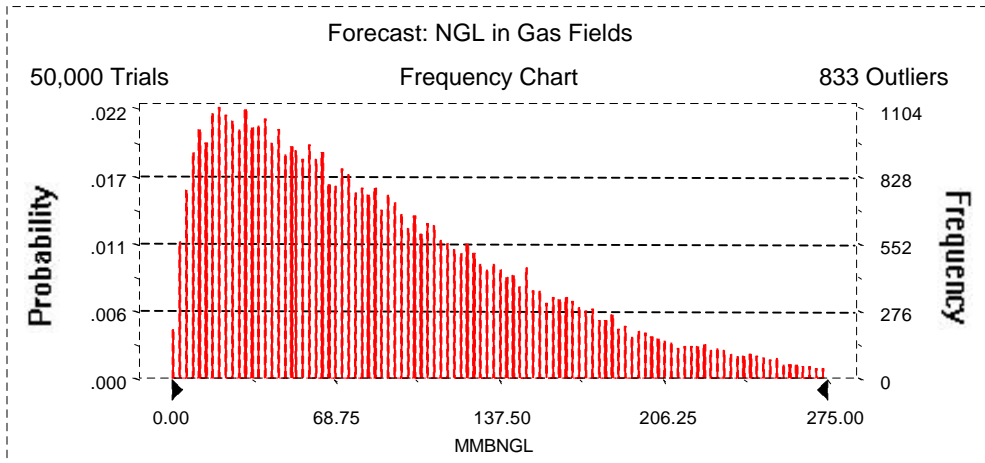
50,000 Trials   Frequency Chart   833 Outliers

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.26
95%	11.10
90%	17.90
85%	24.22
80%	30.79
75%	37.32
70%	44.04
65%	51.23
60%	58.62
55%	66.11
50%	74.55
45%	83.30
40%	92.66
35%	102.71
30%	113.85
25%	126.61
20%	141.30
15%	159.18
10%	182.12
5%	221.03
0%	577.18

End of Forecast

Forecast: Largest Gas Field

Summary:
   Display range is from 0.00 to 1,750.00 BCFG
   Entire range is from 6.72 to 2,499.43 BCFG
   After 50,000 trials, the standard error of the mean is 1.97

Statistics:	Value
Trials	50000
Mean	550.01
Median	420.01
Mode	---
Standard Deviation	441.49
Variance	194,916.05
Skewness	1.66
Kurtosis	6.00
Coefficient of Variability	0.80
Range Minimum	6.72
Range Maximum	2,499.43
Range Width	2,492.70
Mean Standard Error	1.97
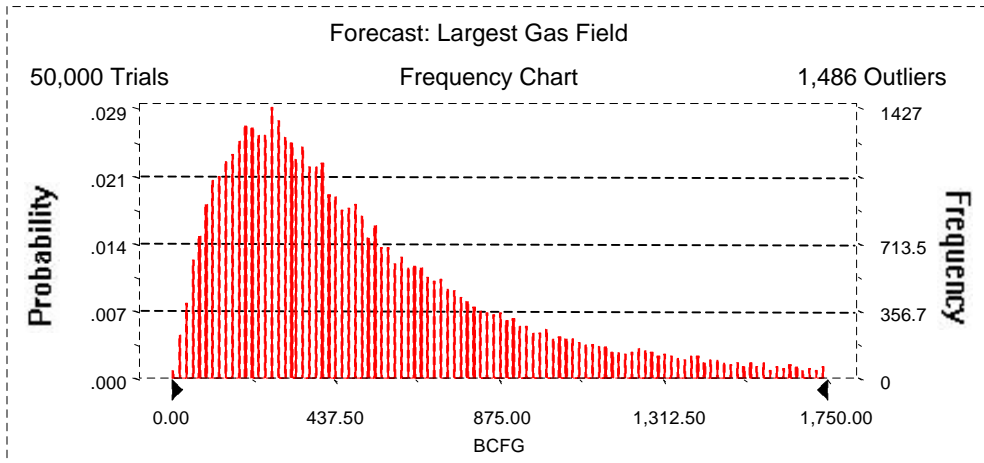
Forecast: Largest Gas Field

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	6.72
95%	95.59
90%	138.61
85%	175.93
80%	209.69
75%	243.22
70%	275.43
65%	308.46
60%	344.21
55%	380.95
50%	420.01
45%	465.64
40%	514.38
35%	570.66
30%	637.97
25%	716.55
20%	812.53
15%	943.95
10%	1,140.77
5%	1,489.31
0%	2,499.43

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum	4
Likeliest	33
Maximum	70

Selected range is from 4 to 70
Mean value in simulation was 36

Number of Oil Fields
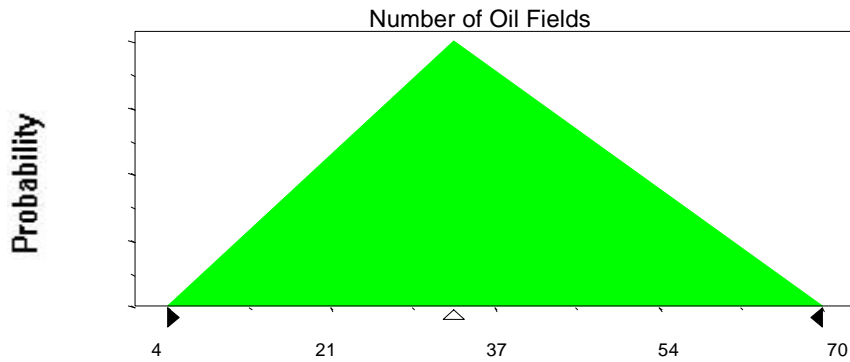
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	20.50		21.5
Standard Deviation	56.41		56.41

Selected range is from 0.00 to 649.00   1.00 to 650.00
Mean value in simulation was 19.63   20.63

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields

| | 0.09 | 142.26 | 284.44 | 426.61 | 568.79 |
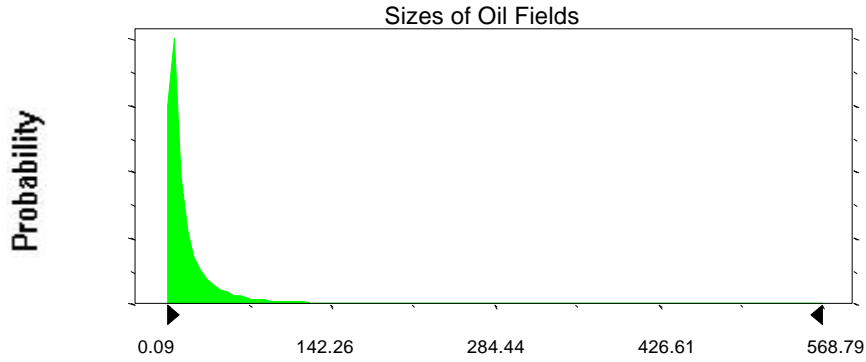
Assumption: GOR in Oil Fields

Triangular distribution with parameters:
Minimum	1,125.00
Likeliest	2,250.00
Maximum	3,375.00

Selected range is from 1,125.00 to 3,375.00
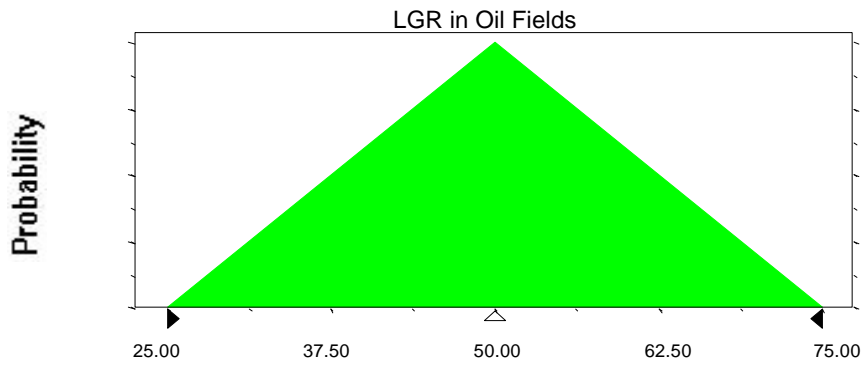Mean value in simulation was 2,249.61

GOR in Oil Fields

| 1,125.00 | 1,687.50 | 2,250.00 | 2,812.50 | 3,375.00 |
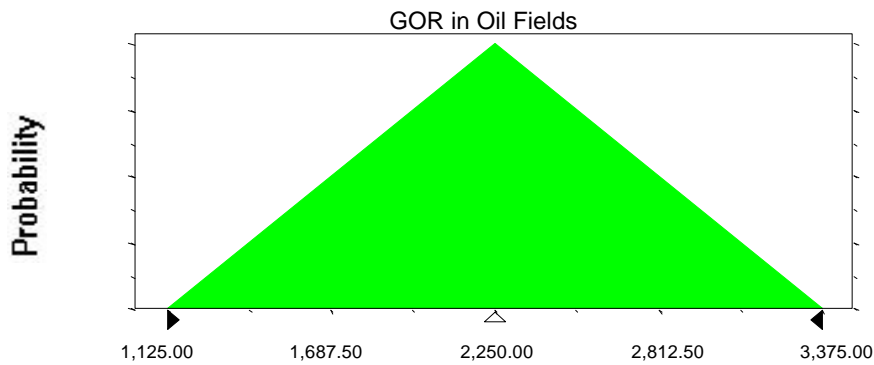
Assumption: LGR in Oil Fields

Triangular distribution with parameters:
Minimum	25.00
Likeliest	50.00
Maximum	75.00

Selected range is from 25.00 to 75.00
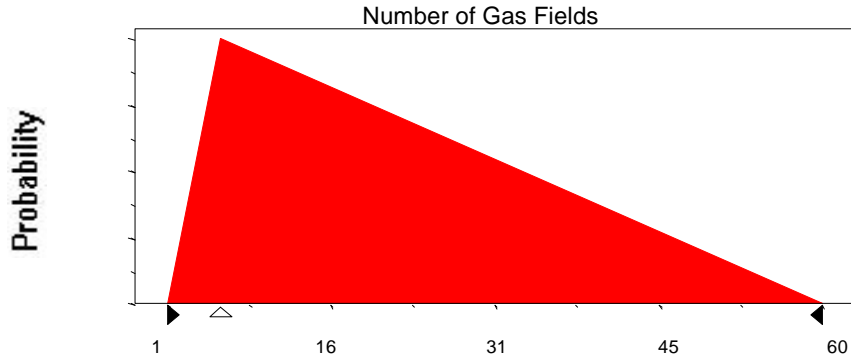Mean value in simulation was 49.96

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum	1
Likeliest	6
Maximum	60

Selected range is from 1 to 60
Mean value in simulation was 22

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Probability

| 1 | 16 | 31 | 45 | 60 |

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	89.34	95.34
Standard Deviation	217.11	217.11

Selected range is from 0.00 to 2,494.00   6.00 to 2,500.00
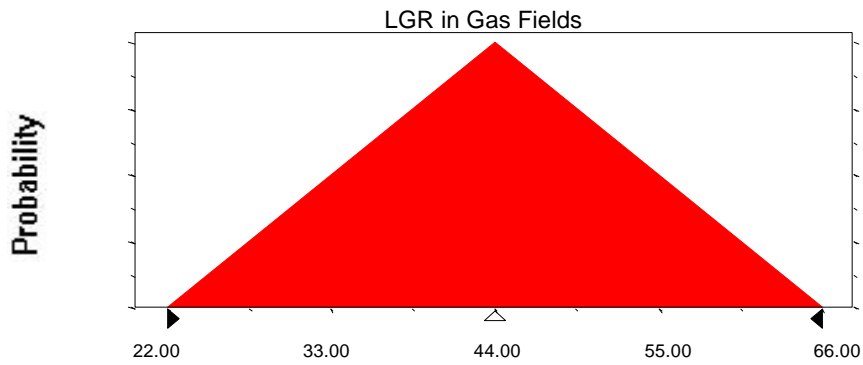Mean value in simulation was 85.36   91.36

Sizes of Gas Fields

Probability

| 0.53 | 550.57 | 1,100.62 | 1,650.67 | 2,200.72 |
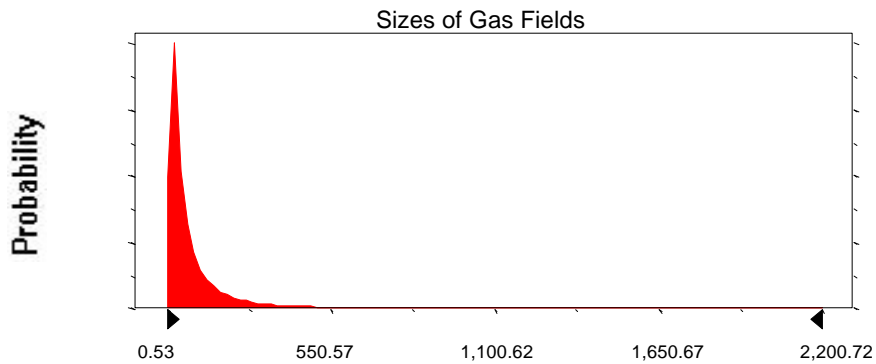
Assumption: LGR in Gas Fields

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 44.06

LGR in Gas Fields

End of Assumptions

Simulation started on 10/7/99 at 16:00:09
Simulation stopped on 10/7/99 at 16:32:35