

Hungarian Paleogene Basin, Assessment Unit 40480601
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	9	42	111	49	10	49	140	59	0	1	4	2	4	12	40	15
Gas Fields	6						59	249	605	280	2	10	26	11	24	63	170	75
Total		1.00	9	42	111	49	69	299	744	339	2	11	30	13				

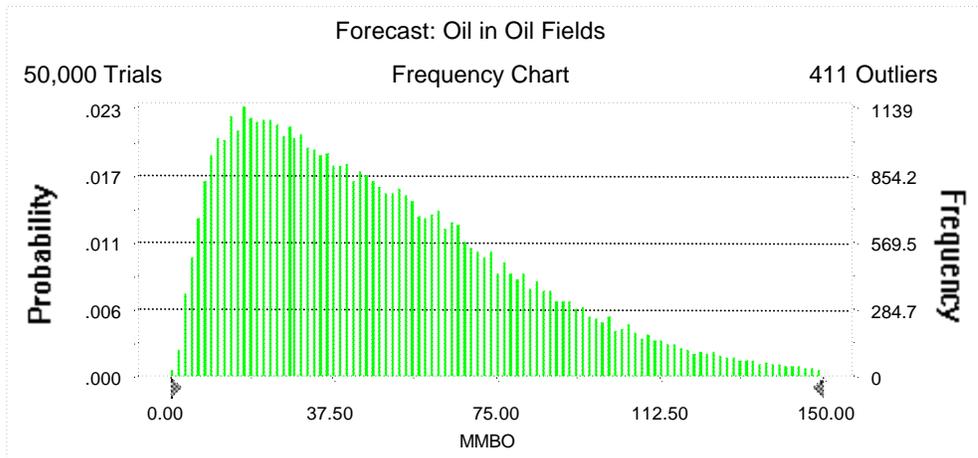
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 150.00 MMBO
Entire range is from 1.05 to 257.25 MMBO
After 50,000 trials, the standard error of the mean is 0.15

Statistics:	Value
Trials	50000
Mean	48.97
Median	42.49
Mode	---
Standard Deviation	32.66
Variance	1,066.77
Skewness	1.02
Kurtosis	4.10
Coefficient of Variability	0.67
Range Minimum	1.05
Range Maximum	257.25
Range Width	256.20
Mean Standard Error	0.15



40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	1.05
95%	9.00
90%	12.82
85%	16.37
80%	19.74
75%	23.21
70%	26.77
65%	30.41
60%	34.24
55%	38.34
50%	42.49
45%	46.92
40%	51.65
35%	56.45
30%	61.91
25%	67.72
20%	74.73
15%	83.29
10%	94.30
5%	111.31
0%	257.25

End of Forecast

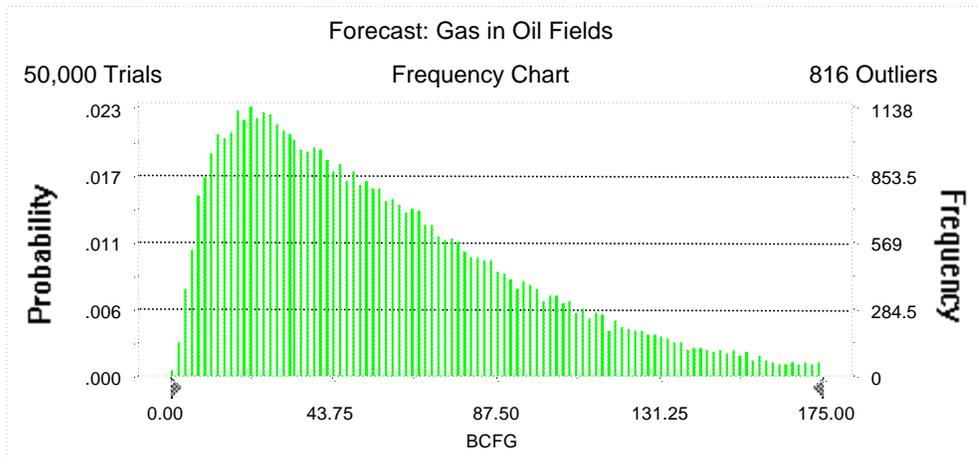
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 175.00 BCFG
Entire range is from 0.97 to 378.98 BCFG
After 50,000 trials, the standard error of the mean is 0.19

Statistics:	Value
Trials	50000
Mean	58.70
Median	49.28
Mode	---
Standard Deviation	41.80
Variance	1,747.23
Skewness	1.26
Kurtosis	5.14
Coefficient of Variability	0.71
Range Minimum	0.97
Range Maximum	378.98
Range Width	378.01
Mean Standard Error	0.19



40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.97
95%	10.08
90%	14.58
85%	18.72
80%	22.65
75%	26.61
70%	30.67
65%	34.97
60%	39.55
55%	44.24
50%	49.28
45%	54.56
40%	60.20
35%	66.26
30%	73.05
25%	80.81
20%	89.84
15%	101.27
10%	115.97
5%	139.52
0%	378.98

End of Forecast

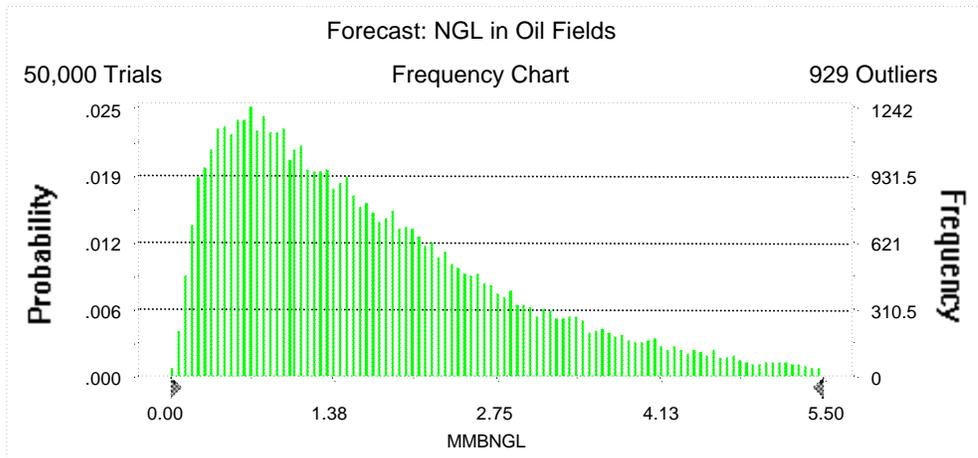
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 5.50 MMBNGL
Entire range is from 0.02 to 13.98 MMBNGL
After 50,000 trials, the standard error of the mean is 0.01

Statistics:	<u>Value</u>
Trials	50000
Mean	1.76
Median	1.43
Mode	---
Standard Deviation	1.33
Variance	1.78
Skewness	1.49
Kurtosis	6.26
Coefficient of Variability	0.76
Range Minimum	0.02
Range Maximum	13.98
Range Width	13.97
Mean Standard Error	0.01



40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.02
95%	0.28
90%	0.42
85%	0.54
80%	0.65
75%	0.77
70%	0.89
65%	1.01
60%	1.14
55%	1.29
50%	1.43
45%	1.59
40%	1.77
35%	1.95
30%	2.16
25%	2.40
20%	2.68
15%	3.06
10%	3.55
5%	4.38
0%	13.98

End of Forecast

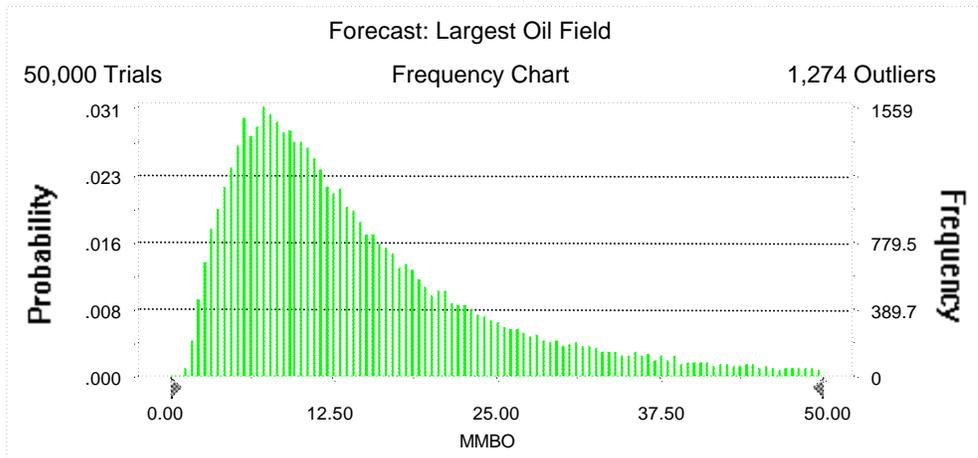
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 50.00 MMBO
Entire range is from 1.05 to 79.97 MMBO
After 50,000 trials, the standard error of the mean is 0.05

Statistics:	Value
Trials	50000
Mean	15.47
Median	11.94
Mode	---
Standard Deviation	12.01
Variance	144.35
Skewness	1.96
Kurtosis	7.78
Coefficient of Variability	0.78
Range Minimum	1.05
Range Maximum	79.97
Range Width	78.92
Mean Standard Error	0.05



40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	1.05
95%	3.64
90%	4.78
85%	5.72
80%	6.58
75%	7.41
70%	8.25
65%	9.11
60%	10.01
55%	10.94
50%	11.94
45%	13.10
40%	14.32
35%	15.77
30%	17.44
25%	19.45
20%	22.04
15%	25.43
10%	30.68
5%	40.11
0%	79.97

End of Forecast

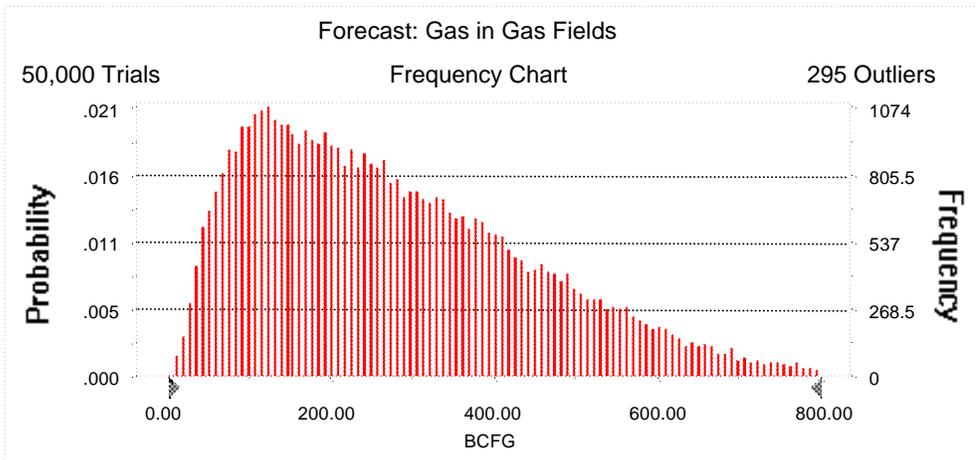
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 800.00 BCFG
 Entire range is from 6.67 to 1,225.55 BCFG
 After 50,000 trials, the standard error of the mean is 0.77

Statistics:	<u>Value</u>
Trials	50000
Mean	280.28
Median	249.45
Mode	---
Standard Deviation	172.50
Variance	29,755.42
Skewness	0.81
Kurtosis	3.33
Coefficient of Variability	0.62
Range Minimum	6.67
Range Maximum	1,225.55
Range Width	1,218.88
Mean Standard Error	0.77



40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	6.67
95%	59.02
90%	82.79
85%	103.17
80%	122.17
75%	141.46
70%	161.84
65%	182.99
60%	203.76
55%	226.55
50%	249.45
45%	273.18
40%	299.51
35%	327.30
30%	356.69
25%	389.04
20%	424.59
15%	469.71
10%	525.29
5%	604.53
0%	1,225.55

End of Forecast

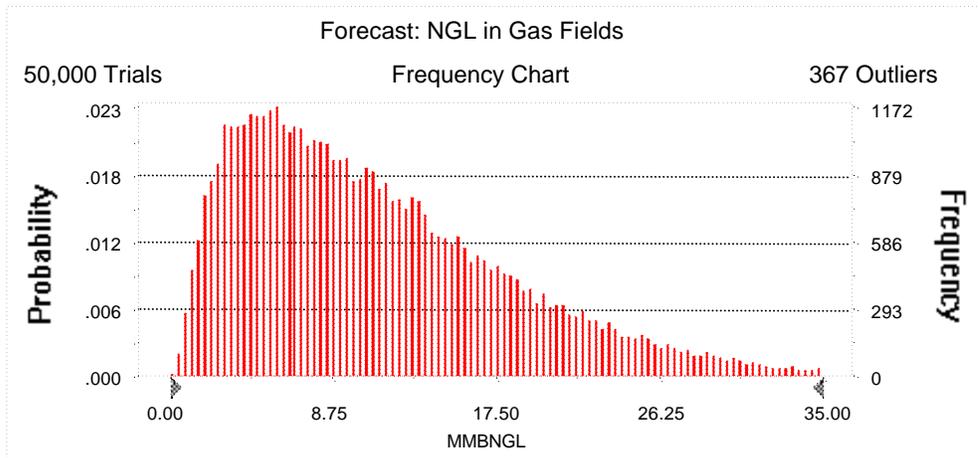
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 35.00 MMBNGL
 Entire range is from 0.20 to 60.58 MMBNGL
 After 50,000 trials, the standard error of the mean is 0.03

Statistics:	<u>Value</u>
Trials	50000
Mean	11.20
Median	9.65
Mode	---
Standard Deviation	7.42
Variance	54.99
Skewness	1.08
Kurtosis	4.31
Coefficient of Variability	0.66
Range Minimum	0.20
Range Maximum	60.58
Range Width	60.38
Mean Standard Error	0.03



40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.20
95%	2.21
90%	3.12
85%	3.92
80%	4.69
75%	5.46
70%	6.22
65%	7.03
60%	7.87
55%	8.73
50%	9.65
45%	10.65
40%	11.64
35%	12.78
30%	13.95
25%	15.39
20%	16.98
15%	18.92
10%	21.54
5%	25.52
0%	60.58

End of Forecast

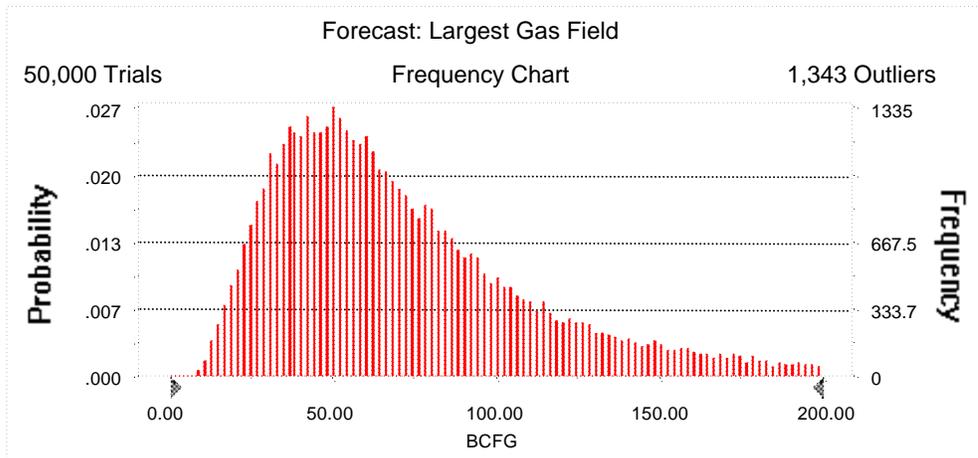
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 200.00 BCFG
 Entire range is from 6.67 to 299.98 BCFG
 After 50,000 trials, the standard error of the mean is 0.21

Statistics:	<u>Value</u>
Trials	50000
Mean	74.94
Median	63.07
Mode	---
Standard Deviation	46.43
Variance	2,156.12
Skewness	1.59
Kurtosis	6.11
Coefficient of Variability	0.62
Range Minimum	6.67
Range Maximum	299.98
Range Width	293.31
Mean Standard Error	0.21



40480601
Hungarian Paleogene Basin
Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	6.67
95%	23.84
90%	29.72
85%	34.41
80%	38.54
75%	42.63
70%	46.76
65%	50.71
60%	54.58
55%	58.84
50%	63.07
45%	67.92
40%	73.18
35%	79.24
30%	85.73
25%	93.57
20%	103.54
15%	116.43
10%	135.88
5%	169.97
0%	299.98

End of Forecast

40480601
Hungarian Paleogene Basin
Monte Carlo Results

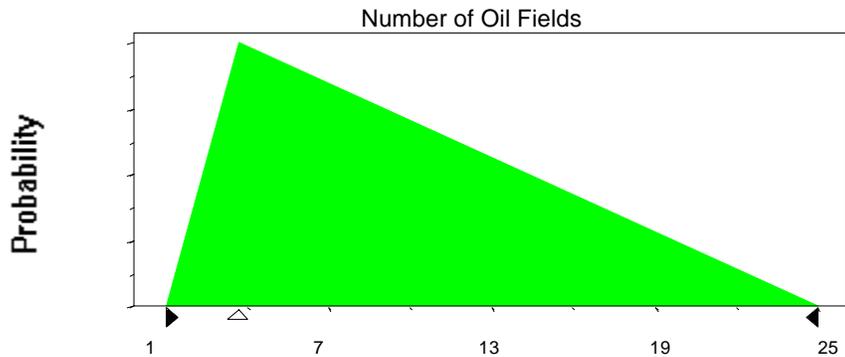
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	4
Maximum	25

Selected range is from 1 to 25
Mean value in simulation was 10



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	4.06
Standard Deviation	7.17

Shifted parameters

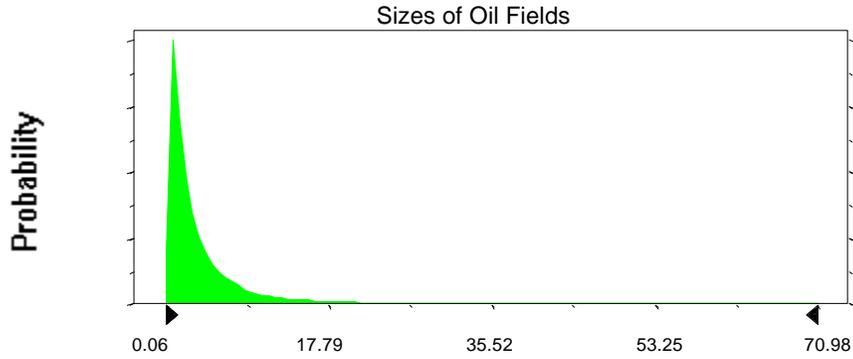
5.06
7.17

Selected range is from 0.00 to 79.00
Mean value in simulation was 3.94

1.00 to 80.00
4.94

40480601
Hungarian Paleogene Basin
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)



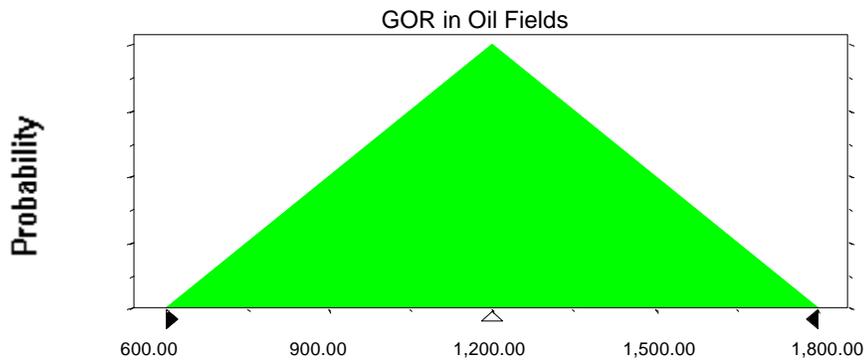
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	600.00
Likeliest	1,200.00
Maximum	1,800.00

Selected range is from 600.00 to 1,800.00

Mean value in simulation was 1,197.94



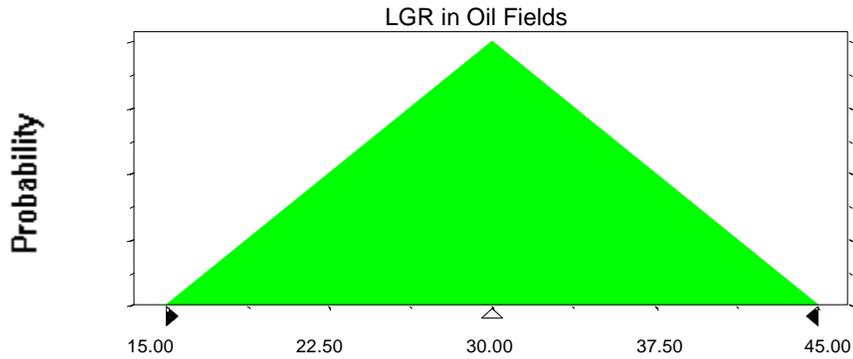
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	15.00
Likeliest	30.00
Maximum	45.00

Selected range is from 15.00 to 45.00
Mean value in simulation was 29.99



Assumption: Number of Gas Fields

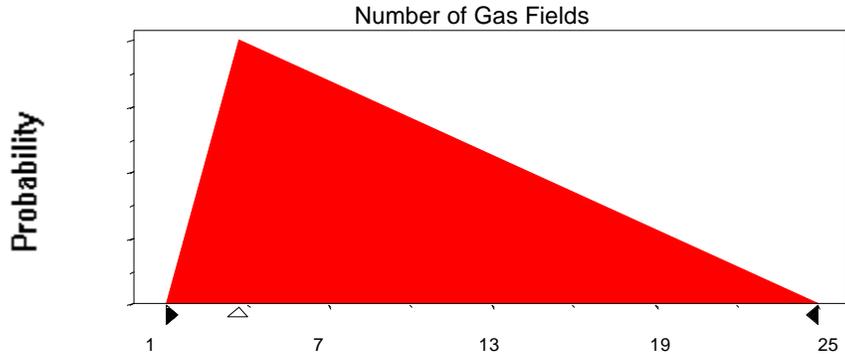
Triangular distribution with parameters:

Minimum	1
Likeliest	4
Maximum	25

Selected range is from 1 to 25
Mean value in simulation was 10

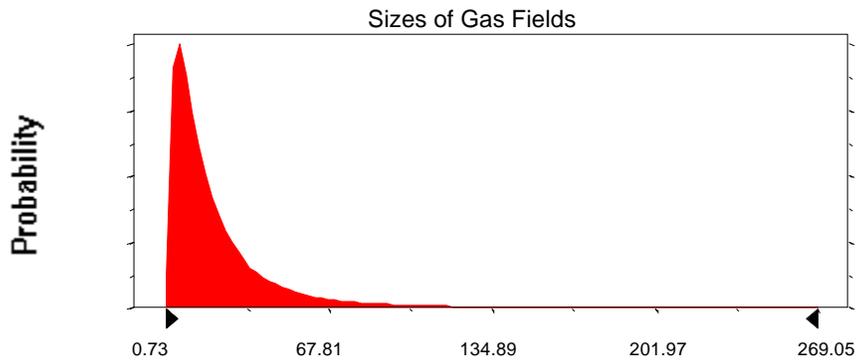
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	22.75	28.75
Standard Deviation	29.13	29.13
Selected range is from 0.00 to 294.00		6.00 to 300.00
Mean value in simulation was 22.54		28.54



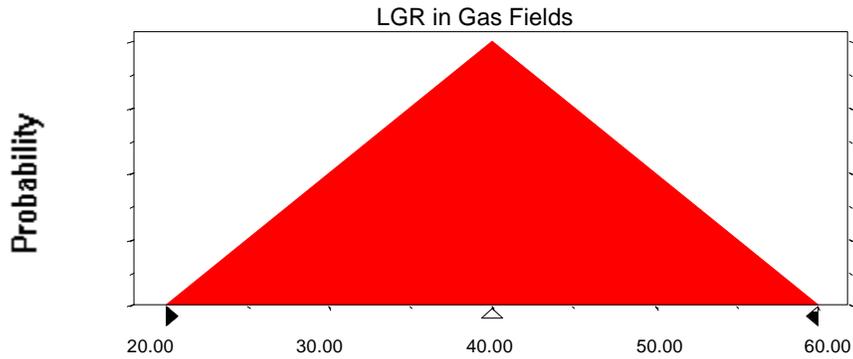
40480601
Hungarian Paleogene Basin
Monte Carlo Results

Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	20.00
Likeliest	40.00
Maximum	60.00

Selected range is from 20.00 to 60.00
Mean value in simulation was 39.97



End of Assumptions

Simulation started on 1/28/00 at 15:19:17
Simulation stopped on 1/28/00 at 15:39:02