

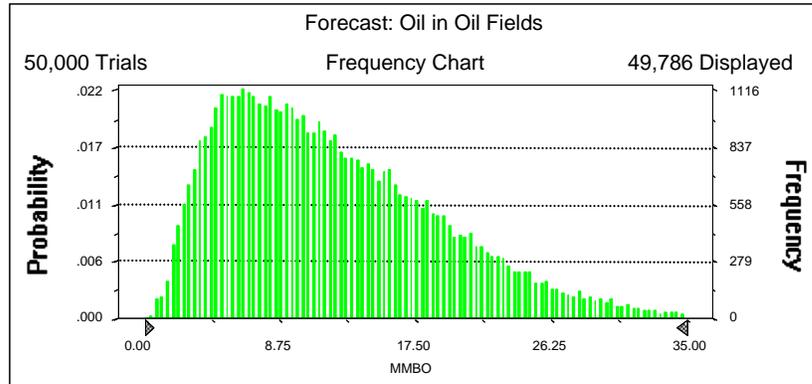
50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 35.00 MMBO
Entire range is from 0.59 to 61.51 MMBO
After 50,000 trials, the standard error of the mean is 0.03

Statistics:	Value
Trials	50000
Mean	12.24
Median	10.99
Mode	---
Standard Deviation	7.00
Variance	48.94
Skewness	0.82
Kurtosis	3.44
Coefficient of Variability	0.57
Range Minimum	0.59
Range Maximum	61.51
Range Width	60.91
Mean Standard Error	0.03



50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	0.59
95%	3.19
90%	4.24
85%	5.11
80%	5.92
75%	6.72
70%	7.54
65%	8.35
60%	9.21
55%	10.06
50%	10.99
45%	11.94
40%	12.97
35%	14.09
30%	15.30
25%	16.58
20%	18.09
15%	19.76
10%	22.01
5%	25.36
0%	61.51

End of Forecast

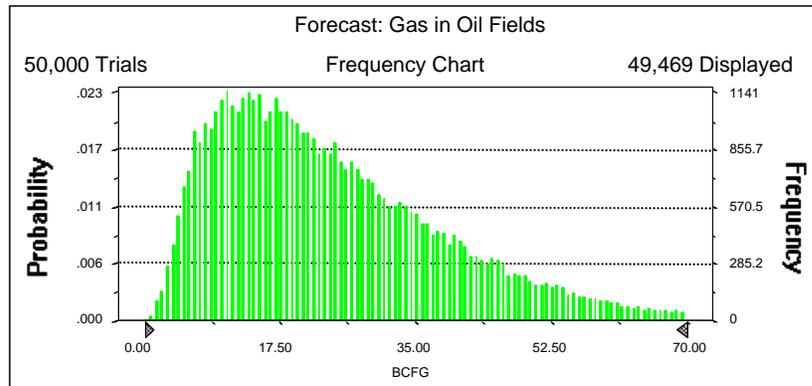
50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 70.00 BCFG
Entire range is from 0.86 to 120.83 BCFG
After 50,000 trials, the standard error of the mean is 0.07

Statistics:	Value
Trials	50000
Mean	24.49
Median	21.31
Mode	---
Standard Deviation	15.14
Variance	229.13
Skewness	1.07
Kurtosis	4.28
Coefficient of Variability	0.62
Range Minimum	0.86
Range Maximum	120.83
Range Width	119.97
Mean Standard Error	0.07



50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.86
95%	5.95
90%	7.95
85%	9.70
80%	11.28
75%	12.93
70%	14.49
65%	16.14
60%	17.77
55%	19.47
50%	21.31
45%	23.29
40%	25.36
35%	27.61
30%	30.08
25%	33.02
20%	36.26
15%	40.29
10%	45.51
5%	53.74
0%	120.83

End of Forecast

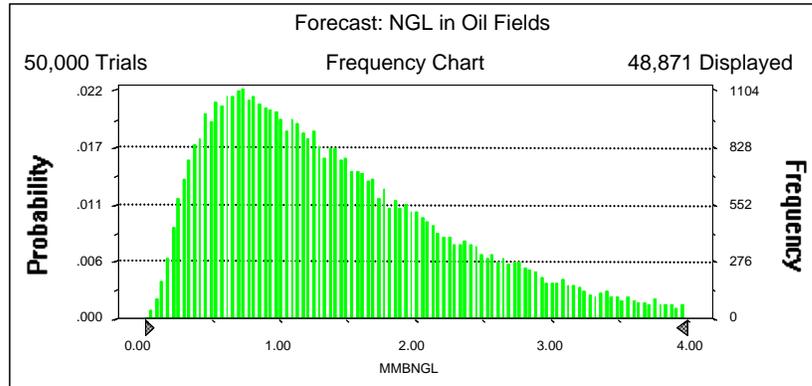
50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 4.00 MMBNGL
Entire range is from 0.05 to 8.16 MMBNGL
After 50,000 trials, the standard error of the mean is 0.00

Statistics:	Value
Trials	50000
Mean	1.47
Median	1.25
Mode	---
Standard Deviation	0.97
Variance	0.95
Skewness	1.28
Kurtosis	5.14
Coefficient of Variability	0.66
Range Minimum	0.05
Range Maximum	8.16
Range Width	8.11
Mean Standard Error	0.00



50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.05
95%	0.33
90%	0.45
85%	0.55
80%	0.65
75%	0.74
70%	0.83
65%	0.93
60%	1.03
55%	1.14
50%	1.25
45%	1.37
40%	1.49
35%	1.63
30%	1.79
25%	1.97
20%	2.18
15%	2.45
10%	2.79
5%	3.37
0%	8.16

End of Forecast

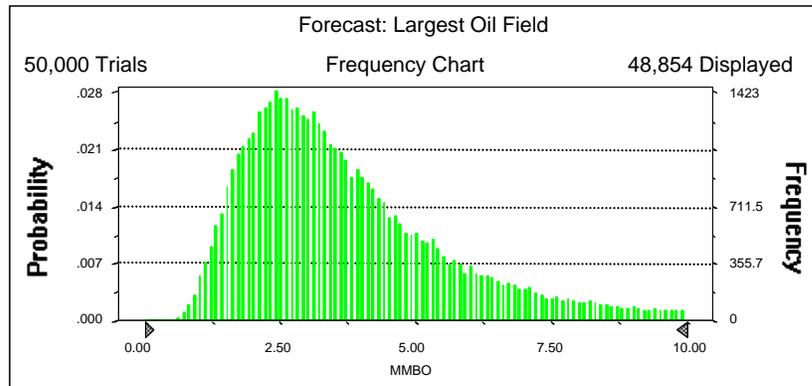
50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 10.00 MMBO
Entire range is from 0.59 to 14.98 MMBO
After 50,000 trials, the standard error of the mean is 0.01

Statistics:	Value
Trials	50000
Mean	3.87
Median	3.33
Mode	---
Standard Deviation	2.17
Variance	4.70
Skewness	1.62
Kurtosis	6.40
Coefficient of Variability	0.56
Range Minimum	0.59
Range Maximum	14.98
Range Width	14.39
Mean Standard Error	0.01



50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	0.59
95%	1.47
90%	1.76
85%	1.98
80%	2.19
75%	2.38
70%	2.55
65%	2.74
60%	2.93
55%	3.13
50%	3.33
45%	3.55
40%	3.79
35%	4.07
30%	4.38
25%	4.74
20%	5.21
15%	5.80
10%	6.68
5%	8.25
0%	14.98

End of Forecast

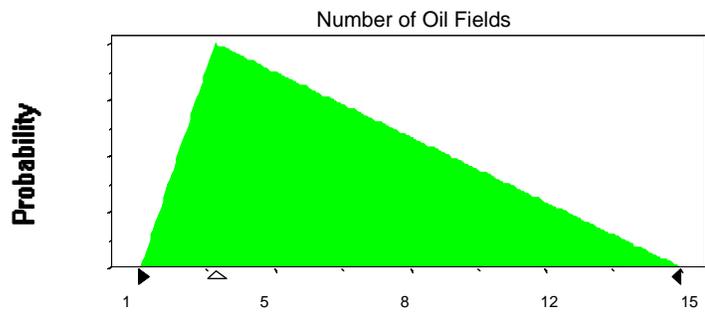
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	3
Maximum	15

Selected range is from 1 to 15



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

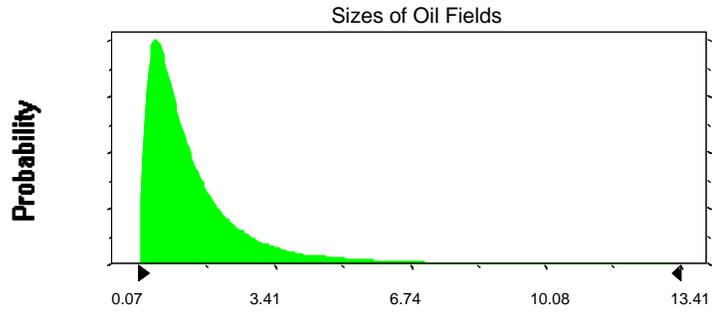
Mean	1.45	Shifted parameters	1.95
Standard Deviation	1.54		1.54

Selected range is from 0.00 to 14.50

0.50 to 15.00

50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)

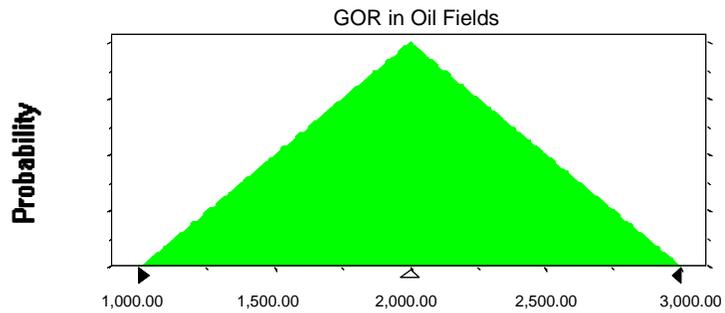


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,000.00
Likeliest	2,000.00
Maximum	3,000.00

Selected range is from 1,000.00 to 3,000.00



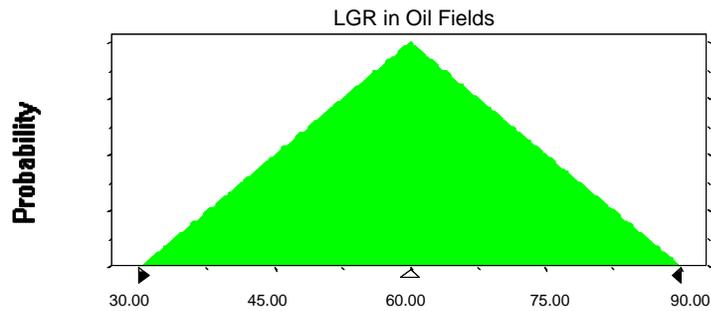
50350301
Upper Fort Union Sandstones Conventional Oil
Monte Carlo Results

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



End of Assumptions

Simulation started on 10/3/05 at 13:09:23
Simulation stopped on 10/3/05 at 13:11:17



***Click here to return to
Chapter 2***