

Western Shelf and Slope, Assessment Unit 80470201
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	2	1.00	18	57	133	64	36	121	307	140	2	7	19	8	6	16	46	19
Gas Fields	12						828	3,908	9,981	4,473	8	38	117	47	193	822	3,001	1,090
Total		1.00	18	57	133	64	864	4,030	10,288	4,613	10	46	136	56				

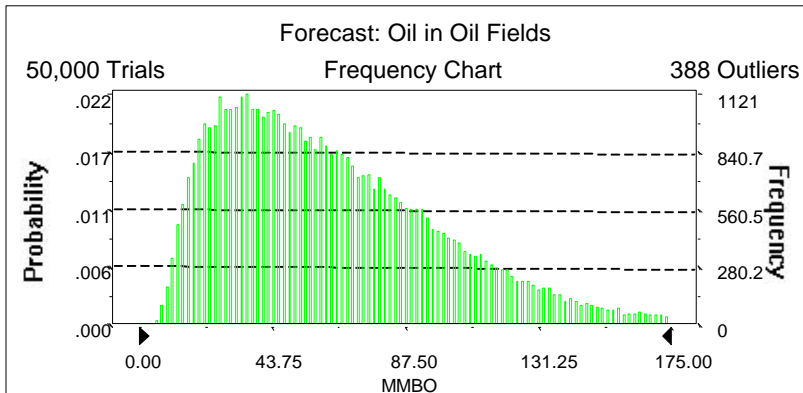
80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 175.00 MMBO
Entire range is from 4.78 to 374.46 MMBO
After 50,000 trials, the standard error of the mean is 0.16

Statistics:	Value
Trials	50000
Mean	63.73
Median	57.01
Mode	---
Standard Deviation	36.46
Variance	1,329.32
Skewness	0.94
Kurtosis	3.89
Coefficient of Variability	0.57
Range Minimum	4.78
Range Maximum	374.46
Range Width	369.68
Mean Standard Error	0.16



80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	4.78
95%	17.73
90%	22.57
85%	26.99
80%	31.14
75%	35.14
70%	39.18
65%	43.45
60%	47.68
55%	52.30
50%	57.01
45%	61.94
40%	67.10
35%	72.63
30%	78.88
25%	85.54
20%	93.13
15%	102.29
10%	114.28
5%	132.83
0%	374.46

End of Forecast

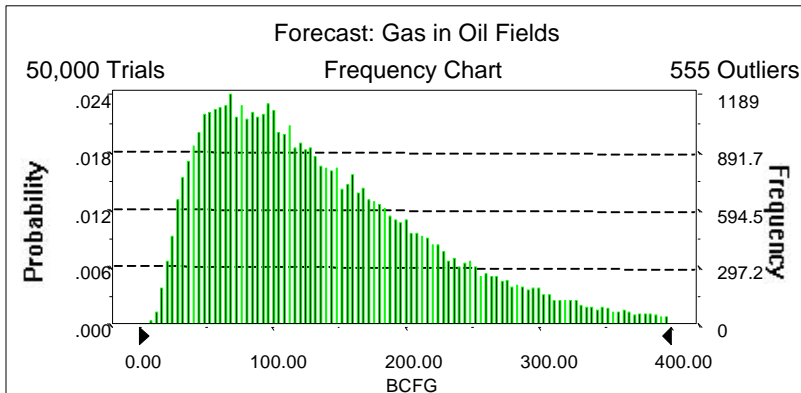
80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 400.00 BCFG
Entire range is from 6.61 to 708.25 BCFG
After 50,000 trials, the standard error of the mean is 0.39

Statistics:	<u>Value</u>
Trials	50000
Mean	140.14
Median	121.47
Mode	---
Standard Deviation	86.49
Variance	7,480.88
Skewness	1.16
Kurtosis	4.64
Coefficient of Variability	0.62
Range Minimum	6.61
Range Maximum	708.25
Range Width	701.64
Mean Standard Error	0.39



80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	6.61
95%	36.17
90%	47.04
85%	56.34
80%	65.23
75%	73.93
70%	83.13
65%	92.34
60%	101.35
55%	111.10
50%	121.47
45%	132.33
40%	144.30
35%	157.59
30%	171.12
25%	187.09
20%	205.72
15%	228.23
10%	259.57
5%	307.18
0%	708.25

End of Forecast

80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: NGL in Oil Fields

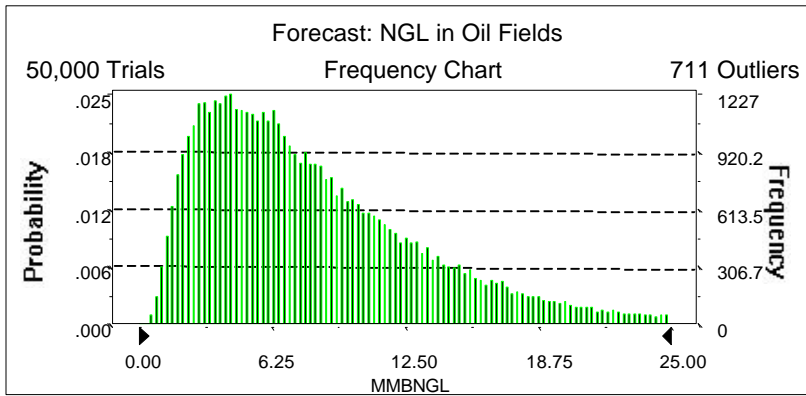
Summary:

Display range is from 0.00 to 25.00 MMBNGL

Entire range is from 0.31 to 53.44 MMBNGL

After 50,000 trials, the standard error of the mean is 0.02

Statistics:	Value
Trials	50000
Mean	8.39
Median	7.06
Mode	---
Standard Deviation	5.56
Variance	30.94
Skewness	1.39
Kurtosis	5.72
Coefficient of Variability	0.66
Range Minimum	0.31
Range Maximum	53.44
Range Width	53.13
Mean Standard Error	0.02



80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.31
95%	2.03
90%	2.66
85%	3.19
80%	3.73
75%	4.25
70%	4.78
65%	5.33
60%	5.89
55%	6.45
50%	7.06
45%	7.75
40%	8.45
35%	9.23
30%	10.15
25%	11.16
20%	12.37
15%	13.86
10%	15.89
5%	19.22
0%	53.44

End of Forecast

80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Largest Oil Field

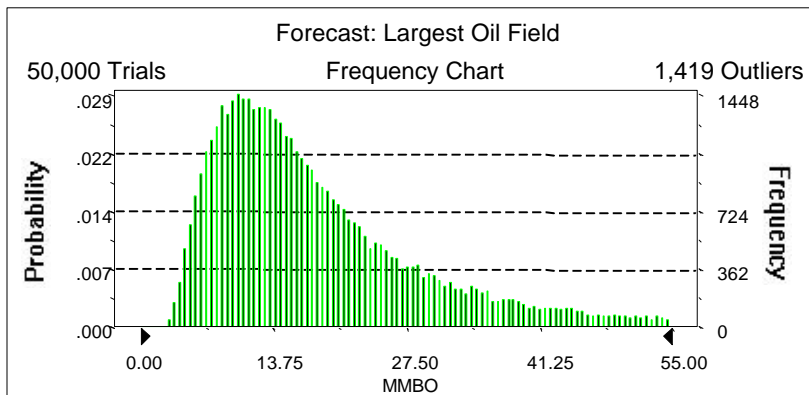
Summary:

Display range is from 0.00 to 55.00 MMBO

Entire range is from 2.46 to 89.85 MMBO

After 50,000 trials, the standard error of the mean is 0.06

Statistics:	Value
Trials	50000
Mean	19.37
Median	15.62
Mode	---
Standard Deviation	13.24
Variance	175.18
Skewness	1.92
Kurtosis	7.69
Coefficient of Variability	0.68
Range Minimum	2.46
Range Maximum	89.85
Range Width	87.40
Mean Standard Error	0.06



80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	2.46
95%	6.09
90%	7.37
85%	8.49
80%	9.49
75%	10.45
70%	11.42
65%	12.43
60%	13.43
55%	14.47
50%	15.62
45%	16.87
40%	18.25
35%	19.83
30%	21.65
25%	23.89
20%	26.74
15%	30.57
10%	36.06
5%	46.10
0%	89.85

End of Forecast

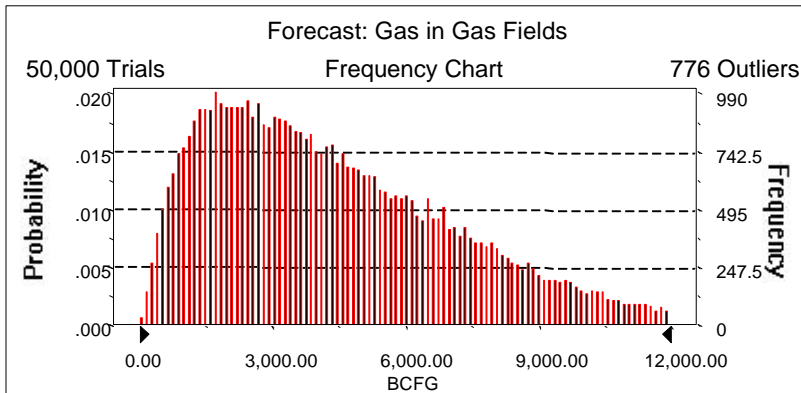
80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 12,000.00 BCFG
Entire range is from 48.03 to 24,201.24 BCFG
After 50,000 trials, the standard error of the mean is 12.91

Statistics:	Value
Trials	50000
Mean	4,472.52
Median	3,908.05
Mode	---
Standard Deviation	2,887.21
Variance	8,335,968.69
Skewness	0.89
Kurtosis	3.55
Coefficient of Variability	0.65
Range Minimum	48.03
Range Maximum	24,201.24
Range Width	24,153.21
Mean Standard Error	12.91



80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	48.03
95%	828.03
90%	1,219.83
85%	1,551.07
80%	1,868.13
75%	2,186.89
70%	2,509.97
65%	2,844.85
60%	3,186.29
55%	3,538.05
50%	3,908.05
45%	4,310.26
40%	4,723.48
35%	5,173.12
30%	5,678.32
25%	6,230.84
20%	6,864.09
15%	7,596.69
10%	8,545.83
5%	9,981.24
0%	24,201.24

End of Forecast

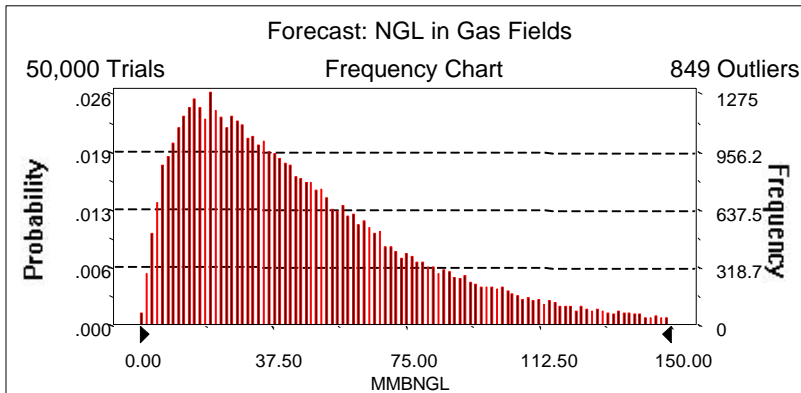
80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 150.00 MMBNGL
Entire range is from 0.39 to 303.98 MMBNGL
After 50,000 trials, the standard error of the mean is 0.16

Statistics:	Value
Trials	50000
Mean	47.22
Median	38.48
Mode	---
Standard Deviation	35.37
Variance	1,251.10
Skewness	1.43
Kurtosis	5.70
Coefficient of Variability	0.75
Range Minimum	0.39
Range Maximum	303.98
Range Width	303.59
Mean Standard Error	0.16



80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.39
95%	7.64
90%	11.43
85%	14.67
80%	17.74
75%	20.87
70%	24.11
65%	27.43
60%	30.93
55%	34.63
50%	38.48
45%	42.58
40%	47.20
35%	52.06
30%	57.76
25%	64.11
20%	71.70
15%	81.81
10%	95.20
5%	117.02
0%	303.98

End of Forecast

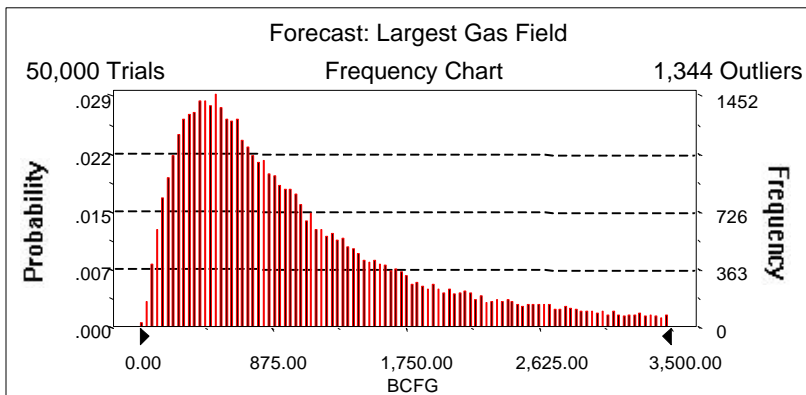
80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 3,500.00 BCFG
Entire range is from 18.93 to 4,496.72 BCFG
After 50,000 trials, the standard error of the mean is 3.90

Statistics:	Value
Trials	50000
Mean	1,089.72
Median	822.00
Mode	---
Standard Deviation	871.93
Variance	760,262.62
Skewness	1.49
Kurtosis	5.01
Coefficient of Variability	0.80
Range Minimum	18.93
Range Maximum	4,496.72
Range Width	4,477.79
Mean Standard Error	3.90



80470201
Western Shelf and Slope
Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	18.93
95%	193.45
90%	273.88
85%	340.92
80%	405.06
75%	466.54
70%	528.15
65%	594.23
60%	661.60
55%	737.67
50%	822.00
45%	911.49
40%	1,011.92
35%	1,128.90
30%	1,270.00
25%	1,434.66
20%	1,645.21
15%	1,932.19
10%	2,352.09
5%	3,000.84
0%	4,496.72

End of Forecast

80470201
Western Shelf and Slope
Monte Carlo Results

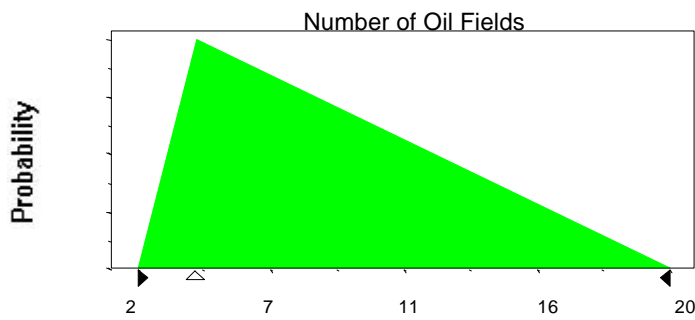
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	2
Likeliest	4
Maximum	20

Selected range is from 2 to 20
Mean value in simulation was 9



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

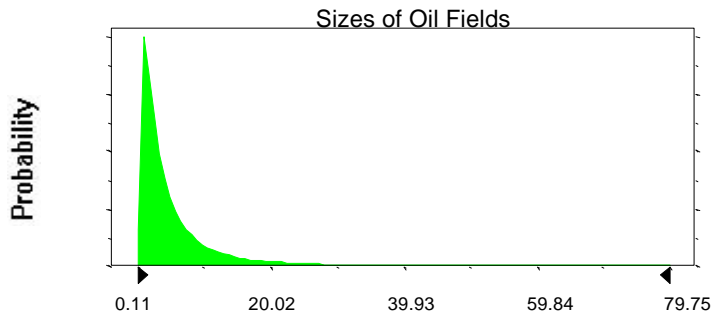
Mean	5.45	Shifted parameters	7.45
Standard Deviation	8.28		8.28

Selected range is from 0.00 to 88.00
Mean value in simulation was 5.38

2.00 to 90.00
7.38

80470201
Western Shelf and Slope
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)

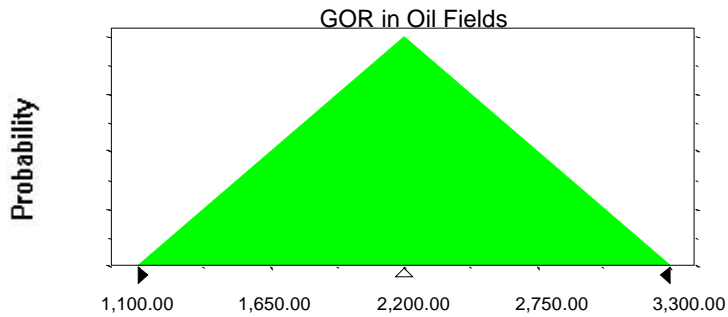


Assumption: GOR in Oil Fields

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 2,199.65



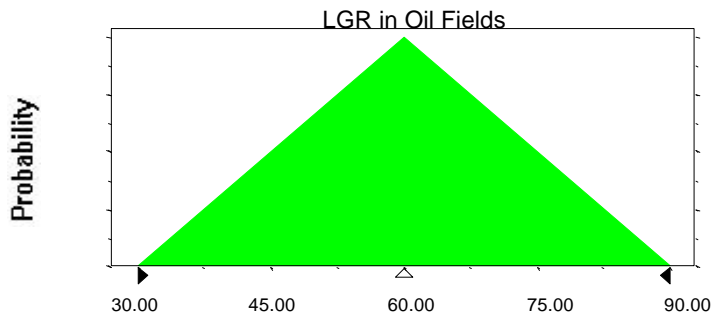
80470201
Western Shelf and Slope
Monte Carlo Results

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
Mean value in simulation was 59.88



Assumption: Number of Gas Fields

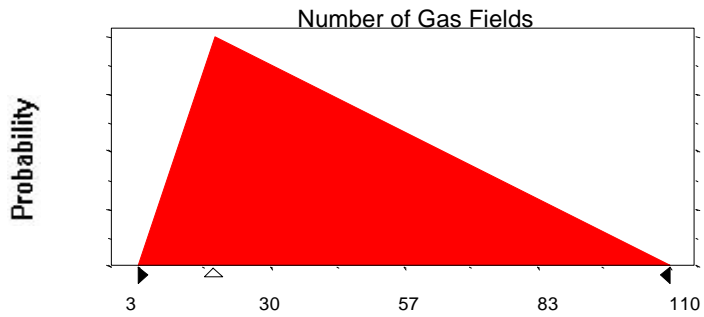
Triangular distribution with parameters:

Minimum	3
Likeliest	18
Maximum	110

Selected range is from 3 to 110
Mean value in simulation was 44

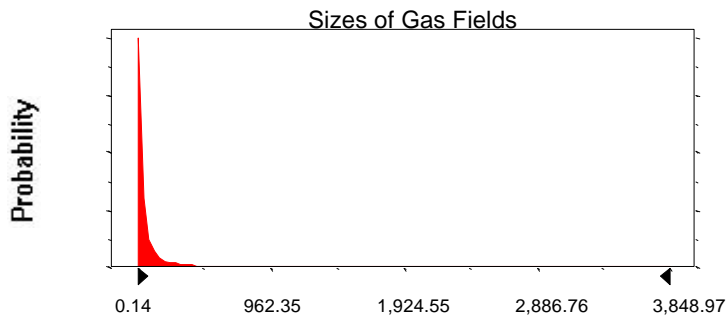
80470201
Western Shelf and Slope
Monte Carlo Results

Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	98.68	110.68
Standard Deviation	411.72	411.72
Selected range is from 0.00 to 4,488.00	12.00 to 4,500.00	
Mean value in simulation was 87.93	99.93	



80470201
Western Shelf and Slope
Monte Carlo Results

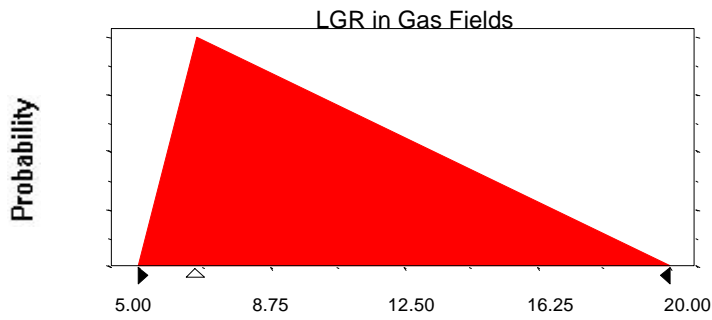
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	5.00
Likeliest	6.67
Maximum	20.00

Selected range is from 5.00 to 20.00

Mean value in simulation was 10.56



End of Assumptions

Simulation started on 8/24/99 at 13:33:15
Simulation stopped on 8/24/99 at 14:04:34