Go to Table of Contents

Go to index map

Jurassic-Tertiary Reservoirs, Assessment Unit 11500201
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	3	1.00	36	124	295	139	27	96	248	111	1	6	16	7	11	33	105	42
Gas Fields	18						680	1,900	3,986	2,069	19	56	127	62	123	307	810	362
Total		1.00	36	124	295	139	707	1,996	4,234	2,180	20	61	143	69				

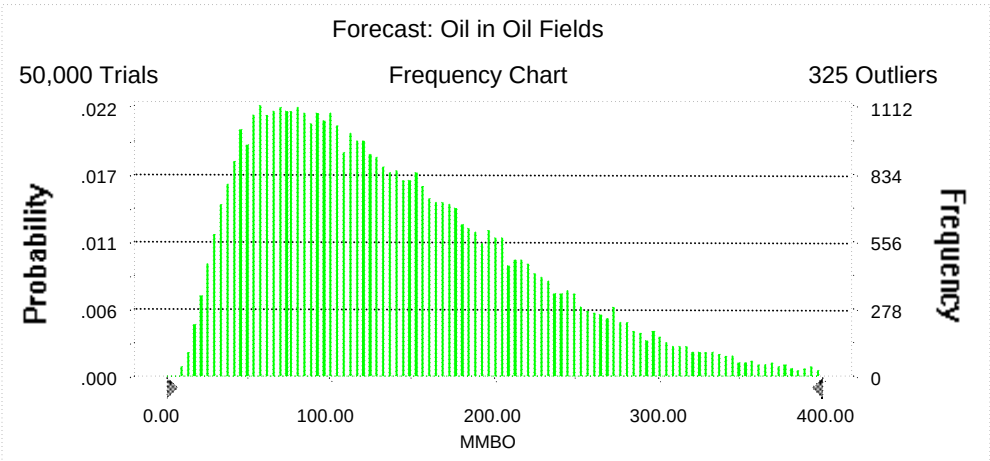
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 400.00 MMBO
Entire range is from 7.38 to 723.31 MMBO
After 50,000 trials, the standard error of the mean is 0.37

Statistics:	Value
Trials	50000
Mean	139.33
Median	123.59
Mode	---
Standard Deviation	82.17
Variance	6,751.62
Skewness	0.97
Kurtosis	4.00
Coefficient of Variability	0.59
Range Minimum	7.38
Range Maximum	723.31
Range Width	715.93
Mean Standard Error	0.37



11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	7.38
95%	36.18
90%	47.34
85%	57.23
80%	66.23
75%	75.35
70%	84.41
65%	93.86
60%	103.14
55%	113.29
50%	123.59
45%	134.58
40%	146.43
35%	158.81
30%	172.59
25%	187.78
20%	205.05
15%	225.62
10%	252.93
5%	295.48
0%	723.31

End of Forecast

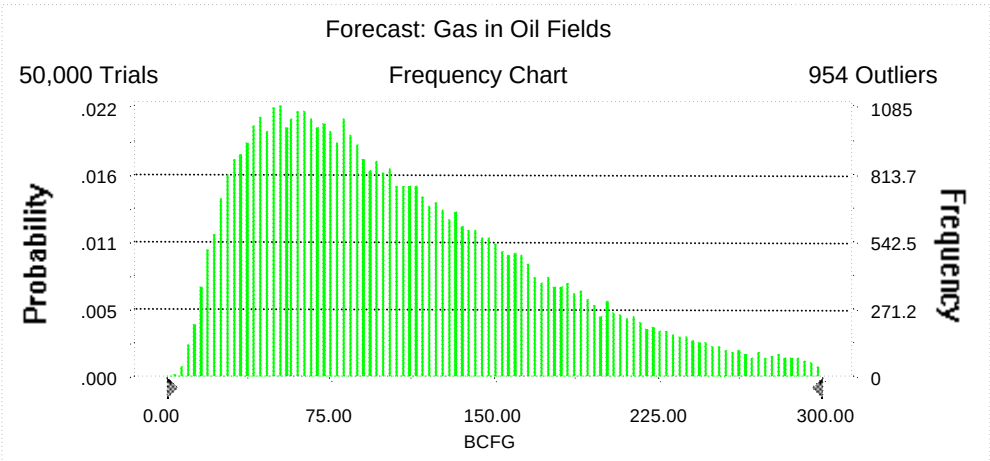
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 300.00 BCFG
Entire range is from 4.26 to 700.48 BCFG
After 50,000 trials, the standard error of the mean is 0.32

Statistics:	Value
Trials	50000
Mean	111.42
Median	95.84
Mode	---
Standard Deviation	71.05
Variance	5,047.51
Skewness	1.23
Kurtosis	5.05
Coefficient of Variability	0.64
Range Minimum	4.26
Range Maximum	700.48
Range Width	696.22
Mean Standard Error	0.32



11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	4.26
95%	26.81
90%	35.61
85%	43.14
80%	50.45
75%	57.68
70%	64.78
65%	72.10
60%	79.62
55%	87.33
50%	95.84
45%	104.68
40%	114.50
35%	124.99
30%	136.58
25%	149.59
20%	164.42
15%	183.48
10%	208.09
5%	247.98
0%	700.48

End of Forecast

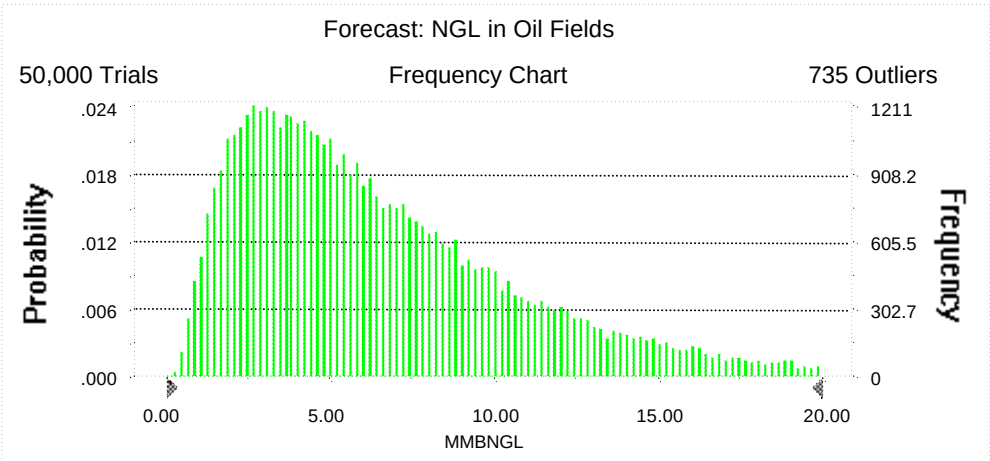
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 20.00 MMBNGL
Entire range is from 0.21 to 43.42 MMBNGL
After 50,000 trials, the standard error of the mean is 0.02

Statistics:	Value
Trials	50000
Mean	6.69
Median	5.59
Mode	---
Standard Deviation	4.56
Variance	20.80
Skewness	1.42
Kurtosis	6.01
Coefficient of Variability	0.68
Range Minimum	0.21
Range Maximum	43.42
Range Width	43.21
Mean Standard Error	0.02



11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.21
95%	1.50
90%	2.01
85%	2.47
80%	2.88
75%	3.30
70%	3.73
65%	4.17
60%	4.61
55%	5.09
50%	5.59
45%	6.14
40%	6.74
35%	7.39
30%	8.12
25%	8.94
20%	9.92
15%	11.18
10%	12.85
5%	15.59
0%	43.42

End of Forecast

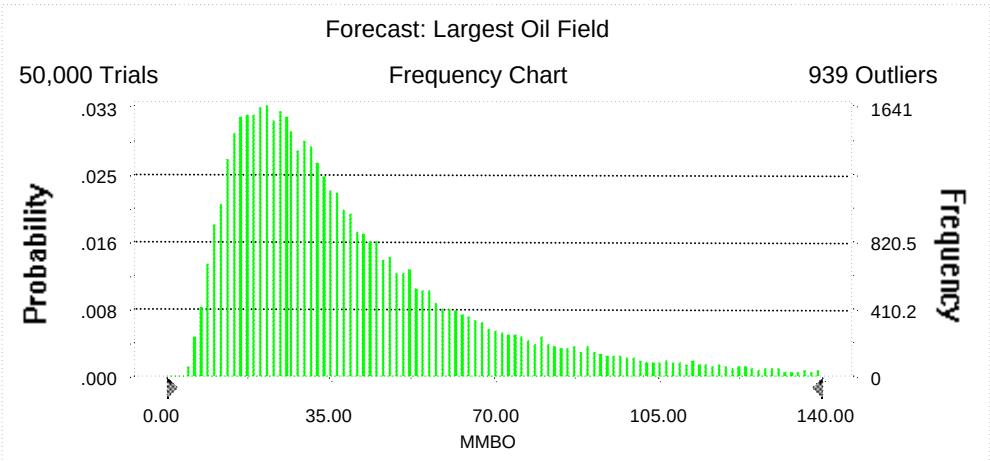
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 140.00 MMBO
Entire range is from 3.94 to 199.88 MMBO
After 50,000 trials, the standard error of the mean is 0.14

Statistics:	Value
Trials	50000
Mean	41.51
Median	32.58
Mode	---
Standard Deviation	30.48
Variance	929.01
Skewness	1.90
Kurtosis	7.41
Coefficient of Variability	0.73
Range Minimum	3.94
Range Maximum	199.88
Range Width	195.94
Mean Standard Error	0.14



11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	3.94
95%	11.43
90%	14.26
85%	16.53
80%	18.74
75%	20.92
70%	23.10
65%	25.31
60%	27.56
55%	30.09
50%	32.58
45%	35.39
40%	38.61
35%	42.33
30%	46.56
25%	51.79
20%	58.18
15%	67.18
10%	80.70
5%	104.95
0%	199.88

End of Forecast

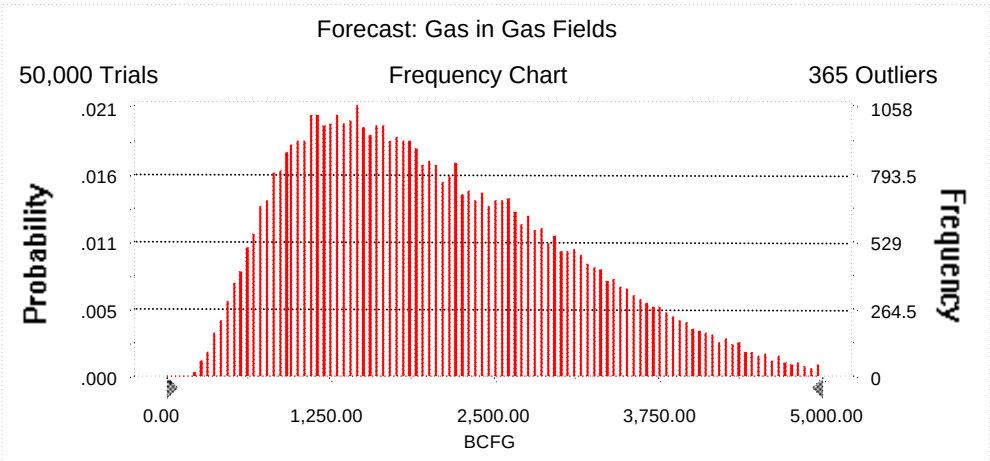
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 5,000.00 BCFG
Entire range is from 186.02 to 7,110.49 BCFG
After 50,000 trials, the standard error of the mean is 4.62

Statistics:	Value
Trials	50000
Mean	2,068.86
Median	1,900.05
Mode	---
Standard Deviation	1,032.87
Variance	1,066,829.88
Skewness	0.69
Kurtosis	3.08
Coefficient of Variability	0.50
Range Minimum	186.02
Range Maximum	7,110.49
Range Width	6,924.46
Mean Standard Error	4.62



11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	186.02
95%	679.98
90%	857.67
85%	1,002.75
80%	1,134.18
75%	1,257.91
70%	1,385.15
65%	1,506.12
60%	1,633.37
55%	1,765.56
50%	1,900.05
45%	2,046.99
40%	2,204.08
35%	2,369.58
30%	2,550.61
25%	2,739.69
20%	2,956.44
15%	3,206.86
10%	3,524.44
5%	3,985.66
0%	7,110.49

End of Forecast

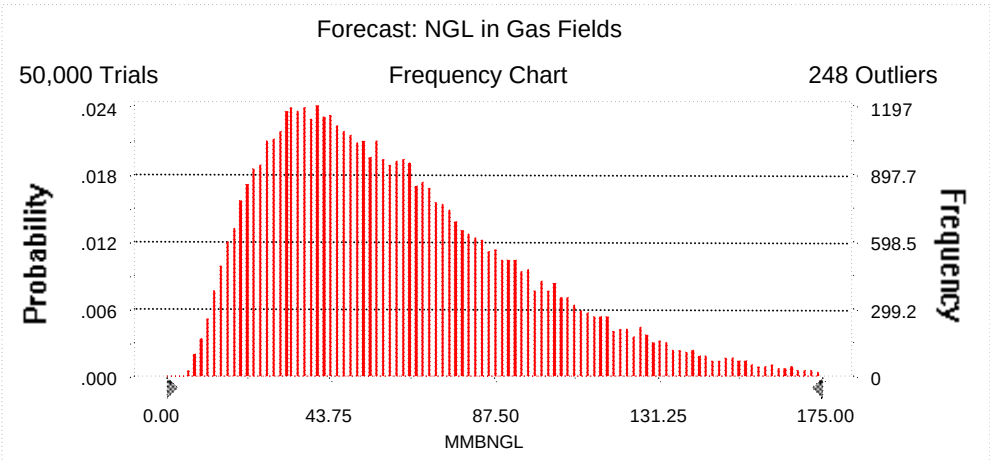
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 175.00 MMBNGL
Entire range is from 4.68 to 246.67 MMBNGL
After 50,000 trials, the standard error of the mean is 0.15

Statistics:	Value
Trials	50000
Mean	62.17
Median	55.90
Mode	---
Standard Deviation	34.06
Variance	1,160.37
Skewness	0.95
Kurtosis	3.86
Coefficient of Variability	0.55
Range Minimum	4.68
Range Maximum	246.67
Range Width	241.99
Mean Standard Error	0.15



11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	4.68
95%	18.75
90%	24.04
85%	28.44
80%	32.40
75%	36.14
70%	39.83
65%	43.62
60%	47.45
55%	51.56
50%	55.90
45%	60.25
40%	64.84
35%	69.79
30%	75.33
25%	81.72
20%	89.22
15%	97.94
10%	109.51
5%	127.35
0%	246.67

End of Forecast

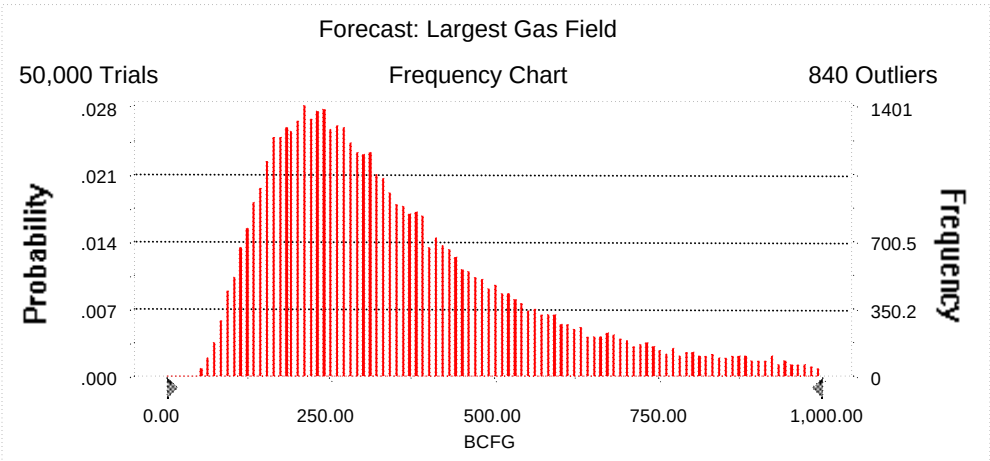
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 1,000.00 BCFG
Entire range is from 41.98 to 1,199.70 BCFG
After 50,000 trials, the standard error of the mean is 0.95

Statistics:	Value
Trials	50000
Mean	362.13
Median	307.00
Mode	---
Standard Deviation	211.37
Variance	44,678.27
Skewness	1.33
Kurtosis	4.72
Coefficient of Variability	0.58
Range Minimum	41.98
Range Maximum	1,199.70
Range Width	1,157.72
Mean Standard Error	0.95



11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	41.98
95%	123.24
90%	150.86
85%	171.84
80%	191.50
75%	210.61
70%	228.81
65%	246.99
60%	265.91
55%	286.07
50%	307.00
45%	329.57
40%	355.45
35%	384.18
30%	416.78
25%	455.92
20%	505.08
15%	567.47
10%	659.27
5%	810.37
0%	1,199.70

End of Forecast

11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

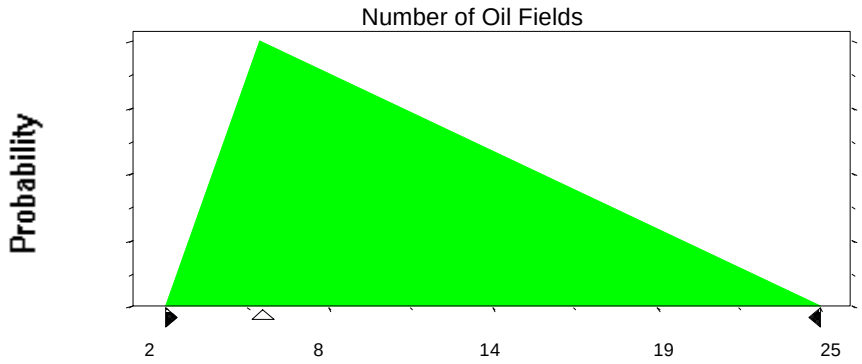
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	2
Likeliest	5
Maximum	25

Selected range is from 2 to 25
Mean value in simulation was 11

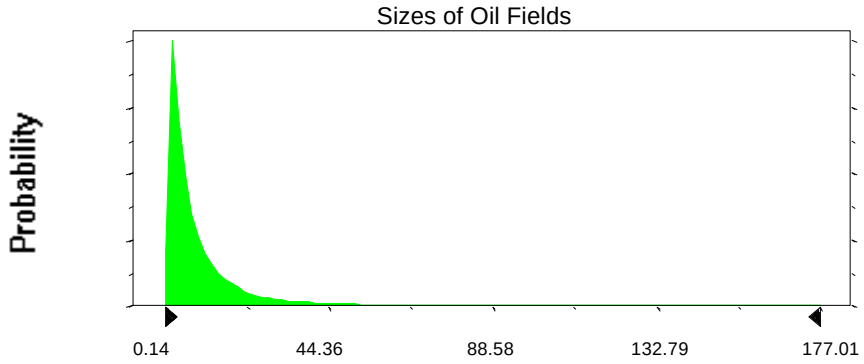


Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	10.14	13.14
Standard Deviation	17.88	17.88
Selected range is from	0.00 to 197.00	3.00 to 200.00
Mean value in simulation was	9.91	12.91

11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)

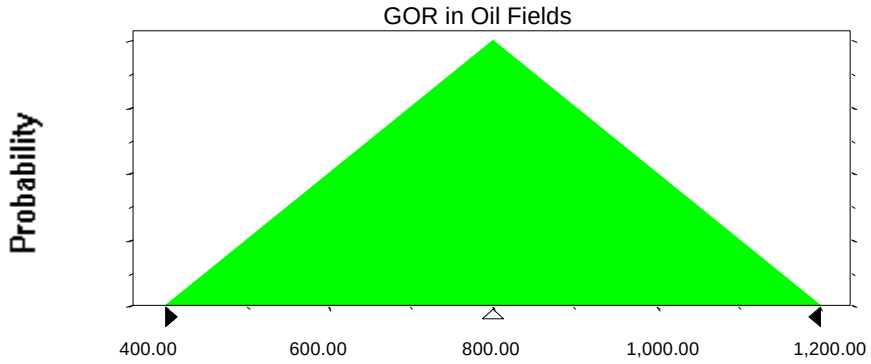


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	400.00
Likeliest	800.00
Maximum	1,200.00

Selected range is from 400.00 to 1,200.00
Mean value in simulation was 799.15



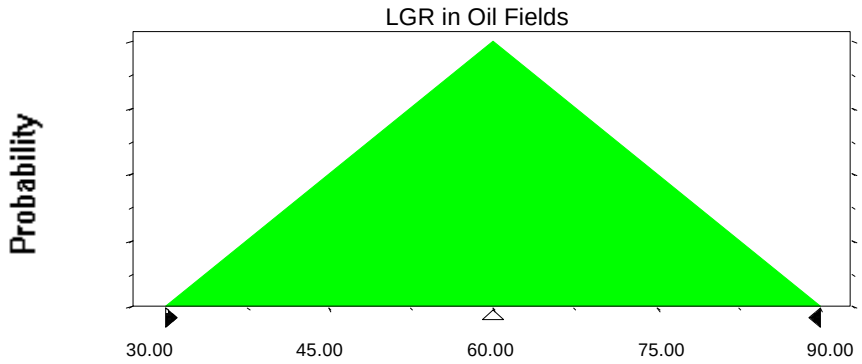
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

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 60.03



Assumption: Number of Gas Fields

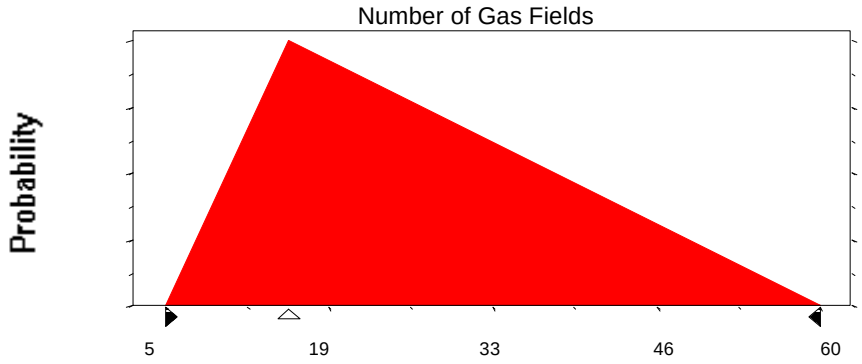
Triangular distribution with parameters:

Minimum	5
Likeliest	15
Maximum	60

Selected range is from 5 to 60
Mean value in simulation was 27

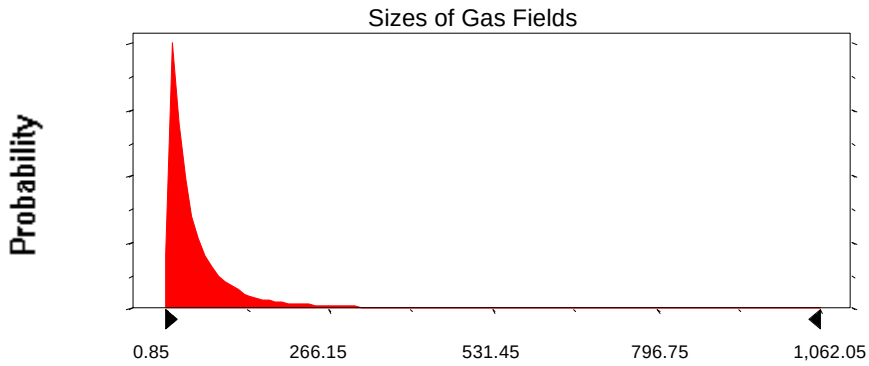
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	60.82	78.82
Standard Deviation	107.27	107.27
Selected range is from 0.00 to 1,182.00		18.00 to 1,200.00
Mean value in simulation was 58.17		76.17



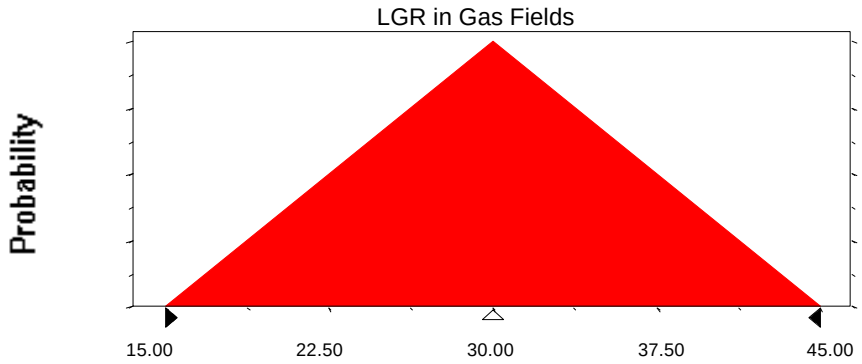
11500201
Jurassic-Tertiary Reservoirs
Monte Carlo Results

Assumption: LGR in Gas 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 30.05



End of Assumptions

Simulation started on 12/30/99 at 14:31:23
Simulation stopped on 12/30/99 at 14:56:30