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San Bernardo Fold Belt Structures, Assessment Unit 60580102
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	50	146	268	151	72	215	416	226	1	4	9	5	9	22	56	26
Gas Fields	6						172	496	890	509	3	10	19	10	35	75	173	85
Total		1.00	50	146	268	151	244	711	1,306	735	5	14	28	15				

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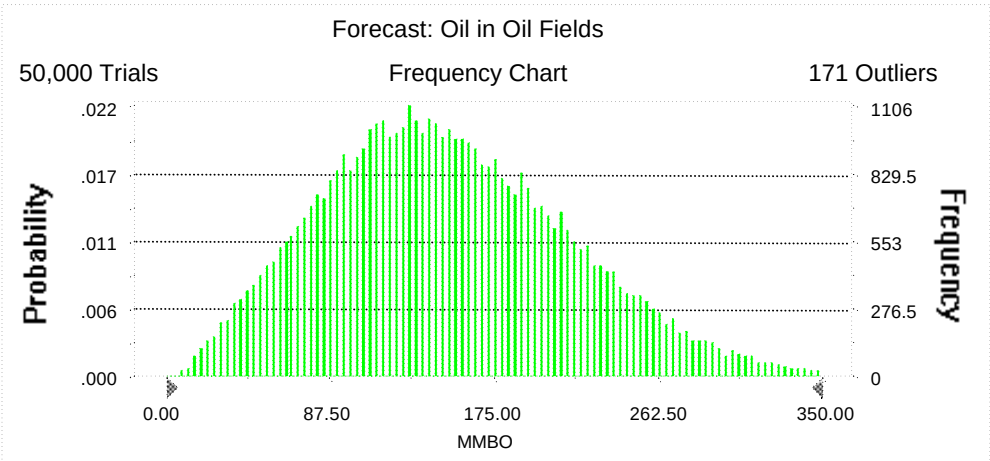
Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 350.00 MMBO
Entire range is from 5.43 to 460.03 MMBO
After 50,000 trials, the standard error of the mean is 0.30

Statistics:	Value
Trials	50000
Mean	150.94
Median	145.53
Mode	---
Standard Deviation	66.35
Variance	4,402.64
Skewness	0.42
Kurtosis	2.92
Coefficient of Variability	0.44
Range Minimum	5.43
Range Maximum	460.03
Range Width	454.61
Mean Standard Error	0.30



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	5.43
95%	49.82
90%	67.58
85%	81.09
80%	92.48
75%	102.45
70%	111.65
65%	120.07
60%	128.87
55%	137.10
50%	145.53
45%	154.28
40%	163.31
35%	173.07
30%	183.48
25%	194.49
20%	207.28
15%	221.81
10%	240.47
5%	267.89
0%	460.03

End of Forecast

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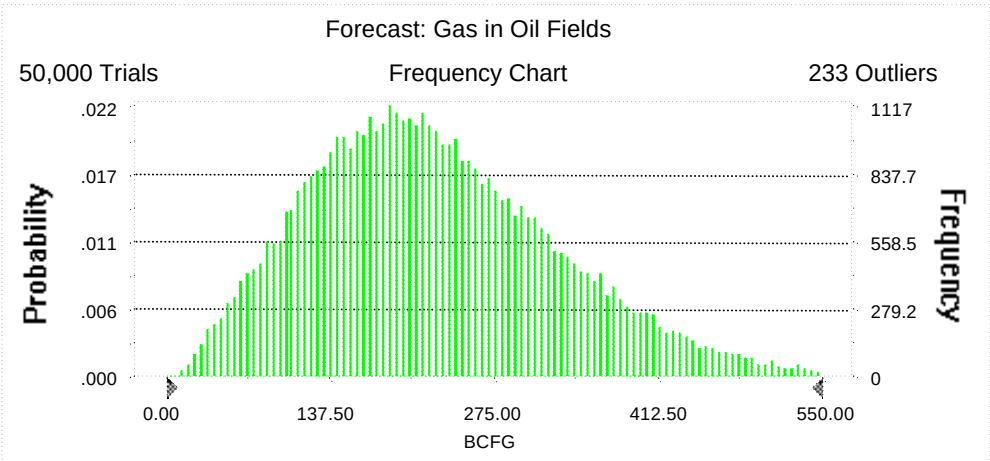
Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 550.00 BCFG
Entire range is from 7.92 to 790.67 BCFG
After 50,000 trials, the standard error of the mean is 0.47

Statistics:	Value
Trials	50000
Mean	226.37
Median	215.17
Mode	---
Standard Deviation	105.25
Variance	11,078.03
Skewness	0.59
Kurtosis	3.30
Coefficient of Variability	0.46
Range Minimum	7.92
Range Maximum	790.67
Range Width	782.76
Mean Standard Error	0.47



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	7.92
95%	72.40
90%	98.88
85%	117.98
80%	134.53
75%	148.95
70%	163.06
65%	176.33
60%	189.45
55%	202.07
50%	215.17
45%	228.05
40%	242.36
35%	257.22
30%	273.81
25%	292.25
20%	312.69
15%	337.49
10%	368.81
5%	416.39
0%	790.67

End of Forecast

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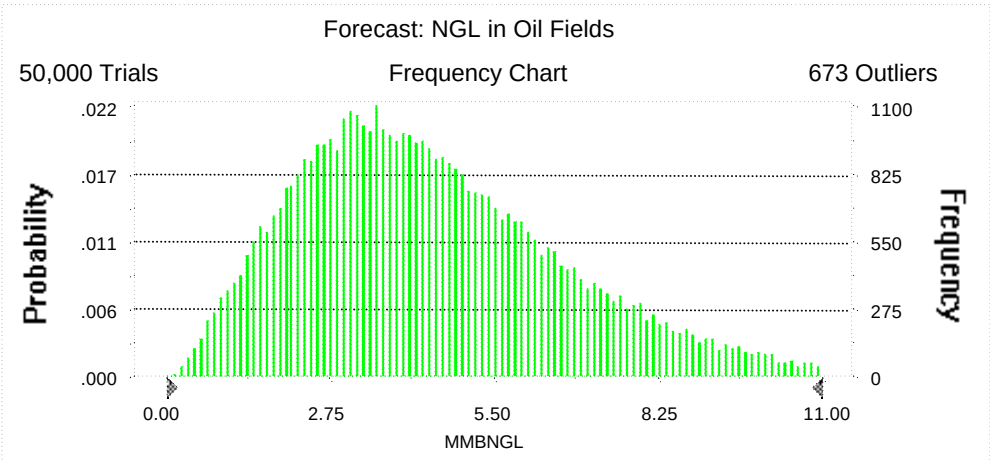
Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 11.00 MMBNGL
Entire range is from 0.13 to 19.29 MMBNGL
After 50,000 trials, the standard error of the mean is 0.01

Statistics:	Value
Trials	50000
Mean	4.53
Median	4.17
Mode	---
Standard Deviation	2.35
Variance	5.50
Skewness	0.89
Kurtosis	4.05
Coefficient of Variability	0.52
Range Minimum	0.13
Range Maximum	19.29
Range Width	19.16
Mean Standard Error	0.01



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.13
95%	1.35
90%	1.82
85%	2.20
80%	2.52
75%	2.81
70%	3.09
65%	3.35
60%	3.61
55%	3.89
50%	4.17
45%	4.46
40%	4.77
35%	5.09
30%	5.46
25%	5.87
20%	6.35
15%	6.93
10%	7.70
5%	8.90
0%	19.29

End of Forecast

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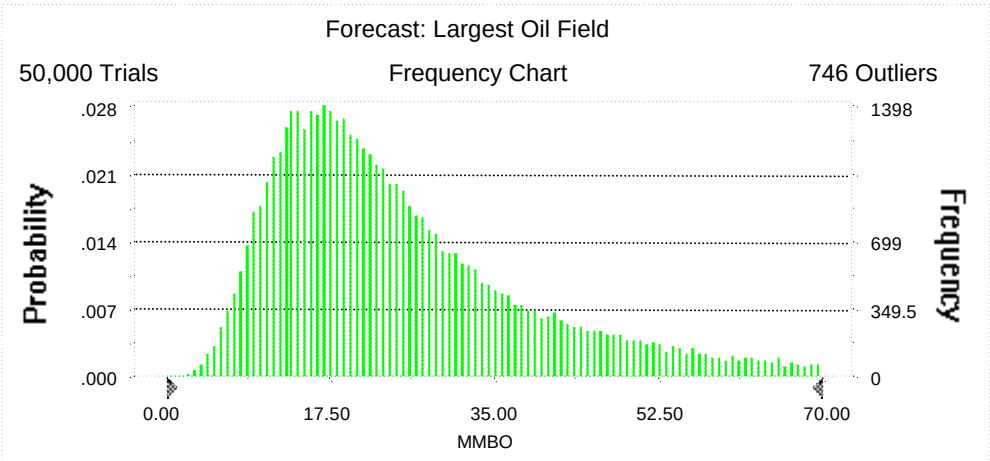
Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 70.00 MMBO
Entire range is from 2.15 to 79.99 MMBO
After 50,000 trials, the standard error of the mean is 0.06

Statistics:	Value
Trials	50000
Mean	25.54
Median	21.83
Mode	---
Standard Deviation	14.49
Variance	209.90
Skewness	1.27
Kurtosis	4.45
Coefficient of Variability	0.57
Range Minimum	2.15
Range Maximum	79.99
Range Width	77.84
Mean Standard Error	0.06



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Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	2.15
95%	8.96
90%	10.96
85%	12.49
80%	13.83
75%	15.13
70%	16.42
65%	17.70
60%	19.01
55%	20.34
50%	21.83
45%	23.38
40%	25.11
35%	27.02
30%	29.28
25%	32.04
20%	35.43
15%	39.98
10%	46.34
5%	56.10
0%	79.99

End of Forecast

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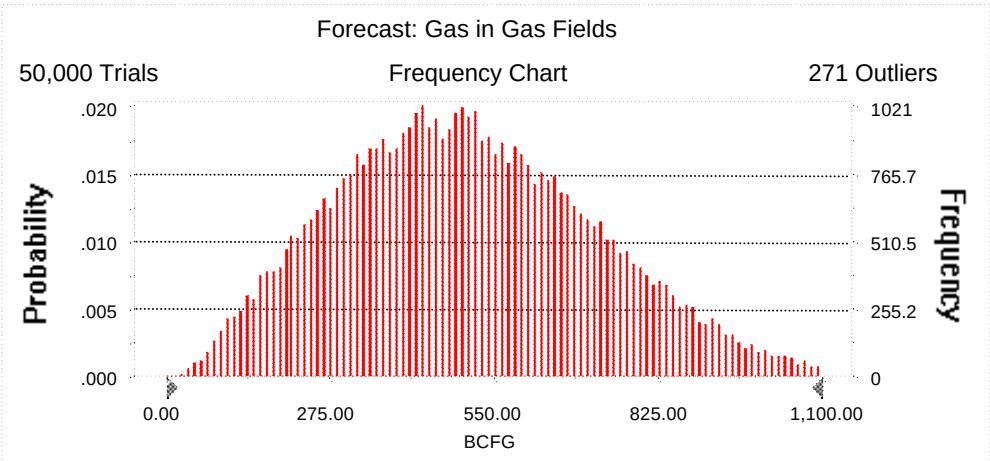
San Bernardo Fold Belt Structures
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 1,100.00 BCFG
Entire range is from 21.88 to 1,447.22 BCFG
After 50,000 trials, the standard error of the mean is 0.98

Statistics:	Value
Trials	50000
Mean	508.92
Median	495.63
Mode	---
Standard Deviation	218.29
Variance	47,649.31
Skewness	0.34
Kurtosis	2.79
Coefficient of Variability	0.43
Range Minimum	21.88
Range Maximum	1,447.22
Range Width	1,425.34
Mean Standard Error	0.98



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	21.88
95%	172.03
90%	230.89
85%	275.20
80%	314.01
75%	347.67
70%	378.80
65%	409.86
60%	437.94
55%	466.71
50%	495.63
45%	522.99
40%	553.24
35%	585.66
30%	618.89
25%	655.41
20%	696.49
15%	743.84
10%	803.00
5%	889.58
0%	1,447.22

End of Forecast

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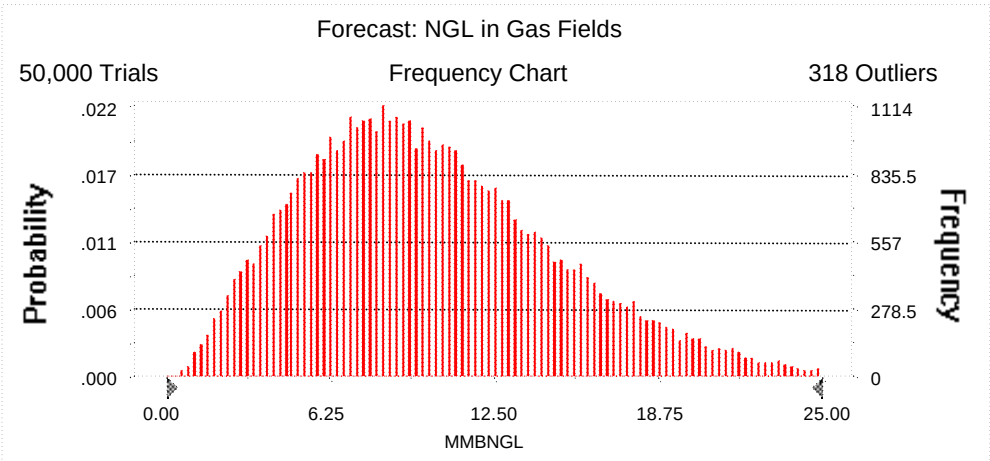
San Bernardo Fold Belt Structures
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 25.00 MMBNGL
Entire range is from 0.37 to 36.84 MMBNGL
After 50,000 trials, the standard error of the mean is 0.02

Statistics:	Value
Trials	50000
Mean	10.17
Median	9.54
Mode	---
Standard Deviation	4.92
Variance	24.20
Skewness	0.68
Kurtosis	3.40
Coefficient of Variability	0.48
Range Minimum	0.37
Range Maximum	36.84
Range Width	36.48
Mean Standard Error	0.02



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.37
95%	3.16
90%	4.28
85%	5.13
80%	5.87
75%	6.53
70%	7.16
65%	7.76
60%	8.36
55%	8.94
50%	9.54
45%	10.18
40%	10.84
35%	11.53
30%	12.32
25%	13.15
20%	14.15
15%	15.35
10%	16.89
5%	19.24
0%	36.84

End of Forecast

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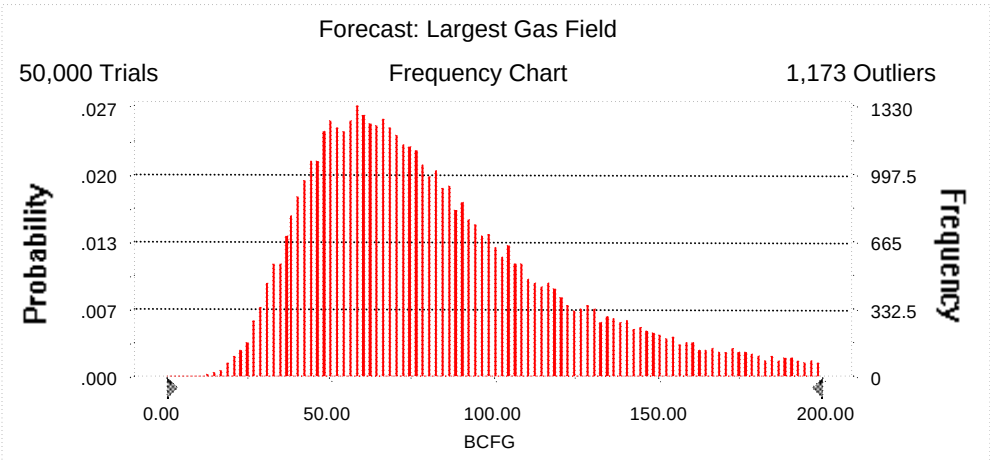
Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 200.00 BCFG
Entire range is from 12.01 to 249.67 BCFG
After 50,000 trials, the standard error of the mean is 0.19

Statistics:	Value
Trials	50000
Mean	85.15
Median	75.23
Mode	---
Standard Deviation	42.20
Variance	1,781.22
Skewness	1.24
Kurtosis	4.55
Coefficient of Variability	0.50
Range Minimum	12.01
Range Maximum	249.67
Range Width	237.66
Mean Standard Error	0.19



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Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	12.01
95%	35.17
90%	41.78
85%	46.66
80%	50.92
75%	54.96
70%	58.89
65%	62.81
60%	66.85
55%	70.90
50%	75.23
45%	79.79
40%	84.87
35%	90.51
30%	96.94
25%	104.71
20%	114.16
15%	126.83
10%	143.87
5%	172.59
0%	249.67

End of Forecast

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San Bernardo Fold Belt Structures
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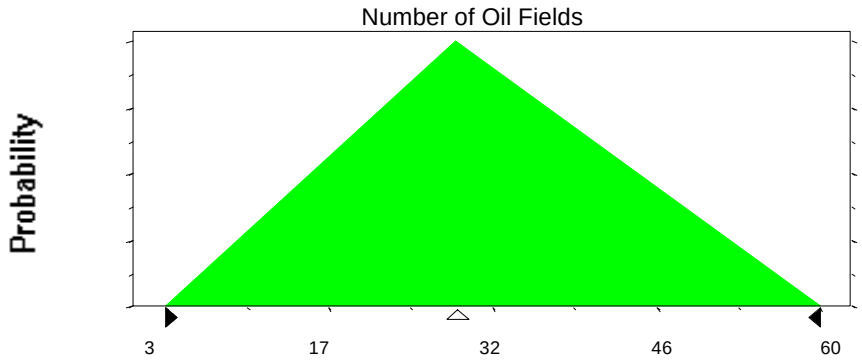
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	3
Likeliest	28
Maximum	60

Selected range is from 3 to 60
Mean value in simulation was 30



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	4.06	5.06
Standard Deviation	7.17	7.17

Selected range is from 0.00 to 79.00	1.00 to 80.00
Mean value in simulation was 3.95	4.95

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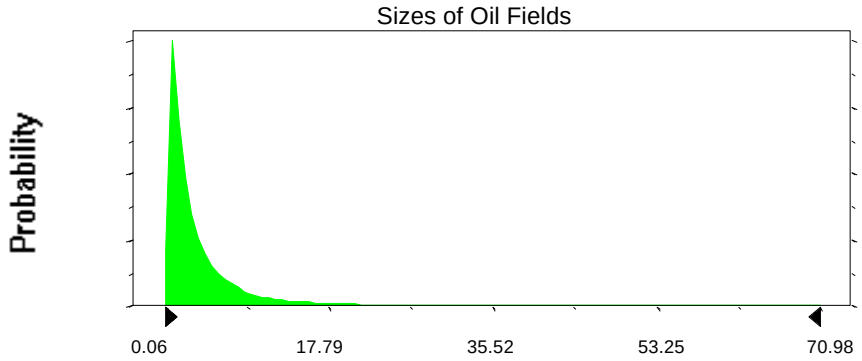
Assumption: Sizes of Oil Fields (cont'd)

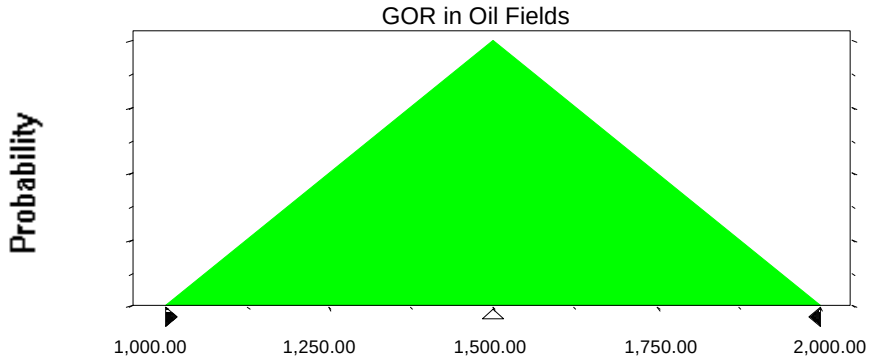


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,000.00
Likeliest	1,500.00
Maximum	2,000.00

Selected range is from 1,000.00 to 2,000.00
Mean value in simulation was 1,499.33



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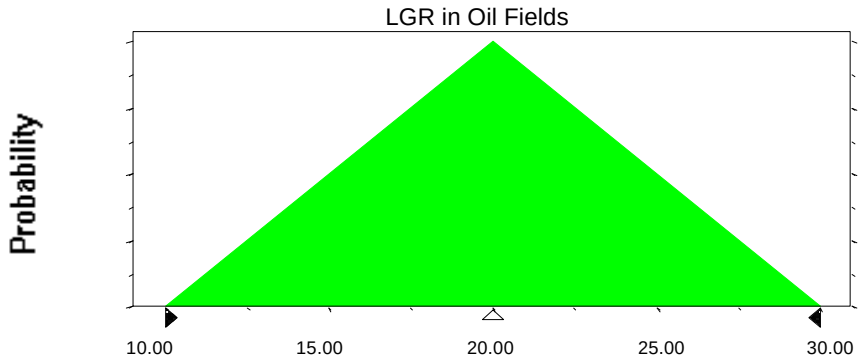
Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	10.00
Likeliest	20.00
Maximum	30.00

Selected range is from 10.00 to 30.00
Mean value in simulation was 20.00



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	2
Likeliest	19
Maximum	40

Selected range is from 2 to 40
Mean value in simulation was 20

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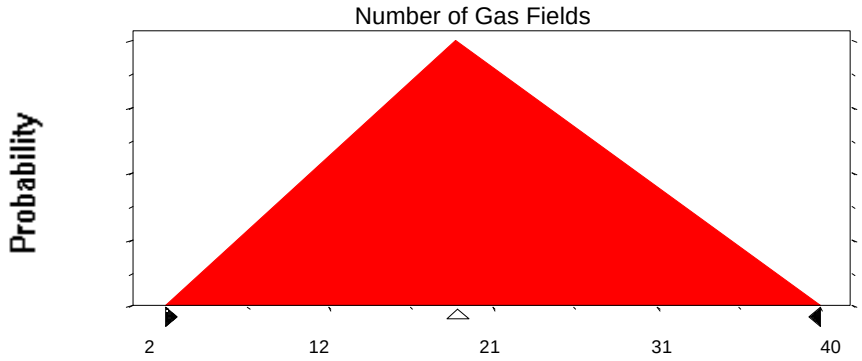
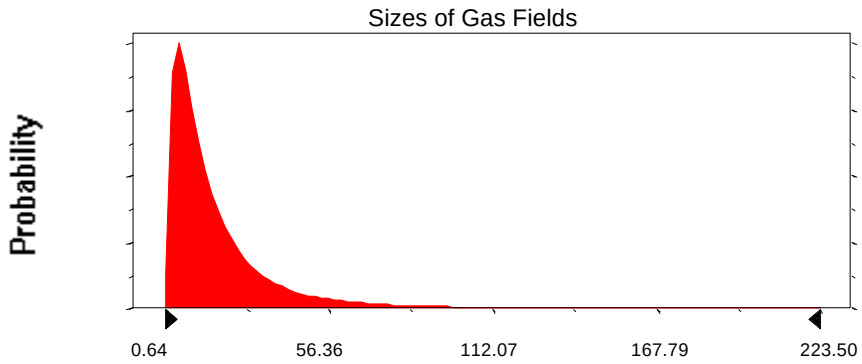
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	19.30	25.3
Standard Deviation	24.31	24.31
Selected range is from 0.00 to 244.00		6.00 to 250.00
Mean value in simulation was 19.01		25.01



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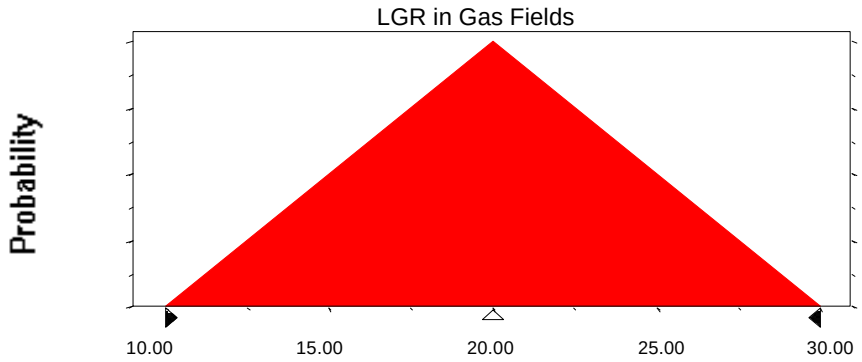
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	10.00
Likeliest	20.00
Maximum	30.00

Selected range is from 10.00 to 30.00
Mean value in simulation was 19.98



End of Assumptions

Simulation started on 2/25/99 at 12:04:17
Simulation stopped on 2/25/99 at 12:32:09