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Agbada Reservoirs, Assessment Unit 71920101
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	11,597	21,659	33,021	21,925	18,788	38,085	68,615	40,078	585	1,245	2,376	1,330	559	1,018	1,440	1,013
Gas Fields	6						24,738	44,619	66,857	45,098	1,492	2,709	4,135	2,748	1,704	3,600	6,410	3,778
Total		1.00	11,597	21,659	33,021	21,925	43,526	82,703	135,472	85,176	2,078	3,955	6,510	4,078				

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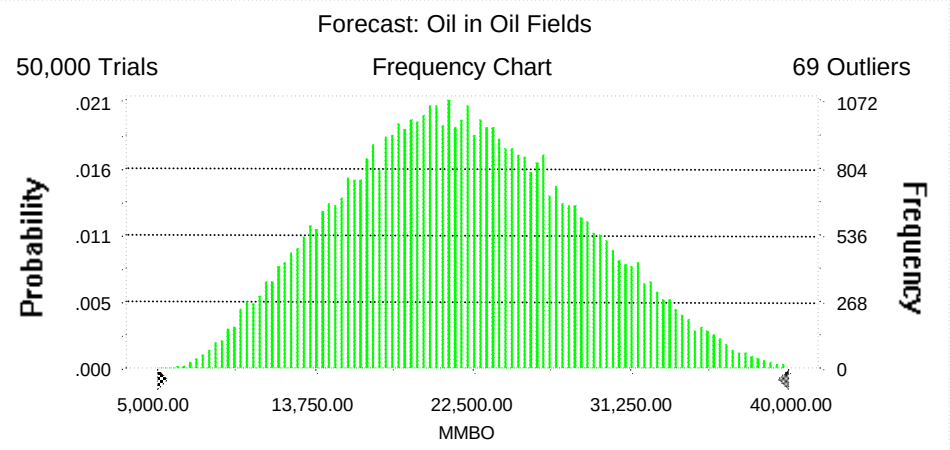
Forecast: Oil in Oil Fields

Summary:

Display range is from 5,000.00 to 40,000.00 MMBO
Entire range is from 5,029.97 to 44,767.37 MMBO
After 50,000 trials, the standard error of the mean is 28.94

Statistics:	Value
Trials	50000
Mean	21,924.96
Median	21,659.31
Mode	---
Standard Deviation	6,470.41
Variance	41,866,165.49
Skewness	0.18
Kurtosis	2.54
Coefficient of Variability	0.30
Range Minimum	5,029.97
Range Maximum	44,767.37
Range Width	39,737.40
Mean Standard Error	28.94



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	5,029.97
95%	11,596.76
90%	13,472.53
85%	14,909.40
80%	16,132.47
75%	17,191.20
70%	18,177.77
65%	19,091.37
60%	19,970.98
55%	20,800.13
50%	21,659.31
45%	22,525.18
40%	23,432.67
35%	24,361.23
30%	25,366.18
25%	26,434.14
20%	27,628.96
15%	29,014.11
10%	30,698.16
5%	33,020.93
0%	44,767.37

End of Forecast

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Agbada Reservoirs
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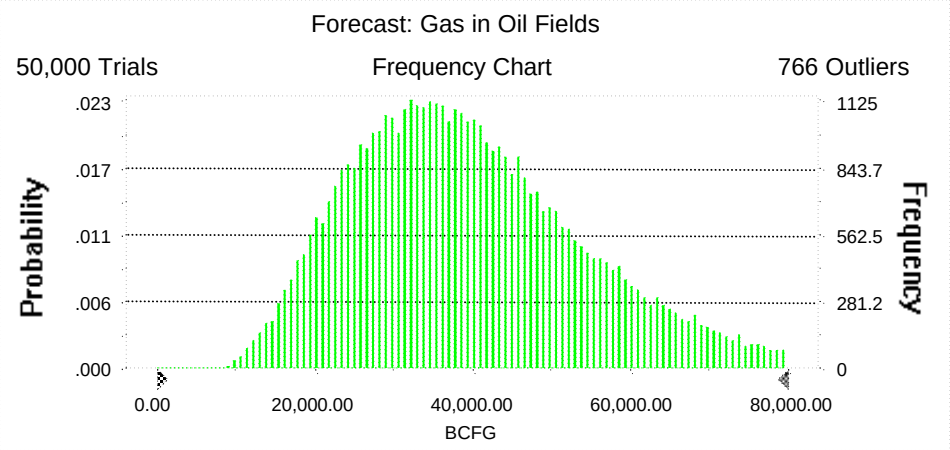
Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 80,000.00 BCFG
Entire range is from 5,866.22 to 114,592.49 BCFG
After 50,000 trials, the standard error of the mean is 68.34

Statistics:	Value
Trials	50000
Mean	40,078.29
Median	38,084.54
Mode	---
Standard Deviation	15,280.29
Variance	233,487,249.89
Skewness	0.73
Kurtosis	3.49
Coefficient of Variability	0.38
Range Minimum	5,866.22
Range Maximum	114,592.49
Range Width	108,726.26
Mean Standard Error	68.34



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	5,866.22
95%	18,788.17
90%	22,089.95
85%	24,576.58
80%	26,817.06
75%	28,862.28
70%	30,740.65
65%	32,612.54
60%	34,432.90
55%	36,213.81
50%	38,084.54
45%	39,974.70
40%	41,918.18
35%	44,084.12
30%	46,397.63
25%	49,053.15
20%	52,168.92
15%	56,012.48
10%	60,871.61
5%	68,614.59
0%	114,592.49

End of Forecast

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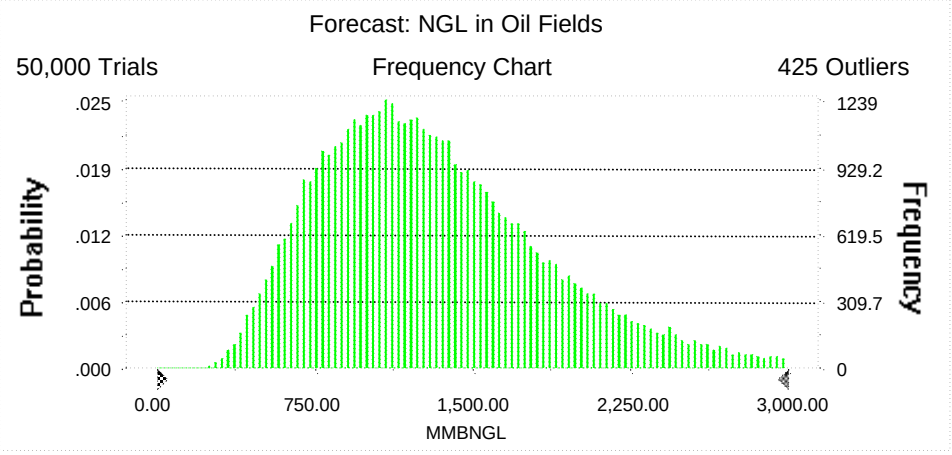
Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 3,000.00 MMBNGL
Entire range is from 178.95 to 4,583.81 MMBNGL
After 50,000 trials, the standard error of the mean is 2.47

Statistics:	Value
Trials	50000
Mean	1,329.57
Median	1,245.49
Mode	---
Standard Deviation	551.99
Variance	304,694.22
Skewness	0.87
Kurtosis	3.93
Coefficient of Variability	0.42
Range Minimum	178.95
Range Maximum	4,583.81
Range Width	4,404.86
Mean Standard Error	2.47



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	178.95
95%	585.44
90%	695.87
85%	780.35
80%	855.35
75%	925.56
70%	991.39
65%	1,055.99
60%	1,116.85
55%	1,180.93
50%	1,245.49
45%	1,313.88
40%	1,384.21
35%	1,461.27
30%	1,546.83
25%	1,641.97
20%	1,751.79
15%	1,890.88
10%	2,076.21
5%	2,375.51
0%	4,583.81

End of Forecast

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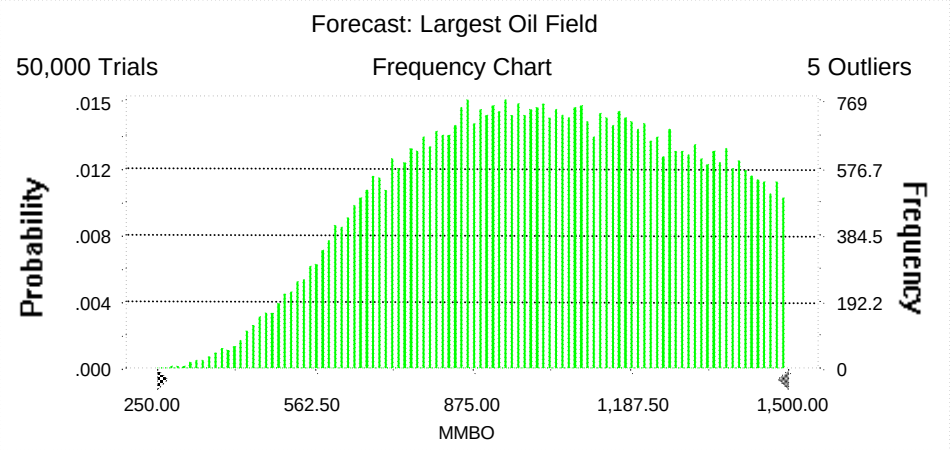
Agbada Reservoirs
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 250.00 to 1,500.00 MMBO
Entire range is from 224.40 to 1,499.97 MMBO
After 50,000 trials, the standard error of the mean is 1.22

Statistics:	Value
Trials	50000
Mean	1,013.46
Median	1,018.06
Mode	---
Standard Deviation	273.67
Variance	74,892.69
Skewness	-0.14
Kurtosis	2.14
Coefficient of Variability	0.27
Range Minimum	224.40
Range Maximum	1,499.97
Range Width	1,275.57
Mean Standard Error	1.22



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Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	224.40
95%	559.11
90%	641.76
85%	702.22
80%	755.98
75%	804.05
70%	850.23
65%	892.37
60%	934.44
55%	976.03
50%	1,018.06
45%	1,060.07
40%	1,103.07
35%	1,147.46
30%	1,190.58
25%	1,235.84
20%	1,283.85
15%	1,333.99
10%	1,385.67
5%	1,440.29
0%	1,499.97

End of Forecast

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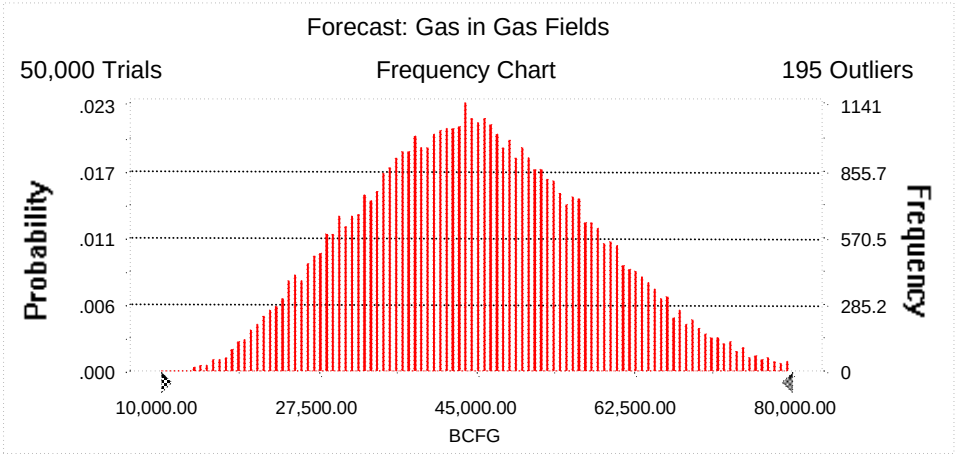
Agbada Reservoirs
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 10,000.00 to 80,000.00 BCFG
Entire range is from 10,723.97 to 103,252.70 BCFG
After 50,000 trials, the standard error of the mean is 57.22

Statistics:	Value
Trials	50000
Mean	45,097.51
Median	44,618.67
Mode	---
Standard Deviation	12,795.88
Variance	163,734,666.35
Skewness	0.22
Kurtosis	2.73
Coefficient of Variability	0.28
Range Minimum	10,723.97
Range Maximum	103,252.70
Range Width	92,528.73
Mean Standard Error	57.22



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	10,723.97
95%	24,737.84
90%	28,527.87
85%	31,329.96
80%	33,786.68
75%	35,908.73
70%	37,794.49
65%	39,586.06
60%	41,336.53
55%	43,023.30
50%	44,618.67
45%	46,268.97
40%	47,975.53
35%	49,787.95
30%	51,688.96
25%	53,799.25
20%	56,123.64
15%	58,765.22
10%	62,086.79
5%	66,856.93
0%	103,252.70

End of Forecast

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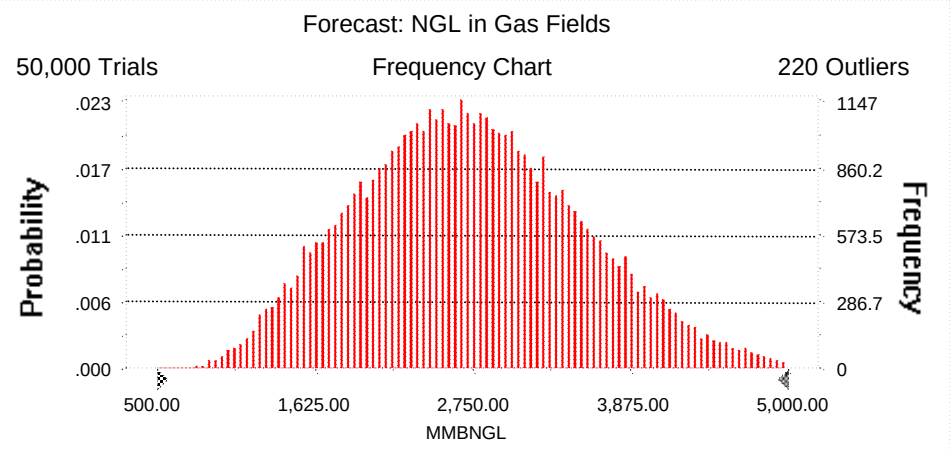
Agbada Reservoirs
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 500.00 to 5,000.00 MMBNGL
Entire range is from 585.19 to 6,459.97 MMBNGL
After 50,000 trials, the standard error of the mean is 3.60

Statistics:	Value
Trials	50000
Mean	2,747.98
Median	2,709.01
Mode	---
Standard Deviation	803.88
Variance	646,224.93
Skewness	0.29
Kurtosis	2.83
Coefficient of Variability	0.29
Range Minimum	585.19
Range Maximum	6,459.97
Range Width	5,874.79
Mean Standard Error	3.60



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	585.19
95%	1,492.13
90%	1,715.91
85%	1,891.34
80%	2,039.04
75%	2,170.05
70%	2,288.41
65%	2,395.91
60%	2,502.24
55%	2,605.69
50%	2,709.01
45%	2,812.73
40%	2,919.88
35%	3,031.79
30%	3,149.89
25%	3,280.44
20%	3,428.15
15%	3,601.82
10%	3,824.24
5%	4,134.74
0%	6,459.97

End of Forecast

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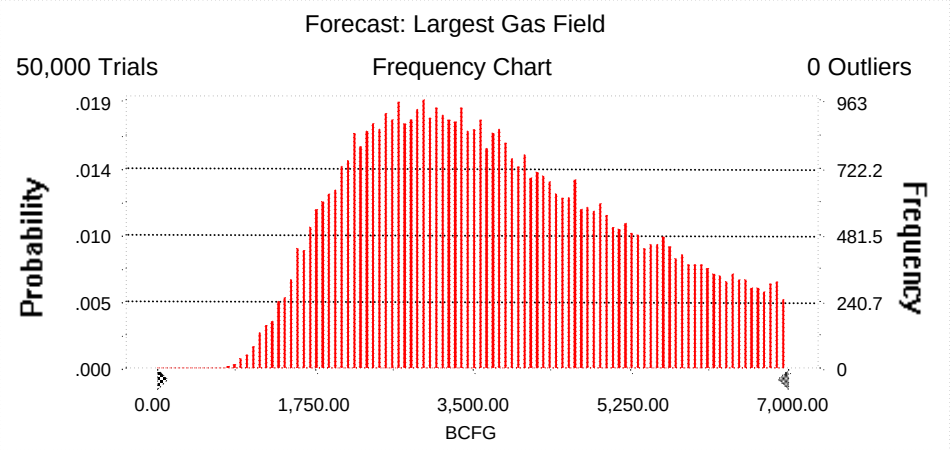
Agbada Reservoirs
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 7,000.00 BCFG
Entire range is from 561.11 to 6,999.71 BCFG
After 50,000 trials, the standard error of the mean is 6.43

Statistics:	Value
Trials	50000
Mean	3,778.13
Median	3,599.61
Mode	---
Standard Deviation	1,438.14
Variance	2,068,245.87
Skewness	0.35
Kurtosis	2.24
Coefficient of Variability	0.38
Range Minimum	561.11
Range Maximum	6,999.71
Range Width	6,438.60
Mean Standard Error	6.43



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Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	561.11
95%	1,703.79
90%	1,998.45
85%	2,231.30
80%	2,438.32
75%	2,635.01
70%	2,826.99
65%	3,013.79
60%	3,204.38
55%	3,398.43
50%	3,599.61
45%	3,808.36
40%	4,028.78
35%	4,271.20
30%	4,539.35
25%	4,825.63
20%	5,143.15
15%	5,507.80
10%	5,915.24
5%	6,410.36
0%	6,999.71

End of Forecast

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Agbada Reservoirs
Monte Carlo Results

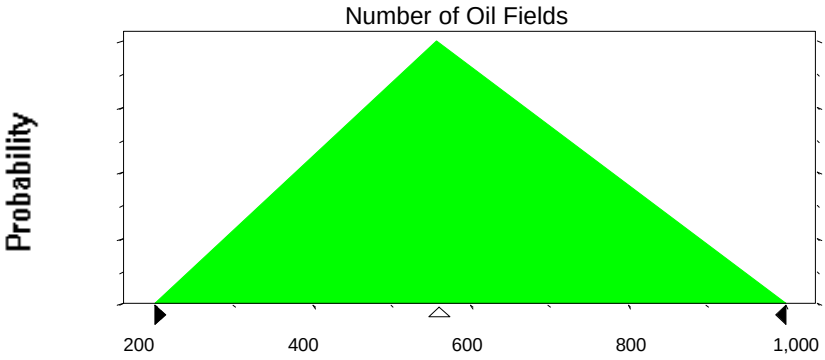
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	200
Likeliest	559
Maximum	1,000

Selected range is from 200 to 1,000
Mean value in simulation was 586



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	38.97	39.97
Standard Deviation	132.43	132.43

Selected range is from 0.00 to 1,499.00	1.00 to 1,500.00
Mean value in simulation was 35.60	36.6

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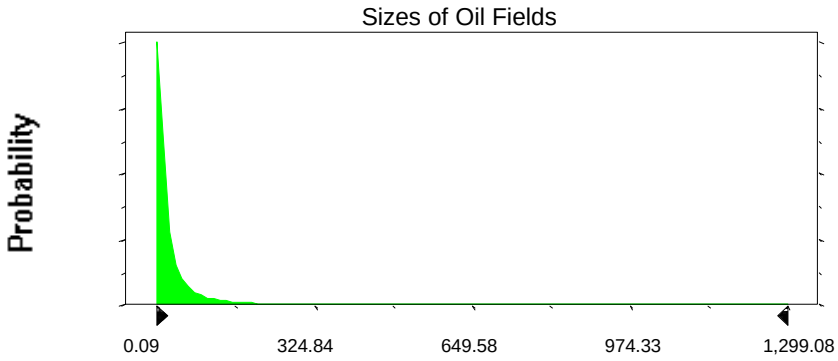
Assumption: Sizes of Oil Fields (cont'd)

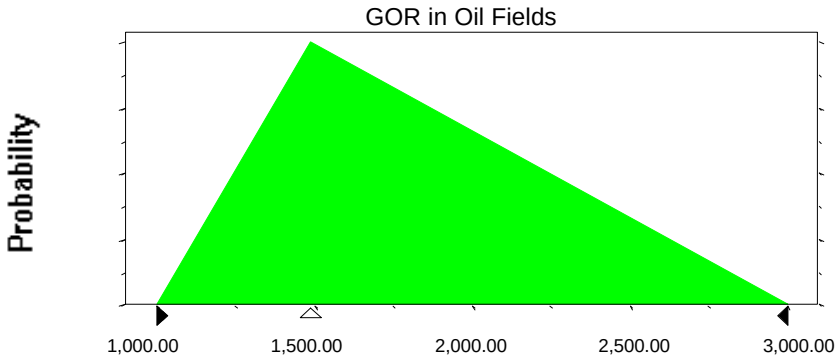


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,000.00
Likeliest	1,487.10
Maximum	3,000.00

Selected range is from 1,000.00 to 3,000.00
Mean value in simulation was 1,828.57



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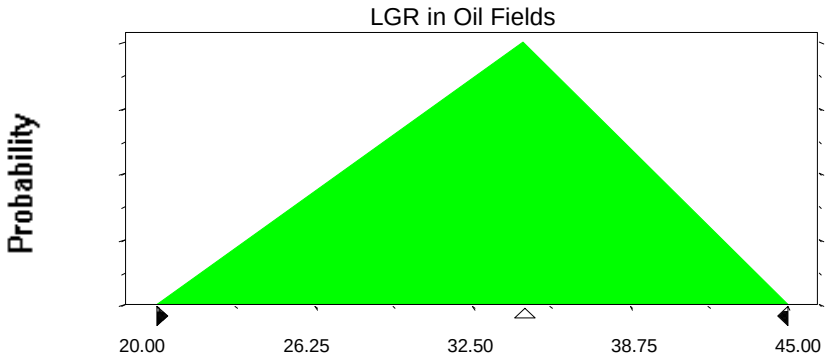
Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	20.00
Likeliest	34.58
Maximum	45.00

Selected range is from 20.00 to 45.00
Mean value in simulation was 33.18



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	100
Likeliest	250
Maximum	400

Selected range is from 100 to 400
Mean value in simulation was 250

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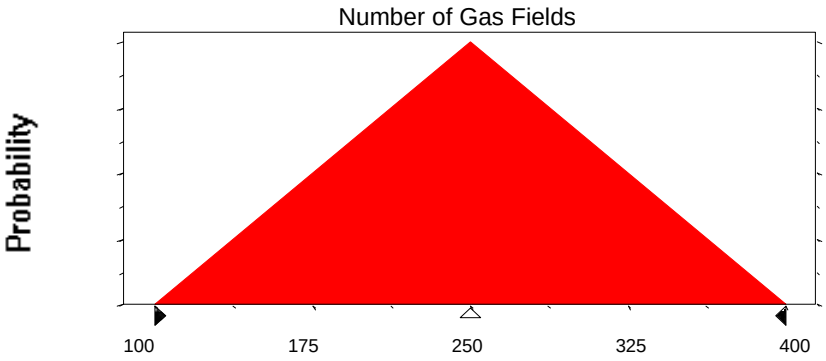
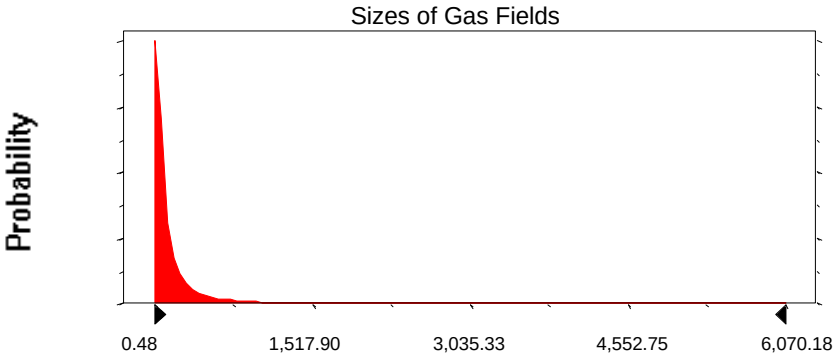
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	186.38	192.38
Standard Deviation	615.72	615.72
Selected range is from 0.00 to 6,994.00		6.00 to 7,000.00
Mean value in simulation was 177.33		183.33



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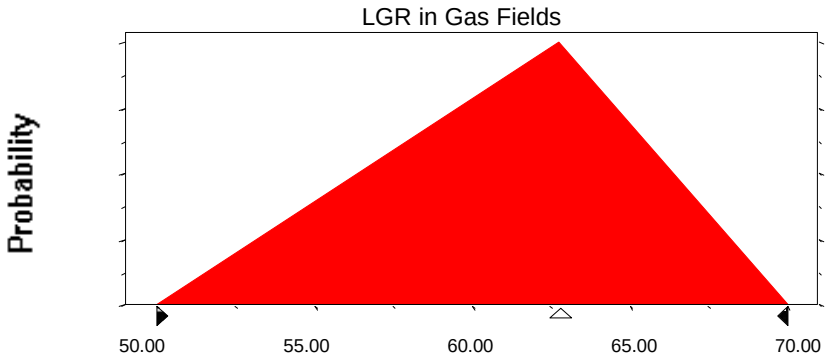
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	50.00
Likeliest	62.77
Maximum	70.00

Selected range is from 50.00 to 70.00
Mean value in simulation was 60.93



End of Assumptions

Simulation started on 11/6/98 at 17:30:57
Simulation stopped on 11/7/98 at 16:16:16