

Kuche (Northern) Foldbelt, Assessment Unit 31540102
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	10	1.00	29	74	199	89	58	161	453	196	3	10	28	12	16	36	131	49
Gas Fields	60						3,214	9,570	20,939	10,516	130	408	974	463	714	1,797	4,692	2,108
Total		1.00	29	74	199	89	3,272	9,731	21,392	10,712	134	418	1,002	475				

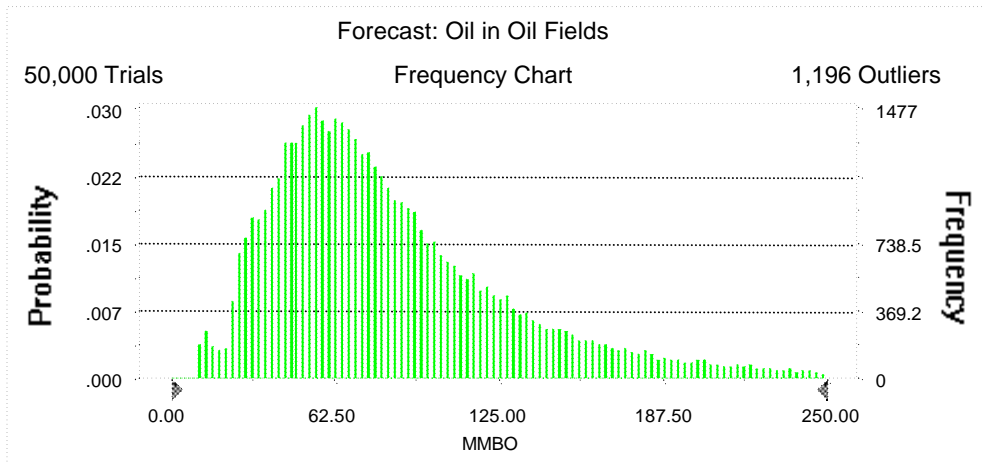
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Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 250.00 MMBO
Entire range is from 10.14 to 651.55 MMBO
After 50,000 trials, the standard error of the mean is 0.26

Statistics:	Value
Trials	50000
Mean	89.05
Median	74.48
Mode	---
Standard Deviation	58.09
Variance	3,374.28
Skewness	2.26
Kurtosis	11.13
Coefficient of Variability	0.65
Range Minimum	10.14
Range Maximum	651.55
Range Width	641.41
Mean Standard Error	0.26



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	10.14
95%	28.89
90%	36.16
85%	42.23
80%	47.09
75%	51.88
70%	56.11
65%	60.62
60%	65.09
55%	69.59
50%	74.48
45%	79.67
40%	85.53
35%	92.14
30%	99.64
25%	108.74
20%	120.25
15%	134.74
10%	156.89
5%	199.39
0%	651.55

End of Forecast

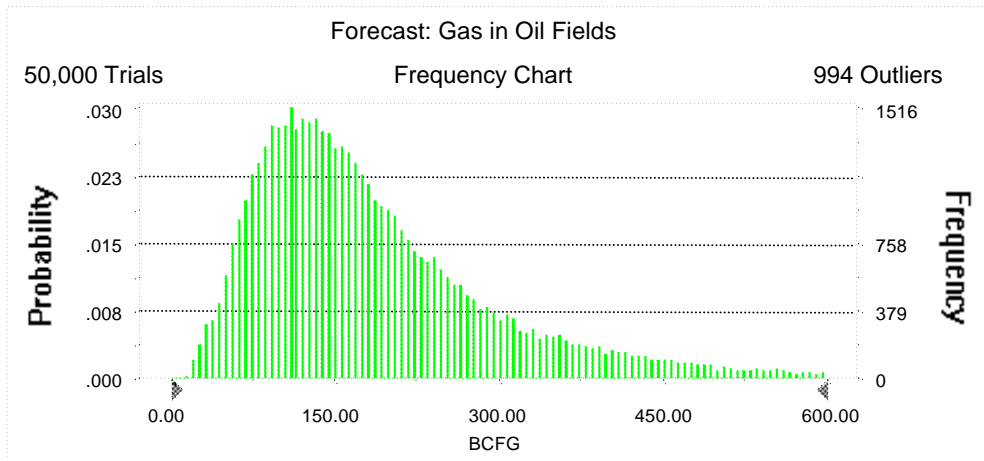
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Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 600.00 BCFG
Entire range is from 14.74 to 1,695.76 BCFG
After 50,000 trials, the standard error of the mean is 0.61

Statistics:	Value
Trials	50000
Mean	196.23
Median	161.43
Mode	---
Standard Deviation	137.10
Variance	18,796.36
Skewness	2.41
Kurtosis	12.65
Coefficient of Variability	0.70
Range Minimum	14.74
Range Maximum	1,695.76
Range Width	1,681.02
Mean Standard Error	0.61



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	14.74
95%	58.42
90%	74.11
85%	86.45
80%	97.39
75%	107.96
70%	118.10
65%	128.81
60%	139.01
55%	149.89
50%	161.43
45%	173.64
40%	187.15
35%	202.44
30%	219.89
25%	241.50
20%	267.18
15%	303.29
10%	357.12
5%	453.01
0%	1,695.76

End of Forecast

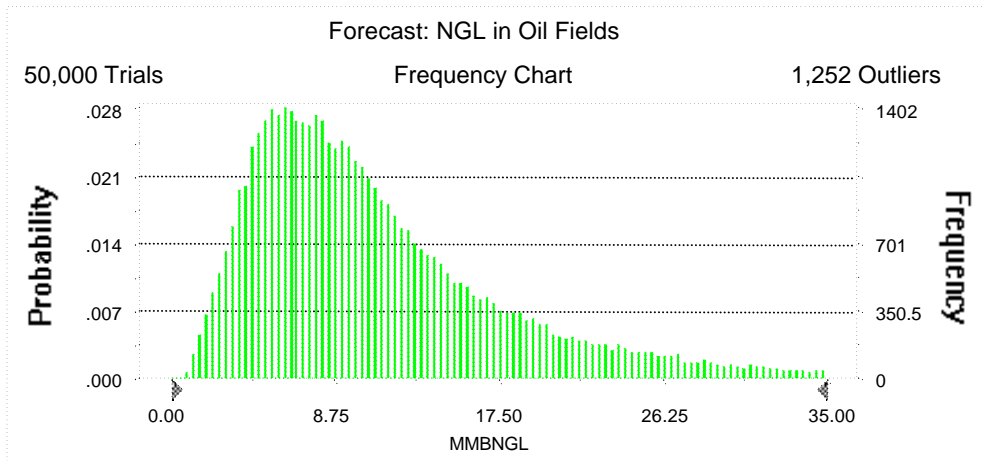
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Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 35.00 MMBNGL
Entire range is from 0.70 to 112.32 MMBNGL
After 50,000 trials, the standard error of the mean is 0.04

Statistics:	Value
Trials	50000
Mean	11.77
Median	9.51
Mode	---
Standard Deviation	8.73
Variance	76.18
Skewness	2.54
Kurtosis	13.96
Coefficient of Variability	0.74
Range Minimum	0.70
Range Maximum	112.32
Range Width	111.61
Mean Standard Error	0.04



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.70
95%	3.20
90%	4.15
85%	4.87
80%	5.52
75%	6.15
70%	6.78
65%	7.45
60%	8.09
55%	8.78
50%	9.51
45%	10.26
40%	11.09
35%	12.07
30%	13.20
25%	14.56
20%	16.29
15%	18.57
10%	21.95
5%	27.96
0%	112.32

End of Forecast

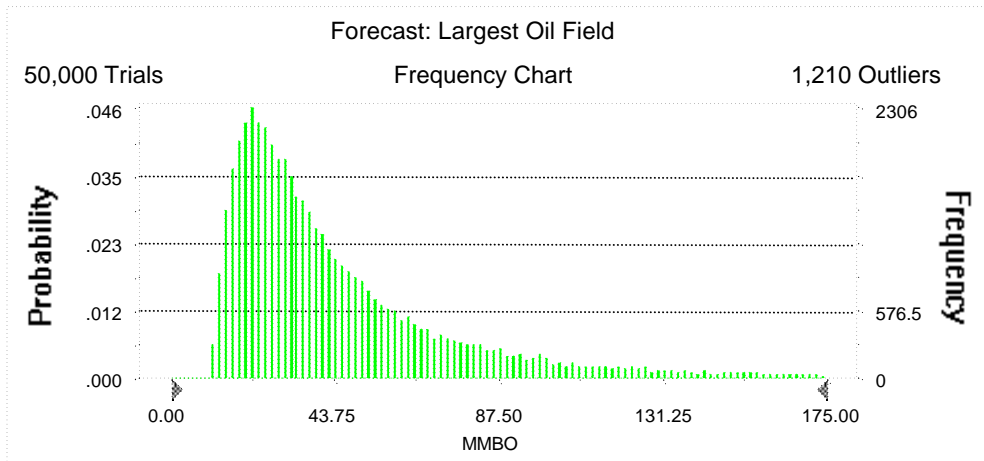
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Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 175.00 MMBO
Entire range is from 10.14 to 398.74 MMBO
After 50,000 trials, the standard error of the mean is 0.19

Statistics:	Value
Trials	50000
Mean	49.45
Median	35.78
Mode	---
Standard Deviation	43.32
Variance	1,876.21
Skewness	3.13
Kurtosis	16.66
Coefficient of Variability	0.88
Range Minimum	10.14
Range Maximum	398.74
Range Width	388.60
Mean Standard Error	0.19



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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	10.14
95%	15.57
90%	17.99
85%	20.08
80%	22.05
75%	24.02
70%	26.03
65%	28.20
60%	30.51
55%	32.98
50%	35.78
45%	38.80
40%	42.33
35%	46.57
30%	51.52
25%	57.66
20%	65.67
15%	77.14
10%	94.61
5%	130.79
0%	398.74

End of Forecast

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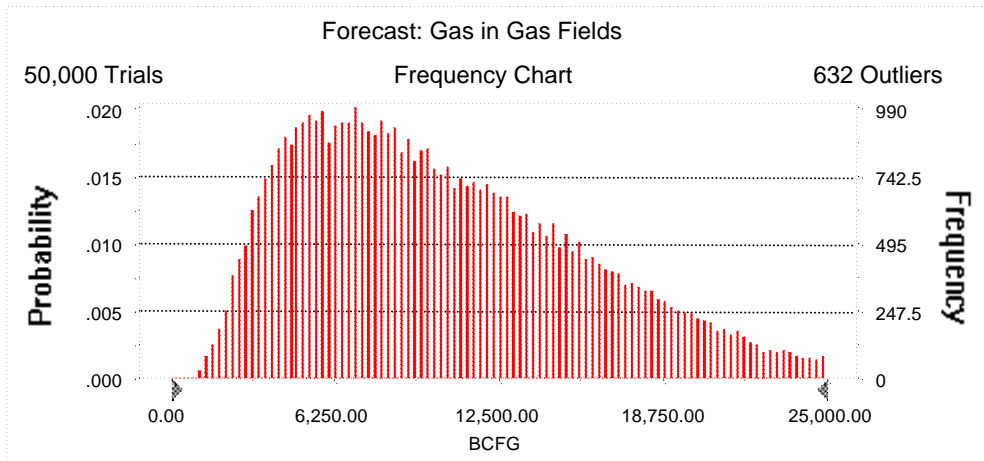
Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 25,000.00 BCFG
 Entire range is from 853.57 to 37,285.57 BCFG
 After 50,000 trials, the standard error of the mean is 24.82

Statistics:

	<u>Value</u>
Trials	50000
Mean	10,515.72
Median	9,569.50
Mode	---
Standard Deviation	5,548.92
Variance	30,790,486.50
Skewness	0.73
Kurtosis	3.12
Coefficient of Variability	0.53
Range Minimum	853.57
Range Maximum	37,285.57
Range Width	36,432.00
Mean Standard Error	24.82



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Forecast: Gas in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	853.57
95%	3,213.82
90%	4,062.99
85%	4,787.95
80%	5,445.02
75%	6,116.86
70%	6,797.54
65%	7,447.17
60%	8,129.76
55%	8,825.39
50%	9,569.50
45%	10,341.41
40%	11,190.63
35%	12,075.89
30%	12,995.20
25%	14,059.57
20%	15,236.58
15%	16,619.33
10%	18,385.26
5%	20,938.73
0%	37,285.57

End of Forecast

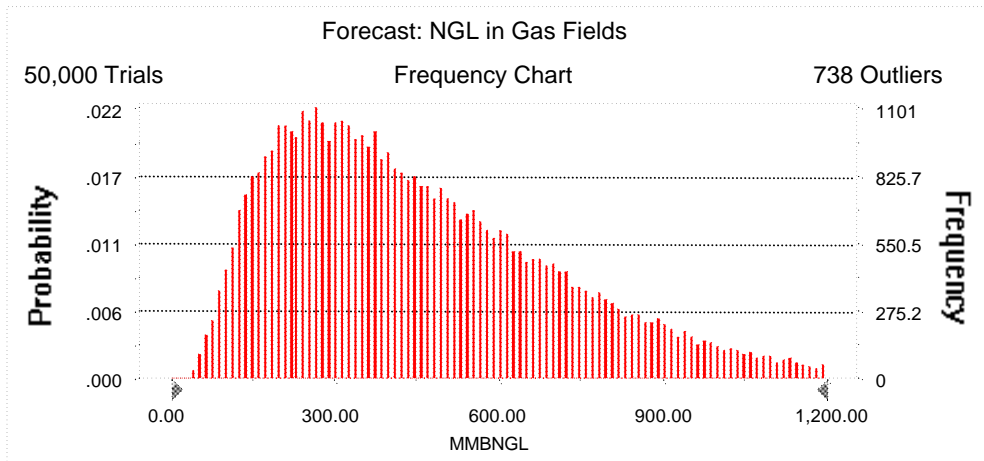
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Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 1,200.00 MMBNGL
Entire range is from 27.43 to 2,070.13 MMBNGL
After 50,000 trials, the standard error of the mean is 1.19

Statistics:	Value
Trials	50000
Mean	463.01
Median	408.20
Mode	---
Standard Deviation	267.13
Variance	71,360.67
Skewness	1.01
Kurtosis	4.05
Coefficient of Variability	0.58
Range Minimum	27.43
Range Maximum	2,070.13
Range Width	2,042.70
Mean Standard Error	1.19



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Forecast: NGL in Gas Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	27.43
95%	130.48
90%	167.92
85%	199.54
80%	229.31
75%	258.07
70%	286.26
65%	315.65
60%	345.12
55%	375.83
50%	408.20
45%	444.19
40%	481.86
35%	521.90
30%	566.52
25%	616.11
20%	675.03
15%	742.35
10%	833.71
5%	974.18
0%	2,070.13

End of Forecast

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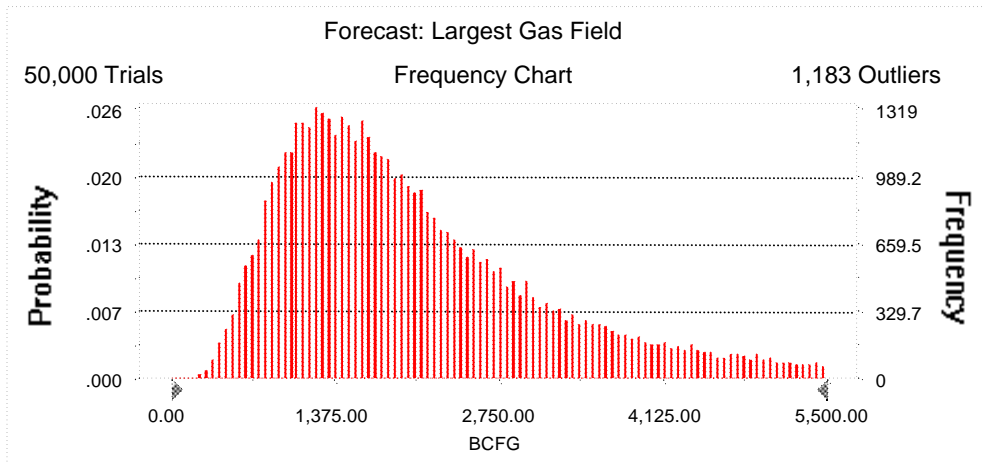
Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 5,500.00 BCFG
 Entire range is from 166.40 to 6,999.94 BCFG
 After 50,000 trials, the standard error of the mean is 5.47

Statistics:

	<u>Value</u>
Trials	50000
Mean	2,107.78
Median	1,796.80
Mode	---
Standard Deviation	1,224.20
Variance	1,498,659.05
Skewness	1.33
Kurtosis	4.78
Coefficient of Variability	0.58
Range Minimum	166.40
Range Maximum	6,999.94
Range Width	6,833.54
Mean Standard Error	5.47



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Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	166.40
95%	713.84
90%	878.37
85%	1,006.52
80%	1,122.87
75%	1,231.61
70%	1,338.46
65%	1,447.51
60%	1,559.45
55%	1,672.45
50%	1,796.80
45%	1,929.58
40%	2,073.83
35%	2,236.51
30%	2,430.34
25%	2,657.68
20%	2,925.01
15%	3,284.46
10%	3,806.80
5%	4,691.81
0%	6,999.94

End of Forecast

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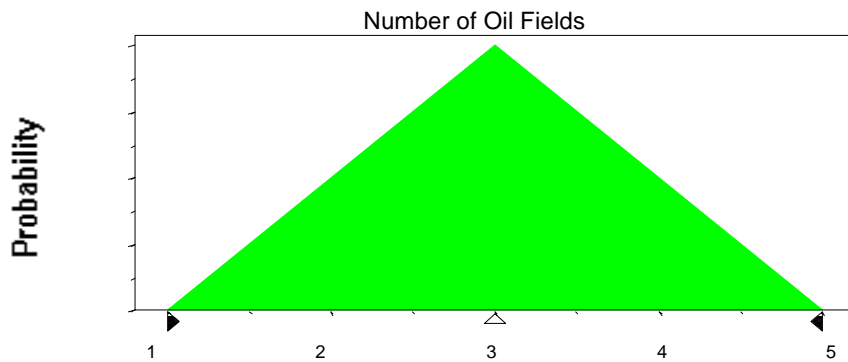
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	3
Maximum	5

Selected range is from 1 to 5
Mean value in simulation was 3



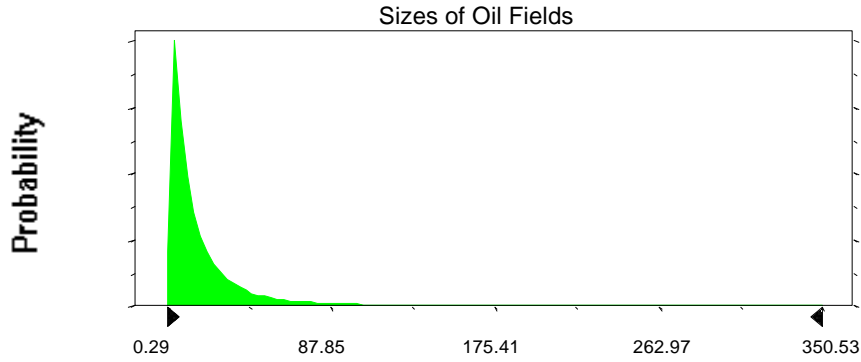
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	20.19	30.19
Standard Deviation	35.43	35.43

Selected range is from 0.00 to 390.00 10.00 to 400.00
Mean value in simulation was 19.82 29.82

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Assumption: Sizes of Oil Fields (cont'd)



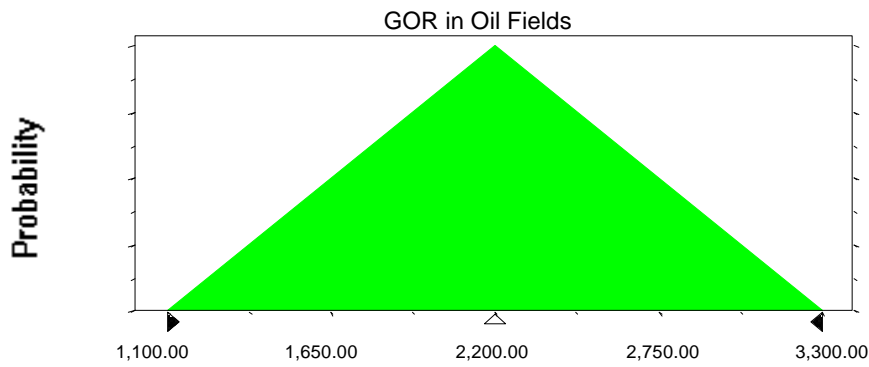
Assumption: GOR in Oil Fields

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 2,202.03



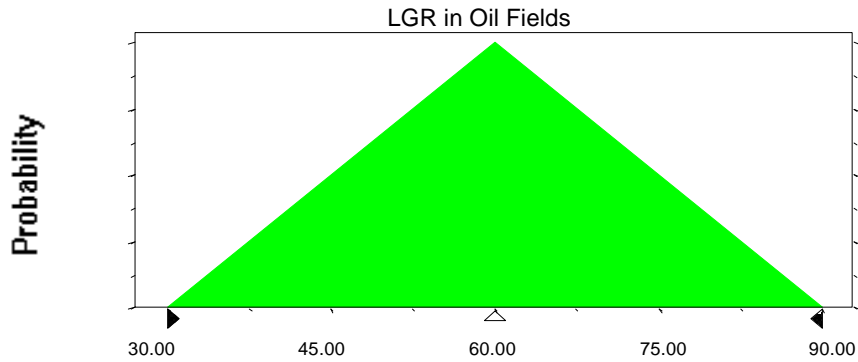
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Assumption: LGR in Oil Fields

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 59.95



Assumption: Number of Gas Fields

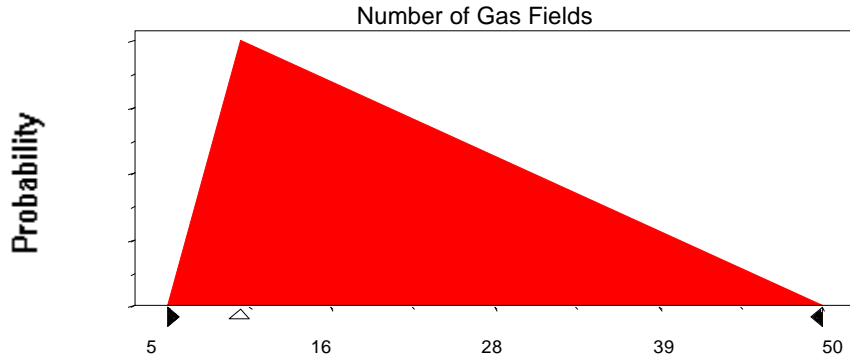
Triangular distribution with parameters:

Minimum	5
Likeliest	10
Maximum	50

Selected range is from 5 to 50
Mean value in simulation was 22

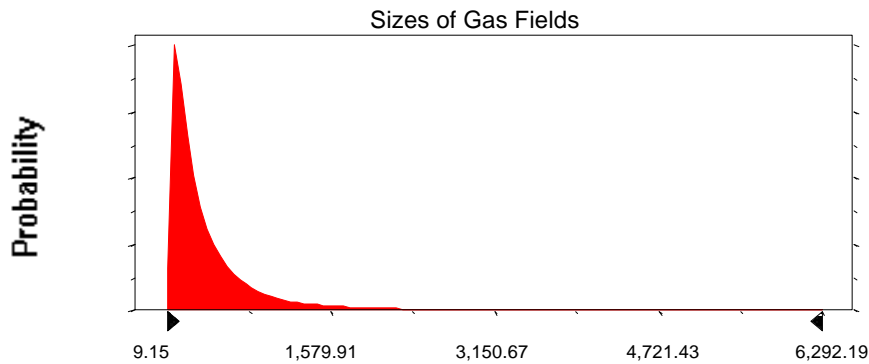
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	434.15	494.15
Standard Deviation	654.45	654.45
Selected range is from 0.00 to 6,940.00		60.00 to 7,000.00
Mean value in simulation was 424.26		484.26



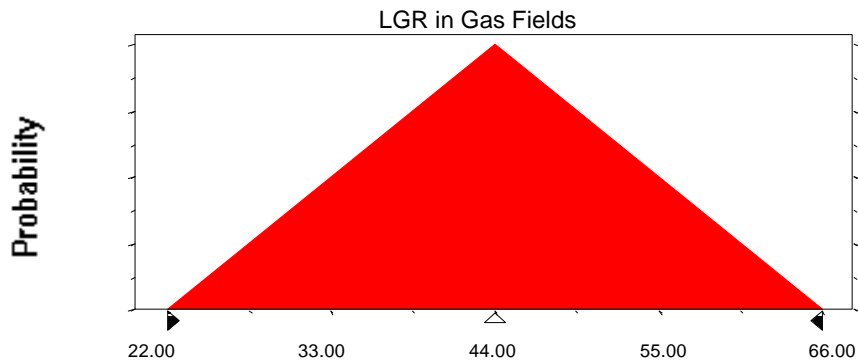
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Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	22.00
Likeliest	44.00
Maximum	66.00

Selected range is from 22.00 to 66.00
Mean value in simulation was 44.01



End of Assumptions

Simulation started on 11/17/99 at 18:17:50
Simulation stopped on 11/17/99 at 18:38:24