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Neuquen Foothills Structure, Assessment Unit 60550102
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	94	306	669	334	265	892	2,114	1,001	5	17	45	20	18	60	201	77
Gas Fields	6						739	2,545	5,504	2,763	10	36	91	41	156	505	1,603	634
Total		1.00	94	306	669	334	1,004	3,438	7,618	3,764	15	54	135	61				

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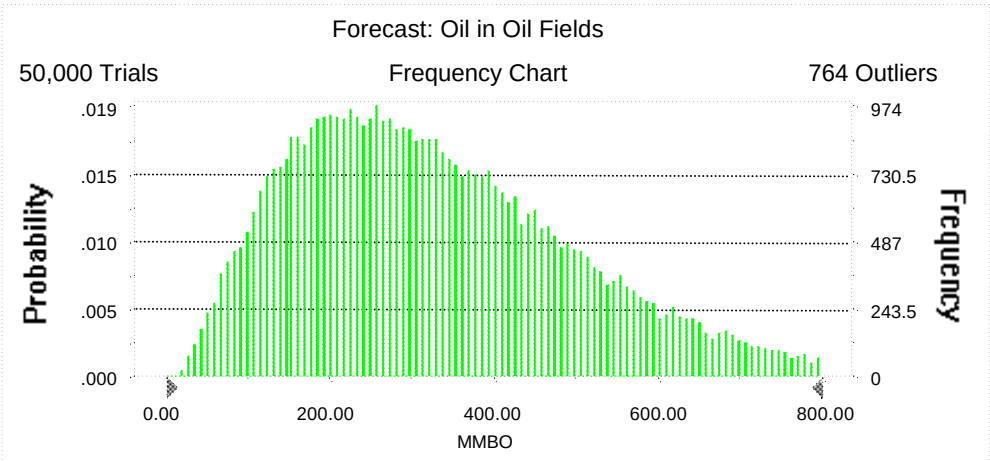
Neuquen Foothills Structure
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 800.00 MMBO
Entire range is from 11.28 to 1,497.56 MMBO
After 50,000 trials, the standard error of the mean is 0.80

Statistics:	Value
Trials	50000
Mean	334.05
Median	306.39
Mode	---
Standard Deviation	178.64
Variance	31,911.84
Skewness	0.82
Kurtosis	3.67
Coefficient of Variability	0.53
Range Minimum	11.28
Range Maximum	1,497.56
Range Width	1,486.29
Mean Standard Error	0.80



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Neuquen Foothills Structure
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	11.28
95%	94.27
90%	126.89
85%	152.87
80%	176.33
75%	198.17
70%	219.31
65%	240.66
60%	262.07
55%	283.97
50%	306.39
45%	329.54
40%	354.10
35%	381.28
30%	409.45
25%	441.48
20%	477.57
15%	521.26
10%	579.04
5%	669.47
0%	1,497.56

End of Forecast

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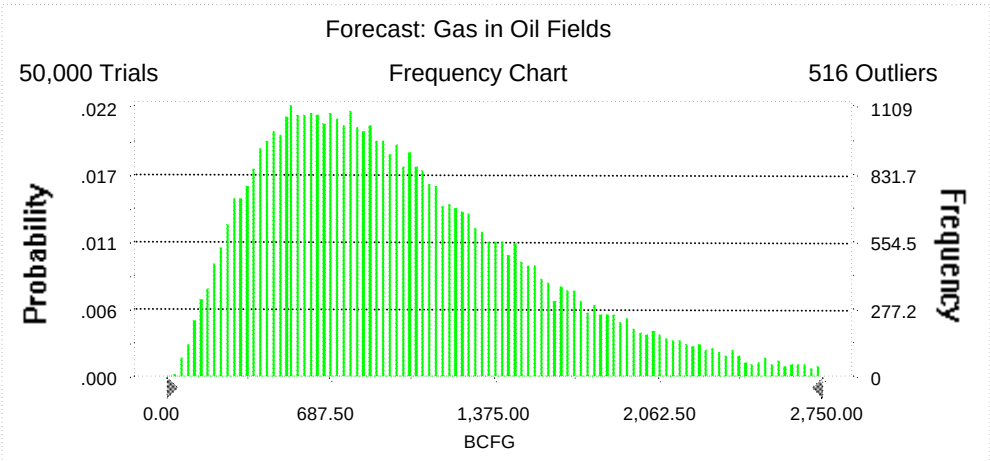
Neuquen Foothills Structure
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 2,750.00 BCFG
Entire range is from 35.00 to 5,243.30 BCFG
After 50,000 trials, the standard error of the mean is 2.60

Statistics:	Value
Trials	50000
Mean	1,001.03
Median	892.32
Mode	---
Standard Deviation	581.31
Variance	337,916.13
Skewness	1.07
Kurtosis	4.51
Coefficient of Variability	0.58
Range Minimum	35.00
Range Maximum	5,243.30
Range Width	5,208.30
Mean Standard Error	2.60



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Neuquen Foothills Structure
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	35.00
95%	264.84
90%	358.04
85%	433.48
80%	502.65
75%	564.59
70%	628.94
65%	693.67
60%	759.80
55%	823.88
50%	892.32
45%	965.13
40%	1,040.61
35%	1,121.70
30%	1,216.32
25%	1,320.55
20%	1,443.64
15%	1,589.23
10%	1,795.66
5%	2,114.10
0%	5,243.30

End of Forecast

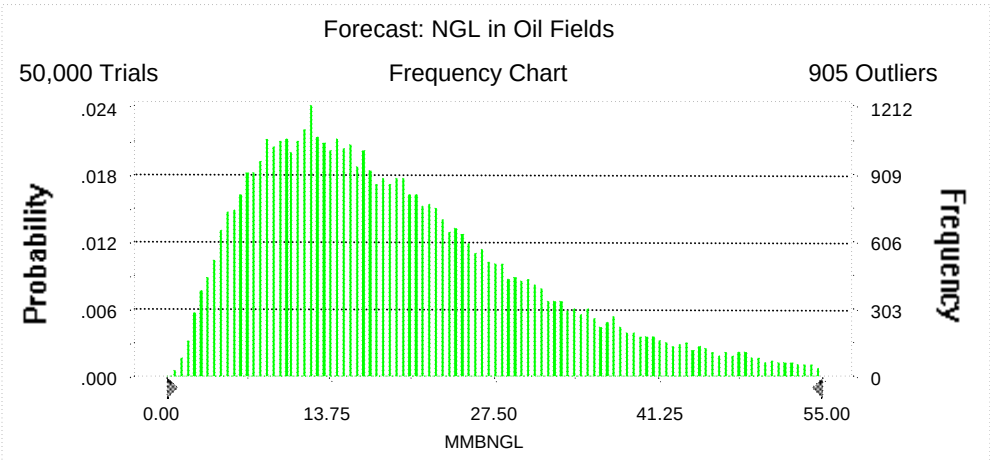
60550102
Neuquen Foothills Structure
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 55.00 MMBNGL
Entire range is from 0.61 to 135.08 MMBNGL
After 50,000 trials, the standard error of the mean is 0.06

Statistics:	Value
Trials	50000
Mean	20.02
Median	17.34
Mode	---
Standard Deviation	12.60
Variance	158.64
Skewness	1.29
Kurtosis	5.38
Coefficient of Variability	0.63
Range Minimum	0.61
Range Maximum	135.08
Range Width	134.46
Mean Standard Error	0.06



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Neuquen Foothills Structure
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.61
95%	4.89
90%	6.68
85%	8.15
80%	9.46
75%	10.78
70%	12.06
65%	13.27
60%	14.58
55%	15.92
50%	17.34
45%	18.90
40%	20.49
35%	22.20
30%	24.11
25%	26.34
20%	28.99
15%	32.33
10%	37.01
5%	44.58
0%	135.08

End of Forecast

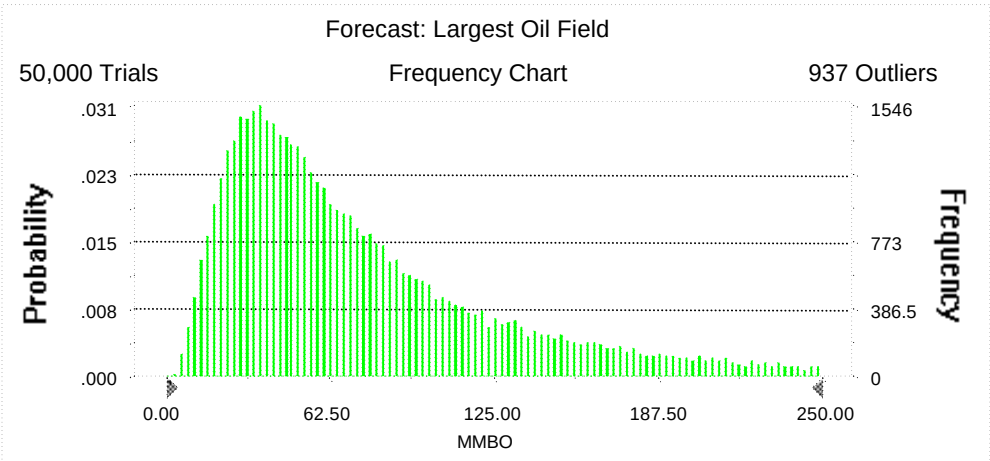
60550102
Neuquen Foothills Structure
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 250.00 MMBO
Entire range is from 2.09 to 299.90 MMBO
After 50,000 trials, the standard error of the mean is 0.25

Statistics:	Value
Trials	50000
Mean	77.15
Median	59.97
Mode	---
Standard Deviation	56.88
Variance	3,234.86
Skewness	1.48
Kurtosis	5.04
Coefficient of Variability	0.74
Range Minimum	2.09
Range Maximum	299.90
Range Width	297.81
Mean Standard Error	0.25



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Neuquen Foothills Structure
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	2.09
95%	17.85
90%	23.49
85%	28.15
80%	32.35
75%	36.41
70%	40.62
65%	45.09
60%	49.74
55%	54.57
50%	59.97
45%	66.11
40%	72.81
35%	80.42
30%	89.34
25%	100.03
20%	113.89
15%	132.49
10%	158.06
5%	200.77
0%	299.90

End of Forecast

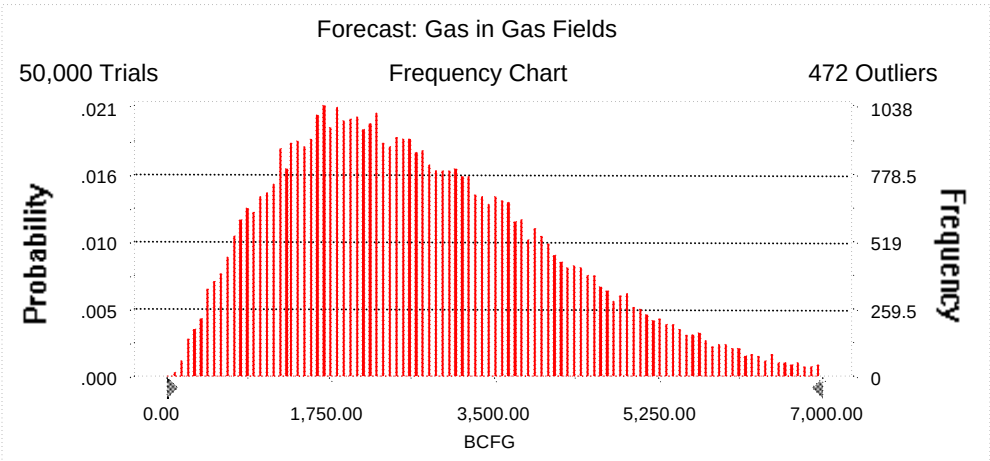
60550102
Neuquen Foothills Structure
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 7,000.00 BCFG
Entire range is from 65.53 to 10,480.82 BCFG
After 50,000 trials, the standard error of the mean is 6.63

Statistics:	Value
Trials	50000
Mean	2,763.46
Median	2,545.36
Mode	---
Standard Deviation	1,483.46
Variance	2,200,652.34
Skewness	0.76
Kurtosis	3.50
Coefficient of Variability	0.54
Range Minimum	65.53
Range Maximum	10,480.82
Range Width	10,415.29
Mean Standard Error	6.63



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Neuquen Foothills Structure
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	65.53
95%	739.06
90%	1,018.01
85%	1,246.83
80%	1,449.51
75%	1,642.26
70%	1,817.04
65%	1,992.01
60%	2,171.05
55%	2,350.03
50%	2,545.36
45%	2,741.38
40%	2,953.74
35%	3,174.09
30%	3,414.93
25%	3,673.20
20%	3,971.71
15%	4,333.99
10%	4,801.29
5%	5,504.12
0%	10,480.82

End of Forecast

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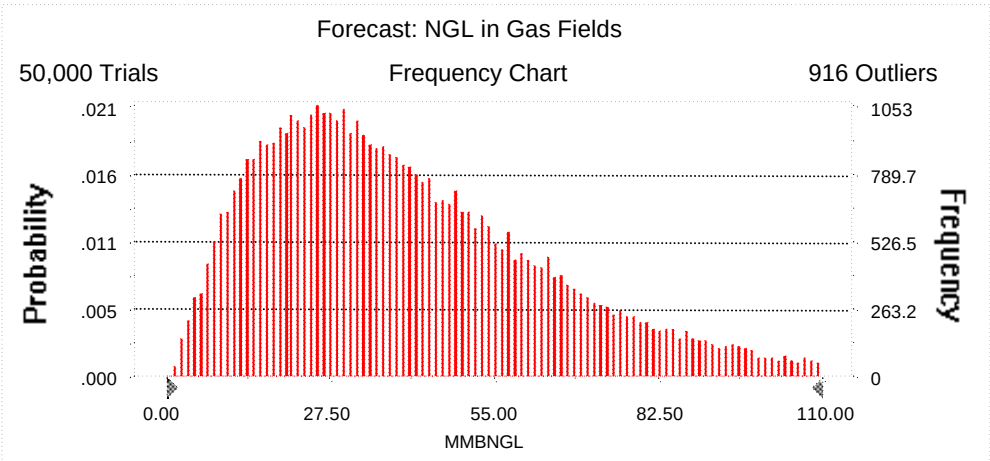
Neuquen Foothills Structure
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 110.00 MMBNGL
Entire range is from 0.75 to 210.14 MMBNGL
After 50,000 trials, the standard error of the mean is 0.11

Statistics:	Value
Trials	50000
Mean	41.45
Median	36.34
Mode	---
Standard Deviation	25.60
Variance	655.51
Skewness	1.13
Kurtosis	4.66
Coefficient of Variability	0.62
Range Minimum	0.75
Range Maximum	210.14
Range Width	209.38
Mean Standard Error	0.11



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Neuquen Foothills Structure
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.75
95%	9.69
90%	13.46
85%	16.59
80%	19.56
75%	22.35
70%	25.13
65%	27.80
60%	30.47
55%	33.29
50%	36.34
45%	39.47
40%	42.86
35%	46.64
30%	50.64
25%	55.16
20%	60.69
15%	67.13
10%	76.28
5%	90.73
0%	210.14

End of Forecast

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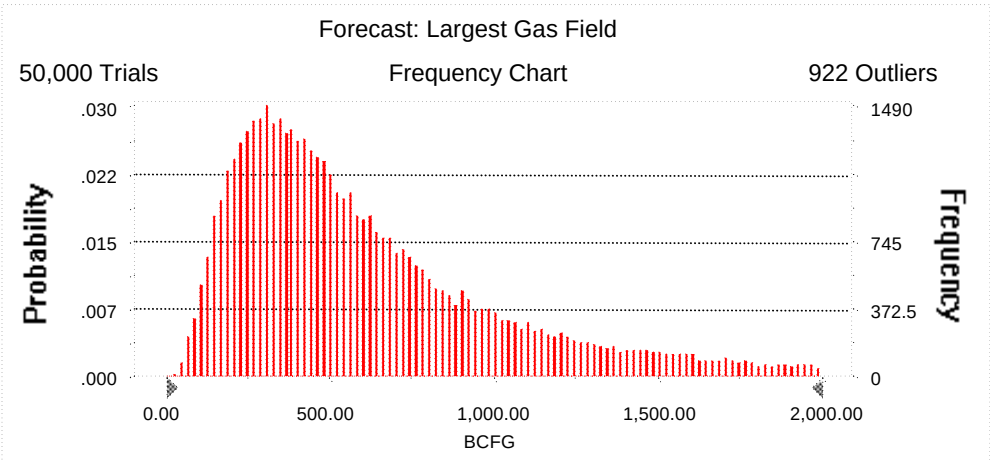
Neuquen Foothills Structure
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 2,000.00 BCFG
Entire range is from 20.19 to 2,399.64 BCFG
After 50,000 trials, the standard error of the mean is 2.01

Statistics:	Value
Trials	50000
Mean	634.49
Median	504.53
Mode	---
Standard Deviation	448.90
Variance	201,506.91
Skewness	1.46
Kurtosis	5.01
Coefficient of Variability	0.71
Range Minimum	20.19
Range Maximum	2,399.64
Range Width	2,379.45
Mean Standard Error	2.01



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Neuquen Foothills Structure
Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	20.19
95%	156.43
90%	203.71
85%	243.49
80%	279.28
75%	313.56
70%	349.14
65%	385.62
60%	423.41
55%	462.48
50%	504.53
45%	552.92
40%	605.64
35%	665.20
30%	733.50
25%	815.19
20%	924.26
15%	1,064.28
10%	1,266.08
5%	1,603.35
0%	2,399.64

End of Forecast

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Neuquen Foothills Structure
Monte Carlo Results

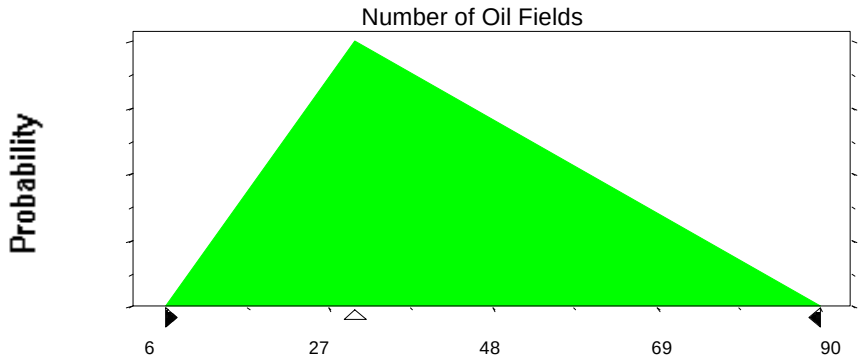
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	6
Likeliest	30
Maximum	90

Selected range is from 6 to 90
Mean value in simulation was 42



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	7.43	8.43
Standard Deviation	26.62	26.62
Selected range is from	0.00 to 299.00	1.00 to 300.00
Mean value in simulation was	6.94	7.94

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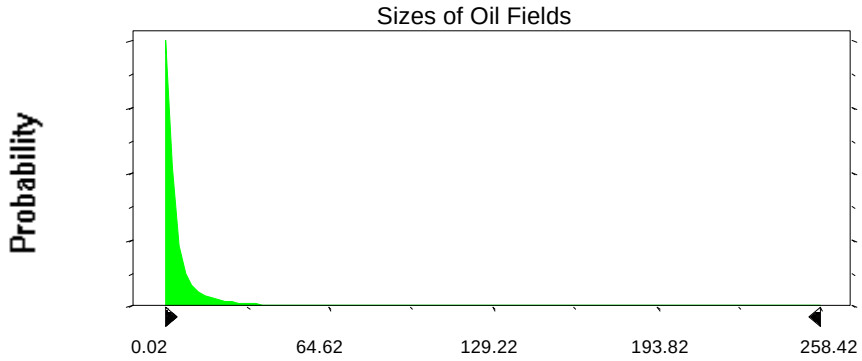
Neuquen Foothills Structure
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)

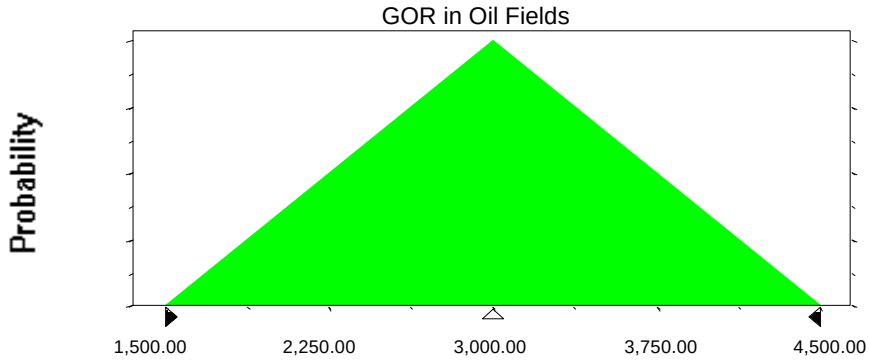


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,500.00
Likeliest	3,000.00
Maximum	4,500.00

Selected range is from 1,500.00 to 4,500.00
Mean value in simulation was 2,999.79



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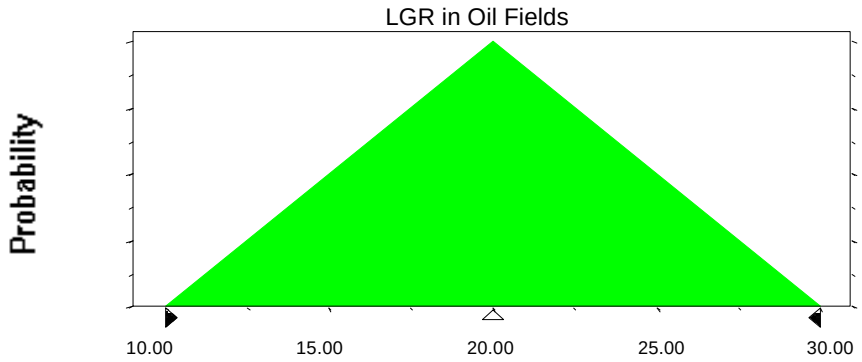
Neuquen Foothills Structure
Monte Carlo Results

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 19.98



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	4
Likeliest	27
Maximum	80

Selected range is from 4 to 80
Mean value in simulation was 37

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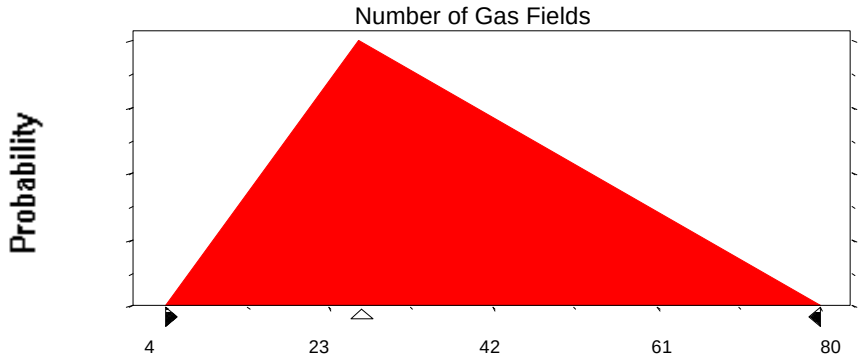
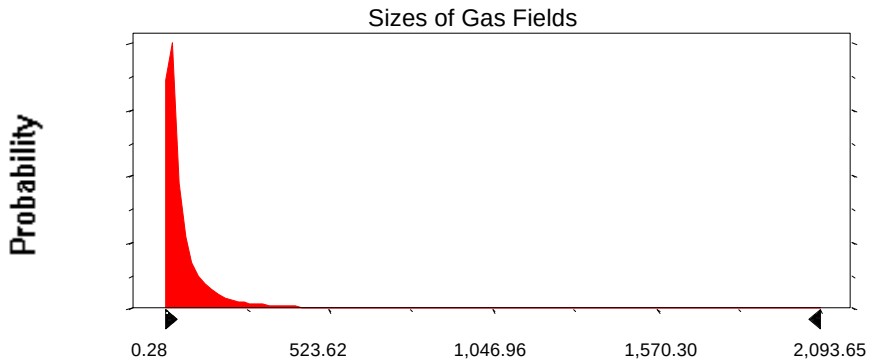
Neuquen Foothills Structure
Monte Carlo Results

Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	72.78	78.78
Standard Deviation	208.35	208.35
Selected range is from 0.00 to 2,394.00		6.00 to 2,400.00
Mean value in simulation was 69.28		75.28



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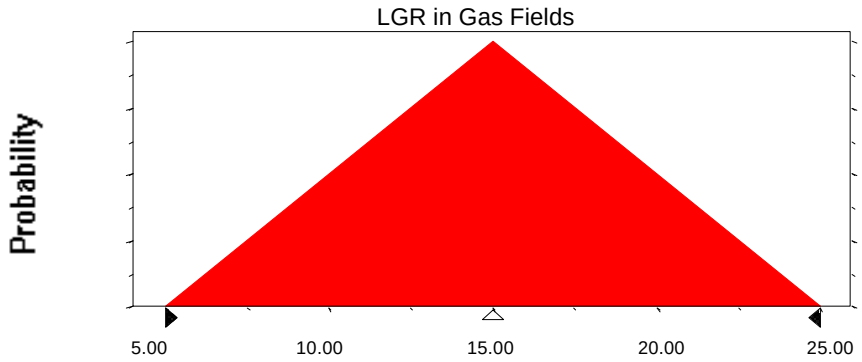
Neuquen Foothills Structure
Monte Carlo Results

Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	5.00
Likeliest	15.00
Maximum	25.00

Selected range is from 5.00 to 25.00
Mean value in simulation was 15.00



End of Assumptions

Simulation started on 2/25/99 at 8:43:06
Simulation stopped on 2/25/99 at 9:26:51