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Mid-Norway Continental Margin, Assessment Unit 40170102
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	20	0.95	31	290	778	334	92	979	2,822	1,165	7	76	234	93	56	146	427	181
Gas Fields	120						1,400	88,552	268,760	106,667	61	3,776	12,291	4,695	4,440	23,262	92,780	31,943
Total		0.95	31	290	778	334	1,493	89,531	271,581	107,832	67	3,852	12,525	4,788				

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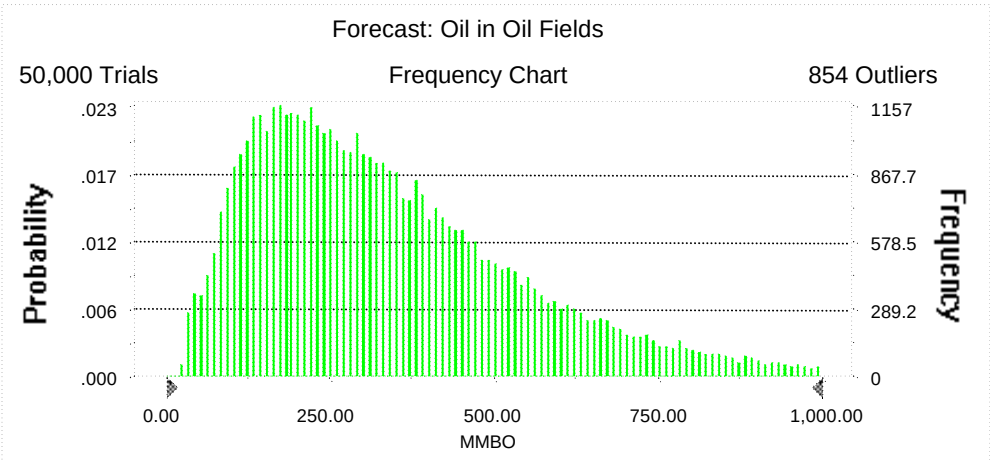
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 1,000.00 MMBO
Entire range is from 22.65 to 2,040.79 MMBO
After 50,000 trials, the standard error of the mean is 1.01

Statistics:	Value
Trials	50000
Mean	351.27
Median	302.72
Mode	---
Standard Deviation	225.39
Variance	50,799.55
Skewness	1.36
Kurtosis	5.67
Coefficient of Variability	0.64
Range Minimum	22.65
Range Maximum	2,040.79
Range Width	2,018.14
Mean Standard Error	1.01



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	22.65
95%	87.23
90%	116.19
85%	140.13
80%	162.85
75%	184.73
70%	207.04
65%	229.19
60%	252.87
55%	277.34
50%	302.72
45%	329.38
40%	357.34
35%	388.68
30%	423.73
25%	462.47
20%	509.95
15%	568.02
10%	650.50
5%	786.46
0%	2,040.79

End of Forecast

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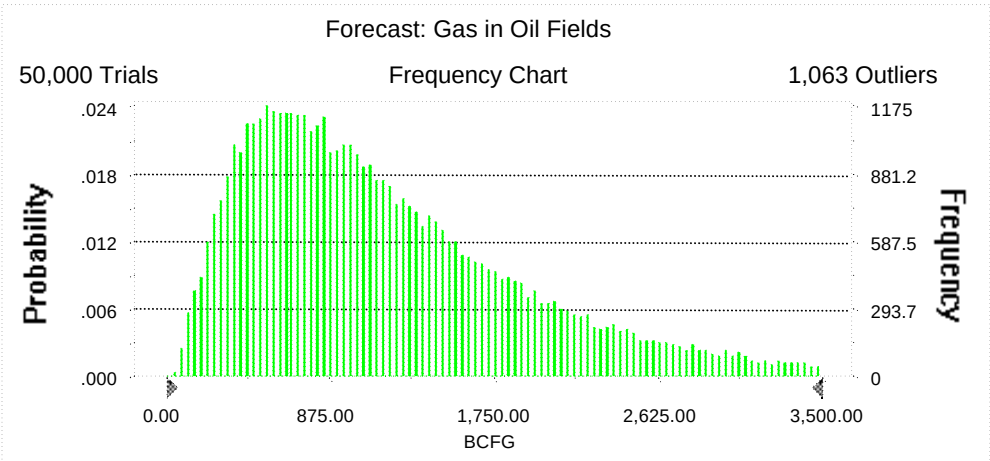
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 3,500.00 BCFG
Entire range is from 52.28 to 9,123.10 BCFG
After 50,000 trials, the standard error of the mean is 3.75

Statistics:	Value
Trials	50000
Mean	1,223.70
Median	1,023.75
Mode	---
Standard Deviation	838.30
Variance	702,742.40
Skewness	1.55
Kurtosis	6.65
Coefficient of Variability	0.69
Range Minimum	52.28
Range Maximum	9,123.10
Range Width	9,070.83
Mean Standard Error	3.75



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	52.28
95%	278.84
90%	379.63
85%	463.15
80%	540.96
75%	616.50
70%	692.47
65%	769.76
60%	849.31
55%	935.38
50%	1,023.75
45%	1,117.09
40%	1,220.66
35%	1,335.62
30%	1,463.88
25%	1,612.20
20%	1,794.03
15%	2,014.83
10%	2,329.60
5%	2,853.32
0%	9,123.10

End of Forecast

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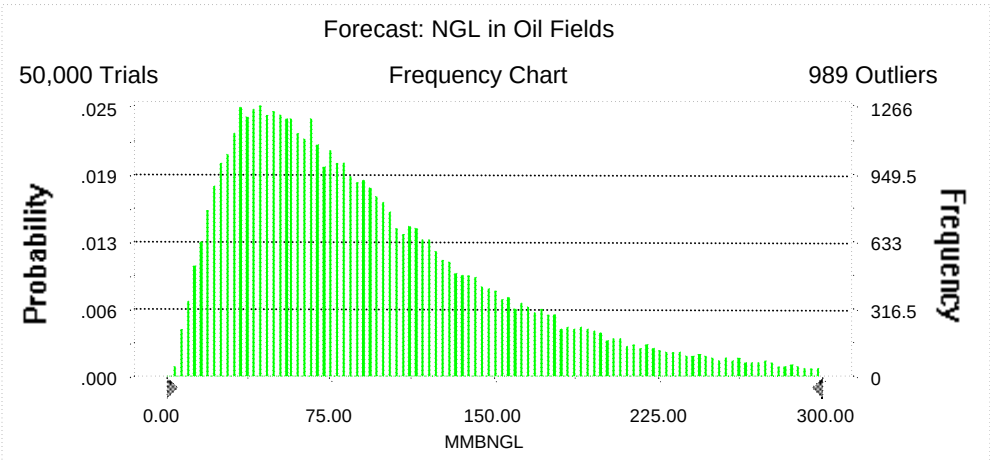
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 300.00 MMBNGL
Entire range is from 3.46 to 799.59 MMBNGL
After 50,000 trials, the standard error of the mean is 0.32

Statistics:	Value
Trials	50000
Mean	97.88
Median	79.94
Mode	---
Standard Deviation	71.19
Variance	5,068.43
Skewness	1.73
Kurtosis	7.64
Coefficient of Variability	0.73
Range Minimum	3.46
Range Maximum	799.59
Range Width	796.13
Mean Standard Error	0.32



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	3.46
95%	20.82
90%	28.68
85%	35.04
80%	41.11
75%	47.15
70%	53.20
65%	59.40
60%	66.01
55%	72.63
50%	79.94
45%	87.85
40%	96.06
35%	105.35
30%	116.13
25%	128.47
20%	143.72
15%	163.28
10%	190.39
5%	236.83
0%	799.59

End of Forecast

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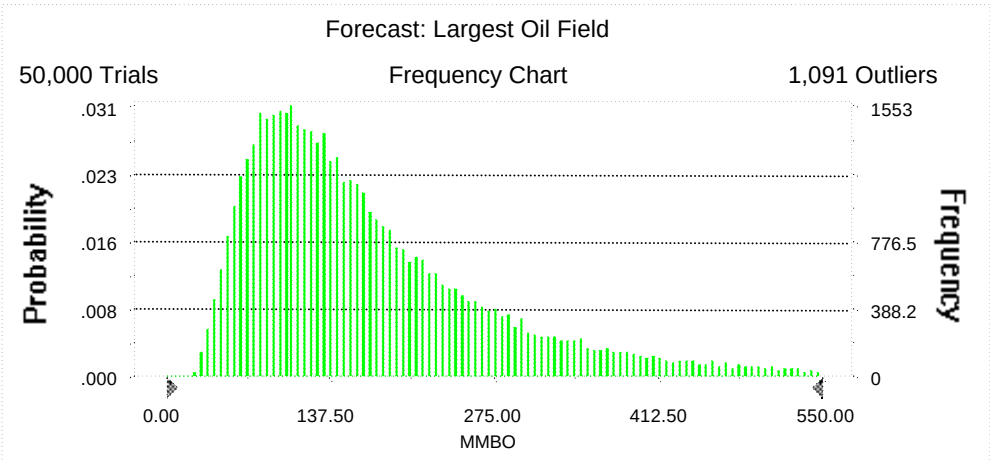
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 550.00 MMBO
Entire range is from 22.65 to 998.01 MMBO
After 50,000 trials, the standard error of the mean is 0.56

Statistics:	Value
Trials	50000
Mean	180.64
Median	145.75
Mode	---
Standard Deviation	126.03
Variance	15,883.85
Skewness	2.15
Kurtosis	9.56
Coefficient of Variability	0.70
Range Minimum	22.65
Range Maximum	998.01
Range Width	975.36
Mean Standard Error	0.56



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	22.65
95%	56.13
90%	68.53
85%	78.73
80%	87.93
75%	97.07
70%	106.07
65%	115.32
60%	124.97
55%	134.93
50%	145.75
45%	157.52
40%	170.11
35%	185.18
30%	202.77
25%	223.07
20%	249.20
15%	282.99
10%	334.04
5%	426.95
0%	998.01

End of Forecast

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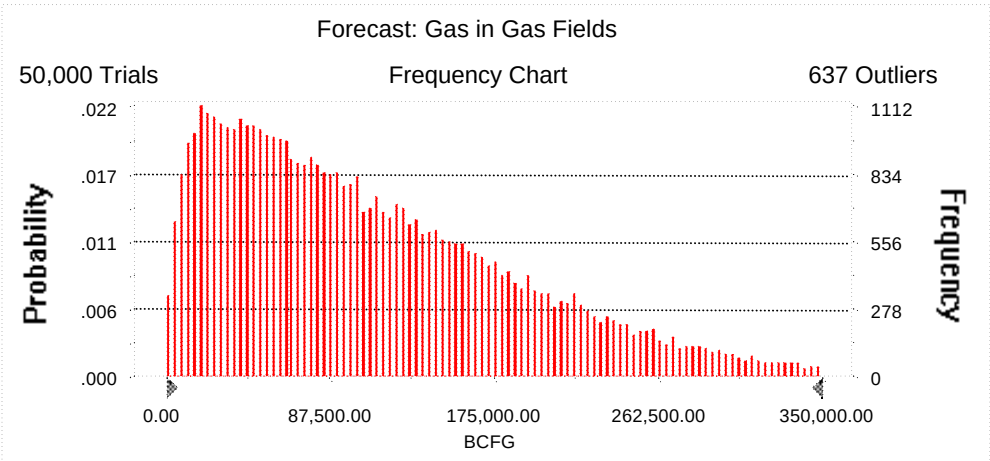
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 350,000.00 BCFG
Entire range is from 140.03 to 656,310.11 BCFG
After 50,000 trials, the standard error of the mean is 371.61

Statistics:	Value
Trials	50000
Mean	112,060.66
Median	93,860.03
Mode	---
Standard Deviation	83,094.52
Variance	6,904,698,915.16
Skewness	1.07
Kurtosis	4.17
Coefficient of Variability	0.74
Range Minimum	140.03
Range Maximum	656,310.11
Range Width	656,170.08
Mean Standard Error	371.61



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	140.03
95%	13,028.32
90%	21,317.13
85%	29,566.67
80%	38,035.40
75%	46,480.70
70%	55,053.03
65%	63,955.44
60%	73,627.74
55%	83,511.38
50%	93,860.03
45%	104,852.23
40%	117,335.13
35%	130,039.72
30%	144,400.05
25%	159,949.68
20%	177,542.26
15%	199,676.69
10%	227,548.05
5%	271,410.88
0%	656,310.11

End of Forecast

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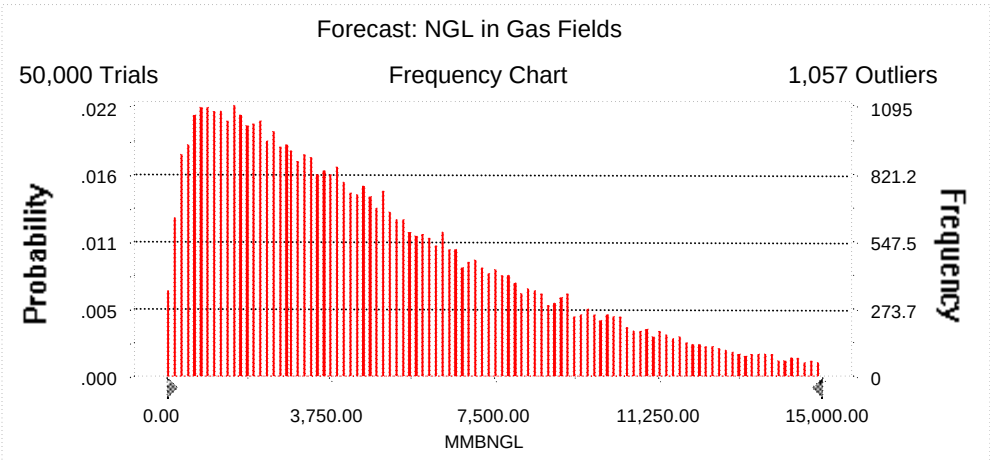
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 15,000.00 MMBNGL
Entire range is from 4.94 to 35,453.15 MMBNGL
After 50,000 trials, the standard error of the mean is 17.28

Statistics:	Value
Trials	50000
Mean	4,932.30
Median	4,006.39
Mode	---
Standard Deviation	3,864.58
Variance	14,934,969.01
Skewness	1.30
Kurtosis	5.16
Coefficient of Variability	0.78
Range Minimum	4.94
Range Maximum	35,453.15
Range Width	35,448.22
Mean Standard Error	17.28



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	4.94
95%	543.18
90%	901.13
85%	1,247.08
80%	1,598.86
75%	1,961.24
70%	2,330.49
65%	2,718.02
60%	3,128.11
55%	3,552.64
50%	4,006.39
45%	4,490.76
40%	5,006.98
35%	5,574.07
30%	6,232.95
25%	6,957.72
20%	7,811.64
15%	8,882.32
10%	10,272.07
5%	12,440.73
0%	35,453.15

End of Forecast

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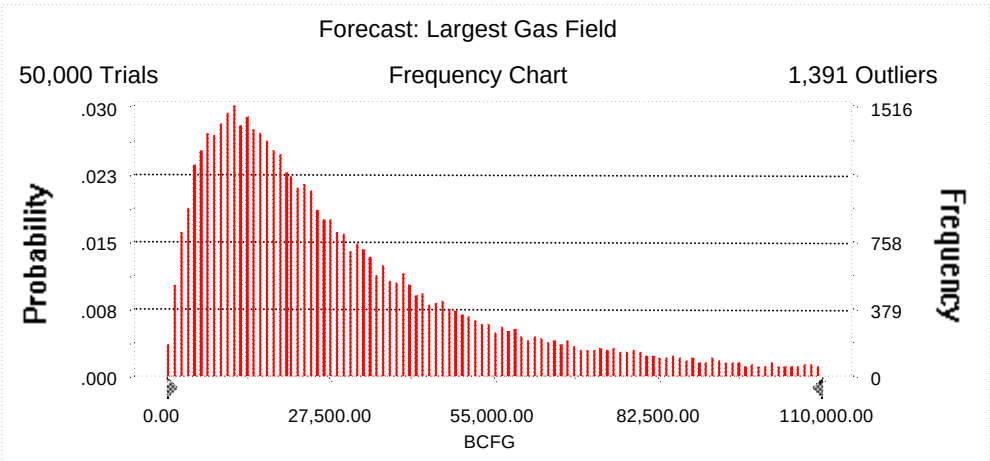
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 110,000.00 BCFG
Entire range is from 140.03 to 149,975.30 BCFG
After 50,000 trials, the standard error of the mean is 124.70

Statistics:	Value
Trials	50000
Mean	31,942.56
Median	23,262.45
Mode	---
Standard Deviation	27,883.22
Variance	777,473,977.73
Skewness	1.67
Kurtosis	5.84
Coefficient of Variability	0.87
Range Minimum	140.03
Range Maximum	149,975.30
Range Width	149,835.27
Mean Standard Error	124.70



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	140.03
95%	4,440.01
90%	6,668.15
85%	8,682.10
80%	10,585.42
75%	12,463.68
70%	14,369.25
65%	16,347.52
60%	18,444.72
55%	20,743.94
50%	23,262.45
45%	25,909.65
40%	29,042.63
35%	32,660.24
30%	36,866.84
25%	41,967.52
20%	48,378.79
15%	57,217.72
10%	70,335.27
5%	92,779.52
0%	149,975.30

End of Forecast

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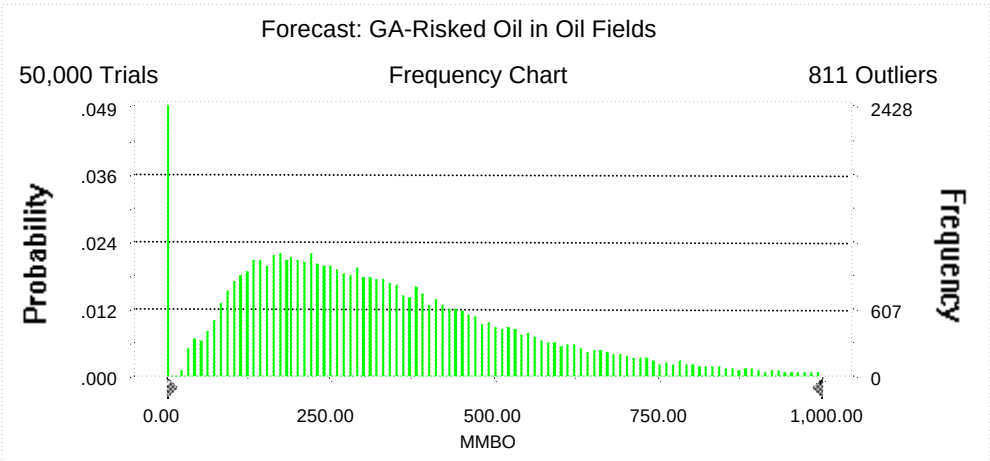
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked Oil in Oil Fields

Summary:

Display range is from 0.00 to 1,000.00 MMBO
Entire range is from 0.00 to 1,941.95 MMBO
After 50,000 trials, the standard error of the mean is 1.04

Statistics:	Value
Trials	50000
Mean	334.40
Median	290.48
Mode	0.00
Standard Deviation	232.40
Variance	54,009.19
Skewness	1.23
Kurtosis	5.31
Coefficient of Variability	0.69
Range Minimum	0.00
Range Maximum	1,941.95
Range Width	1,941.95
Mean Standard Error	1.04



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	0.00
95%	30.80
90%	90.08
85%	119.78
80%	144.44
75%	168.23
70%	191.21
65%	214.48
60%	238.48
55%	263.49
50%	290.48
45%	317.30
40%	346.39
35%	378.56
30%	412.82
25%	452.31
20%	499.85
15%	558.64
10%	640.35
5%	778.18
0%	1,941.95

End of Forecast

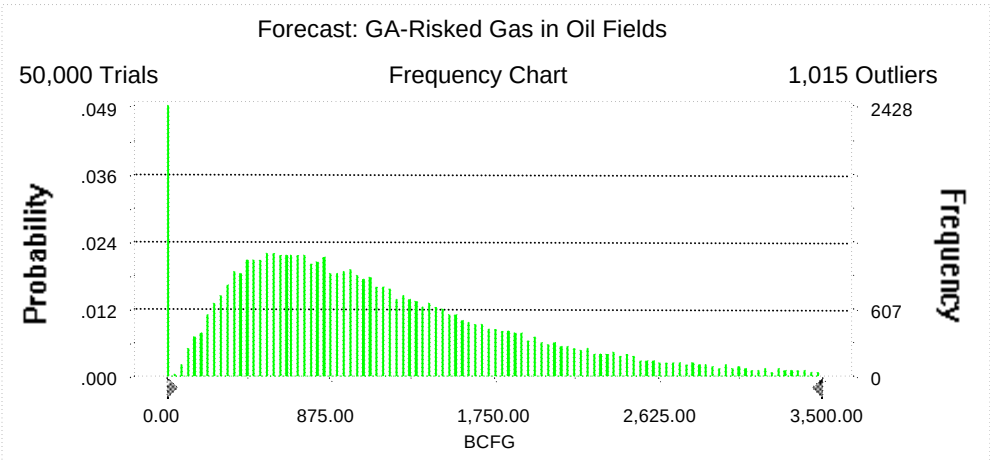
40170102
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked Gas in Oil Fields

Summary:

Display range is from 0.00 to 3,500.00 BCFG
Entire range is from 0.00 to 7,974.69 BCFG
After 50,000 trials, the standard error of the mean is 3.84

Statistics:	Value
Trials	50000
Mean	1,165.07
Median	979.35
Mode	0.00
Standard Deviation	859.19
Variance	738,210.37
Skewness	1.43
Kurtosis	6.21
Coefficient of Variability	0.74
Range Minimum	0.00
Range Maximum	7,974.69
Range Width	7,974.69
Mean Standard Error	3.84



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	0.00
95%	92.32
90%	288.60
85%	391.05
80%	477.68
75%	558.93
70%	639.07
65%	718.71
60%	801.56
55%	886.08
50%	979.35
45%	1,073.52
40%	1,179.13
35%	1,294.83
30%	1,424.90
25%	1,571.14
20%	1,755.01
15%	1,976.22
10%	2,289.57
5%	2,821.82
0%	7,974.69

End of Forecast

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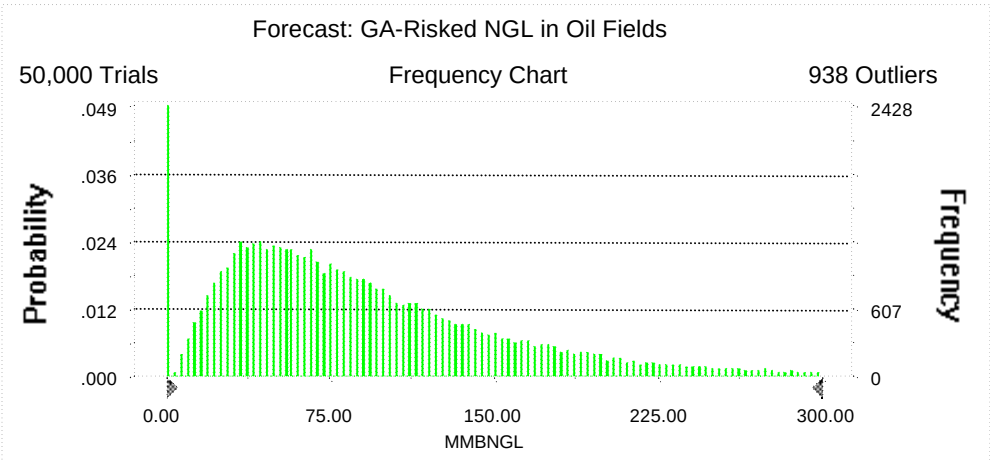
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked NGL in Oil Fields

Summary:

Display range is from 0.00 to 300.00 MMBNGL
Entire range is from 0.00 to 738.78 MMBNGL
After 50,000 trials, the standard error of the mean is 0.32

Statistics:	Value
Trials	50000
Mean	93.18
Median	76.48
Mode	0.00
Standard Deviation	72.57
Variance	5,266.60
Skewness	1.62
Kurtosis	7.20
Coefficient of Variability	0.78
Range Minimum	0.00
Range Maximum	738.78
Range Width	738.78
Mean Standard Error	0.32



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.00
95%	6.62
90%	21.58
85%	29.65
80%	36.14
75%	42.46
70%	48.86
65%	55.32
60%	61.99
55%	68.87
50%	76.48
45%	84.19
40%	92.66
35%	101.94
30%	112.96
25%	125.03
20%	140.55
15%	160.19
10%	186.78
5%	233.67
0%	738.78

End of Forecast

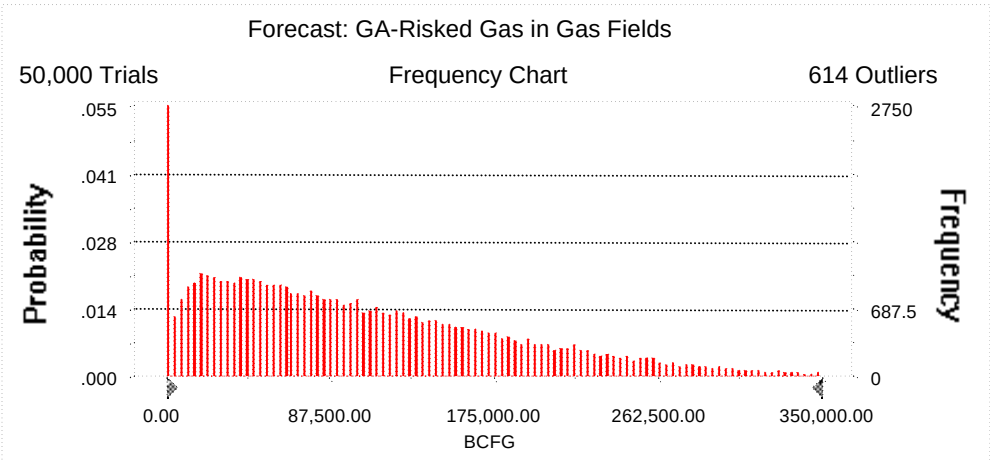
40170102
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked Gas in Gas Fields

Summary:

Display range is from 0.00 to 350,000.00 BCFG
Entire range is from 0.00 to 656,310.11 BCFG
After 50,000 trials, the standard error of the mean is 378.35

Statistics:	Value
Trials	50000
Mean	106,666.79
Median	88,551.78
Mode	0.00
Standard Deviation	84,601.28
Variance	7,157,376,813.02
Skewness	1.05
Kurtosis	4.10
Coefficient of Variability	0.79
Range Minimum	0.00
Range Maximum	656,310.11
Range Width	656,310.11
Mean Standard Error	378.35



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Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	0.00
95%	1,400.44
90%	13,788.67
85%	22,380.93
80%	31,082.06
75%	40,128.87
70%	48,903.71
65%	58,091.42
60%	67,613.91
55%	78,008.13
50%	88,551.78
45%	99,908.87
40%	112,343.07
35%	125,479.15
30%	139,819.92
25%	155,849.20
20%	173,705.36
15%	195,888.47
10%	224,722.48
5%	268,759.62
0%	656,310.11

End of Forecast

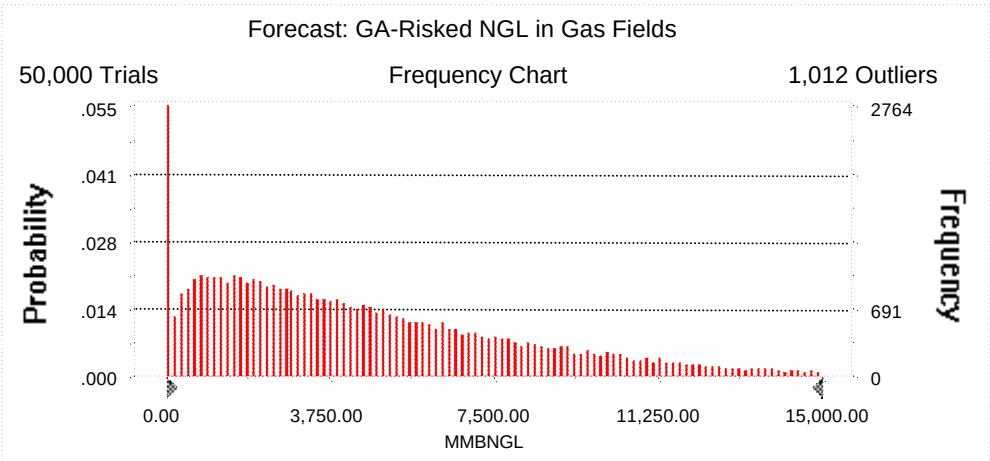
40170102
Mid-Norway Continental Margin
Monte Carlo Results

Forecast: GA-Risked NGL in Gas Fields

Summary:

Display range is from 0.00 to 15,000.00 MMBNGL
Entire range is from 0.00 to 35,453.15 MMBNGL
After 50,000 trials, the standard error of the mean is 17.52

Statistics:	Value
Trials	50000
Mean	4,695.04
Median	3,775.95
Mode	0.00
Standard Deviation	3,918.32
Variance	15,353,254.29
Skewness	1.27
Kurtosis	5.04
Coefficient of Variability	0.83
Range Minimum	0.00
Range Maximum	35,453.15
Range Width	35,453.15
Mean Standard Error	17.52



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Monte Carlo Results

Forecast: GA-Risked NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.00
95%	60.84
90%	577.40
85%	949.25
80%	1,310.41
75%	1,685.09
70%	2,070.00
65%	2,460.59
60%	2,873.18
55%	3,313.95
50%	3,775.95
45%	4,263.64
40%	4,784.68
35%	5,360.71
30%	6,020.39
25%	6,746.09
20%	7,629.77
15%	8,700.00
10%	10,115.12
5%	12,291.48
0%	35,453.15

End of Forecast

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Mid-Norway Continental Margin
Monte Carlo Results

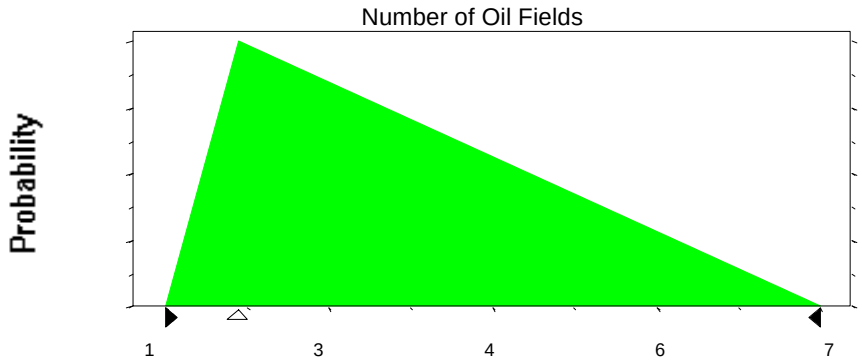
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	2
Maximum	7

Selected range is from 1 to 7
Mean value in simulation was 3



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	90.28	110.28
Standard Deviation	101.50	101.5
Selected range is from	0.00 to 980.00	20.00 to 1,000.00
Mean value in simulation was	89.09	109.09

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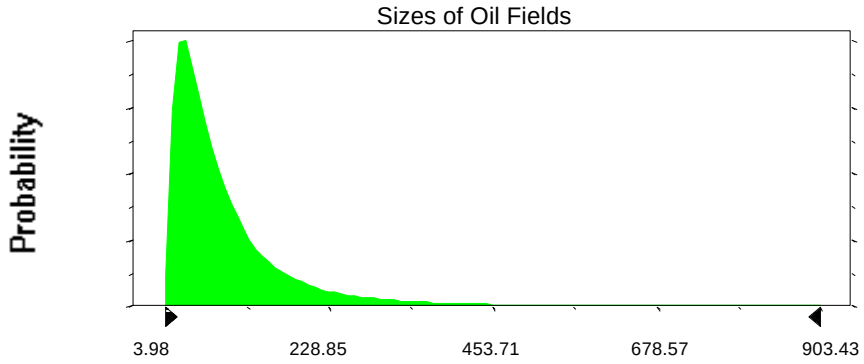
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)

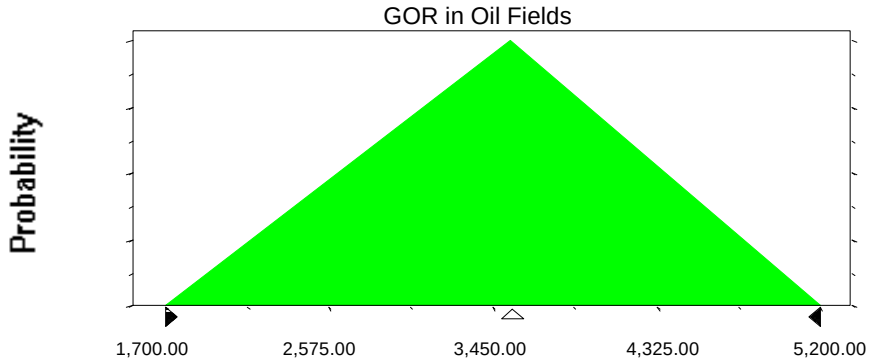


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,700.00
Likeliest	3,551.43
Maximum	5,200.00

Selected range is from 1,700.00 to 5,200.00
Mean value in simulation was 3,484.39



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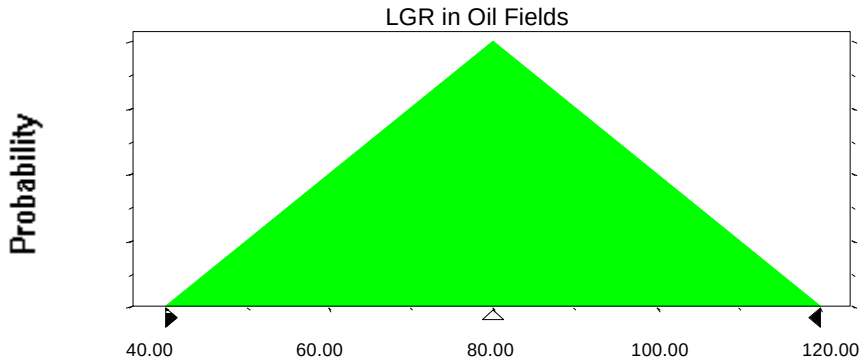
Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	40.00
Likeliest	80.00
Maximum	120.00

Selected range is from 40.00 to 120.00
Mean value in simulation was 79.99



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	9
Maximum	90

Selected range is from 1 to 90
Mean value in simulation was 33

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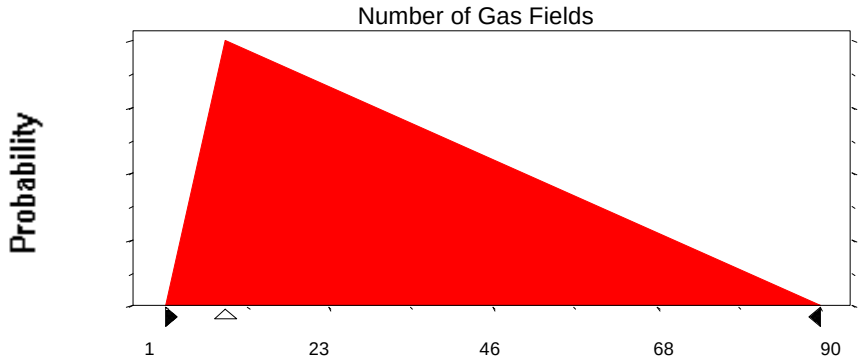
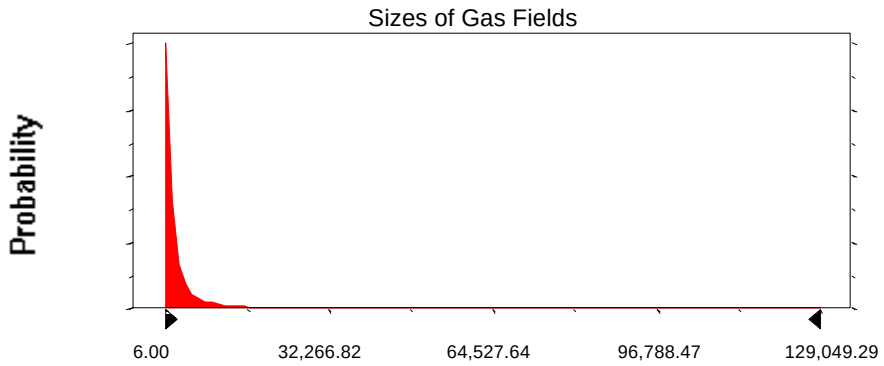
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	3,505.78	3,625.78
Standard Deviation	13,519.29	13,519.29
Selected range is from 0.00 to 149,880.00		120.00 to 150,000.00
Mean value in simulation was 3,281.18		3,401.18



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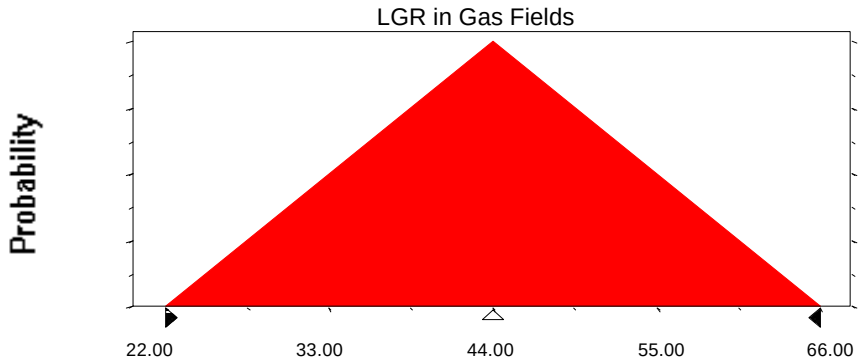
Assumption: LGR in Gas Fields

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 44.03



End of Assumptions

Simulation started on 11/9/99 at 15:58:59
Simulation stopped on 11/9/99 at 16:26:43