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Abrolhos Sub-Volcanic Structures, Assessment Unit 60340103
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	0.72	0	252	1,690	468	0	636	4,474	1,214	0	37	271	73	30	184	1,157	331
Gas Fields	60						0	4,692	23,873	7,332	0	198	1,081	323	380	2,291	10,795	3,430
Total		0.72	0	252	1,690	468	0	5,328	28,347	8,545	0	235	1,352	396				

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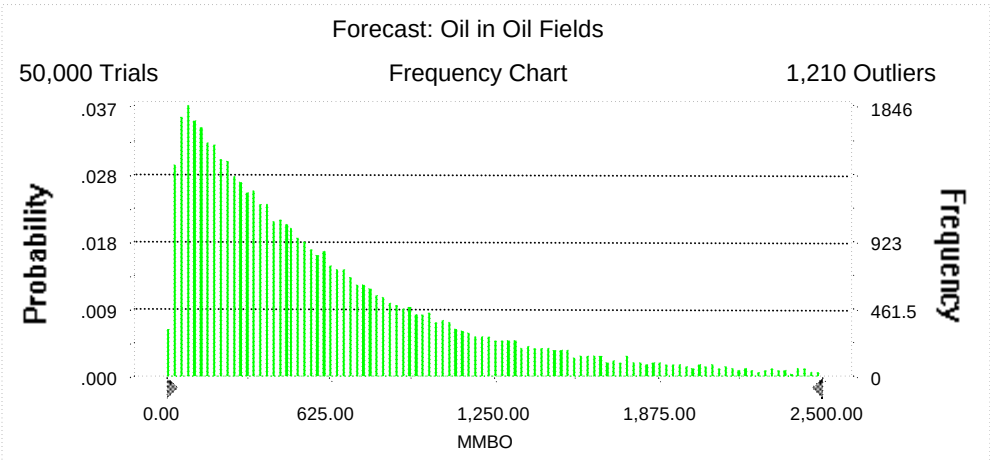
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 2,500.00 MMBO
Entire range is from 10.12 to 6,227.44 MMBO
After 50,000 trials, the standard error of the mean is 2.92

Statistics:	Value
Trials	50000
Mean	653.78
Median	455.76
Mode	---
Standard Deviation	652.60
Variance	425,889.28
Skewness	2.24
Kurtosis	10.13
Coefficient of Variability	1.00
Range Minimum	10.12
Range Maximum	6,227.44
Range Width	6,217.32
Mean Standard Error	2.92



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	10.12
95%	60.53
90%	94.34
85%	130.43
80%	167.78
75%	208.04
70%	249.95
65%	296.38
60%	345.13
55%	398.15
50%	455.76
45%	518.68
40%	589.25
35%	666.56
30%	760.30
25%	869.93
20%	1,007.98
15%	1,186.50
10%	1,453.66
5%	1,942.31
0%	6,227.44

End of Forecast

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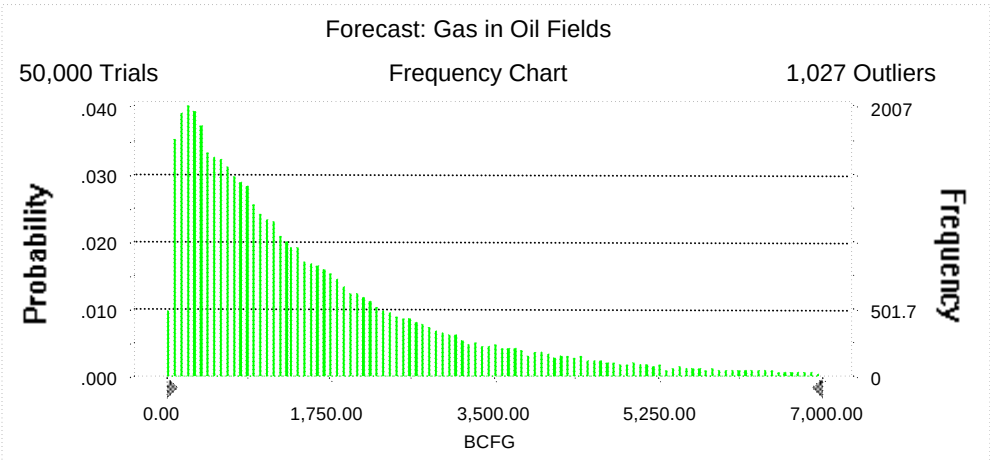
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 7,000.00 BCFG
Entire range is from 17.22 to 20,551.43 BCFG
After 50,000 trials, the standard error of the mean is 7.88

Statistics:	Value
Trials	50000
Mean	1,697.47
Median	1,145.97
Mode	---
Standard Deviation	1,762.06
Variance	3,104,866.10
Skewness	2.46
Kurtosis	12.12
Coefficient of Variability	1.04
Range Minimum	17.22
Range Maximum	20,551.43
Range Width	20,534.22
Mean Standard Error	7.88



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	17.22
95%	149.61
90%	236.82
85%	324.91
80%	417.78
75%	522.10
70%	631.41
65%	744.45
60%	867.11
55%	999.46
50%	1,145.97
45%	1,314.31
40%	1,499.43
35%	1,708.63
30%	1,947.45
25%	2,238.57
20%	2,607.86
15%	3,081.80
10%	3,819.38
5%	5,122.47
0%	20,551.43

End of Forecast

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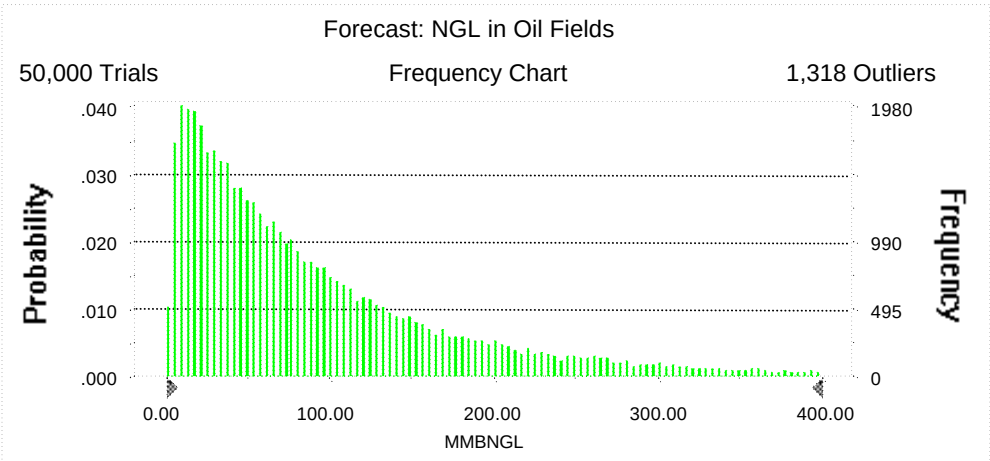
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 400.00 MMBNGL
Entire range is from 0.58 to 1,503.19 MMBNGL
After 50,000 trials, the standard error of the mean is 0.49

Statistics:	Value
Trials	50000
Mean	102.11
Median	67.58
Mode	---
Standard Deviation	110.38
Variance	12,183.26
Skewness	2.69
Kurtosis	14.28
Coefficient of Variability	1.08
Range Minimum	0.58
Range Maximum	1,503.19
Range Width	1,502.62
Mean Standard Error	0.49



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.58
95%	8.62
90%	13.64
85%	18.82
80%	24.15
75%	30.23
70%	36.47
65%	43.21
60%	50.65
55%	58.66
50%	67.58
45%	77.40
40%	88.32
35%	100.64
30%	115.24
25%	132.87
20%	155.46
15%	186.18
10%	231.34
5%	312.80
0%	1,503.19

End of Forecast

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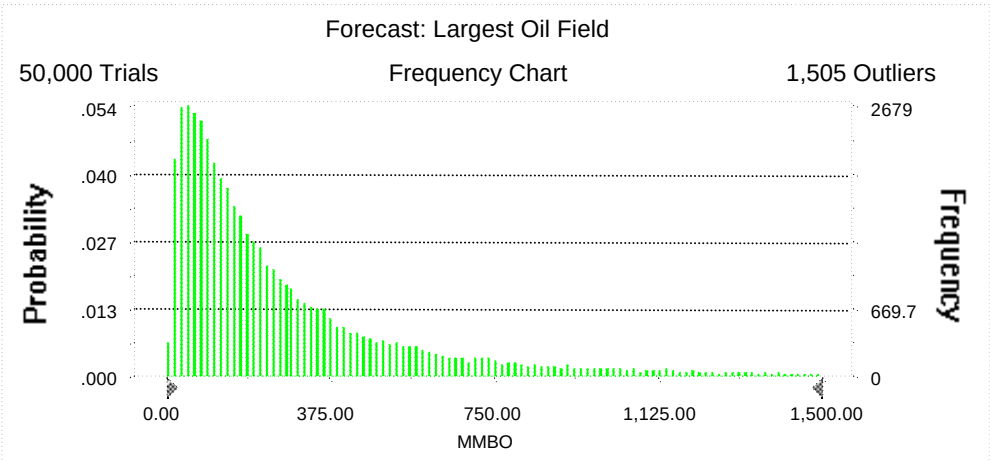
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 1,500.00 MMBO
Entire range is from 10.12 to 3,498.78 MMBO
After 50,000 trials, the standard error of the mean is 1.93

Statistics:	Value
Trials	50000
Mean	331.32
Median	184.47
Mode	---
Standard Deviation	431.51
Variance	186,197.68
Skewness	3.22
Kurtosis	16.36
Coefficient of Variability	1.30
Range Minimum	10.12
Range Maximum	3,498.78
Range Width	3,488.66
Mean Standard Error	1.93



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	10.12
95%	30.02
90%	44.22
85%	57.95
80%	72.14
75%	86.97
70%	102.72
65%	120.26
60%	139.55
55%	160.44
50%	184.47
45%	211.87
40%	244.00
35%	282.52
30%	329.07
25%	386.48
20%	468.57
15%	580.71
10%	767.30
5%	1,157.32
0%	3,498.78

End of Forecast

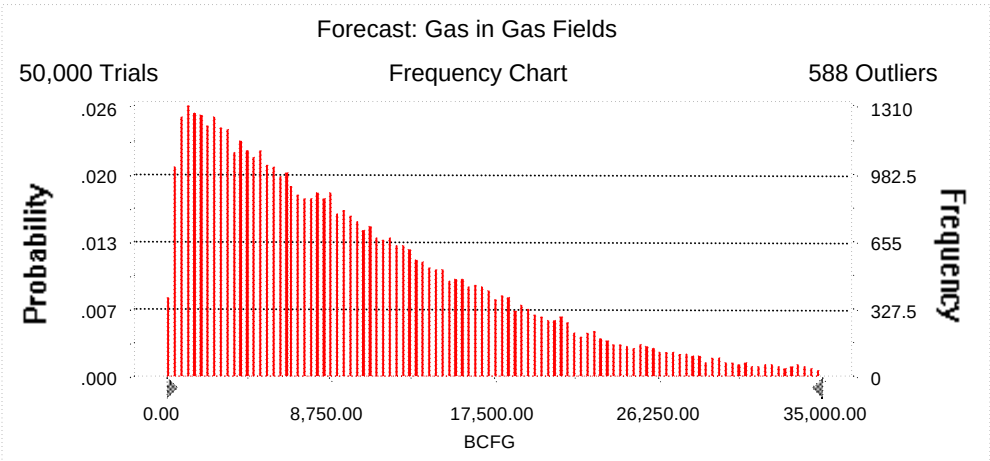
60340103
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 35,000.00 BCFG
Entire range is from 61.91 to 71,217.75 BCFG
After 50,000 trials, the standard error of the mean is 36.49

Statistics:	Value
Trials	50000
Mean	10,195.09
Median	8,253.72
Mode	---
Standard Deviation	8,159.43
Variance	66,576,242.65
Skewness	1.29
Kurtosis	5.14
Coefficient of Variability	0.80
Range Minimum	61.91
Range Maximum	71,217.75
Range Width	71,155.84
Mean Standard Error	36.49



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	61.91
95%	1,003.74
90%	1,677.66
85%	2,380.63
80%	3,084.82
75%	3,847.85
70%	4,638.79
65%	5,457.52
60%	6,328.81
55%	7,261.55
50%	8,253.72
45%	9,271.43
40%	10,385.21
35%	11,631.95
30%	12,974.09
25%	14,529.28
20%	16,334.92
15%	18,481.97
10%	21,333.97
5%	26,150.74
0%	71,217.75

End of Forecast

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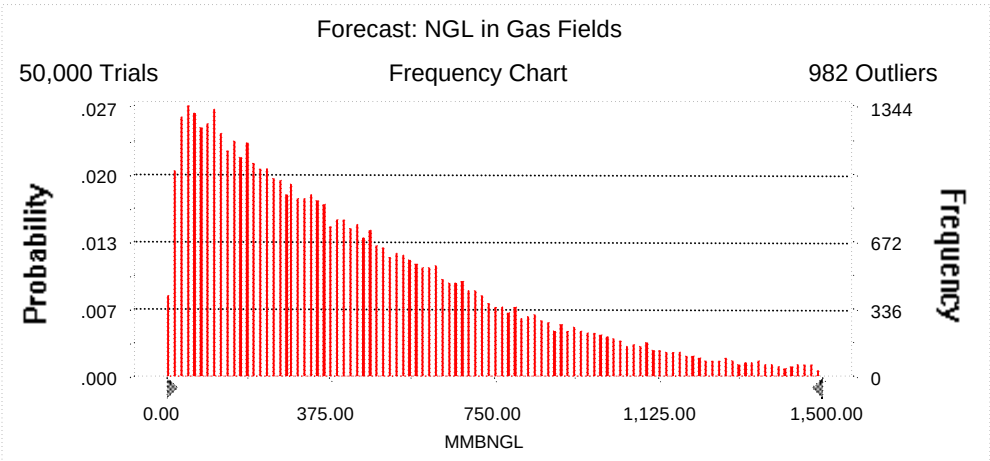
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 1,500.00 MMBNGL
Entire range is from 2.12 to 3,905.19 MMBNGL
After 50,000 trials, the standard error of the mean is 1.69

Statistics:	Value
Trials	50000
Mean	449.03
Median	352.07
Mode	---
Standard Deviation	378.39
Variance	143,176.49
Skewness	1.52
Kurtosis	6.33
Coefficient of Variability	0.84
Range Minimum	2.12
Range Maximum	3,905.19
Range Width	3,903.07
Mean Standard Error	1.69



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	2.12
95%	42.61
90%	70.65
85%	100.38
80%	130.13
75%	162.43
70%	195.54
65%	231.20
60%	269.05
55%	309.02
50%	352.07
45%	397.73
40%	447.01
35%	500.73
30%	563.16
25%	630.74
20%	712.95
15%	817.20
10%	959.45
5%	1,186.25
0%	3,905.19

End of Forecast

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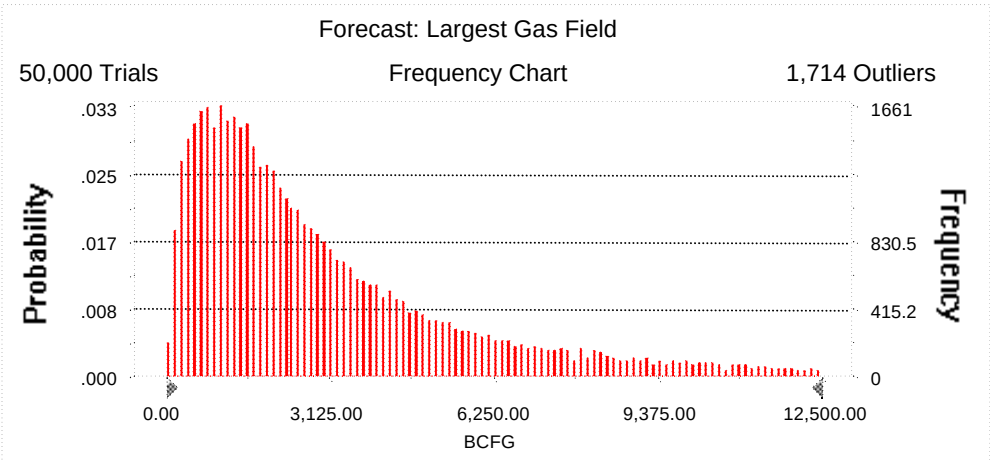
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 12,500.00 BCFG
Entire range is from 61.91 to 20,996.54 BCFG
After 50,000 trials, the standard error of the mean is 15.45

Statistics:	Value
Trials	50000
Mean	3,429.85
Median	2,290.55
Mode	---
Standard Deviation	3,454.04
Variance	11,930,371.02
Skewness	2.13
Kurtosis	8.22
Coefficient of Variability	1.01
Range Minimum	61.91
Range Maximum	20,996.54
Range Width	20,934.63
Mean Standard Error	15.45



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	61.91
95%	380.13
90%	588.50
85%	778.94
80%	975.49
75%	1,170.49
70%	1,368.44
65%	1,567.04
60%	1,788.54
55%	2,028.11
50%	2,290.55
45%	2,588.48
40%	2,927.23
35%	3,310.81
30%	3,786.87
25%	4,358.04
20%	5,105.73
15%	6,142.05
10%	7,782.23
5%	10,795.21
0%	20,996.54

End of Forecast

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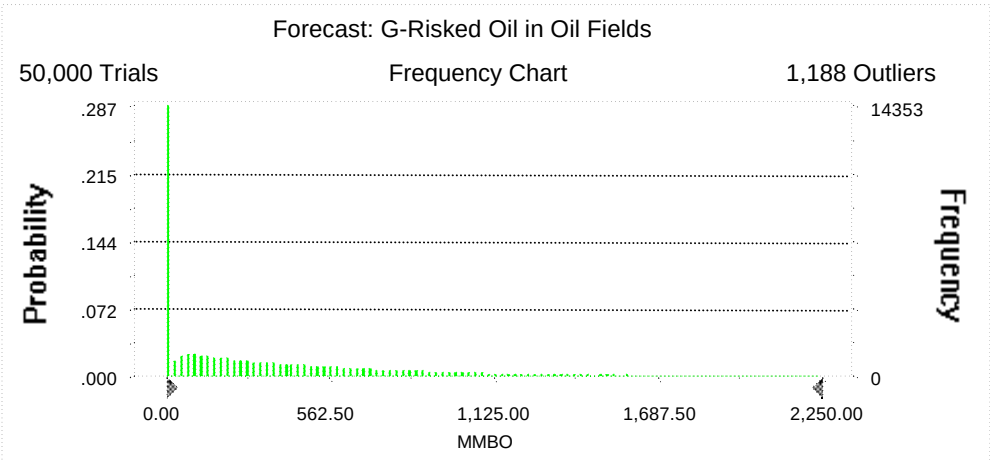
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: G-Risked Oil in Oil Fields

Summary:

Display range is from 0.00 to 2,250.00 MMBO
Entire range is from 0.00 to 6,227.44 MMBO
After 50,000 trials, the standard error of the mean is 2.80

Statistics:	Value
Trials	50000
Mean	467.59
Median	251.63
Mode	0.00
Standard Deviation	626.36
Variance	392,324.44
Skewness	2.43
Kurtosis	11.43
Coefficient of Variability	1.34
Range Minimum	0.00
Range Maximum	6,227.44
Range Width	6,227.44
Mean Standard Error	2.80



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

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

Percentiles:

Percentile	MMBO
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	39.98
65%	89.87
60%	138.83
55%	193.15
50%	251.63
45%	316.52
40%	387.09
35%	468.40
30%	560.77
25%	665.76
20%	800.35
15%	976.56
10%	1,232.80
5%	1,690.15
0%	6,227.44

End of Forecast

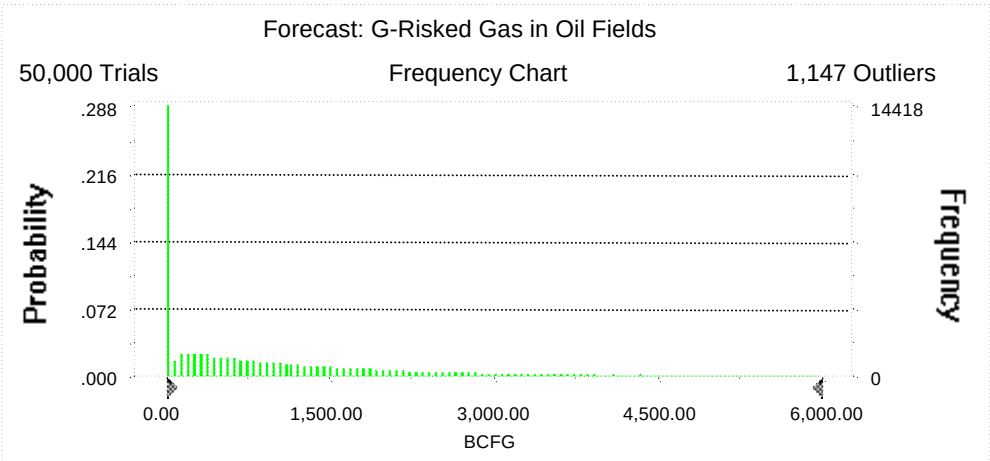
60340103
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: G-Risked Gas in Oil Fields

Summary:

Display range is from 0.00 to 6,000.00 BCFG
Entire range is from 0.00 to 20,551.43 BCFG
After 50,000 trials, the standard error of the mean is 7.50

Statistics:	Value
Trials	50000
Mean	1,213.77
Median	636.01
Mode	0.00
Standard Deviation	1,676.65
Variance	2,811,139.97
Skewness	2.67
Kurtosis	13.73
Coefficient of Variability	1.38
Range Minimum	0.00
Range Maximum	20,551.43
Range Width	20,551.43
Mean Standard Error	7.50



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

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

Percentiles:

Percentile	BCFG
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	99.29
65%	224.91
60%	346.99
55%	482.44
50%	636.01
45%	794.83
40%	974.96
35%	1,181.01
30%	1,427.35
25%	1,703.67
20%	2,053.28
15%	2,522.60
10%	3,206.14
5%	4,473.79
0%	20,551.43

End of Forecast

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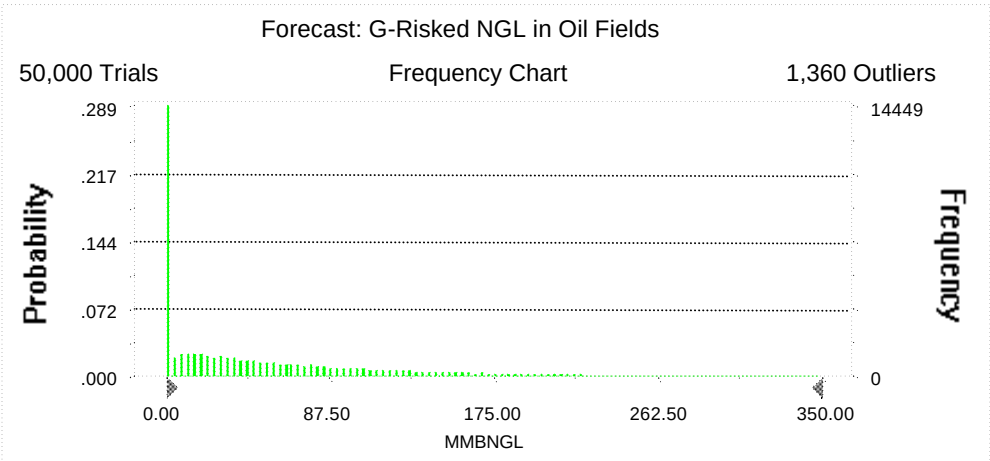
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: G-Risked NGL in Oil Fields

Summary:

Display range is from 0.00 to 350.00 MMBNGL
Entire range is from 0.00 to 1,503.19 MMBNGL
After 50,000 trials, the standard error of the mean is 0.47

Statistics:	Value
Trials	50000
Mean	73.00
Median	36.65
Mode	0.00
Standard Deviation	104.40
Variance	10,899.60
Skewness	2.94
Kurtosis	16.64
Coefficient of Variability	1.43
Range Minimum	0.00
Range Maximum	1,503.19
Range Width	1,503.19
Mean Standard Error	0.47



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

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

Percentiles:

Percentile	MMBNGL
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	5.62
65%	12.87
60%	20.06
55%	28.09
50%	36.65
45%	46.42
40%	57.12
35%	69.54
30%	83.53
25%	100.61
20%	121.82
15%	150.34
10%	192.79
5%	271.31
0%	1,503.19

End of Forecast

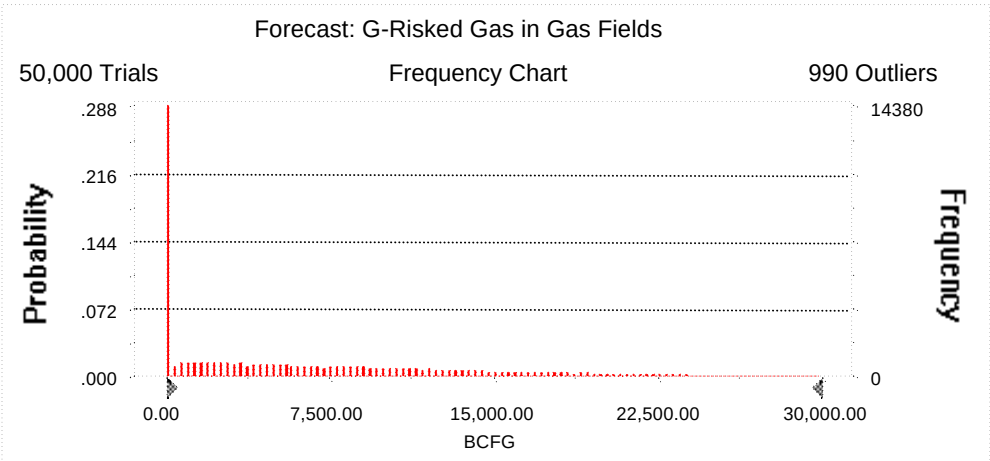
60340103
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: G-Risked Gas in Gas Fields

Summary:

Display range is from 0.00 to 30,000.00 BCFG
Entire range is from 0.00 to 71,217.75 BCFG
After 50,000 trials, the standard error of the mean is 37.20

Statistics:	Value
Trials	50000
Mean	7,331.54
Median	4,691.66
Mode	0.00
Standard Deviation	8,318.41
Variance	69,195,867.34
Skewness	1.44
Kurtosis	5.35
Coefficient of Variability	1.13
Range Minimum	0.00
Range Maximum	71,217.75
Range Width	71,217.75
Mean Standard Error	37.20



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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

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

Percentiles:

Percentile	BCFG
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	628.62
65%	1,571.20
60%	2,549.48
55%	3,562.58
50%	4,691.66
45%	5,868.31
40%	7,138.96
35%	8,527.21
30%	10,009.29
25%	11,710.75
20%	13,670.64
15%	16,063.72
10%	19,095.25
5%	23,873.06
0%	71,217.75

End of Forecast

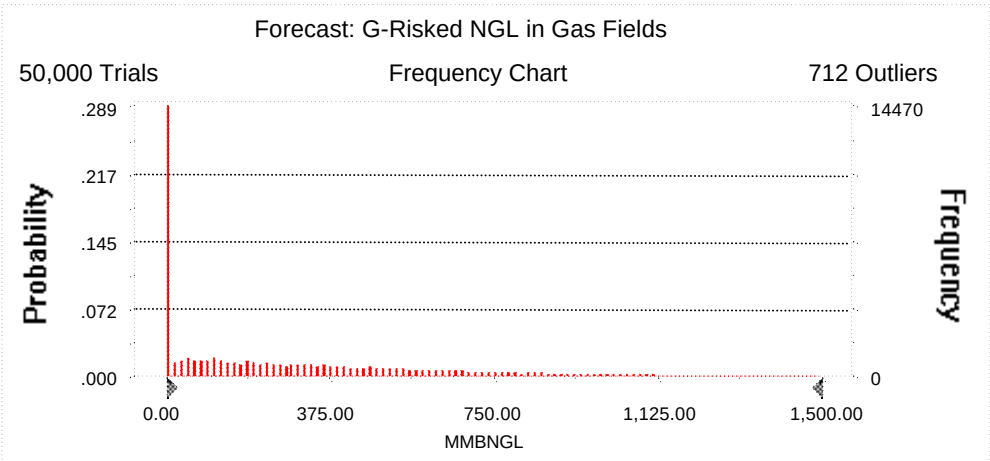
60340103
Abrolhos Sub-Volcanic Structures
Monte Carlo Results

Forecast: G-Risked NGL in Gas Fields

Summary:

Display range is from 0.00 to 1,500.00 MMBNGL
Entire range is from 0.00 to 3,905.19 MMBNGL
After 50,000 trials, the standard error of the mean is 1.70

Statistics:	Value
Trials	50000
Mean	323.07
Median	197.91
Mode	0.00
Standard Deviation	379.89
Variance	144,313.81
Skewness	1.64
Kurtosis	6.51
Coefficient of Variability	1.18
Range Minimum	0.00
Range Maximum	3,905.19
Range Width	3,905.19
Mean Standard Error	1.70



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Monte Carlo Results

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

Percentiles:

Percentile	MMBNGL
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	25.78
65%	66.58
60%	107.62
55%	150.83
50%	197.91
45%	248.74
40%	304.30
35%	362.96
30%	429.99
25%	505.52
20%	593.91
15%	700.91
10%	849.27
5%	1,080.72
0%	3,905.19

End of Forecast

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Abrolhos Sub-Volcanic Structures
Monte Carlo Results

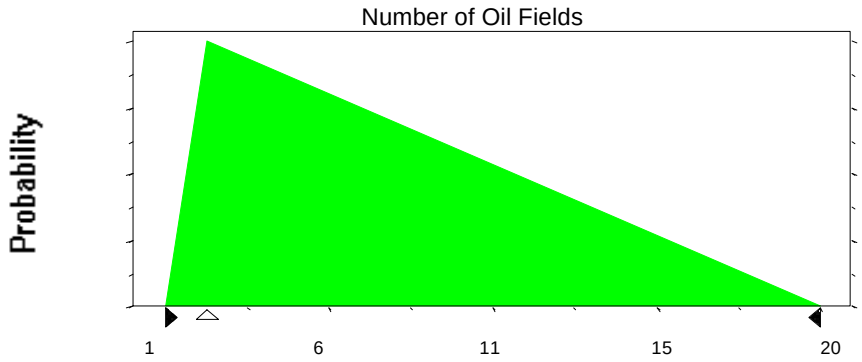
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	2
Maximum	20

Selected range is from 1 to 20
Mean value in simulation was 8



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	80.73	90.73
Standard Deviation	315.68	315.68
Selected range is from	0.00 to 3,490.00	10.00 to 3,500.00
Mean value in simulation was	73.86	83.86

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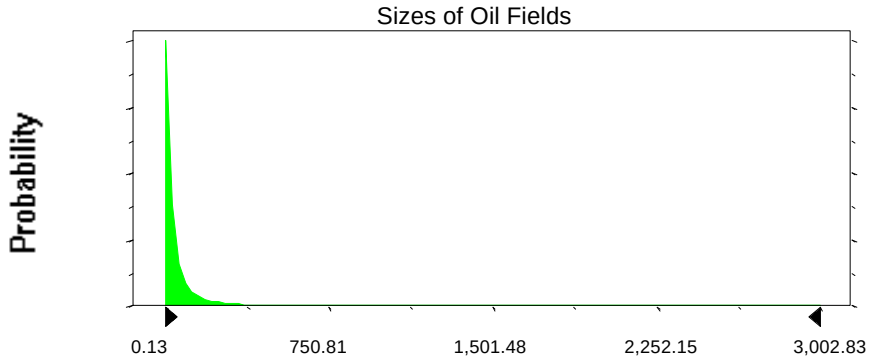
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)

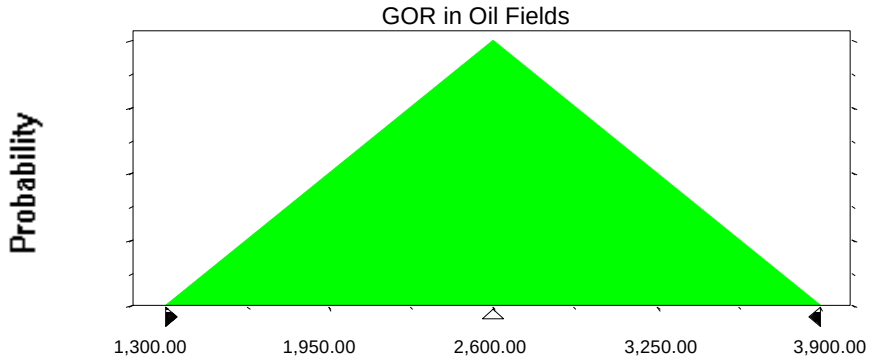


Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	1,300.00
Likeliest	2,600.00
Maximum	3,900.00

Selected range is from 1,300.00 to 3,900.00
Mean value in simulation was 2,599.49



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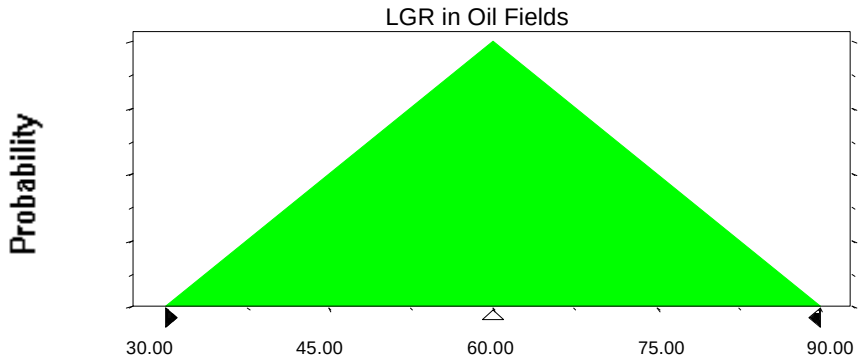
Assumption: LGR in Oil Fields

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 60.11



Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	4
Maximum	55

Selected range is from 1 to 55
Mean value in simulation was 20

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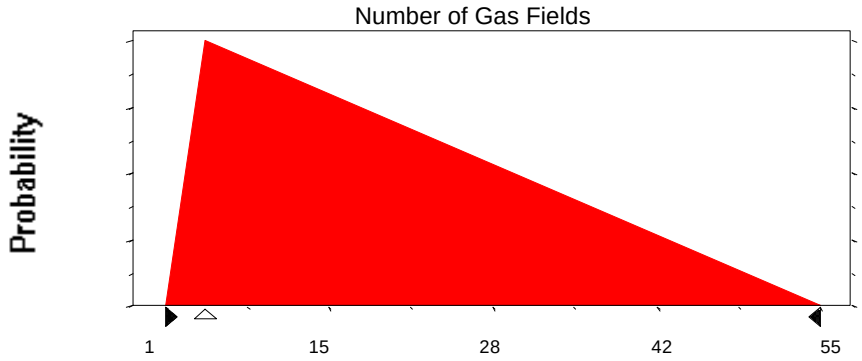
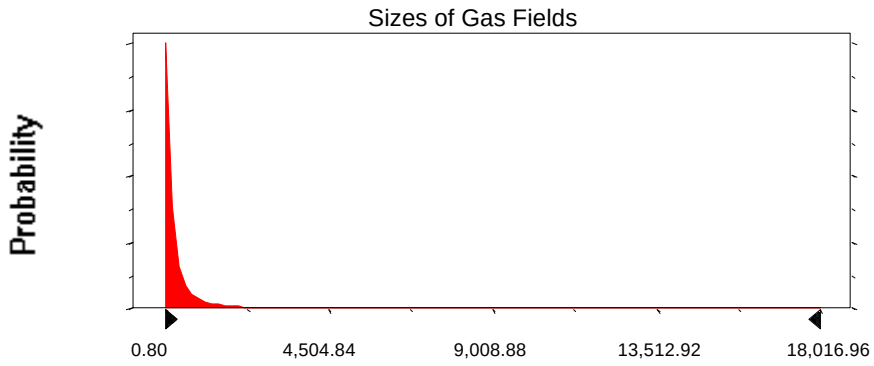
Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	484.36	544.36
Standard Deviation	1,894.06	1,894.06
Selected range is from 0.00 to 20,940.00		60.00 to 21,000.00
Mean value in simulation was 446.70		506.7



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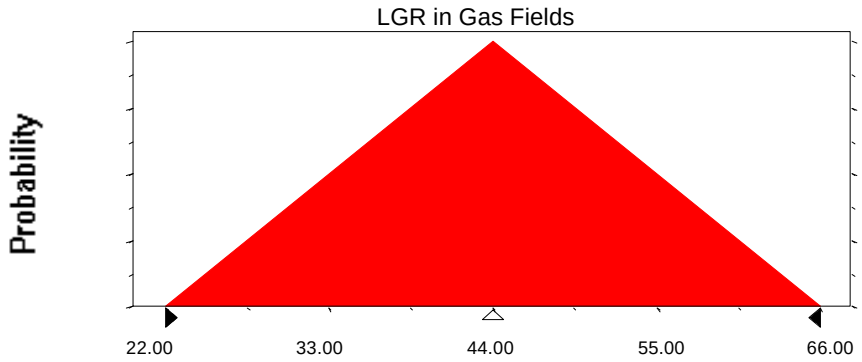
Assumption: LGR in Gas Fields

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 11/17/99 at 17:04:52
Simulation stopped on 11/17/99 at 17:28:26