



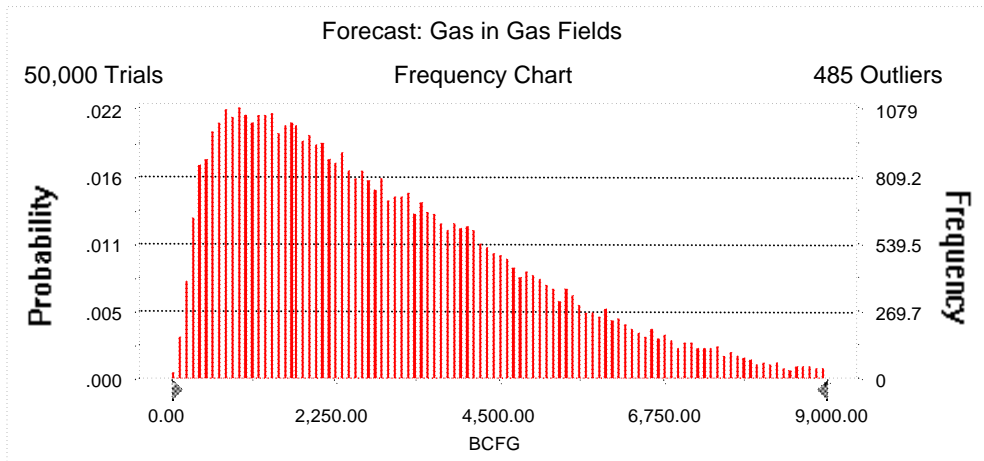
**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

**Forecast: Gas in Gas Fields**

Summary:

Display range is from 0.00 to 9,000.00 BCFG  
Entire range is from 65.07 to 15,441.36 BCFG  
After 50,000 trials, the standard error of the mean is 9.08

Statistics:	Value
Trials	50000
Mean	2,972.12
Median	2,553.11
Mode	---
Standard Deviation	2,030.03
Variance	4,121,020.71
Skewness	0.99
Kurtosis	3.90
Coefficient of Variability	0.68
Range Minimum	65.07
Range Maximum	15,441.36
Range Width	15,376.29
Mean Standard Error	9.08



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**Monte Carlo Results**

**Forecast: Gas in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	65.07
95%	491.65
90%	722.76
85%	933.64
80%	1,148.07
75%	1,362.93
70%	1,585.22
65%	1,806.12
60%	2,045.16
55%	2,291.09
50%	2,553.11
45%	2,834.58
40%	3,135.82
35%	3,450.15
30%	3,795.52
25%	4,162.44
20%	4,595.19
15%	5,117.26
10%	5,813.02
5%	6,884.28
0%	15,441.36

End of Forecast

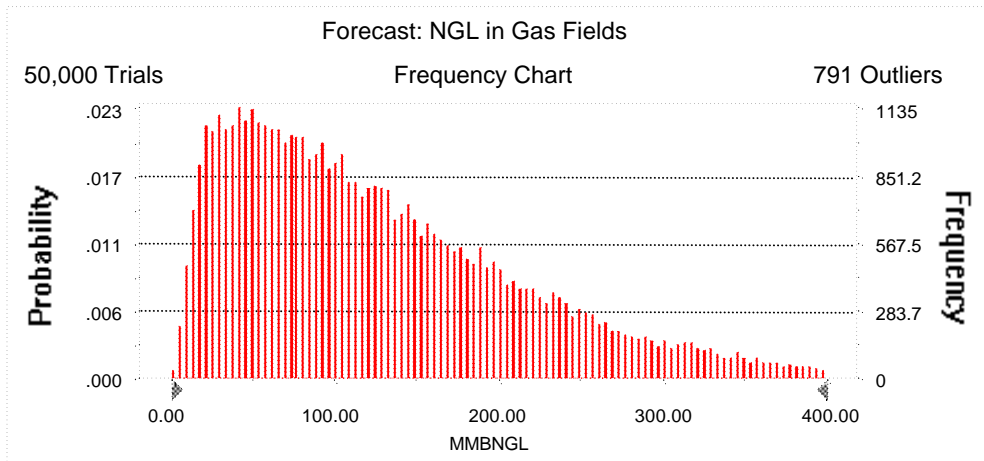
**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

**Forecast: NGL in Gas Fields**

Summary:

Display range is from 0.00 to 400.00 MMBNGL  
Entire range is from 2.12 to 863.96 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.43

Statistics:	Value
Trials	50000
Mean	130.73
Median	108.72
Mode	---
Standard Deviation	95.12
Variance	9,047.38
Skewness	1.26
Kurtosis	5.07
Coefficient of Variability	0.73
Range Minimum	2.12
Range Maximum	863.96
Range Width	861.84
Mean Standard Error	0.43



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**Forecast: NGL in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	2.12
95%	20.59
90%	30.08
85%	39.41
80%	48.49
75%	57.61
70%	67.08
65%	76.98
60%	87.14
55%	97.72
50%	108.72
45%	121.21
40%	133.67
35%	147.68
30%	163.42
25%	181.49
20%	201.70
15%	227.39
10%	259.96
5%	316.57
0%	863.96

End of Forecast

**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

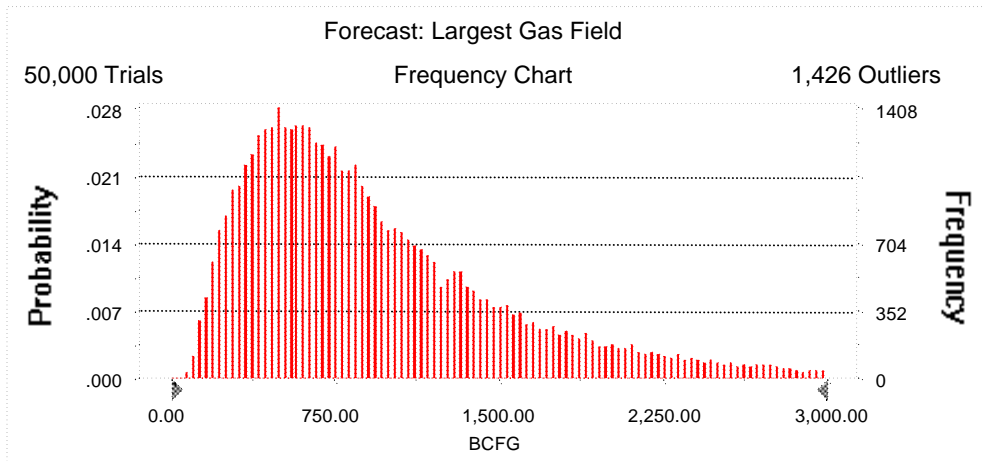
**Forecast: Largest Gas Field**

Summary:

Display range is from 0.00 to 3,000.00 BCFG  
Entire range is from 65.07 to 4,999.51 BCFG  
After 50,000 trials, the standard error of the mean is 3.30

Statistics:

	<u>Value</u>
Trials	50000
Mean	1,008.59
Median	805.87
Mode	---
Standard Deviation	738.50
Variance	545,383.17
Skewness	1.87
Kurtosis	7.54
Coefficient of Variability	0.73
Range Minimum	65.07
Range Maximum	4,999.51
Range Width	4,934.44
Mean Standard Error	3.30



**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

**Forecast: Largest Gas Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	65.07
95%	247.64
90%	326.87
85%	392.64
80%	451.02
75%	506.35
70%	562.69
65%	620.39
60%	679.30
55%	741.03
50%	805.87
45%	875.28
40%	953.25
35%	1,047.45
30%	1,151.84
25%	1,280.35
20%	1,431.68
15%	1,633.24
10%	1,934.43
5%	2,493.09
0%	4,999.51

End of Forecast

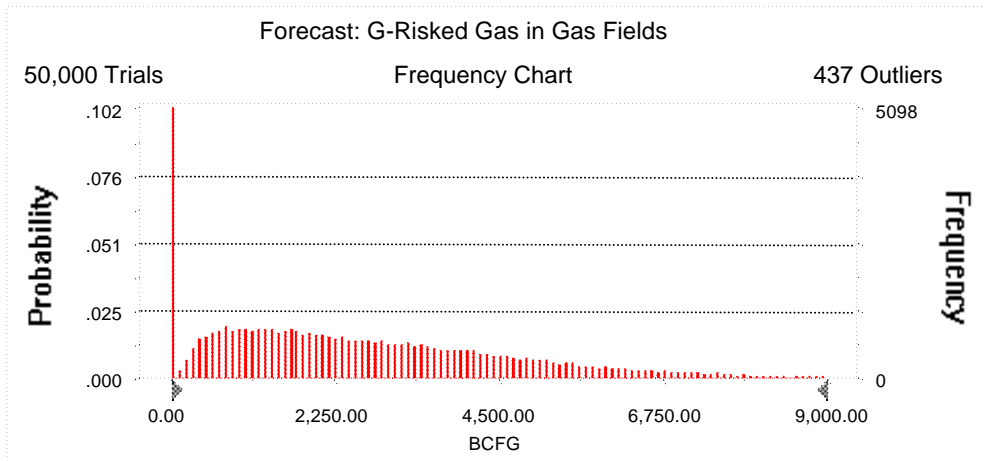
**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

**Forecast: G-Risked Gas in Gas Fields**

Summary:

Display range is from 0.00 to 9,000.00 BCFG  
Entire range is from 0.00 to 15,441.36 BCFG  
After 50,000 trials, the standard error of the mean is 9.50

Statistics:	Value
Trials	50000
Mean	2,667.59
Median	2,253.73
Mode	0.00
Standard Deviation	2,123.27
Variance	4,508,291.49
Skewness	0.94
Kurtosis	3.75
Coefficient of Variability	0.80
Range Minimum	0.00
Range Maximum	15,441.36
Range Width	15,441.36
Mean Standard Error	9.50





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**Vulcan Graben**  
**Monte Carlo Results**

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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.00
95%	0.00
90%	0.00
85%	512.09
80%	762.59
75%	998.97
70%	1,239.14
65%	1,479.55
60%	1,726.33
55%	1,982.28
50%	2,253.73
45%	2,545.56
40%	2,859.65
35%	3,192.18
30%	3,546.89
25%	3,946.47
20%	4,382.34
15%	4,923.89
10%	5,621.64
5%	6,742.16
0%	15,441.36

End of Forecast

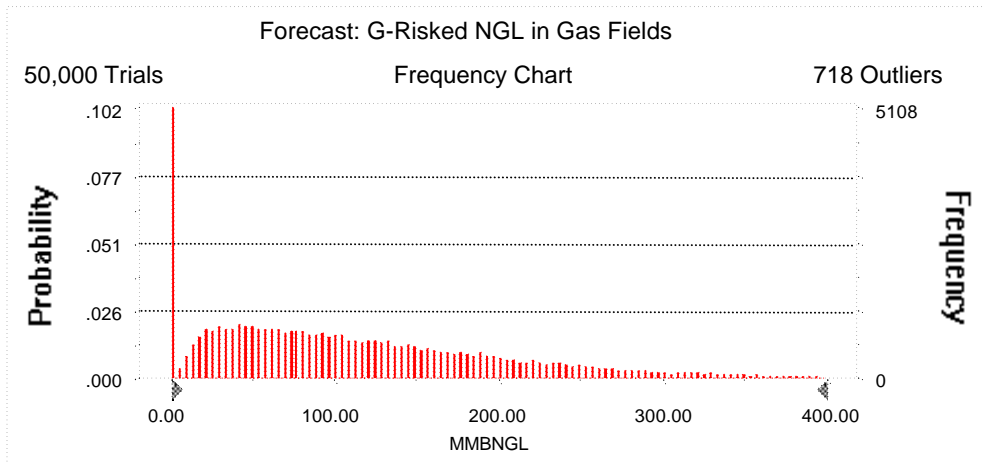
**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

**Forecast: G-Risked NGL in Gas Fields**

Summary:

Display range is from 0.00 to 400.00 MMBNGL  
Entire range is from 0.00 to 863.96 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.44

Statistics:	Value
Trials	50000
Mean	117.35
Median	96.16
Mode	0.00
Standard Deviation	98.44
Variance	9,690.23
Skewness	1.20
Kurtosis	4.87
Coefficient of Variability	0.84
Range Minimum	0.00
Range Maximum	863.96
Range Width	863.96
Mean Standard Error	0.44



**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

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

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	21.47
80%	31.76
75%	42.12
70%	52.06
65%	62.67
60%	73.48
55%	84.48
50%	96.16
45%	108.39
40%	122.26
35%	136.28
30%	152.27
25%	170.72
20%	191.80
15%	217.80
10%	251.59
5%	308.71
0%	863.96

End of Forecast

**39100202**  
**Vulcan Graben**  
**Monte Carlo Results**

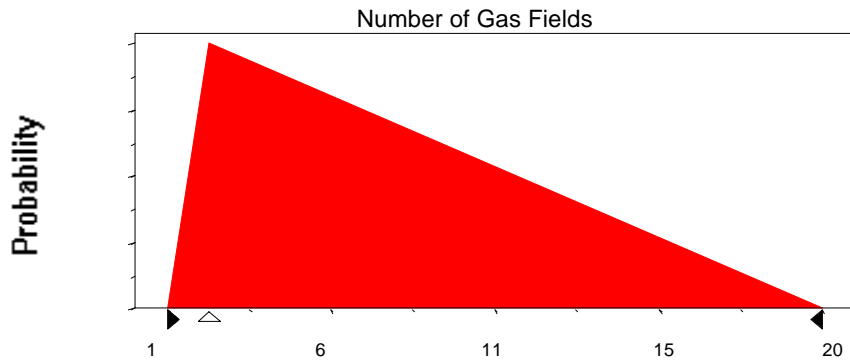
**Assumptions**

**Assumption: Number of Gas Fields**

Triangular distribution with parameters:

Minimum	1
Likeliest	2
Maximum	20

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



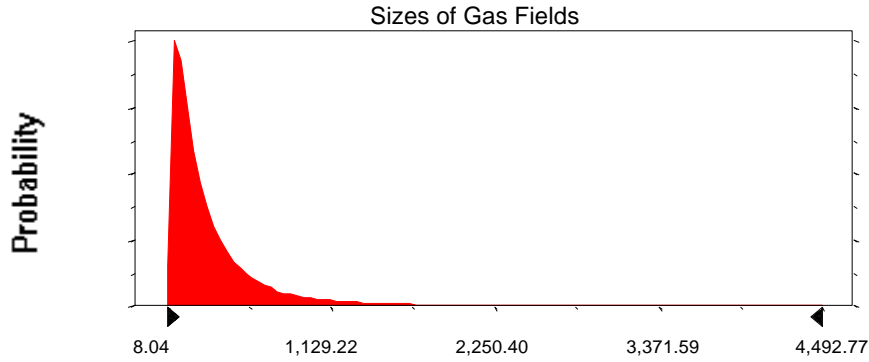
**Assumption: Sizes of Gas Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	331.26	391.26
Standard Deviation	473.10	473.1

Selected range is from 0.00 to 4,940.00	60.00 to 5,000.00
Mean value in simulation was 324.01	384.01

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**Assumption: Sizes of Gas Fields (cont'd)**



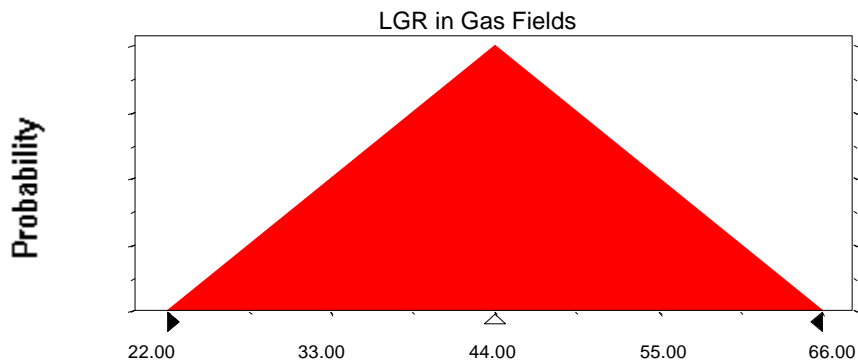
**Assumption: LGR in Gas Fields**

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 44.00



End of Assumptions

Simulation started on 4/26/99 at 16:14:07  
Simulation stopped on 4/26/99 at 16:26:50