

**Suprasalt, Assessment Unit 10160106**  
**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	3	1.00	1,178	3,237	6,679	3,497	1,245	3,751	8,821	4,241	70	219	557	254	111	238	443	253
Gas Fields	18						2,344	5,374	9,982	5,693	41	111	272	128	181	361	691	389
Total		1.00	1,178	3,237	6,679	3,497	3,589	9,125	18,803	9,934	110	330	829	382				

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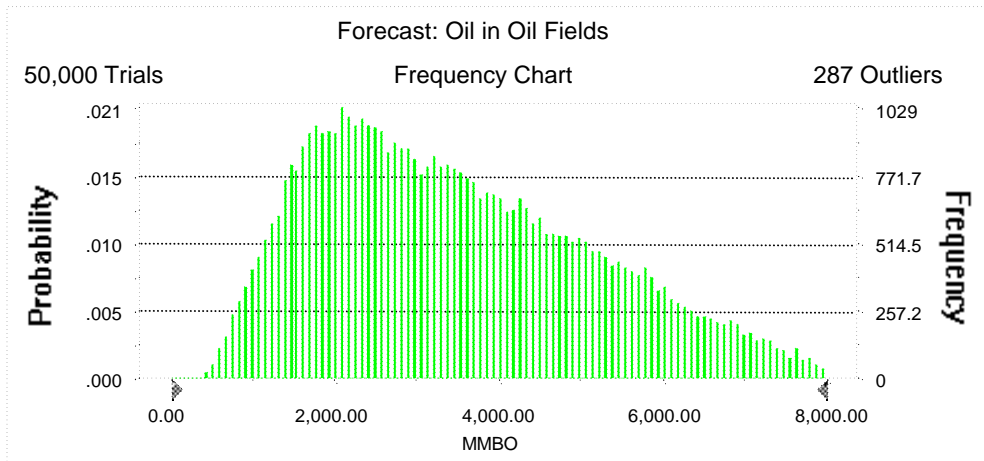
**Forecast: Oil in Oil Fields**

Summary:

Display range is from 0.00 to 8,000.00 MMBO  
Entire range is from 271.44 to 9,526.51 MMBO  
After 50,000 trials, the standard error of the mean is 7.61

Statistics:

	<u>Value</u>
Trials	50000
Mean	3,497.23
Median	3,236.70
Mode	---
Standard Deviation	1,702.56
Variance	2,898,718.21
Skewness	0.55
Kurtosis	2.59
Coefficient of Variability	0.49
Range Minimum	271.44
Range Maximum	9,526.51
Range Width	9,255.07
Mean Standard Error	7.61



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

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	271.44
95%	1,177.80
90%	1,479.36
85%	1,711.78
80%	1,925.20
75%	2,132.22
70%	2,334.21
65%	2,540.42
60%	2,763.63
55%	2,992.25
50%	3,236.70
45%	3,481.45
40%	3,741.83
35%	4,027.95
30%	4,331.34
25%	4,665.90
20%	5,038.92
15%	5,458.48
10%	5,949.27
5%	6,678.69
0%	9,526.51

End of Forecast

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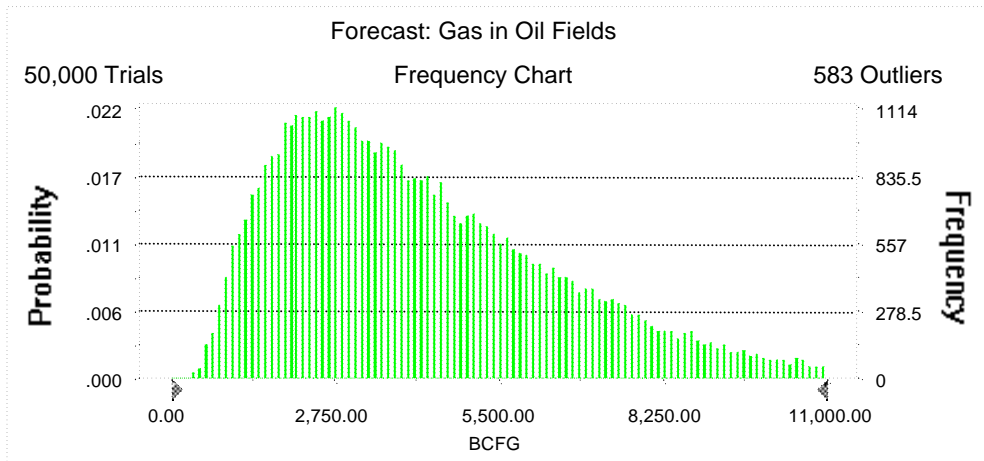
**Forecast: Gas in Oil Fields**

Summary:

Display range is from 0.00 to 11,000.00 BCFG  
Entire range is from 259.52 to 16,046.91 BCFG  
After 50,000 trials, the standard error of the mean is 10.65

Statistics:

	<u>Value</u>
Trials	50000
Mean	4,240.99
Median	3,750.57
Mode	---
Standard Deviation	2,381.30
Variance	5,670,573.74
Skewness	0.96
Kurtosis	3.81
Coefficient of Variability	0.56
Range Minimum	259.52
Range Maximum	16,046.91
Range Width	15,787.39
Mean Standard Error	10.65



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	259.52
95%	1,245.29
90%	1,605.04
85%	1,900.17
80%	2,158.92
75%	2,416.19
70%	2,670.53
65%	2,921.71
60%	3,180.59
55%	3,463.79
50%	3,750.57
45%	4,064.09
40%	4,397.54
35%	4,759.03
30%	5,173.74
25%	5,625.71
20%	6,151.38
15%	6,778.83
10%	7,578.23
5%	8,820.66
0%	16,046.91

End of Forecast

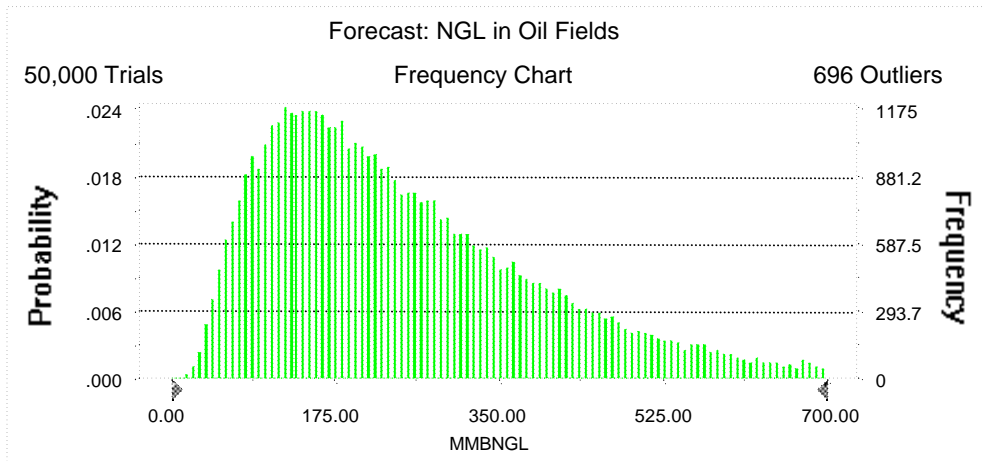
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**Forecast: NGL in Oil Fields**

Summary:

Display range is from 0.00 to 700.00 MMBNGL  
Entire range is from 13.06 to 1,267.16 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.69

Statistics:	Value
Trials	50000
Mean	254.09
Median	219.19
Mode	---
Standard Deviation	154.55
Variance	23,886.31
Skewness	1.20
Kurtosis	4.77
Coefficient of Variability	0.61
Range Minimum	13.06
Range Maximum	1,267.16
Range Width	1,254.11
Mean Standard Error	0.69



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

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	13.06
95%	69.55
90%	89.86
85%	107.48
80%	122.99
75%	138.35
70%	153.39
65%	168.63
60%	184.46
55%	201.56
50%	219.19
45%	238.01
40%	259.19
35%	281.72
30%	306.59
25%	335.74
20%	369.58
15%	412.27
10%	466.98
5%	556.55
0%	1,267.16

End of Forecast

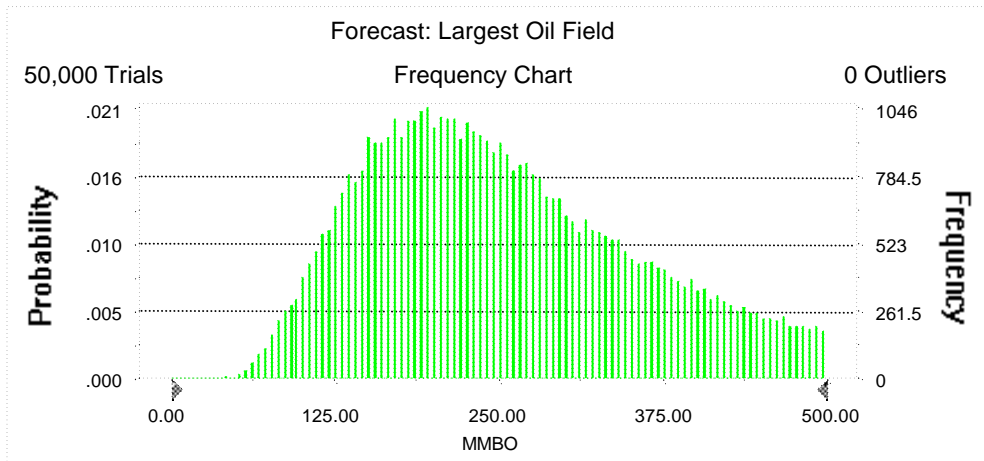
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**Forecast: Largest Oil Field**

Summary:

Display range is from 0.00 to 500.00 MMBO  
Entire range is from 35.97 to 499.96 MMBO  
After 50,000 trials, the standard error of the mean is 0.45

Statistics:	Value
Trials	50000
Mean	252.56
Median	238.15
Mode	---
Standard Deviation	100.16
Variance	10,031.21
Skewness	0.46
Kurtosis	2.47
Coefficient of Variability	0.40
Range Minimum	35.97
Range Maximum	499.96
Range Width	463.99
Mean Standard Error	0.45





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

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	35.97
95%	110.56
90%	131.94
85%	148.08
80%	161.89
75%	174.94
70%	187.97
65%	199.87
60%	212.41
55%	225.22
50%	238.15
45%	252.14
40%	266.67
35%	282.12
30%	299.80
25%	320.51
20%	342.90
15%	369.41
10%	400.99
5%	442.75
0%	499.96

End of Forecast

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**Forecast: Gas in Gas Fields**

Summary:

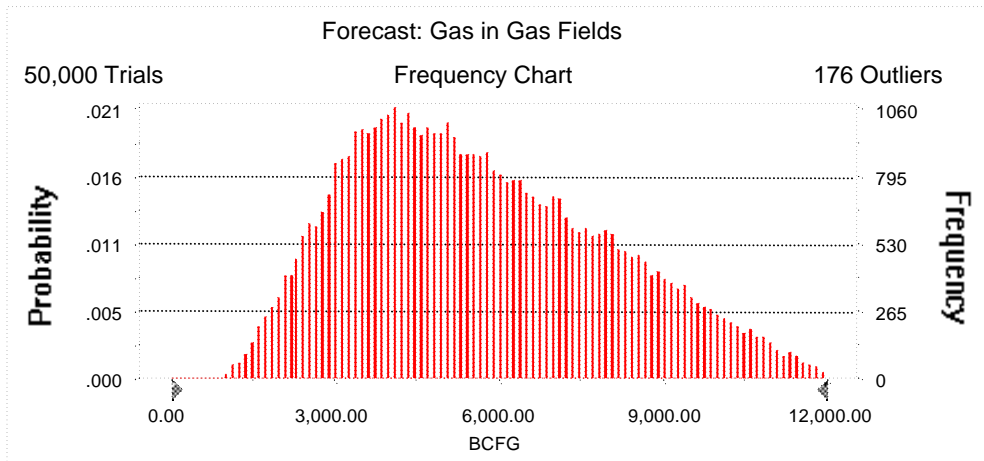
Display range is from 0.00 to 12,000.00 BCFG

Entire range is from 766.64 to 14,506.08 BCFG

After 50,000 trials, the standard error of the mean is 10.51

Statistics:

	<u>Value</u>
Trials	50000
Mean	5,693.11
Median	5,374.03
Mode	---
Standard Deviation	2,349.84
Variance	5,521,751.34
Skewness	0.46
Kurtosis	2.54
Coefficient of Variability	0.41
Range Minimum	766.64
Range Maximum	14,506.08
Range Width	13,739.45
Mean Standard Error	10.51



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

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	766.64
95%	2,343.83
90%	2,857.69
85%	3,228.60
80%	3,551.75
75%	3,861.23
70%	4,145.17
65%	4,441.46
60%	4,749.74
55%	5,058.63
50%	5,374.03
45%	5,719.83
40%	6,074.03
35%	6,461.67
30%	6,883.39
25%	7,319.68
20%	7,838.38
15%	8,384.50
10%	9,064.46
5%	9,982.32
0%	14,506.08

End of Forecast

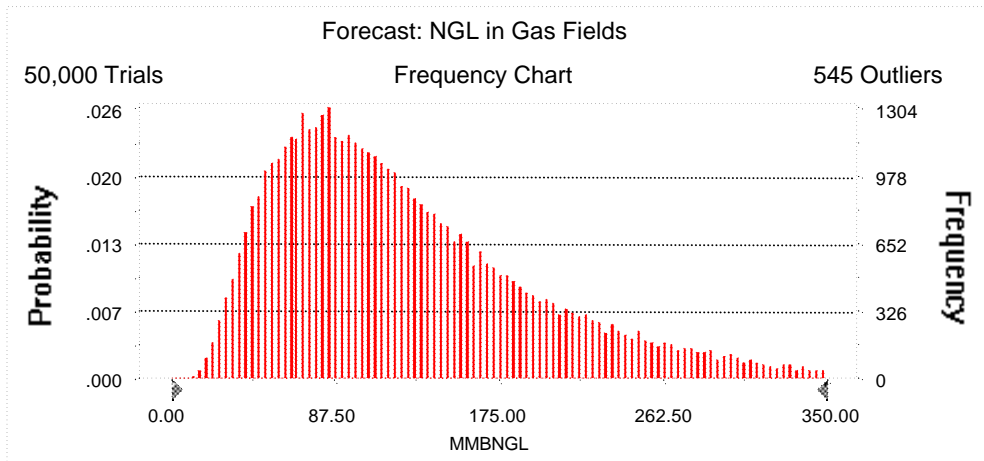
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**Forecast: NGL in Gas Fields**

Summary:

Display range is from 0.00 to 350.00 MMBNGL  
Entire range is from 10.14 to 515.54 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.32

Statistics:	Value
Trials	50000
Mean	127.51
Median	111.29
Mode	---
Standard Deviation	72.36
Variance	5,236.11
Skewness	1.17
Kurtosis	4.47
Coefficient of Variability	0.57
Range Minimum	10.14
Range Maximum	515.54
Range Width	505.40
Mean Standard Error	0.32



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

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	10.14
95%	40.50
90%	50.81
85%	59.09
80%	66.79
75%	73.96
70%	81.21
65%	87.99
60%	95.52
55%	103.31
50%	111.29
45%	119.75
40%	129.03
35%	139.40
30%	150.91
25%	164.53
20%	180.60
15%	201.42
10%	228.70
5%	271.96
0%	515.54

End of Forecast

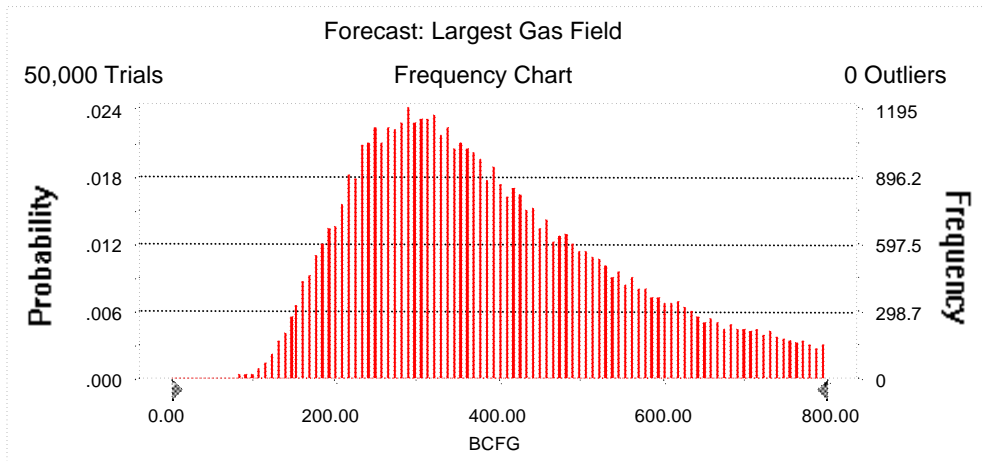
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**Forecast: Largest Gas Field**

Summary:

Display range is from 0.00 to 800.00 BCFG  
Entire range is from 73.88 to 799.94 BCFG  
After 50,000 trials, the standard error of the mean is 0.68

Statistics:	Value
Trials	50000
Mean	388.76
Median	361.48
Mode	---
Standard Deviation	153.03
Variance	23,418.11
Skewness	0.62
Kurtosis	2.71
Coefficient of Variability	0.39
Range Minimum	73.88
Range Maximum	799.94
Range Width	726.06
Mean Standard Error	0.68



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Forecast: Largest Gas Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	73.88
95%	180.86
90%	211.63
85%	234.28
80%	253.21
75%	271.60
70%	289.37
65%	306.73
60%	324.16
55%	342.21
50%	361.48
45%	381.67
40%	403.53
35%	427.76
30%	454.90
25%	485.71
20%	521.05
15%	563.48
10%	617.40
5%	690.87
0%	799.94

End of Forecast

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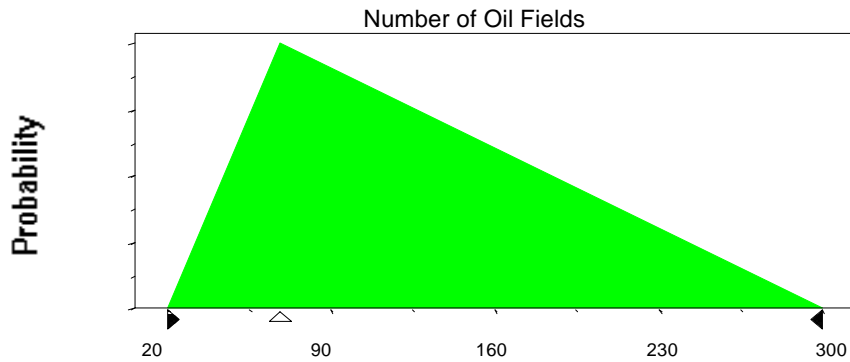
Assumptions

**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	20
Likeliest	69
Maximum	300

Selected range is from 20 to 300  
Mean value in simulation was 129



**Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:

Mean	24.80
Standard Deviation	44.87

Shifted parameters

27.8
44.87

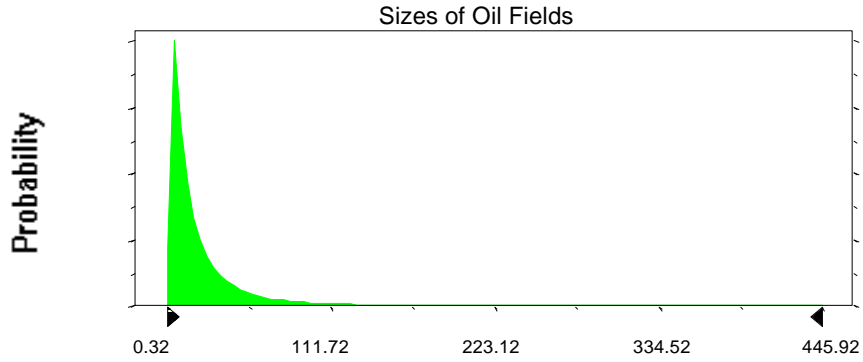
Selected range is from 0.00 to 497.00  
Mean value in simulation was 24.43

3.00 to 500.00  
27.43



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Assumption: Sizes of Oil Fields (cont'd)



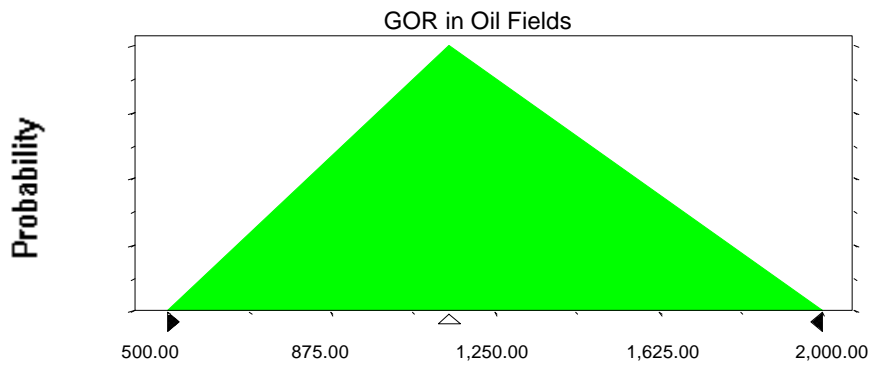
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	500.00
Likeliest	1,146.67
Maximum	2,000.00

Selected range is from 500.00 to 2,000.00

Mean value in simulation was 1,213.14



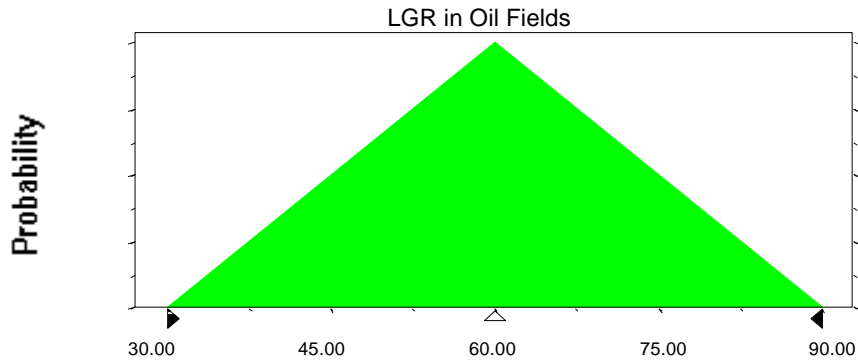
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**Assumption: LGR in Oil Fields**

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 59.93



**Assumption: Number of Gas Fields**

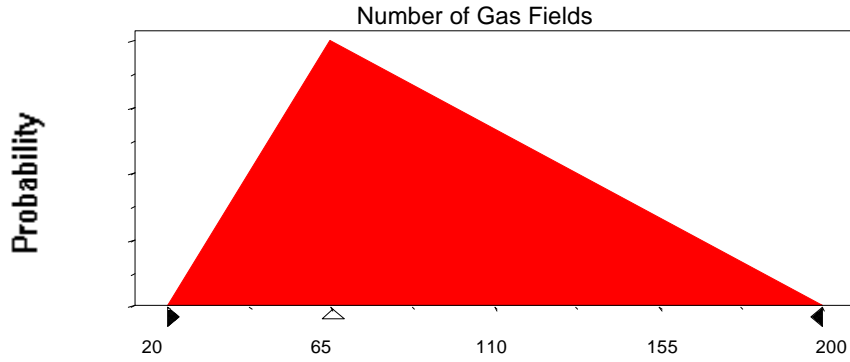
Triangular distribution with parameters:

Minimum	20
Likeliest	66
Maximum	200

Selected range is from 20 to 200  
Mean value in simulation was 95

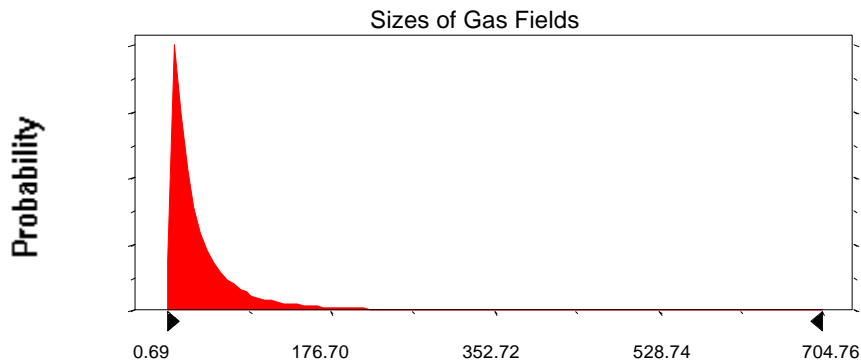
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	42.89	60.89
Standard Deviation	71.80	71.8
Selected range is from 0.00 to 782.00	18.00 to 800.00	
Mean value in simulation was 41.90	59.9	



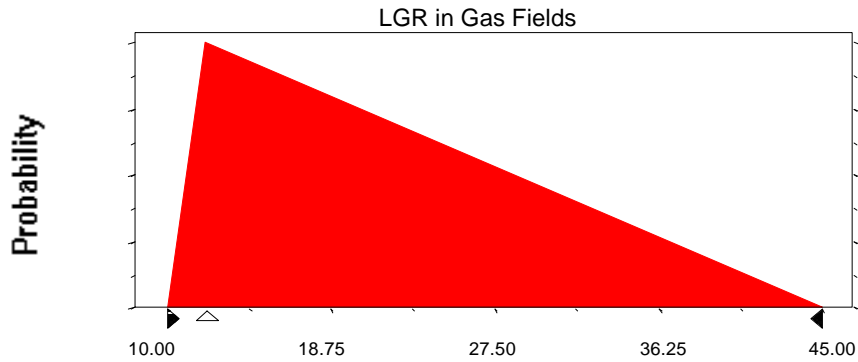
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**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	10.00
Likeliest	12.09
Maximum	45.00

Selected range is from 10.00 to 45.00  
Mean value in simulation was 22.36



End of Assumptions

Simulation started on 1/20/99 at 13:18:26  
Simulation stopped on 1/20/99 at 15:07:07