South Barents and Ludlov Saddle, Assessment Unit 10500102
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	1.00	61	217	592	257	147	534	1,519	644	8	31	94	39	33	85	307	115
Gas Fields	120						54,538	171,891	377,273	188,600	1,012	3,398	8,510	3,901	7,943	25,649	66,299	29,826
Total		1.00	61	217	592	257	54,686	172,425	378,792	189,244	1,020	3,429	8,604	3,940				

Forecast: Oil in Oil Fields

Summary:
   Display range is from 0.00 to 800.00 MMBO
   Entire range is from 20.40 to 1,552.86 MMBO
   After 50,000 trials, the standard error of the mean is 0.77

Statistics:	Value
Trials	50000
Mean	257.48
Median	217.27
Mode	---
Standard Deviation	172.77
Variance	29,847.80
Skewness	1.44
Kurtosis	6.00
Coefficient of Variability	0.67
Range Minimum	20.40
Range Maximum	1,552.86
Range Width	1,532.46
Mean Standard Error	0.77

Forecast: Oil in Oil Fields

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	20.40
95%	61.22
90%	80.66
85%	96.93
80%	113.41
75%	129.46
70%	145.66
65%	162.01
60%	179.47
55%	197.80
50%	217.27
45%	238.44
40%	260.60
35%	284.37
30%	310.47
25%	341.47
20%	378.59
15%	422.60
10%	485.72
5%	592.09
0%	1,552.86

End of Forecast

Forecast: Gas in Oil Fields

Summary:
    Display range is from 0.00 to 2,000.00 BCFG
    Entire range is from 36.54 to 4,189.68 BCFG
    After 50,000 trials, the standard error of the mean is 2.01

Statistics:	Value
Trials	50000
Mean	644.18
Median	534.05
Mode	---
Standard Deviation	450.55
Variance	202,997.39
Skewness	1.57
Kurtosis	6.64
Coefficient of Variability	0.70
Range Minimum	36.54
Range Maximum	4,189.68
Range Width	4,153.14
Mean Standard Error	2.01
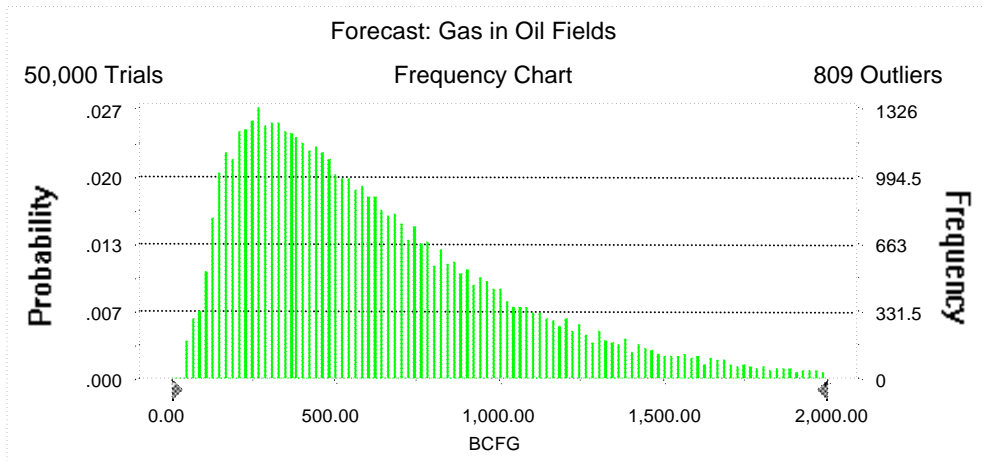
Forecast: Gas in Oil Fields

50,000 Trials   Frequency Chart   809 Outliers

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	36.54
95%	147.45
90%	193.95
85%	235.44
80%	274.77
75%	314.08
70%	354.48
65%	396.38
60%	440.12
55%	485.13
50%	534.05
45%	586.42
40%	641.71
35%	703.22
30%	773.52
25%	855.26
20%	950.10
15%	1,070.31
10%	1,236.27
5%	1,519.19
0%	4,189.68

End of Forecast

Forecast: NGL in Oil Fields

Summary:
    Display range is from 0.00 to 120.00 MMBNGL
    Entire range is from 1.47 to 318.78 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.13

Statistics:	Value
Trials	50000
Mean	38.65
Median	31.26
Mode	---
Standard Deviation	28.65
Variance	821.01
Skewness	1.76
Kurtosis	7.80
Coefficient of Variability	0.74
Range Minimum	1.47
Range Maximum	318.78
Range Width	317.31
Mean Standard Error	0.13
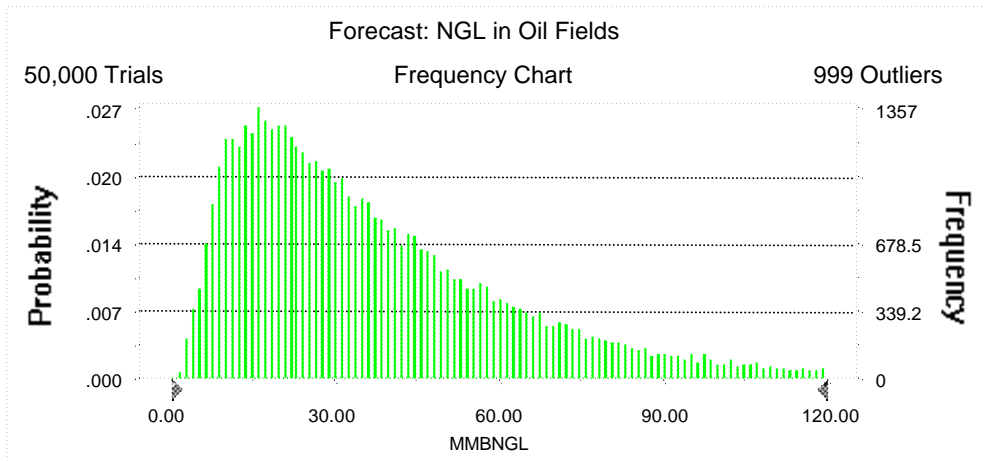
Forecast: NGL in Oil Fields

50,000 Trials   Frequency Chart   999 Outliers

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

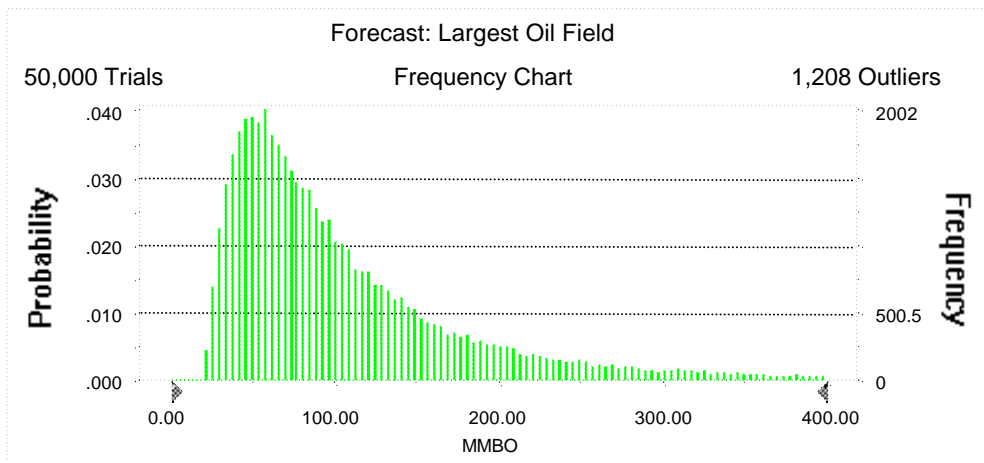| Percentile	MMBNGL
100%	1.47
95%	8.25
90%	10.92
85%	13.48
80%	15.81
75%	18.09
70%	20.48
65%	22.89
60%	25.53
55%	28.36
50%	31.26
45%	34.47
40%	37.85
35%	41.75
30%	46.04
25%	51.04
20%	57.23
15%	64.85
10%	75.45
5%	94.38
0%	318.78

End of Forecast

Forecast: Largest Oil Field

Summary:
Display range is from 0.00 to 400.00 MMBO
Entire range is from 20.40 to 799.41 MMBO
After 50,000 trials, the standard error of the mean is 0.43

Statistics:	Value
Trials	50000
Mean	115.23
Median	85.30
Mode	---
Standard Deviation	96.42
Variance	9,297.57
Skewness	2.64
Kurtosis	12.45
Coefficient of Variability	0.84
Range Minimum	20.40
Range Maximum	799.41
Range Width	779.00
Mean Standard Error	0.43

Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

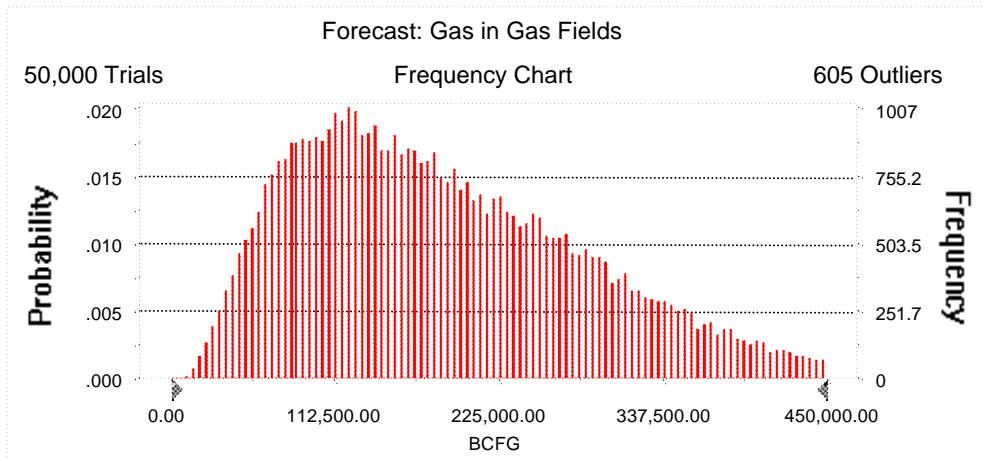| Percentile	MMBO
100%	20.40
95%	33.42
90%	39.60
85%	44.93
80%	50.16
75%	55.23
70%	60.32
65%	65.88
60%	71.82
55%	78.29
50%	85.30
45%	92.89
40%	101.54
35%	111.63
30%	123.82
25%	138.36
20%	157.02
15%	183.62
10%	223.76
5%	306.73
0%	799.41

End of Forecast

Forecast: Gas in Gas Fields

Summary:
Display range is from 0.00 to 450,000.00 BCFG
Entire range is from 8,855.58 to 678,411.99 BCFG
After 50,000 trials, the standard error of the mean is 449.16

Statistics:	Value
Trials	50000
Mean	188,599.87
Median	171,890.70
Mode	---
Standard Deviation	100,435.88
Variance	10,087,365,739.00
Skewness	0.70
Kurtosis	3.06
Coefficient of Variability	0.53
Range Minimum	8,855.58
Range Maximum	678,411.99
Range Width	669,556.40
Mean Standard Error	449.16

Forecast: Gas in Gas Fields

50,000 Trials   Frequency Chart   605 Outliers

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	8,855.58
95%	54,538.24
90%	71,333.61
85%	84,994.79
80%	97,612.35
75%	110,204.82
70%	121,807.85
65%	133,216.29
60%	145,622.57
55%	158,454.42
50%	171,890.70
45%	185,556.84
40%	200,684.89
35%	217,141.37
30%	234,536.56
25%	253,576.66
20%	274,299.06
15%	298,601.00
10%	330,846.35
5%	377,272.88
0%	678,411.99

End of Forecast

Forecast: NGL in Gas Fields

Summary:
      Display range is from 0.00 to 11,000.00 MMBNGL
      Entire range is from 176.44 to 17,308.18 MMBNGL
      After 50,000 trials, the standard error of the mean is 10.59

Statistics:	Value
Trials	50000
Mean	3,900.99
Median	3,397.74
Mode	---
Standard Deviation	2,367.38
Variance	5,604,493.08
Skewness	1.12
Kurtosis	4.43
Coefficient of Variability	0.61
Range Minimum	176.44
Range Maximum	17,308.18
Range Width	17,131.74
Mean Standard Error	10.59
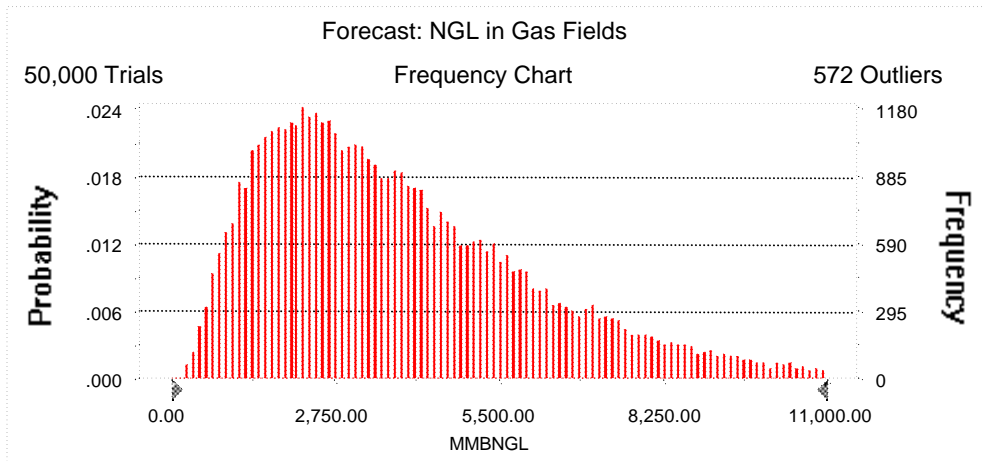
Forecast: NGL in Gas Fields

50,000 Trials	Frequency Chart	572 Outliers

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	176.44
95%	1,012.04
90%	1,351.62
85%	1,615.63
80%	1,870.76
75%	2,120.66
70%	2,362.05
65%	2,597.27
60%	2,849.19
55%	3,121.16
50%	3,397.74
45%	3,700.62
40%	4,013.34
35%	4,346.53
30%	4,740.69
25%	5,192.56
20%	5,683.14
15%	6,311.25
10%	7,174.63
5%	8,509.74
0%	17,308.18

End of Forecast

Forecast: Largest Gas Field

Summary:
Display range is from 0.00 to 80,000.00 BCFG
Entire range is from 1,382.27 to 79,997.97 BCFG
After 50,000 trials, the standard error of the mean is 79.38

Statistics:	Value
Trials	50000
Mean	29,825.88
Median	25,648.59
Mode	---
Standard Deviation	17,749.20
Variance	315,034,213.13
Skewness	0.83
Kurtosis	2.94
Coefficient of Variability	0.60
Range Minimum	1,382.27
Range Maximum	79,997.97
Range Width	78,615.70
Mean Standard Error	79.38
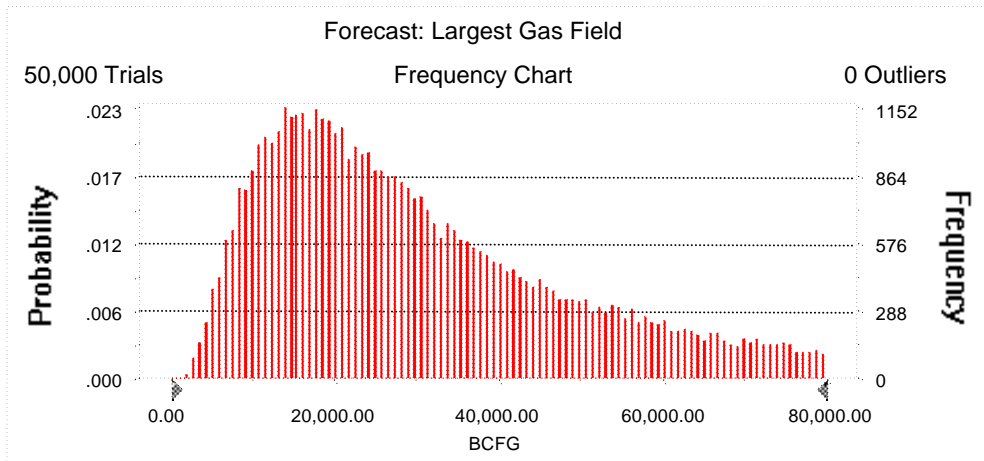
Forecast: Largest Gas Field

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	1,382.27
95%	7,942.55
90%	10,359.42
85%	12,350.04
80%	14,193.23
75%	15,969.06
70%	17,793.04
65%	19,553.64
60%	21,441.59
55%	23,510.63
50%	25,648.59
45%	27,951.37
40%	30,424.71
35%	33,278.33
30%	36,521.46
25%	40,269.90
20%	44,856.55
15%	50,338.78
10%	57,040.99
5%	66,298.95
0%	79,997.97

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum	1
Likeliest	2
Maximum	10

Selected range is from 1 to 10
Mean value in simulation was 4

Number of Oil Fields
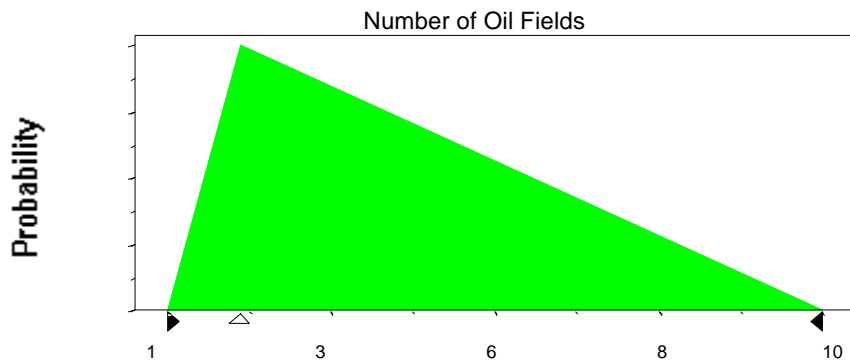
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	40.39		60.39
Standard Deviation	70.86		70.86

Selected range is from 0.00 to 780.00		20.00 to 800.00	
Mean value in simulation was 39.37		59.37	

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields

Probability

0.57   175.69   350.81   525.93   701.06
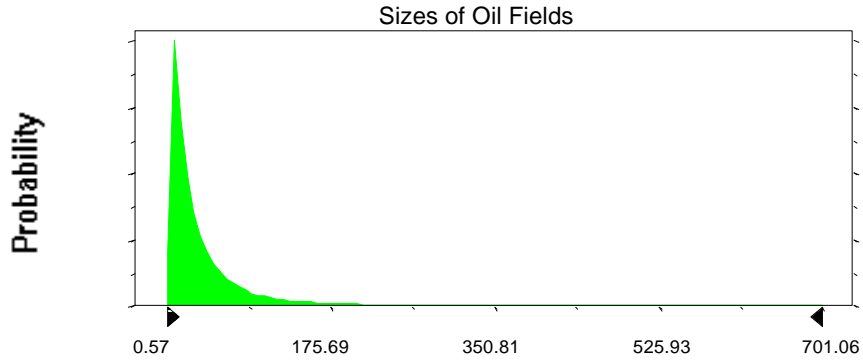
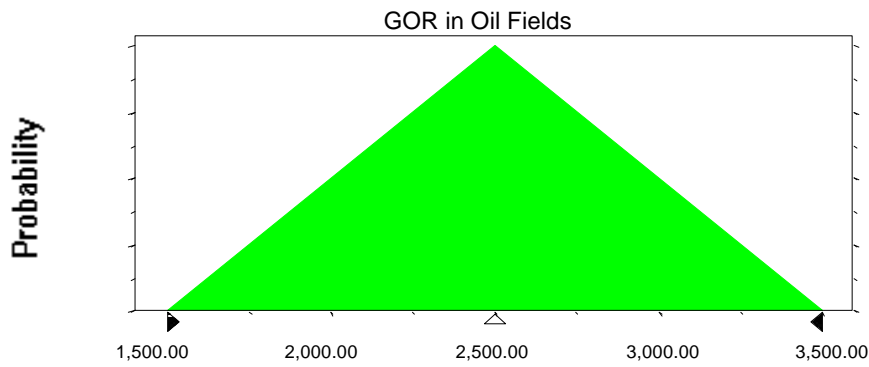**Assumption: GOR in Oil Fields**

Triangular distribution with parameters:
Minimum   1,500.00
Likeliest   2,500.00
Maximum   3,500.00

Selected range is from 1,500.00 to 3,500.00
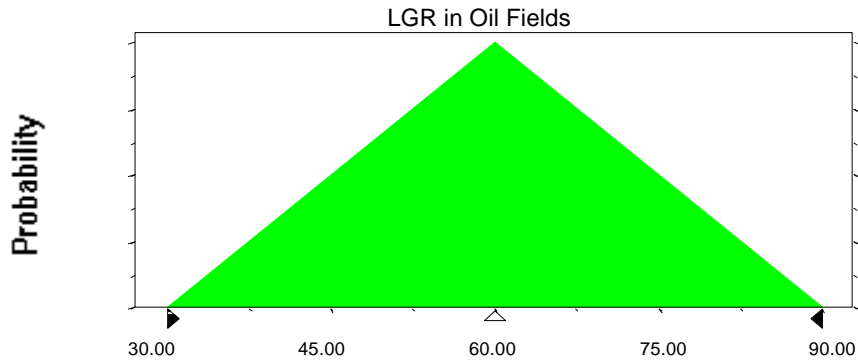Mean value in simulation was 2,500.03

GOR in Oil Fields

Probability

1,500.00   2,000.00   2,500.00   3,000.00   3,500.00

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 60.01

LGR in Oil Fields

Assumption: Number of Gas 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: Number of Gas Fields (cont'd)

Number of Gas Fields
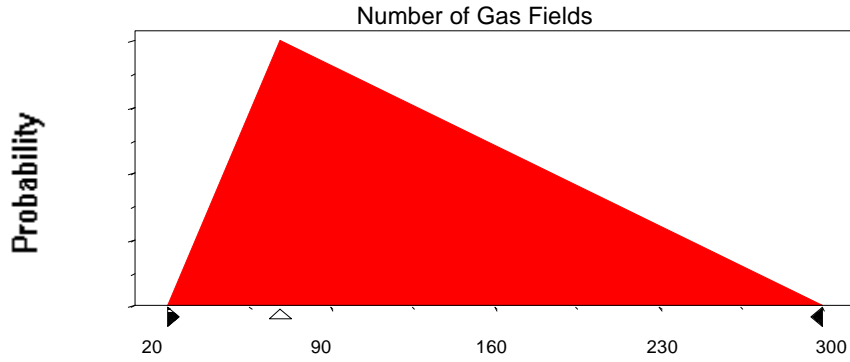
Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	1,492.97		1,612.97
Standard Deviation	7,819.33		7,819.33

Selected range is from 0.00 to 79,880.00   120.00 to 80,000.00
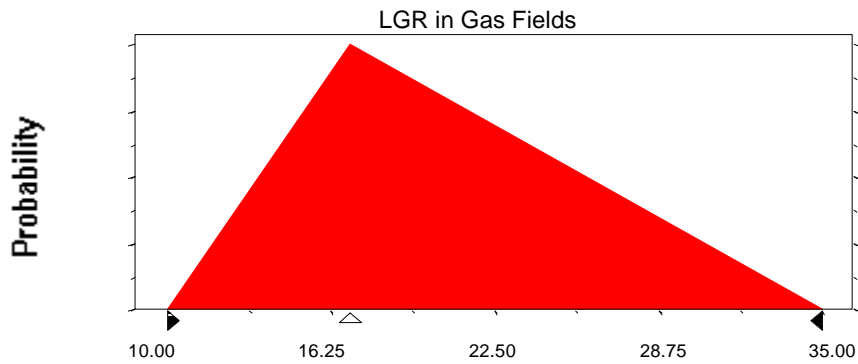Mean value in simulation was 1,304.22   1,424.22
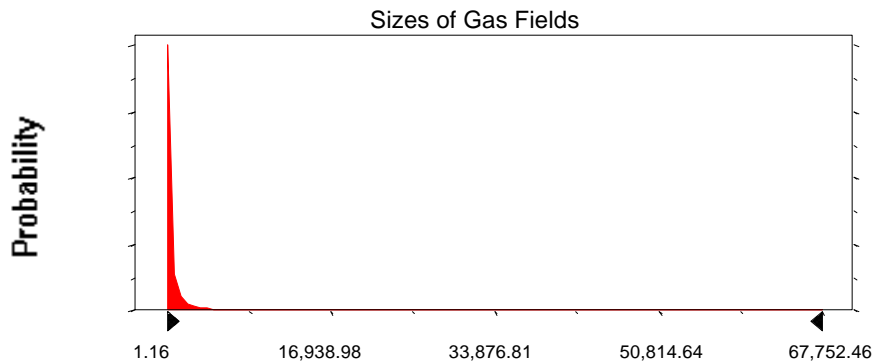
Sizes of Gas Fields

Assumption: LGR in Gas Fields

  Triangular distribution with parameters:
Minimum	10.00
Likeliest	17.00
Maximum	35.00

  Selected range is from 10.00 to 35.00
  Mean value in simulation was 20.67

LGR in Gas Fields

End of Assumptions

Simulation started on 10/18/99 at 15:28:35
Simulation stopped on 10/18/99 at 16:39:20