Akata Reservoirs, Assessment Unit 71920102
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 | | | |
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)				(MMBO or BCFG)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	1	1.00	5,890	18,316	32,102	18,562	9,915	32,035	64,965	33,977	317	1,046	2,232	1,130	630	1,517	2,747	1,586
Gas Fields	6						4,107	13,292	23,729	13,563	249	808	1,459	826	555	1,373	2,956	1,513
Total		1.00	5,890	18,316	32,102	18,562	14,022	45,327	88,693	47,540	566	1,854	3,692	1,956				

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 40,000.00 MMBO

Entire range is from 474.79 to 46,894.82 MMBO

After 50,000 trials, the standard error of the mean is 35.30

Statistics:	Value
Trials	50000
Mean	18,562.38
Median	18,315.71
Mode	---
Standard Deviation	7,892.56
Variance	62,292,543.58
Skewness	0.19
Kurtosis	2.60
Coefficient of Variability	0.43
Range Minimum	474.79
Range Maximum	46,894.82
Range Width	46,420.03
Mean Standard Error	35.30
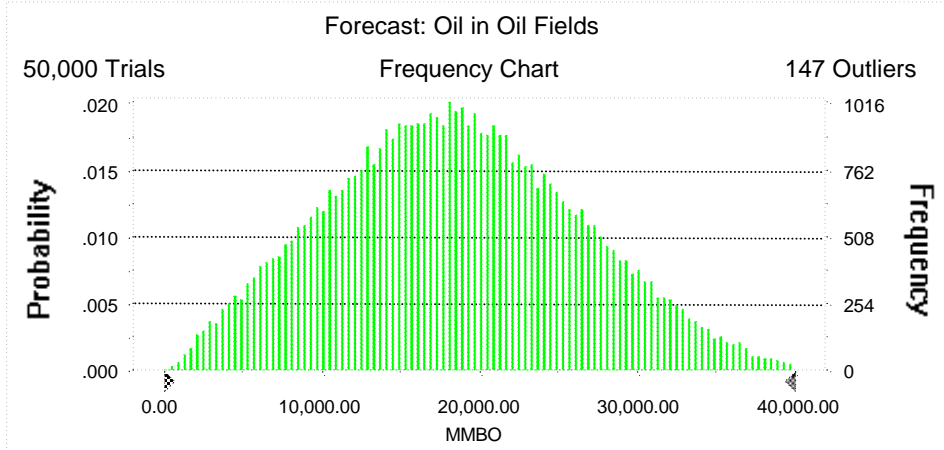
Forecast: Oil in Oil Fields

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	474.79
95%	5,890.50
90%	8,222.09
85%	9,981.43
80%	11,501.84
75%	12,845.62
70%	14,056.90
65%	15,155.93
60%	16,214.65
55%	17,268.68
50%	18,315.71
45%	19,332.40
40%	20,388.62
35%	21,499.71
30%	22,687.26
25%	24,012.22
20%	25,440.71
15%	27,095.55
10%	29,176.25
5%	32,102.10
0%	46,894.82

End of Forecast

Forecast: Gas in Oil Fields

Summary:
Display range is from 0.00 to 80,000.00 BCFG
Entire range is from 627.24 to 132,543.60 BCFG
After 50,000 trials, the standard error of the mean is 75.01

Statistics:	Value
Trials	50000
Mean	33,977.41
Median	32,035.00
Mode	---
Standard Deviation	16,773.29
Variance	281,343,333.32
Skewness	0.69
Kurtosis	3.53
Coefficient of Variability	0.49
Range Minimum	627.24
Range Maximum	132,543.60
Range Width	131,916.37
Mean Standard Error	75.01

Forecast: Gas in Oil Fields
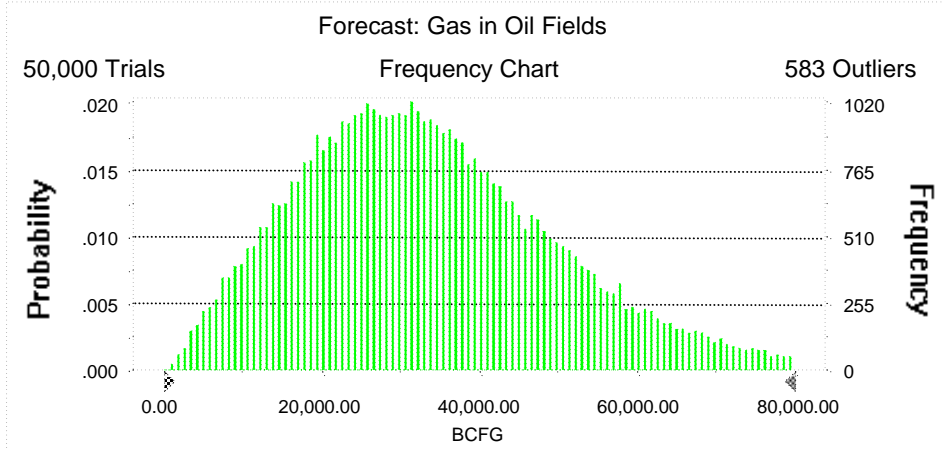
50,000 Trials   Frequency Chart   583 Outliers

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	627.24
95%	9,914.78
90%	13,871.46
85%	16,907.16
80%	19,466.93
75%	21,738.28
70%	23,922.56
65%	25,954.51
60%	27,972.24
55%	30,035.91
50%	32,035.00
45%	34,073.98
40%	36,260.51
35%	38,535.15
30%	41,093.93
25%	43,973.18
20%	47,347.61
15%	51,268.99
10%	56,442.19
5%	64,964.71
0%	132,543.60

End of Forecast

Forecast: NGL in Oil Fields

Summary:
   Display range is from 0.00 to 2,750.00 MMBNGL
   Entire range is from 15.42 to 5,004.24 MMBNGL
   After 50,000 trials, the standard error of the mean is 2.65

Statistics:	Value
Trials	50000
Mean	1,129.78
Median	1,046.03
Mode	---
Standard Deviation	592.37
Variance	350,899.57
Skewness	0.87
Kurtosis	4.07
Coefficient of Variability	0.52
Range Minimum	15.42
Range Maximum	5,004.24
Range Width	4,988.82
Mean Standard Error	2.65

Forecast: NGL in Oil Fields
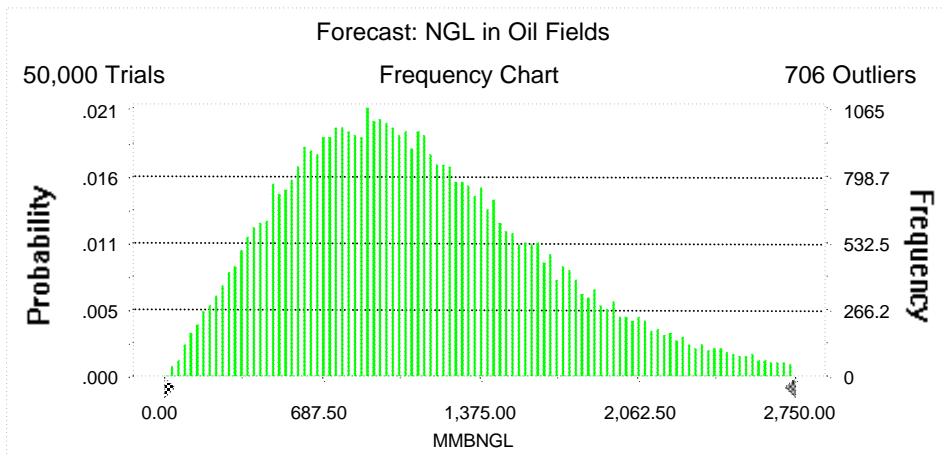
50,000 Trials	Frequency Chart	706 Outliers

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	15.42
95%	317.28
90%	441.53
85%	538.17
80%	622.31
75%	697.90
70%	769.05
65%	838.66
60%	908.28
55%	976.03
50%	1,046.03
45%	1,117.99
40%	1,193.16
35%	1,276.29
30%	1,365.87
25%	1,465.89
20%	1,587.33
15%	1,731.31
10%	1,920.45
5%	2,232.50
0%	5,004.24

End of Forecast

Forecast: Largest Oil Field

Summary:
Display range is from 0.00 to 3,000.00 MMBO
Entire range is from 65.24 to 2,999.94 MMBO
After 50,000 trials, the standard error of the mean is 2.89

Statistics:	Value
Trials	50000
Mean	1,585.66
Median	1,516.63
Mode	---
Standard Deviation	646.84
Variance	418,403.67
Skewness	0.27
Kurtosis	2.22
Coefficient of Variability	0.41
Range Minimum	65.24
Range Maximum	2,999.94
Range Width	2,934.70
Mean Standard Error	2.89
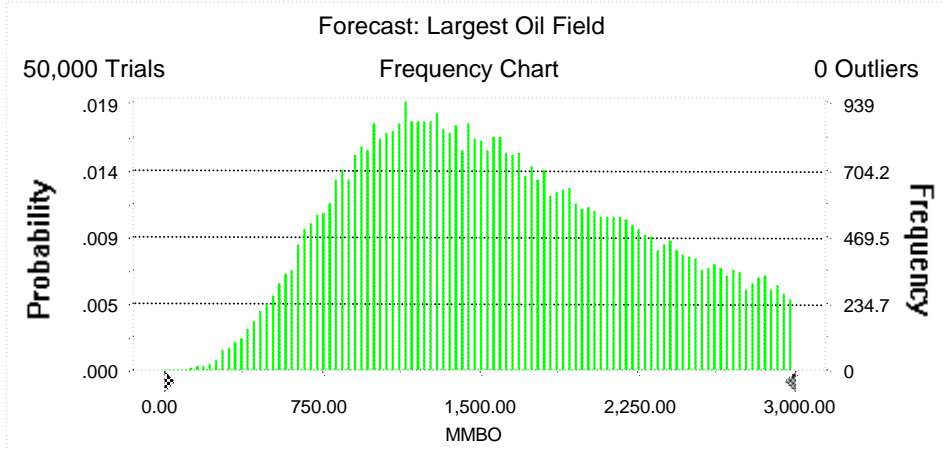
Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

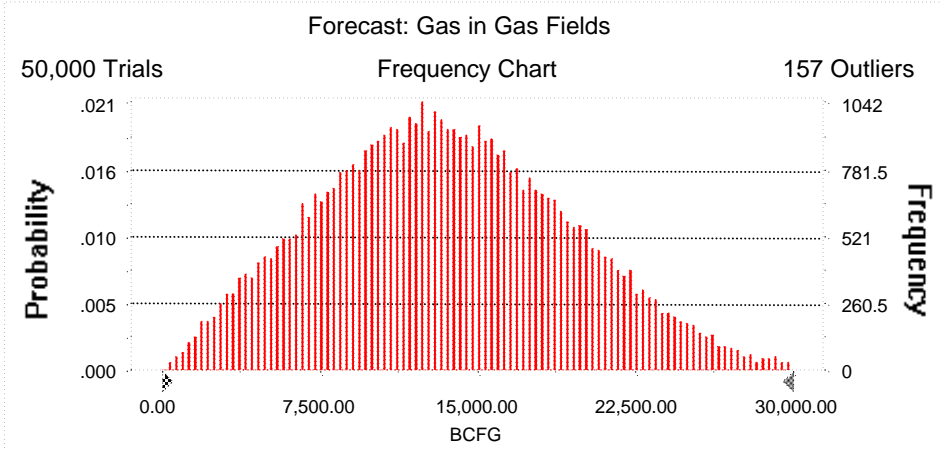| Percentile	MMBO
100%	65.24
95%	629.51
90%	777.73
85%	891.89
80%	990.26
75%	1,079.74
70%	1,165.33
65%	1,250.29
60%	1,336.77
55%	1,426.35
50%	1,516.63
45%	1,610.52
40%	1,708.85
35%	1,817.59
30%	1,934.56
25%	2,063.97
20%	2,203.95
15%	2,357.66
10%	2,537.85
5%	2,747.13
0%	2,999.94

End of Forecast

Forecast: Gas in Gas Fields

Summary:
  Display range is from 0.00 to 30,000.00 BCFG
  Entire range is from 146.38 to 40,898.44 BCFG
  After 50,000 trials, the standard error of the mean is 26.51

Statistics:	Value
Trials	50000
Mean	13,562.56
Median	13,291.78
Mode	---
Standard Deviation	5,927.57
Variance	35,136,144.38
Skewness	0.25
Kurtosis	2.68
Coefficient of Variability	0.44
Range Minimum	146.38
Range Maximum	40,898.44
Range Width	40,752.07
Mean Standard Error	26.51

Forecast: Gas in Gas Fields

50,000 Trials   Frequency Chart   157 Outliers

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	146.38
95%	4,107.11
90%	5,849.01
85%	7,172.52
80%	8,272.54
75%	9,230.88
70%	10,136.54
65%	10,959.12
60%	11,781.60
55%	12,525.59
50%	13,291.78
45%	14,085.42
40%	14,911.20
35%	15,739.61
30%	16,626.21
25%	17,614.63
20%	18,693.53
15%	19,965.87
10%	21,509.59
5%	23,728.50
0%	40,898.44

End of Forecast

Forecast: NGL in Gas Fields

Summary:
    Display range is from 0.00 to 2,000.00 MMBNGL
    Entire range is from 9.36 to 2,564.90 MMBNGL
    After 50,000 trials, the standard error of the mean is 1.64

Statistics:	Value
Trials	50000
Mean	826.31
Median	807.88
Mode	---
Standard Deviation	366.64
Variance	134,421.66
Skewness	0.30
Kurtosis	2.76
Coefficient of Variability	0.44
Range Minimum	9.36
Range Maximum	2,564.90
Range Width	2,555.54
Mean Standard Error	1.64

Forecast: NGL in Gas Fields
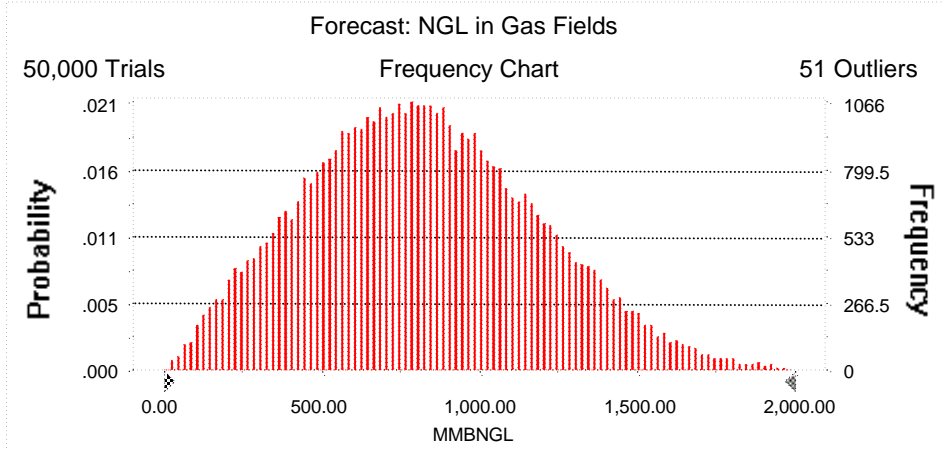
50,000 Trials	Frequency Chart	51 Outliers

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	9.36
95%	248.62
90%	354.33
85%	434.36
80%	500.37
75%	559.12
70%	611.59
65%	662.83
60%	711.89
55%	759.95
50%	807.88
45%	855.67
40%	903.55
35%	957.49
30%	1,011.74
25%	1,072.79
20%	1,142.80
15%	1,220.50
10%	1,320.07
5%	1,459.25
0%	2,564.90

End of Forecast

Forecast: Largest Gas Field

Summary:
 Display range is from 0.00 to 3,500.00 BCFG
 Entire range is from 46.36 to 3,499.39 BCFG
 After 50,000 trials, the standard error of the mean is 3.23

Statistics:	Value
Trials	50000
Mean	1,512.80
Median	1,373.16
Mode	---
Standard Deviation	722.37
Variance	521,823.21
Skewness	0.69
Kurtosis	2.83
Coefficient of Variability	0.48
Range Minimum	46.36
Range Maximum	3,499.39
Range Width	3,453.03
Mean Standard Error	3.23

Forecast: Largest Gas Field
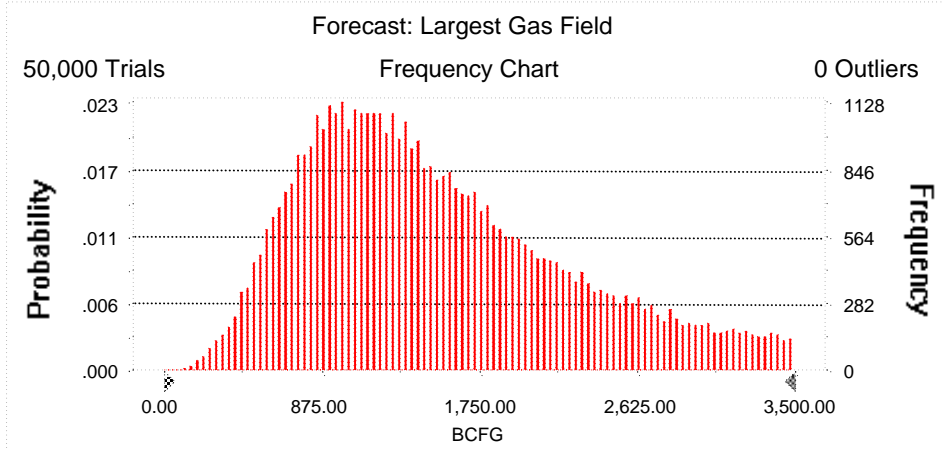
50,000 Trials	Frequency Chart	0 Outliers

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	46.36
95%	554.70
90%	687.60
85%	791.05
80%	878.84
75%	961.21
70%	1,042.42
65%	1,122.19
60%	1,203.02
55%	1,285.78
50%	1,373.16
45%	1,468.21
40%	1,573.12
35%	1,685.44
30%	1,807.85
25%	1,954.15
20%	2,126.21
15%	2,329.38
10%	2,594.08
5%	2,955.76
0%	3,499.39

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum	10
Likeliest	245
Maximum	500

Selected range is from 10 to 500
Mean value in simulation was 251

Number of Oil Fields

10	133	255	378	500
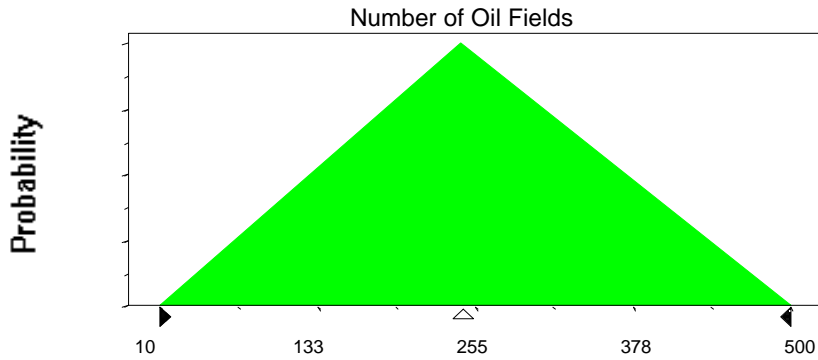
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	77.95		78.95
Standard Deviation	264.96		264.96
Selected range is from 0.00 to 2,999.00		1.00 to 3,000.00	
Mean value in simulation was 72.43			73.43

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields

| | 0.19 | 649.89 | 1,299.59 | 1,949.29 | 2,598.99 |
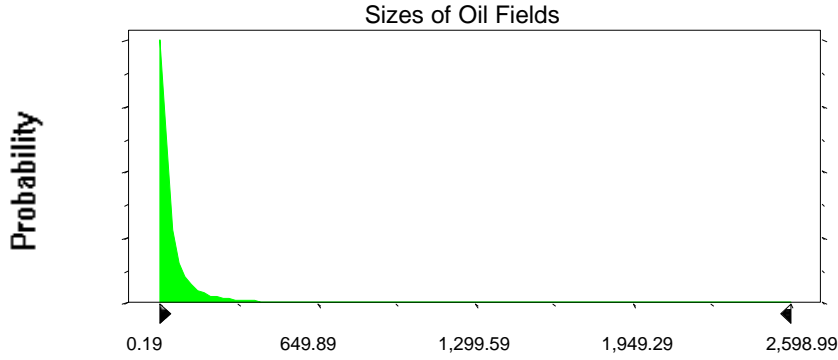
Assumption: GOR in Oil Fields
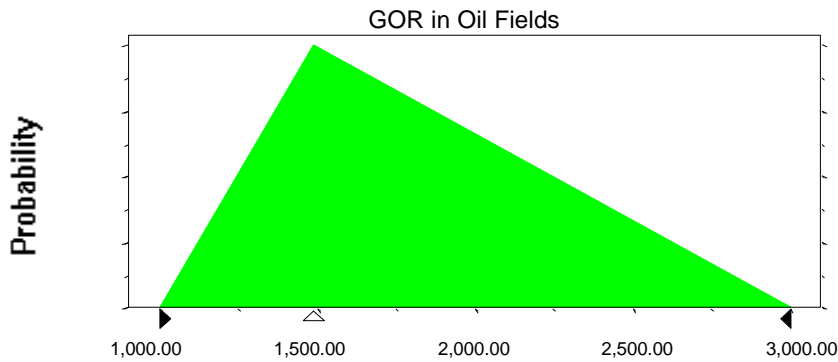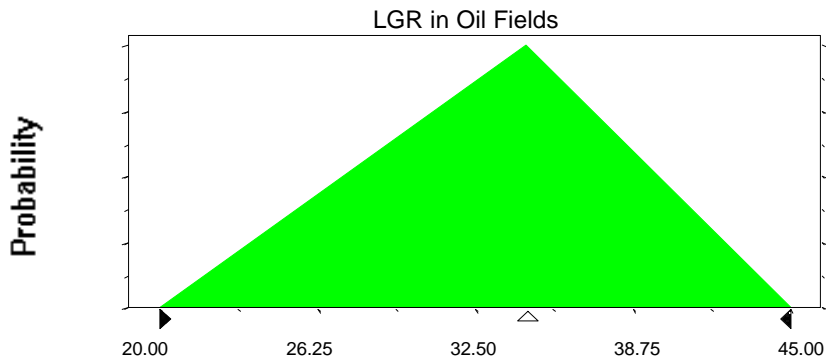
Triangular distribution with parameters:
Minimum   1,000.00
Likeliest   1,487.10
Maximum   3,000.00

Selected range is from 1,000.00 to 3,000.00
Mean value in simulation was 1,830.68

GOR in Oil Fields

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

Assumption: LGR in Oil Fields

Triangular distribution with parameters:
Minimum	20.00
Likeliest	34.58
Maximum	45.00

Selected range is from 20.00 to 45.00
Mean value in simulation was 33.22

LGR in Oil Fields

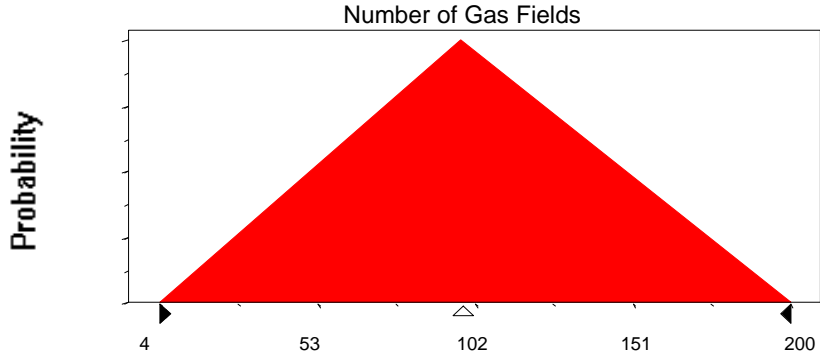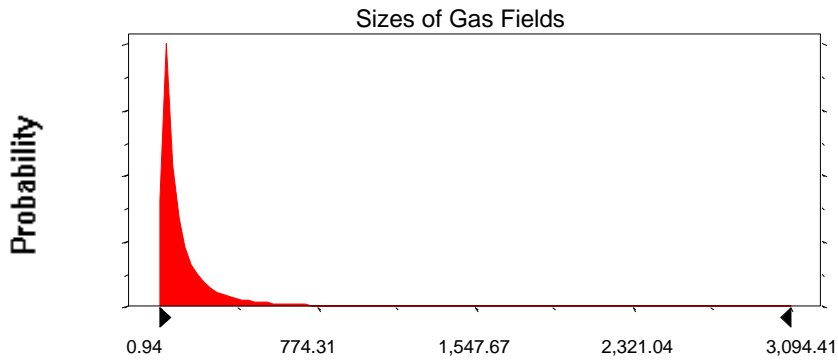**Assumption: Number of Gas Fields**

Triangular distribution with parameters:
Minimum	4
Likeliest	98
Maximum	200

Selected range is from 4 to 200
Mean value in simulation was 101

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	134.22		140.22
Standard Deviation	305.43		305.43

Selected range is from 0.00 to 3,494.00   6.00 to 3,500.00
Mean value in simulation was 128.27   134.27

Sizes of Gas Fields

Assumption: LGR in Gas Fields

Triangular distribution with parameters:
Minimum	50.00
Likeliest	62.77
Maximum	70.00

Selected range is from 50.00 to 70.00
Mean value in simulation was 60.92

LGR in Gas Fields
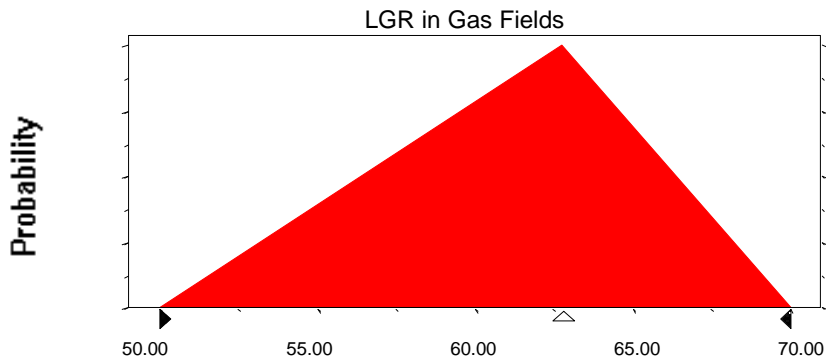
End of Assumptions

Simulation started on 11/2/98 at 16:51:51
Simulation stopped on 11/3/98 at 3:43:43