Tanezzuft-Illizi Structural/Stratigraphic, Assessment Unit 20560101
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	10	1.00	601	2,520	6,000	2,814	2,655	11,444	29,734	13,235	55	244	685	291	86	205	419	222
Gas Fields	60						5,809	14,241	24,286	14,550	213	551	1,055	582	753	1,633	3,696	1,842
Total		1.00	601	2,520	6,000	2,814	8,464	25,685	54,020	27,785	269	795	1,740	873				

Forecast: Oil in Oil Fields

Summary:
Display range is from 0.00 to 8,000.00 MMBO
Entire range is from 193.83 to 8,743.38 MMBO
After 50,000 trials, the standard error of the mean is 7.61

Statistics:	Value
Trials	50000
Mean	2,814.16
Median	2,520.39
Mode	---
Standard Deviation	1,702.69
Variance	2,899,159.93
Skewness	0.60
Kurtosis	2.52
Coefficient of Variability	0.61
Range Minimum	193.83
Range Maximum	8,743.38
Range Width	8,549.55
Mean Standard Error	7.61

Forecast: Oil in Oil Fields

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

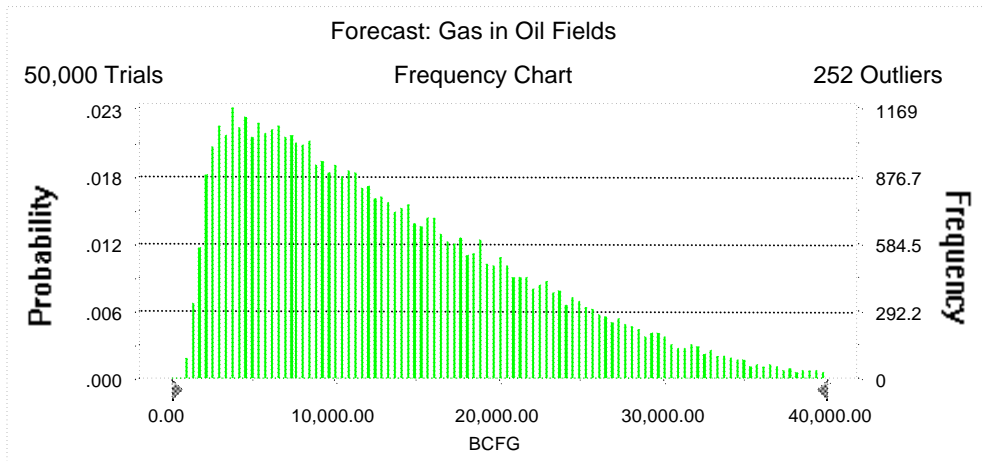| Percentile	MMBO
100%	193.83
95%	600.78
90%	795.72
85%	991.17
80%	1,184.86
75%	1,384.76
70%	1,589.96
65%	1,806.65
60%	2,033.01
55%	2,264.86
50%	2,520.39
45%	2,783.28
40%	3,063.52
35%	3,344.93
30%	3,662.60
25%	3,997.83
20%	4,376.39
15%	4,807.08
10%	5,319.94
5%	5,999.91
0%	8,743.38

End of Forecast

Forecast: Gas in Oil Fields

Summary:
    Display range is from 0.00 to 40,000.00 BCFG
    Entire range is from 672.59 to 53,036.18 BCFG
    After 50,000 trials, the standard error of the mean is 38.41

Statistics:	Value
Trials	50000
Mean	13,235.36
Median	11,443.92
Mode	---
Standard Deviation	8,588.01
Variance	73,753,875.57
Skewness	0.86
Kurtosis	3.30
Coefficient of Variability	0.65
Range Minimum	672.59
Range Maximum	53,036.18
Range Width	52,363.59
Mean Standard Error	38.41

Forecast: Gas in Oil Fields

50,000 Trials   Frequency Chart   252 Outliers

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	672.59
95%	2,654.67
90%	3,585.64
85%	4,473.55
80%	5,388.24
75%	6,312.21
70%	7,247.76
65%	8,220.17
60%	9,234.94
55%	10,319.78
50%	11,443.92
45%	12,626.60
40%	13,967.90
35%	15,362.74
30%	16,851.18
25%	18,575.30
20%	20,486.21
15%	22,794.25
10%	25,592.96
5%	29,734.29
0%	53,036.18

End of Forecast

Forecast: NGL in Oil Fields

Summary:
    Display range is from 0.00 to 900.00 MMBNGL
    Entire range is from 10.30 to 1,449.37 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.90

Statistics:	Value
Trials	50000
Mean	290.79
Median	244.48
Mode	---
Standard Deviation	201.77
Variance	40,711.96
Skewness	1.13
Kurtosis	4.29
Coefficient of Variability	0.69
Range Minimum	10.30
Range Maximum	1,449.37
Range Width	1,439.08
Mean Standard Error	0.90
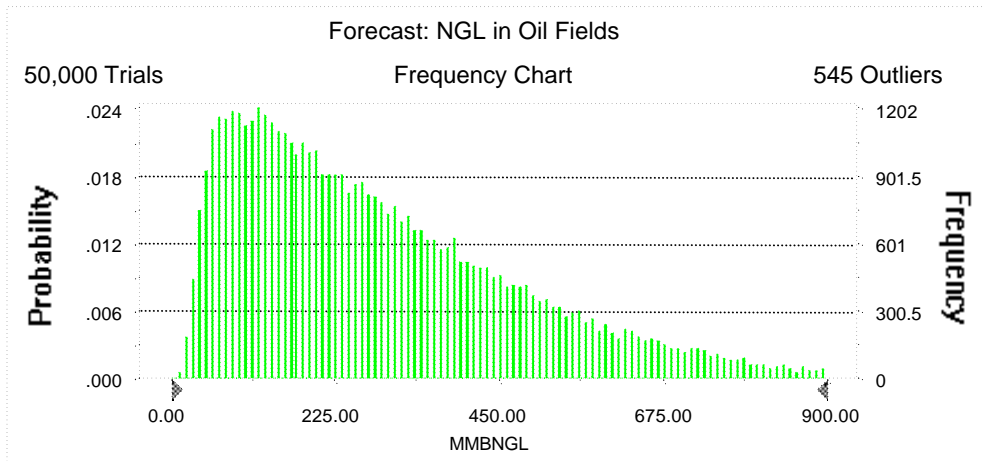
Forecast: NGL in Oil Fields

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	10.30
95%	55.09
90%	75.02
85%	93.93
80%	113.62
75%	132.57
70%	152.82
65%	174.06
60%	196.04
55%	219.58
50%	244.48
45%	270.80
40%	298.88
35%	329.81
30%	364.05
25%	402.92
20%	447.68
15%	501.70
10%	573.76
5%	685.13
0%	1,449.37

End of Forecast

Forecast: Largest Oil Field

Summary:
    Display range is from 0.00 to 500.00 MMBO
    Entire range is from 22.66 to 499.92 MMBO
    After 50,000 trials, the standard error of the mean is 0.45

Statistics:	Value
Trials	50000
Mean	222.16
Median	205.44
Mode	---
Standard Deviation	100.12
Variance	10,023.22
Skewness	0.64
Kurtosis	2.79
Coefficient of Variability	0.45
Range Minimum	22.66
Range Maximum	499.92
Range Width	477.27
Mean Standard Error	0.45
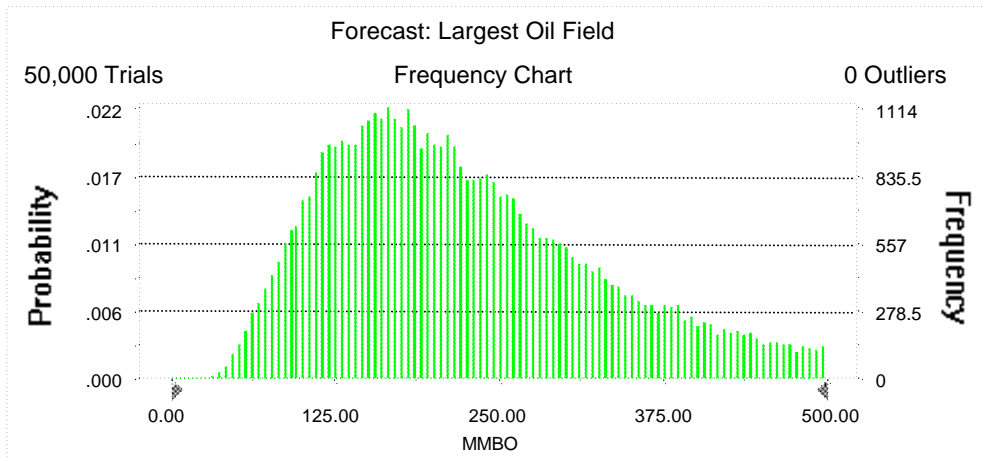
Forecast: Largest Oil Field

50,000 Trials   Frequency Chart   0 Outliers

Forecast: Largest Oil Field (cont'd)

Percentiles:

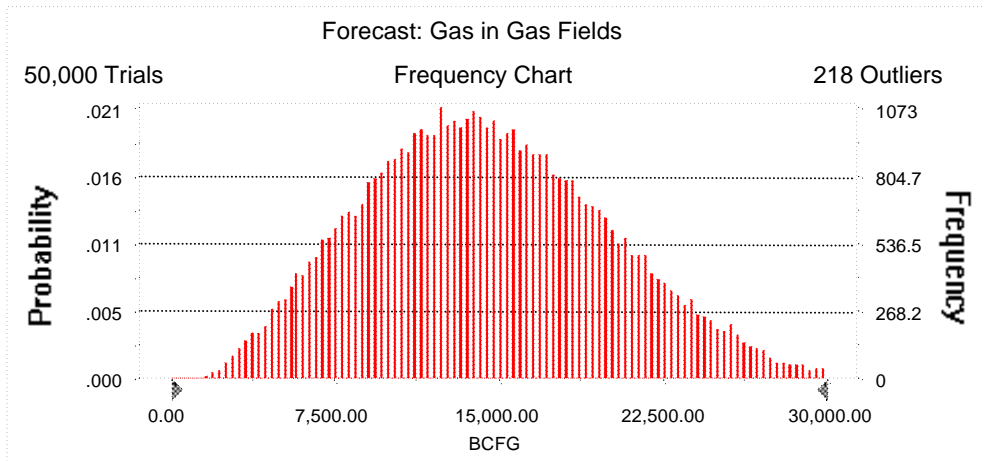| Percentile	MMBO
100%	22.66
95%	85.73
90%	105.23
85%	120.04
80%	132.89
75%	145.88
70%	157.55
65%	169.15
60%	180.86
55%	192.72
50%	205.44
45%	218.43
40%	232.88
35%	248.09
30%	264.54
25%	284.33
20%	306.69
15%	333.88
10%	370.30
5%	419.46
0%	499.92

End of Forecast

Forecast: Gas in Gas Fields

Summary:
    Display range is from 0.00 to 30,000.00 BCFG
    Entire range is from 1,326.80 to 38,104.40 BCFG
    After 50,000 trials, the standard error of the mean is 25.03

Statistics:	Value
Trials	50000
Mean	14,549.99
Median	14,241.45
Mode	---
Standard Deviation	5,597.70
Variance	31,334,202.08
Skewness	0.29
Kurtosis	2.74
Coefficient of Variability	0.38
Range Minimum	1,326.80
Range Maximum	38,104.40
Range Width	36,777.59
Mean Standard Error	25.03

Forecast: Gas in Gas Fields

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	1,326.80
95%	5,809.17
90%	7,357.02
85%	8,568.93
80%	9,577.47
75%	10,462.80
70%	11,272.65
65%	12,043.76
60%	12,778.07
55%	13,527.14
50%	14,241.45
45%	14,973.34
40%	15,742.49
35%	16,557.56
30%	17,395.99
25%	18,337.24
20%	19,370.98
15%	20,564.90
10%	22,067.93
5%	24,285.90
0%	38,104.40

End of Forecast

Forecast: NGL in Gas Fields

Summary:
Display range is from 0.00 to 1,500.00 MMBNGL
Entire range is from 38.91 to 2,102.38 MMBNGL
After 50,000 trials, the standard error of the mean is 1.15

Statistics:	Value
Trials	50000
Mean	581.74
Median	550.58
Mode	---
Standard Deviation	257.53
Variance	66,323.19
Skewness	0.65
Kurtosis	3.41
Coefficient of Variability	0.44
Range Minimum	38.91
Range Maximum	2,102.38
Range Width	2,063.47
Mean Standard Error	1.15
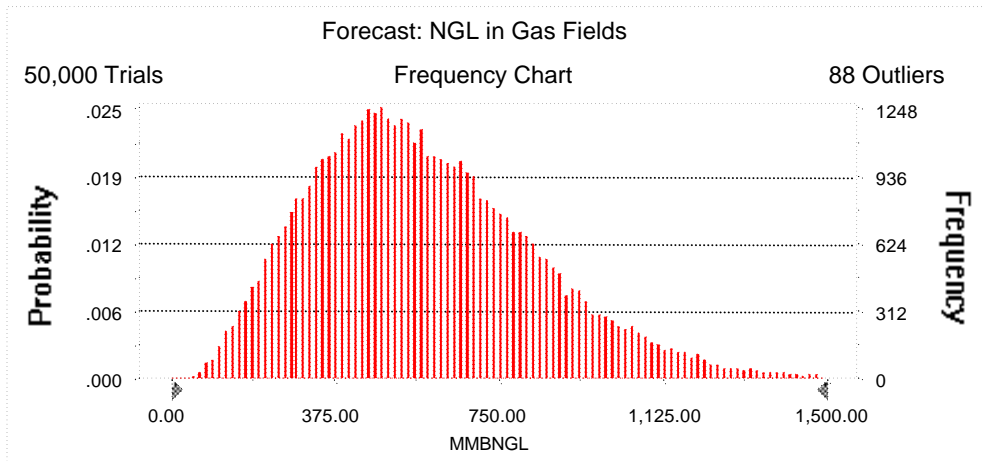
Forecast: NGL in Gas Fields

50,000 Trials   Frequency Chart   88 Outliers

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	38.91
95%	213.41
90%	271.64
85%	317.57
80%	356.47
75%	392.63
70%	425.81
65%	457.34
60%	487.47
55%	518.91
50%	550.58
45%	583.84
40%	619.75
35%	657.60
30%	696.18
25%	740.73
20%	791.47
15%	850.17
10%	928.11
5%	1,054.53
0%	2,102.38

End of Forecast

Forecast: Largest Gas Field

Summary:
  Display range is from 0.00 to 4,500.00 BCFG
  Entire range is from 261.89 to 4,799.34 BCFG
  After 50,000 trials, the standard error of the mean is 3.99

Statistics:	Value
Trials	50000
Mean	1,842.41
Median	1,633.28
Mode	---
Standard Deviation	893.24
Variance	797,881.05
Skewness	1.01
Kurtosis	3.63
Coefficient of Variability	0.48
Range Minimum	261.89
Range Maximum	4,799.34
Range Width	4,537.45
Mean Standard Error	3.99
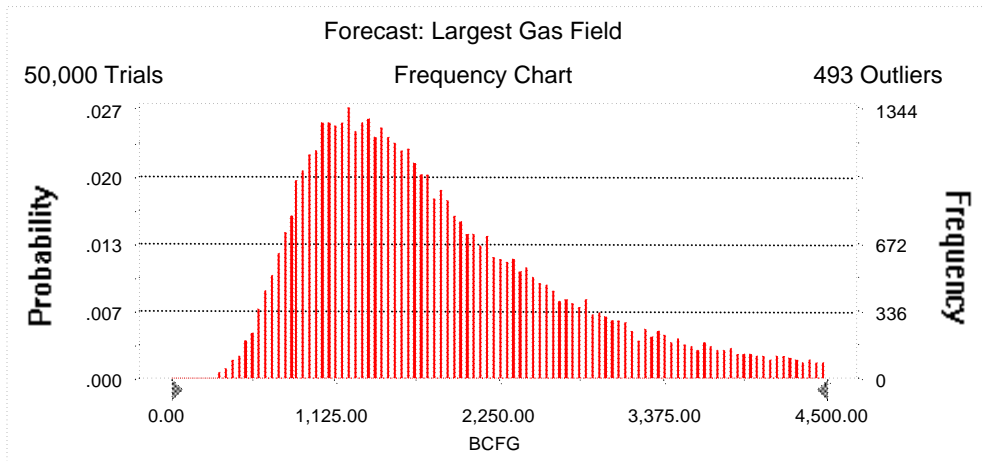
Forecast: Largest Gas Field

50,000 Trials — Frequency Chart — 493 Outliers

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	261.89
95%	752.79
90%	891.89
85%	996.22
80%	1,089.99
75%	1,178.30
70%	1,264.09
65%	1,353.83
60%	1,444.69
55%	1,537.01
50%	1,633.28
45%	1,737.84
40%	1,855.77
35%	1,984.90
30%	2,140.69
25%	2,317.08
20%	2,520.91
15%	2,787.28
10%	3,135.25
5%	3,695.58
0%	4,799.34

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum   10
Likeliest   14
Maximum   200

Selected range is from 10 to 200
Mean value in simulation was 75

Number of Oil Fields
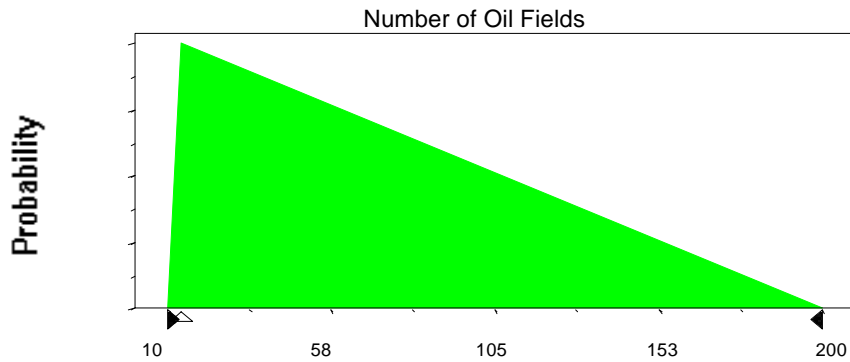
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	28.35		38.35
Standard Deviation	45.46		45.46

Selected range is from 0.00 to 490.00		10.00 to 500.00	
Mean value in simulation was 27.87		37.87	

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields

| 0.51 | 111.05 | 221.60 | 332.14 | 442.69 |
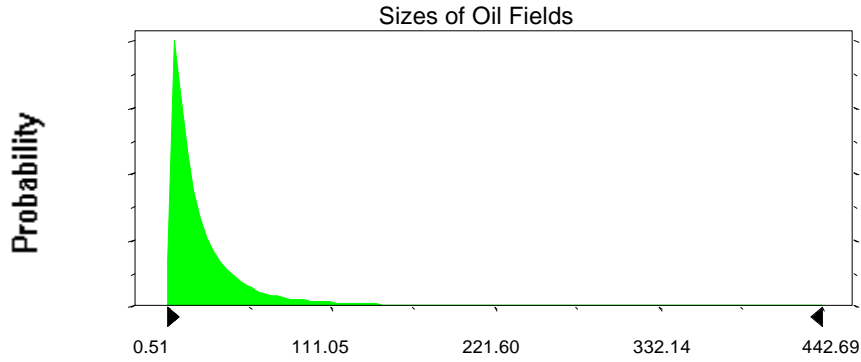
Assumption: GOR in Oil Fields

Triangular distribution with parameters:
Minimum	2,350.00
Likeliest	4,700.00
Maximum	7,050.00

Selected range is from 2,350.00 to 7,050.00
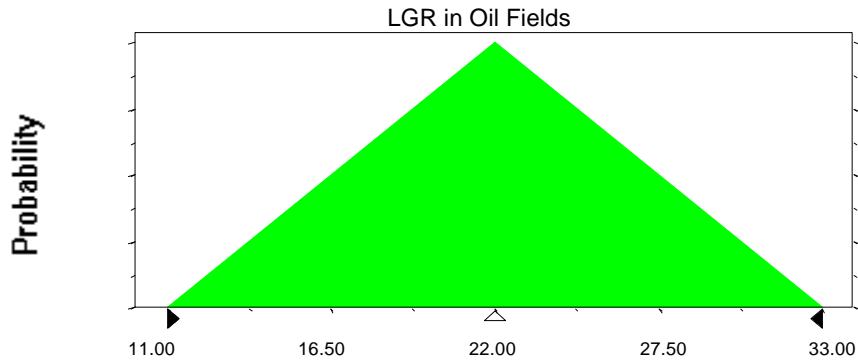Mean value in simulation was 4,704.83
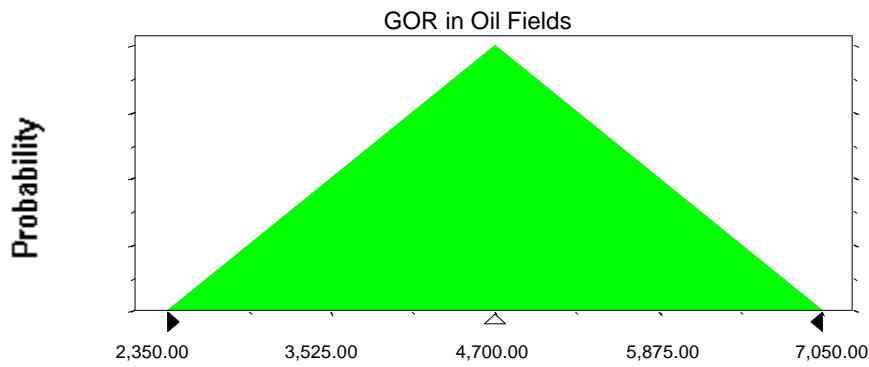
GOR in Oil Fields

| 2,350.00 | 3,525.00 | 4,700.00 | 5,875.00 | 7,050.00 |

Assumption: LGR in Oil Fields

Triangular distribution with parameters:
Minimum	11.00
Likeliest	22.00
Maximum	33.00

Selected range is from 11.00 to 33.00
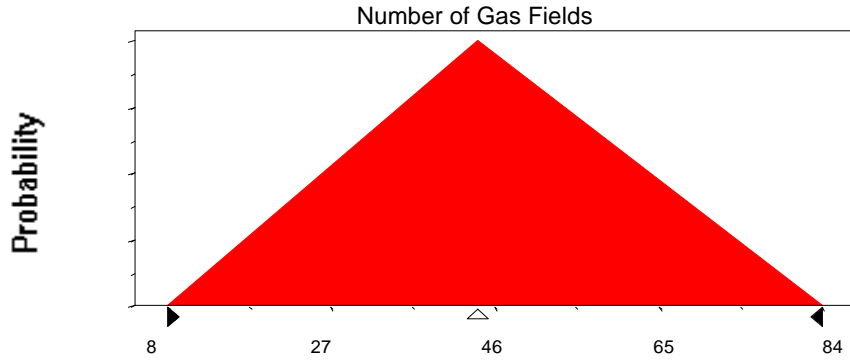Mean value in simulation was 21.97

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum	8
Likeliest	44
Maximum	84

Selected range is from 8 to 84
Mean value in simulation was 45

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	268.08		328.08
Standard Deviation	437.76		437.76

Selected range is from 0.00 to 4,740.00 60.00 to 4,800.00
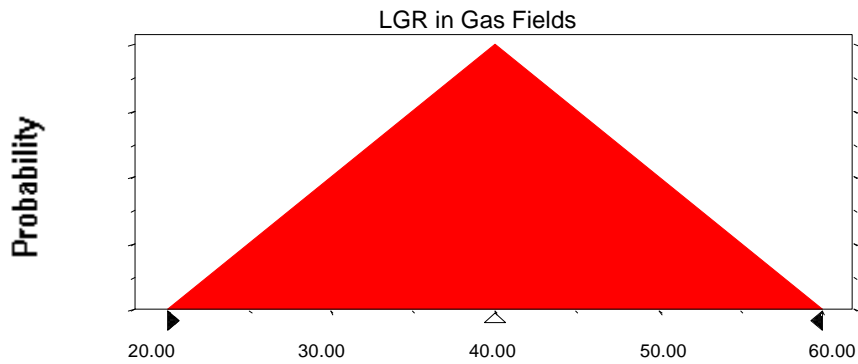Mean value in simulation was 262.71 322.71
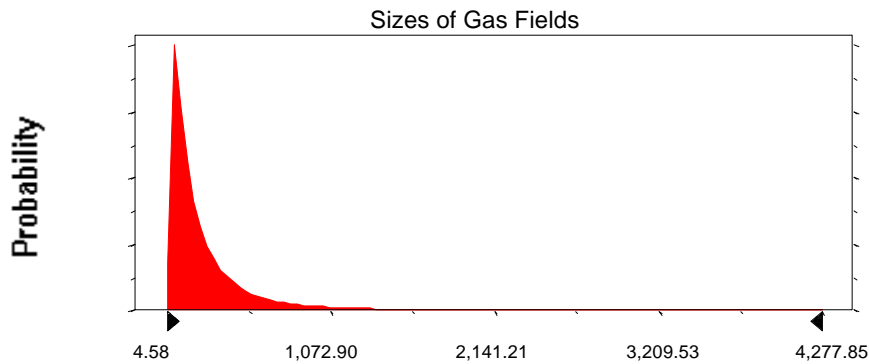
Sizes of Gas Fields

Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	20.00
Likeliest	40.00
Maximum	60.00

Selected range is from 20.00 to 60.00
Mean value in simulation was 39.99

LGR in Gas Fields

End of Assumptions

Simulation started on 12/3/98 at 9:52:06
Simulation stopped on 12/3/98 at 10:55:13