Tanezzuft-Oued Mya Structural/Stratigraphic, Assessment Unit 20540101
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	10	1.00	292	802	1,450	830	233	673	1,355	720	9	26	58	29	40	96	255	114
Gas Fields	60						269	1,417	3,640	1,621	13	69	192	81	111	318	1,030	405
Total		1.00	292	802	1,450	830	502	2,090	4,994	2,341	21	95	250	110				

Forecast: Oil in Oil Fields

Summary:
   Display range is from 0.00 to 1,750.00 MMBO
   Entire range is from 57.81 to 2,426.66 MMBO
   After 50,000 trials, the standard error of the mean is 1.58

Statistics:	Value
Trials	50000
Mean	830.20
Median	802.22
Mode	---
Standard Deviation	352.98
Variance	124,593.54
Skewness	0.37
Kurtosis	2.77
Coefficient of Variability	0.43
Range Minimum	57.81
Range Maximum	2,426.66
Range Width	2,368.85
Mean Standard Error	1.58

Forecast: Oil in Oil Fields

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	57.81
95%	292.18
90%	386.24
85%	456.14
80%	515.27
75%	567.64
70%	617.37
65%	665.00
60%	710.04
55%	755.53
50%	802.22
45%	849.01
40%	899.67
35%	951.57
30%	1,006.35
25%	1,067.02
20%	1,137.33
15%	1,215.46
10%	1,312.05
5%	1,450.04
0%	2,426.66

End of Forecast

Forecast: Gas in Oil Fields

Summary:
Display range is from 0.00 to 1,750.00 BCFG
Entire range is from 35.27 to 2,696.55 BCFG
After 50,000 trials, the standard error of the mean is 1.54

Statistics:	Value
Trials	50000
Mean	719.56
Median	673.05
Mode	---
Standard Deviation	344.98
Variance	119,008.17
Skewness	0.71
Kurtosis	3.45
Coefficient of Variability	0.48
Range Minimum	35.27
Range Maximum	2,696.55
Range Width	2,661.28
Mean Standard Error	1.54
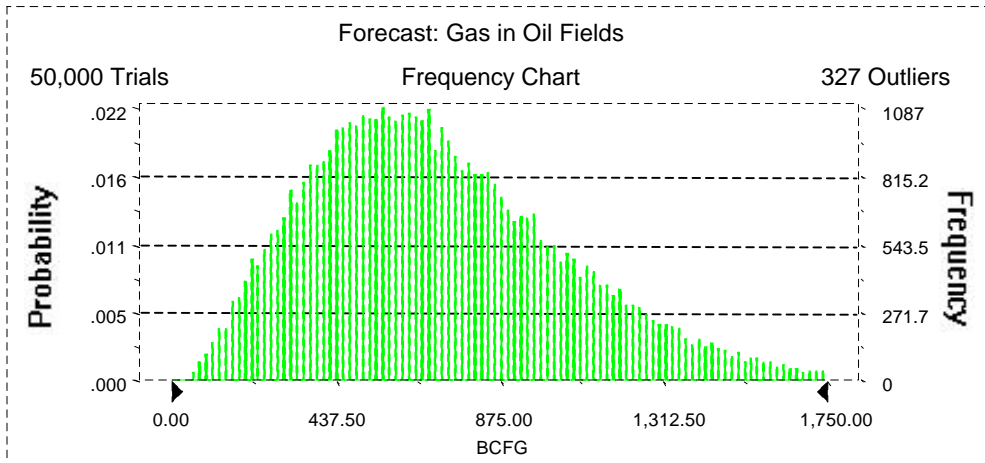
Forecast: Gas in Oil Fields

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	35.27
95%	233.43
90%	310.35
85%	368.91
80%	419.57
75%	464.06
70%	507.40
65%	548.97
60%	590.30
55%	631.60
50%	673.05
45%	716.60
40%	761.88
35%	813.30
30%	867.10
25%	929.82
20%	999.00
15%	1,084.76
10%	1,192.76
5%	1,354.52
0%	2,696.55

End of Forecast

Forecast: NGL in Oil Fields

Summary:
    Display range is from 0.00 to 70.00 MMBNGL
    Entire range is from 1.19 to 124.14 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.07

Statistics:	Value
Trials	50000
Mean	28.80
Median	26.22
Mode	---
Standard Deviation	15.29
Variance	233.83
Skewness	0.99
Kurtosis	4.30
Coefficient of Variability	0.53
Range Minimum	1.19
Range Maximum	124.14
Range Width	122.95
Mean Standard Error	0.07
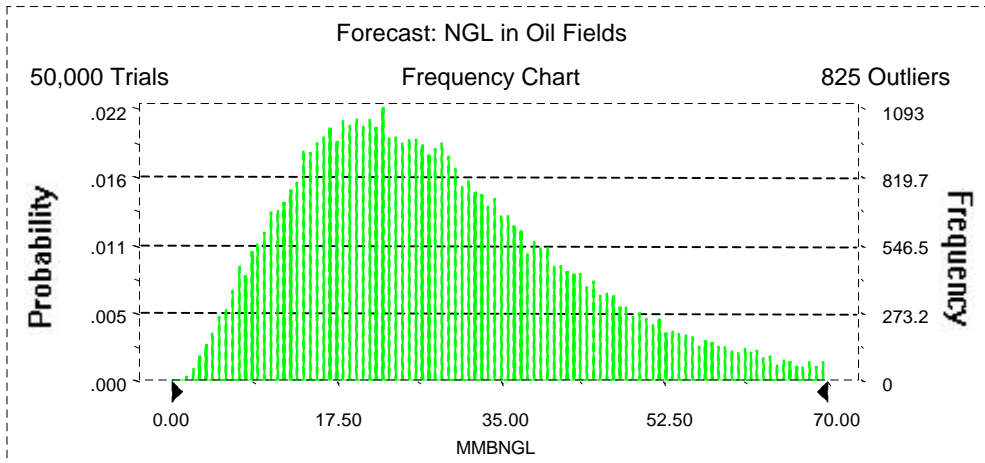
Forecast: NGL in Oil Fields

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.19
95%	8.65
90%	11.55
85%	13.91
80%	15.81
75%	17.57
70%	19.29
65%	21.00
60%	22.69
55%	24.41
50%	26.22
45%	28.11
40%	30.01
35%	32.15
30%	34.52
25%	37.19
20%	40.35
15%	44.27
10%	49.44
5%	57.97
0%	124.14

End of Forecast

Forecast: Largest Oil Field

Summary:
Display range is from 0.00 to 300.00 MMBO
Entire range is from 13.48 to 361.84 MMBO
After 50,000 trials, the standard error of the mean is 0.29

Statistics:	Value
Trials	50000
Mean	113.68
Median	96.07
Mode	---
Standard Deviation	65.48
Variance	4,287.69
Skewness	1.31
Kurtosis	4.54
Coefficient of Variability	0.58
Range Minimum	13.48
Range Maximum	361.84
Range Width	348.36
Mean Standard Error	0.29
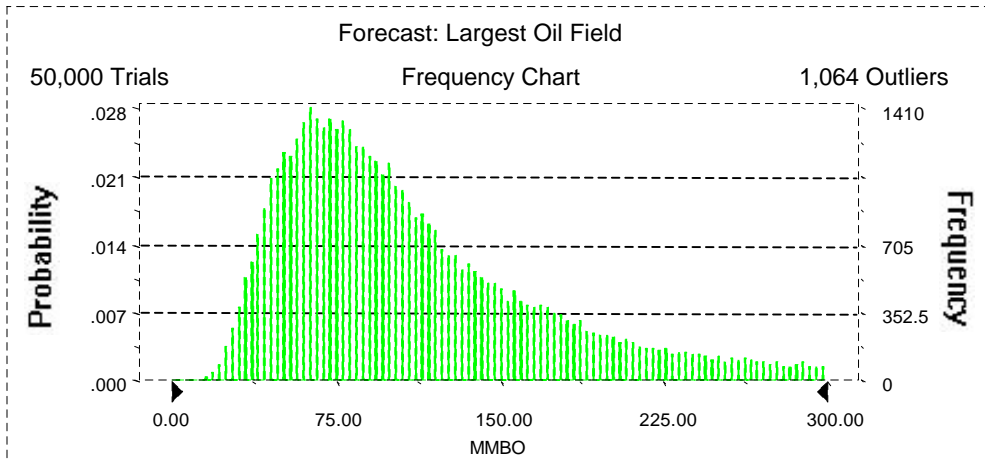
Forecast: Largest Oil Field
50,000 Trials   Frequency Chart   1,064 Outliers

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	13.48
95%	40.36
90%	48.35
85%	54.87
80%	60.99
75%	66.47
70%	72.04
65%	77.77
60%	83.33
55%	89.60
50%	96.07
45%	102.97
40%	110.75
35%	119.69
30%	130.48
25%	143.14
20%	158.82
15%	178.12
10%	206.22
5%	254.60
0%	361.84

End of Forecast

Forecast: Gas in Gas Fields

Summary:
    Display range is from 0.00 to 4,500.00 BCFG
    Entire range is from 60.69 to 7,529.41 BCFG
    After 50,000 trials, the standard error of the mean is 4.83

Statistics:	Value
Trials	50000
Mean	1,621.07
Median	1,416.79
Mode	---
Standard Deviation	1,079.90
Variance	1,166,190.09
Skewness	0.84
Kurtosis	3.39
Coefficient of Variability	0.67
Range Minimum	60.69
Range Maximum	7,529.41
Range Width	7,468.72
Mean Standard Error	4.83
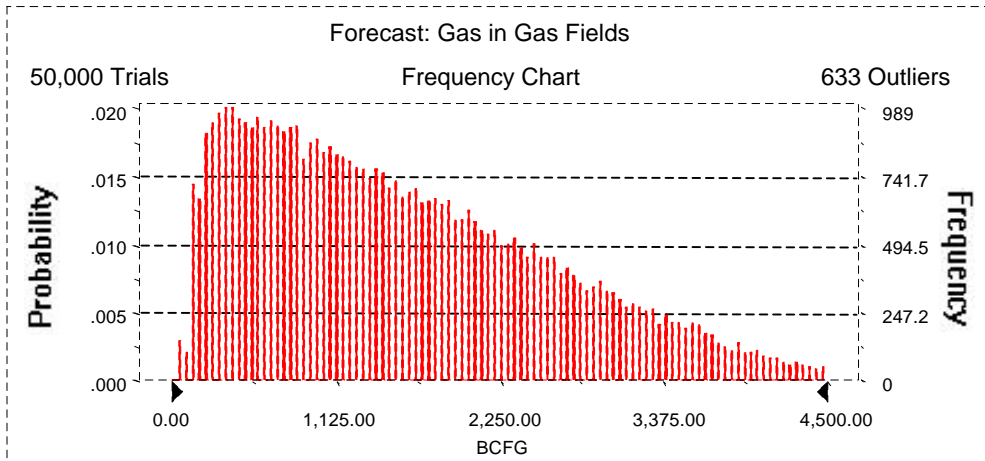
Forecast: Gas in Gas Fields

50,000 Trials — Frequency Chart — 633 Outliers

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	60.69
95%	268.82
90%	385.38
85%	501.94
80%	622.35
75%	743.49
70%	865.83
65%	995.91
60%	1,129.87
55%	1,268.50
50%	1,416.79
45%	1,571.16
40%	1,736.59
35%	1,909.64
30%	2,096.04
25%	2,309.31
20%	2,539.35
15%	2,809.57
10%	3,156.91
5%	3,639.63
0%	7,529.41

End of Forecast

Forecast: NGL in Gas Fields

Summary:
    Display range is from 0.00 to 250.00 MMBNGL
    Entire range is from 1.84 to 467.81 MMBNGL
    After 50,000 trials, the standard error of the mean is 0.26

Statistics:	Value
Trials	50000
Mean	81.16
Median	68.50
Mode	---
Standard Deviation	57.67
Variance	3,325.29
Skewness	1.10
Kurtosis	4.37
Coefficient of Variability	0.71
Range Minimum	1.84
Range Maximum	467.81
Range Width	465.97
Mean Standard Error	0.26
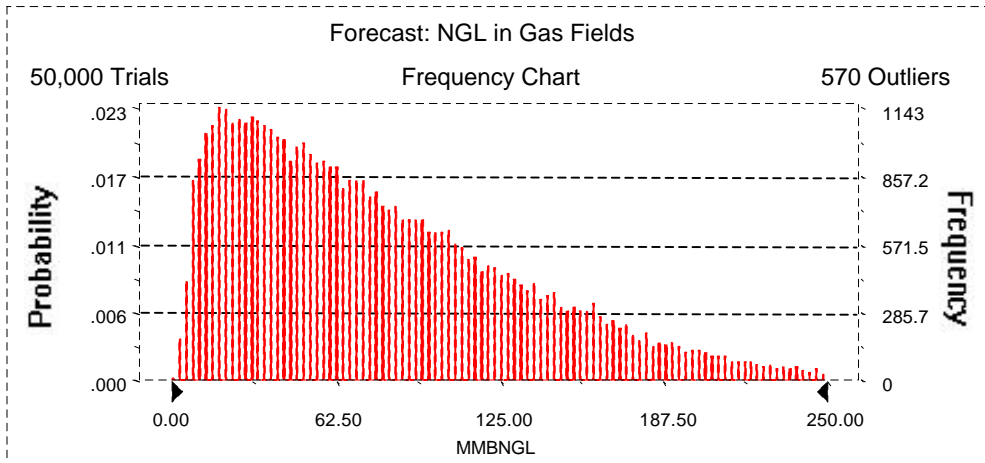
Forecast: NGL in Gas Fields

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	1.84
95%	12.77
90%	18.61
85%	24.17
80%	29.95
75%	35.66
70%	41.58
65%	48.03
60%	54.44
55%	61.23
50%	68.50
45%	76.03
40%	84.41
35%	93.46
30%	103.26
25%	113.89
20%	126.71
15%	142.13
10%	161.48
5%	191.96
0%	467.81

End of Forecast

Forecast: Largest Gas Field

Summary:
    Display range is from 0.00 to 1,200.00 BCFG
    Entire range is from 60.69 to 1,999.51 BCFG
    After 50,000 trials, the standard error of the mean is 1.35

Statistics:	Value
Trials	50000
Mean	405.22
Median	317.67
Mode	---
Standard Deviation	301.96
Variance	91,180.42
Skewness	1.98
Kurtosis	7.87
Coefficient of Variability	0.75
Range Minimum	60.69
Range Maximum	1,999.51
Range Width	1,938.82
Mean Standard Error	1.35
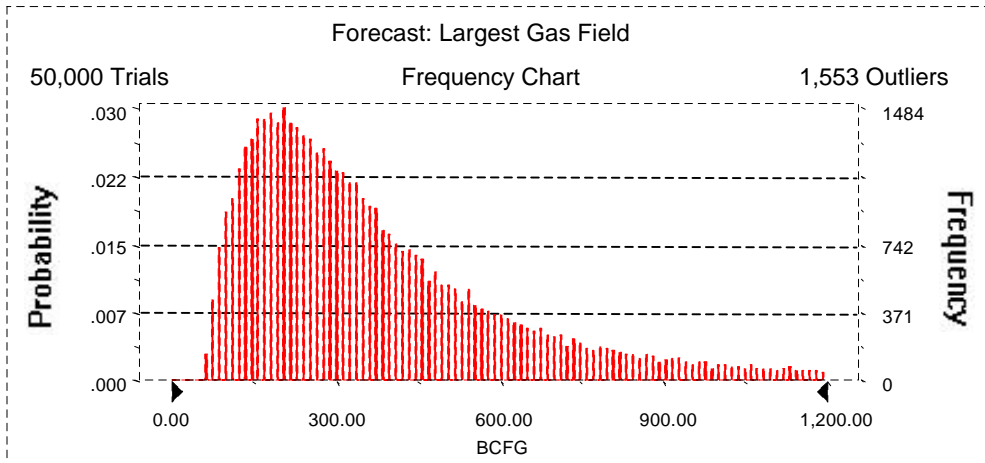
Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	60.69
95%	111.18
90%	137.72
85%	160.19
80%	181.14
75%	202.02
70%	222.57
65%	244.64
60%	267.53
55%	291.35
50%	317.67
45%	344.87
40%	375.66
35%	411.91
30%	453.65
25%	504.35
20%	567.84
15%	653.84
10%	783.54
5%	1,029.57
0%	1,999.51

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum   4
Likeliest   31
Maximum   70
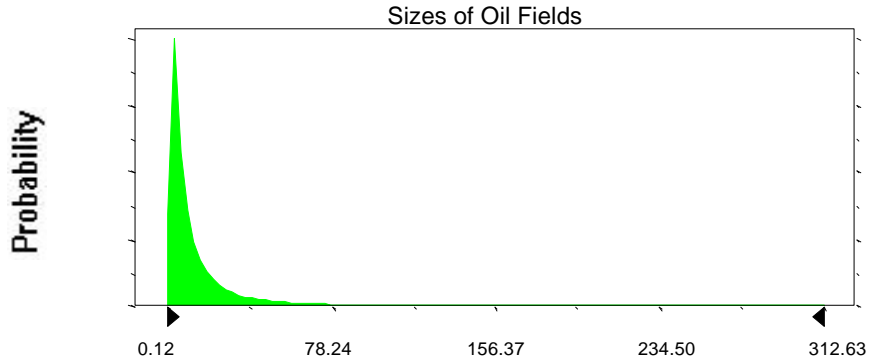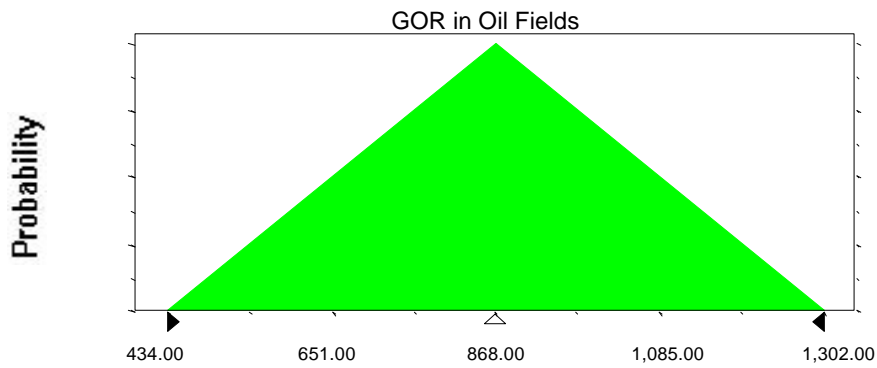
Selected range is from 4 to 70
Mean value in simulation was 35

Number of Oil Fields

Probability

4   21   37   54   70
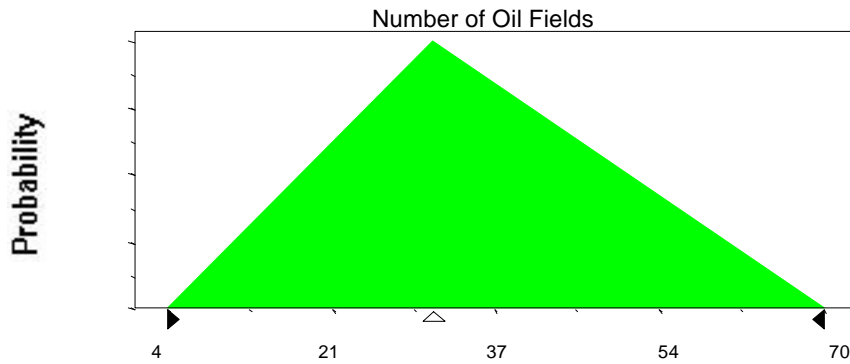
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters: Shifted parameters
Mean   14.30   24.3
Standard Deviation   30.92   30.92

Selected range is from 0.00 to 352.00   10.00 to 362.00
Mean value in simulation was 13.70   23.7

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields

Assumption: GOR in Oil Fields

Triangular distribution with parameters:
Minimum	434.00
Likeliest	868.00
Maximum	1,302.00

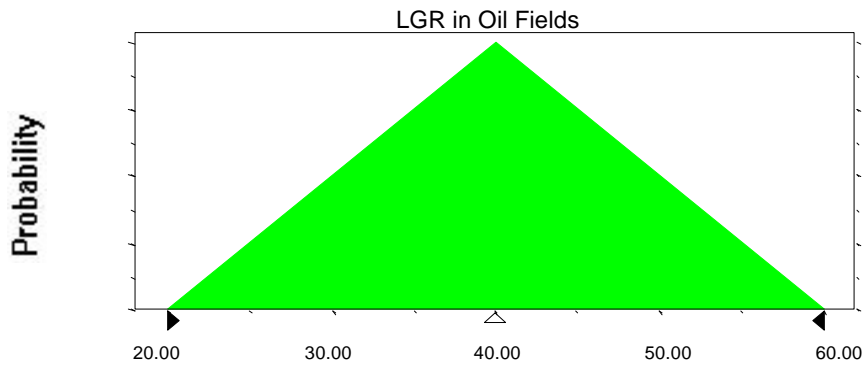Selected range is from 434.00 to 1,302.00
Mean value in simulation was 866.89

GOR in Oil Fields

Assumption: LGR in Oil Fields

Triangular distribution with parameters:
Minimum	20.00
Likeliest	40.00
Maximum	60.00

Selected range is from 20.00 to 60.00
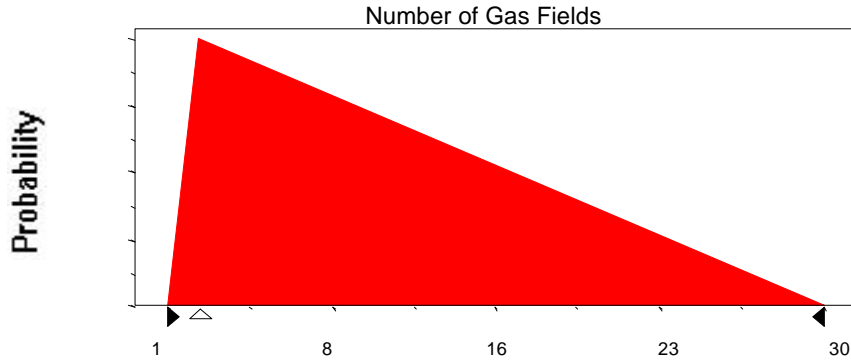Mean value in simulation was 40.01

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum	1
Likeliest	2
Maximum	30

Selected range is from 1 to 30
Mean value in simulation was 11

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters: Shifted parameters

Mean	88.05	148.05
Standard Deviation	172.65	172.65

Selected range is from 0.00 to 1,940.00   60.00 to 2,000.00
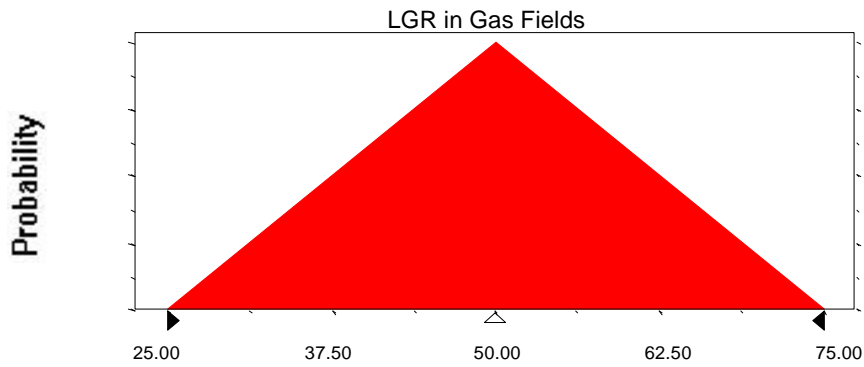Mean value in simulation was 84.53   144.53
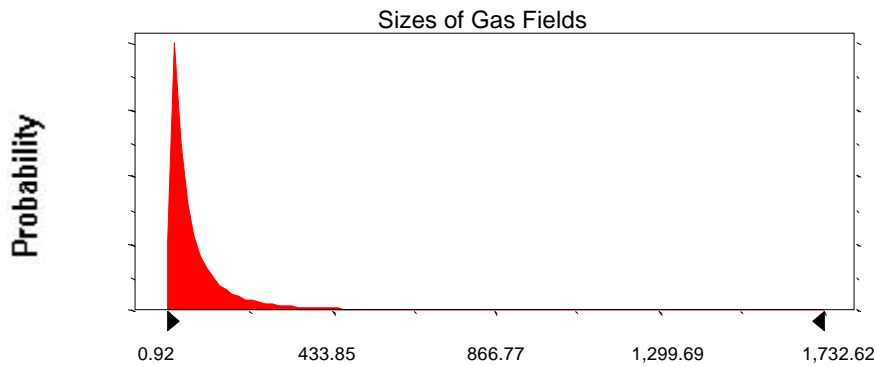
Sizes of Gas Fields

Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	25.00
Likeliest	50.00
Maximum	75.00

Selected range is from 25.00 to 75.00
Mean value in simulation was 50.09

LGR in Gas Fields

End of Assumptions

Simulation started on 12/1/98 at 16:12:21
Simulation stopped on 12/1/98 at 16:39:25