Murgab Depression Subsalt, Assessment Unit 11540104
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	5	1.00	39	104	217	113	358	1,007	2,305	1,127	20	59	145	68	23	48	107	54
Gas Fields	30						37,905	130,355	279,233	140,635	913	3,237	7,572	3,607	7,307	27,514	92,100	35,323
Total		1.00	39	104	217	113	38,263	131,362	281,538	141,762	932	3,296	7,718	3,675				

Forecast: Oil in Oil Fields

Summary:
Display range is from 0.00 to 275.00 MMBO
Entire range is from 7.18 to 508.60 MMBO
After 50,000 trials, the standard error of the mean is 0.25

Statistics:	Value
Trials	50000
Mean	112.62
Median	103.80
Mode	---
Standard Deviation	55.57
Variance	3,087.90
Skewness	0.91
Kurtosis	4.13
Coefficient of Variability	0.49
Range Minimum	7.18
Range Maximum	508.60
Range Width	501.41
Mean Standard Error	0.25

Forecast: Oil in Oil Fields

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	7.18
95%	39.21
90%	49.36
85%	57.36
80%	64.63
75%	71.33
70%	77.89
65%	84.27
60%	90.58
55%	97.15
50%	103.80
45%	110.76
40%	117.88
35%	125.83
30%	134.56
25%	144.57
20%	155.91
15%	169.98
10%	188.10
5%	216.79
0%	508.60

End of Forecast

Forecast: Gas in Oil Fields

Summary:
Display range is from 0.00 to 2,750.00 BCFG
Entire range is from 48.77 to 5,775.72 BCFG
After 50,000 trials, the standard error of the mean is 2.74

Statistics:	Value
Trials	50000
Mean	1,126.79
Median	1,007.47
Mode	---
Standard Deviation	613.28
Variance	376,109.33
Skewness	1.14
Kurtosis	4.90
Coefficient of Variability	0.54
Range Minimum	48.77
Range Maximum	5,775.72
Range Width	5,726.95
Mean Standard Error	2.74
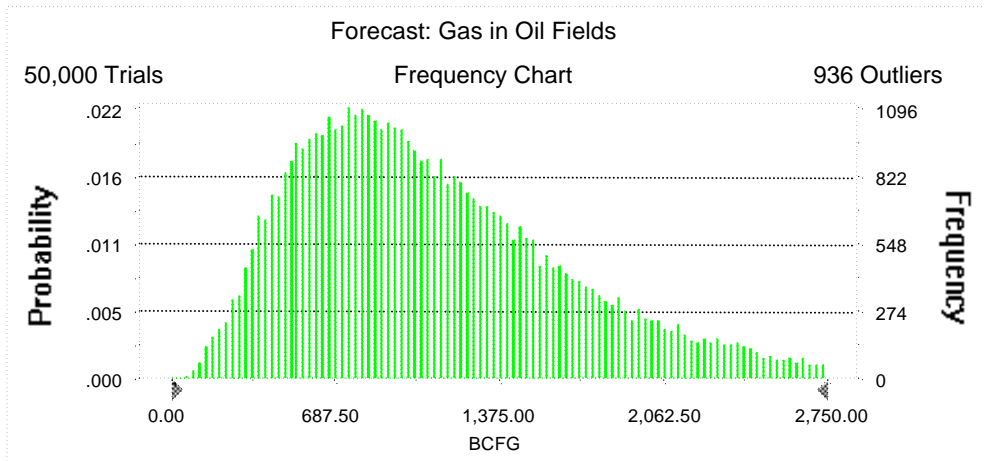
Forecast: Gas in Oil Fields

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	48.77
95%	358.33
90%	457.43
85%	536.98
80%	609.52
75%	677.01
70%	744.37
65%	807.14
60%	872.29
55%	939.08
50%	1,007.47
45%	1,083.27
40%	1,162.73
35%	1,249.36
30%	1,345.20
25%	1,452.87
20%	1,579.00
15%	1,738.57
10%	1,956.93
5%	2,304.67
0%	5,775.72

End of Forecast

Forecast: NGL in Oil Fields

Summary:
Display range is from 0.00 to 175.00 MMBNGL
Entire range is from 2.69 to 364.84 MMBNGL
After 50,000 trials, the standard error of the mean is 0.18

Statistics:	Value
Trials	50000
Mean	67.57
Median	59.23
Mode	---
Standard Deviation	39.84
Variance	1,587.03
Skewness	1.32
Kurtosis	5.58
Coefficient of Variability	0.59
Range Minimum	2.69
Range Maximum	364.84
Range Width	362.16
Mean Standard Error	0.18
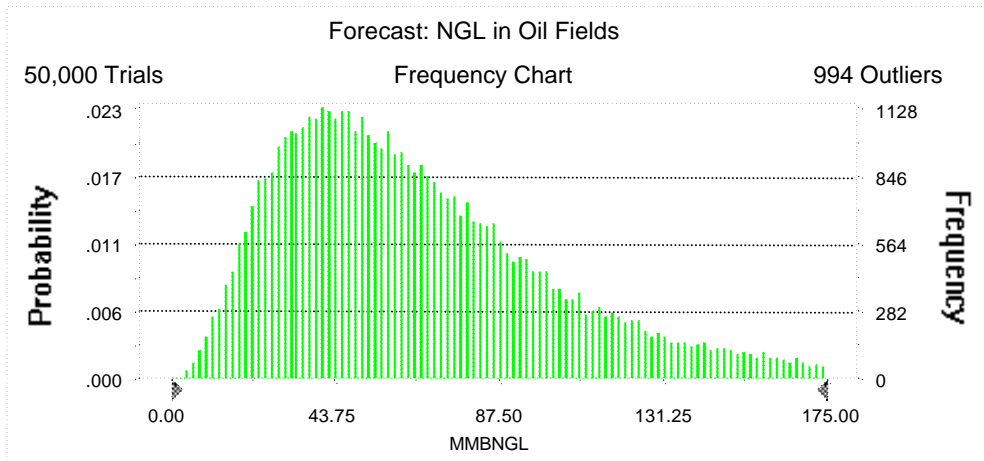
Forecast: NGL in Oil Fields

50,000 Trials — Frequency Chart — 994 Outliers

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	2.69
95%	19.68
90%	25.50
85%	30.27
80%	34.58
75%	38.67
70%	42.59
65%	46.64
60%	50.63
55%	54.85
50%	59.23
45%	63.86
40%	68.90
35%	74.39
30%	80.35
25%	87.05
20%	95.34
15%	105.76
10%	120.70
5%	145.43
0%	364.84

End of Forecast

Forecast: Largest Oil Field

Summary:
Display range is from 0.00 to 140.00 MMBO
Entire range is from 7.18 to 199.83 MMBO
After 50,000 trials, the standard error of the mean is 0.12

Statistics:	Value
Trials	50000
Mean	53.98
Median	47.93
Mode	---
Standard Deviation	26.77
Variance	716.43
Skewness	1.52
Kurtosis	6.22
Coefficient of Variability	0.50
Range Minimum	7.18
Range Maximum	199.83
Range Width	192.64
Mean Standard Error	0.12
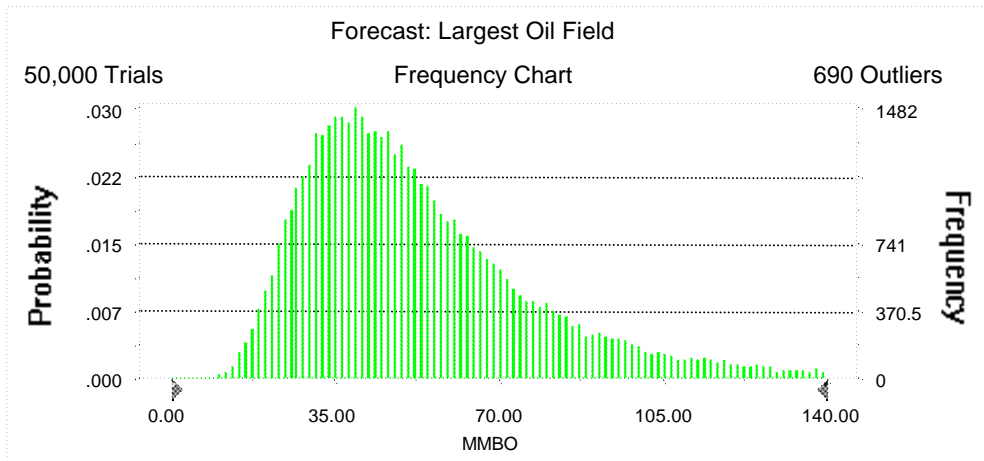
Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	7.18
95%	23.00
90%	26.98
85%	30.16
80%	32.80
75%	35.36
70%	37.80
65%	40.26
60%	42.77
55%	45.30
50%	47.93
45%	50.71
40%	53.82
35%	57.20
30%	61.16
25%	65.72
20%	71.06
15%	78.48
10%	88.56
5%	106.61
0%	199.83

End of Forecast

Forecast: Gas in Gas Fields

Summary:
    Display range is from 0.00 to 350,000.00 BCFG
    Entire range is from 2,441.86 to 587,944.08 BCFG
    After 50,000 trials, the standard error of the mean is 334.89

Statistics:	Value
Trials	50000
Mean	140,635.46
Median	130,354.98
Mode	---
Standard Deviation	74,883.23
Variance	5,607,497,504.42
Skewness	0.81
Kurtosis	3.79
Coefficient of Variability	0.53
Range Minimum	2,441.86
Range Maximum	587,944.08
Range Width	585,502.22
Mean Standard Error	334.89
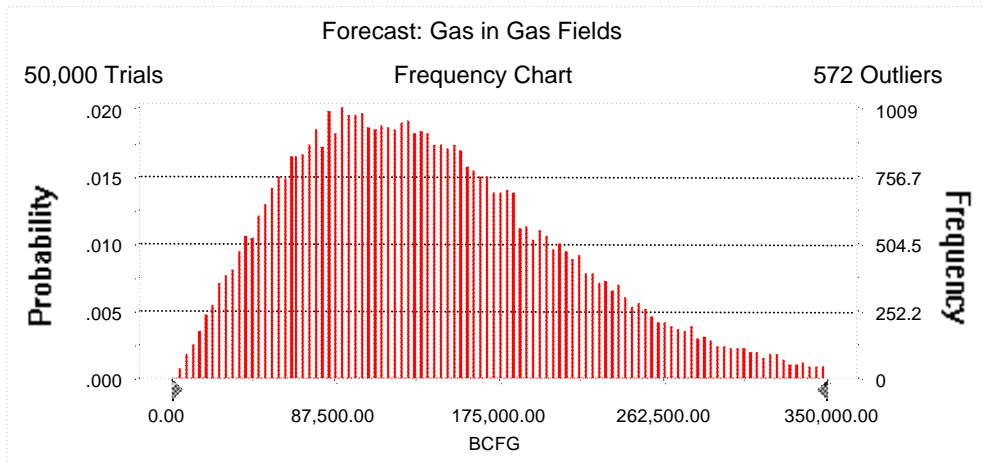
Forecast: Gas in Gas Fields

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	2,441.86
95%	37,904.91
90%	53,070.72
85%	64,567.82
80%	75,154.14
75%	84,882.67
70%	93,832.83
65%	102,720.56
60%	111,917.35
55%	121,240.11
50%	130,354.98
45%	139,912.79
40%	149,952.66
35%	160,306.73
30%	171,832.06
25%	184,490.16
20%	199,988.80
15%	218,048.05
10%	241,441.75
5%	279,232.93
0%	587,944.08

End of Forecast

Forecast: NGL in Gas Fields

Summary:
Display range is from 0.00 to 10,000.00 MMBNGL
Entire range is from 57.73 to 18,353.50 MMBNGL
After 50,000 trials, the standard error of the mean is 9.35

Statistics:	Value
Trials	50000
Mean	3,607.02
Median	3,236.70
Mode	---
Standard Deviation	2,090.43
Variance	4,369,879.87
Skewness	1.08
Kurtosis	4.64
Coefficient of Variability	0.58
Range Minimum	57.73
Range Maximum	18,353.50
Range Width	18,295.77
Mean Standard Error	9.35
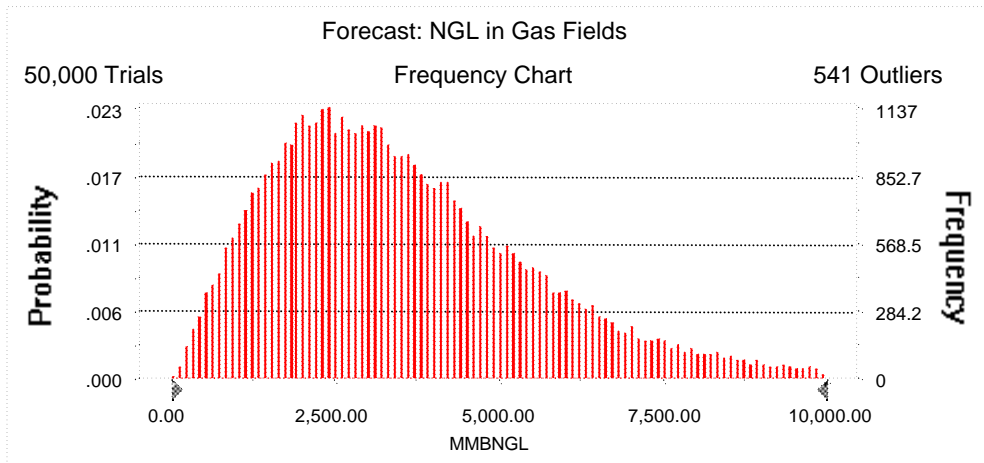
Forecast: NGL in Gas Fields

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	57.73
95%	912.54
90%	1,282.29
85%	1,574.86
80%	1,838.11
75%	2,071.32
70%	2,303.24
65%	2,528.05
60%	2,758.27
55%	2,998.63
50%	3,236.70
45%	3,492.22
40%	3,758.95
35%	4,056.11
30%	4,364.57
25%	4,736.56
20%	5,178.15
15%	5,687.45
10%	6,394.71
5%	7,572.41
0%	18,353.50

End of Forecast

Forecast: Largest Gas Field

Summary:
Display range is from 0.00 to 110,000.00 BCFG
Entire range is from 535.84 to 119,967.01 BCFG
After 50,000 trials, the standard error of the mean is 115.61

Statistics:	Value
Trials	50000
Mean	35,322.54
Median	27,513.74
Mode	---
Standard Deviation	25,850.72
Variance	668,259,621.37
Skewness	1.20
Kurtosis	3.86
Coefficient of Variability	0.73
Range Minimum	535.84
Range Maximum	119,967.01
Range Width	119,431.17
Mean Standard Error	115.61
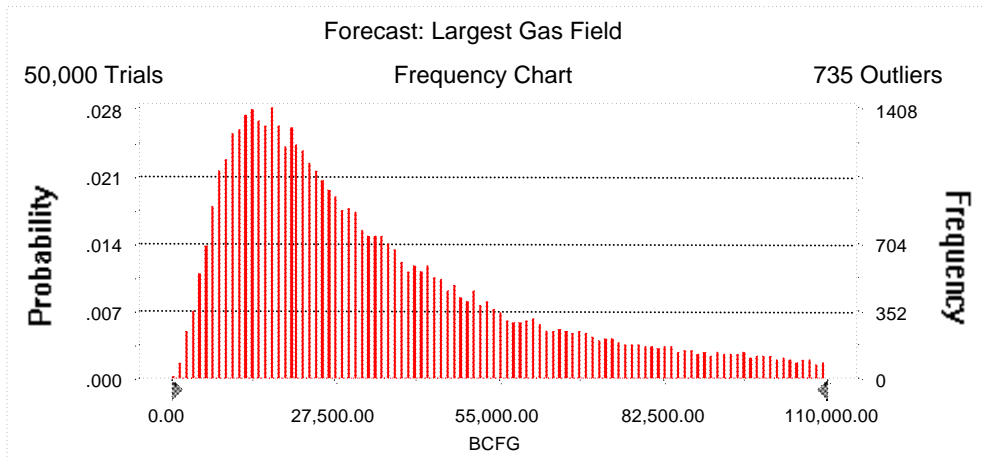
Forecast: Largest Gas Field

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	535.84
95%	7,307.48
90%	9,831.18
85%	11,965.09
80%	13,946.31
75%	16,009.15
70%	17,993.14
65%	20,203.45
60%	22,373.58
55%	24,799.27
50%	27,513.74
45%	30,544.15
40%	33,919.46
35%	37,691.99
30%	42,248.15
25%	47,541.78
20%	54,059.59
15%	62,933.03
10%	74,707.71
5%	92,099.83
0%	119,967.01

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum	1
Likeliest	2
Maximum	6

Selected range is from 1 to 6
Mean value in simulation was 3

Number of Oil Fields
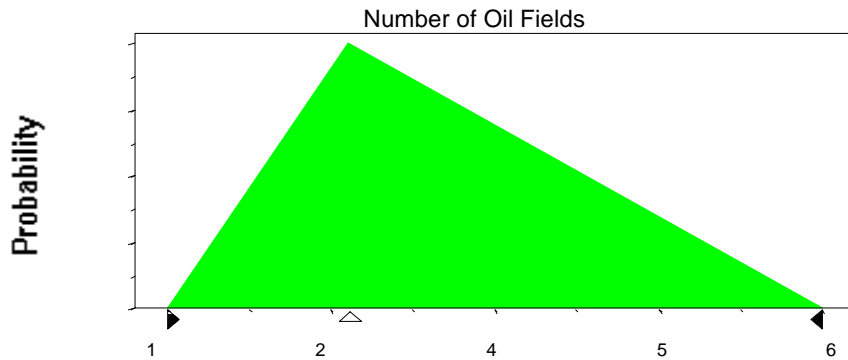
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	31.18		36.18
Standard Deviation	23.24		23.24
Selected range is from 0.00 to 195.00		5.00 to 200.00	
Mean value in simulation was 30.91		35.91	

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields
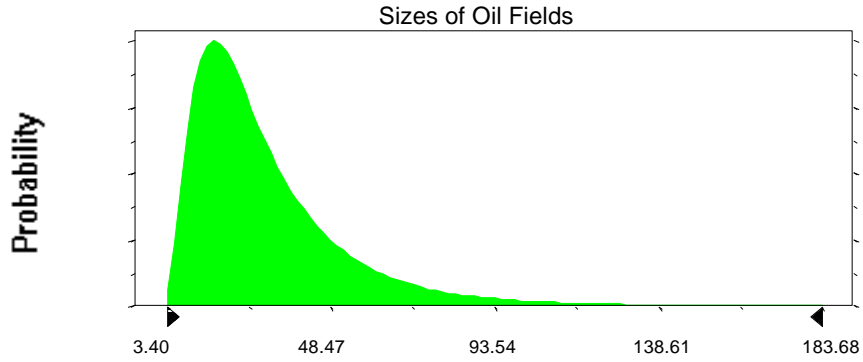
Assumption: GOR in Oil Fields

Triangular distribution with parameters:
Minimum	5,000.00
Likeliest	10,000.00
Maximum	15,000.00

Selected range is from 5,000.00 to 15,000.00
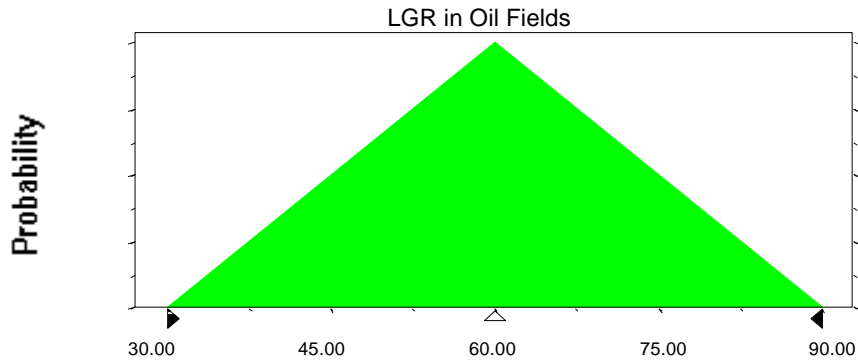Mean value in simulation was 10,001.07
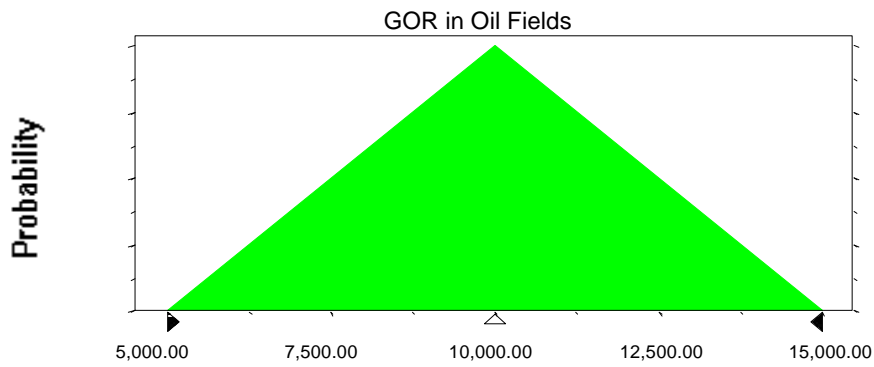
GOR in Oil Fields

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 59.99
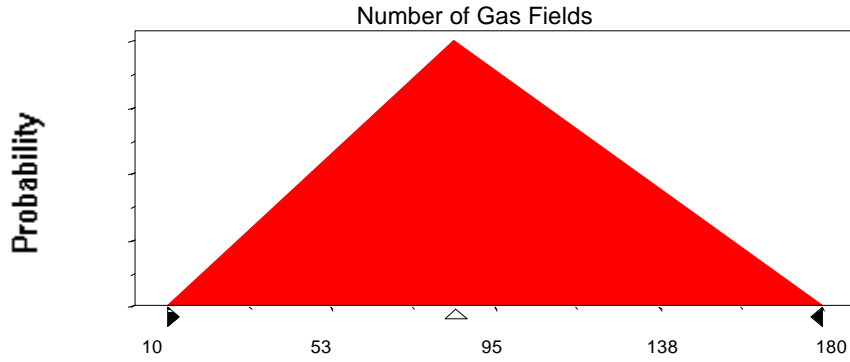

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:
Minimum	10
Likeliest	85
Maximum	180

Selected range is from 10 to 180
Mean value in simulation was 92

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	1,759.80		1,789.80
Standard Deviation	13,966.36		13,966.36

Selected range is from 0.00 to 119,970.00   30.00 to 120,000.00
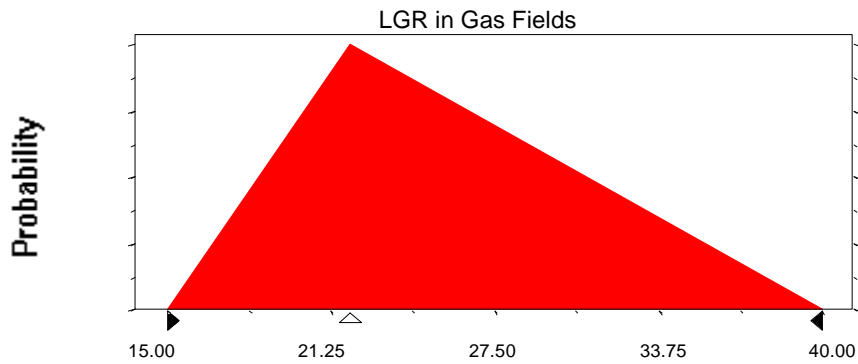Mean value in simulation was 1,485.72   1,515.72

Sizes of Gas Fields
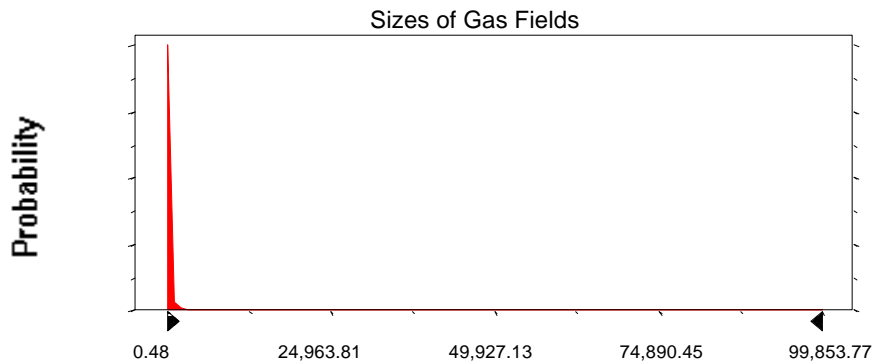
Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	15.00
Likeliest	22.00
Maximum	40.00

Selected range is from 15.00 to 40.00
Mean value in simulation was 25.66

LGR in Gas Fields

End of Assumptions

Simulation started on 7/30/99 at 13:27:42
Simulation stopped on 7/30/99 at 14:17:20