Karabil-Badkhyz (Southern Area), Assessment Unit 11540102
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	3	1.00	31	83	161	88	57	160	343	175	3	9	21	10	8	19	53	23
Gas Fields	18						3,472	7,145	12,534	7,482	49	108	214	116	355	750	1,623	835
Total		1.00	31	83	161	88	3,529	7,305	12,877	7,657	52	118	235	127				

Forecast: Oil in Oil Fields

Summary:
Display range is from 0.00 to 200.00 MMBO
Entire range is from 6.80 to 343.86 MMBO
After 50,000 trials, the standard error of the mean is 0.18

Statistics:	Value
Trials	50000
Mean	87.57
Median	82.57
Mode	---
Standard Deviation	40.08
Variance	1,606.79
Skewness	0.73
Kurtosis	3.66
Coefficient of Variability	0.46
Range Minimum	6.80
Range Maximum	343.86
Range Width	337.06
Mean Standard Error	0.18
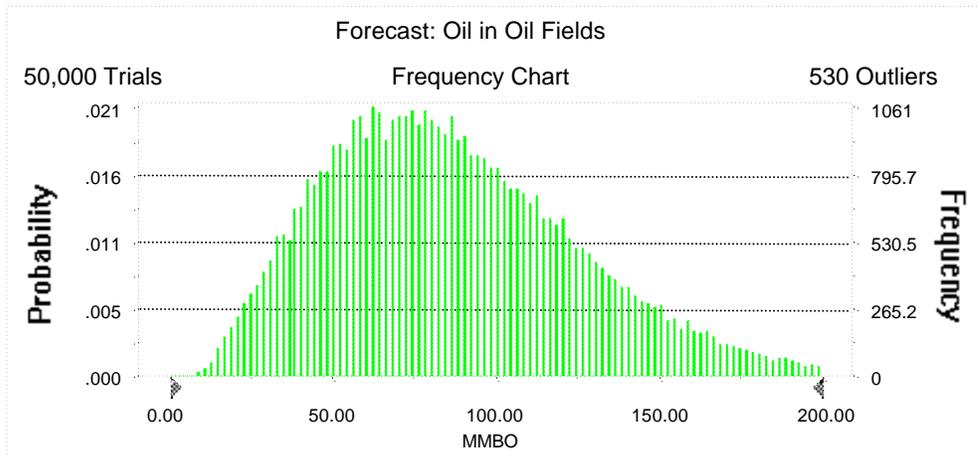
Forecast: Oil in Oil Fields

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	MMBO
100%	6.80
95%	31.21
90%	40.04
85%	46.76
80%	52.60
75%	57.89
70%	62.86
65%	67.85
60%	72.74
55%	77.65
50%	82.57
45%	87.57
40%	93.01
35%	98.73
30%	105.06
25%	111.99
20%	119.79
15%	129.09
10%	141.34
5%	160.75
0%	343.86

End of Forecast

Forecast: Gas in Oil Fields

Summary:
 Display range is from 0.00 to 450.00 BCFG
 Entire range is from 11.22 to 792.82 BCFG
 After 50,000 trials, the standard error of the mean is 0.40

Statistics:	Value
Trials	50000
Mean	174.75
Median	160.03
Mode	---
Standard Deviation	88.85
Variance	7,894.73
Skewness	0.98
Kurtosis	4.39
Coefficient of Variability	0.51
Range Minimum	11.22
Range Maximum	792.82
Range Width	781.60
Mean Standard Error	0.40
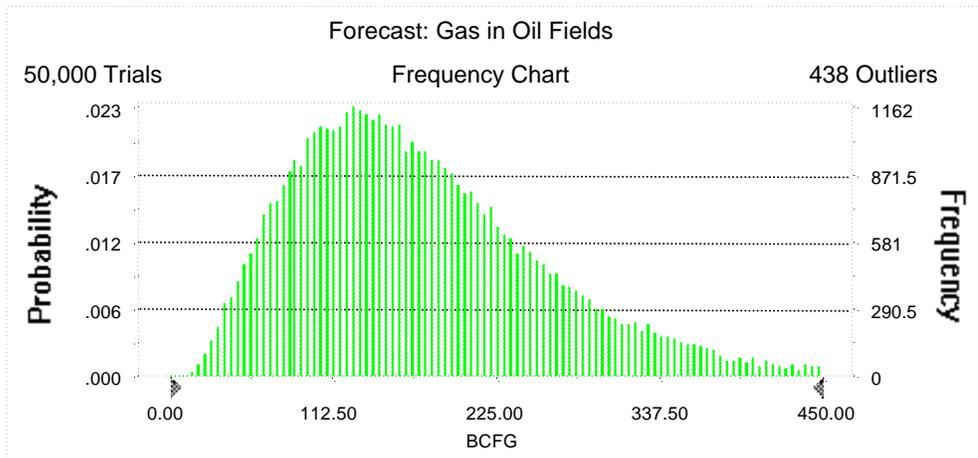
Forecast: Gas in Oil Fields

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	11.22
95%	57.40
90%	73.83
85%	87.19
80%	98.84
75%	109.37
70%	119.92
65%	129.83
60%	139.60
55%	149.82
50%	160.03
45%	171.19
40%	182.85
35%	195.03
30%	208.71
25%	223.86
20%	242.50
15%	264.41
10%	294.01
5%	342.60
0%	792.82

End of Forecast

Forecast: NGL in Oil Fields

Summary:
Display range is from 0.00 to 27.50 MMBNGL
Entire range is from 0.61 to 68.07 MMBNGL
After 50,000 trials, the standard error of the mean is 0.03

Statistics:	Value
Trials	50000
Mean	10.47
Median	9.39
Mode	---
Standard Deviation	5.82
Variance	33.91
Skewness	1.20
Kurtosis	5.33
Coefficient of Variability	0.56
Range Minimum	0.61
Range Maximum	68.07
Range Width	67.46
Mean Standard Error	0.03

Forecast: NGL in Oil Fields

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.61
95%	3.15
90%	4.12
85%	4.89
80%	5.57
75%	6.22
70%	6.84
65%	7.44
60%	8.08
55%	8.74
50%	9.39
45%	10.09
40%	10.81
35%	11.62
30%	12.48
25%	13.49
20%	14.70
15%	16.21
10%	18.23
5%	21.49
0%	68.07

End of Forecast

Forecast: Largest Oil Field

Summary:
    Display range is from 0.00 to 70.00 MMBO
    Entire range is from 3.54 to 99.98 MMBO
    After 50,000 trials, the standard error of the mean is 0.07

Statistics:	Value
Trials	50000
Mean	23.09
Median	18.89
Mode	---
Standard Deviation	14.64
Variance	214.32
Skewness	1.85
Kurtosis	7.27
Coefficient of Variability	0.63
Range Minimum	3.54
Range Maximum	99.98
Range Width	96.44
Mean Standard Error	0.07

Forecast: Largest Oil Field

Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	3.54
95%	8.27
90%	9.74
85%	11.00
80%	12.12
75%	13.18
70%	14.24
65%	15.31
60%	16.42
55%	17.60
50%	18.89
45%	20.30
40%	21.87
35%	23.70
30%	25.78
25%	28.27
20%	31.43
15%	35.63
10%	41.72
5%	53.20
0%	99.98

End of Forecast

Forecast: Gas in Gas Fields

Summary:
Display range is from 0.00 to 15,000.00 BCFG
Entire range is from 1,340.27 to 19,091.15 BCFG
After 50,000 trials, the standard error of the mean is 12.46

Statistics:	Value
Trials	50000
Mean	7,482.27
Median	7,144.61
Mode	---
Standard Deviation	2,786.54
Variance	7,764,828.90
Skewness	0.50
Kurtosis	2.80
Coefficient of Variability	0.37
Range Minimum	1,340.27
Range Maximum	19,091.15
Range Width	17,750.88
Mean Standard Error	12.46

Forecast: Gas in Gas Fields

Forecast: Gas in Gas Fields (cont'd)

Percentiles:

Percentile	BCFG
100%	1,340.27
95%	3,471.90
90%	4,090.84
85%	4,555.25
80%	4,980.27
75%	5,361.86
70%	5,726.22
65%	6,079.85
60%	6,428.13
55%	6,776.56
50%	7,144.61
45%	7,532.07
40%	7,940.95
35%	8,362.55
30%	8,828.61
25%	9,333.63
20%	9,906.83
15%	10,561.85
10%	11,386.47
5%	12,534.40
0%	19,091.15

End of Forecast
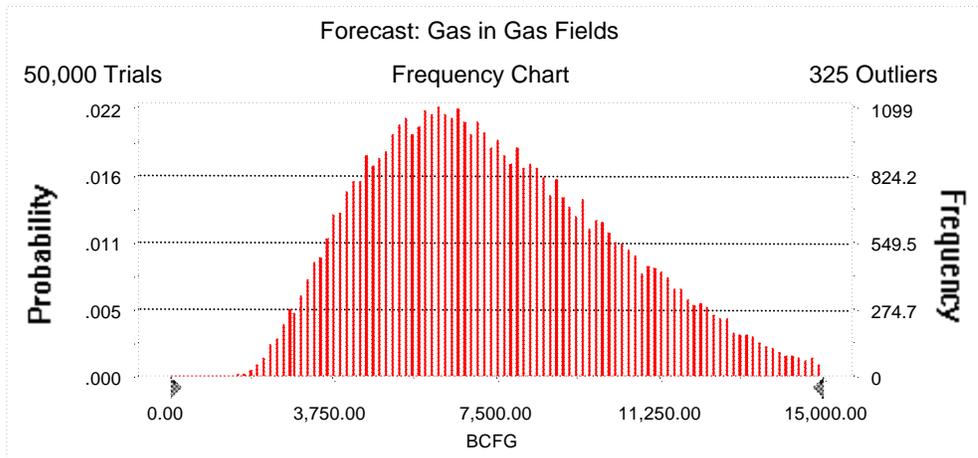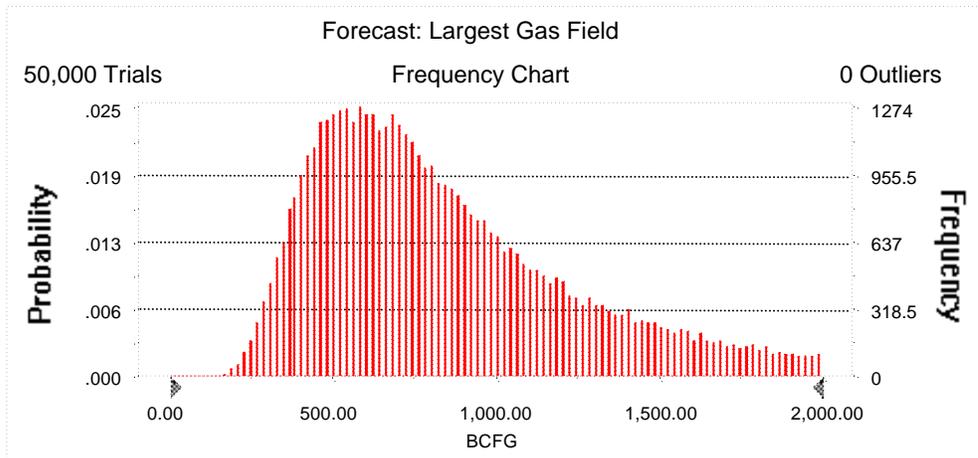
11540102
Karabil-Badkhyz (Southern Area)
Monte Carlo Results

Forecast: NGL in Gas Fields

Summary:
   Display range is from 0.00 to 250.00 MMBNGL
   Entire range is from 16.45 to 396.14 MMBNGL
   After 50,000 trials, the standard error of the mean is 0.23

Statistics:	Value
Trials	50000
Mean	116.50
Median	108.24
Mode	---
Standard Deviation	51.00
Variance	2,601.43
Skewness	0.90
Kurtosis	3.90
Coefficient of Variability	0.44
Range Minimum	16.45
Range Maximum	396.14
Range Width	379.68
Mean Standard Error	0.23

Forecast: NGL in Gas Fields

50,000 Trials	Frequency Chart	878 Outliers

Forecast: NGL in Gas Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	16.45
95%	48.87
90%	58.38
85%	65.99
80%	72.35
75%	78.60
70%	84.38
65%	90.16
60%	96.16
55%	101.96
50%	108.24
45%	114.53
40%	121.36
35%	128.69
30%	136.69
25%	145.37
20%	155.79
15%	168.51
10%	185.88
5%	213.92
0%	396.14

End of Forecast

Forecast: Largest Gas Field

Summary:
Display range is from 0.00 to 2,000.00 BCFG
Entire range is from 136.37 to 1,999.92 BCFG
After 50,000 trials, the standard error of the mean is 1.71

Statistics:	Value
Trials	50000
Mean	834.95
Median	749.66
Mode	---
Standard Deviation	383.41
Variance	147,002.78
Skewness	0.87
Kurtosis	3.19
Coefficient of Variability	0.46
Range Minimum	136.37
Range Maximum	1,999.92
Range Width	1,863.55
Mean Standard Error	1.71

Forecast: Largest Gas Field

Forecast: Largest Gas Field (cont'd)

Percentiles:

Percentile	BCFG
100%	136.37
95%	354.87
90%	414.69
85%	461.59
80%	503.17
75%	543.14
70%	583.58
65%	623.24
60%	665.02
55%	705.68
50%	749.66
45%	797.27
40%	850.23
35%	906.95
30%	972.65
25%	1,049.69
20%	1,142.98
15%	1,258.19
10%	1,410.92
5%	1,622.57
0%	1,999.92

End of Forecast

Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:
Minimum	2
Likeliest	9
Maximum	20

Selected range is from 2 to 20
Mean value in simulation was 10

Number of Oil Fields
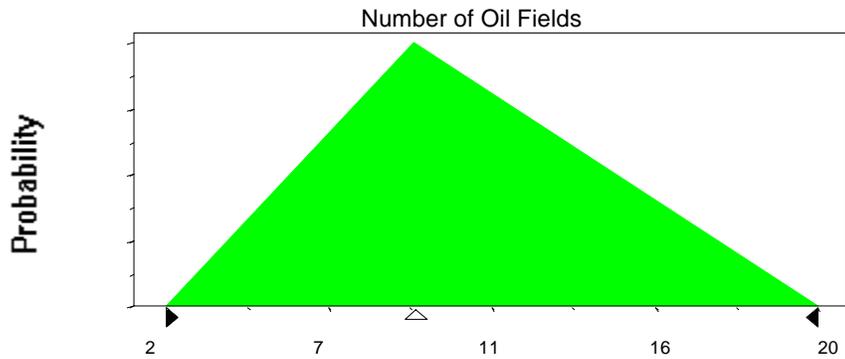
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	5.65		8.65
Standard Deviation	9.01		9.01

Selected range is from 0.00 to 97.00   3.00 to 100.00
Mean value in simulation was 5.46   8.46

Assumption: Sizes of Oil Fields (cont'd)

Sizes of Oil Fields

| 0.10 | 21.99 | 43.88 | 65.77 | 87.66 |
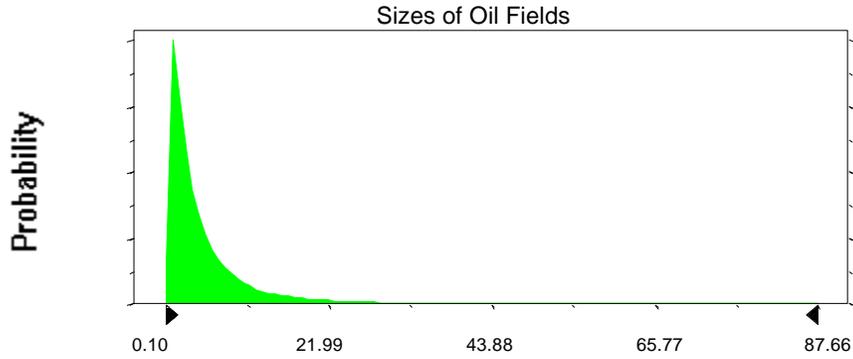
Assumption: GOR in Oil Fields

Triangular distribution with parameters:
Minimum	1,000.00
Likeliest	2,000.00
Maximum	3,000.00

Selected range is from 1,000.00 to 3,000.00
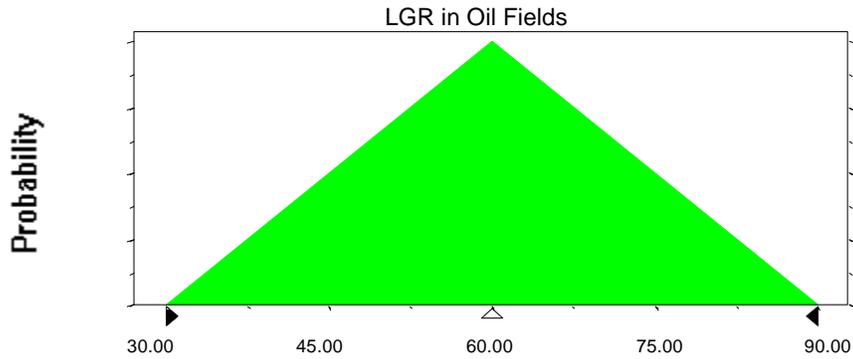Mean value in simulation was 1,996.78

GOR in Oil Fields

| 1,000.00 | 1,500.00 | 2,000.00 | 2,500.00 | 3,000.00 |
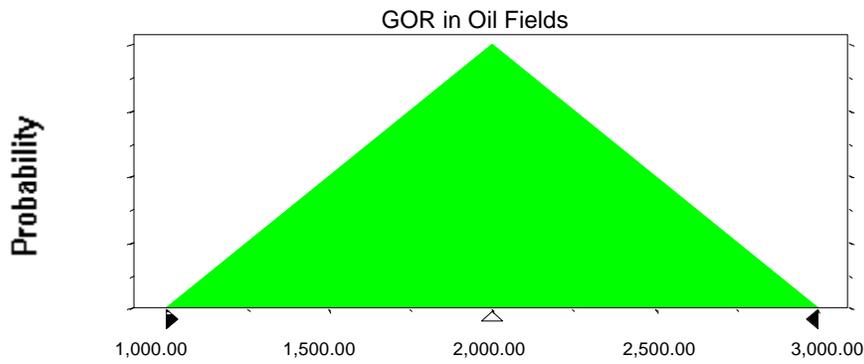
Assumption: LGR in Oil Fields

Triangular distribution with parameters:

Minimum	30.00
Likeliest	60.00
Maximum	90.00

Selected range is from 30.00 to 90.00
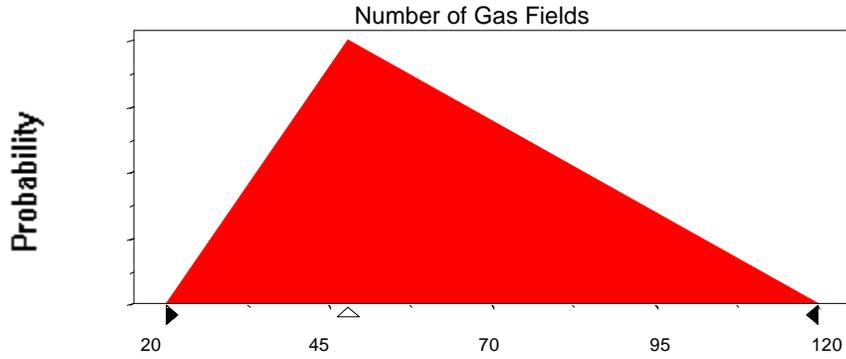Mean value in simulation was 59.95

LGR in Oil Fields

Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	20
Likeliest	48
Maximum	120

Selected range is from 20 to 120
Mean value in simulation was 63

Assumption: Number of Gas Fields (cont'd)

Number of Gas Fields

Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters	
Mean	104.10		122.1
Standard Deviation	180.52		180.52

Selected range is from 0.00 to 1,982.00   18.00 to 2,000.00
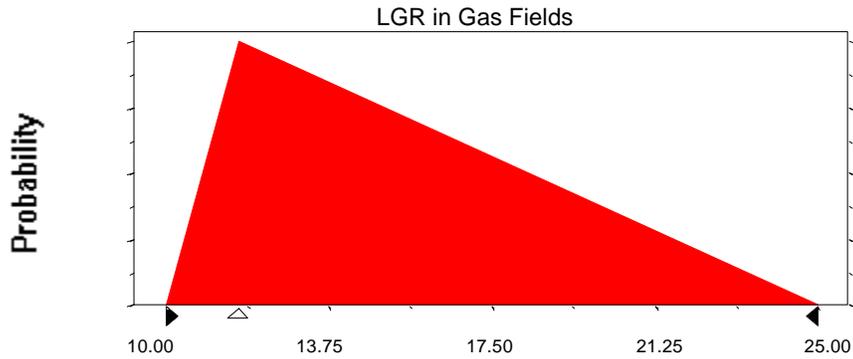Mean value in simulation was 100.62   118.62
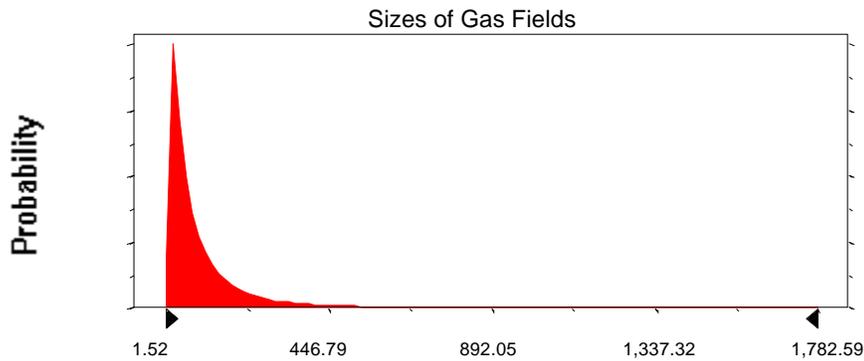
Sizes of Gas Fields

Assumption: LGR in Gas Fields

Triangular distribution with parameters:
Minimum	10.00
Likeliest	11.67
Maximum	25.00

Selected range is from 10.00 to 25.00
Mean value in simulation was 15.57

End of Assumptions

Simulation started on 7/30/99 at 11:34:38
Simulation stopped on 7/30/99 at 12:08:59