

**Southeast Sirte Clastics, Assessment Unit 20430101**  
**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	890	2,293	4,130	2,380	195	672	1,879	808	12	40	113	48	148	322	736	363
Gas Fields	60						0	0	0	0	0	0	0	0	NA	NA	NA	NA
Total		1.00	890	2,293	4,130	2,380	195	672	1,879	808	12	40	113	48				

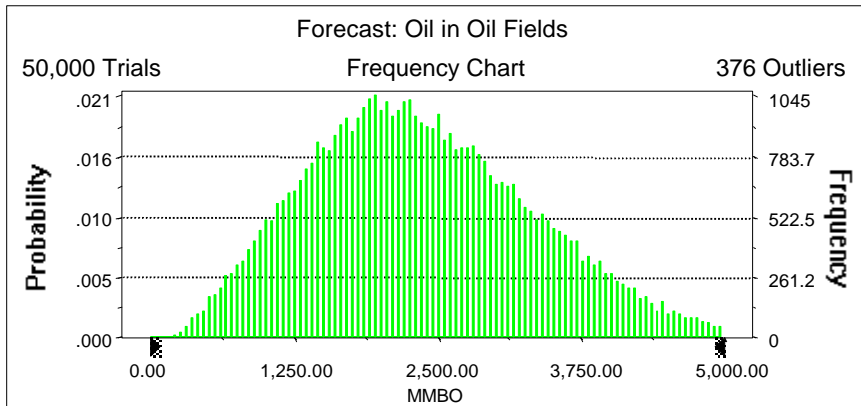
20430101  
Southeast Sirte Clastics  
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 5,000.00 MMBO  
Entire range is from 160.10 to 8,114.59 MMBO  
After 50,000 trials, the standard error of the mean is 4.42

Statistics:	Value
Trials	50000
Mean	2,379.94
Median	2,293.07
Mode	---
Standard Deviation	987.74
Variance	975,638.94
Skewness	0.42
Kurtosis	2.89
Coefficient of Variability	0.42
Range Minimum	160.10
Range Maximum	8,114.59
Range Width	7,954.49
Mean Standard Error	4.42



**20430101**  
**Southeast Sirte Clastics**  
**Monte Carlo Results**

**Forecast: Oil in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	160.10
95%	889.83
90%	1,143.44
85%	1,343.64
80%	1,505.16
75%	1,655.36
70%	1,792.05
65%	1,919.24
60%	2,041.91
55%	2,168.66
50%	2,293.07
45%	2,424.53
40%	2,558.79
35%	2,708.08
30%	2,860.34
25%	3,031.21
20%	3,220.17
15%	3,452.02
10%	3,721.63
5%	4,130.30
0%	8,114.59

End of Forecast

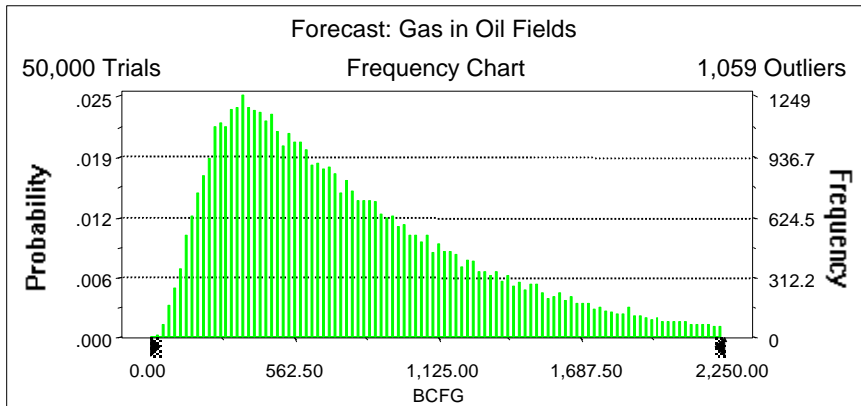
**20430101**  
**Southeast Sirte Clastics**  
**Monte Carlo Results**

**Forecast: Gas in Oil Fields**

Summary:

Display range is from 0.00 to 2,250.00 BCFG  
Entire range is from 31.94 to 4,743.89 BCFG  
After 50,000 trials, the standard error of the mean is 2.42

Statistics:	Value
Trials	50000
Mean	808.07
Median	672.23
Mode	---
Standard Deviation	541.39
Variance	293,100.51
Skewness	1.34
Kurtosis	5.28
Coefficient of Variability	0.67
Range Minimum	31.94
Range Maximum	4,743.89
Range Width	4,711.96
Mean Standard Error	2.42



20430101  
Southeast Sirte Clastics  
Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	31.94
95%	195.04
90%	257.44
85%	309.07
80%	356.70
75%	402.71
70%	450.44
65%	500.41
60%	554.51
55%	610.52
50%	672.23
45%	736.45
40%	809.73
35%	889.67
30%	978.23
25%	1,081.22
20%	1,201.38
15%	1,353.70
10%	1,552.59
5%	1,878.53
0%	4,743.89

End of Forecast

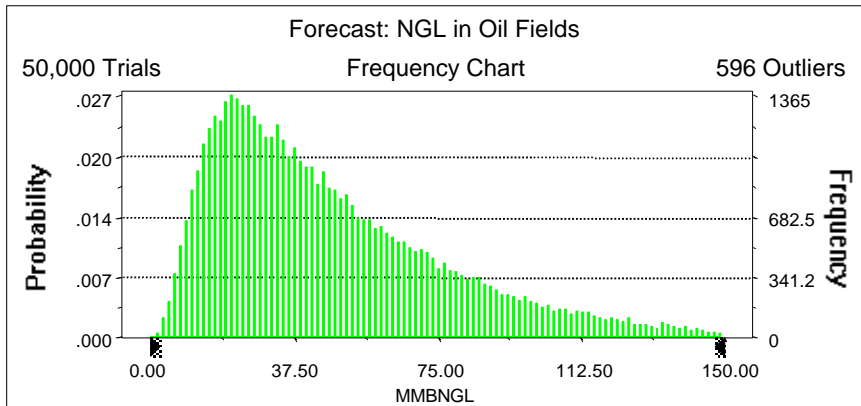
**20430101**  
**Southeast Sirte Clastics**  
**Monte Carlo Results**

**Forecast: NGL in Oil Fields**

Summary:

Display range is from 0.00 to 150.00 MMBNGL  
Entire range is from 1.94 to 273.79 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.15

Statistics:	Value
Trials	50000
Mean	48.47
Median	40.21
Mode	---
Standard Deviation	32.67
Variance	1,067.55
Skewness	1.36
Kurtosis	5.36
Coefficient of Variability	0.67
Range Minimum	1.94
Range Maximum	273.79
Range Width	271.84
Mean Standard Error	0.15



20430101  
Southeast Sirte Clastics  
Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	1.94
95%	11.59
90%	15.33
85%	18.38
80%	21.23
75%	24.04
70%	26.90
65%	29.96
60%	33.25
55%	36.59
50%	40.21
45%	44.17
40%	48.43
35%	53.17
30%	58.63
25%	64.94
20%	72.16
15%	81.19
10%	93.18
5%	113.27
0%	273.79

End of Forecast

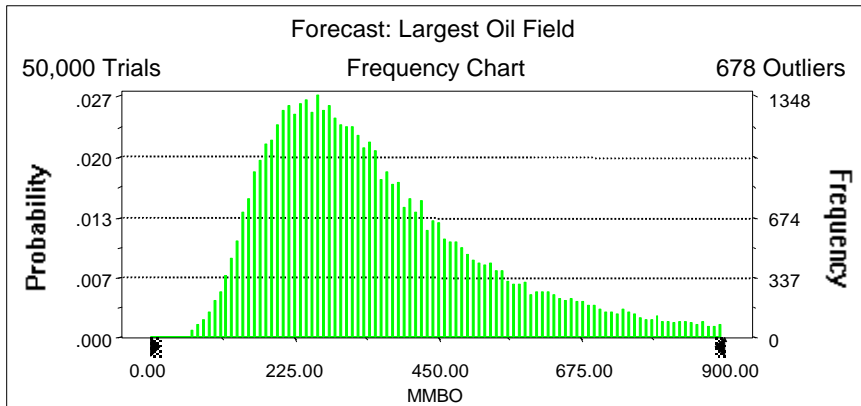
20430101  
Southeast Sirte Clastics  
Monte Carlo Results

Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 900.00 MMBO  
Entire range is from 44.37 to 999.86 MMBO  
After 50,000 trials, the standard error of the mean is 0.80

Statistics:	Value
Trials	50000
Mean	363.13
Median	321.68
Mode	---
Standard Deviation	179.15
Variance	32,093.05
Skewness	1.11
Kurtosis	4.01
Coefficient of Variability	0.49
Range Minimum	44.37
Range Maximum	999.86
Range Width	955.49
Mean Standard Error	0.80





20430101  
Southeast Sirte Clastics  
Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	44.37
95%	147.95
90%	174.60
85%	195.93
80%	214.32
75%	232.15
70%	249.38
65%	266.94
60%	284.00
55%	302.61
50%	321.68
45%	342.07
40%	363.86
35%	389.27
30%	418.54
25%	451.88
20%	492.38
15%	545.46
10%	619.78
5%	736.14
0%	999.86

End of Forecast

20430101  
Southeast Sirte Clastics  
Monte Carlo Results

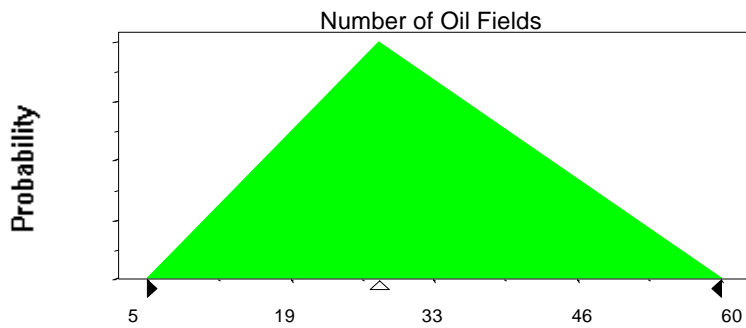
Assumptions

**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	5
Likeliest	27
Maximum	60

Selected range is from 5 to 60  
Mean value in simulation was 31



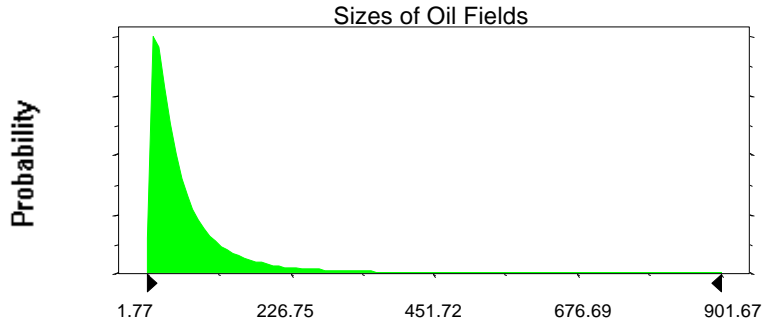
**Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	68.58	78.58
Standard Deviation	95.53	95.53

Selected range is from 0.00 to 990.00	10.00 to 1,000.00
Mean value in simulation was 67.74	77.74

20430101  
Southeast Sirte Clastics  
Monte Carlo Results

Assumption: Sizes of Oil Fields (cont'd)



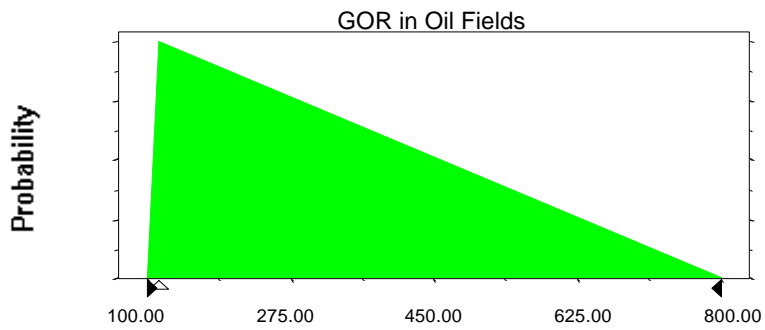
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	100.00
Likeliest	114.00
Maximum	800.00

Selected range is from 100.00 to 800.00

Mean value in simulation was 339.38



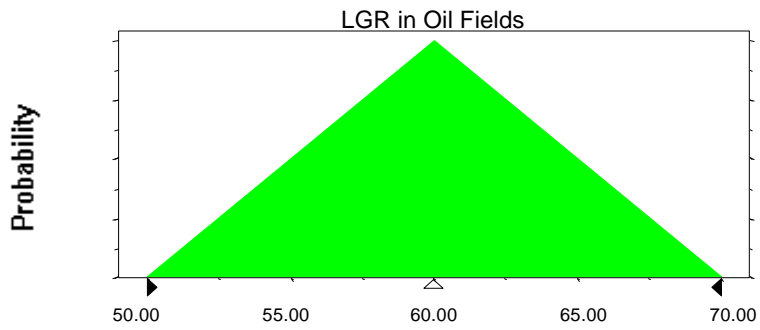
20430101  
Southeast Sirte Clastics  
Monte Carlo Results

**Assumption: LGR in Oil Fields**

Triangular distribution with parameters:

Minimum	50.00
Likeliest	60.00
Maximum	70.00

Selected range is from 50.00 to 70.00  
Mean value in simulation was 59.99



End of Assumptions

Simulation started on 12/8/98 at 8:23:19  
Simulation stopped on 12/8/98 at 8:43:00