

Upper Paleozoic/Lower Mesozoic Nonmarine Coarse Clastics, Assessment Unit 31150101
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	5	1.00	118	423	963	467	81	304	756	346	5	18	47	21	33	81	197	93
Gas Fields	30						0	0	0	0	0	0	0	0	NA	NA	NA	NA
Total		1.00	118	423	963	467	81	304	756	346	5	18	47	21				

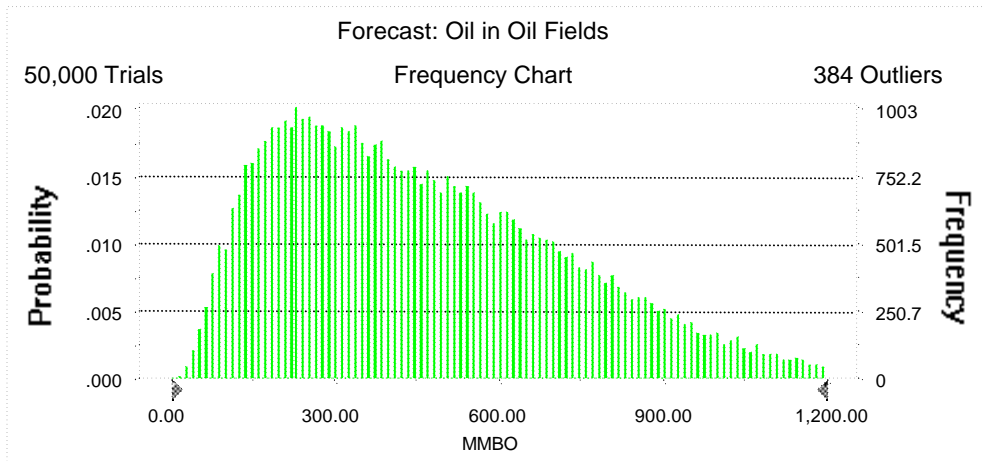
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Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 1,200.00 MMBO
Entire range is from 18.11 to 1,718.07 MMBO
After 50,000 trials, the standard error of the mean is 1.19

Statistics:	Value
Trials	50000
Mean	467.25
Median	422.79
Mode	---
Standard Deviation	265.33
Variance	70,399.14
Skewness	0.70
Kurtosis	3.00
Coefficient of Variability	0.57
Range Minimum	18.11
Range Maximum	1,718.07
Range Width	1,699.96
Mean Standard Error	1.19



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	18.11
95%	117.79
90%	157.49
85%	191.19
80%	223.18
75%	253.76
70%	285.39
65%	318.51
60%	351.18
55%	385.93
50%	422.79
45%	461.81
40%	502.71
35%	544.23
30%	590.27
25%	640.28
20%	697.20
15%	762.74
10%	844.56
5%	962.52
0%	1,718.07

End of Forecast

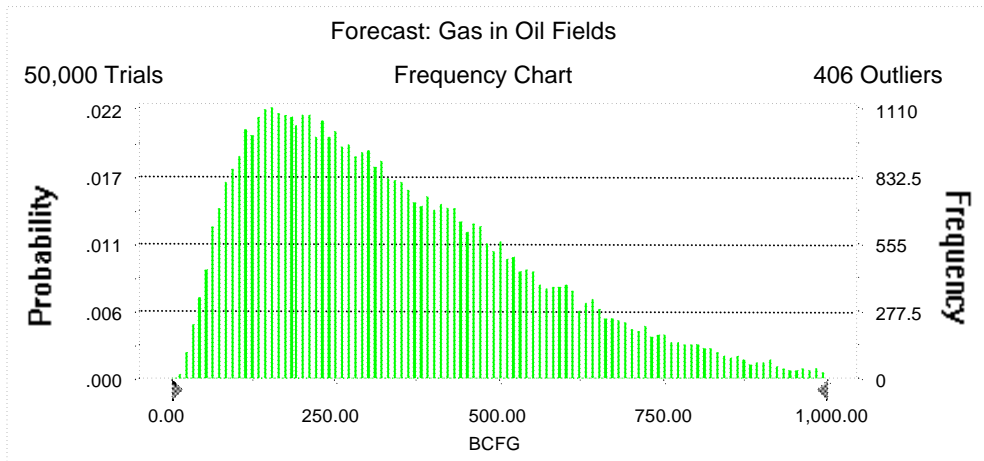
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Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 1,000.00 BCFG
Entire range is from 11.18 to 1,574.53 BCFG
After 50,000 trials, the standard error of the mean is 0.95

Statistics:	Value
Trials	50000
Mean	346.41
Median	304.19
Mode	---
Standard Deviation	213.30
Variance	45,498.76
Skewness	0.96
Kurtosis	3.84
Coefficient of Variability	0.62
Range Minimum	11.18
Range Maximum	1,574.53
Range Width	1,563.35
Mean Standard Error	0.95



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	11.18
95%	80.51
90%	109.53
85%	133.93
80%	156.73
75%	179.72
70%	203.01
65%	227.02
60%	251.38
55%	277.06
50%	304.19
45%	331.99
40%	362.74
35%	396.89
30%	432.26
25%	471.45
20%	516.43
15%	573.58
10%	644.65
5%	755.73
0%	1,574.53

End of Forecast

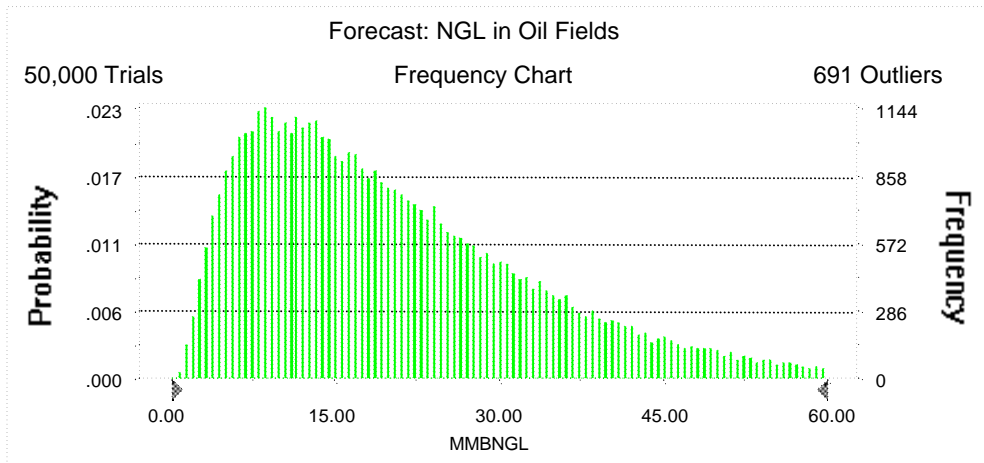
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Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 60.00 MMBNGL
Entire range is from 0.48 to 107.01 MMBNGL
After 50,000 trials, the standard error of the mean is 0.06

Statistics:	<u>Value</u>
Trials	50000
Mean	20.77
Median	17.73
Mode	---
Standard Deviation	13.68
Variance	187.03
Skewness	1.18
Kurtosis	4.69
Coefficient of Variability	0.66
Range Minimum	0.48
Range Maximum	107.01
Range Width	106.53
Mean Standard Error	0.06



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.48
95%	4.51
90%	6.18
85%	7.63
80%	8.95
75%	10.35
70%	11.73
65%	13.12
60%	14.55
55%	16.13
50%	17.73
45%	19.46
40%	21.34
35%	23.36
30%	25.55
25%	28.10
20%	31.09
15%	34.70
10%	39.64
5%	47.50
0%	107.01

End of Forecast

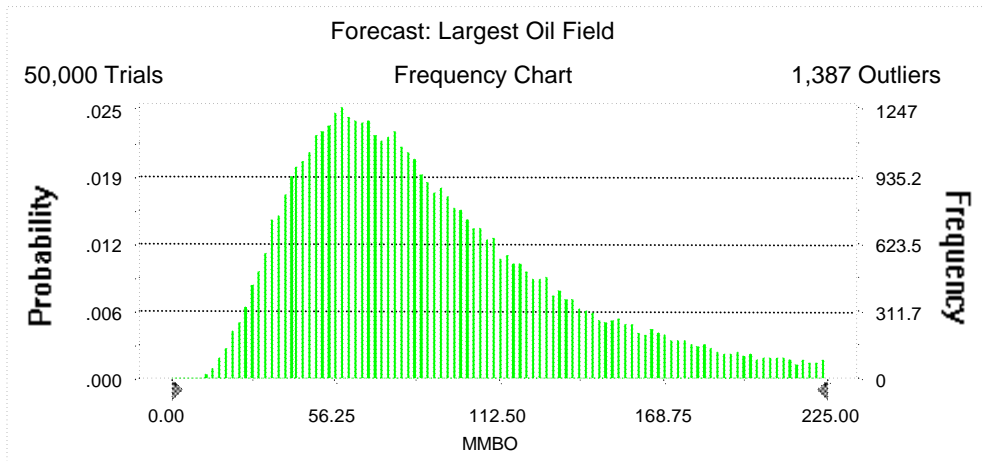
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Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 225.00 MMBO
 Entire range is from 7.46 to 299.94 MMBO
 After 50,000 trials, the standard error of the mean is 0.23

Statistics:	<u>Value</u>
Trials	50000
Mean	92.69
Median	80.62
Mode	---
Standard Deviation	50.80
Variance	2,580.13
Skewness	1.29
Kurtosis	4.79
Coefficient of Variability	0.55
Range Minimum	7.46
Range Maximum	299.94
Range Width	292.49
Mean Standard Error	0.23



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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	7.46
95%	33.17
90%	40.59
85%	46.40
80%	51.60
75%	56.45
70%	61.07
65%	65.75
60%	70.54
55%	75.60
50%	80.62
45%	86.17
40%	92.42
35%	99.22
30%	106.88
25%	116.03
20%	127.04
15%	141.40
10%	162.34
5%	196.95
0%	299.94

End of Forecast

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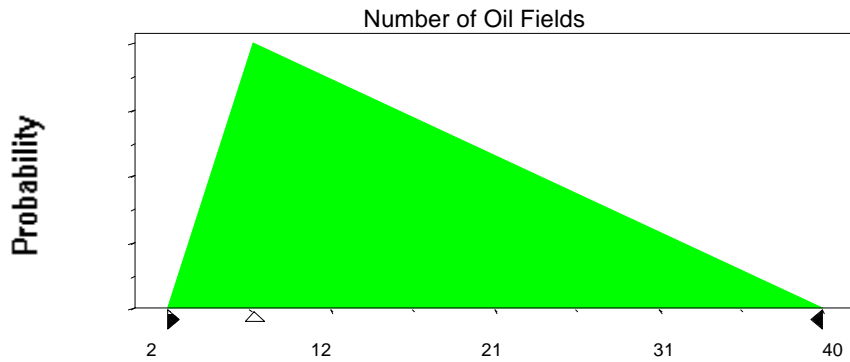
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	2
Likeliest	7
Maximum	40

Selected range is from 2 to 40
Mean value in simulation was 16



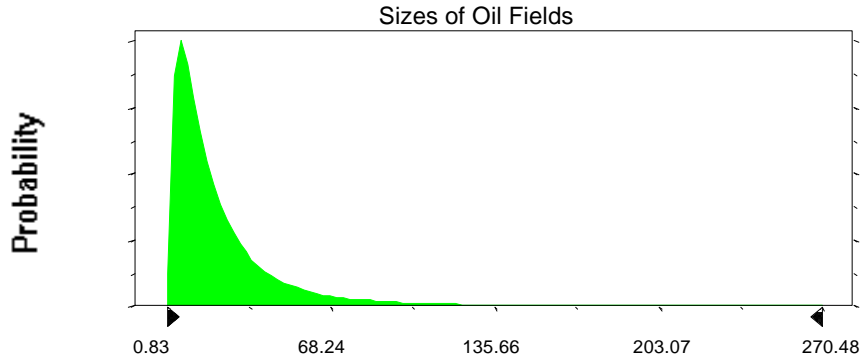
Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	23.87	28.87
Standard Deviation	29.56	29.56

Selected range is from 0.00 to 295.00 5.00 to 300.00
Mean value in simulation was 23.48 28.48

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Assumption: Sizes of Oil Fields (cont'd)



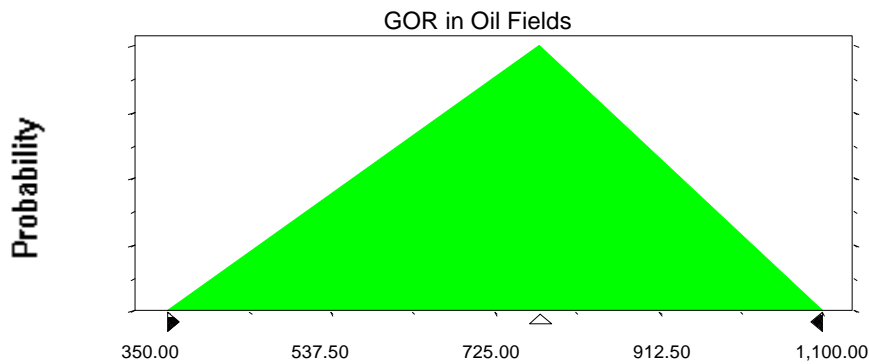
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	350.00
Likeliest	776.67
Maximum	1,100.00

Selected range is from 350.00 to 1,100.00

Mean value in simulation was 741.05



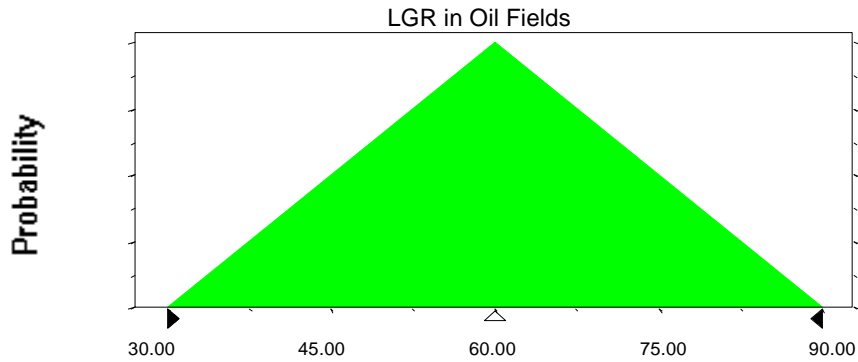
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Assumption: LGR in Oil Fields

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 60.00



End of Assumptions

Simulation started on 5/28/99 at 10:13:57
Simulation stopped on 5/28/99 at 10:29:59