

Salt-Involved Structural Oil, Assessment Unit 20210202
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	20	1.00	5,696	14,420	26,218	14,989	6,691	17,142	31,972	17,991	247	667	1,376	719	816	1,926	4,609	2,204
Gas Fields	120						0	0	0	0	0	0	0	0	NA	NA	NA	NA
Total		1.00	5,696	14,420	26,218	14,989	6,691	17,142	31,972	17,991	247	667	1,376	719				

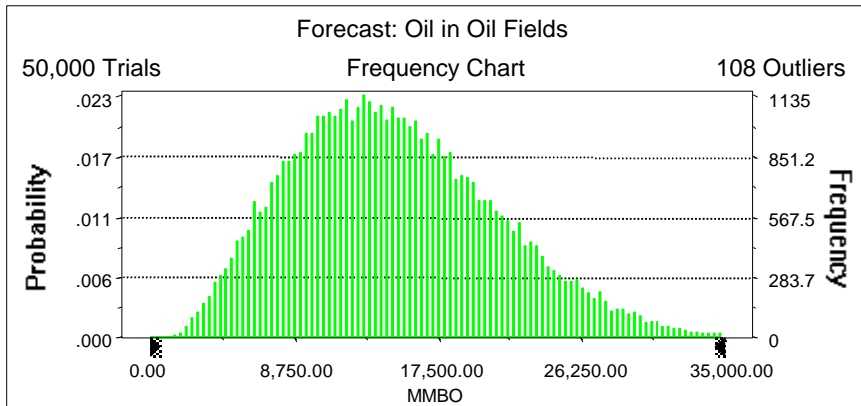
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Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:

Display range is from 0.00 to 35,000.00 MMBO
Entire range is from 984.95 to 46,078.79 MMBO
After 50,000 trials, the standard error of the mean is 28.01

Statistics:	Value
Trials	50000
Mean	14,988.70
Median	14,420.35
Mode	---
Standard Deviation	6,263.82
Variance	39,235,432.10
Skewness	0.47
Kurtosis	2.96
Coefficient of Variability	0.42
Range Minimum	984.95
Range Maximum	46,078.79
Range Width	45,093.84
Mean Standard Error	28.01



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Forecast: Oil in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	984.95
95%	5,695.80
90%	7,245.38
85%	8,396.25
80%	9,431.62
75%	10,317.07
70%	11,159.28
65%	11,985.87
60%	12,812.12
55%	13,590.70
50%	14,420.35
45%	15,242.54
40%	16,103.23
35%	17,012.49
30%	17,989.07
25%	19,072.21
20%	20,304.50
15%	21,721.67
10%	23,501.26
5%	26,217.63
0%	46,078.79

End of Forecast

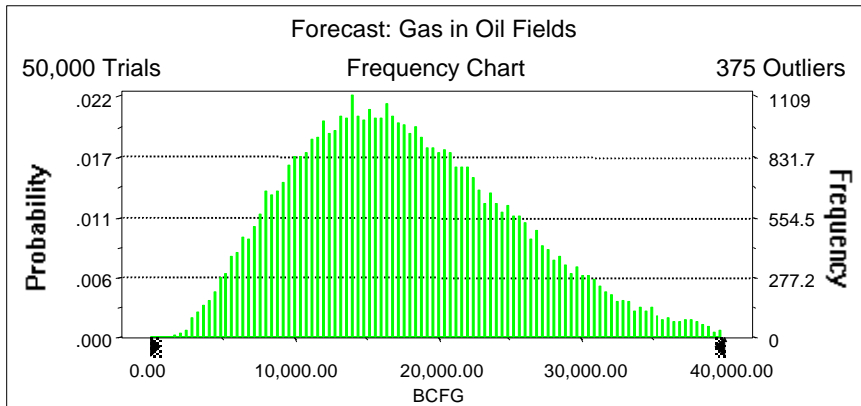
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Forecast: Gas in Oil Fields

Summary:

Display range is from 0.00 to 40,000.00 BCFG
Entire range is from 985.46 to 62,510.03 BCFG
After 50,000 trials, the standard error of the mean is 34.79

Statistics:	Value
Trials	50000
Mean	17,990.90
Median	17,141.96
Mode	---
Standard Deviation	7,779.02
Variance	60,513,142.00
Skewness	0.58
Kurtosis	3.23
Coefficient of Variability	0.43
Range Minimum	985.46
Range Maximum	62,510.03
Range Width	61,524.57
Mean Standard Error	34.79



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Forecast: Gas in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	985.46
95%	6,691.41
90%	8,490.99
85%	9,927.91
80%	11,131.32
75%	12,210.22
70%	13,257.08
65%	14,236.42
60%	15,193.49
55%	16,170.46
50%	17,141.96
45%	18,157.93
40%	19,225.62
35%	20,380.26
30%	21,581.57
25%	22,891.11
20%	24,470.45
15%	26,216.50
10%	28,522.21
5%	31,971.58
0%	62,510.03

End of Forecast

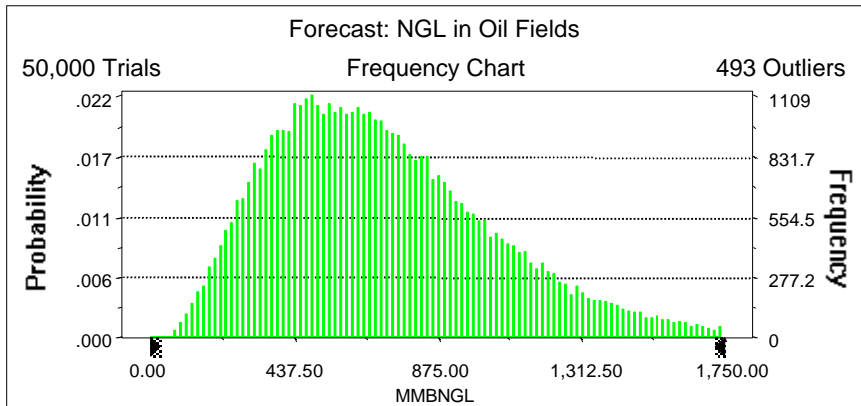
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Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 1,750.00 MMBNGL
Entire range is from 39.23 to 3,111.09 MMBNGL
After 50,000 trials, the standard error of the mean is 1.57

Statistics:	Value
Trials	50000
Mean	719.38
Median	666.80
Mode	---
Standard Deviation	350.61
Variance	122,926.91
Skewness	0.89
Kurtosis	4.04
Coefficient of Variability	0.49
Range Minimum	39.23
Range Maximum	3,111.09
Range Width	3,071.86
Mean Standard Error	1.57



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Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	39.23
95%	246.86
90%	316.10
85%	370.17
80%	416.29
75%	459.21
70%	499.94
65%	541.46
60%	582.88
55%	624.54
50%	666.80
45%	710.38
40%	756.63
35%	806.59
30%	859.25
25%	920.37
20%	993.44
15%	1,080.33
10%	1,192.93
5%	1,375.71
0%	3,111.09

End of Forecast

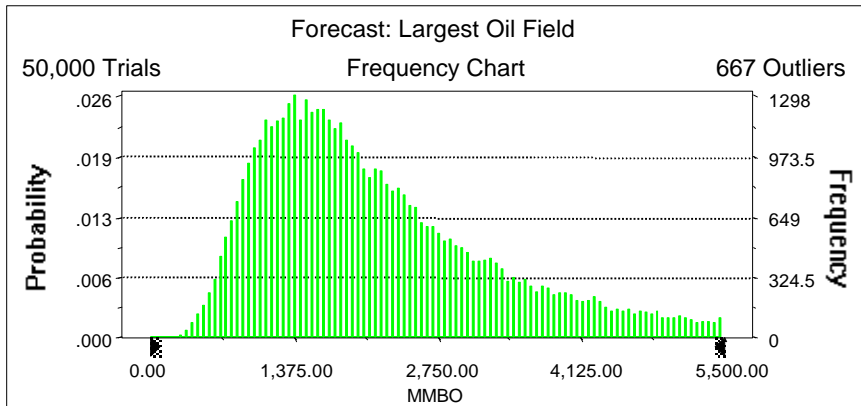
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Forecast: Largest Oil Field

Summary:

Display range is from 0.00 to 5,500.00 MMBO
Entire range is from 140.50 to 5,999.59 MMBO
After 50,000 trials, the standard error of the mean is 5.14

Statistics:	Value
Trials	50000
Mean	2,204.35
Median	1,925.66
Mode	---
Standard Deviation	1,150.00
Variance	1,322,488.96
Skewness	1.02
Kurtosis	3.61
Coefficient of Variability	0.52
Range Minimum	140.50
Range Maximum	5,999.59
Range Width	5,859.09
Mean Standard Error	5.14



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Forecast: Largest Oil Field (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	140.50
95%	816.30
90%	983.69
85%	1,113.09
80%	1,233.84
75%	1,348.13
70%	1,458.23
65%	1,570.33
60%	1,683.43
55%	1,801.91
50%	1,925.66
45%	2,064.52
40%	2,220.72
35%	2,387.86
30%	2,576.18
25%	2,805.16
20%	3,078.51
15%	3,414.85
10%	3,895.68
5%	4,609.10
0%	5,999.59

End of Forecast

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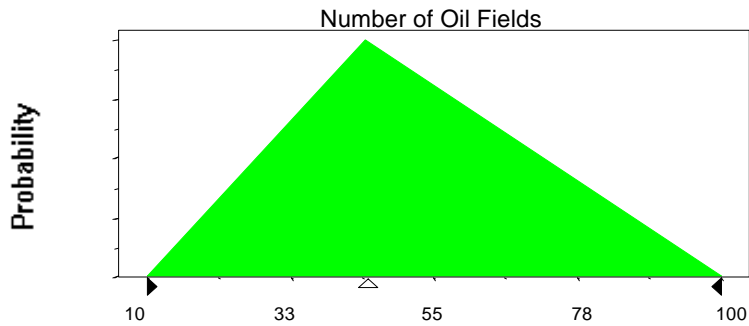
Assumptions

Assumption: Number of Oil Fields

Triangular distribution with parameters:

Minimum	10
Likeliest	44
Maximum	100

Selected range is from 10 to 100
Mean value in simulation was 51



Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:

Mean	280.10
Standard Deviation	534.57

Shifted parameters

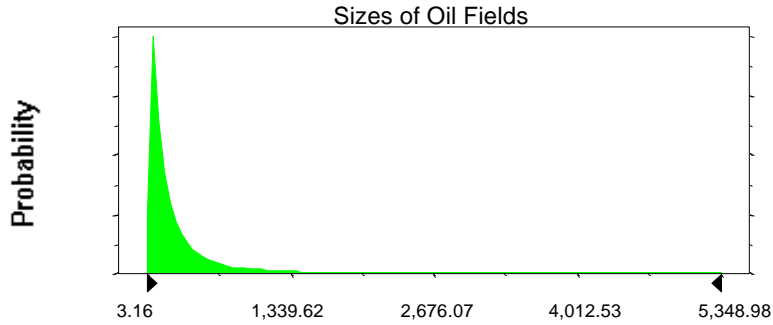
300.1
534.57

Selected range is from 0.00 to 5,980.00
Mean value in simulation was 270.57

20.00 to 6,000.00
290.57

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Assumption: Sizes of Oil Fields (cont'd)



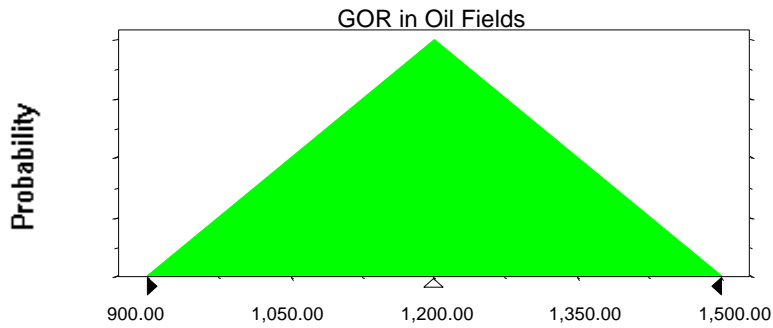
Assumption: GOR in Oil Fields

Triangular distribution with parameters:

Minimum	900.00
Likeliest	1,200.00
Maximum	1,500.00

Selected range is from 900.00 to 1,500.00

Mean value in simulation was 1,200.35



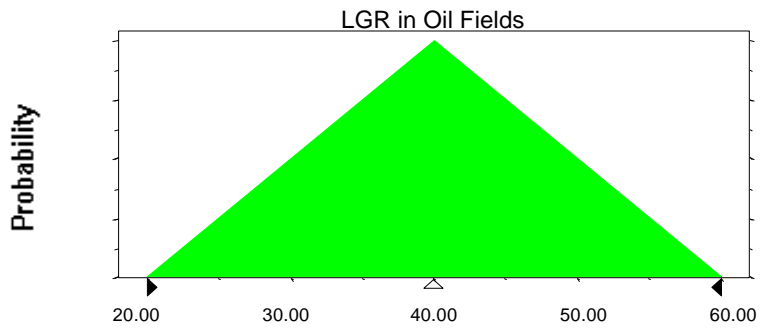
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Assumption: LGR in Oil Fields

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 39.98



End of Assumptions

Simulation started on 5/28/99 at 9:40:47
Simulation stopped on 5/28/99 at 10:06:55