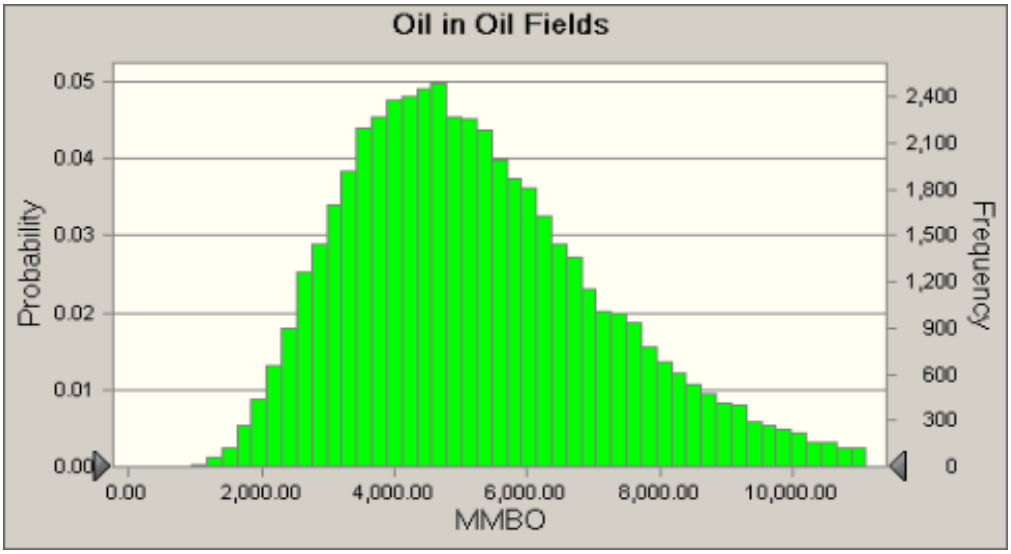
20210101
Horst Block and Suprasalt Structural Oil
Monte Carlo Results

Forecast: Oil in Oil Fields

Summary:
Entire range is from 37.53 to 19,130.63
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 9.27



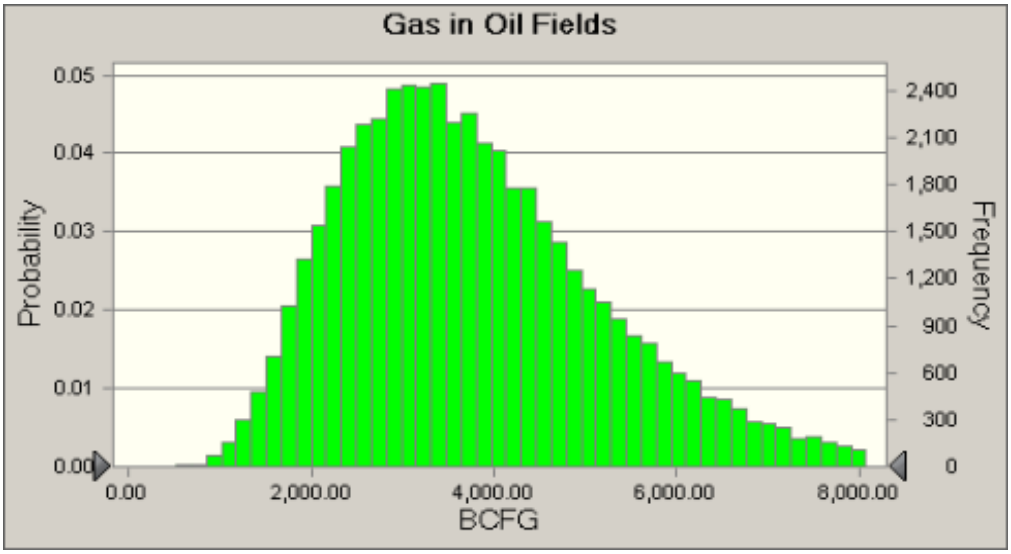
Statistics:	Forecast values
Trials	50,000
Mean	5,299.92
Median	4,984.52
Mode	---
Standard Deviation	2,073.13
Variance	4,297,887.74
Skewness	0.9524
Kurtosis	4.39
Coefficient of Variability	0.3912
Minimum	37.53
Maximum	19,130.63
Range Width	19,093.10
Mean Standard Error	9.27

Forecast: Oil in Oil Fields (continued)

Percentiles:	MMBO
100%	37.53
95%	2,528.84
90%	2,948.67
85%	3,272.51
80%	3,549.51
75%	3,805.59
70%	4,042.99
65%	4,278.17
60%	4,508.63
55%	4,738.15
50%	4,984.48
45%	5,232.00
40%	5,493.21
35%	5,782.67
30%	6,093.20
25%	6,440.78
20%	6,853.92
15%	7,386.09
10%	8,068.36
5%	9,162.96
0%	19,130.63

Forecast: Gas in Oil Fields

Summary:
Entire range is from 23.68 to 13,929.63
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 6.81



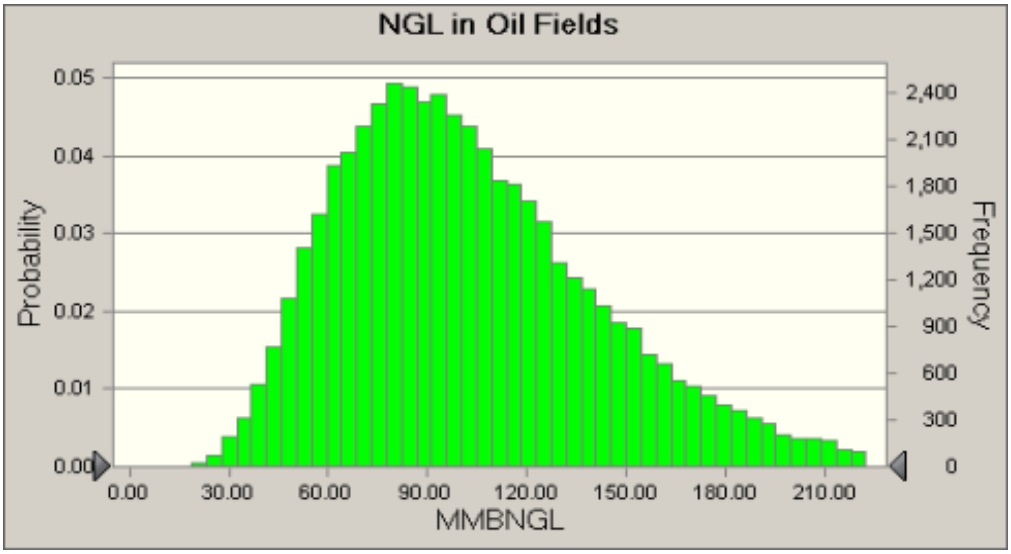
Statistics:	Forecast values
Trials	50,000
Mean	3,819.69
Median	3,579.71
Mode	---
Standard Deviation	1,521.72
Variance	2,315,622.12
Skewness	0.9675
Kurtosis	4.44
Coefficient of Variability	0.3984
Minimum	23.68
Maximum	13,929.63
Range Width	13,905.96
Mean Standard Error	6.81

Forecast: Gas in Oil Fields (continued)

Percentiles:	BCFG
100%	23.68
95%	1,791.82
90%	2,097.66
85%	2,334.31
80%	2,530.97
75%	2,718.70
70%	2,893.76
65%	3,062.76
60%	3,234.64
55%	3,399.98
50%	3,579.70
45%	3,767.10
40%	3,959.68
35%	4,168.78
30%	4,397.95
25%	4,658.97
20%	4,966.35
15%	5,352.19
10%	5,853.80
5%	6,661.95
0%	13,929.63

Forecast: NGL in Oil Fields

Summary:
Entire range is from 0.53 to 452.29
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 0.19



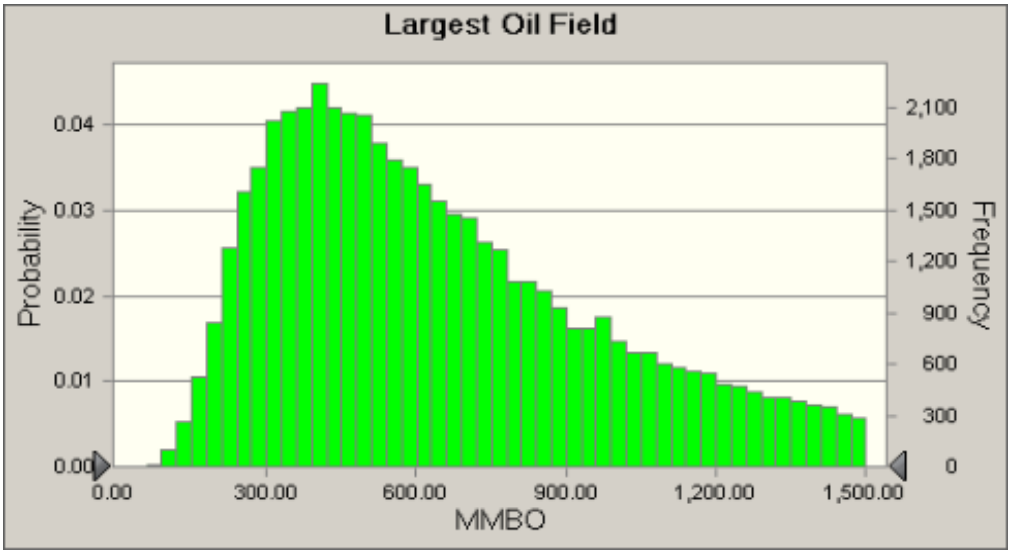
Statistics:	Forecast values
Trials	50,000
Mean	104.29
Median	97.48
Mode	---
Standard Deviation	42.28
Variance	1,787.57
Skewness	0.9910
Kurtosis	4.50
Coefficient of Variability	0.4054
Minimum	0.53
Maximum	452.29
Range Width	451.77
Mean Standard Error	0.19

Forecast: NGL in Oil Fields (continued)

Percentiles:	MMBNGL
100%	0.53
95%	48.42
90%	56.61
85%	63.02
80%	68.58
75%	73.79
70%	78.56
65%	83.10
60%	87.84
55%	92.56
50%	97.48
45%	102.57
40%	107.85
35%	113.97
30%	120.07
25%	127.33
20%	136.24
15%	146.81
10%	160.67
5%	183.22
0%	452.29

Forecast: Largest Oil Field

Summary:
Entire range is from 31.34 to 1,500.00
Filter range is from 0.00 to Infinity
After 50,000 trials, the standard error of the mean is 1.44



Statistics:	Forecast values
Trials	50,000
Mean	643.48
Median	576.13
Mode	---
Standard Deviation	322.39
Variance	103,935.82
Skewness	0.7036
Kurtosis	2.69
Coefficient of Variability	0.5010
Minimum	31.34
Maximum	1,500.00
Range Width	1,468.65
Mean Standard Error	1.44

Forecast: Largest Oil Field (continued)

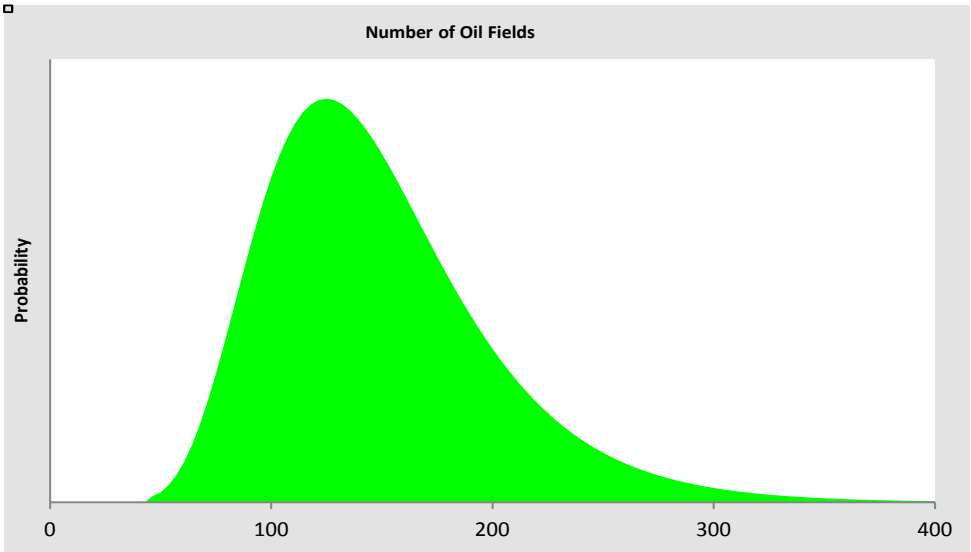
Percentiles:	MMBO
100%	31.34
95%	230.46
90%	277.56
85%	317.74
80%	354.11
75%	390.04
70%	423.71
65%	459.25
60%	495.82
55%	534.36
50%	576.12
45%	619.79
40%	667.81
35%	719.35
30%	776.45
25%	845.20
20%	926.31
15%	1,019.81
10%	1,139.27
5%	1,289.22
0%	1,500.00

End of Forecasts

Assumptions

Assumption: Number of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	1
Mean	147.33	148.33
Standard Deviation	51.78	51.78
Selected range is from -Infinity to 399.00		1.00 to 400.00



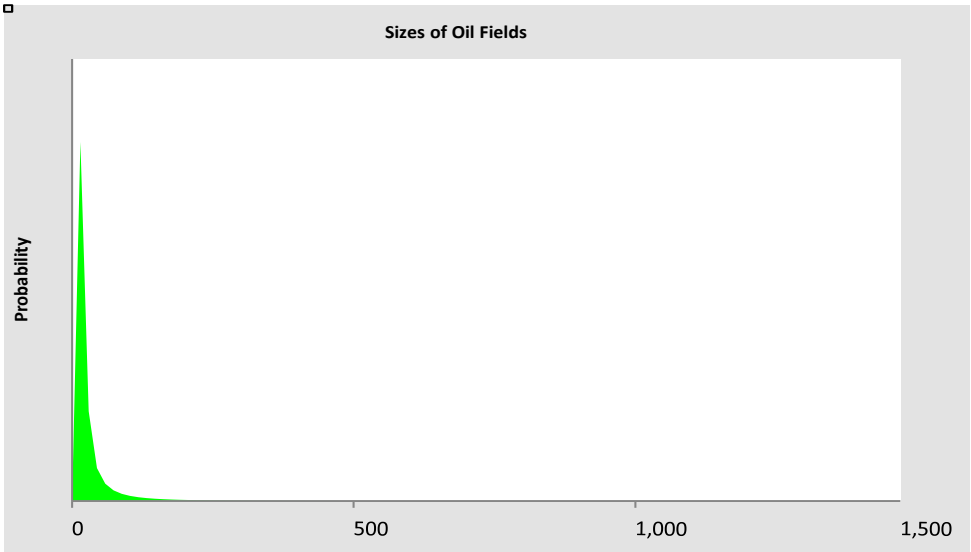
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	147.92	148.04
Median	139.94	139.94
Mode	---	---
Standard Deviation	50.83	50.95
Variance	2,583.60	2,596.01
Skewness	0.9494	0.9666
Kurtosis	4.26	4.32
Coefficient of Variability	0.3436	0.3442
Minimum	33.75	1.00
Maximum	399.23	400.00
Range Width	365.48	399.00
Mean Standard Error	0.23	---

Assumption: Number of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	33.75	1.00
95%	80.13	80.28
90%	90.64	90.74
85%	98.40	98.57
80%	105.07	105.27
75%	111.29	111.39
70%	116.97	117.19
65%	122.62	122.83
60%	128.29	128.44
55%	133.97	134.11
50%	139.94	139.94
45%	145.88	146.02
40%	152.45	152.47
35%	159.59	159.44
30%	167.16	167.13
25%	176.06	175.84
20%	186.20	186.07
15%	198.99	198.73
10%	215.85	215.88
5%	243.18	243.91
0%	399.23	400.00

Assumption: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	5
Mean	33.52	38.52
Standard Deviation	136.37	136.37
Selected range is from -Infinity to 1,495.00		5.00 to 1,500.00



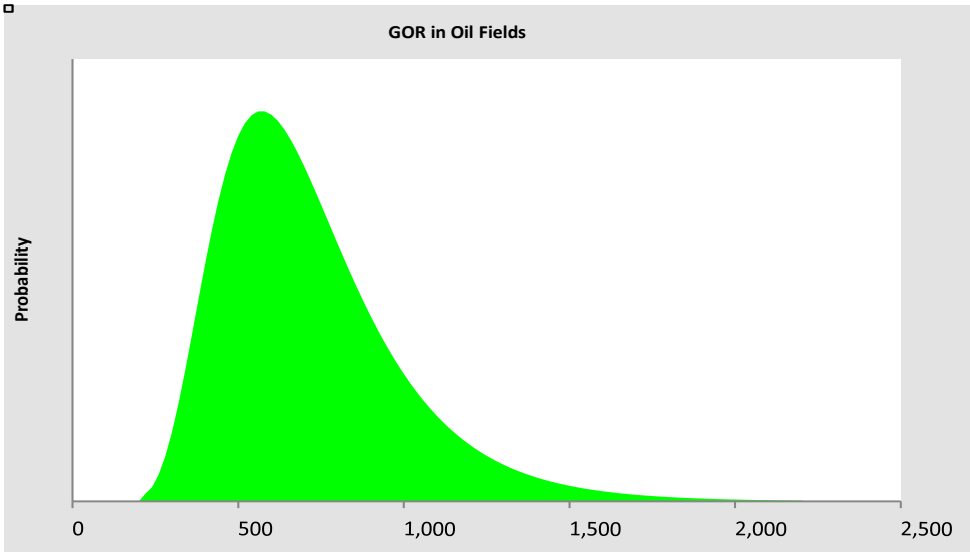
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	35.76	36.08
Median	13.05	12.98
Mode	---	---
Standard Deviation	81.07	81.32
Variance	6,573.10	6,612.93
Skewness	7.68	7.66
Kurtosis	86.22	85.51
Coefficient of Variability	2.27	2.25
Minimum	5.01	5.00
Maximum	1,496.11	1,500.00
Range Width	1,491.10	1,495.00
Mean Standard Error	0.36	---

Assumption: Sizes of Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	5.01	5.00
95%	5.48	5.49
90%	5.92	5.91
85%	6.40	6.38
80%	6.95	6.92
75%	7.58	7.55
70%	8.33	8.29
65%	9.18	9.16
60%	10.26	10.20
55%	11.53	11.45
50%	13.05	12.98
45%	14.92	14.87
40%	17.27	17.25
35%	20.35	20.31
30%	24.44	24.37
25%	29.90	29.96
20%	38.16	38.09
15%	50.82	50.95
10%	73.64	74.41
5%	132.33	132.51
0%	1,496.11	1,500.00

Assumption: GOR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	75
Mean	647.69	722.69
Standard Deviation	278.56	278.56
Selected range is from -Infinity to 2,125.00		75.00 to 2,200.00



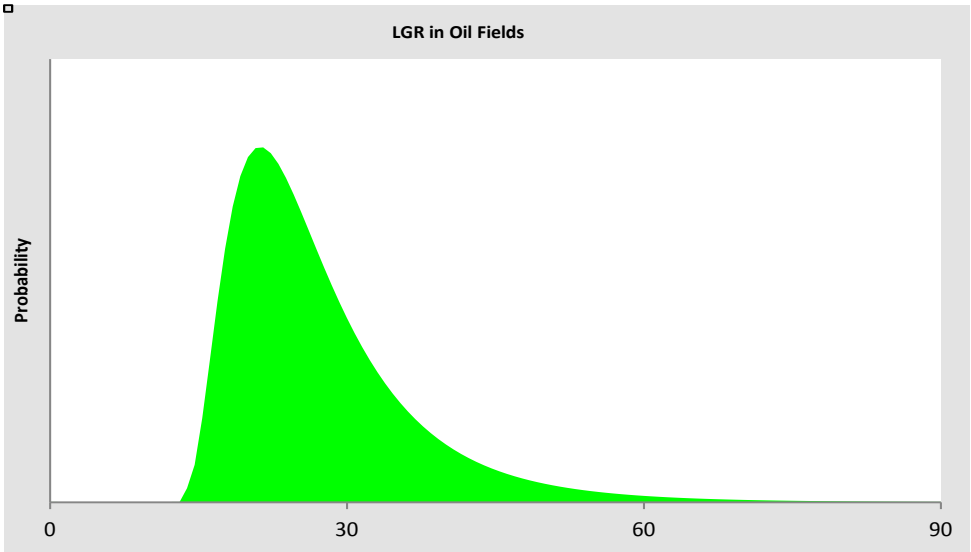
Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	718.71	720.94
Median	668.32	669.69
Mode	---	---
Standard Deviation	270.30	273.00
Variance	73,062.48	74,530.23
Skewness	1.17	1.19
Kurtosis	4.98	5.06
Coefficient of Variability	0.3761	0.3787
Minimum	157.12	75.00
Maximum	2,195.85	2,200.00
Range Width	2,038.73	2,125.00
Mean Standard Error	1.21	---

Assumption: GOR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	157.12	75.00
95%	379.32	377.10
90%	427.31	425.86
85%	462.32	463.12
80%	493.23	495.54
75%	524.00	525.51
70%	553.18	554.23
65%	581.82	582.47
60%	610.29	610.80
55%	639.03	639.72
50%	668.30	669.69
45%	698.96	701.25
40%	732.19	735.03
35%	769.48	771.85
30%	810.00	812.87
25%	856.09	859.82
20%	913.52	915.59
15%	982.75	985.54
10%	1,075.01	1,081.67
5%	1,233.74	1,242.26
0%	2,195.85	2,200.00

Assumption: LGR in Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Location	0.00	12
Mean	15.38	27.38
Standard Deviation	9.72	9.72
Selected range is from -Infinity to 78.00		12.00 to 90.00



Statistics:	Simulated values	Theoretical values
Trials	50,000	---
Mean	27.35	27.30
Median	24.98	24.99
Mode	---	---
Standard Deviation	9.49	9.40
Variance	90.02	88.38
Skewness	1.76	1.76
Kurtosis	7.56	7.65
Coefficient of Variability	0.3469	0.3443
Minimum	13.39	12.00
Maximum	89.83	90.00
Range Width	76.44	78.00
Mean Standard Error	0.04	---

Assumption: LGR in Oil Fields (continued)

Percentiles:	Simulated values	Theoretical values
100%	13.39	12.00
95%	17.01	17.01
90%	18.21	18.18
85%	19.15	19.12
80%	19.98	19.98
75%	20.78	20.79
70%	21.57	21.59
65%	22.37	22.39
60%	23.21	23.22
55%	24.07	24.08
50%	24.98	24.99
45%	25.98	25.97
40%	27.06	27.04
35%	28.26	28.24
30%	29.60	29.60
25%	31.22	31.20
20%	33.19	33.14
15%	35.78	35.66
10%	39.37	39.25
5%	45.97	45.56
0%	89.83	90.00

End of Assumptions

Simulation started on 5/17/2011 at 4:59 PM
Simulation stopped on 5/17/2011 at 8:11 PM