Vulcan Graben, Assessment Unit 39100202 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]

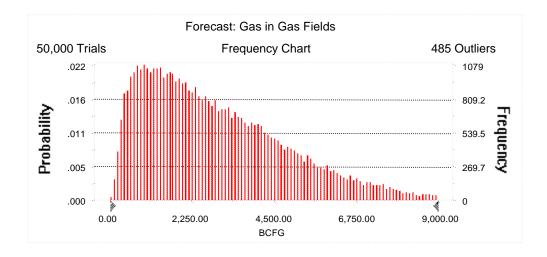
Field Type	MFS						U	ndiscovere	d Resourc	es					La	rgest Undi	scovered F	ield
		Prob.	Oil (MMBO)			Gas (BCFG)			NGL (MMBNGL)			(MMBO or BCFG)						
		(0-1)	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	10	0.00	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA
Gas Fields	60	0.90					0	2,254	6,742	2,668	0	96	309	117	248	806	2,493	1,009
Total		0.90	0	0	0	0	0	2,254	6,742	2,668	0	96	309	117				

Forecast: Gas in Gas Fields

Summary:

Display range is from 0.00 to 9,000.00 BCFG Entire range is from 65.07 to 15,441.36 BCFG After 50,000 trials, the standard error of the mean is 9.08

<u>Value</u>
50000
2,972.12
2,553.11
2,030.03
4,121,020.71
0.99
3.90
0.68
65.07
15,441.36
15,376.29
9.08



Forecast: Gas in Gas Fields (cont'd)

Percentiles:

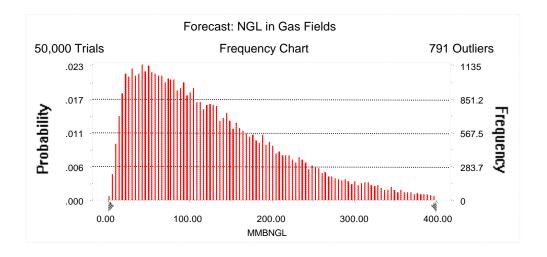
<u>Percentile</u>	<u>BCFG</u>
100%	65.07
95%	491.65
90%	722.76
85%	933.64
80%	1,148.07
75%	1,362.93
70%	1,585.22
65%	1,806.12
60%	2,045.16
55%	2,291.09
50%	2,553.11
45%	2,834.58
40%	3,135.82
35%	3,450.15
30%	3,795.52
25%	4,162.44
20%	4,595.19
15%	5,117.26
10%	5,813.02
5%	6,884.28
0%	15,441.36

Forecast: NGL in Gas Fields

Summary:

Display range is from 0.00 to 400.00 MMBNGL Entire range is from 2.12 to 863.96 MMBNGL After 50,000 trials, the standard error of the mean is 0.43

Statistics:	<u>Value</u>
Trials	50000
Mean	130.73
Median	108.72
Mode	
Standard Deviation	95.12
Variance	9,047.38
Skewness	1.26
Kurtosis	5.07
Coefficient of Variability	0.73
Range Minimum	2.12
Range Maximum	863.96
Range Width	861.84
Mean Standard Error	0.43



Forecast: NGL in Gas Fields (cont'd)

Percentiles:

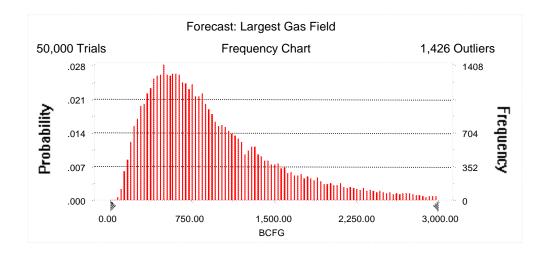
<u>Percentile</u>	MMBNGL
100%	2.12
95%	20.59
90%	30.08
85%	39.41
80%	48.49
75%	57.61
70%	67.08
65%	76.98
60%	87.14
55%	97.72
50%	108.72
45%	121.21
40%	133.67
35%	147.68
30%	163.42
25%	181.49
20%	201.70
15%	227.39
10%	259.96
5%	316.57
0%	863.96

Forecast: Largest Gas Field

Summary:

Display range is from 0.00 to 3,000.00 BCFG Entire range is from 65.07 to 4,999.51 BCFG After 50,000 trials, the standard error of the mean is 3.30

Statistics:	<u>Value</u>
Trials	50000
Mean	1,008.59
Median	805.87
Mode	
Standard Deviation	738.50
Variance	545,383.17
Skewness	1.87
Kurtosis	7.54
Coefficient of Variability	0.73
Range Minimum	65.07
Range Maximum	4,999.51
Range Width	4,934.44
Mean Standard Error	3.30



Forecast: Largest Gas Field (cont'd)

Percentiles:

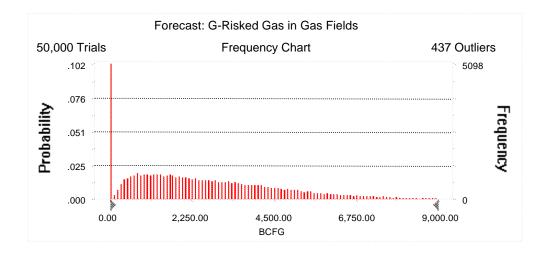
<u>Percentile</u>	<u>BCFG</u>
100%	65.07
95%	247.64
90%	326.87
85%	392.64
80%	451.02
75%	506.35
70%	562.69
65%	620.39
60%	679.30
55%	741.03
50%	805.87
45%	875.28
40%	953.25
35%	1,047.45
30%	1,151.84
25%	1,280.35
20%	1,431.68
15%	1,633.24
10%	1,934.43
5%	2,493.09
0%	4,999.51

Forecast: G-Risked Gas in Gas Fields

Summary:

Display range is from 0.00 to 9,000.00 BCFG Entire range is from 0.00 to 15,441.36 BCFG After 50,000 trials, the standard error of the mean is 9.50

Statistics:	<u>Value</u>
Trials	50000
Mean	2,667.59
Median	2,253.73
Mode	0.00
Standard Deviation	2,123.27
Variance	4,508,291.49
Skewness	0.94
Kurtosis	3.75
Coefficient of Variability	0.80
Range Minimum	0.00
Range Maximum	15,441.36
Range Width	15,441.36
Mean Standard Error	9.50



Forecast: G-Risked Gas in Gas Fields (cont'd)

Percentiles:

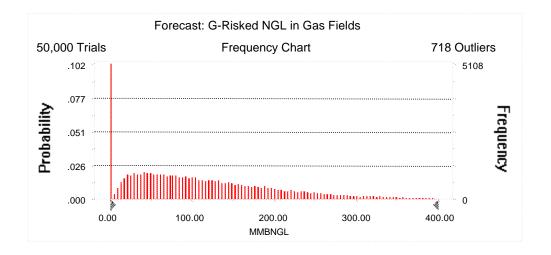
Percentile	BCFG
100%	0.00
95%	0.00
90%	0.00
85%	512.09
80%	762.59
75%	998.97
70%	1,239.14
65%	1,479.55
60%	1,726.33
55%	1,982.28
50%	2,253.73
45%	2,545.56
40%	2,859.65
35%	3,192.18
30%	3,546.89
25%	3,946.47
20%	4,382.34
15%	4,923.89
10%	5,621.64
5%	6,742.16
0%	15,441.36

Forecast: G-Risked NGL in Gas Fields

Summary:

Display range is from 0.00 to 400.00 MMBNGL Entire range is from 0.00 to 863.96 MMBNGL After 50,000 trials, the standard error of the mean is 0.44

Statistics:	<u>Value</u>
Trials	50000
Mean	117.35
Median	96.16
Mode	0.00
Standard Deviation	98.44
Variance	9,690.23
Skewness	1.20
Kurtosis	4.87
Coefficient of Variability	0.84
Range Minimum	0.00
Range Maximum	863.96
Range Width	863.96
Mean Standard Error	0.44



Forecast: G-Risked NGL in Gas Fields (cont'd)

Percentiles:

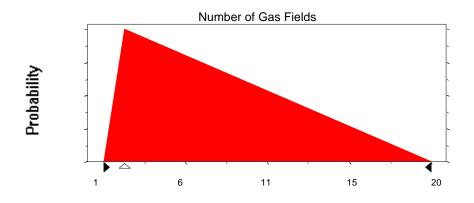
<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	21.47
80%	31.76
75%	42.12
70%	52.06
65%	62.67
60%	73.48
55%	84.48
50%	96.16
45%	108.39
40%	122.26
35%	136.28
30%	152.27
25%	170.72
20%	191.80
15%	217.80
10%	251.59
5%	308.71
0%	863.96

Assumptions

Assumption: Number of Gas Fields

i riangular distribution with parameters:	
Minimum	1
Likeliest	2
Maximum	20

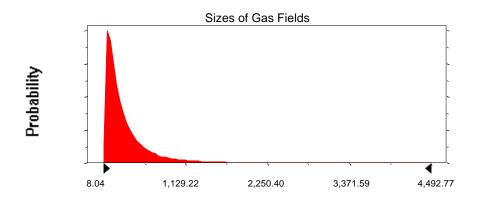
Selected range is from 1 to 20 Mean value in simulation was 8



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	331.26	391.26
Standard Deviation	473.10	473.1
Selected range is from 0.00 to 4,940.00		60.00 to 5,000.00
Mean value in simulation was 324.01		384.01

Assumption: Sizes of Gas Fields (cont'd)

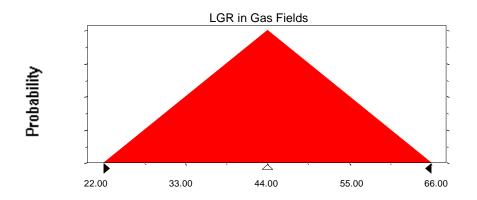


Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	22.00
Likeliest	44.00
Maximum	66.00

Selected range is from 22.00 to 66.00 Mean value in simulation was 44.00



End of Assumptions

Simulation started on 4/26/99 at 16:14:07 Simulation stopped on 4/26/99 at 16:26:50