# Second White Specks-Cardium Gas, Assessment Unit 52430601 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]

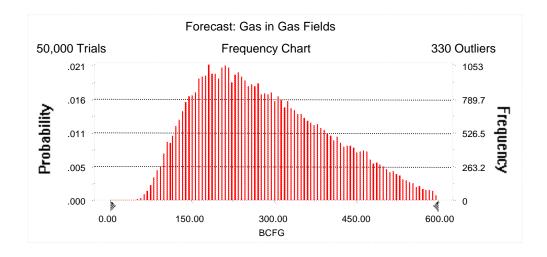
Field	MFS	S Prob.	Undiscovered Resources								Largest Undiscovered Field							
Type			Oil (MMBO)			Gas (BCFG)			NGL (MMBNGL)			(MMBO or BCFG)						
. )   0		(0-1)	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	1	1.00	0	0	0	0	0	0	0	0	0	0	0	0	NA	NA	NA	NA
Gas Fields	3	1.00					117	268	506	285	3	8	16	9	12	2 24	54	4 28
Total		1.00	0	0	0	0	117	268	506	285	3	8	16	9				

#### Forecast: Gas in Gas Fields

#### Summary:

Display range is from 0.00 to 600.00 BCFG Entire range is from 45.69 to 744.64 BCFG After 50,000 trials, the standard error of the mean is 0.54

Statistics:	<u>Value</u>
Trials	50000
Mean	285.14
Median	268.02
Mode	
Standard Deviation	120.18
Variance	14,443.47
Skewness	0.53
Kurtosis	2.64
Coefficient of Variability	0.42
Range Minimum	45.69
Range Maximum	744.64
Range Width	698.95
Mean Standard Error	0.54



Forecast: Gas in Gas Fields (cont'd)

# Percentiles:

Percentile	BCFG
100%	45.69
95%	117.48
90%	141.00
85%	159.37
80%	175.51
75%	190.27
70%	205.52
65%	219.92
60%	235.72
55%	251.13
50%	268.02
45%	285.33
40%	303.66
35%	322.83
30%	343.60
25%	366.77
20%	392.43
15%	422.34
10%	459.04
5%	506.33
0%	744.64

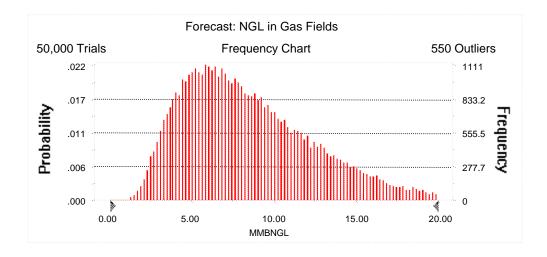
**End of Forecast** 

#### Forecast: NGL in Gas Fields

#### Summary:

Display range is from 0.00 to 20.00 MMBNGL Entire range is from 0.86 to 29.50 MMBNGL After 50,000 trials, the standard error of the mean is 0.02

Statistics:	<u>Value</u>
Trials	50000
Mean	8.54
Median	7.82
Mode	
Standard Deviation	4.08
Variance	16.65
Skewness	0.83
Kurtosis	3.48
Coefficient of Variability	0.48
Range Minimum	0.86
Range Maximum	29.50
Range Width	28.64
Mean Standard Error	0.02



Forecast: NGL in Gas Fields (cont'd)

# Percentiles:

<u>Percentile</u>	MMBNGL
100%	0.86
95%	3.20
90%	3.88
85%	4.45
80%	4.96
75%	5.43
70%	5.90
65%	6.36
60%	6.83
55%	7.31
50%	7.82
45%	8.35
40%	8.93
35%	9.53
30%	10.21
25%	10.98
20%	11.88
15%	12.94
10%	14.26
5%	16.30
0%	29.50

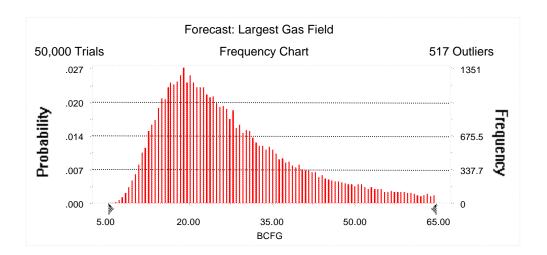
**End of Forecast** 

# Forecast: Largest Gas Field

#### Summary:

Display range is from 5.00 to 65.00 BCFG Entire range is from 5.51 to 69.99 BCFG After 50,000 trials, the standard error of the mean is 0.06

Statistics:	<u>Value</u>
Trials	50000
Mean	27.50
Median	24.48
Mode	
Standard Deviation	12.60
Variance	158.76
Skewness	1.04
Kurtosis	3.70
Coefficient of Variability	0.46
Range Minimum	5.51
Range Maximum	69.99
Range Width	64.48
Mean Standard Error	0.06



Forecast: Largest Gas Field (cont'd)

# Percentiles:

Percentile	BCFG	
100%	5.51	
95%	12.31	
90%	14.19	
85%	15.67	
80%	16.94	
75%	18.18	,
70%	19.34	
65%	20.54	,
60%	21.80	)
55%	23.09	
50%	24.48	
45%	25.99	
40%	27.61	
35%	29.42	
30%	31.49	
25%	34.02	
20%	36.97	
15%	40.76	i
10%	45.92	
5%	53.75	)
0%	69.99	)

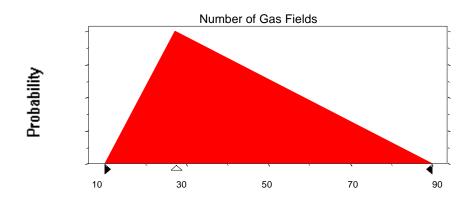
**End of Forecast** 

# **Assumptions**

# **Assumption: Number of Gas Fields**

i riangular distribution with parameters:	
Minimum	10
Likeliest	28
Maximum	90

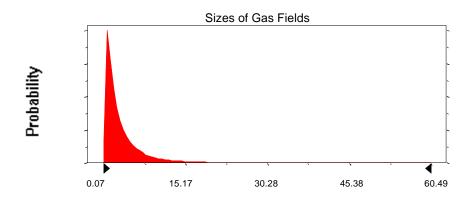
Selected range is from 10 to 90 Mean value in simulation was 42



# **Assumption: Sizes of Gas Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	3.81	6.81
Standard Deviation	6.20	6.2
Selected range is from 0.00 to 67.00 Mean value in simulation was 3.75		3.00 to 70.00 6.75

# Assumption: Sizes of Gas Fields (cont'd)

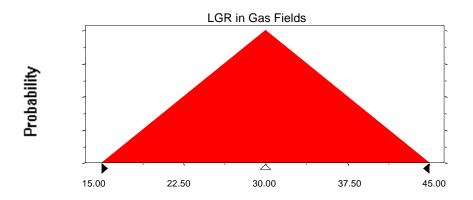


# Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	15.00
Likeliest	30.00
Maximum	45.00

Selected range is from 15.00 to 45.00 Mean value in simulation was 29.95



# **End of Assumptions**

Simulation started on 8/11/99 at 15:23:29 Simulation stopped on 8/11/99 at 15:48:28