# Coastal Plain and Offshore, Assessment Unit 70130101 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]

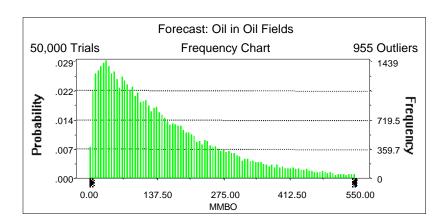
Field	MFS	FS Prob.			Undiscovered Reso								ces				Largest Undiscovered Field		
Field Type			Oil (MMBO)			Gas (BCFG)			NGL (MMBNGL)			(MMBO or BCFG)							
. 7   -		(0-1)	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	
Oil Fields	1	1.00	15	120	430	157	33	255	968	345	2	15	59	21	7	41	217	66	
Gas Fields	6	1.00					83	414	1,276	510	3	18	58	22	31	137	648	208	
Total		1.00	15	120	430	157	116	669	2,244	856	5	33	118	43					

#### Forecast: Oil in Oil Fields

#### Summary:

Display range is from 0.00 to 550.00 MMBO Entire range is from 1.04 to 1,300.25 MMBO After 50,000 trials, the standard error of the mean is 0.61

Statistics:	<u>Value</u>
Trials	50000
Mean	157.19
Median	119.65
Mode	
Standard Deviation	135.96
Variance	18,486.14
Skewness	1.62
Kurtosis	6.62
Coefficient of Variability	0.86
Range Minimum	1.04
Range Maximum	1,300.25
Range Width	1,299.21
Mean Standard Error	0.61



# Forecast: Oil in Oil Fields (cont'd)

Percentiles:

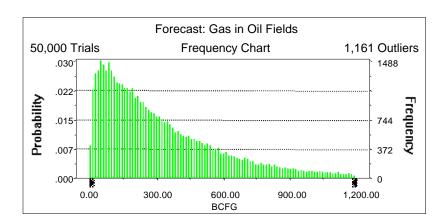
<u>Percentile</u>	<u>MMBO</u>
100%	1.04
95%	15.50
90%	25.85
85%	35.48
80%	45.40
75%	56.23
70%	68.06
65%	79.34
60%	91.76
55%	105.10
50%	119.65
45%	135.88
40%	152.45
35%	172.04
30%	193.20
25%	217.88
20%	248.37
15%	286.41
10%	338.66
5%	429.69
0%	1,300.25

#### Forecast: Gas in Oil Fields

#### Summary:

Display range is from 0.00 to 1,200.00 BCFG Entire range is from 1.97 to 3,297.82 BCFG After 50,000 trials, the standard error of the mean is 1.40

Statistics:	<u>Value</u>
Trials	50000
Mean	345.48
Median	254.97
Mode	
Standard Deviation	313.44
Variance	98,241.77
Skewness	1.86
Kurtosis	8.16
Coefficient of Variability	0.91
Range Minimum	1.97
Range Maximum	3,297.82
Range Width	3,295.85
Mean Standard Error	1.40



# Forecast: Gas in Oil Fields (cont'd)

#### Percentiles:

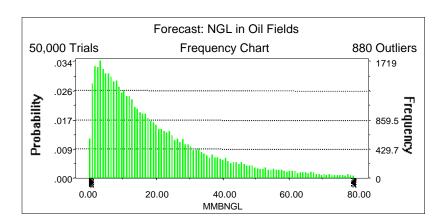
<u>Percentile</u>	<u>BCFG</u>
100%	1.97
95%	32.66
90%	54.12
85%	74.65
80%	95.85
75%	118.48
70%	143.26
65%	169.01
60%	195.68
55%	224.19
50%	254.97
45%	290.26
40%	328.14
35%	369.96
30%	419.67
25%	477.05
20%	543.23
15%	629.57
10%	752.10
5%	967.73
0%	3,297.82

#### Forecast: NGL in Oil Fields

#### Summary:

Display range is from 0.00 to 80.00 MMBNGL Entire range is from 0.10 to 205.74 MMBNGL After 50,000 trials, the standard error of the mean is 0.09

Statistics:	<u>Value</u>
Trials	50000
Mean	20.70
Median	14.87
Mode	
Standard Deviation	19.59
Variance	383.85
Skewness	2.05
Kurtosis	9.43
Coefficient of Variability	0.95
Range Minimum	0.10
Range Maximum	205.74
Range Width	205.65
Mean Standard Error	0.09



Forecast: NGL in Oil Fields (cont'd)

Percentiles:

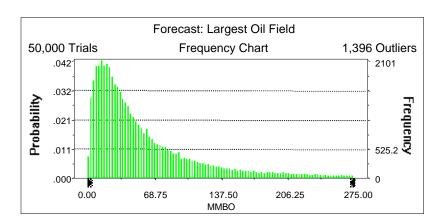
<u>Percentile</u>	<u>MMBNGL</u>
100%	0.10
95%	1.87
90%	3.08
85%	4.28
80%	5.56
75%	6.88
70%	8.27
65%	9.74
60%	11.33
55%	13.02
50%	14.87
45%	17.00
40%	19.28
35%	21.87
30%	24.75
25%	28.22
20%	32.38
15%	37.96
10%	45.77
5%	59.43
0%	205.74

## Forecast: Largest Oil Field

#### Summary:

Display range is from 0.00 to 275.00 MMBO Entire range is from 1.04 to 499.37 MMBO After 50,000 trials, the standard error of the mean is 0.32

Statistics:	<u>Value</u>
Trials	50000
Mean	65.52
Median	40.88
Mode	
Standard Deviation	72.62
Variance	5,273.93
Skewness	2.50
Kurtosis	10.67
Coefficient of Variability	1.11
Range Minimum	1.04
Range Maximum	499.37
Range Width	498.33
Mean Standard Error	0.32



# Forecast: Largest Oil Field (cont'd)

Percentiles:

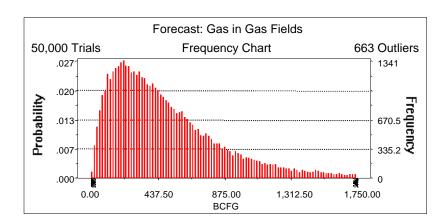
<u>Percentile</u>	<u>MMBO</u>
100%	1.04
95%	6.63
90%	10.25
85%	13.62
80%	16.95
75%	20.35
70%	23.74
65%	27.44
60%	31.54
55%	35.90
50%	40.88
45%	46.51
40%	53.01
35%	60.78
30%	69.78
25%	81.61
20%	96.18
15%	117.03
10%	149.69
5%	216.54
0%	499.37

#### Forecast: Gas in Gas Fields

#### Summary:

Display range is from 0.00 to 1,750.00 BCFG Entire range is from 6.51 to 4,050.63 BCFG After 50,000 trials, the standard error of the mean is 1.74

Statistics: Trials	<u>Value</u> 50000
Mean	510.48
Median	414.36
Mode	
Standard Deviation	389.77
Variance	151,920.90
Skewness	1.64
Kurtosis	7.05
Coefficient of Variability	0.76
Range Minimum	6.51
Range Maximum	4,050.63
Range Width	4,044.13
Mean Standard Error	1.74



# Forecast: Gas in Gas Fields (cont'd)

Percentiles:

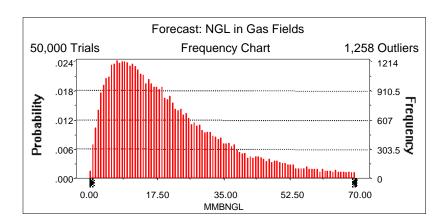
<u>Percentile</u>	<u>BCFG</u>
100%	6.51
95%	82.85
90%	123.53
85%	160.69
80%	194.94
75%	227.88
70%	261.94
65%	298.05
60%	334.23
55%	372.86
50%	414.36
45%	457.18
40%	504.77
35%	557.63
30%	615.78
25%	682.75
20%	766.59
15%	871.98
10%	1,022.51
5%	1,276.36
0%	4,050.63

#### Forecast: NGL in Gas Fields

#### Summary:

Display range is from 0.00 to 70.00 MMBNGL Entire range is from 0.22 to 226.26 MMBNGL After 50,000 trials, the standard error of the mean is 0.08

Statistics:	<u>Value</u>
Trials	50000
Mean	22.49
Median	17.73
Mode	
Standard Deviation	18.13
Variance	328.68
Skewness	1.84
Kurtosis	8.38
Coefficient of Variability	0.81
Range Minimum	0.22
Range Maximum	226.26
Range Width	226.04
Mean Standard Error	0.08



# Forecast: NGL in Gas Fields (cont'd)

#### Percentiles:

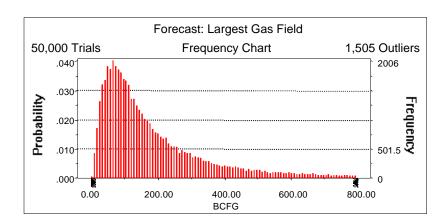
<u>Percentile</u>	<u>MMBNGL</u>
100%	0.22
95%	3.46
90%	5.20
85%	6.73
80%	8.20
75%	9.65
70%	11.11
65%	12.61
60%	14.21
55%	15.93
50%	17.73
45%	19.62
40%	21.73
35%	24.14
30%	26.82
25%	30.02
20%	33.80
15%	38.57
10%	46.02
5%	58.26
0%	226.26

## Forecast: Largest Gas Field

#### Summary:

Display range is from 0.00 to 800.00 BCFG Entire range is from 6.51 to 1,499.87 BCFG After 50,000 trials, the standard error of the mean is 0.96

Statistics:	<u>Value</u>
Trials	50000
Mean	208.34
Median	136.69
Mode	
Standard Deviation	214.98
Variance	46,215.18
Skewness	2.54
Kurtosis	11.01
Coefficient of Variability	1.03
Range Minimum	6.51
Range Maximum	1,499.87
Range Width	1,493.36
Mean Standard Error	0.96



# Forecast: Largest Gas Field (cont'd)

#### Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	6.51
95%	31.35
90%	43.90
85%	54.66
80%	65.31
75%	75.39
70%	86.12
65%	97.18
60%	109.20
55%	122.05
50%	136.69
45%	153.51
40%	172.99
35%	195.63
30%	222.88
25%	256.13
20%	299.39
15%	358.66
10%	455.13
5%	647.51
0%	1,499.87

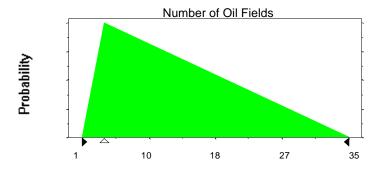
## **Assumptions**

## **Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	1
Likeliest	4
Maximum	35

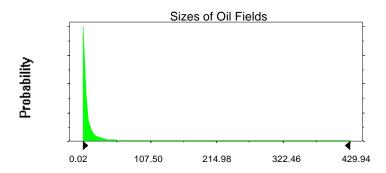
Selected range is from 1 to 35 Mean value in simulation was 13



#### Assumption: Sizes of Oil Fields

Lognormal distribution with parameter	s:	Shifted parameters
Mean	11.80	12.8
Standard Deviation	44.89	44.89
Selected range is from 0.00 to 499.00		1.00 to 500.00
Mean value in simulation was 11.05		12.05

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



#### Assumption: GOR in Oil Fields

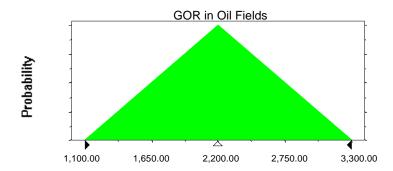
Triangular distribution with parameters:

 Minimum
 1,100.00

 Likeliest
 2,200.00

 Maximum
 3,300.00

Selected range is from 1,100.00 to 3,300.00 Mean value in simulation was 2,198.06

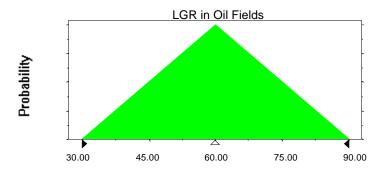


## Assumption: LGR in Oil Fields

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 59.96



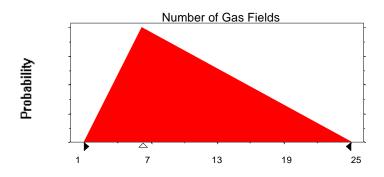
#### Assumption: Number of Gas Fields

Triangular distribution with parameters:

Minimum	1
Likeliest	6
Maximum	25

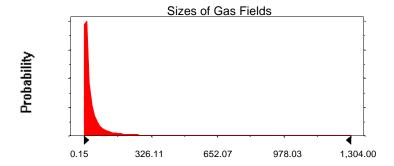
Selected range is from 1 to 25 Mean value in simulation was 11

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



#### **Assumption: Sizes of Gas Fields**

Lognormal distribution with par	ameters:	Shifted parameters
Mean	43.87	49.87
Standard Deviation	130.27	130.27
Selected range is from 0.00 to 1	1,494.00	6.00 to 1,500.00
Mean value in simulation was 41	1.53	47.53

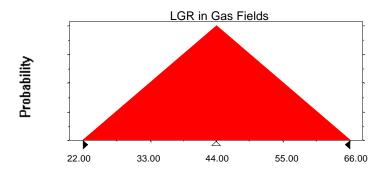


#### Assumption: LGR in Gas Fields

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 44.05



End of Assumptions

Simulation started on 10/7/99 at 14:29:13 Simulation stopped on 10/7/99 at 14:51:40