# Gippsland, Assessment Unit 39300101 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]

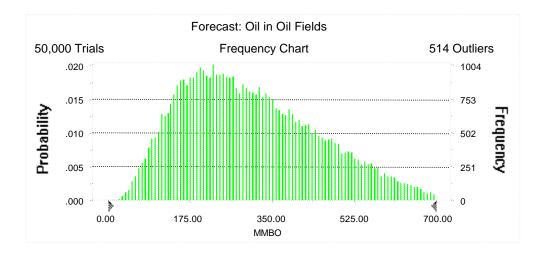
Field	MFS	Undiscovered Resources							Largest Undiscovered Field									
Field Type		Prob.	Oil (MMBO)			Gas (BCFG)			NGL (MMBNGL)			(MMBO or BCFG)						
. 7   -		(0-1)	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	2	1.00	103	288	583	310	266	785	1,747	867	15	46	110	52	17	43	107	49
Gas Fields	12						977	4,261	10,373	4,791	57	252	638	287	225	738	2,107	888
Total		1.00	103	288	583	310	1,243	5,046	12,120	5,658	72	298	748	339				

#### Forecast: Oil in Oil Fields

#### Summary:

Display range is from 0.00 to 700.00 MMBO Entire range is from 20.15 to 952.16 MMBO After 50,000 trials, the standard error of the mean is 0.67

Statistics:	<u>Value</u>
Trials	50000
Mean	309.52
Median	288.38
Mode	
Standard Deviation	149.22
Variance	22,266.53
Skewness	0.60
Kurtosis	2.91
Coefficient of Variability	0.48
Range Minimum	20.15
Range Maximum	952.16
Range Width	932.02
Mean Standard Error	0.67



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

# Percentiles:

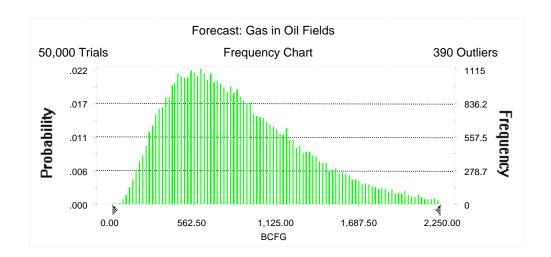
<u>Percentile</u>	<u> </u>	имво
100%		20.15
95%	1	02.61
90%	1	32.25
85%	1	54.64
80%	1	74.56
75%	1	93.46
70%	2	211.69
65%	2	230.09
60%	2	248.59
55%	2	267.79
50%	2	288.38
45%	3	309.34
40%	3	31.44
35%	3	354.04
30%		80.06
25%	4	107.66
20%	4	139.04
15%	4	175.86
10%	5	20.23
5%		82.92
0%	g	952.16

#### Forecast: Gas in Oil Fields

#### Summary:

Display range is from 0.00 to 2,250.00 BCFG Entire range is from 52.53 to 3,654.50 BCFG After 50,000 trials, the standard error of the mean is 2.06

Statistics:	<u>Value</u>
Trials	50000
Mean	866.61
Median	785.11
Mode	
Standard Deviation	461.06
Variance	212,577.14
Skewness	0.89
Kurtosis	3.74
Coefficient of Variability	0.53
Range Minimum	52.53
Range Maximum	3,654.50
Range Width	3,601.96
Mean Standard Error	2.06



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

# Percentiles:

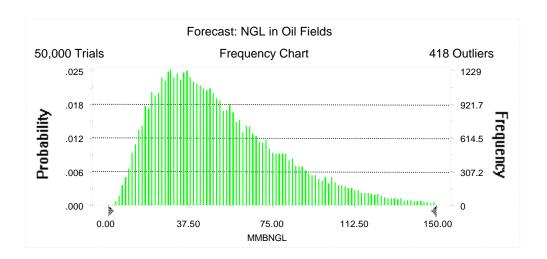
<u>Percentile</u>	<u>BCFG</u>
100%	52.53
95%	265.99
90%	343.38
85%	407.92
80%	463.37
75%	516.60
70%	569.14
65%	621.22
60%	674.06
55%	728.11
50%	785.11
45%	844.11
40%	906.17
35%	974.97
30%	1,051.47
25%	1,136.69
20%	1,233.05
15%	1,352.91
10%	1,507.22
5%	1,747.14
0%	3,654.50

#### Forecast: NGL in Oil Fields

#### Summary:

Display range is from 0.00 to 150.00 MMBNGL Entire range is from 3.19 to 313.79 MMBNGL After 50,000 trials, the standard error of the mean is 0.13

Statistics:	<u>Value</u>
Trials	50000
Mean	52.00
Median	45.89
Mode	
Standard Deviation	30.16
Variance	909.43
Skewness	1.16
Kurtosis	4.87
Coefficient of Variability	0.58
Range Minimum	3.19
Range Maximum	313.79
Range Width	310.60
Mean Standard Error	0.13



Forecast: NGL in Oil Fields (cont'd)

Percentiles:

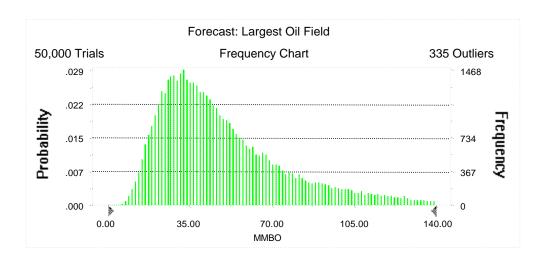
<u>Percentile</u>	MMBN	GL
100%	3.	19
95%	14.	78
90%	19.	31
85%	23.	02
80%	26.	40
75%	29.	54
70%	32.	70
65%	35.	89
60%	39.	01
55%	42.	35
50%	45.	89
45%	49.	49
40%	53.	
35%	57.	80
30%	62.	72
25%	68.	13
20%	74.	65
15%	82.	59
10%	93.	02
5%	109.	76
0%	313.	79

# Forecast: Largest Oil Field

#### Summary:

Display range is from 0.00 to 140.00 MMBO Entire range is from 4.52 to 150.00 MMBO After 50,000 trials, the standard error of the mean is 0.12

Statistics:	<u>Value</u>
Trials	50000
Mean	49.41
Median	42.58
Mode	
Standard Deviation	27.31
Variance	745.85
Skewness	1.19
Kurtosis	4.17
Coefficient of Variability	0.55
Range Minimum	4.52
Range Maximum	150.00
Range Width	145.48
Mean Standard Error	0.12



# Forecast: Largest Oil Field (cont'd)

# Percentiles:

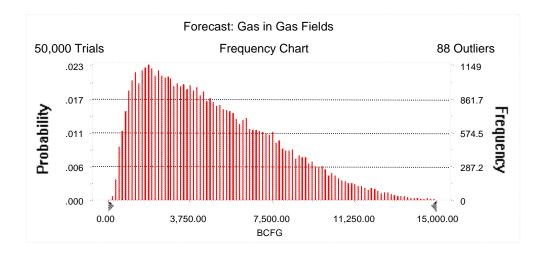
<u>Percentile</u>	MMBO
100%	4.52
95%	17.47
90%	21.38
85%	24.29
80%	26.94
75%	29.44
70%	31.96
65%	34.38
60%	37.03
55%	39.71
50%	42.58
45%	45.62
40%	49.02
35%	52.84
30%	57.21
25%	62.54
20%	68.76
15%	77.13
10%	88.87
5%	106.83
0%	150.00

#### Forecast: Gas in Gas Fields

#### Summary:

Display range is from 0.00 to 15,000.00 BCFG Entire range is from 178.16 to 19,184.68 BCFG After 50,000 trials, the standard error of the mean is 13.29

Statistics:	<u>Value</u>
Trials	50000
Mean	4,791.49
Median	4,261.05
Mode	
Standard Deviation	2,972.81
Variance	8,837,586.10
Skewness	0.75
Kurtosis	3.08
Coefficient of Variability	0.62
Range Minimum	178.16
Range Maximum	19,184.68
Range Width	19,006.52
Mean Standard Error	13.29



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

# Percentiles:

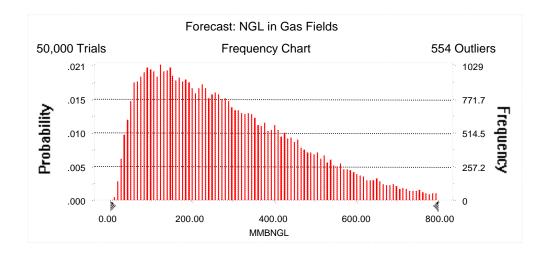
<u>Percentile</u>	<u>BCFG</u>
100%	178.16
95%	976.56
90%	1,340.64
85%	1,696.08
80%	2,029.28
75%	2,371.62
70%	2,722.08
65%	3,086.45
60%	3,479.29
55%	3,862.30
50%	4,261.05
45%	4,685.63
40%	5,134.26
35%	5,620.53
30%	6,149.47
25%	6,731.49
20%	7,365.89
15%	8,094.80
10%	9,046.51
5%	10,373.23
0%	19,184.68

#### Forecast: NGL in Gas Fields

#### Summary:

Display range is from 0.00 to 800.00 MMBNGL Entire range is from 9.00 to 1,440.06 MMBNGL After 50,000 trials, the standard error of the mean is 0.82

Statistics:	<u>Value</u>
Trials	50000
Mean	287.11
Median	252.29
Mode	
Standard Deviation	184.14
Variance	33,908.76
Skewness	0.89
Kurtosis	3.58
Coefficient of Variability	0.64
Range Minimum	9.00
Range Maximum	1,440.06
Range Width	1,431.07
Mean Standard Error	0.82



Forecast: NGL in Gas Fields (cont'd)

# Percentiles:

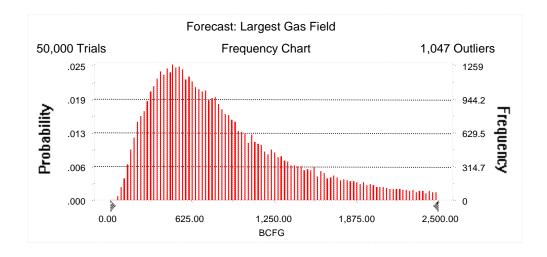
Percentile	MMBNGL
100%	9.00
95%	57.19
90%	79.18
85%	98.94
80%	119.84
75%	140.00
70%	160.32
65%	182.03
60%	204.48
55%	228.09
50%	252.29
45%	277.02
40%	303.93
35%	333.53
30%	364.64
25%	400.54
20%	439.23
15%	486.18
10%	546.63
5%	637.83
0%	1,440.06

# Forecast: Largest Gas Field

#### Summary:

Display range is from 0.00 to 2,500.00 BCFG Entire range is from 40.76 to 2,999.23 BCFG After 50,000 trials, the standard error of the mean is 2.59

Statistics:	<u>Value</u>
Trials	50000
Mean	887.82
Median	737.61
Mode	
Standard Deviation	578.48
Variance	334,637.41
Skewness	1.23
Kurtosis	4.23
Coefficient of Variability	0.65
Range Minimum	40.76
Range Maximum	2,999.23
Range Width	2,958.47
Mean Standard Error	2.59



# Forecast: Largest Gas Field (cont'd)

# Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	40.76
95%	225.28
90%	298.57
85%	358.95
80%	411.66
75%	463.93
70%	514.53
65%	565.10
60%	618.77
55%	676.87
50%	737.61
45%	802.87
40%	872.40
35%	951.54
30%	1,046.44
25%	1,159.49
20%	1,298.47
15%	1,478.29
10%	1,722.66
5%	2,107.47
0%	2,999.23

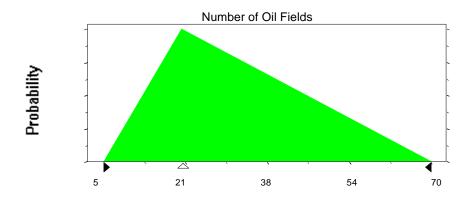
# **Assumptions**

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

Triangular	distribution	with	parameters:
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Minimum	5
Likeliest	21
Maximum	70

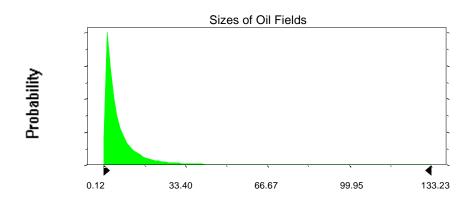
Selected range is from 5 to 70 Mean value in simulation was 32



# **Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	7.92	9.92
Standard Deviation	13.52	13.52
Selected range is from 0.00 to 148.00		2.00 to 150.00
Mean value in simulation was 7.63		9.63

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



### Assumption: GOR in Oil Fields

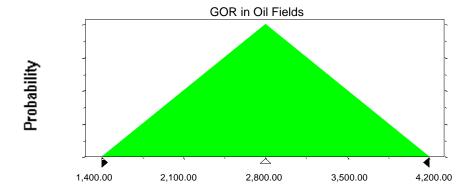
Triangular distribution with parameters:

 Minimum
 1,400.00

 Likeliest
 2,800.00

 Maximum
 4,200.00

Selected range is from 1,400.00 to 4,200.00 Mean value in simulation was 2,801.00

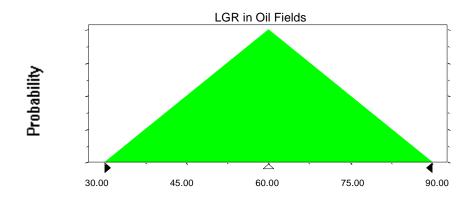


### Assumption: LGR in Oil Fields

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 60.03



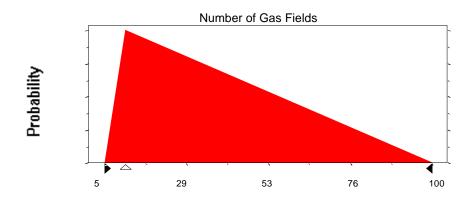
# **Assumption: Number of Gas Fields**

Triangular distribution with parameters:

Minimum	5
Likeliest	11
Maximum	100

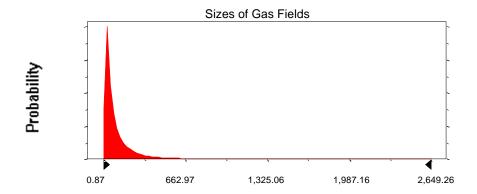
Selected range is from 5 to 100 Mean value in simulation was 38

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



# **Assumption: Sizes of Gas Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	117.32	129.32
Standard Deviation	261.65	261.65
Selected range is from 0.00 to 2,	12.00 to 3,000.00	
Mean value in simulation was 113.26		125.26

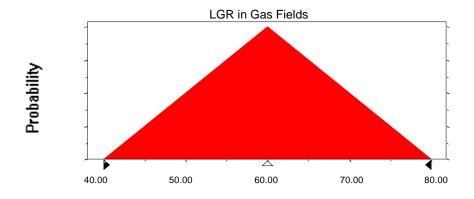


# Assumption: LGR in Gas Fields

Triangular distribution with parameters:

Minimum	40.00
Likeliest	60.00
Maximum	80.00

Selected range is from 40.00 to 80.00 Mean value in simulation was 59.93



# End of Assumptions

Simulation started on 11/9/99 at 14:08:47 Simulation stopped on 11/9/99 at 14:52:45