# Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites, Assessment Unit 53050105 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						Uı	ndiscovere	d Resource	es					La	rgest Undi:	scovered F	ield
Field Type		Prob.	ob. 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	1	1.00	88	321	793	366	182	687	1,827	804	10	40	113	48	22	78	300	107
Gas Fields	6						0	0	0	0	0	0	0	0	NA	NA	NA	NA
Total		1.00	88	321	793	366	182	687	1,827	804	10	40	113	48				

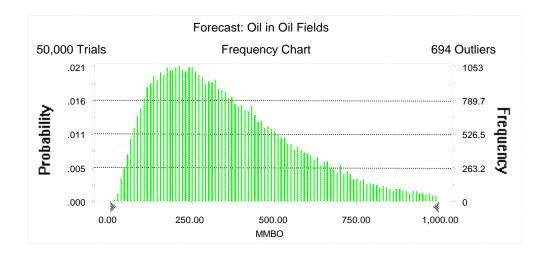
### Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

#### Forecast: Oil in Oil Fields

#### Summary:

Display range is from 0.00 to 1,000.00 MMBO Entire range is from 8.69 to 2,006.00 MMBO After 50,000 trials, the standard error of the mean is 1.00

Statistics:	<u>Value</u>
Trials	50000
Mean	365.51
Median	321.08
Mode	
Standard Deviation	223.93
Variance	50,145.32
Skewness	1.10
Kurtosis	4.55
Coefficient of Variability	0.61
Range Minimum	8.69
Range Maximum	2,006.00
Range Width	1,997.30
Mean Standard Error	1.00



## Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile	ММВО
100%	8.69
95%	88.44
90%	119.78
85%	146.02
80%	171.31
75%	195.58
70%	219.63
65%	244.32
60%	268.29
55%	293.89
50%	321.08
45%	348.72
40%	379.29
35%	412.76
30%	448.22
25%	489.55
20%	536.70
15%	595.16
10%	671.79
5%	793.08
0%	2,006.00

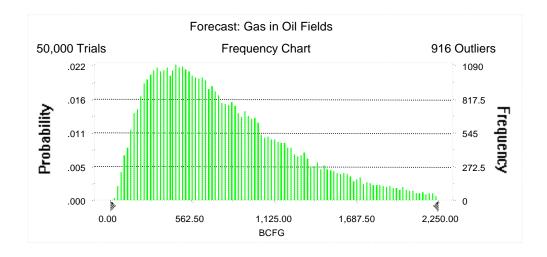
### Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

#### Forecast: Gas in Oil Fields

#### Summary:

Display range is from 0.00 to 2,250.00 BCFG Entire range is from 19.71 to 6,310.28 BCFG After 50,000 trials, the standard error of the mean is 2.35

Statistics:	<u>Value</u>
Trials	50000
Mean	803.98
Median	687.17
Mode	
Standard Deviation	526.47
Variance	277,167.13
Skewness	1.31
Kurtosis	5.54
Coefficient of Variability	0.65
Range Minimum	19.71
Range Maximum	6,310.28
Range Width	6,290.57
Mean Standard Error	2.35



## Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Doroontilo	
<u>Percentile</u>	
100%	
95%	
90%	
85%	
80%	
75%	
70%	
65%	
60%	
55%	
50%	
45%	
40%	
35%	
30%	
25%	
20%	
15%	
10%	
5%	
0%	

**BCFG** 19.71 182.50 248.83 305.04 358.05 411.47 464.96 517.61 571.21 628.87 687.17 750.82 820.94 895.20 976.14 1,071.59 1,187.11 1,325.32 1,518.13 1,826.79 6,310.28

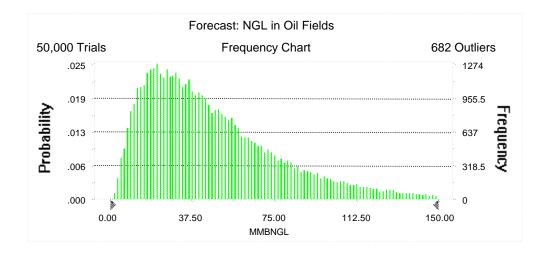
### Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

#### Forecast: NGL in Oil Fields

#### Summary:

Display range is from 0.00 to 150.00 MMBNGL Entire range is from 1.24 to 333.75 MMBNGL After 50,000 trials, the standard error of the mean is 0.15

Statistics:	<u>Value</u>
Trials	50000
Mean	48.14
Median	40.33
Mode	
Standard Deviation	33.44
Variance	1,118.03
Skewness	1.51
Kurtosis	6.50
Coefficient of Variability	0.69
Range Minimum	1.24
Range Maximum	333.75
Range Width	332.51
Mean Standard Error	0.15



# Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

Forecast: NGL in Oil Fields (cont'd)

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	1.24
95%	10.27
90%	14.13
85%	17.49
80%	20.53
75%	23.55
70%	26.78
65%	29.94
60%	33.14
55%	36.63
50%	40.33
45%	44.07
40%	48.38
35%	52.88
30%	57.97
25%	63.95
20%	71.22
15%	80.23
10%	92.80
5%	113.20
0%	333.75

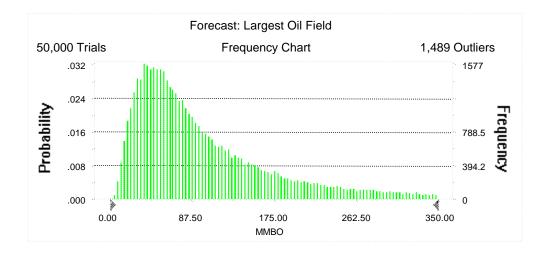
### Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

#### Forecast: Largest Oil Field

#### Summary:

Display range is from 0.00 to 350.00 MMBO Entire range is from 2.04 to 499.76 MMBO After 50,000 trials, the standard error of the mean is 0.39

Statistics:	<u>Value</u>
Trials	50000
Mean	106.90
Median	78.47
Mode	
Standard Deviation	88.23
Variance	7,784.18
Skewness	1.76
Kurtosis	6.26
Coefficient of Variability	0.83
Range Minimum	2.04
Range Maximum	499.76
Range Width	497.73
Mean Standard Error	0.39



# Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

Forecast: Largest Oil Field (cont'd)

Percentiles:

<b>5</b>
<u>Percentile</u>
100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%

MMBO
2.04
21.73
28.98
35.18
40.79
46.42
52.18
58.03
64.29
71.03
71.03 78.47
86.74
96.27
107.55
121.14
137.11
157.11
184.57
226.41
300.01
499.76
433.70

## Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

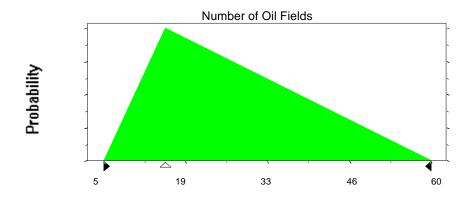
#### **Assumptions**

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

Triangular	distribution	with	parameters:

Minimum	5
Likeliest	15
Maximum	60

Selected range is from 5 to 60 Mean value in simulation was 27

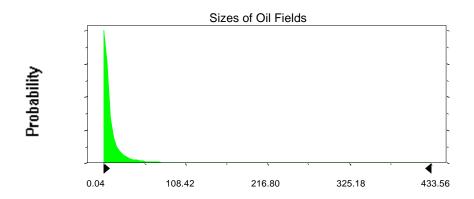


### **Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:		Shifted parameters	
Mean	13.55	•	14.55
Standard Deviation	43.83	4	43.83
Selected range is from 0.00 to 499.00		1.00 to 50	00.00
Mean value in simulation was 12 78		•	13 78

# 53050105 Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

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

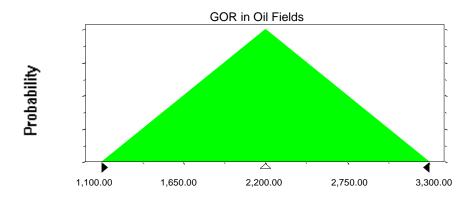


### Assumption: GOR in Oil Fields

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 2,201.74



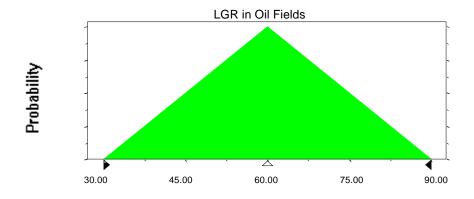
# 53050105 Tamaulipas-Like Basinal Limestone and Tertiary Strata Without Underlying Evaporites Monte Carlo Results

### 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 59.98



### End of Assumptions

Simulation started on 12/1/99 at 17:19:26 Simulation stopped on 12/1/99 at 17:38:22