Jurassic Lacustrine, Assessment Unit 31420201 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							
Туре		Prob.	Oil (MMBO)				Gas (BCFG)			NGL (MMBNGL)			(MMBO or BCFG)					
1,900		(0-1)	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
Oil Fields	1	1 00	8	25	54	27	36	123	288	137	2	7	18	8	2	2 5	12	6
Gas Fields	6	1.00					0	0	0	0	0	0	0	0	NA	NA	NA	NA
Total		1.00	8	25	54	27	36	123	288	137	2	7	18	8				

Forecast: Oil in Oil Fields

Summary:
Display range is from 0.00 to 70.00 MMBO
Entire range is from 1.03 to 95.98 MMBO
After 50,000 trials, the standard error of the mean is 0.06

Statistics:	Value
Trials	50000
Mean	27.45
Median	25.22
Mode	
Standard Deviation	14.40
Variance	207.45
Skewness	0.61
Kurtosis	2.88
Coefficient of Variability	0.52
Range Minimum	1.03
Range Maximum	95.98
Range Width	94.95
Mean Standard Error	0.06



Forecast: Oil in Oil Fields (cont'd)

Percentiles:

Percentile Percentile	MMBO
100%	1.03
95%	7.70
90%	10.41
85%	12.44
80%	14.36
75%	16.15
70%	17.85
65%	19.65
60%	21.41
55%	23.35
50%	25.22
45%	27.30
40%	29.50
35%	31.77
30%	34.22
25%	37.01
20%	40.09
15%	43.59
10%	47.88
5%	54.00
0%	95.98

Forecast: Gas in Oil Fields

Summary:
Display range is from 0.00 to 350.00 BCFG
Entire range is from 4.17 to 616.24 BCFG
After 50,000 trials, the standard error of the mean is 0.35

Statistics:	Value
Trials	50000
Mean	137.41
Median	122.73
Mode	
Standard Deviation	78.81
Variance	6,210.35
Skewness	0.91
Kurtosis	3.76
Coefficient of Variability	0.57
Range Minimum	4.17
Range Maximum	616.24
Range Width	612.08
Mean Standard Error	0.35



Forecast: Gas in Oil Fields (cont'd)

Percentiles:

Percentile	<u>BCFG</u>
100%	4.17
95%	35.86
90%	48.45
85%	59.10
80%	68.33
75%	76.83
70%	85.47
65%	94.64
60%	103.71
55%	112.89
50%	122.73
45%	133.18
40%	144.32
35%	156.04
30%	169.38
25%	184.03
20%	200.88
15%	220.99
10%	247.32
5%	287.54
0%	616.24

Forecast: NGL in Oil Fields

Summary:

Display range is from 0.00 to 22.50 MMBNGL
Entire range is from 0.20 to 45.85 MMBNGL
After 50,000 trials, the standard error of the mean is 0.02

Statistics:	<u>Value</u>
Trials	50000
Mean	8.26
Median	7.16
Mode	
Standard Deviation	5.12
Variance	26.25
Skewness	1.16
Kurtosis	4.67
Coefficient of Variability	0.62
Range Minimum	0.20
Range Maximum	45.85
Range Width	45.66
Mean Standard Error	0.02



Forecast: NGL in Oil Fields (cont'd)

Percentiles:

Percentile	MMBNGL
100%	0.20
95%	1.99
90%	2.75
85%	3.35
80%	3.90
75%	4.43
70%	4.94
65%	5.45
60%	6.00
55%	6.57
50%	7.16
45%	7.78
40%	8.48
35%	9.24
30%	10.07
25%	11.01
20%	12.14
15%	13.44
10%	15.22
5%	18.27
0%	45.85

Forecast: Largest Oil Field

Summary: Display range is from 0.00 to 15.00 MMBO Entire range is from 1.03 to 20.00 MMBO After 50,000 trials, the standard error of the mean is 0.01

Statistics:	Value
Trials	50000
Mean	5.86
Median	5.11
Mode	
Standard Deviation	3.03
Variance	9.19
Skewness	1.50
Kurtosis	5.75
Coefficient of Variability	0.52
Range Minimum	1.03
Range Maximum	20.00
Range Width	18.97
Mean Standard Error	0.01



Forecast: Largest Oil Field (cont'd)

Percentiles:

Percentile	MMBO
100%	1.03
95%	2.45
90%	2.86
85%	3.18
80%	3.47
75%	3.74
70%	4.00
65%	4.26
60%	4.53
55%	4.81
50%	5.11
45%	5.42
40%	5.76
35%	6.15
30%	6.61
25%	7.13
20%	7.81
15%	8.67
10%	9.89
5%	11.98
0%	20.00

Assumptions

Assumption: Number of Oil 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: Sizes of Oil Fields

Lognormal distribution with parameters:		Shifted parameters
Mean	1.57	2.57
Standard Deviation	1.92	1.92
Selected range is from 0.00 to 19.00		1.00 to 20.00
Mean value in simulation was 1.55		2.55

Assumption: Sizes of Oil Fields (cont'd)



Assumption: GOR in Oil Fields

Triangular distribution with parameters:

2,500.00
5,000.00
7,500.00

Selected range is from 2,500.00 to 7,500.00 Mean value in simulation was 5,005.36



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 60.10



End of Assumptions

Simulation started on 12/30/99 at 16:35:45 Simulation stopped on 12/30/99 at 16:49:58