

# FORSPAN ASSESSMENT MODEL FOR CONTINUOUS ACCUMULATIONS--BASIC INPUT DATA FORM (Version 4, 10-5-00)

## IDENTIFICATION INFORMATION

Assessment Geologist:...	R.M. Flores	Date:	10/18/2000
Region:.....	North America	Number:	5
Province:.....	Powder River Basin	Number:	5033
Total Petroleum System:..	Tertiary-Upper Cretaceous Coalbed Methane	Number:	503301
Assessment Unit:.....	Upper Fort Union Formation	Number:	50330182
Based on Data as of:.....	PI production data current through third quarter 1999		
Notes from Assessor:....	Very active and recent coalbed methane drilling and development. Gas is biogenic.		

## CHARACTERISTICS OF ASSESSMENT UNIT (A.U.)

**Assessment-Unit type:** Oil (<20,000 cfg/bo) or Gas (≥20,000 cfg/bo) Gas

**What is the minimum total recovery per cell?...** 0.02 (mmbo for oil A.U.; bcfg for gas A.U.)

Number of evaluated cells:..... 3090

Number of evaluated cells with total recovery per cell ≥ minimum: ..... 2449

Established (>24 cells ≥ min.) X Frontier (1-24 cells) ..... Hypothetical (no cells) .....

Median total recovery per cell (for cells ≥ min.): (mmbo for oil A.U.; bcfg for gas A.U.)

1st 3rd discovered	<u>0.19</u>	2nd 3rd <u>0.23</u>	3rd 3rd <u>0.21</u>
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### Assessment-Unit Probabilities:

Attribute	Probability of occurrence (0-1.0)
1. <b>CHARGE:</b> Adequate petroleum charge for an untested cell with total recovery ≥ minimum .....	<u>1.0</u>
2. <b>ROCKS:</b> Adequate reservoirs, traps, seals for an untested cell with total recovery ≥ minimum.	<u>1.0</u>
3. <b>TIMING:</b> Favorable geologic timing for an untested cell with total recovery ≥ minimum.....	<u>1.0</u>

**Assessment-Unit GEOLOGIC Probability** (Product of 1, 2, and 3):..... 1.0

4. **ACCESS:** Adequate location for necessary petroleum-related activities for an untested cell with total recovery ≥ minimum ..... 1.0

## NO. OF UNTESTED CELLS WITH POTENTIAL FOR ADDITIONS TO RESERVES IN NEXT 30 YEARS

1. Total assessment-unit area (acres): (uncertainty of a fixed value)

minimum <u>8,447,000</u>	median <u>8,892,000</u>	maximum <u>9,337,000</u>
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2. Area per cell of untested cells having potential for additions to reserves in next 30 years (acres): (values are inherently variable)

minimum <u>40</u>	median <u>80</u>	maximum <u>140</u>
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3. Percentage of total assessment-unit area that is untested (%): (uncertainty of a fixed value)

minimum <u>97</u>	median <u>98</u>	maximum <u>99</u>
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4. Percentage of untested assessment-unit area that has potential for additions to reserves in next 30 years (%): ( a necessary criterion is that total recovery per cell ≥ minimum) (uncertainty of a fixed value)

minimum <u>10</u>	median <u>33</u>	maximum <u>58</u>
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### TOTAL RECOVERY PER CELL

Total recovery per cell for untested cells having potential for additions to reserves in next 30 years:

(values are inherently variable)

(mmbo for oil A.U.; bcfg for gas A.U.)      minimum 0.02      median 0.23      maximum 4

### AVERAGE COPRODUCT RATIOS FOR UNTESTED CELLS

(uncertainty of a fixed value)

Oil assessment unit:	minimum	median	maximum
Gas/oil ratio (cfg/bo).....	<u>                    </u>	<u>                    </u>	<u>                    </u>
NGL/gas ratio (bngl/mmcfg).....	<u>                    </u>	<u>                    </u>	<u>                    </u>
Gas assessment unit:			
Liquids/gas ratio (bliq/mmcfg).....	<u>0</u>	<u>0</u>	<u>0</u>

### SELECTED ANCILLARY DATA FOR UNTESTED CELLS

(values are inherently variable)

Oil assessment unit:	minimum	median	maximum
API gravity of oil (degrees).....	<u>                    </u>	<u>                    </u>	<u>                    </u>
Sulfur content of oil (%).....	<u>                    </u>	<u>                    </u>	<u>                    </u>
Drilling depth (m) .....	<u>                    </u>	<u>                    </u>	<u>                    </u>
Depth (m) of water (if applicable).....	<u>                    </u>	<u>                    </u>	<u>                    </u>
Gas assessment unit:			
Inert-gas content (%).....	<u>2.00</u>	<u>3.00</u>	<u>4.00</u>
CO <sub>2</sub> content (%).....	<u>3.00</u>	<u>5.00</u>	<u>8.00</u>
Hydrogen-sulfide content (%).....	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
Drilling depth (m).....	<u>60</u>	<u>365</u>	<u>800</u>
Depth (m) of water (if applicable).....	<u>                    </u>	<u>                    </u>	<u>                    </u>

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO STATES**  
**Surface Allocations** (uncertainty of a fixed value)

1. <u>Wyoming</u>	represents	<u>64.22</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>65.00</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____
2. <u>Montana</u>	represents	<u>35.78</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>35</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____
3. _____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
4. _____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

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5. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

6. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

7. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

8. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO LAND ENTITIES**  
**Surface Allocations** (uncertainty of a fixed value)

1. <u>Federal Lands</u>	represents	<u>15.18</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>20</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____
2. <u>Private Lands</u>	represents	<u>72.38</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>72</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____
3. <u>Tribal Lands</u>	represents	<u>5.83</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>2</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____
4. <u>Other Lands</u>	represents	<u>0.12</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>0</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____

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5. <u>WY State Lands</u>	represents	<u>4.85</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>5</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____
6. <u>MT State Lands</u>	represents	<u>1.64</u>	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	<u>1</u>	_____
Portion of volume % that is offshore (0-100%)..	_____	<u>0</u>	_____
7. _____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
8. _____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

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9. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

10. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

11. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

12. \_\_\_\_\_ represents \_\_\_\_\_ areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO FEDERAL LAND SUBDIVISIONS**  
**Surface Allocations** (uncertainty of a fixed value)

1. Bureau of Land Management (BLM)	represents	7.99	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>				
	minimum		median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	10.53	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____	_____
2. BLM Wilderness Areas (BLMW)	represents	_____	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>				
	minimum		median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
3. BLM Roadless Areas (BLMR)	represents	_____	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>				
	minimum		median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
4. National Park Service (NPS)	represents	_____	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>				
	minimum		median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____



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5. <u>NPS Wilderness Areas (NPSW)</u>	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	_____	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
6. <u>NPS Protected Withdrawals (NPSP)</u>	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	_____	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
7. <u>US Forest Service (USFS)</u>	represents	7.13	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	_____	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	9.40	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____
8. <u>USFS Wilderness Areas (USFSW)</u>	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	_____	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

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9. <u>USFS Roadless Areas (USFSR)</u>	represents	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
10. <u>USFS Protected Withdrawals (USFSP)</u>	represents	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
11. <u>US Fish and Wildlife Service (USFWS)</u>	represents	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
12. <u>USFWS Wilderness Areas (USFWSW)</u>	represents	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

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13. <u>USFWS Protected Withdrawals (USFWSP)</u>	represents	_____	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	_____	median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
14. <u>Wilderness Study Areas (WS)</u>	represents	_____	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	_____	median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
15. <u>Department of Energy (DOE)</u>	represents	_____	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	_____	median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
16. <u>Department of Defense (DOD)</u>	represents	_____	areal % of the assessment unit	
<u>Oil in oil assessment unit:</u>	minimum	_____	median	maximum
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....	_____	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____	_____

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17. Bureau of Reclamation (BOR)	represents		areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
18. Tennessee Valley Authority (TVA)	represents		areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
19. Other Federal	represents	0.05	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	0.07	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____
20. _____	represents		areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

### ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ECOSYSTEMS

1. <u>Bighorn Mountains (BHMT)</u>	represents	3.68	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	3.68	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____
2. <u>Northwestern Great Plains (NWGP)</u>	represents	10.60	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	10.60	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____
3. <u>Powder River Basin (PRBA)</u>	represents	85.72	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	85.72	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____
4. _____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

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5.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>				
		minimum	median	maximum
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____
6.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>				
		minimum	median	maximum
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____
7.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>				
		minimum	median	maximum
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____
8.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>				
		minimum	median	maximum
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____
<u>Gas in gas assessment unit:</u>				
	Volume % in entity.....	_____	_____	_____
	Portion of volume % that is offshore (0-100%)..	_____	_____	_____

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9.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>		minimum	median	maximum
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____
10.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>		minimum	median	maximum
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____
11.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>		minimum	median	maximum
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____
12.	_____	represents	_____	areal % of the assessment unit
<u>Oil in oil assessment unit:</u>		minimum	median	maximum
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____
<u>Gas in gas assessment unit:</u>				
Volume % in entity.....		_____	_____	_____
Portion of volume % that is offshore (0-100%)..		_____	_____	_____

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**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO LAND ENTITIES**  
**Subsurface Allocations** (uncertainty of a fixed value)

Based on Data as of: Data through 1998

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1. All Federal Subsurface represents 47 areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	50	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____

2. Other Subsurface represents 53 areal % of the assessment unit

<u>Oil in oil assessment unit:</u>	minimum	median	maximum
Volume % in entity.....	_____	_____	_____
Portion of volume % that is offshore (0-100%)..	_____	_____	_____

<u>Gas in gas assessment unit:</u>			
Volume % in entity.....	_____	50	_____
Portion of volume % that is offshore (0-100%)..	_____	0	_____

