

**SEVENTH APPROXIMATION
DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS (NOGA, Version 5, 6-30-01)**

IDENTIFICATION INFORMATION

Assessment Geologist:.....	<u>C.S. Swezey</u>	Date:	<u>1/16/2002</u>
Region:.....	<u>North America</u>	Number:	<u>5</u>
Province:.....	<u>Appalachian Basin</u>	Number:	<u>5067</u>
Total Petroleum System:.....	<u>Devonian Shale-Middle and Upper Paleozoic</u>	Number:	<u>506704</u>
Assessment Unit:.....	<u>Oriskany Sandstone-Stratigraphic</u>	Number:	<u>50670402</u>
Based on Data as of:.....	<u>State-Supplied Data, Atlas of Major Appalachian Gas Plays (1996), PI/Dwights</u>		
Notes from Assessor:.....	<u>NRG Reservoir Growth Function. Gas atlas reported 83 gas fields. Replaces 6721.</u>		

CHARACTERISTICS OF ASSESSMENT UNIT

Oil (<20,000 cfg/bo overall) or Gas (≥20,000 cfg/bo overall):... Gas

What is the minimum accumulation size?..... 0.5 mmboc grown
(the smallest accumulation that has potential to be added to reserves in the next 30 years)

No. of discovered accumulations exceeding minimum size:..... Oil: 0 Gas: 8
Established (>13 accums.) _____ Frontier (1-13 accums.) X Hypothetical (no accums.) _____

Median size (grown) of discovered oil accumulation (mmboc):
1st 3rd _____ 2nd 3rd _____ 3rd 3rd _____
Median size (grown) of discovered gas accumulations (bcfg):
1st 3rd 17.2 2nd 3rd 5.3 3rd 3rd _____

Assessment-Unit Probabilities:

<u>Attribute</u>	<u>Probability of occurrence (0-1.0)</u>
1. CHARGE: Adequate petroleum charge for an undiscovered accum. ≥ minimum size.....	<u>1.0</u>
2. ROCKS: Adequate reservoirs, traps, and seals for an undiscovered accum. ≥ minimum size.....	<u>1.0</u>
3. TIMING OF GEOLOGIC EVENTS: Favorable timing for an undiscovered accum. ≥ minimum size.....	<u>1.0</u>

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

4. **ACCESSIBILITY:** Adequate location to allow exploration for an undiscovered accumulation
≥ minimum size..... 1.0

UNDISCOVERED ACCUMULATIONS

No. of Undiscovered Accumulations: How many undiscovered accums. exist that are ≥ min. size?:
(uncertainty of fixed but unknown values)

Oil Accumulations:.....min. no. (>0)	<u>0</u>	median no. <u>0</u>	max no. <u>0</u>
Gas Accumulations:.....min. no. (>0)	<u>1</u>	median no. <u>10</u>	max no. <u>25</u>

Sizes of Undiscovered Accumulations: What are the sizes (**grown**) of the above accums?:
(variations in the sizes of undiscovered accumulations)

Oil in Oil Accumulations (mmboc):.....min. size	<u>3</u>	median size _____	max. size _____
Gas in Gas Accumulations (bcfg):.....min. size	<u>3</u>	median size <u>5</u>	max. size <u>40</u>

AVERAGE RATIOS FOR UNDISCOVERED ACCUMS., TO ASSESS COPRODUCTS

(uncertainty of fixed but unknown values)

<u>Oil Accumulations:</u>	minimum	median	maximum
Gas/oil ratio (cfg/bo).....	_____	_____	_____
NGL/gas ratio (bnl/mmcf).....	_____	_____	_____
 <u>Gas Accumulations:</u>	 minimum	 median	 maximum
Liquids/gas ratio (bliq/mmcf).....	4	8	12
Oil/gas ratio (bo/mmcf).....	_____	_____	_____

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

<u>Oil Accumulations:</u>	minimum	median	maximum
API gravity (degrees).....	_____	_____	_____
Sulfur content of oil (%).....	_____	_____	_____
Drilling Depth (m)	_____	_____	_____
Depth (m) of water (if applicable).....	_____	_____	_____
 <u>Gas Accumulations:</u>	 minimum	 median	 maximum
Inert gas content (%).....	0	0.1	1
CO ₂ content (%).....	0	0.1	4
Hydrogen-sulfide content (%).....	0	0	0.1
Drilling Depth (m).....	500	1500	2500
Depth (m) of water (if applicable).....	0	22	50

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

1. Kentucky represents 7.1 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

2. New York represents 8.03 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	2	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

3. Ohio represents 40.55 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	56	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

4. Pennsylvania represents 15.15 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____
<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	26	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

5. Virginia represents 4.71 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

6. West Virginia represents 24.46 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	14	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

7. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

8. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
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. Federal Lands represents 4.96 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	5	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

2. Private Lands represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

3. Tribal Lands represents 0.1 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	0	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

4. Other Lands (includes private, state, & federal) represents 86.31 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	15	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

5. OH Offshore represents 7.42 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	55	_____
Portion of volume % that is offshore (0-100%):.....	_____	100	_____

6. PA Offshore represents 1.21 areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	25	_____
Portion of volume % that is offshore (0-100%):.....	_____	100	_____

7. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

8. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

9. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

10. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

11. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

12. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Fields:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
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 _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

2. BLM Wilderness Areas (BLMW) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

3. BLM Roadless Areas (BLMR) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

4. National Park Service (NPS) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

5. NPS Wilderness Areas (NPSW) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

6. NPS Protected Withdrawals (NPSP) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

7. US Forest Service (USFS) represents 4.12 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	4	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

8. USFS Wilderness Areas (USFSW) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

9. USFS Roadless Areas (USFSR) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

10. USFS Protected Withdrawals (USFSF) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

11. US Fish and Wildlife Service (USFWS) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

12. USFWS Wilderness Areas (USFWSA) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

13. USFWS Protected Withdrawals (USF) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

14. Wilderness Study Areas (WS) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

15. Department of Energy (DOE) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

16. Department of Defense (DOD) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

17. Bureau of Reclamation (BOR) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

18. Tennessee Valley Authority (TVA) represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

19. Other Federal represents 0.84 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

20. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

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

1. Allegheny Mountains (ALMT) represents 1.66 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

2. Central Till Plains, Beech-Maple (CTF) represents 1 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

3. Erie and Ontario Lake Plain (EOLP) represents 7.15 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	2	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

4. Northern Cumberland Mountains (NC) represents 14.06 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	2	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

5. Northern Cumberland Plateau (NCPT) represents 1.4 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

6. Northern Glaciated Allegheny Plateau represents 5.23 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

7. Northern Ridge and Valley (NRVA) represents 2.11 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

8. Northern Unglaciated Allegheny Plate represents 3.69 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

9. Southern Cumberland Mountains (SC represents 0.54 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	1	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

10. Southern Unglaciaded Allegheny Plate represents 34.71 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	6	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

11. Western Glaciaded Allegheny Plateau represents 19.84 areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	3	_____
Portion of volume % that is offshore (0-100%):.....	_____	0	_____

12. _____ represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

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

Based on Data as of: _____

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

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

2. Other Subsurface represents _____ areal % of the total assessment unit

<u>Oil in Oil Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____

<u>Gas in Gas Accumulations:</u>	minimum	median	maximum
Richness factor (unitless multiplier):.....	_____	_____	_____
Volume % in parcel (areal % x richness factor):...	_____	_____	_____
Portion of volume % that is offshore (0-100%):.....	_____	_____	_____