

**USGS WORLD PETROLEUM RESOURCES ASSESSMENT
INPUT FORM FOR CONVENTIONAL ASSESSMENT UNITS (Version 6.0, September 2, 2008)**

IDENTIFICATION INFORMATION

| | | | |
|-------------------------|--|---------|------------------|
| Assessment Geologist: | <u>R.M. Pollastro</u> | Date: | <u>6/21/2011</u> |
| Region: | <u>Asia Pacific</u> | Number: | <u>3</u> |
| Province: | <u>Bonaparte Basin</u> | Number: | <u>3910</u> |
| Total Petroleum System: | <u>Bonaparte Paleozoic-Mesozoic Composite</u> | Number: | <u>391001</u> |
| Assessment Unit: | <u>South Petrel Sub-Basin</u> | Number: | <u>39100101</u> |
| Scenario: | <u></u> | Number: | <u></u> |
| Based on Data as of: | <u>IHS (2009)</u> | | |
| Notes from Assessor: | <u>NRG Field Reserve-Growth Function, 30 yrs</u> | | |

CHARACTERISTICS OF ASSESSMENT UNIT

Area of assessment unit: 27,972 square kilometers

Minimum assessed accumulation size: 5 MMBOE (grown)

No. of discovered accumulations exceeding minimum size: Oil: 2 Gas: 1

| | | |
|---------------------------|-----------|----------|
| Uncertainty Class: | Check One | Number |
| Producing fields | <u>X</u> | <u>1</u> |
| Discoveries | <u></u> | <u></u> |
| Wells | <u></u> | <u></u> |
| Seismic | <u></u> | <u></u> |
| No seismic | <u></u> | <u></u> |

Median size (grown) of discovered oil accumulations (MMBO):

| | | | | | |
|---------|---------|---------|---------|---------|---------|
| 1st 3rd | <u></u> | 2nd 3rd | <u></u> | 3rd 3rd | <u></u> |
|---------|---------|---------|---------|---------|---------|

Median size (grown) of discovered gas accumulations (BCFG):

| | | | | | |
|---------|---------|---------|---------|---------|---------|
| 1st 3rd | <u></u> | 2nd 3rd | <u></u> | 3rd 3rd | <u></u> |
|---------|---------|---------|---------|---------|---------|

ANALOGS USED IN ESTIMATING INPUT

| <u>Purpose</u> | <u>Analog or Analog Set</u> |
|------------------|-----------------------------|
| 1 <u>Numbers</u> | <u>Rift Sag</u> |
| | <u></u> |
| | <u></u> |
| 2 <u></u> | <u></u> |
| | <u></u> |
| | <u></u> |
| 3 <u></u> | <u></u> |
| | <u></u> |
| | <u></u> |
| 4 <u></u> | <u></u> |
| | <u></u> |
| | <u></u> |

Assessment Unit (name, no.)
Scenario (name, no.)

South Petrel Sub-Basin, 39100101

Probability of occurrence (0-1.0)

Scenario Probability:

Assessment-Unit Probabilities: (Adequacy for at least one undiscovered field of minimum size)

| Attribute | Probability of occurrence (0-1.0) |
|---|-----------------------------------|
| 1. CHARGE: Adequate petroleum charge: | 1.0 |
| 2. ROCKS: Adequate reservoirs, traps, and seals: | 1.0 |
| 3. TIMING OF GEOLOGIC EVENTS: Favorable timing: | 1.0 |
| Assessment-Unit GEOLOGIC Probability (Product of 1, 2, and 3): | 1.0 |

UNDISCOVERED ACCUMULATIONS

Number of Undiscovered Accumulations: How many undiscovered accumulations exist that are at least the minimum size?: (uncertainty of fixed but unknown values)

| | | | |
|----------------------|---|------------------|-------------------|
| Total Accumulations: | minimum (>0) | median | maximum |
| Oil/Gas Mix: | minimum | mode | maximum |
| | number of oil accumulations / number of total accumulations | | |
| | number of oil accumulations / number of gas accumulations | | |
| | number of gas accumulations / number of oil accumulations | | |
| Oil Accumulations: | minimum <u>1</u> | median <u>7</u> | maximum <u>20</u> |
| Gas Accumulations: | minimum <u>1</u> | median <u>24</u> | maximum <u>70</u> |

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

| | | | |
|----------------------------------|-------------------|------------------|---------------------|
| Oil in Oil Accumulations (MMBO): | minimum <u>5</u> | median <u>10</u> | maximum <u>40</u> |
| Gas in Gas Accumulations (BCFG): | minimum <u>30</u> | median <u>90</u> | maximum <u>5000</u> |

RATIOS FOR UNDISCOVERED ACCUMULATIONS, TO ASSESS COPRODUCTS

(variations in the properties of undiscovered accumulations)

| | | | |
|---------------------------------|------------|-------------|--------------|
| <u>Oil Accumulations:</u> | minimum | median | maximum |
| Gas/oil ratio (CFG/BO): | <u>100</u> | <u>1000</u> | <u>20000</u> |
| NGL/gas ratio (BNGL/MMCFG): | <u>5</u> | <u>25</u> | <u>85</u> |
| <u>Gas Accumulations:</u> | minimum | median | maximum |
| Liquids/gas ratio (BLIQ/MMCFG): | <u>1</u> | <u>30</u> | <u>55</u> |

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

| | minimum | median | maximum |
|-------------------------------------|------------|-------------|------------|
| API gravity (degrees): | <u>14</u> | <u>34</u> | <u>50</u> |
| Viscosity (centipoise): | <u>2.5</u> | <u>5</u> | <u>15</u> |
| Sulfur content of oil (%): | <u>0</u> | <u>0.04</u> | <u>0.2</u> |
| Depth (m) of water (if applicable): | <u>0</u> | <u>35</u> | <u>100</u> |

| | minimum | F75 | median | F25 | maximum |
|---------------------|------------|-----|-------------|-----|-------------|
| Drilling Depth (m): | <u>500</u> | | <u>1600</u> | | <u>3400</u> |

Gas Accumulations:

| | minimum | median | maximum |
|-------------------------------------|----------|-----------|------------|
| Inert gas content (%): | <u>1</u> | <u>2</u> | <u>5</u> |
| Carbon dioxide content (%): | <u>0</u> | <u>1</u> | <u>3</u> |
| Hydrogen sulfide content (%): | <u>0</u> | <u>0</u> | <u>0</u> |
| Depth (m) of water (if applicable): | <u>0</u> | <u>35</u> | <u>100</u> |

| | minimum | F75 | median | F25 | maximum |
|---------------------|------------|-----|-------------|-----|-------------|
| Drilling Depth (m): | <u>500</u> | | <u>1600</u> | | <u>3400</u> |

Assessment Unit (name, no.)
Scenario (name, no.)

South Petrel Sub-Basin, 39100101

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore

62.93 area % of the AU

Oil in Oil Accumulations: 80.00 volume % of the AU

Gas in Gas Accumulations: 80.00 volume % of the AU

2 Onshore portion of:

Australia

37.07 area % of the AU

Oil in Oil Accumulations: 20.00 volume % of the AU

Gas in Gas Accumulations: 20.00 volume % of the AU

3 Onshore portion of:

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU

Gas in Gas Accumulations: _____ volume % of the AU

4 Onshore portion of:

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU

Gas in Gas Accumulations: _____ volume % of the AU

5 Onshore portion of:

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU

Gas in Gas Accumulations: _____ volume % of the AU

6 Onshore portion of:

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU

Gas in Gas Accumulations: _____ volume % of the AU

Assessment Unit (name, no.)
Scenario (name, no.)

South Petrel Sub-Basin, 39100101

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO PROVINCES

1 ONSHORE portion of: Bonaparte Basin, 3910

37.07 area % of the AU

Oil in Oil Accumulations: 20.00 volume % of the AU
Gas in Gas Accumulations: 20.00 volume % of the AU

OFFSHORE portion of: Bonaparte Basin, 3910

62.93 area % of the AU

Oil in Oil Accumulations: 80.00 volume % of the AU
Gas in Gas Accumulations: 80.00 volume % of the AU

2 ONSHORE portion of: _____

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

OFFSHORE portion of: _____

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

3 ONSHORE portion of: _____

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

OFFSHORE portion of: _____

_____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

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South Petrel Sub-Basin, 39100101

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO PROVINCES

4 ONSHORE portion of: _____
_____ area % of the AU
Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

OFFSHORE portion of: _____
_____ area % of the AU
Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

5 ONSHORE portion of: _____
_____ area % of the AU
Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

OFFSHORE portion of: _____
_____ area % of the AU
Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

6 ONSHORE portion of: _____
_____ area % of the AU
Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

OFFSHORE portion of: _____
_____ area % of the AU
Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU