

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

**IDENTIFICATION INFORMATION**

Assessment Geologist:	<u>C.J. Schenk</u>	Date:	<u>8/12/2011</u>
Region:	<u>North America</u>	Number:	<u>5</u>
Province:	<u>Villahermosa Uplift</u>	Number:	<u>5305</u>
Total Petroleum System:	<u>Mesozoic-Cenozoic Composite</u>	Number:	<u>530501</u>
Assessment Unit:	<u>Reforma Trend Reservoirs</u>	Number:	<u>53050101</u>
Scenario:		Number:	
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: 19,859 square kilometers

Minimum assessed accumulation size: 1 MMBOE (grown)

No. of discovered accumulations exceeding minimum size: Oil: 122 Gas: 14

<b>Uncertainty Class:</b>	Check One	Number
Producing fields	<u>X</u>	<u>        </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>103.5</u>	2nd 3rd <u>55.8</u>	3rd 3rd <u>63.4</u>
Median size (grown) of discovered gas accumulations (BCFG):			
	1st 3rd <u>636</u>	2nd 3rd <u>32.7</u>	3rd 3rd <u>136.8</u>

**ANALOGS USED IN ESTIMATING INPUT**

<u>Purpose</u>	<u>Analog or Analog Set</u>
1 <u>        </u>	<u>        </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.)

Reforma Trend Reservoirs, 53050101

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. <b>CHARGE:</b> Adequate petroleum charge:	1.0
2. <b>ROCKS:</b> Adequate reservoirs, traps, and seals:	1.0
3. <b>TIMING OF GEOLOGIC EVENTS:</b> Favorable timing:	1.0
<b>Assessment-Unit GEOLOGIC Probability</b> (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	_____
		_____				_____
		_____				_____
		_____				_____
Oil Accumulations:	minimum	1	median	80	maximum	160
Gas Accumulations:	minimum	1	median	30	maximum	60

**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	1	median	3	maximum	1500
Gas in Gas Accumulations (BCFG):	minimum	6	median	18	maximum	9000

### 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):		100		2900		12000
NGL/gas ratio (BNGL/MMCFG):		1		10		30
<u>Gas Accumulations:</u>	minimum	_____	median	_____	maximum	_____
Liquids/gas ratio (BLIQ/MMCFG):		1		20		50

**SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS**

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

	minimum	median	maximum
API gravity (degrees):	15	32	45
Viscosity (centipoise)	5	300	900
Sulfur content of oil (%):	0.8	2	3
Depth (m) of water (if applicable):	0	50	1000

	minimum	F75	median	F25	maximum
Drilling Depth (m):	2000		4000		8000

Gas Accumulations:

	minimum	median	maximum
Inert gas content (%):	0	2	70
Carbon dioxide content (%):	0	1	5
Hydrogen sulfide content (%):	0.3	1.5	3
Depth (m) of water (if applicable):	0	50	1000

	minimum	F75	median	F25	maximum
Drilling Depth (m):	2000		4000		8000

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES**

1 Offshore

55.82 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:

Mexico

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44.18 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

**ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO PROVINCES**

1 ONSHORE portion of: Villahermosa Uplift, 5305  
44.18 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: Villahermosa Uplift, 5305  
55.82 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

**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