

**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>25-Sep-08</u>
Region:	<u>Central and South America</u>	Number:	<u>6</u>
Province:	<u>Magallanes Basin</u>	Number:	<u>6059</u>
Total Petroleum System:	<u>Lower Inoceramus</u>	Number:	<u>605901</u>
Assessment Unit:	<u>Magallanes Extensional Structures</u>	Number:	<u>60590101</u>
Scenario:	<u></u>	Number:	<u></u>
Based on Data as of:	<u>IHS Energy (2007)</u>		
Notes from Assessor:	<u>NRG Fields monotone growth function</u>		

**CHARACTERISTICS OF ASSESSMENT UNIT**

Area of assessment unit: 170,621 square kilometers

Minimum assessed accumulation size: 0.5 MMBOE (grown)

No. of discovered accumulations exceeding minimum size: Oil: 104 Gas: 114

<b>Uncertainty Class:</b>	Check One	Number
Producing fields	<u>X</u>	<u>218</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>3.18</u>	2nd 3rd	<u>3.23</u>	3rd 3rd	<u>1.97</u>
---------	-------------	---------	-------------	---------	-------------

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

1st 3rd	<u>76.1</u>	2nd 3rd	<u>38.8</u>	3rd 3rd	<u>38.9</u>
---------	-------------	---------	-------------	---------	-------------

**ANALOGS USED IN ESTIMATING INPUT**

<u>Purpose</u>	<u>Analog or Analog Set</u>
1 _____	_____ _____ _____
2 _____	_____ _____ _____
3 _____	_____ _____ _____
4 _____	_____ _____ _____

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

Magallanes Extensional Structures, 60590101

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 \_\_\_\_\_  
\_\_\_\_\_ 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 2 median 30 maximum 80  
Gas Accumulations: minimum 2 median 80 maximum 200

**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 0.5 median 1.5 maximum 100  
Gas in Gas Accumulations (BCFG): minimum 3 median 24 maximum 1500

### 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>500</u>	<u>2000</u>	<u>14000</u>
NGL/gas ratio (BNGL/MMCFG):	<u>5</u>	<u>12</u>	<u>24</u>
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (BLIQ/MMCFG):	<u>3</u>	<u>20</u>	<u>350</u>

**SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS**

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

	minimum	median	maximum
API gravity (degrees):	<u>25</u>	<u>42</u>	<u>55</u>
Viscosity (centipoise)	<u>0.5</u>	<u>0.7</u>	<u>1</u>
Sulfur content of oil (%):	<u>0</u>	<u>0.8</u>	<u>1</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>50</u>	<u>100</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>1000</u>		<u>2500</u>		<u>4000</u>

Gas Accumulations:

	minimum	median	maximum
Inert gas content (%):	<u>0</u>	<u>1.13</u>	<u>25</u>
Carbon dioxide content (%):	<u>0</u>	<u>0.11</u>	<u>65</u>
Hydrogen sulfide content (%):	<u>0</u>	<u>0</u>	<u>0</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>50</u>	<u>100</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>1000</u>		<u>3000</u>		<u>6000</u>

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

1 Offshore

27.25 area % of the AU

Oil in Oil Accumulations: 27.00 volume % of the AU

Gas in Gas Accumulations: 27.00 volume % of the AU

2 Onshore portion of:

Argentina

---

60.15 area % of the AU

Oil in Oil Accumulations: 60.00 volume % of the AU

Gas in Gas Accumulations: 60.00 volume % of the AU

3 Onshore portion of:

Chile

---

12.60 area % of the AU

Oil in Oil Accumulations: 13.00 volume % of the AU

Gas in Gas Accumulations: 13.00 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: Magallanes Basin, 6059

72.75 area % of the AU

Oil in Oil Accumulations: 73.00 volume % of the AU

Gas in Gas Accumulations: 73.00 volume % of the AU

OFFSHORE portion of: Magallanes Basin, 6059

27.25 area % of the AU

Oil in Oil Accumulations: 27.00 volume % of the AU

Gas in Gas Accumulations: 27.00 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