

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

**IDENTIFICATION INFORMATION**

Assessment Geologist:	<u>T.R. Klett</u>	Date:	<u>9-Aug-11</u>
Region:	<u>Former Soviet Union</u>	Number:	<u>1</u>
Province:	<u>Afghan-Tajik Basin</u>	Number:	<u>1156</u>
Total Petroleum System:	<u>Mesozoic-Cenozoic Composite</u>	Number:	<u>115601</u>
Assessment Unit:	<u>Western Gentle Folds and Subsalt</u>	Number:	<u>11560101</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: 30,082 square kilometers

Minimum assessed accumulation size: 1 MMBOE (grown)

No. of discovered accumulations exceeding minimum size: Oil: 3 Gas: 20

<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>        </u>	2nd 3rd	<u>        </u>	3rd 3rd	<u>        </u>
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Median size (grown) of discovered gas accumulations (BCFG):

1st 3rd	<u>1297</u>	2nd 3rd	<u>157</u>	3rd 3rd	<u>30</u>
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**ANALOGS USED IN ESTIMATING INPUT**

<u>Purpose</u>	<u>Analog or Analog Set</u>
1 <u>Number and sizes</u>	<u>Foreland basins, carbonate depositional systems</u>
2 <u>Coproducts and ancillary data</u>	<u>Murgab Depression, 11540103</u>
3 <u>        </u>	<u>        </u>
4 <u>        </u>	<u>        </u>

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

Western Gentle Folds and Subsalt, 11560101

Probability of occurrence (0-1.0)

Scenario Probability:

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

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

### 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) <u>          </u>	median <u>          </u>	maximum <u>          </u>
Oil/Gas Mix:	minimum <u>          </u>	mode <u>          </u>	maximum <u>          </u>
	<u>          </u> number of oil accumulations / number of total accumulations		
	<u>          </u> number of oil accumulations / number of gas accumulations		
	<u>          </u> number of gas accumulations / number of oil accumulations		
Oil Accumulations:	minimum <u>    1    </u>	median <u>    12   </u>	maximum <u>    24   </u>
Gas Accumulations:	minimum <u>    1    </u>	median <u>    98   </u>	maximum <u>   196   </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>    1    </u>	median <u>    3    </u>	maximum <u>    20   </u>
Gas in Gas Accumulations (BCFG):	minimum <u>    6    </u>	median <u>   18   </u>	maximum <u>  2500  </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>   2000   </u>	<u>   7000   </u>
NGL/gas ratio (BNGL/MMCFG):	<u>    1    </u>	<u>    15   </u>	<u>    85   </u>
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (BLIQ/MMCFG):	<u>    1    </u>	<u>    10   </u>	<u>    60   </u>

**SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS**

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

	minimum	median	maximum
API gravity (degrees):	26	32	40
Viscosity (centipoise): cs	3	5	25
Sulfur content of oil (%):	0	0.5	2.5
Depth (m) of water (if applicable):			

	minimum	F75	median	F25	maximum
Drilling Depth (m):	1800		2200		6000

Gas Accumulations:

	minimum	median	maximum
Inert gas content (%):	0	3	6
Carbon dioxide content (%):	0	1.2	10
Hydrogen sulfide content (%):	0	0.2	7
Depth (m) of water (if applicable):			

	minimum	F75	median	F25	maximum
Drilling Depth (m):	600		2500		6000

### ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore

0 area % of the AU

Oil in Oil Accumulations: 0 volume % of the AU

Gas in Gas Accumulations: 0 volume % of the AU

2 Onshore portion of:

Afghanistan

24.98 area % of the AU

Oil in Oil Accumulations: 24.98 volume % of the AU

Gas in Gas Accumulations: 24.98 volume % of the AU

3 Onshore portion of:

Tajikistan

0.76 area % of the AU

Oil in Oil Accumulations: 0.76 volume % of the AU

Gas in Gas Accumulations: 0.76 volume % of the AU

4 Onshore portion of:

Turkmenistan

16.67 area % of the AU

Oil in Oil Accumulations: 16.67 volume % of the AU

Gas in Gas Accumulations: 16.67 volume % of the AU

5 Onshore portion of:

Uzbekistan

57.59 area % of the AU

Oil in Oil Accumulations: 57.59 volume % of the AU

Gas in Gas Accumulations: 57.59 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: Afghan-Tajik Basin, 1156

100 area % of the AU

Oil in Oil Accumulations: 100 volume % of the AU

Gas in Gas Accumulations: 100 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

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