

**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-Nov-09</u>
Region:	<u>Former Soviet Union</u>	Number:	<u>1</u>
Province:	<u>Middle Caspian Basin</u>	Number:	<u>1109</u>
Total Petroleum System:	<u>Terek-Caspian</u>	Number:	<u>110901</u>
Assessment Unit:	<u>Foreland Slope and Foredeep</u>	Number:	<u>11090102</u>
Scenario:		Number:	
Based on Data as of:	<u>IHS Energy (2008)</u>		
Notes from Assessor:	<u>NRG Field Monotone reserve growth factor, 30 years</u>		
	<u>Median sizes of discovery thirds for fields >0.5 MMBOE</u>		

CHARACTERISTICS OF ASSESSMENT UNIT

Area of assessment unit: 48,171 square kilometers

Minimum assessed accumulation size: 1 MMBOE (grown)

No. of discovered accumulations exceeding minimum size: Oil: 2 Gas: 0

Uncertainty Class:	Check One	Number
Producing fields	<u> </u>	<u> </u>
Discoveries	<u> X </u>	<u>1 awaiting</u> develop., 1 disc.
Wells	<u> </u>	<u> </u>
Seismic	<u> </u>	
No seismic	<u> </u>	

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

1st 3rd 2nd 3rd 3rd 3rd

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

1st 3rd 2nd 3rd 3rd 3rd

ANALOGS USED IN ESTIMATING INPUT

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

Foreland Slope and Foredeep, 11090102

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	_____
		_____				_____
		_____				_____
		_____				_____
Oil Accumulations:	minimum	1	median	20	maximum	80
Gas Accumulations:	minimum	1	median	10	maximum	40

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	4	maximum	500
Gas in Gas Accumulations (BCFG):	minimum	6	median	24	maximum	3000

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		2000		14500
NGL/gas ratio (BNGL/MMCFG):		1		20		50
<u>Gas Accumulations:</u>	minimum	_____	median	_____	maximum	_____
Liquids/gas ratio (BLIQ/MMCFG):		2		25		70

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

<u>Oil Accumulations:</u>	minimum	median	maximum
API gravity (degrees):	<u>20</u>	<u>40</u>	<u>50</u>
Viscosity (centipoise): cs	<u>0.4</u>	<u>6</u>	<u>36</u>
Sulfur content of oil (%):	<u>0.01</u>	<u>0.2</u>	<u>2</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>250</u>	<u>700</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>1500</u>		<u>3000</u>		<u>5000</u>

<u>Gas Accumulations:</u>	minimum	median	maximum
Inert gas content (%):	<u>0</u>	<u>3</u>	<u>30</u>
Carbon dioxide content (%):	<u>0.1</u>	<u>3</u>	<u>15</u>
Hydrogen sulfide content (%):	<u>0</u>	<u>1</u>	<u>1.5</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>250</u>	<u>700</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>1500</u>		<u>3500</u>		<u>6000</u>

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore

53.44 area % of the AU

Oil in Oil Accumulations: 70 volume % of the AU

Gas in Gas Accumulations: 70 volume % of the AU

2 Onshore portion of:

Russia

46.56 area % of the AU

Oil in Oil Accumulations: 30 volume % of the AU

Gas in Gas Accumulations: 30 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: Middle Caspian Basin, 1109

46.56 area % of the AU

Oil in Oil Accumulations: 30 volume % of the AU

Gas in Gas Accumulations: 30 volume % of the AU

OFFSHORE portion of: Middle Caspian Basin, 1109

53.44 area % of the AU

Oil in Oil Accumulations: 70 volume % of the AU

Gas in Gas Accumulations: 70 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