

**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>North Caspian Basin</u>	Number:	<u>1016</u>
Total Petroleum System:	<u>Paleozoic Composite</u>	Number:	<u>101601</u>
Assessment Unit:	<u>South Margin Subsalt</u>	Number:	<u>10160104</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>		

CHARACTERISTICS OF ASSESSMENT UNIT

Area of assessment unit: 124,277 square kilometers

Minimum assessed accumulation size: 1 MMBOE (grown)

No. of discovered accumulations exceeding minimum size: Oil: 6 Gas: 4

Uncertainty Class:	Check One	Number
Producing fields	<u>X</u>	<u>3 prod., 1 develop.</u>
Discoveries	<u> </u>	<u>6</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>6529.0</u>	2nd 3rd	<u>758.1</u>	3rd 3rd	<u> </u>
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Median size (grown) of discovered gas accumulations (BCFG):

1st 3rd	<u>66426.0</u>	2nd 3rd	<u>699.8</u>	3rd 3rd	<u> </u>
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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.)

South Margin Subsalt, 10160104

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>50</u>	maximum <u>150</u>
Gas Accumulations:	minimum <u>1</u>	median <u>50</u>	maximum <u>150</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>6</u>	maximum <u>5000</u>
Gas in Gas Accumulations (BCFG):	minimum <u>6</u>	median <u>36</u>	maximum <u>30000</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>1000</u>	<u>2300</u>	<u>3500</u>
NGL/gas ratio (BNGL/MMCFG):	<u>1</u>	<u>20</u>	<u>50</u>
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (BLIQ/MMCFG):	<u>1</u>	<u>32</u>	<u>60</u>

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SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

	minimum	median	maximum
API gravity (degrees):	<u>10</u>	<u>42</u>	<u>50</u>
Viscosity (centipoise): cs	<u>0.25</u>	<u>0.3</u>	<u>0.4</u>
Sulfur content of oil (%):	<u>0.1</u>	<u>3</u>	<u>8</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>15</u>	<u>25</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>3700</u>		<u>4000</u>		<u>4500</u>

Gas Accumulations:

	minimum	median	maximum
Inert gas content (%):	<u>0</u>	<u>4</u>	<u>15</u>
Carbon dioxide content (%):	<u>0.1</u>	<u>16</u>	<u>25</u>
Hydrogen sulfide content (%):	<u>0</u>	<u>30</u>	<u>35</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>15</u>	<u>25</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>3700</u>		<u>4900</u>		<u>6000</u>

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ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore

36.73 area % of the AU

Oil in Oil Accumulations: 45.00 volume % of the AU

Gas in Gas Accumulations: 40.00 volume % of the AU

2 Onshore portion of:

Kazakhstan

29.87 area % of the AU

Oil in Oil Accumulations: 30.00 volume % of the AU

Gas in Gas Accumulations: 25.00 volume % of the AU

3 Onshore portion of:

Russia

33.39 area % of the AU

Oil in Oil Accumulations: 25.00 volume % of the AU

Gas in Gas Accumulations: 35.00 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

Assessment Unit (name, no.)
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South Margin Subsalt, 10160104

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO PROVINCES

1 ONSHORE portion of: North Caspian Basin, 1016
63.27 area % of the AU
Oil in Oil Accumulations: 55.00 volume % of the AU
Gas in Gas Accumulations: 60.00 volume % of the AU

OFFSHORE portion of: North Caspian Basin, 1016
36.73 area % of the AU
Oil in Oil Accumulations: 45.00 volume % of the AU
Gas in Gas Accumulations: 40.00 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