

CIRCUM-ARCTIC RESOURCE ASSESSMENT
GEOLOGIC DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS (Version 5.1, June 4, 2007)

IDENTIFICATION INFORMATION

Assessment Geologist:	T.R. Klett	Date:	12-Feb-08
Region:	Former Soviet Union	Number:	1
Province:	East Barents Basins	Number:	1050
Total Petroleum System:	Paleozoic-Mesozoic Composite	Number:	105001
Assessment Unit:	North Barents Basin	Number:	10500103
Scenario:		Number:	
Based on Data as of:			
Notes from Assessor:			

CHARACTERISTICS OF ASSESSMENT UNIT

Area of assessment unit: 465,804 square kilometers

Minimum assessed accumulation size: 50 mmboe (grown)

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

Uncertainty Class:	Check One	Number
Producing fields	<u> </u>	<u> </u>
Discoveries	<u> </u>	<u> </u>
Wells	<u> X </u>	<u> 4 </u>
Seismic	<u> </u>	<u> </u>
No seismic	<u> </u>	<u> </u>

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

1st 3rd		2nd 3rd		3rd 3rd	
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Median size (grown) of discovered gas accumulations (bcfg):

1st 3rd		2nd 3rd		3rd 3rd	
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ANALOGS USED IN ESTIMATING INPUT

<u>Purpose</u>	<u>Analog or Analog Set</u>
1 <u>Number and sizes</u>	Rift/sag
	Prospect maps
	Possibility of reefs
2 <u>Composition</u>	Produced hydrocarbons on Kolguyev Island and analyses of
	South Barents hydrocarbons
	IHS Energy (2007)
3 <u> </u>	
4 <u> </u>	

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

North Barents Basin, 10500103

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. CHARGE: Adequate petroleum charge:	<u>0.8</u>
2. ROCKS: Adequate reservoirs, traps, and seals:	<u>0.7</u>
3. TIMING OF GEOLOGIC EVENTS: Favorable timing:	<u>0.9</u>
Assessment-Unit GEOLOGIC Probability (Product of 1, 2, and 3):	<u>0.504</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>1</u>	median <u>70</u>	maximum <u>140</u>
Oil/Gas Mix:	minimum (>0) <u>0.1</u>	mode <u>0.3</u>	maximum <u>0.6</u>
	<u>X</u> # of oil accumulations / # of total accumulations		
	# of oil accumulations / # of gas accumulations		
	# of gas accumulations / # of oil accumulations		
Oil Accumulations:	minimum (>0) <u>0</u>	median <u>22</u>	maximum <u>84</u>
Gas Accumulations:	minimum (>0) <u>1</u>	median <u>48</u>	maximum <u>126</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 (mmbb):	minimum <u>50</u>	median <u>110</u>	maximum <u>30000</u>
Gas in Gas Accumulations (bcfg):	minimum <u>300</u>	median <u>660</u>	maximum <u>500000</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>0</u>	<u>1300</u>	<u>20000</u>
NGL/gas ratio (bnlq/mmcf):	<u>0</u>	<u>11</u>	<u>82</u>
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (bliq/mmcf):	<u>0</u>	<u>2</u>	<u>75</u>

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

	minimum	median	maximum
API gravity (degrees):	30	40	55
Viscosity (centipoise)	0.01	3	30
Sulfur content of oil (%):	0	0.3	1.5
Depth (m) of water (if applicable):	0	200	600

	minimum	F75	median	F25	maximum
Drilling Depth (m):	1000		3000		5000

Gas Accumulations:

	minimum	median	maximum
Inert gas content (%):	0	2	60
Carbon dioxide content (%):	0	0.2	10
Hydrogen sulfide content (%):	0	0	0
Depth (m) of water (if applicable):	0	200	600

	minimum	F75	median	F25	maximum
Drilling Depth (m):	1000		3000		6500

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ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ARCTIC AREA

1 North of Arctic Circle

100 area % of the AU

Oil in Oil Accumulations: 100 volume % of the AU

Gas in Gas Accumulations: 100 volume % of the AU

2 South of Arctic Circle

 area % of the AU

Oil in Oil Accumulations: volume % of the AU

Gas in Gas Accumulations: volume % of the AU

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ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore

96.61 area % of the AU

Oil in Oil Accumulations: 100 volume % of the AU

Gas in Gas Accumulations: 100 volume % of the AU

2 Onshore portion of:

Russia

3.39 area % of the AU

Oil in Oil Accumulations: 0 volume % of the AU

Gas in Gas Accumulations: 0 volume % of the AU

3 Onshore portion of:

Norway

0.00 area % of the AU

Oil in Oil Accumulations: 0 volume % of the AU

Gas in Gas Accumulations: 0 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