

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

IDENTIFICATION INFORMATION

Assessment Geologist:	<u>D.L. Gautier</u>	Date:	<u>12-Feb-08</u>
Region:	<u>Europe</u>	Number:	<u>4</u>
Province:	<u>Barents Platform</u>	Number:	<u>4012</u>
Total Petroleum System:	<u>Paleozoic-Mesozoic Composite</u>	Number:	<u>401201</u>
Assessment Unit:	<u>Barents Platform North</u>	Number:	<u>40120101</u>
Scenario:	<u></u>	Number:	<u></u>
Based on Data as of:	<u></u>		
Notes from Assessor:	<u></u>		

CHARACTERISTICS OF ASSESSMENT UNIT

Area of assessment unit: 299,530 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></u>	<u></u>
Seismic	<u>X</u>	<u></u>
No seismic	<u></u>	<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>Numbers</u>	<u>Carbonate shelves, paralic clastics</u>
	<u></u>
	<u></u>
2 <u>Sizes</u>	<u>Prospect analysis from NPD</u>
	<u>Barents Platform South (internal analog?)</u>
	<u></u>
3 <u>Oil vs Gas</u>	<u>Modified from discoveries in South Barents</u>
	<u>Global statistics</u>
	<u></u>
4 <u>Coproducts</u>	<u>South Barents accumulations, global stats</u>
	<u></u>
	<u></u>

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

Barents Platform North, 40120101

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:	0.9
2. ROCKS: Adequate reservoirs, traps, and seals:	0.8
3. TIMING OF GEOLOGIC EVENTS: Favorable timing:	0.5
Assessment-Unit GEOLOGIC Probability (Product of 1, 2, and 3):	0.360

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)	1	median	20	maximum	60
Oil/Gas Mix:	minimum (>0)	0.1	mode	0.3	maximum	0.5
	X	# of oil accumulations / # of total accumulations				
		# of oil accumulations / # of gas accumulations				
		# of gas accumulations / # of oil accumulations				
Oil Accumulations:	minimum (>0)	0	median	6	maximum	30
Gas Accumulations:	minimum (>0)	1	median	14	maximum	54

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	50	median	115	maximum	1200
Gas in Gas Accumulations (bcfg):	minimum	300	median	700	maximum	7000

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):	500	2300	20000
NGL/gas ratio (bnlq/mmcf):	5	20	80
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (bliq/mmcf):	0	5	75

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

	minimum	median	maximum
API gravity (degrees):	20	34	50
Viscosity (centipoise)	0.2	0.6	1.8
Sulfur content of oil (%):	0	0.3	1.5
Depth (m) of water (if applicable):	0	250	500

	minimum	F75	median	F25	maximum
Drilling Depth (m):	500		2000		4000

Gas Accumulations:

	minimum	median	maximum
Inert gas content (%):	0	1	5
Carbon dioxide content (%):	0.1	0.3	1
Hydrogen sulfide content (%):	0	0	0
Depth (m) of water (if applicable):	0	250	500

	minimum	F75	median	F25	maximum
Drilling Depth (m):	500		2000		4000

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

Barents Platform North, 40120101

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

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore

89.93 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:

Norway

10.07 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:

 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