Supplementary Appendix 5. Assessment input data for the Greater Ungava Fault Zone Assessment Unit.

[MMBO, million barrels of oil; BCFG, billion cubic feet of gas; MMBNGL, million barrels of natural-gas liquids; MMBOE, million barrels of oil equivalent; NGL, natural gas liquids; CFG/BO, cubic feet of gas per barrel of oil; BNGL/MMCFG, barrels of natural gas liquids per million cubic feet of gas; BLIQ/MMCFG, barrels of liquids per million cubic feet of gas; AU, assessment unit; TPS, total petroleum system. F75 denotes a 75-percent chance; F25 denotes a 25-percent chance.]

Appendix 9.
CIRCUM-ARCTIC RESOURCE ASSESSMENT
GEOLOGIC DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS (Version 5.1, June 4, 2007)

IDENTIFICATION INFORMATION

Assessment Geologist:	C.J. Schenk	Date:	14-Dec-07
Region:	North America	Number:	5
Province:	West Greenland-East Canada	Number:	5208
Total Petroleum System:	Mesozoic-Cenozoic Composite	Number:	520801
Assessment Unit:	Greater Ungava Fault Zone	Number:	52080105
Scenario:		Number:	
Based on Data as of:			
Notes from Assessor:			

CHARACTERISTICS OF ASSESSMENT UNIT

Area of assessment unit: 145,000 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		
Discoveries		
Wells	X	2
Seismic		
No seismic		

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

	Purpose	Analog or Analog Set
1	Number of Accumulations	Strike-Slip
2	Sizes of Accumulations	Strike-Slip
3	Ancillary Data	World averages
4		

Assessment Unit (name, no.) Greater Ungava Fault Zone, 52080105

Scenario (name, no.)

	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:	0.5
2. **ROCKS:** Adequate reservoirs, traps, and seals:	1.0
3. **TIMING OF GEOLOGIC EVENTS:** Favorable timing:	0.6
Assessment-Unit GEOLOGIC Probability (Product of 1, 2, and 3):	0.30

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	50	maximum 150
Oil/Gas Mix:		minimum (>0)	10	mode	50	maximum 90
	X	no. of oil accumulations / no. of total accumulations				
		no. of oil accumulations / no. of gas accumulations				
		no. of gas accumulations / no. of oil accumulations				
Oil Accumulations:		minimum (>0)	1	median	25	maximum 135
Gas Accumulations:		minimum (>0)	1	median	25	maximum 135

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	50	median	100	maximum 5000
Gas in Gas Accumulations (BCFG):	minimum	300	median	600	maximum 30000

RATIOS FOR UNDISCOVERED ACCUMULATIONS, TO ASSESS COPRODUCTS

(variations in the properties of undiscovered accumulations)

	minimum	median	maximum
Oil Accumulations:			
Gas/oil ratio (CFG/BO):	50	1700	15000
NGL/gas ratio (BNGL/MMCFG):	5	16	60
Gas Accumulations:			
Liquids/gas ratio (BLIQ/MMCFG):	10	20	52

Assessment Unit (name, no.): Greater Ungava Fault Zone, 52080105

Scenario (name, no.):

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

Oil Accumulations:	minimum	median	maximum
API gravity (degrees):	23	40	55
Viscosity (centipoise)	120	280	8200
Sulfur content of oil (%):	0.24	0.7	5
Depth (m) of water (if applicable):	0	500	800

	minimum	F75	median	F25	maximum
Drilling Depth (m):	500		2000		5000

Gas Accumulations:	minimum	median	maximum
Inert gas content (%):	1.5	3.8	17
Carbon dioxide content (%):	1.4	5	28
Hydrogen sulfide content (%):	0.7	1.5	6
Depth (m) of water (if applicable):	0	500	800

	minimum	F75	median	F25	maximum
Drilling Depth (m):	500		2500		8000

Assessment Unit (name, no.) Greater Ungava Fault Zone, 52080105

Scenario (name, no.)

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ARCTIC AREA

1 North of Arctic Circle

59.16 area % of the AU

Oil in Oil Accumulations: 59.16 volume % of the AU

Gas in Gas Accumulations: 59.16 volume % of the AU

2 South of Arctic Circle

40.84 area % of the AU

Oil in Oil Accumulations: 40.84 volume % of the AU

Gas in Gas Accumulations: 40.84 volume % of the AU

Assessment Unit (name, no.) Greater Ungava Fault Zone (52080105)

Scenario (name, no.)

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore portion of

96.8 area % of the AU

Oil in Oil Accumulations: 96.8 volume % of the AU
Gas in Gas Accumulations: 96.8 volume % of the AU

2 Onshore portion of: Greenland

3.2 area % of the AU

Oil in Oil Accumulations: 3.2 volume % of the AU
Gas in Gas Accumulations: 3.2 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

Assessment Unit (name, no.) Greater Ungava Fault Zone, 52080105
Scenario (name, no.) _____

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO PROVINCES

1 ONSHORE portion of: West Greenland-East Canada

3.2 area % of the AU

Oil in Oil Accumulations: 3.2 volume % of the AU
Gas in Gas Accumulations: 3.2 volume % of the AU

OFFSHORE portion of: West Greenland-East Canada

96.8 area % of the AU

Oil in Oil Accumulations: 96.8 volume % of the AU
Gas in Gas Accumulations: 96.8 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

Assessment Unit (name, no.) Greater Ungava Fault Zone, 52080105
Scenario (name, no.) _____

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

Assessment Unit (name, no.) Greater Ungava Fault Zone, 52080105
Scenario (name, no.) _____

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ICE CONDITIONS

1 Province: _____

Permanent sea ice _____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

Semi-permanent sea ice 100 area % of the AU

Oil in Oil Accumulations: 100 volume % of the AU
Gas in Gas Accumulations: 100 volume % of the AU

2 Province: _____

Permanent sea ice _____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

Semi-permanent sea ice _____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

3 Province: _____

Permanent sea ice _____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU

Semi-permanent sea ice _____ area % of the AU

Oil in Oil Accumulations: _____ volume % of the AU
Gas in Gas Accumulations: _____ volume % of the AU