

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

IDENTIFICATION INFORMATION

Assessment Geologist:	<u>D.W. Houseknecht</u>	Date:	<u>30-Jul-07</u>
Region:	<u>North America</u>	Number:	<u>5</u>
Province:	<u>Arctic Alaska</u>	Number:	<u>5000</u>
Total Petroleum System:	<u>Mesozoic Composite</u>	Number:	<u>500001</u>
Assessment Unit:	<u>Alaskan Platform</u>	Number:	<u>50000101</u>
Scenario:		Number:	
Based on Data as of:	<u>USGS, MMS, Alaska DNR, GSC, CEB</u>		
Notes from Assessor:	<u></u>		

CHARACTERISTICS OF ASSESSMENT UNIT

Area of assessment unit: 197,153 square kilometers

Minimum assessed accumulation size: 50 mmboe (grown)

No. of discovered accumulations exceeding minimum size: Oil: 15 Gas: 2

Uncertainty Class:	Check One	Number
Producing fields	<u>X</u>	<u>10</u>
Discoveries	<u></u>	<u></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>500</u>	2nd 3rd	<u>200</u>	3rd 3rd	<u>50</u>
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Median size (grown) of discovered gas accumulations (bcfg):

1st 3rd	<u></u>	2nd 3rd	<u></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>Number and sizes</u>	<u>Internal analog - North Alaska accumulations</u> <u>Extensional, continental crust without compressional or salt-related</u> <u>components</u>
2 <u></u>	<u></u>
3 <u></u>	<u></u>
4 <u></u>	<u></u>

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

Alaskan Platform, 50000101

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)	25	median	150	maximum	300
Oil/Gas Mix:	minimum (>0)	0.3	mode	0.6	maximum	0.8
	X	# of oil accumulations / # of total accumulations				
		# of oil accumulations / # of gas accumulations				
		# of gas accumulations / # of oil accumulations				
Oil Accumulations:	minimum (>0)	8	median	85	maximum	240
Gas Accumulations:	minimum (>0)	5	median	60	maximum	200

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	150	maximum	8000
Gas in Gas Accumulations (bcfg):	minimum	300	median	900	maximum	50000

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	900	20000
NGL/gas ratio (bnlq/mmcf):	5	25	80
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (bliq/mmcf):	4	25	75

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

Oil Accumulations:

	minimum	median	maximum
API gravity (degrees):	<u>20</u>	<u>32</u>	<u>55</u>
Viscosity (centipoise)	<u>1</u>	<u>3</u>	<u>30</u>
Sulfur content of oil (%):	<u>0</u>	<u>0.5</u>	<u>2</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>25</u>	<u>200</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>1500</u>		<u>2500</u>		<u>5000</u>

Gas Accumulations:

	minimum	median	maximum
Inert gas content (%):	<u>0</u>	<u>2</u>	<u>10</u>
Carbon dioxide content (%):	<u>0</u>	<u>2</u>	<u>10</u>
Hydrogen sulfide content (%):	<u>0</u>	<u>0.5</u>	<u>3.5</u>
Depth (m) of water (if applicable):	<u>0</u>	<u>25</u>	<u>200</u>

	minimum	F75	median	F25	maximum
Drilling Depth (m):	<u>2000</u>		<u>3000</u>		<u>8000</u>

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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

69.84 area % of the AU

Oil in Oil Accumulations: 60.00 volume % of the AU

Gas in Gas Accumulations: 80.00 volume % of the AU

2 Onshore portion of:

U.S.A.

30.16 area % of the AU

Oil in Oil Accumulations: 40.00 volume % of the AU

Gas in Gas Accumulations: 20.00 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