## Chukchi Sea Play 12: Torok Turbidites (Lower Brookian)-Chukchi Wrench Zone

### Geological Assessment

*GRASP UAI: AAAAA DAM*
*Play Area: 15,678 square miles*
*Play Water Depth Range: 100-170 feet*
*Play Depth Range: 3,500-19,000 feet*
*Play Exploration Chance: 0.072*

**Play 12, Torok Turbidites (Lower Brookian)-Chukchi Wrench Zone, Chukchi Sea OCS Planning Area, 2006 Assessment, Undiscovered Technically-Recoverable Oil & Gas**

Assessment Results as of November 2005

| Resource Commodity (Units) | Resources * | | |
|---|---|---|---|
| | F95 | Mean | F05 |
| BOE (Mmboe) | 51 | 500 | 1,353 |
| Total Gas (Tcfg) | 0.138 | 1.496 | 4.222 |
| Total Liquids (Mmbo) | 26 | 234 | 602 |
| Free Gas** (Tcfg) | 0.095 | 1.142 | 3.357 |
| Solution Gas (Tcfg) | 0.044 | 0.353 | 0.866 |
| Oil (Mmbo) | 22 | 172 | 419 |
| Condensate (Mmbc) | 5 | 62 | 183 |

** Risked, Technically-Recoverable*

*** Free Gas Includes Gas Cap and Non-Associated Gas*

*F95 = 95% chance that resources will equal or exceed the given quantity*

*F05 = 5% chance that resources will equal or exceed the given quantity*

*BOE = total hydrocarbon energy, expressed in barrels-of-oil-equivalent, where 1 barrel of oil = 5,620 cubic feet of natural gas*

*Mmb = millions of barrels*

*Tcf = trillions of cubic feet*

**Table 1**

Play 12, the "Torok Turbidites-Chukchi Wrench Zone" play, is the 12th-ranking play (of 29 plays) in the Chukchi Sea OCS Planning Area, with 1.7% (500 Mmboe) of the Planning Area energy endowment (29,041 Mmboe). The overall assessment results for play 12 are shown in table 1. Oil and gas-condensate liquids form 47% of the hydrocarbon energy endowment of play 12. Table 5 reports the detailed assessment results by commodity for play 12.

Table 3 summarizes the volumetric input data developed for the *GRASP* computer model of Chukchi Sea play 12. Table 4 reports the risk model used for play 12. The location of play 12 is shown in figure 1.

Potential reservoirs are primarily turbidite sandstones within Lower Cretaceous Torok Formation shales deposited in a prodelta system on the shelf terrace between Colville and North Chukchi basins and on Chukchi platform. Substantial sandstone sequences are possible. For example, a sequence of turbiditic sandstones over 300 ft thick (gross) was encountered at the base of the Torok Formation in Crackerjack well. Prospects are fault traps and faulted anticlines along transtensional ("wrench") faults that were active in early Tertiary time. The transtensional faults lie in several discrete north-trending, densely-faulted zones in southern parts of the play area. Several evaporite diapirs pierce this play and create traps against diapir flanks in a narrow graben just west of Popcorn well. This play is charged by the Hanna trough play charging system, with some hydrocarbons possibly re-migrating into Brookian sandstones from deeper Ellesmerian stratigraphic traps disrupted by Paleocene faults. The play was penetrated at three wells, with pooled oil apparently present (logs) at Crackerjack and Klondike wells and minor oil shows present in a turbidite sandstone at Popcorn well.

A maximum of 24 hypothetical pools is forecast by the aggregation of the risk model

and the prospect numbers model for play 12. These 24 pools range in mean conditional (un-risked) recoverable volumes from 6 Mmboe (pool rank 24) to 283 Mmboe (pool rank 1). Pool rank 1 ranges in possible conditional recoverable volumes from 36 Mmboe (F95) to 775 Mmboe (F05). Table 2 shows the conditional sizes of the 10 largest pools in play 12.

| Play 12, Torok Turbidites (lower Brookian)-Chukchi Wrench Zone, Chukchi Sea OCS Planning Area, 2006 Assessment, Conditional BOE Sizes of Ten Largest Pools | | | |
|---|---|---|---|
| Assessment Results as of November 2005 | | | |
| **Pool Rank** | **BOE Resources *** | | |
| | **F95** | **Mean** | **F05** |
| **1** | 36 | 283 | 775 |
| **2** | 16 | 112 | 304 |
| **3** | 10 | 67 | 171 |
| **4** | 7 | 46 | 118 |
| **5** | 5 | 34 | 88 |
| **6** | 5 | 27 | 70 |
| **7** | 4 | 23 | 57 |
| **8** | 3.7 | 19 | 49 |
| **9** | 3.4 | 17 | 43 |
| **10** | 3.2 | 16 | 38 |

** Conditional, Technically-Recoverable, Millions of Barrels Energy-Equivalent (Mmboe), from "PSRK.out" file*

*F95 = 95% chance that resources will equal or exceed the given quantity*

*F05 = 5% chance that resources will equal or exceed the given quantity*

*BOE = total hydrocarbon energy, expressed in barrels-of-oil-equivalent, where 1 barrel of oil = 5,620 cubic feet of natural gas*

**Table 2**

In the computer simulation for play 12 a total of 50,246 “simulation pools” were sampled for size. These simulation pools can be grouped according to the USGS size class system in which sizes double with each successive class. Pool size class 11 contains the largest share (11,285, or 22%) of simulation pools (conditional, technically recoverable BOE resources) for play 12. Pool size class 11 ranges from 32 to 64 Mmboe. The largest 3 simulation pools for play 12 fall within pool size class 18, which ranges in size from 4,096 to 8,192 Mmboe. Table 6 reports statistics for the simulation pools developed in the GRASP computer model for play 12.

## *GRASP* Play Data Form (Minerals Management Service-Alaska Regional Office)

**Basin**: Chukchi Sea Planning Area
**Play Number**: 12
**Play UAI Number**: AAAAA DAM

**Assessor**: K.W. Sherwood
**Play Name**: Torok Turbidites (Lower Brookian) - Chukchi Wrench Zone

**Date**: January 2005

**Play Area**: mi² ( million acres) 15,678 (10.034)
**Reservoir Thermal Maturity**: % Ro 0.82 - 1.34

**Play Depth Range**: feet 3,500 - 19,000 (mean = 9,162)
**Expected Oil Gravity**: ° API 30
**Play Water Depth Range**: feet 100 - 170 (mean = 155)

### *POOLS* Module (Volumes of Pools, Acre-Feet)

| Fractile | F100 | F95 | F90 | F75 | F50 | Mean/Std. Dev. | F25 | F15 | F10 | F05 | F02 | F01 | F00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Prospect Area (acres)-Model Input* | 1445 | | 2529 | | 9434 | 15994/21894 | | | 35202 | | | | 133713 |
| Prospect Area (acres)-Model Output** | 1448 | 2273 | 2900 | 5087 | 9677 | 15253/16912 | 18577 | 26590 | 33689 | 47574 | | | 131499 |
| Fill Fraction (Fraction of Area Filled) | 0.18 | 0.30 | 0.32 | 0.37 | 0.43 | 0.44/0.10 | 0.50 | 0.54 | 0.57 | 0.62 | | | 1.00 |
| Productive Area of Pool (acres)*** | 401 | 910 | 1217 | 2150 | 4146 | 6791/8020 | 8221 | 11744 | 14960 | 21697 | 28000 | 32000 | 78056 |
| Pay Thickness (feet) | 8 | 28 | 34 | 45 | 63 | 71/36 | 87 | 104 | 117 | 140 | 170 | 194 | 500 |

* model fit to prospect area data in *BESTFIT*
** output from *@RISK* after aggregation with fill fraction
*** from *@RISK* aggregation of probability distributions for prospect area and fill fraction

### *MPRO* Module (Numbers of Pools)

| | |
|---|---|
| Input Play Level Chance * | 1 * |
| Output Play Level Chance** | 0.9899 |

| | |
|---|---|
| Prospect Level Chance | 0.072 |

| | |
|---|---|
| Exploration Chance | 0.072 |

* (Pooled oil [logs] encountered at Klondike and Crackerjack wells)

** First Occurrence of Non Zero Pools As Reported in PSUM Module

| Risk Model | Play Chance | Petroleum System Factors | Prospect Chance |
|---|---|---|---|
| | | Closure Reliability | 0.6 |
| | | Reservoir Presence | 0.6 |
| | | Chance Porosity > 10% | 0.25 |
| | | Migration (risk of diversion up transtensional faults) | 0.8 |
| | | | |
| | | | |
| | | | |

| Fractile | F99 | F95 | F90 | F75 | F50 | Mean/Std. Dev. | F25 | F15 | F10 | F05 | F02 | F01 | F00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Numbers of Prospects in Play | 40 | 47 | 50 | 56 | 68 | 69.79/17.06 | 79 | 85 | 90 | 97 | 110 | 120 | 160 |
| Numbers of Pools in Play | 1 | 1 | 2 | 3 | 5 | 5.02/2.48 | 7 | 8 | 8 | 9 | 11 | 12 | 24 |

Zero Pools at F99.01

| | | | | | |
|---|---|---|---|---|---|
| Minimum Number of Pools | 1 (F99) | Mean Number of Pools | 5.02 | Maximum Number of Pools | 24 |

### *POOLS/PSRK/PSUM* Modules (Play Resources)

| Fractile | F100 | F95 | F90 | F75 | F50 | Mean/Std. Dev. | F25 | F15 | F10 | F05 | F02 | F01 | F00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Oil Recovery Factor (bbl/acre-foot) | 20 | 44 | 50 | 66 | 91 | 109/65 | 133 | 163 | 190 | 232 | 290 | 320 | 701 |
| Gas Recovery Factor (Mcfg/acre-foot) | 327 | 617 | 701 | 860 | 1102 | 1229/540 | 1448 | 1707 | 1898 | 2253 | 2600 | 2800 | 4972 |
| Gas Oil Ratio (Sol'n Gas)(cf/bbl) | 540 | 1450 | 1600 | 1800 | 2050 | 2059/433 | 2350 | 2500 | 2575 | 2700 | 2850 | 3000 | 3600 |
| Condensate Yield ((bbl/Mmcfg) | 13 | 29 | 33 | 40 | 50 | 54/19 | 64 | 72 | 79 | 90 | 105 | 120 | 200 |

Pool Size Distribution Statistics from *POOLS* (1,000 BOE): μ (mu)= 10.793 σ² (sigma squared)= 1.430
Random Number Generator Seed= 499322

| | |
|---|---|
| BOE Conversion Factor (cf/bbl) | 5620 |
| Probability Any Pool is 100% Oil | 0.2 |
| Probability Any Pool is 100% Gas | 0.2 |

| | |
|---|---|
| Probability Any Pool Contains Both Oil and Free Gas (Gas Cap) | 0.6 |
| Fraction of Pool Volume Gas-Bearing in Oil Pools with Gas Cap | 0.3 |

**Table 3**. Input data for Chukchi Sea play 12, 2006 assessment.

## Risk Analysis Form - 2006 National Assessment

| | | | |
|---|---|---|---|
| **Assessment Province:** | Chukchi Sea OCS Planning Area | **Play Number, Name:** | 12. Torok Turbidites (Lower Brookian) - Chukchi Wrench Zone |
| **Assessor(s):** | K.W. Sherwood | **Play UAI:** | AAAAA DAM |
| **Date:** | 1-Jan-05 | | |

For each component, a *quantitative* probability of success (i.e., between zero and one, where zero indicates no confidence and one indicates absolute certainty) based on consideration of the *qualitative* assessment of **ALL** elements within the component was assigned. This is the assessment of the probability that the minimum geologic parameter assumptions have been met or exceeded.

| | | | Play Chance Factors | Averge Conditional Prospect Chance[1] |
|---|---|---|---|---|
| **1.** | **Hydrocarbon Fill component** (1a * 1b * 1c) | **1** | ***1.0000*** | ***0.8000*** |
| | **a. Presence of a Quality, Effective, Mature Source Rock** | | | |
| | Probability of efficient source rock in terms of the existence of sufficient volume of mature source rock of adequate quality located in the drainage area of the reservoirs. | 1a | 1.00 | 1.00 |
| | **b. Effective Expulsion and Migration** | | | |
| | Probability of effective expulsion and migration of hydrocarbons from the source rock to the reservoirs. | 1b | 1.00 | 0.80 |
| | **c. Preservation** | | | |
| | Probability of effective retention of hydrocarbons in the prospects after accumulation. | 1c | 1.00 | 1.00 |
| **2.** | **Reservoir component** (2a * 2b) | **2** | ***1.0000*** | ***0.1500*** |
| | **a. Presence of reservoir facies** | | | |
| | Probability of presence of reservoir facies with a minimum net thickness and net/gross ratio (as specified in the resource assessment). | 2a | 1.00 | 0.60 |
| | **b. Reservoir quality** | | | |
| | Probability of effectiveness of the reservoir, with respect to minimum effective porosity, and permeability (as specified in the resource assessment). | 2b | 1.00 | 0.25 |
| **3.** | **Trap component** (3a * 3b) | **3** | ***1.0000*** | ***0.6000*** |
| | **a. Presence of trap** | | | |
| | Probability of presence of the trap with a minimum rock volume (as specified in the resource assessment). | 3a | 1.00 | 0.60 |
| | **b. Effective seal mechanism** | | | |
| | Probability of effective seal mechanism for the trap. | 3b | 1.00 | 1.00 |
| **Overall Play Chance (Marginal Probability of hydrocarbons, MPhc)** | | | ***1.0000*** | |
| | (1 * 2 * 3) *Product of All Subjective Play Chance Factors* | | | |
| **Average Conditional Prospect Chance[1]** | | | | ***0.0720*** |
| | (1 * 2 * 3) *Product of All Subjective Conditional Prospect Chance Factors* | | | |
| | ***[1] Assumes that the Play exists (where all play chance factors = 1.0)*** | | | |
| | ***Must be consistent with play chance and prospect distribution -- See discussion on Page 3 of Guide*** | | | |
| **Exploration Chance** | | | ***0.0720*** | |
| | *(Product of Overall Play Chance and Average Conditional Prospect Chance)* | | | |

**Comments:** *See guidance document for explanation of the Risk Analysis Form*

2b: Chance That Porosity >10%, Based on Regional Model for Porosity vs Reservoir Thermal Maturity

Pooled oil (apparent log pay) was encountered at Crackerjack 1 and Klondike 1 wells. Oil shows were observed at the Popcorn 1 well.

**Table 4**. Risk model for Chukchi Sea play 12, 2006 assessment.

**GRASP - Geologic and Economic Resource Assessment Model - PSUM Module Results**

Minerals Management Service - Alaska OCS Region

GRASP Model Version: 8.29.2005)

Computes the Geologic Resource Potential of the Play

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Play UAI:** | **AAAAADAM** | | **Play No.** | | **12** | | |
| World | Level | - | World | Level | | Resources | |
| Country | Level | - | UNITED | STATES | | OF | AMERICA |
| Region | Level | - | MMS | - | | ALASKA | REGION |
| Basin | Level | - | **CHUKCHI** | **SEA** | | **SHELF** | |
| **Play** | **Level** | **-** | **Play** | | **12** | **Torok Turbidites (Lower Brookian) - Chukchi Wrench Zone** | |
| Geologist | Kirk | W. | Sherwood | | | | |
| Remarks | 2005 | Assessment | | | | | |
| Run Date & Time: | | Date | 19-Sep-05 | Time | | 13:54:21 | |

**Summary of Play Potential**

| Product | MEAN | Standard Deviation |
|---|---|---|
| **BOE (Mboe)** | 500,480 | 453,700 |
| **Oil (Mbo)** | 172,110 | 186,230 |
| **Condensate (Mbc)** | 62,273 | 76,967 |
| **Free (Gas Cap & Nonassociated) Gas (Mmcfg)** | 1,142,300 | 1,294,100 |
| **Solution Gas (Mmcfg)** | 353,200 | 384,990 |

10000 (Number of Trials in Sample)

0.9899 (MPhc [Probability] of First Occurrence of Non-Zero Resource)

Windowing Feature: used

**Empirical Probability Distributions of the Products**

| Greater Than Percentage | BOE (Mboe) | Oil (Mbo) | Condensate (Mbc) | Free (Gas Cap & Nonassociated) Gas (Mmcfg) | Solution Gas (Mmcfg) |
|---|---|---|---|---|---|
| 100 | 0 | 0 | 0 | 0 | 0 |
| 99.99 | 0 | 0 | 0 | 0 | 0 |
| 99 | 3,625 | 1,588 | 330 | 6,545 | 3,053 |
| 95 | 51,088 | 21,814 | 4,649 | 94,571 | 43,820 |
| 90 | 93,785 | 36,159 | 9,861 | 194,580 | 73,857 |
| 85 | 129,100 | 50,145 | 13,840 | 263,430 | 102,510 |
| 80 | 164,360 | 59,579 | 19,177 | 358,650 | 122,430 |
| 75 | 198,680 | 69,957 | 22,940 | 451,860 | 142,610 |
| 70 | 233,610 | 87,912 | 26,475 | 489,990 | 180,060 |
| 65 | 267,270 | 94,314 | 31,232 | 603,300 | 193,160 |
| 60 | 304,690 | 115,640 | 32,960 | 640,630 | 236,600 |
| 55 | 339,380 | 121,670 | 38,960 | 755,510 | 249,060 |
| 50 | 384,060 | 136,170 | 45,800 | 853,000 | 282,800 |
| 45 | 425,460 | 142,440 | 55,343 | 979,090 | 300,480 |
| 40 | 472,770 | 171,130 | 56,034 | 1,029,200 | 351,130 |
| 35 | 527,830 | 186,150 | 60,775 | 1,198,500 | 380,170 |
| 30 | 588,970 | 207,860 | 72,780 | 1,306,900 | 425,910 |
| 25 | 663,410 | 235,370 | 78,197 | 1,483,000 | 483,120 |
| 20 | 749,580 | 267,500 | 90,996 | 1,646,800 | 551,120 |
| 15 | 861,830 | 318,430 | 101,820 | 1,843,400 | 638,260 |
| 10 | 1,038,600 | 338,740 | 129,930 | 2,497,800 | 705,140 |
| 8 | 1,141,400 | 399,640 | 143,990 | 2,537,500 | 821,990 |
| 6 | 1,281,800 | 411,300 | 163,750 | 3,114,300 | 857,640 |
| 5 | 1,353,300 | 419,420 | 182,530 | 3,356,800 | 865,660 |
| 4 | 1,446,400 | 495,790 | 179,760 | 3,328,500 | 1,003,900 |
| 2 | 1,785,500 | 547,950 | 249,890 | 4,415,300 | 1,135,300 |
| 1 | 2,146,700 | 712,750 | 292,080 | 4,995,700 | 1,421,400 |
| 0.1 | 3,905,600 | 2,432,200 | 222,060 | 2,716,300 | 4,316,700 |
| 0.01 | 5,009,900 | 2,732,700 | 357,780 | 5,432,700 | 5,354,600 |
| 0.001 | 5,282,300 | 2,988,400 | 286,290 | 5,753,000 | 5,529,500 |

**Table 5**. Assessment results by commodity for Chukchi Sea play 12, 2006 assessment.

**Basin: CHUKCHI SEA SHELF**
**Play 12 - L. Brookian Wrench Zone - Torok Turbidites**
**UAI Key: AAAAADAM**

**Model Simulation "Pools" Reported by "Fieldsize.out" *GRASP* Module**

| Classification and Size | | | | Pool Count Statistics | | | | Pool Types Count | | | Mixed Pool Range | | Oil Pool Range | | Gas Pool Range | | Total Pool Range | | Pool Resource Statistics (MMBOE) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Class | Min (MMBOE) | Max (MMBOE) | Pool Count | Percentage | Trial Average | Trials w/Pool Avg | | Mixed Pool | Oil Pool | Gas Pool | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Total Resource | Average Resource |
| **1** | 0.0312 | 0.0625 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **2** | 0.0625 | 0.125 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **3** | 0.125 | 0.25 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **4** | 0.25 | 0.5 | 4 | 0.007961 | 0.0004 | 0.000404 | | 0 | 4 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0.329827 | 0.370981 | 1.400016 | 350.003928 |
| **5** | 0.5 | 1 | 28 | 0.055726 | 0.0028 | 0.002828 | | 14 | 12 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.504125 | 0.992091 | 22.476956 | 802.748442 |
| **6** | 1 | 2 | 125 | 0.248776 | 0.0125 | 0.012626 | | 56 | 64 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1.022204 | 1.987126 | 195.229078 | 1.561833 |
| **7** | 2 | 4 | 762 | 1.516539 | 0.0762 | 0.07697 | | 372 | 326 | 64 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 2.006526 | 3.993858 | 2380.346000 | 3.123814 |
| **8** | 4 | 8 | 2415 | 4.806353 | 0.2415 | 0.243939 | | 1413 | 717 | 285 | 1 | 3 | 1 | 2 | 1 | 2 | 1 | 5 | 4.004399 | 7.999144 | 14725.302000 | 6.097434 |
| **9** | 8 | 16 | 5629 | 11.202882 | 0.5629 | 0.568586 | | 3414 | 1442 | 773 | 1 | 5 | 1 | 3 | 1 | 2 | 1 | 5 | 8.002868 | 15.995989 | 67304.820000 | 11.956799 |
| **10** | 16 | 32 | 9391 | 18.690044 | 0.9391 | 0.948586 | | 5744 | 2175 | 1472 | 1 | 6 | 1 | 3 | 1 | 3 | 1 | 6 | 16.003887 | 31.998157 | 221529.729000 | 23.589579 |
| **11** | 32 | 64 | 11285 | 22.459499 | 1.1285 | 1.139899 | | 6877 | 2201 | 2207 | 1 | 6 | 1 | 5 | 1 | 4 | 1 | 8 | 32.003996 | 63.998234 | 523376.991000 | 46.378113 |
| **12** | 64 | 128 | 10001 | 19.904072 | 1.0001 | 1.010202 | | 6077 | 1696 | 2228 | 1 | 9 | 1 | 3 | 1 | 4 | 1 | 9 | 64.012323 | 127.995323 | 909579.525000 | 90.948860 |
| **13** | 128 | 256 | 6410 | 12.757235 | 0.641 | 0.647475 | | 3731 | 996 | 1683 | 1 | 7 | 1 | 3 | 1 | 3 | 1 | 8 | 128.012116 | 255.909835 | 1139605.000000 | 177.785416 |
| **14** | 256 | 512 | 2939 | 5.849222 | 0.2939 | 0.296869 | | 1692 | 416 | 831 | 1 | 3 | 1 | 2 | 1 | 3 | 1 | 4 | 256.133116 | 511.768149 | 1031119.000000 | 350.839935 |
| **15** | 512 | 1024 | 1005 | 2.000159 | 0.1005 | 0.101515 | | 512 | 114 | 379 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 3 | 512.056452 | 1023.859000 | 694618.318000 | 691.162476 |
| **16** | 1024 | 2048 | 217 | 0.431875 | 0.0217 | 0.021919 | | 106 | 31 | 80 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1025.039000 | 2025.753000 | 298404.068000 | 1.375134 |
| **17** | 2048 | 4096 | 32 | 0.063687 | 0.0032 | 0.003232 | | 10 | 3 | 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2088.979000 | 4017.946000 | 87415.567000 | 2.731737 |
| **18** | 4096 | 8192 | 3 | 0.005971 | 0.0003 | 0.000303 | | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 4698.095000 | 5108.678000 | 14504.868000 | 4.834956 |
| **19** | 8192 | 16384 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **20** | 16384 | 32768 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **21** | 32768 | 65536 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **22** | 65536 | 131072 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **23** | 131072 | 262144 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **24** | 262144 | 524288 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| **25** | 524288 | 1048576 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Not Classified | | | 0 | 0 | 0 | 0 | Below Class | 0 | 0 | 0 | | | | | | | | Below Class | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| | | Totals | **50246** | **100.000008** | **5.0246** | **5.075354** | Above Class | 0 | 0 | 0 | | | | | | | | Above Class | 0.000000 | 0.000000 | 0.000000 | 0.000000 |

**Number of Pools not Classified: 0**
**Number of Pools below Class 1: 0**
**Number of Trials with Pools: 9900**

Min and Max refer to numbers of pools of the relevant size class that occur within any single trial in the simulation.

Min and Max refer to aggregate resources of the relevant size class that occur within any single trial in the simulation.

**Table 6**. Statistics for simulation pools created in computer sampling run for Chukchi Sea play 12, 2006 assessment.

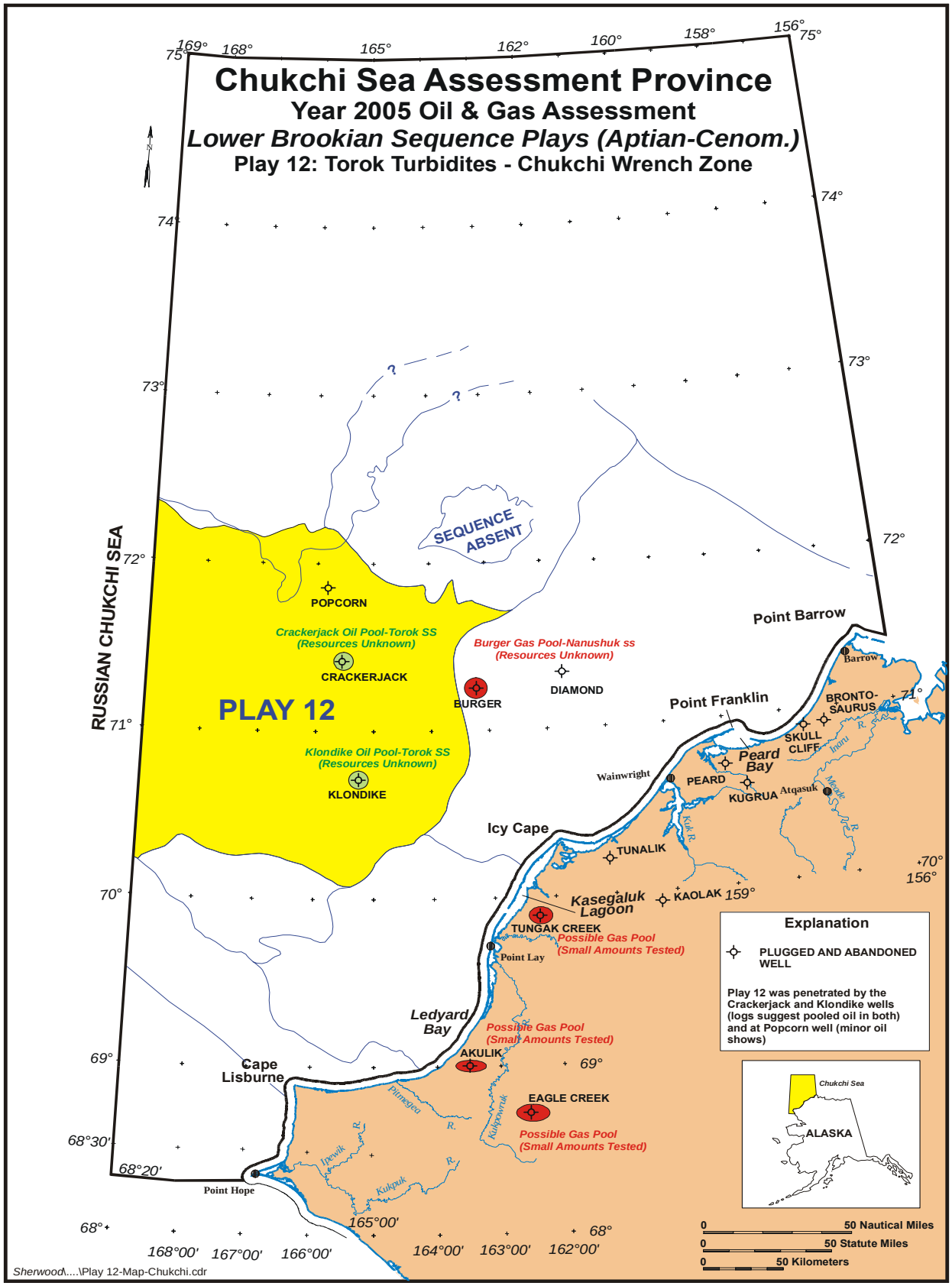


**Figure 1**. Map location of Chukchi Sea play 12, 2006 assessment.