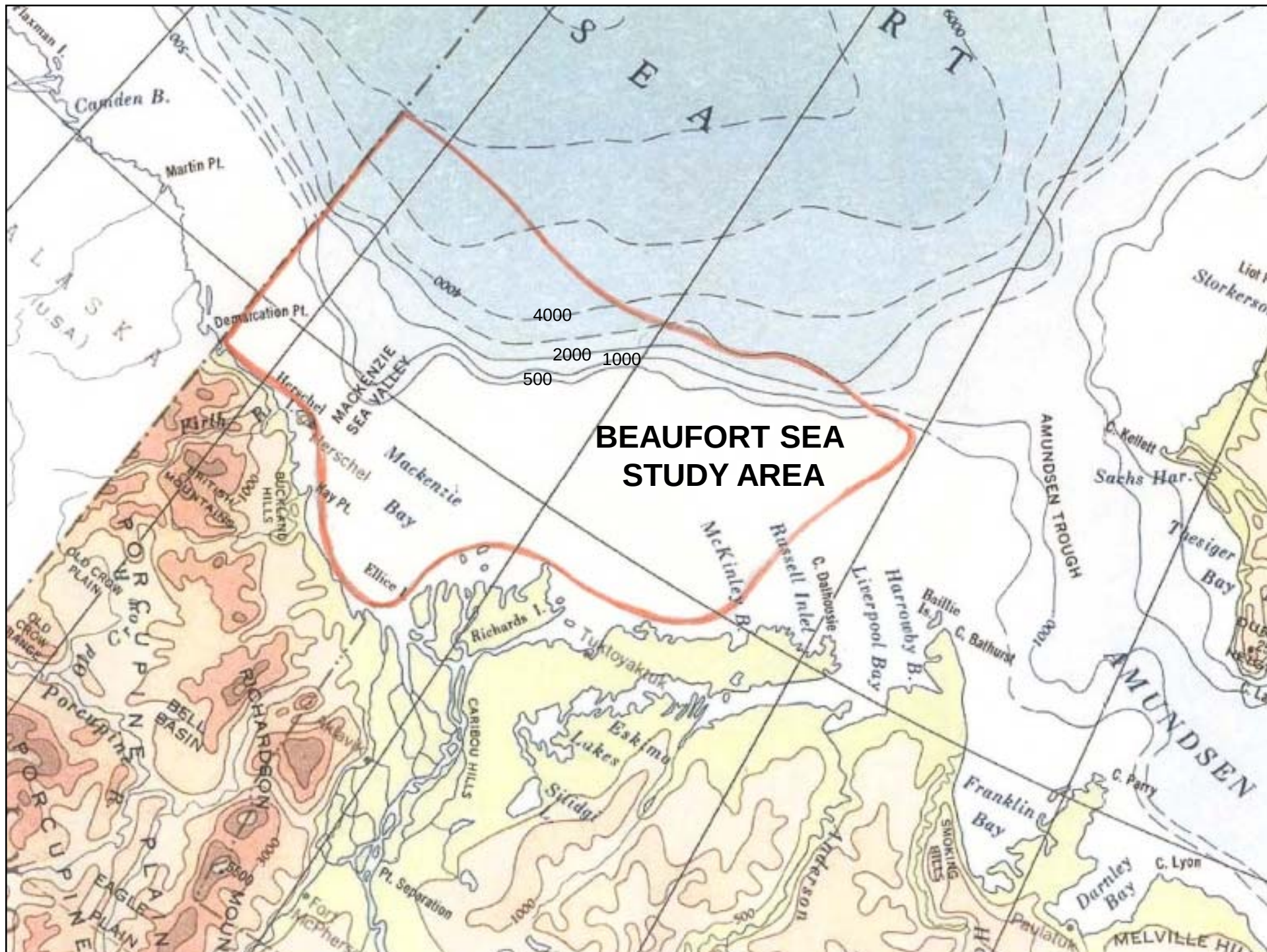


**YELLOWKNIFE
GEOSCIENCE FORUM 2008
November 18, 2008**

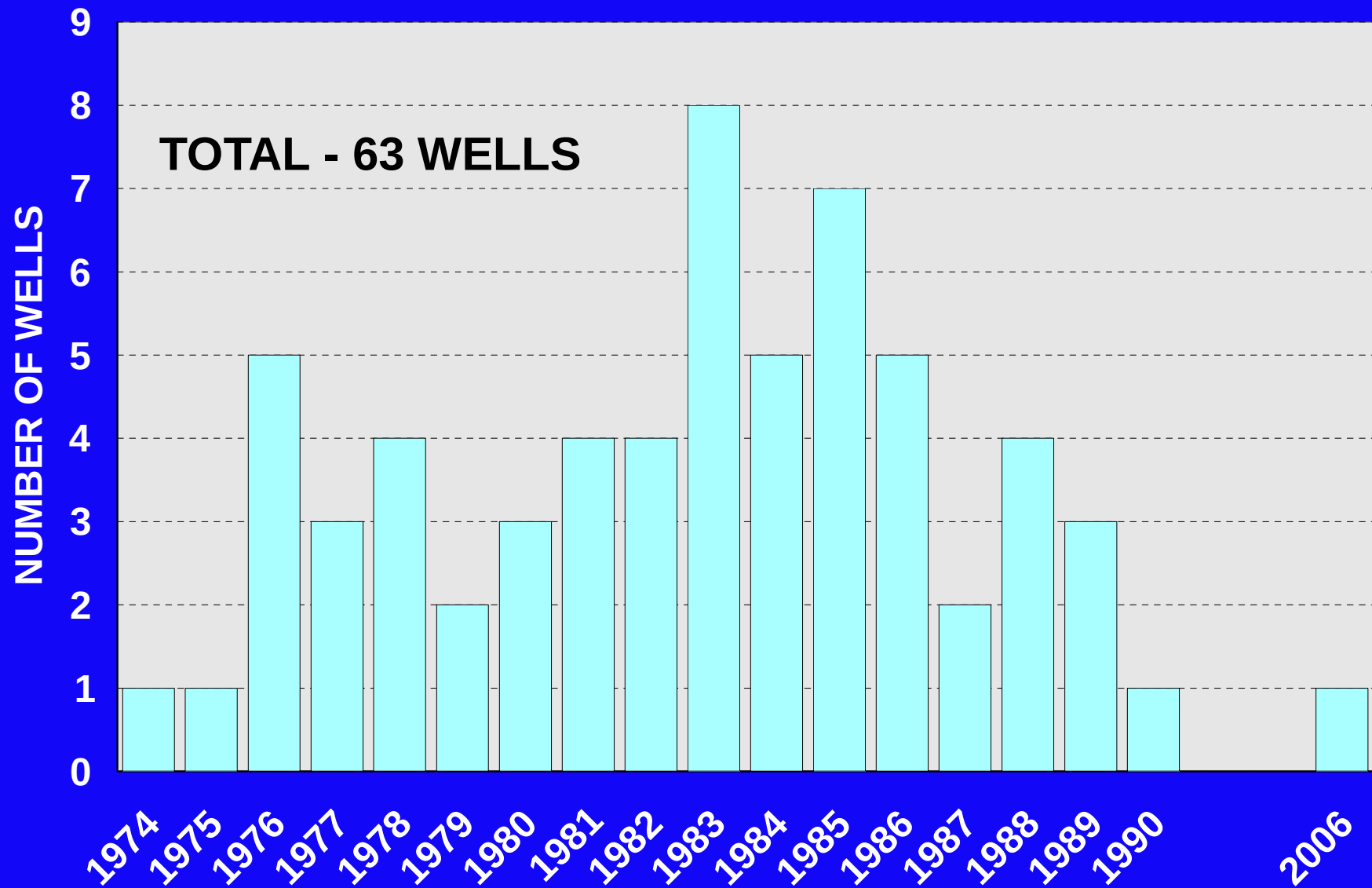
**Discovered and Undiscovered
Oil and Gas Resources
of the
Beaufort Sea**

Kenneth J. Drummond



BEAUFORT SEA

NUMBER OF WELLS BY RIG RELEASE



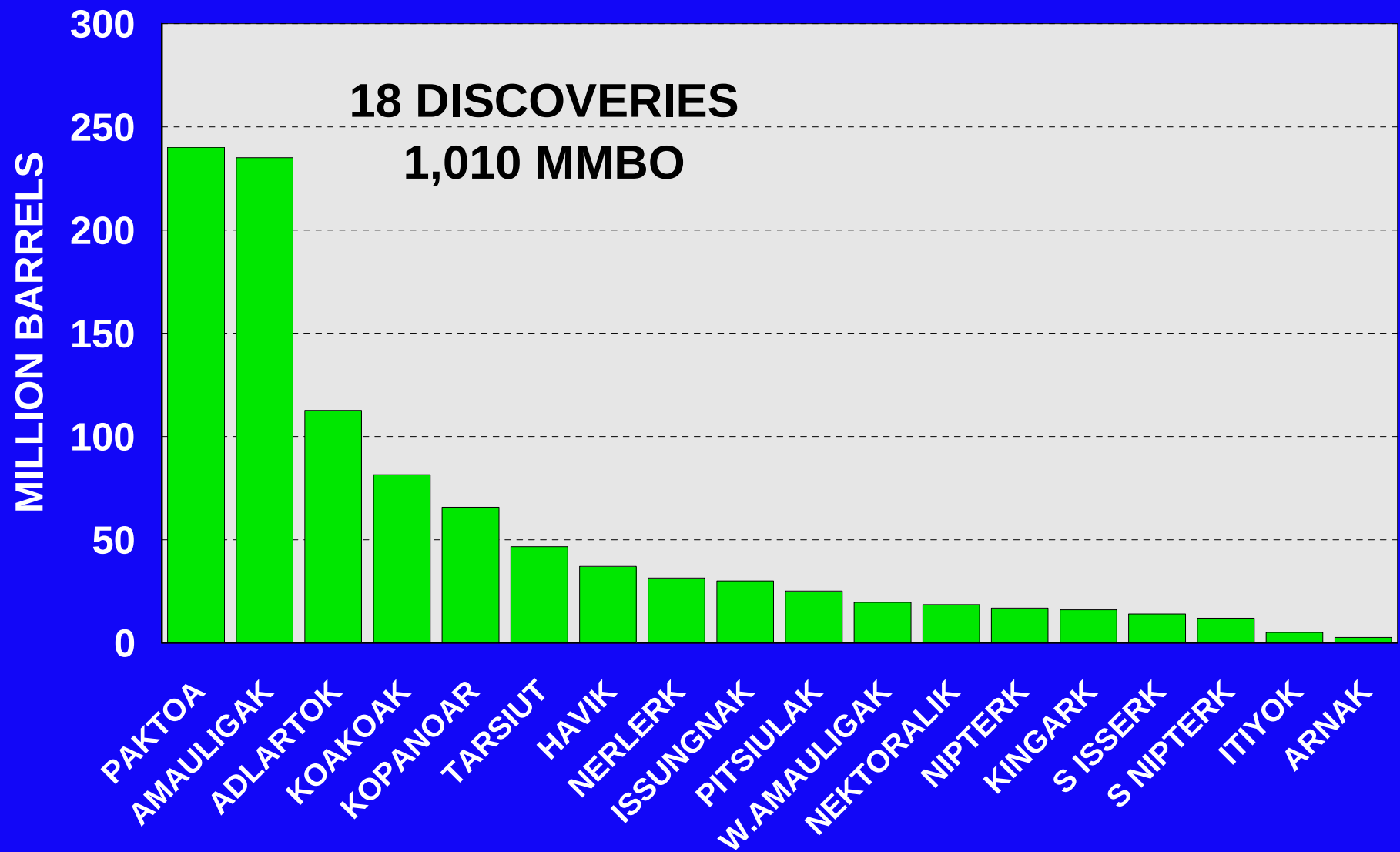
BEAUFORT SEA EXPLORATION

HIGH SUCCESS RATE

	DRILLED	SUCCESSFUL	SUCCESS %
TOTAL WELLS	63	26	41%
STRUCTURES DRILLED	49	26	53%
STRUCTURES DRILLED SDL's + SHOWS	49	33	67%

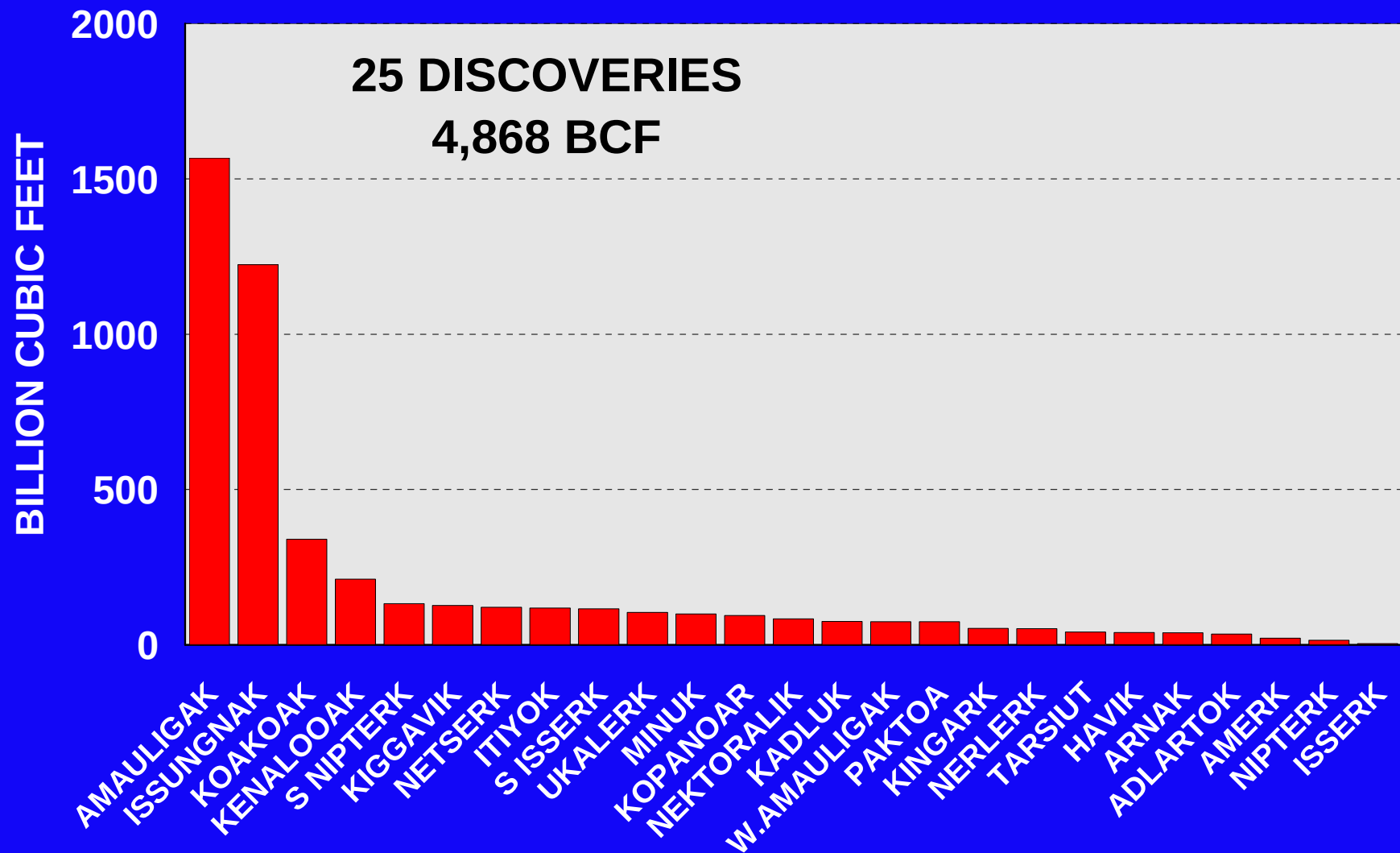
BEAUFORT SEA

DISCOVERED OIL FIELD SIZE DISTRIBUTION



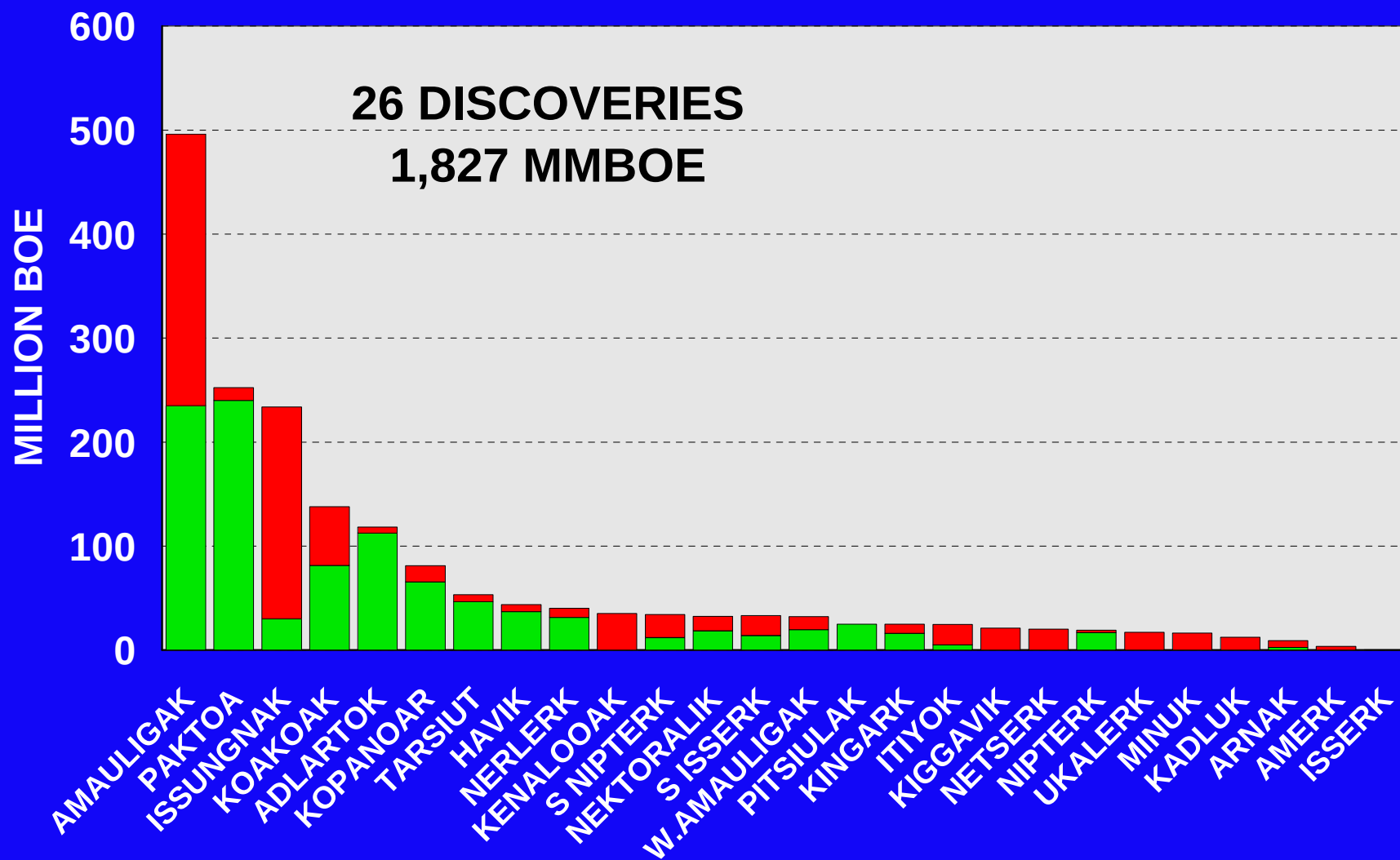
BEAUFORT SEA

DISCOVERED GAS FIELD SIZE DISTRIBUTION



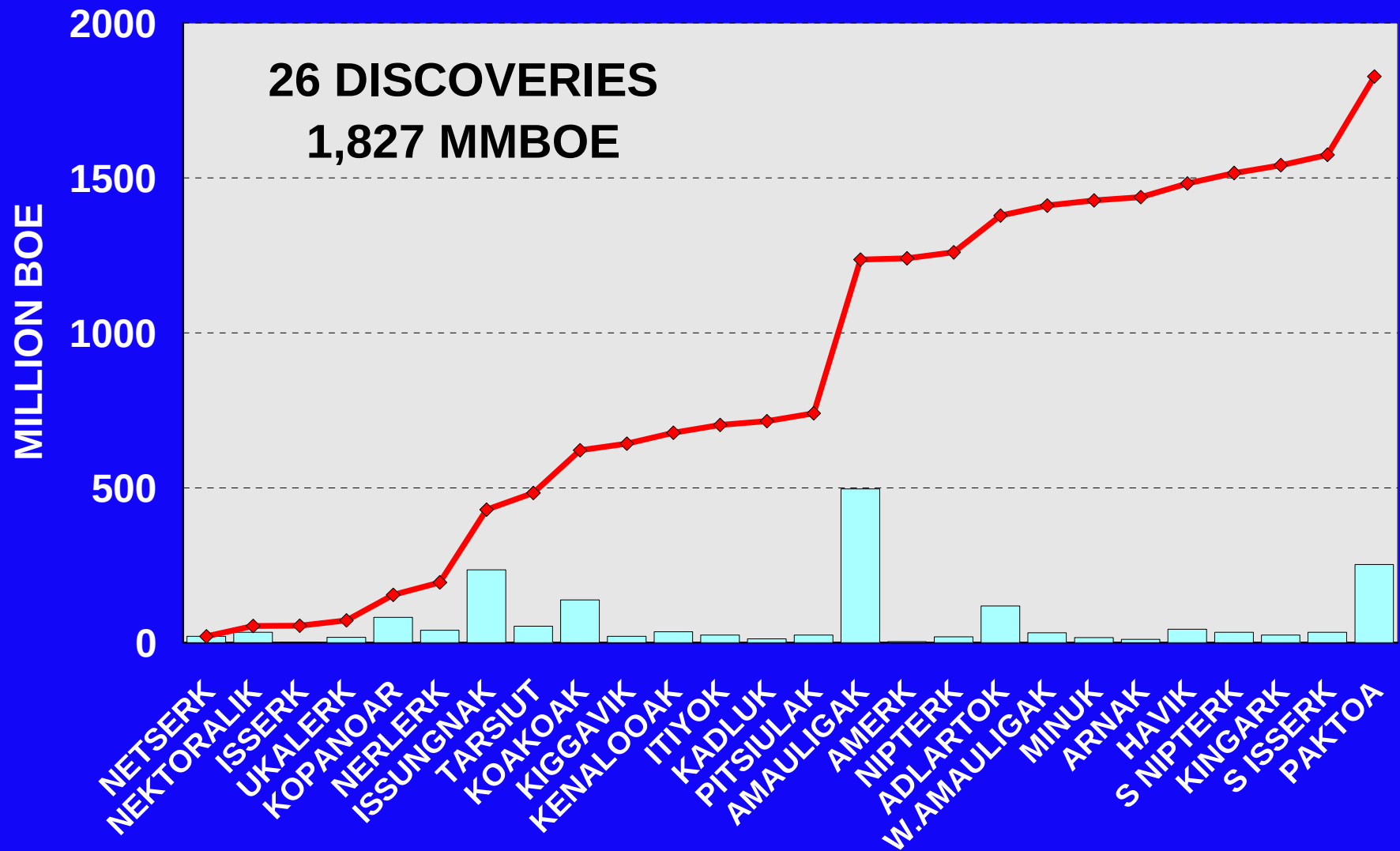
BEAUFORT SEA

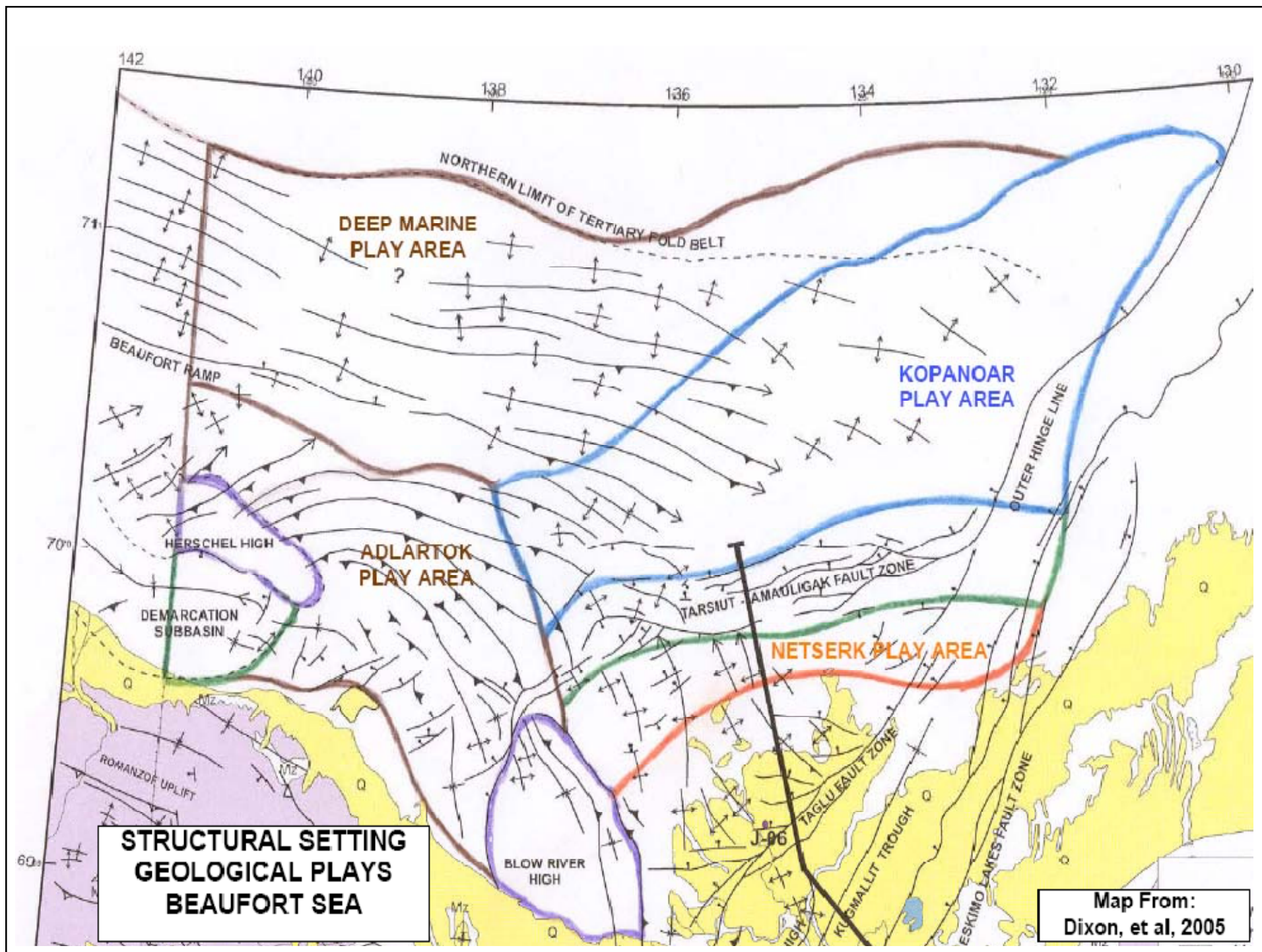
DISCOVERED FIELD SIZE DISTRIBUTION

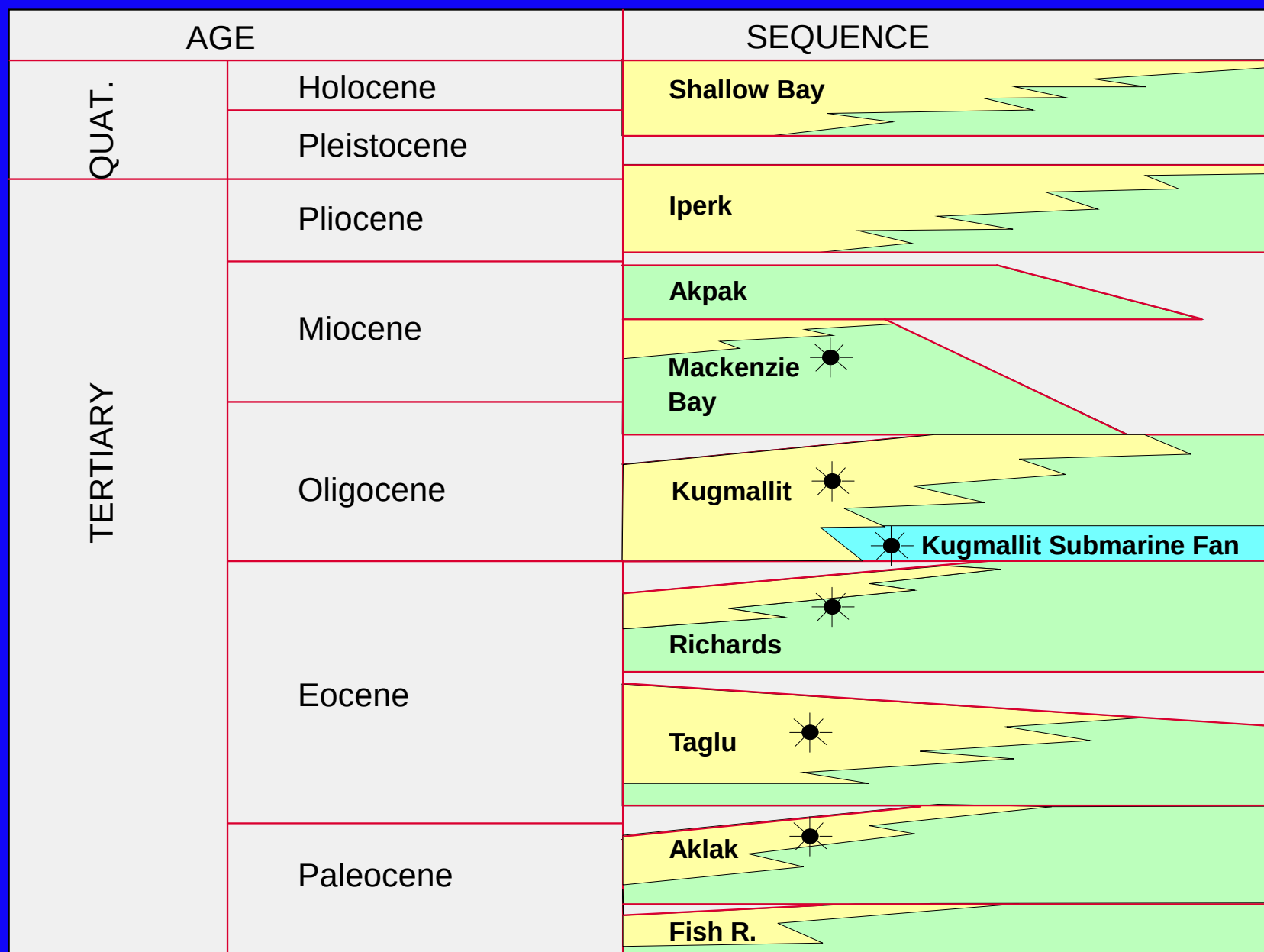


BEAUFORT SEA

DISCOVERY SEQUENCE with CREAMING CURVE

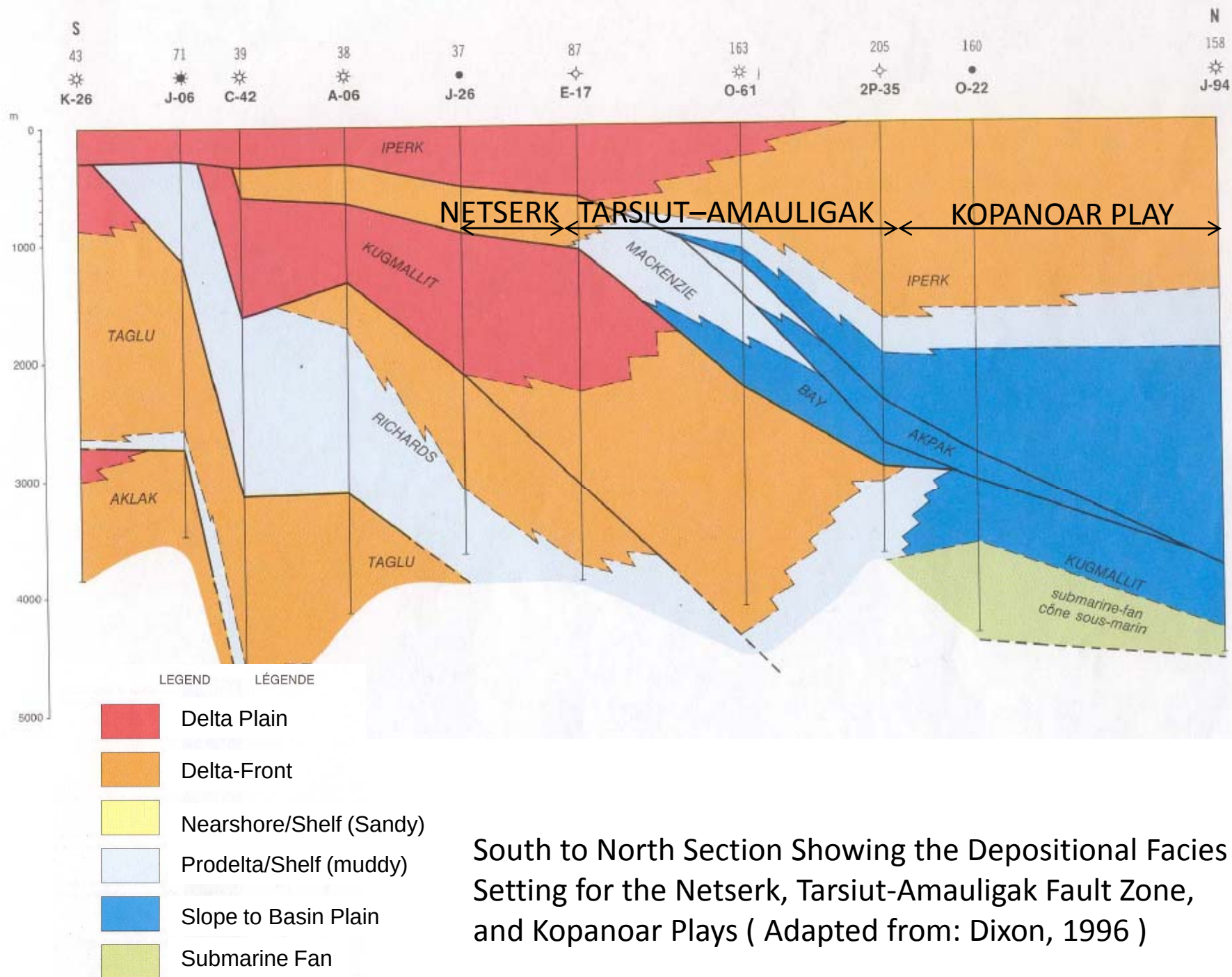




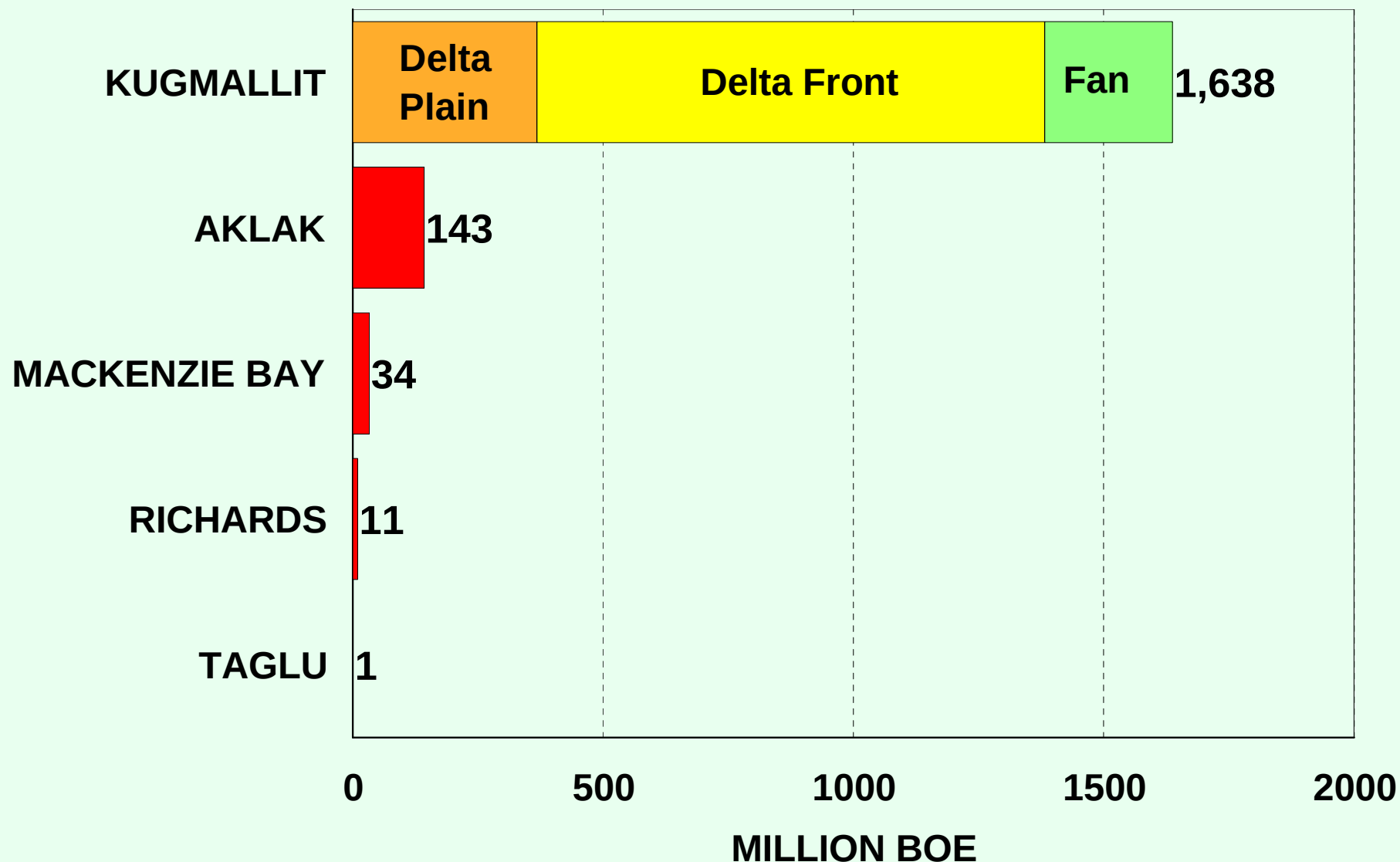


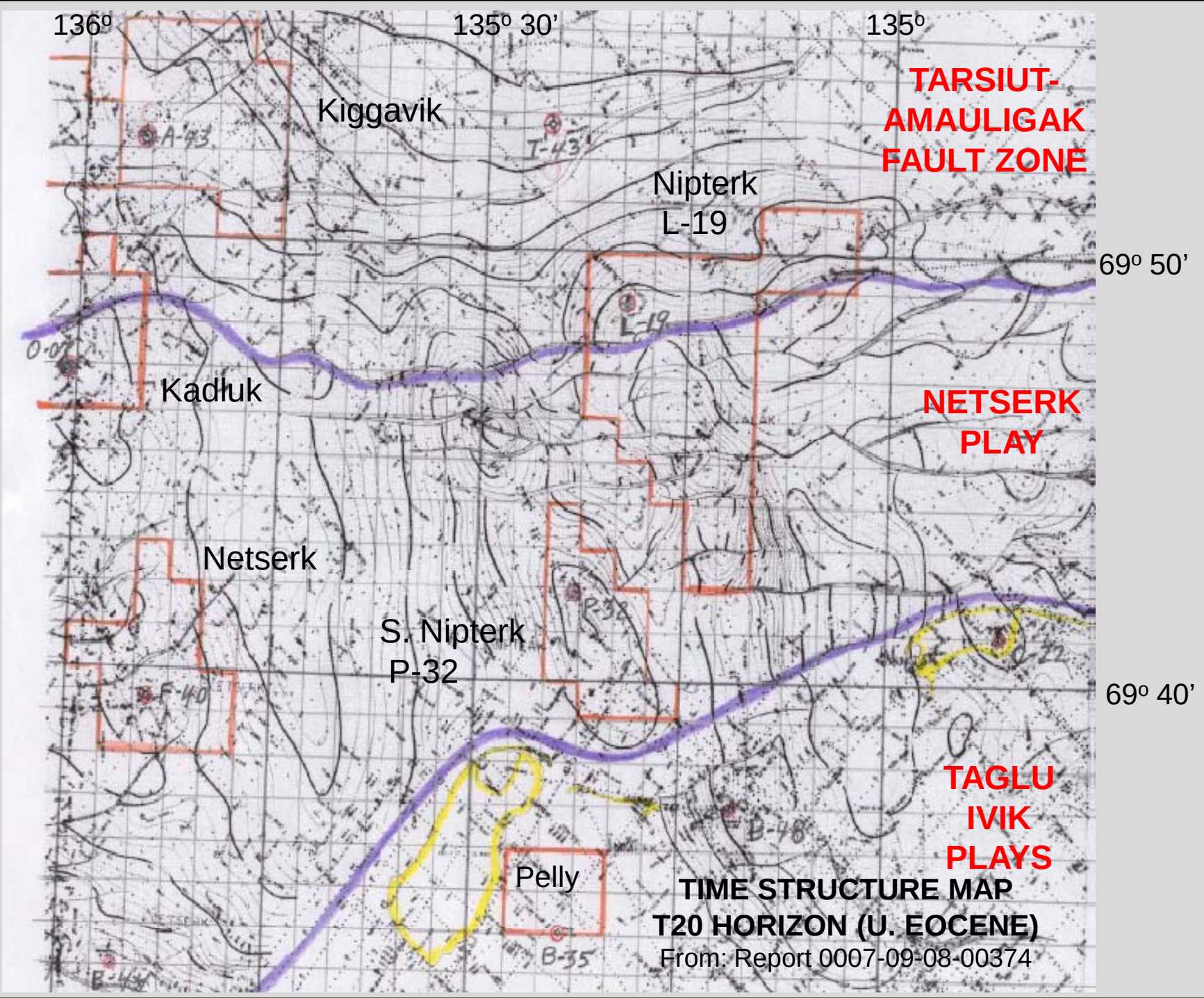
BEAUFORT SEA STRATIGRAPHIC SECTION

Modified from: Dixon, 1995



BEAUFORT SEA - STRATIGRAPHIC DISTRIBUTION DISCOVERED RECOVERABLE OIL EQUIVALENT





136° 30'
70° 00'

136°

SDL 086

SDL 084

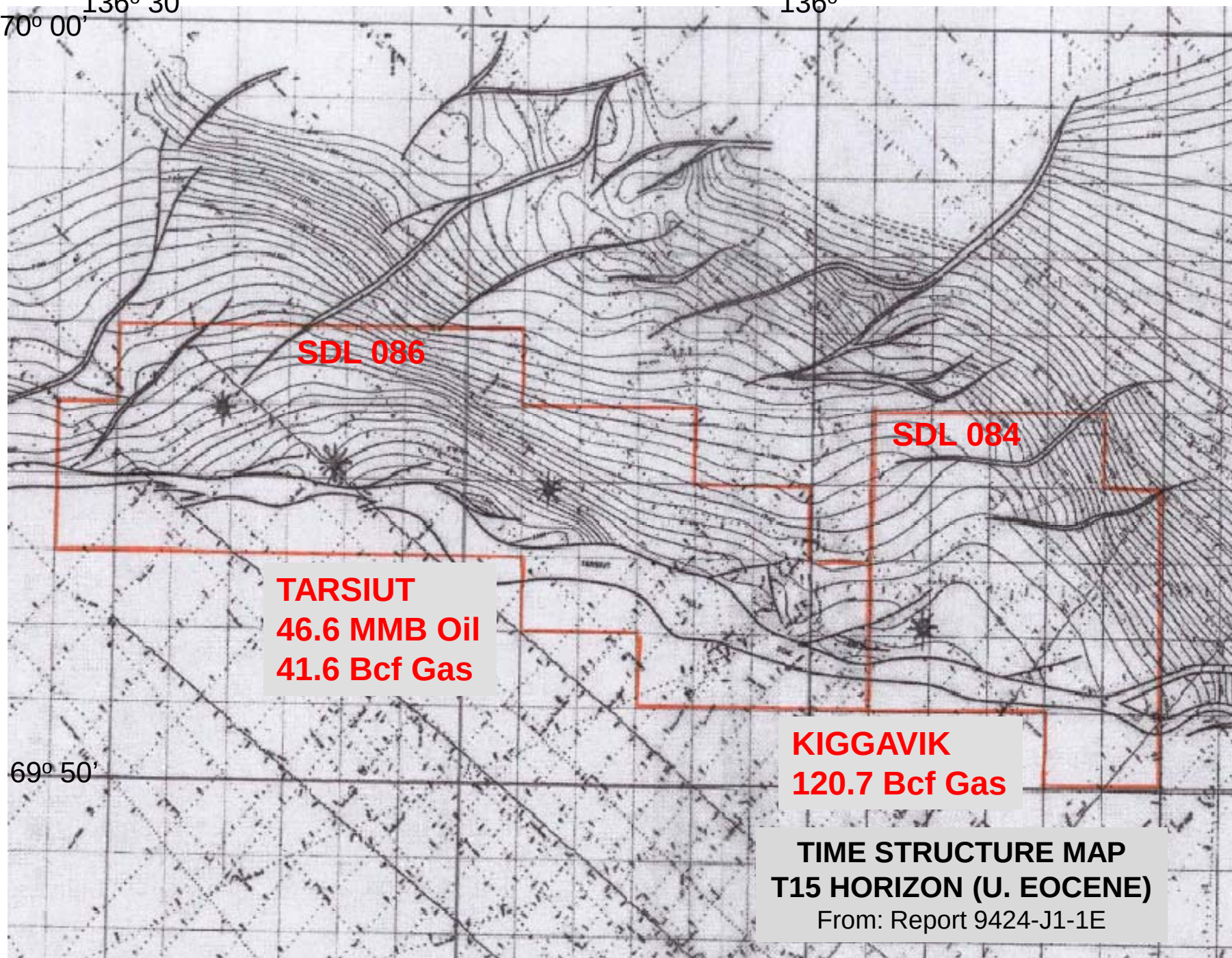
TARSIUT
46.6 MMB Oil
41.6 Bcf Gas

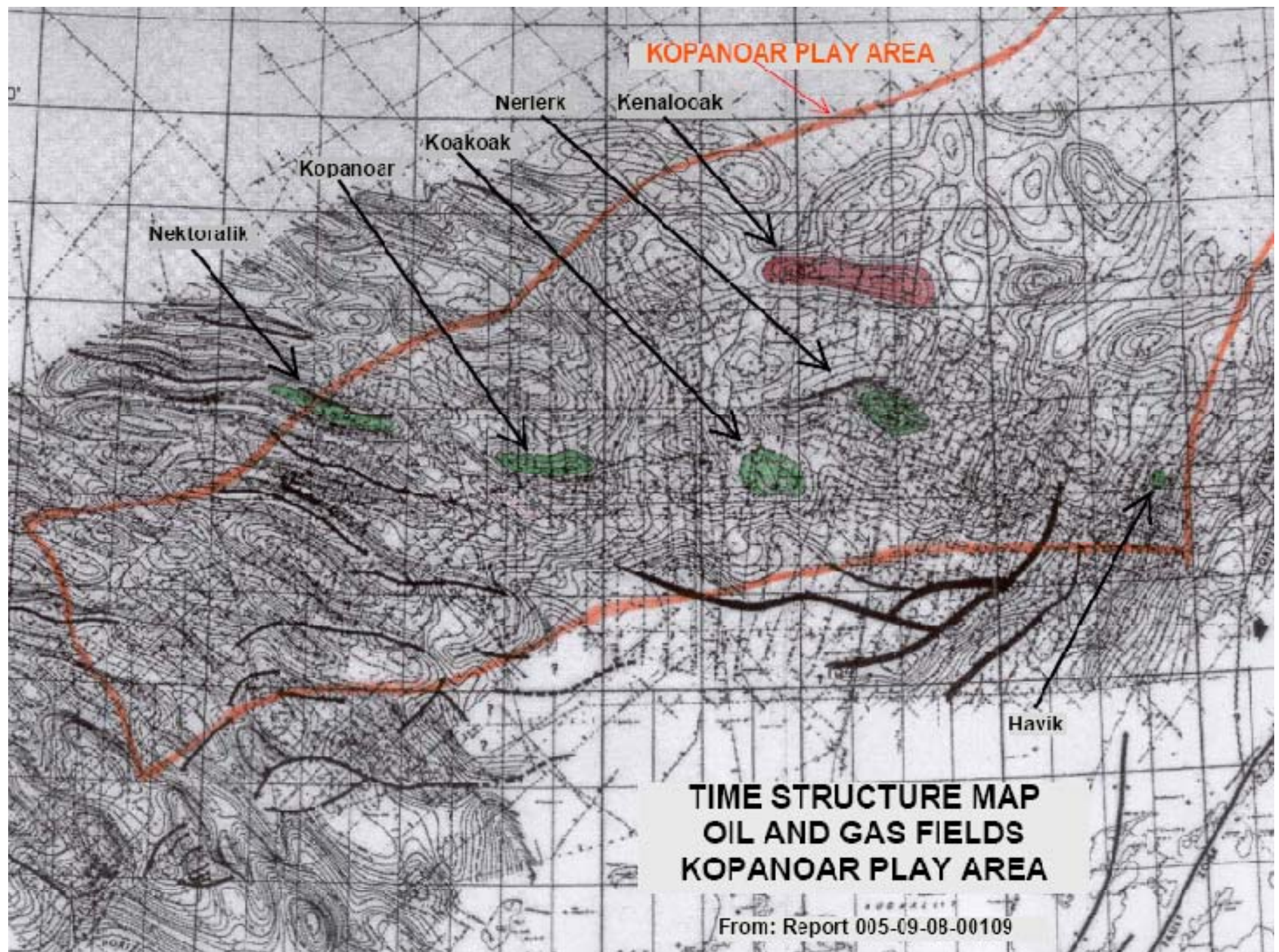
KIGGAVIK
120.7 Bcf Gas

69° 50'

TIME STRUCTURE MAP
T15 HORIZON (U. EOCENE)

From: Report 9424-J1-1E





LOWER EOCENE TIME-STRUCTURE KOPANOAR STRUCTURE

SDL 039

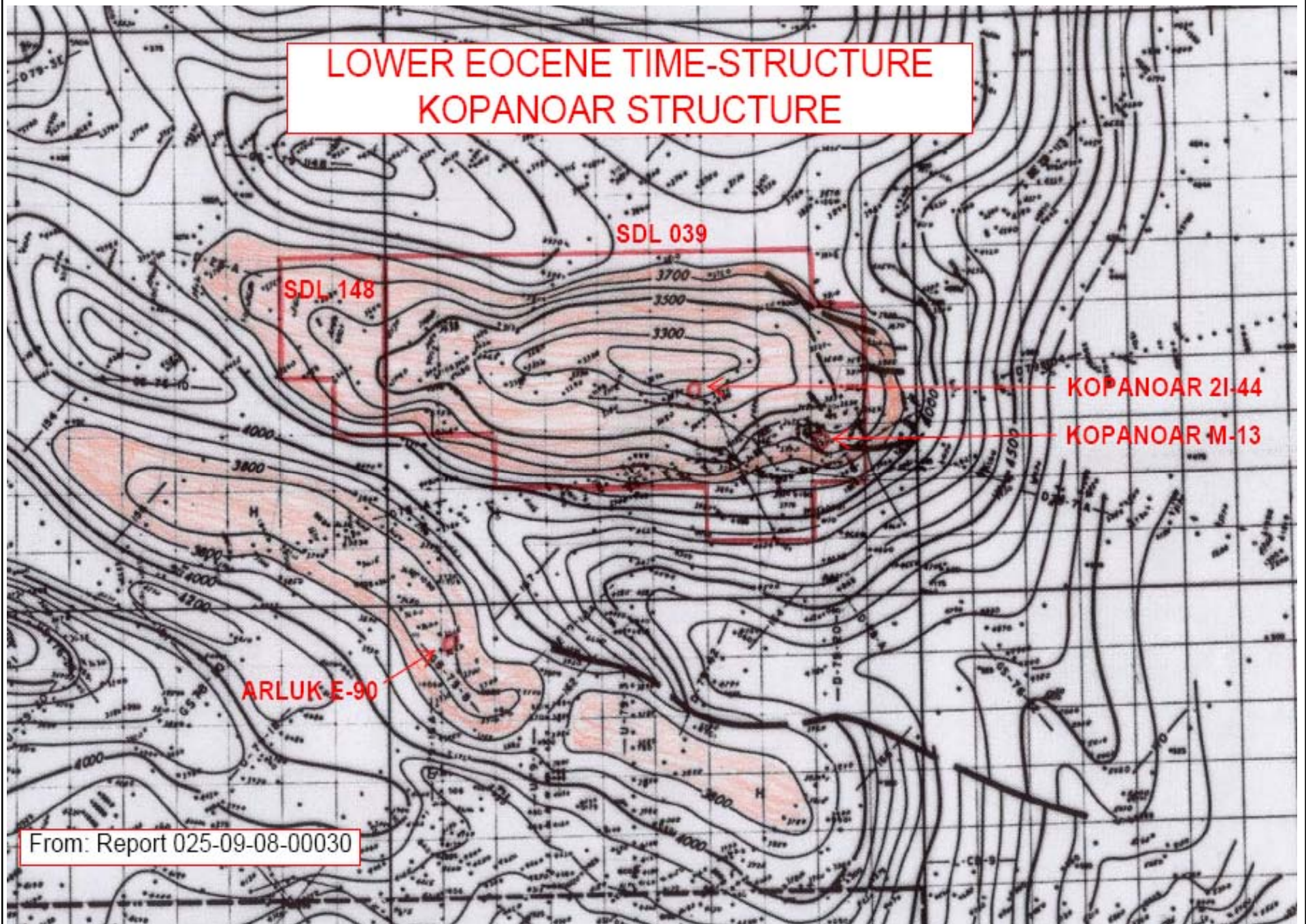
SDL 148

KOPANOAR 21-44

KOPANOAR M-13

ARLUK E-90

From: Report 025-09-08-00030



KOPANOAR M-13

SÉQ. D'IPERK SEQ.

TIME/TEMPS (SECONDS/SECONDES)

2.0

3.0

4.0

SÉQ. DE MACKENZIE BAY/AKPAK SEQ.

SÉQ. DE KUGMALLIT SEQ.

KUGMALLIT SUBMARINE FAN
CÔNE SOUS-MARINE DE KUGMALLIT

CLINOFORMS
CLINOFORMES

PRODUCING ZONES DST 4, 5, 6
INTERVAL PRODUCTIF : ESSAIS
AUX TIGES 4, 5 ET 6

?SÉQ. DE RICHARDS SEQ.?

?SÉQ. DE REINDEER SEQ.?

EOCENE
EOCENE

KOPANOAR ANTICLINE
ANTICLINEAL DE KOPANOAR

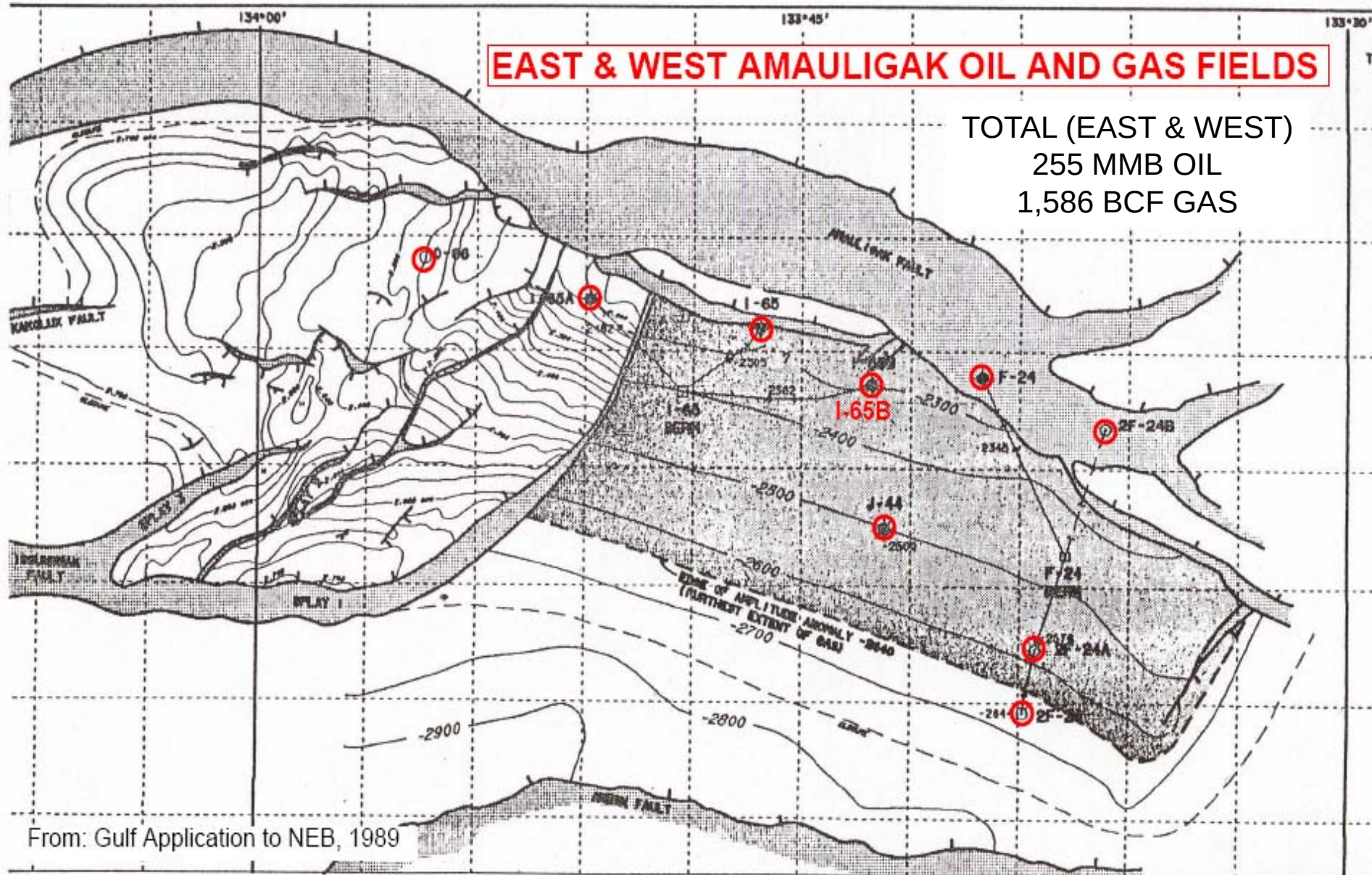
FAULT FAÏLLE DE CHEVAUQUEMENT

Drone Line D3D-80-33

From Morrell, 1996,
Beaufort-Mackenzie Atlas,
GSC Misc Report 59

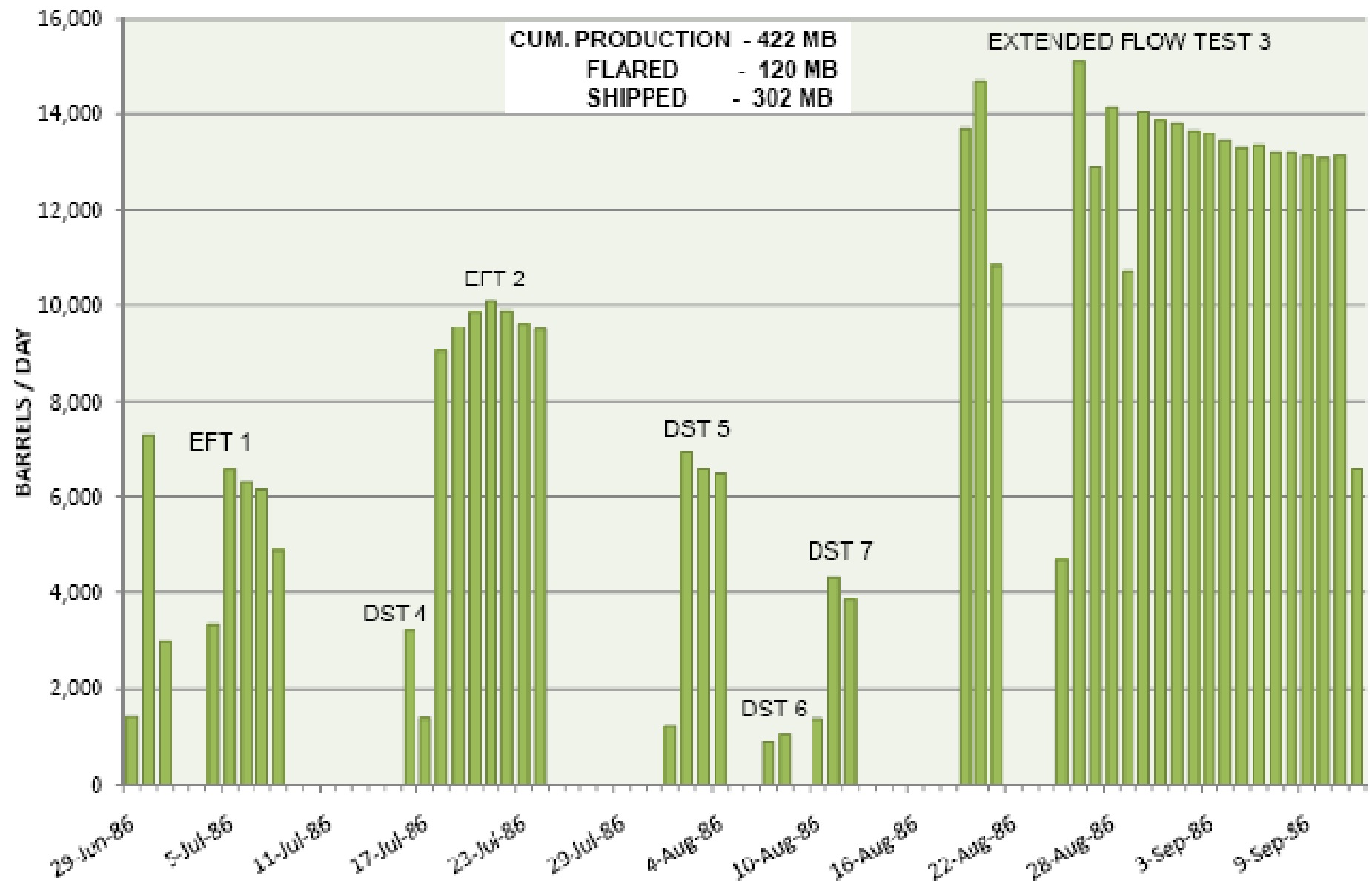
EAST & WEST AMAULIGAK OIL AND GAS FIELDS

TOTAL (EAST & WEST)
255 MMB OIL
1,586 BCF GAS



GULF et al AMAULIGAK I-65B

OIL PRODUCTION - DST AND EXTENDED FLOW TEST



**UNDISCOVERED
RECOVERABLE RESOURCE**

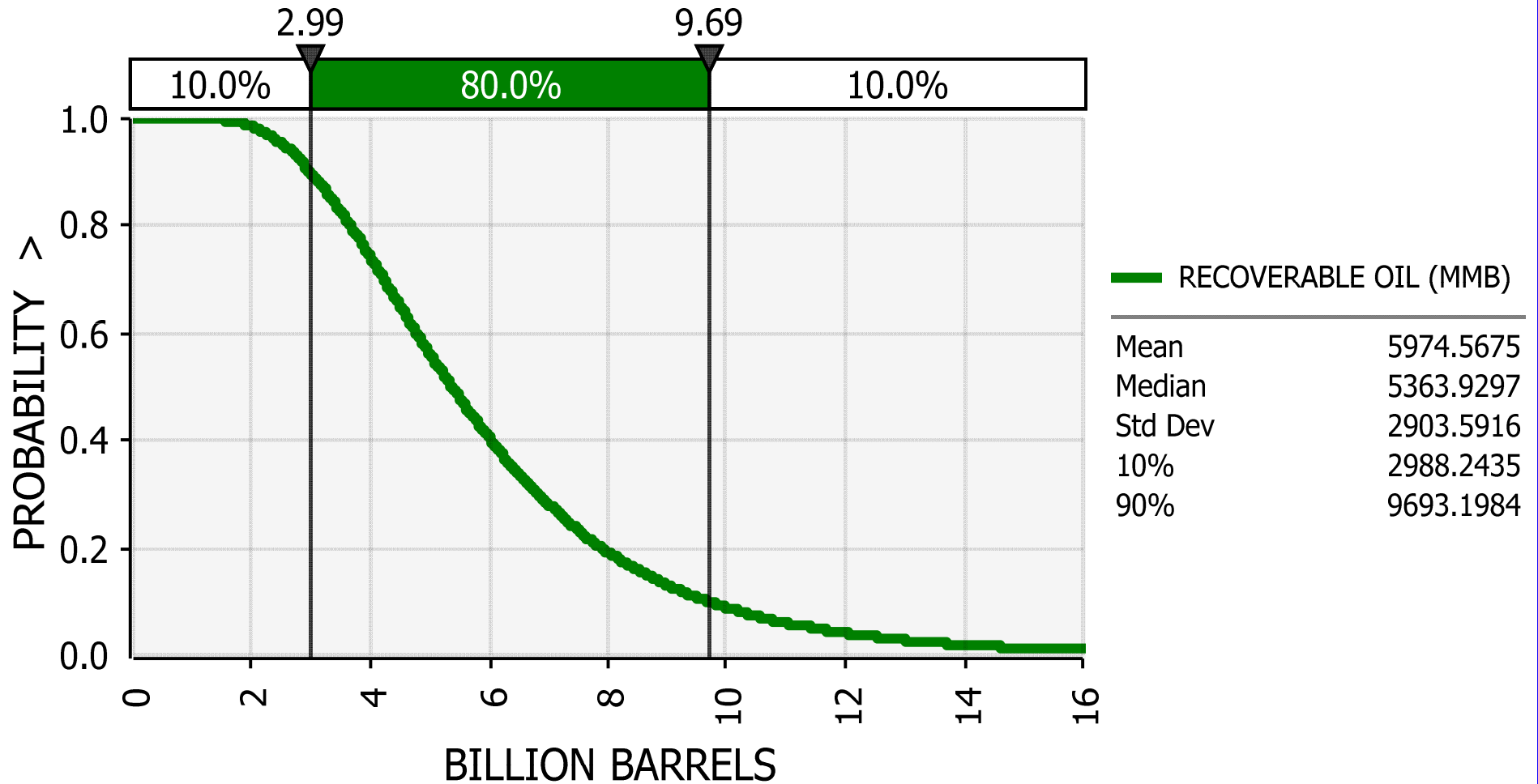
6.0 BILLION BARRELS OF OIL

33.6 TRILLION CUBIC FEET OF GAS

11.6 BILLION BOE

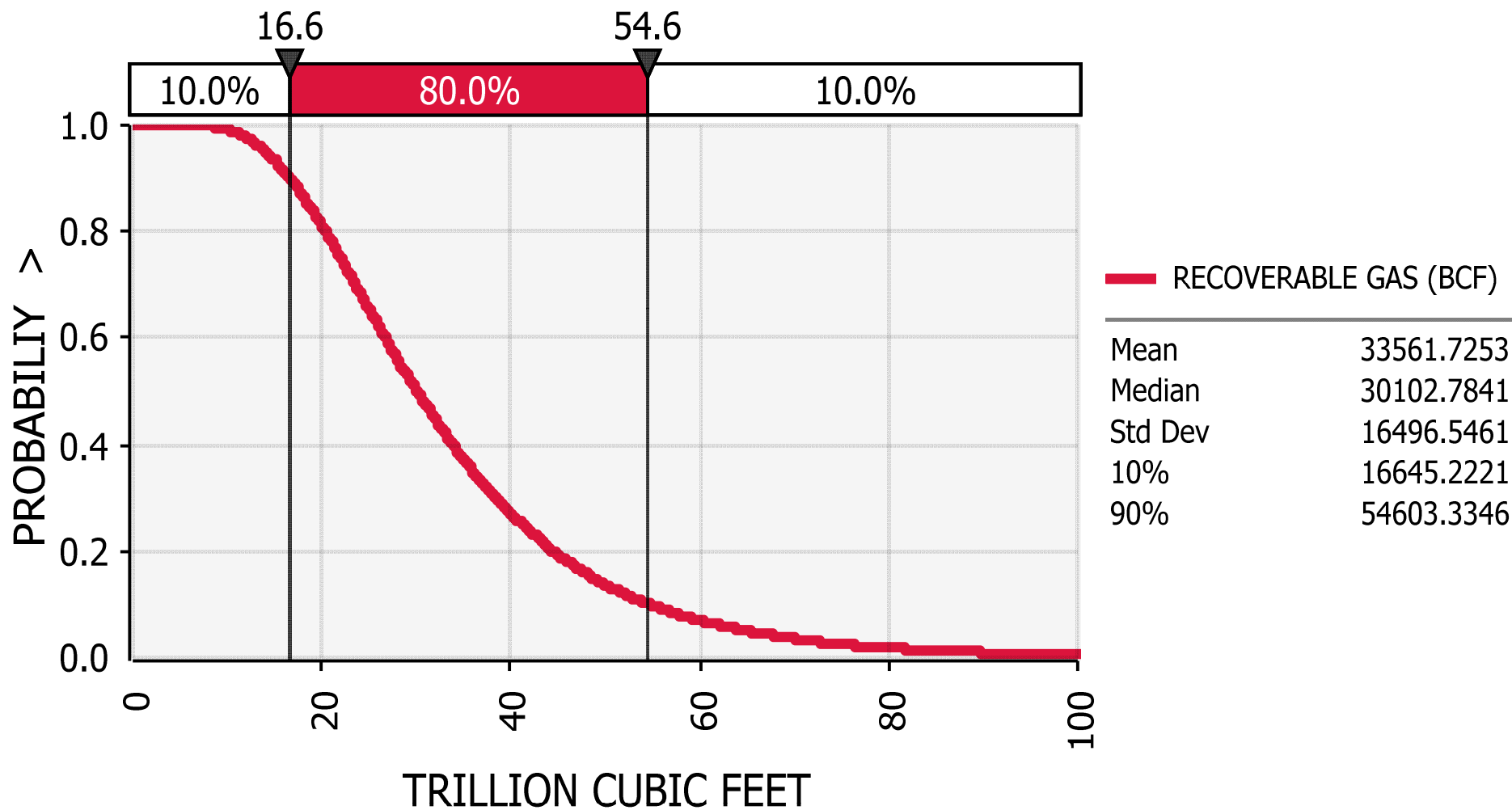
BEAUFORT SEA - ALL PLAYS

DISTRIBUTION OF UNDISCOVERED RECOVERABLE OIL



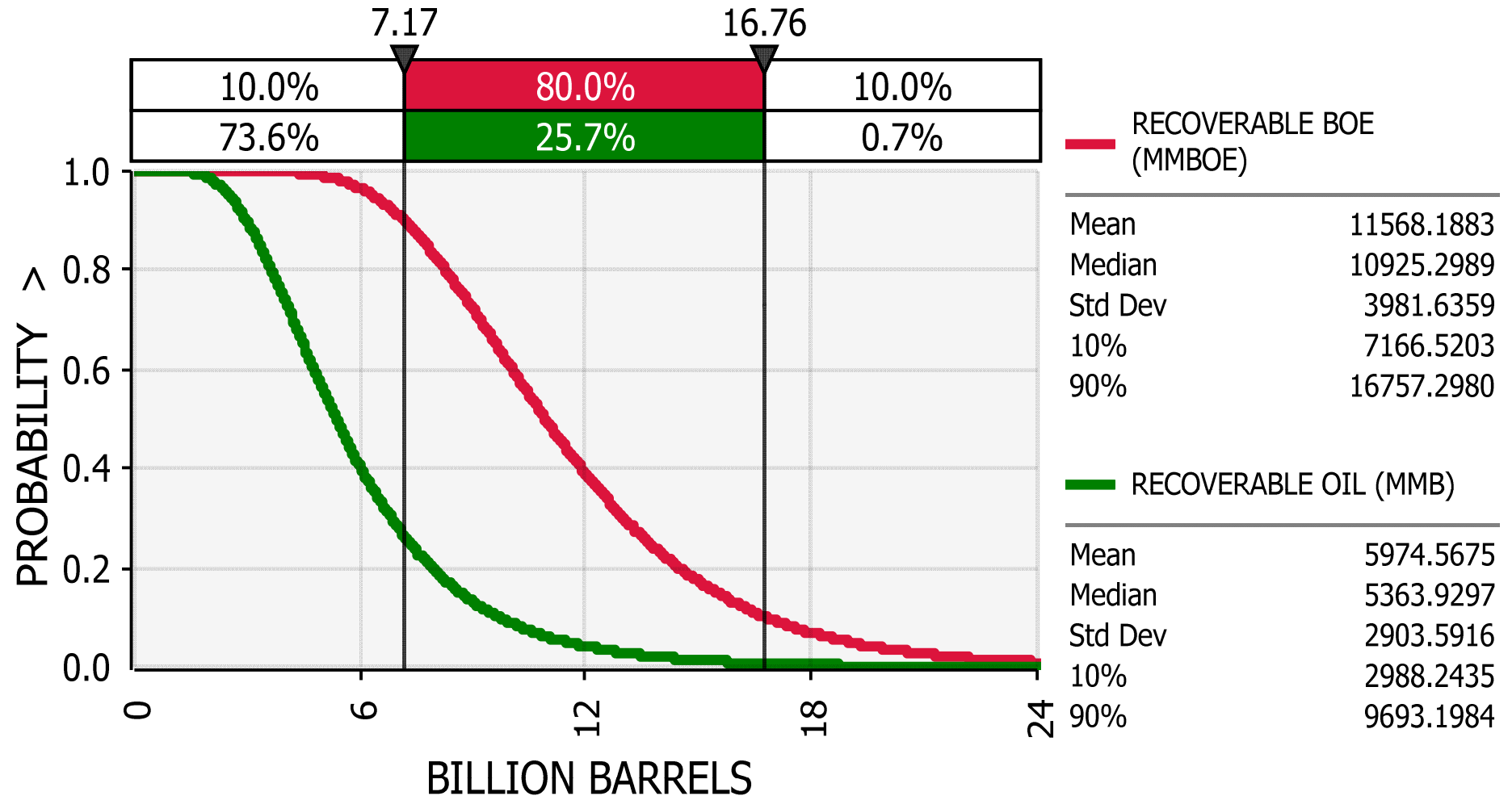
BEAUFORT SEA - ALL PLAYS

DISTRIBUTION OF UNDISCOVERED RECOVERABLE GAS



BEAUFORT SEA - ALL PLAYS

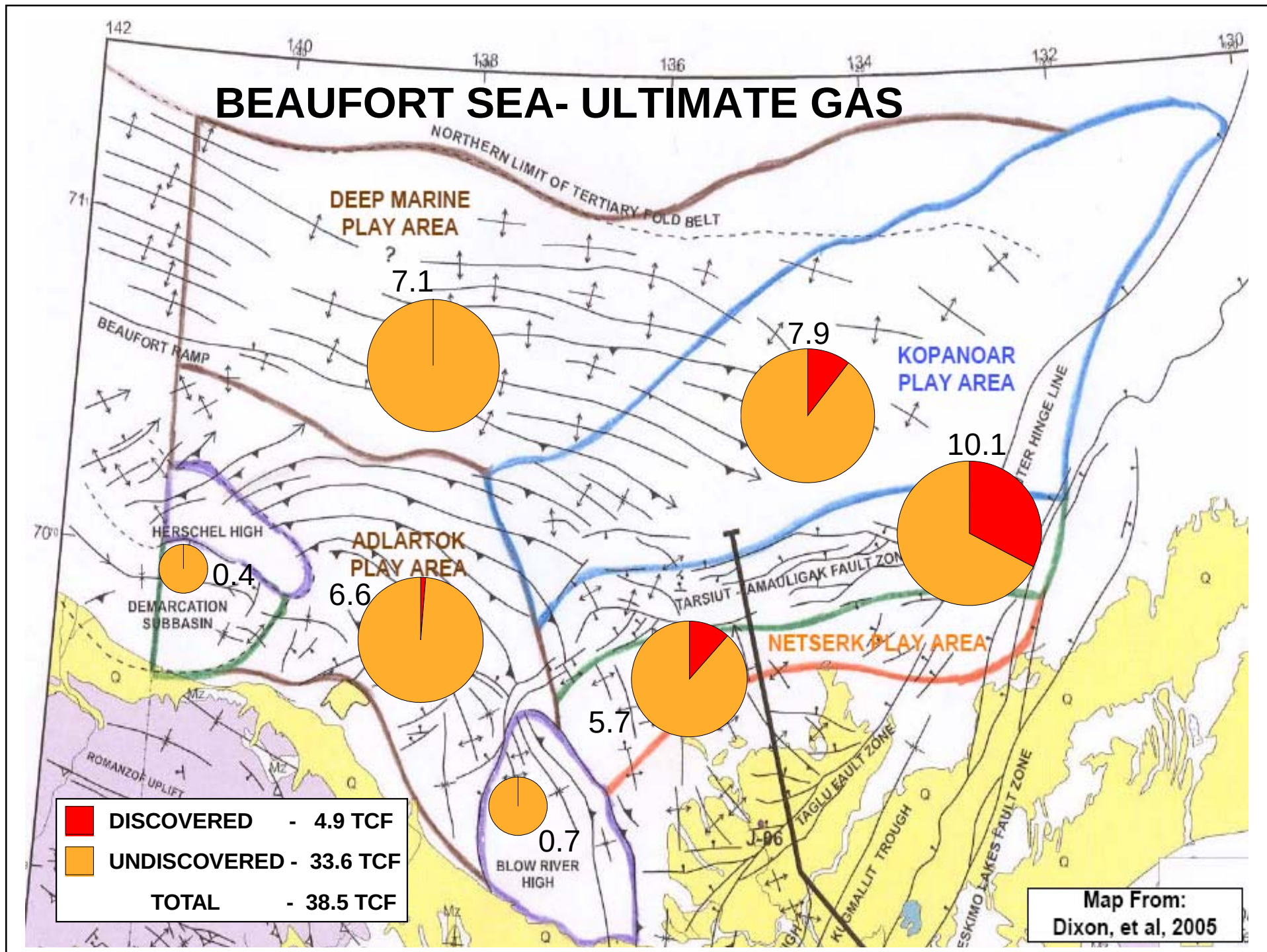
DISTRIBUTION OF UNDISCOVERED RECOVERABLE RESOURCES



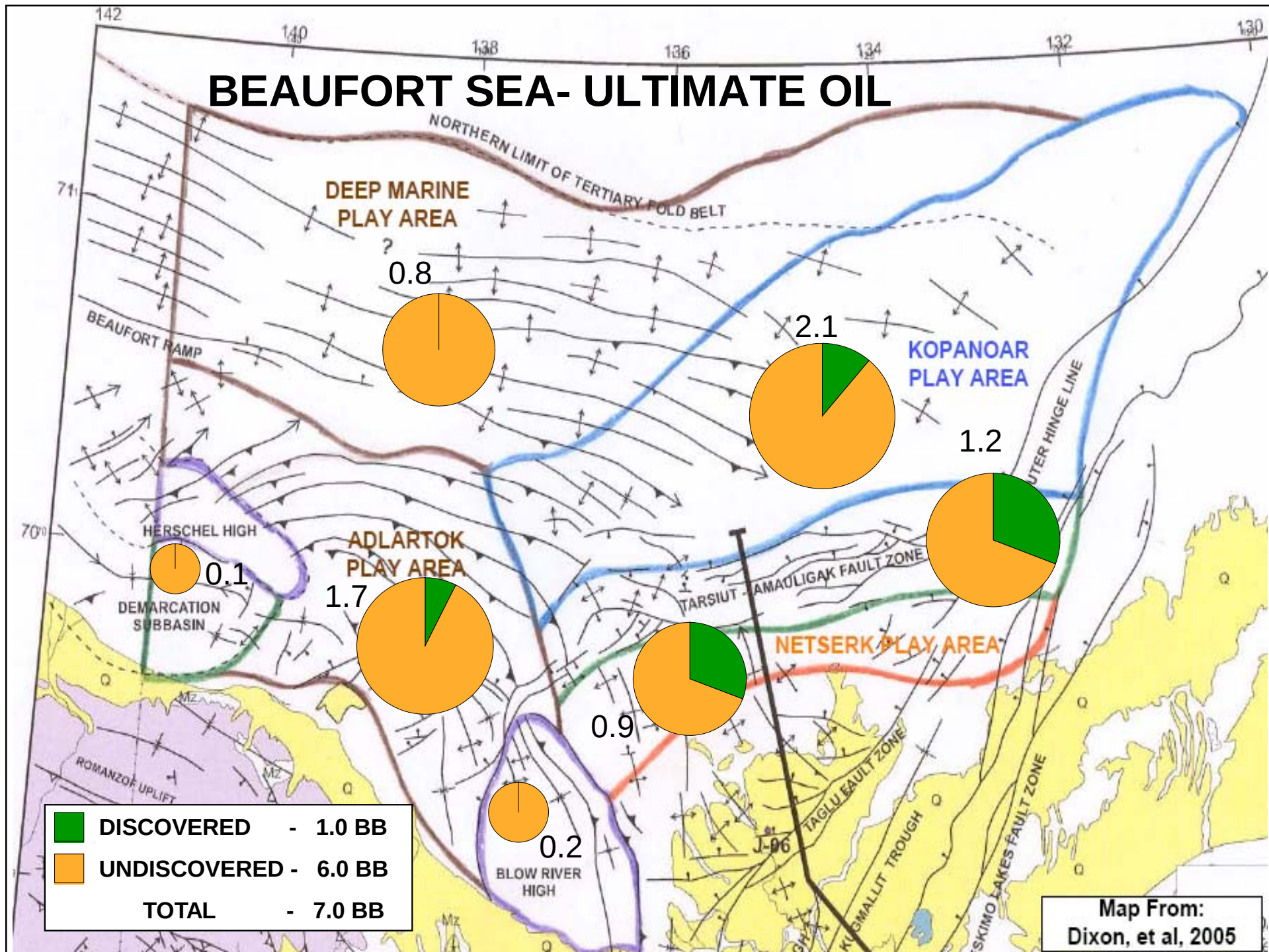
ULTIMATE RECOVERABLE RESOURCES OF THE BEAUFORT SEA

	DISCOVERED RESOURCES		UNDISCOVERED RESOURCES		ULTIMATE RESOURCES	
PLAY	OIL (MMB)	GAS (BCF)	OIL (MMB)	GAS (BCF)	OIL (MMB)	GAS (BCF)
NETSERK	269	659	599	5,046	868	5,705
TARSIUT-AMAILIGAK	378	3,298	846	6,785	1,224	10,083
KOPANOAR	234	822	1,866	7,044	2,100	7,866
ADLARTOK	129	88	1,605	6,435	1,734	6,523
DEEP WATER WEST			793	7,113	793	7,113
HERSCHEL			172	692	172	692
DEMARICATION			93	446	93	446
TOTAL	1,010	4,867	5,974	33,561	6,984	38,428

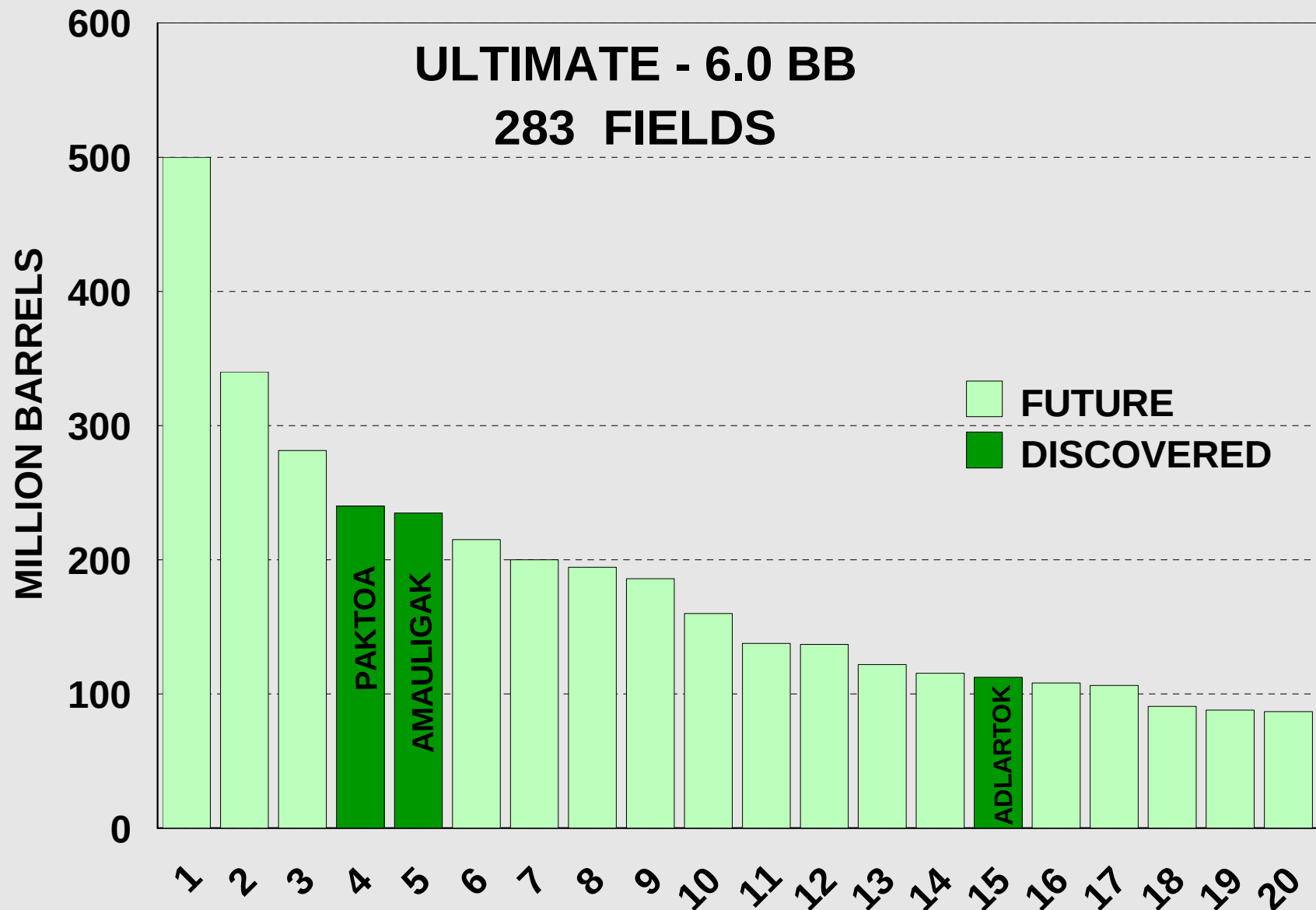
BEAUFORT SEA- ULTIMATE GAS



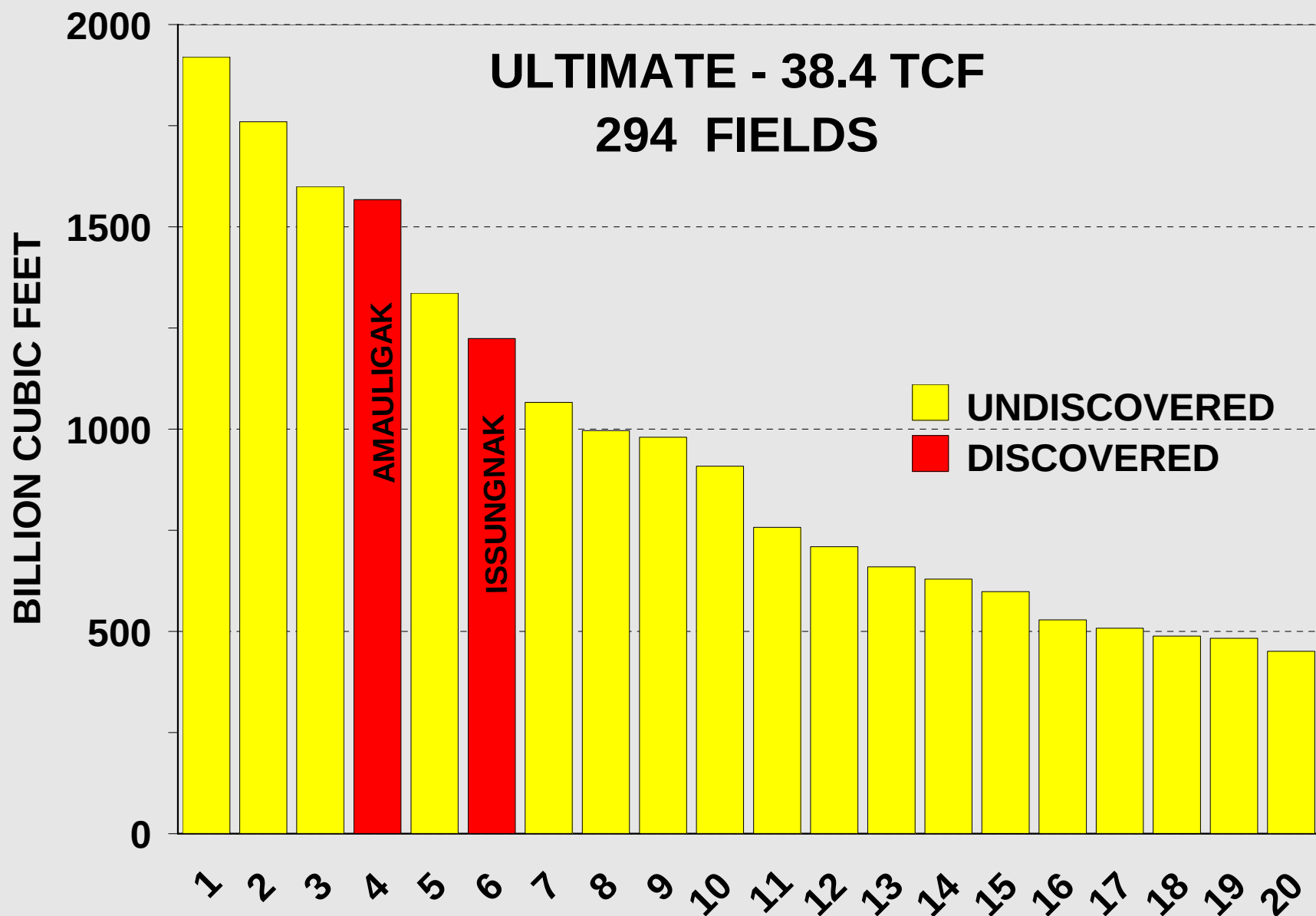
BEAUFORT SEA- ULTIMATE OIL



BEAUFORT SEA - ULTIMATE RECOVERABLE TOP 20 OIL FIELD SIZE DISTRIBUTION



BEAUFORT SEA - ULTIMATE RECOVERABLE TOP 20 GAS FIELD SIZE DISTRIBUTION



CONCLUSIONS

**THE BEAUFORT SEA HAS A LARGE
DISCOVERED OIL AND GAS RESOURCE**

**SUCCESS RATE IS HIGH WITH 26
SIGNIFICANT DISCOVERIES WITH 63 WELLS**

**THERE IS EXCELLENT POTENTIAL FOR
SIGNIFICANT VOLUMES OF UNDISCOVERED
OIL AND GAS IN THE BEAUFORT SEA**

