



THE BC OFFSHORE:
THOUGHTS ON THE BC OFFSHORE
OIL AND GAS MORATORIUM

Presented to Mari-Tech 2004

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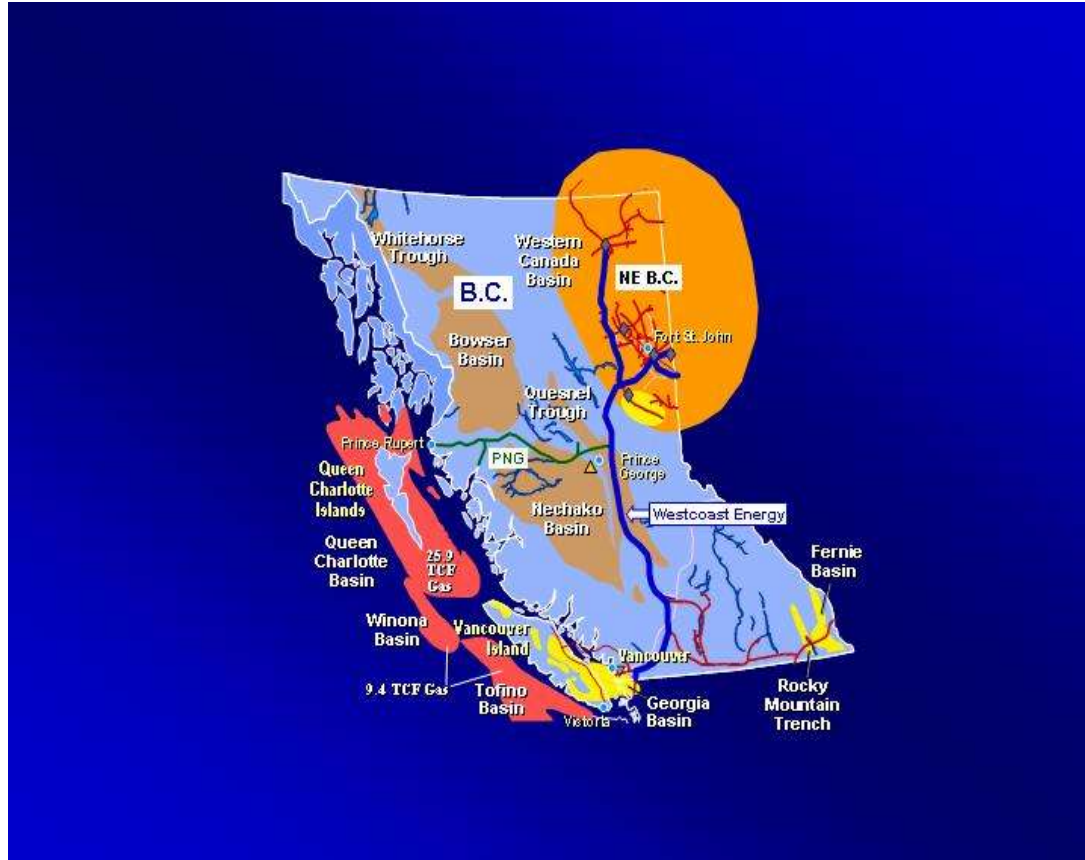
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OFFSHORE: A FIVE STEP PROCESS

- *Step 1 Seismic Surveying* - to find oil & gas Prospects
- *Step 2 Exploration Drilling* – do any Prospects hold economically recoverable oil & gas (Discovery)?
- *Step 3 Appraisal Drilling* – do the Prospects result in commercial Pools or Fields?
- *Step 4 Development and Production* - Oil and/or gas will be produced from each Field for (typically) 10-25 years
- *Step 5 Decommissioning* - removal of facilities and site restoration.

BC OIL AND GAS BASINS WE START AHEAD OF NL & NS



34,000 jobs \$2 B direct to BC

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BC OFFSHORE – HISTORY/STATUS

- **1913 (Graham Is. wells); 1958-88 (“ancient” seismic); 1966 (14 offshore wells); 1984-86 (fed-prov panel); 1989 failed Pacific Accord.**
- **Federal and provincial moratoria: jurisdictional disputes & tanker issues.**
- **BC prepared to lift its moratorium.**
- **Federal moratorium removal the issue today**

**THE BIG SECRET: BC OFFSHORE
INDUSTRY “EXISTS”, BUT IT’S OVER**



BC built Sedco 135 F off Victoria 1960's

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OR IT'S "OVER THERE":

BC BUILT BOAT TO NORTH SEA 1974



(21 OTHERS BUILT IN BC FOR OFFSHORE)

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BC'S SANDWELL ENGINEERING

SAKHALIN - RUSSIA



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WHY THE MORATORIUM?

- **BC AMONG FIRST IN MODERN EXPL'N**
- **1972 – MORATORIUM TARGETS U.S. TANKERS IN BC'S "INSIDE PASSAGE"**
- **OFFSHORE INDUSTRY CAUGHT BY OPTICS: INFO FROM MINISTER ANDERSON**
- **1989 – MORATORIUM DUE TO TWO NON-OFFSHORE OIL & GAS INDUSTRY SPILLS**
- **IGNORES LAST 30 YEARS OF HISTORY**

- **UK, NL, NS, NORWAY – ONLY BC FAILED**

POSITIONS ON THE MORATORIUM

- **“IDEALISTS”**: “NOPE”; IDEOLOGY ISSUE
- **“MISINFORMED”**: CAN’T DO RESPONSIBLY IN TERMS OF SAFETY/ENVIRONMENT
- **“INFORMED”**: VALUES, JUDGEMENT DIFFER
- **MINISTER ANDERSON**: STUDY, STUDY, STUDY – FILL ALL GAPS FIRST, NO “RULES”
- **INDUSTRY**: LARGELY SITTING IT OUT
- **TWO SCIENCE PANELS**: GAPS EXIST, BUT CAN LIFT MORATORIUM TO FILL GAPS
- **PROVINCE**: LIFT THE MORATORIA

MISINFORMED?

- “The impacts of the offshore oil and gas industry were summarized by the San Luis Obispo Chamber of Commerce. In their 1998 report they concluded, “The impact of oil and gas in our county is already profound. From loss of property values to loss of business to environment and social impacts, we have been harmed.””
- **THE ACTUAL LEAD –IN SENTENCE:**
 - “Therefore, the socioeconomic impacts of offshore oil and gas development are still unknown”.
- **SLO COC chair: SLO never had an offshore, but the 1926 onshore oil fire was bad.**

Times Colonist Feb. 23, 2004

- “Although the safety record of the **offshore energy industry** has improved, it was in response to a succession of disasters”.
- “Despite the **industry’s** best intentions, the risk of a major oil spill or blowout still exists. The sinking of the tanker Prestige off the coast of Spain, an incident that is releasing more oil than Exxon Valdez spill, is **a recent and ongoing example.**”
- *Neither accident was offshore oil and gas industry.*
- *Prestige’s cargo was not even crude oil.*

Author: “Non-profit ecological group”

EFFECTS OF THE MORATORIUM

■ FACILITATES DISINFORMATION

- **HYPOTHETICAL PROJECTS**
- **OPERATOR, LOCATION, DEPTH, ECOSYSTEM, GEOLOGY, TECHNOLOGY, TRANSPORT, TIMING ?????**
- **NO FORMAL PROCESS – UNTESTED INFO**
- **WHO PAYS COSTS ABSENT A PROPONENT & PROJECT?**

■ SCIENCE GAPS CONTINUE

- **“SEED MONEY” TOO RISKY FOR INDUSTRY**
- **“BEEN THERE, DONE THAT”**

■ BC CONTINUES TO RECEIVE UNFAIR AND DISCRIMINATORY TREATMENT

“GHOST” STUDIED TO DEATH

- **1986** – Joint Federal /Provincial panel recommended lifting the moratorium with 92 recommendations
- **1998** AGRA update – no apparent fatal flaws
- **2001-** Jacques Whitford – *“no specific design, geophysical or environmental issues that would preclude development”*
- **2002** - BC Scientific Panel – *“no fundamental inadequacy of science or technology, properly applied in an appropriate regulatory setting, to justify retaining moratorium”*
- **2004** (Feb) – Royal Society – *“no science gaps need to be filed before lifting the moratoria.....provided an adequate regulatory regime is put in place”*
- **NOW THE “PRIDDLE PANEL” AWAITING RECOMMENDATION THIS SUMMER**

WHAT IS THE REST
OF CANADA DOING IN
OFFSHORE?

PETROBRAS RIG REFIT IN QUEBEC SHIPYARD



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VENTURE JACKET LOADING - HALIFAX



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NEWFOUNDLAND - HIBERNIA GBS



FED. MONEY/ LEADERSHIP

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CANADIAN ARCTIC 1980s

FEDERAL MONEY/LEADERSHIP



CAMPECHE PROJECT - \$250 MM US

50% CANADIAN - MEXICO OFFSHORE



CANTARELL PROJECT - \$1.2 B US
30% CANADIAN - MEXICO OFFSHORE
N2 SUPPLY TO CANTARELL FIELD



AND YES, EVEN ONTARIO!

LAKE ERIE – OVER 2100 WELLS



550 PRODUCING; 10-15 DRILLED/YR

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BC SEEMS TO RATE “SPECIAL TREATMENT”

- **ONLY BLANKET OFFSHORE MORATORIUM
IN CANADA**
- **UNSUPPORTED BY 1972 & 1989 EVENTS**
- **UNSUPPORTED BY SCIENCE OR
TECHNOLOGY DEFECTS (SCIENCE PANELS)**
- **UNSUPPORTED BY THE LAST 30 YEARS
OPERATIONAL HISTORY IN “TIGHT”
JURISDICTIONS**

THE “RISKS” OF *NOT* PROCEEDING

- OFFSHORE RISKS/CONSEQUENCES KNOWN AND PROVEN LOW IN ATLANTIC CANADA
- LOSS OF OPPORTUNITY IS A “RISK” TOO – BUT HERE IT’S AN EXISTING *EVENT!*
- NORTHERN AND COASTAL TOWNS CRISIS
- CRISIS & CONSEQUENCES REAL, AND WE HAVE LITTLE CONTROL OF THIS
- NO GUARANTEE OF OFFSHORE INDUSTRY

- BUT GIVE BC THE OPPORTUNITY!

***A SELECTION OF ISSUES
AND MYTHS***

TYPICAL CONCERNS

- BLOWOUTS, OIL SPILLS
- TOXIC DRILLING FLUIDS
- SEISMIC IMPACTS
- SUSTAINABILITY
- GLOBAL WARMING
- “SUNSET” INDUSTRY
- TAKES TOO LONG
- MAY NOT BE ANY OIL
- FIRST NATIONS ISSUES
- WIND, WAVES, EARTHQUAKES
- NO JOBS, NO BENEFITS
- FOREIGNERS GET MOST JOBS
- NO LONG TERM JOBS
- BIG SUBSIDIES NEEDED
- IMPACT ON FISHING, TOURISM
- NO REGULATORY, FISCAL REGIMES FOR BC
- NO INDUSTRY INTEREST
- “OIL IS EVIL”
- NO NEED FOR OIL & GAS

RISK IS NOT A MYTH

- **RISK IS A QUESTION OF BALANCE**
- **RISK MANAGEMENT IS A KEY PART OF THIS INDUSTRY**
- **THE OFFSHORE HAS BENEFITS AND RISKS**
- **SAME AS ANY RESOURCE INDUSTRY**

Roncador Production Platform 2001

- Onboard explosion with fatalities.
- Emergency sub-sea systems worked.
- Crude spill from “riser” and small diesel fuel spill.
- “Titanic Principle” worked.



The Piper Alpha Disaster – North Sea



- 167 dead, 62 survivors.
- The disaster was *extensively* investigated.
- The experience is used in current industry production system designs.
- 1984 Ocean ranger

BLOWOUTS DO HAPPEN, BUT..

- Uniacke off Sable Island 1984 -1500 bbl condensate spill evaporates
- 1-2 IN EAST COAST HISTORY - GAS



■ ATLANTIC
CANADA: NO CRUDE
OIL BLOWOUTS

WORLD OFFSHORE BLOWOUTS

- **5 over 150,000 bbl (Exxon Valdez 260,000).**
- **Four of the five in the early days: 1960-1980.**
- **Four of the five in third world countries.**
- **Two of the five - & the worst - in one country**

- **US state: no blowout over 1,000 bbl since 1992.**
- **US federal: nothing over 1,000 bbl since 1970.**
- **Atlantic Canada experience**

SOURCE: (JWEL, MMS)

BLOWOUTS US FEDERAL OCS

- **FIVE OVER 1,000 BBL – ALL 1964-70**
- **SANTA BARBARA 1969 LED TO CHANGES**
- **1971-2000:**
 - **29,000 WELLS, 199 BLOWOUTS**
 - **28 SPILLED OIL: 1 TO 200 BBL**
 - **CUMULATIVE VOLUME 1,200 BBL**

Source: Cook Inlet Final EIS 2003 App. A -A-I-4

MYTH: OFFSHORE A MAJOR SOURCE OF WORLD OCEANIC OIL POLLUTION

Tankers	12.2%
General marine traffic	33.2
Municipal/industrial runoff	36.2
Atmospheric	9.2
Natural seeps and erosion of oil	7.2
Offshore oil and gas industry	2.2

(Source: S.L. Ross 1995)

■ **OFFSHORE OIL AND GAS LESS THAN NATURAL SOURCES!!!!**

NL SPILL STATISTICS

- Production over 300,000 barrels per day
- 2002: Total spills: 21 153 barrels
 - Synthetic based mud 151 barrels
 - Miscellaneous 2 barrels
 - Crude, condensate 0.1 barrels
- 6 years 1997-2002: 138 spills, 256 barrels
- Mud 201 barrels, all hydrocarbons 55 barrels
- CRD “Wastewater”: 600,000 BPD to St. of Juan de Fuca

2002-3 Annual Report - Canada Newfoundland Offshore Petroleum Board; CRD & Sierra Legal Defence Fund Information

MYTH: NO BENEFITS, FEW JOBS

- **SEE PAPER FOR INFRASTRUCTURE AND SPENDING**
- **D + I Job Statistics Dec 2003 (unofficial):**
- **NL 14,000+; 81-89% NL residents, 7% ROC**
- **NS 5800+; 60% NS, 26% ROC**
- **JOBS ARE IN PHASES, DEPEND ON SUCCESS**
- **Cohasset manpower 78% NS, 90% Cdn**

**Source: CNSOPB, CNOPB, M & NE, Heritage Gas, NL TST, indirect factor of 3; JHA
update May 2004.**

MYTH: BC NORTH COAST WATERS WORST IN THE WORLD



TRY NEWFOUNDLAND'S GRAND BANKS

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BC WATERS RISKY & PRISTINE?

- **M.V. ARCTIC
SHIPPED ARCTIC
CRUDE FROM BENT
HORN FOR ABOUT
10 YEARS.**

(Canarctic Shipping)



GULF BEAUFORT DELIVERS FUEL TO ARCTIC EXPLORERS (GNWT)



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TRY THE NORTH ATLANTIC OR SOUTH CHINA OR NORTH SEAS!!!



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TRY WINTER NORTH ATLANTIC



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TRY COOK INLET ALASKA

- **15-16 PLATFORMS NEARSHORE – 1962 START**
- **LONG, NARROW FIORD LIKE SETTING**
- **3 ACTIVE VOLCANOES**
- **TERRIBLE EARTHQUAKES**
- **2-4 FT. PAN ICE**
- **HUGE TIDES, 7-8 KT. CURRENTS IN INLET**

- **SEVERAL GAS BLOWOUTS, NO CRUDE BLOWOUTS**

MYTH: BC OFFSHORE & GLOBAL WARMING

- Claim: BC offshore will cause global warming.
- Energy conservation and “off-oil” may cut oil/gas use.
- BUT: Banning BC offshore does not change consumption of crude, just the SOURCE of N. A. crude and the location of jobs and benefits producing it.
- ***THIS ARGUMENT IS NOT PERSUASIVE***

LIFTING THE MORATORIUM?

- **EQUAL TREATMENT FOR BC VS. REST OF CANADA**
- **FEDERAL SHOW OF GOOD FAITH**
- **DEVELOPE FISCAL, REGULATORY, TECHNICAL REGIMES, PACIFIC ACCORD, FIRST NATIONS**
- **GOVTS THEN OPEN TO CONSIDER PROPOSALS**

- **NOT A GREEN LIGHT TO EXPLORATION**
- **REMOVES RED LIGHT TO PROGRESS AND IMPROVEMENT OF KNOWLEDGE BASE**

CONCLUSIONS

- Both risks and benefits exist - can be managed.
- Environmental risks very low: 30 year proof in Atlantic Canada and “modern” waters.
- Stop exporting our jobs/\$ to others.
- Recognize the cost of the moratorium.
- NO JUSTIFICATION FOR MORATORIUM
- NO JUSTIFICATION TO DEPRIVE BC OF OPPORTUNITY.
- Issue is value judgment and political leadership, not science or technology.

KEY RECOMMENDATIONS TO PRIDDLE PANEL

- **LIFT MORATORIUM UNCONDITIONALLY AND COMPLETELY**
- **SPLITTING PHASES WILL BE DISASTER**
- **FLAG MISINFORMATION ISSUE**
- **PLEASE DO NOT CONTINUE TO
DISADVANTAGE BC**

NORTH ISLAND & NORTH COAST?

A POSSIBLE FUTURE?



LET'S DECIDE!

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BACKUP SLIDES

MYTH: SEISMIC KILLS EVERYTHING

- **NOT: EXPLOSIVES, NEAR BOTTOM, NEAR SHORE, NAVY SONAR, OR LONG TERM**
- **NO DAMAGE TO FISH UNLESS VERY CLOSE (6-10 m)**
- **AVOIDANCE BEHAVIOUR COMMON**
- **“SOFT START” PROTECTS MOST LIFE**
- **THE NORWAY HALF-STORY**

SEISMIC IN CONTEXT

FREQUENT?
AREA?

HOW
LONG?

KILLS?

SEISMIC

-once or twice
in history
-moderate area

entire QCB
in
90 days

-few fish if any
-undetectable
eggs, larvae
-accidental

FISHING

-forever
-wide area

most days
of every
year

-huge
-deliberate
-trawl damage
-bycatch

MYTH: SUSTAINABILITY

- Claim 1: “BC offshore anti sustainability”.
- “Sustainability” is environment, economy, social/social justice, *NOT just environment*. NL, NS, Norway history!

- Claim 2: Offshore oil & gas industry is not sustainable so don't do it. (“sunset industry”)
- How long is sustainable? 100 years? 1000 years?
- Is no jobs better than 150 years of jobs?
- Do we shut down all mining & manufacturing on this basis?
- *THESE ARGUMENTS NOT PERSUASIVE*