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Petroleum Exploration Opportunities in Western Newfoundland

By

Phonse Fagan, P.Geo.

Government of Newfoundland

Dept. of Mines and Energy

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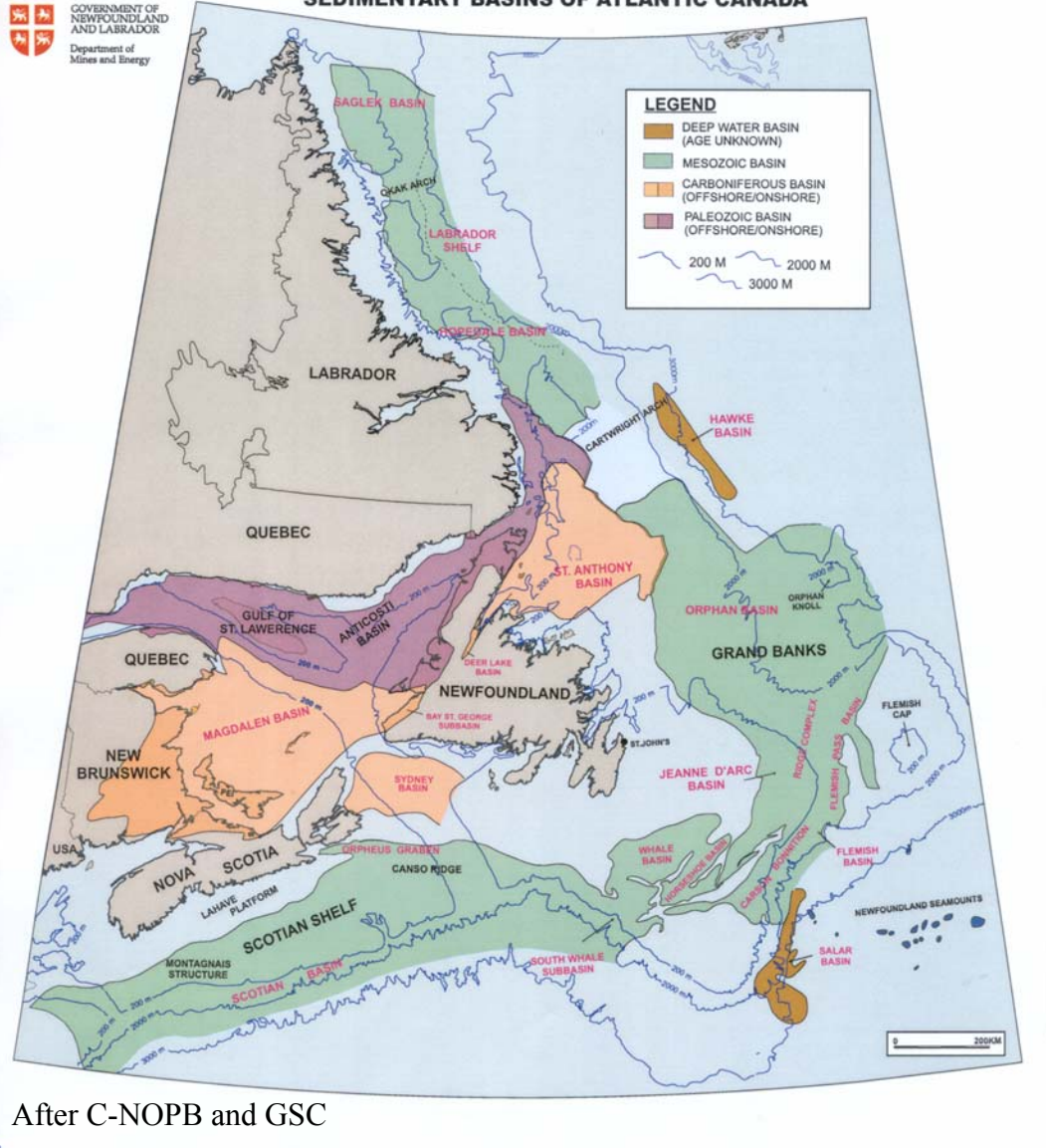
Ian Atkinson





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SEDIMENTARY BASINS OF ATLANTIC CANADA



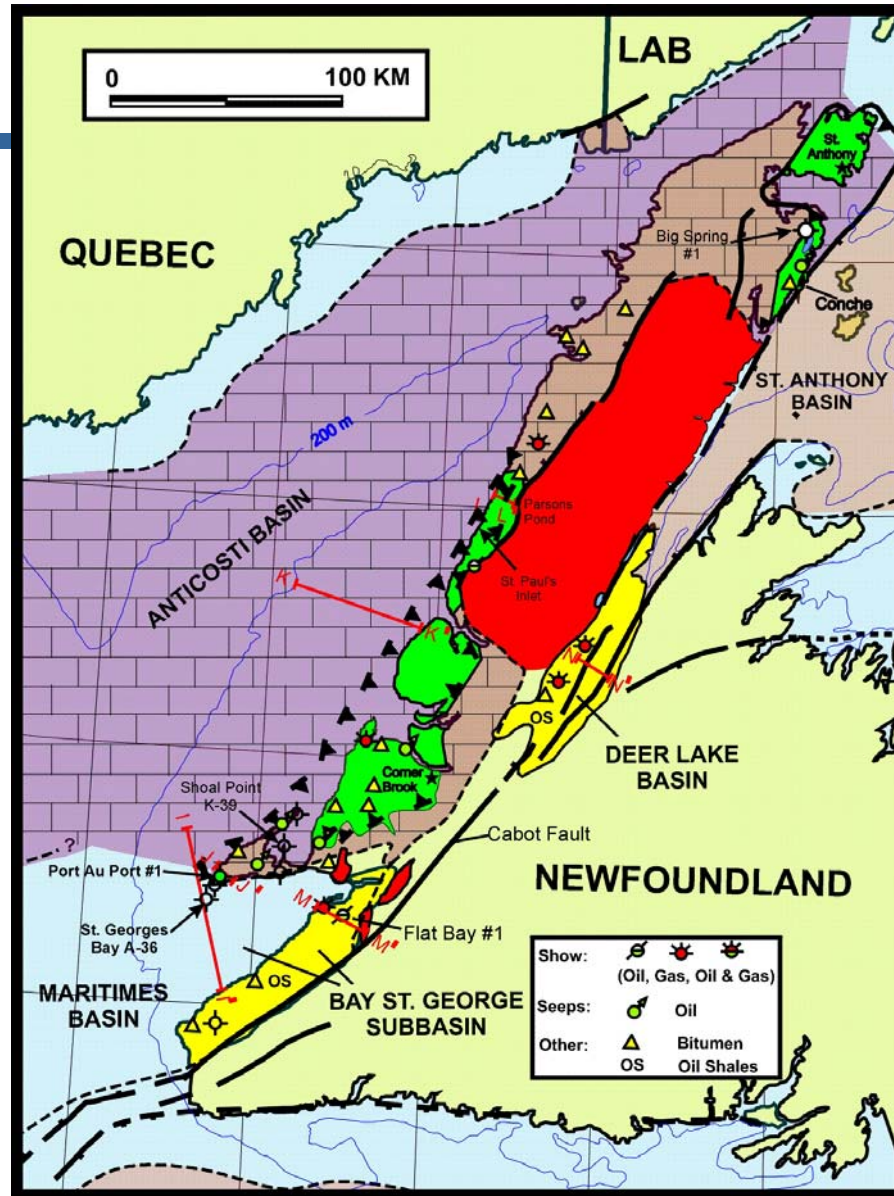
After C-NOPB and GSC

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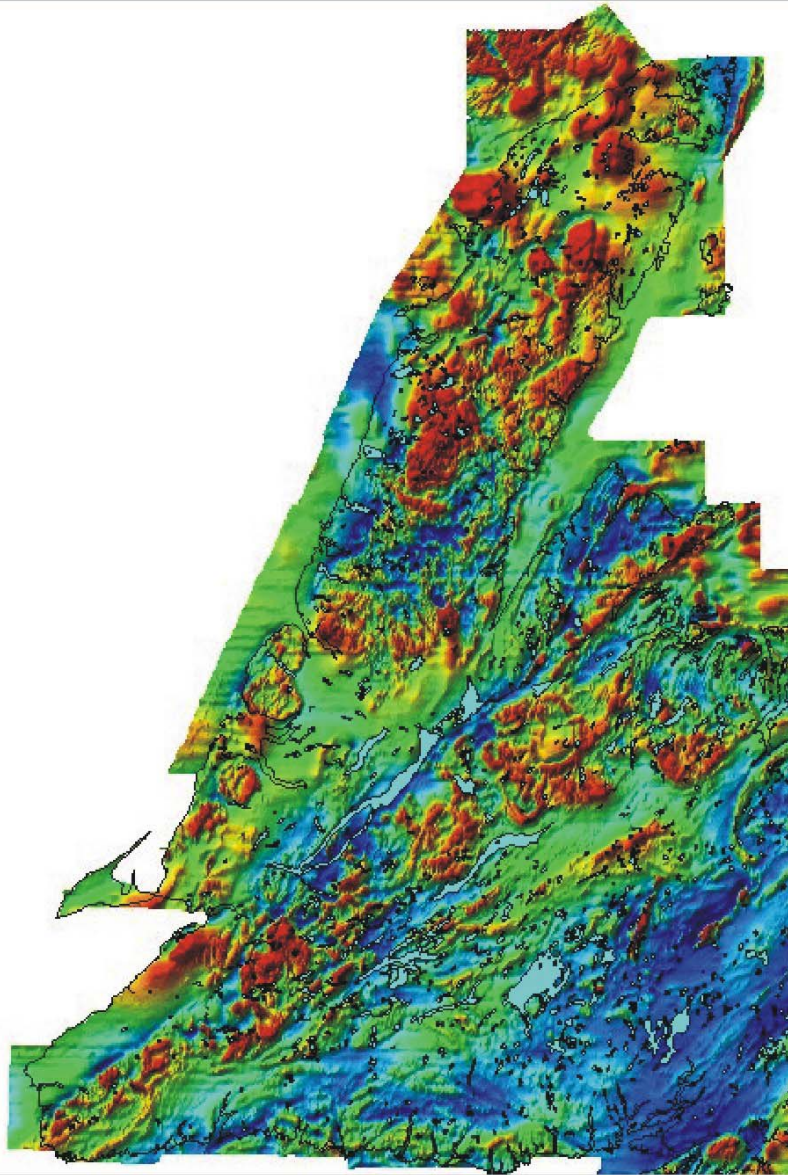
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Western Nfld. Surface Geology



Mag Data

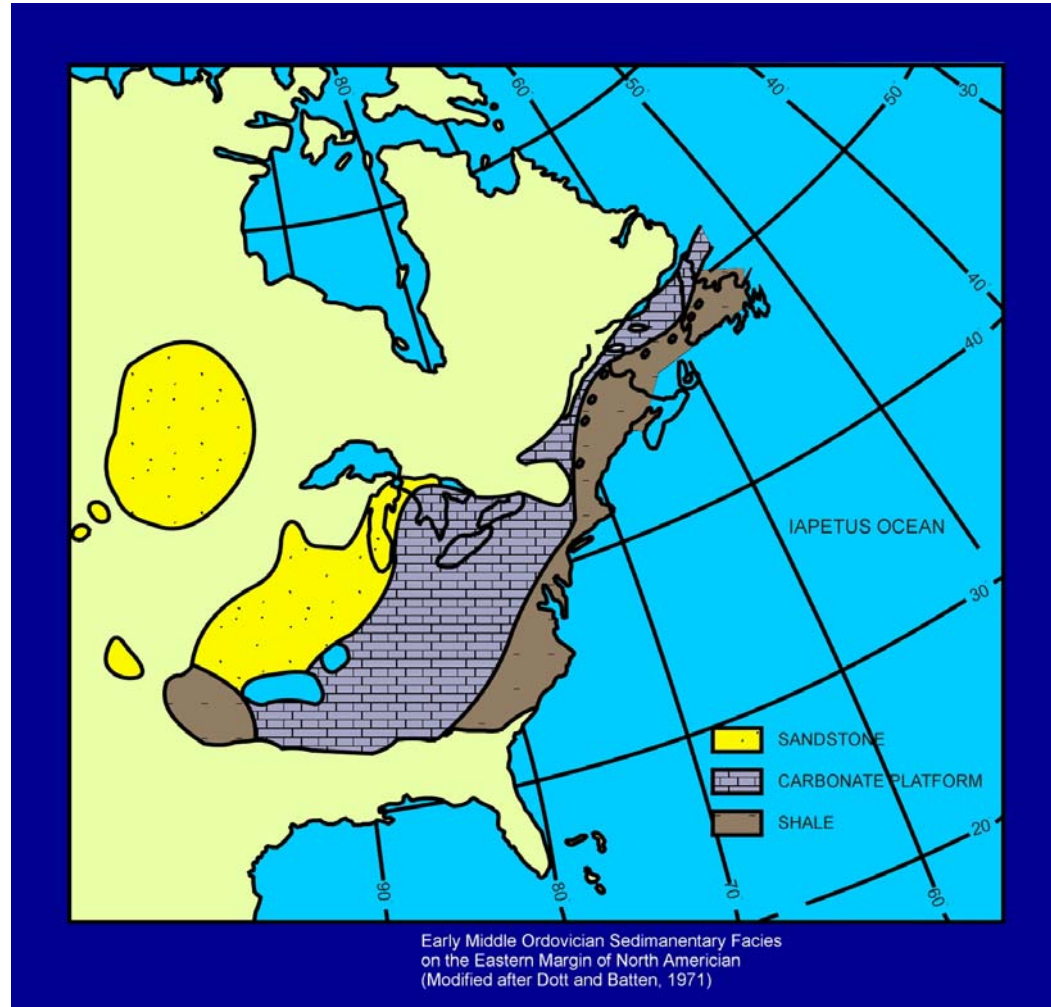


Kilfoil

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Cambro-Ordovician Deposition



After Dott and Batten 1971

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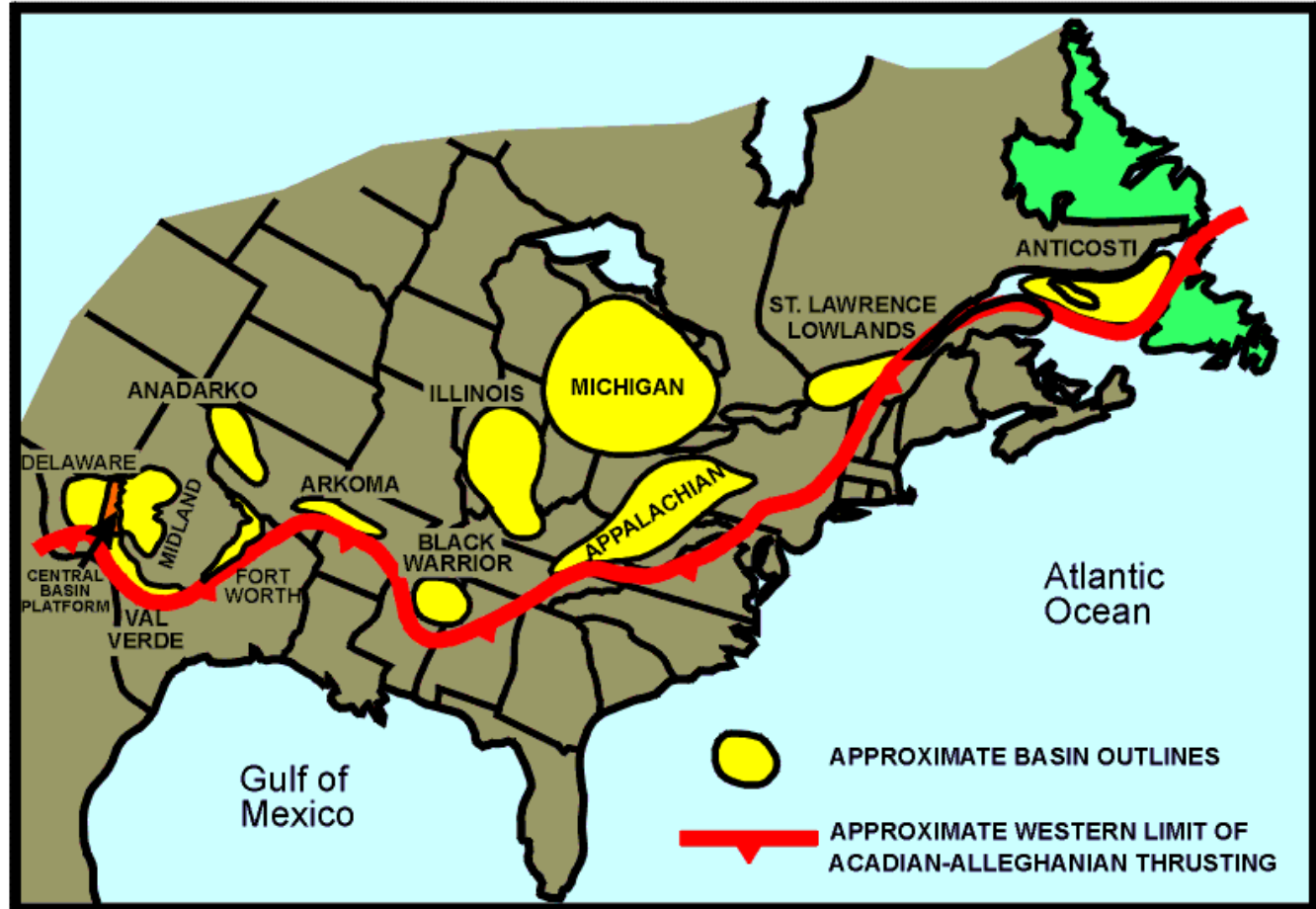
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PALEOZOIC BASINS OF EASTERN NORTH AMERICA



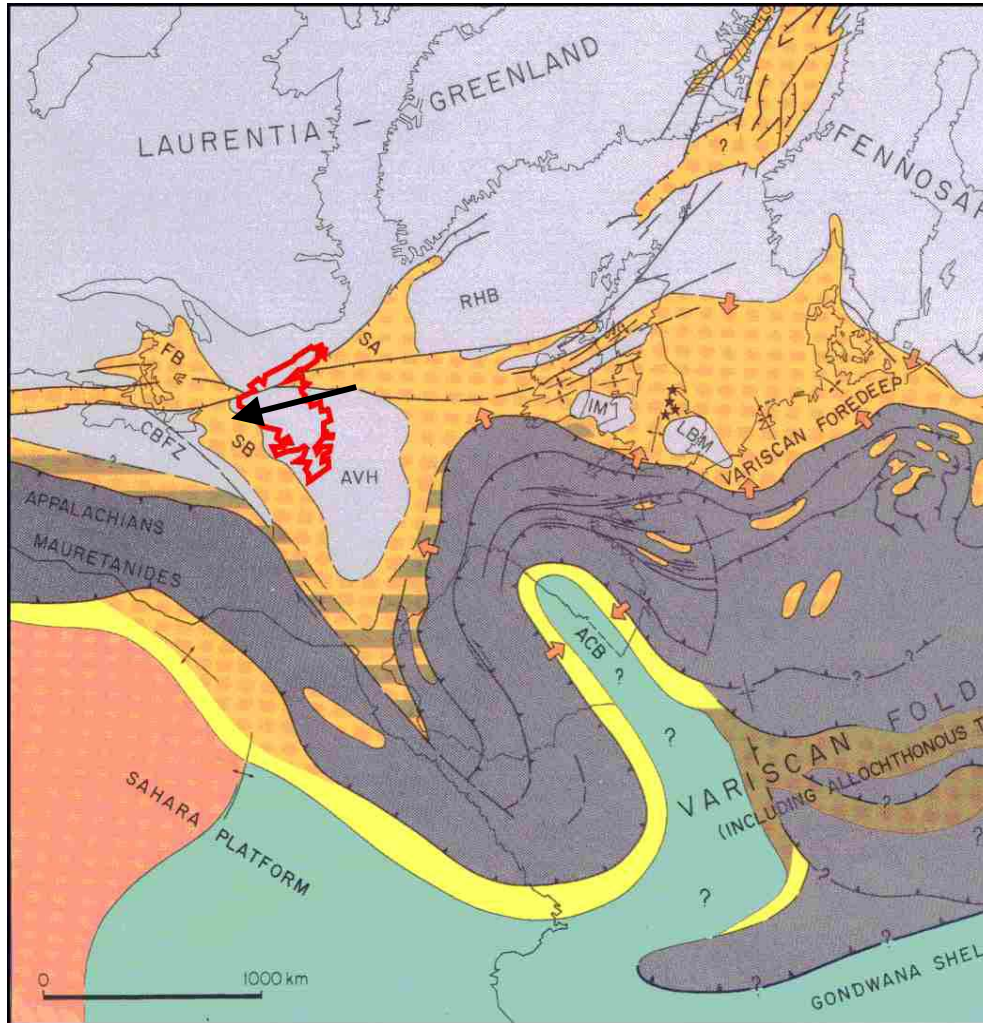
After Sinclair: C-NOPB

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Middle Carboniferous Depositional Environment



DEPOSITIONAL ENVIRONMENT AND PRINCIPAL LITHOLOGY

- | | | | |
|--|---|--|--|
| | MAINLY CONTINENTAL CLASTICS | | MAINLY EVAPORITES |
| | DELTAIC-SHALLOW MARINE, MAINLY SANDS | | EVAPORITES, CLASTICS AND CARBONATES |
| | SHALLOW MARINE, MAINLY SHALES | | EVAPORITES AND CARBONATES |
| | SHALLOW MARINE, CARBONATES AND CLASTICS | | DEEPER MARINE CLASTICS AND/OR CARBONATES |
| | SHALLOW MARINE, MAINLY CARBONATES | | DEEPER MARINE, MAINLY SANDS (FLYSCH) |
| | EVAPORITES AND CLASTICS | | BASINS FLOODED BY OCEANIC CRUST |

POSITIVE AREAS

- | | |
|--|----------------------|
| | ACTIVE FOLD BELTS |
| | INACTIVE FOLD BELTS |
| | ANOROGENIC, CRATONIC |

VOLCANIC ACTIVITY

- | | |
|--|-----------------|
| | PLATEAU BASALTS |
| | ANOROGENIC |
| | OROGENIC |

AUXILIARY SYMBOLS

- | | | | |
|--|------------------------|--|-----------------------------------|
| | FAULTS, WRENCH, NORMAL | | DIRECTION OF CLASTIC INFLUX |
| | MAJOR THRUST FAULTS | | CONTINENTAL SLOPE |
| | SUBDUCTION ZONES | | ACTIVE SEA-FLOOR SPREADING AXIS |
| | MAJOR ANTICLINAL AXIS | | AS ABOVE, WITH MAGNETIC ANOMALIES |

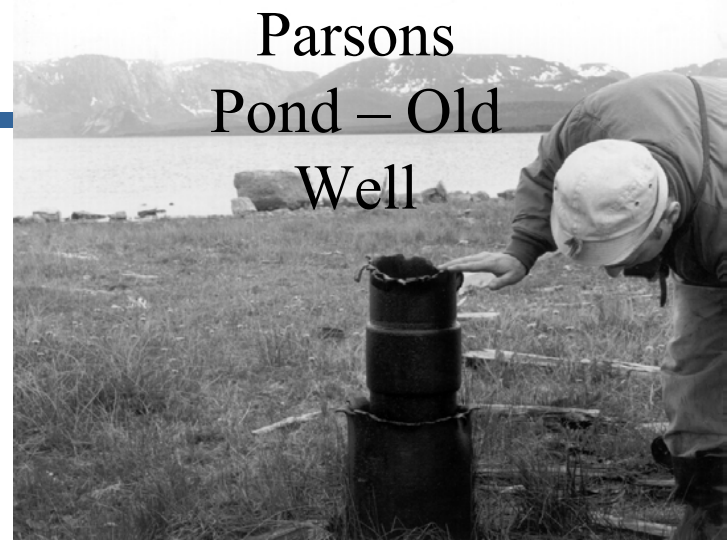
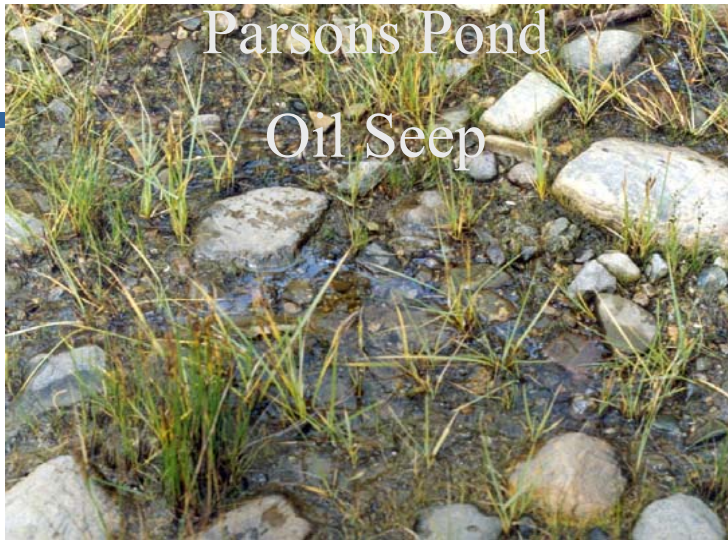
- | | |
|------|----------------------------|
| ACB | AQUITAINE CANTABRIAN BASIN |
| AVH | AVALON HIGH |
| CBFZ | CHEDABUCTO FRACTURE ZONE |
| FB | FUNDY BASIN |
| IM | IRISH MASSIF |
| KAZ | KAZAKHSTAN BLOCK |

- | | |
|-----|-----------------------|
| KZR | KONTO ZERO RIF |
| LBM | LONDON-BRABANT MASSIF |
| RHB | ROCKALL-HATTON BANK |
| SA | ST. ANTHONY BASIN |
| SB | SIDNEY BASIN |
| SVB | SVERDRUP BASIN |

After Ziegler

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Old wells in western Nfld. drilled on oil seeps/ surface geology

