

Fracking for Fossil Fuels in NZ



*Prepared for Eye of the Storm
Climate Conference
Victoria University 15-17 Feb 2016*

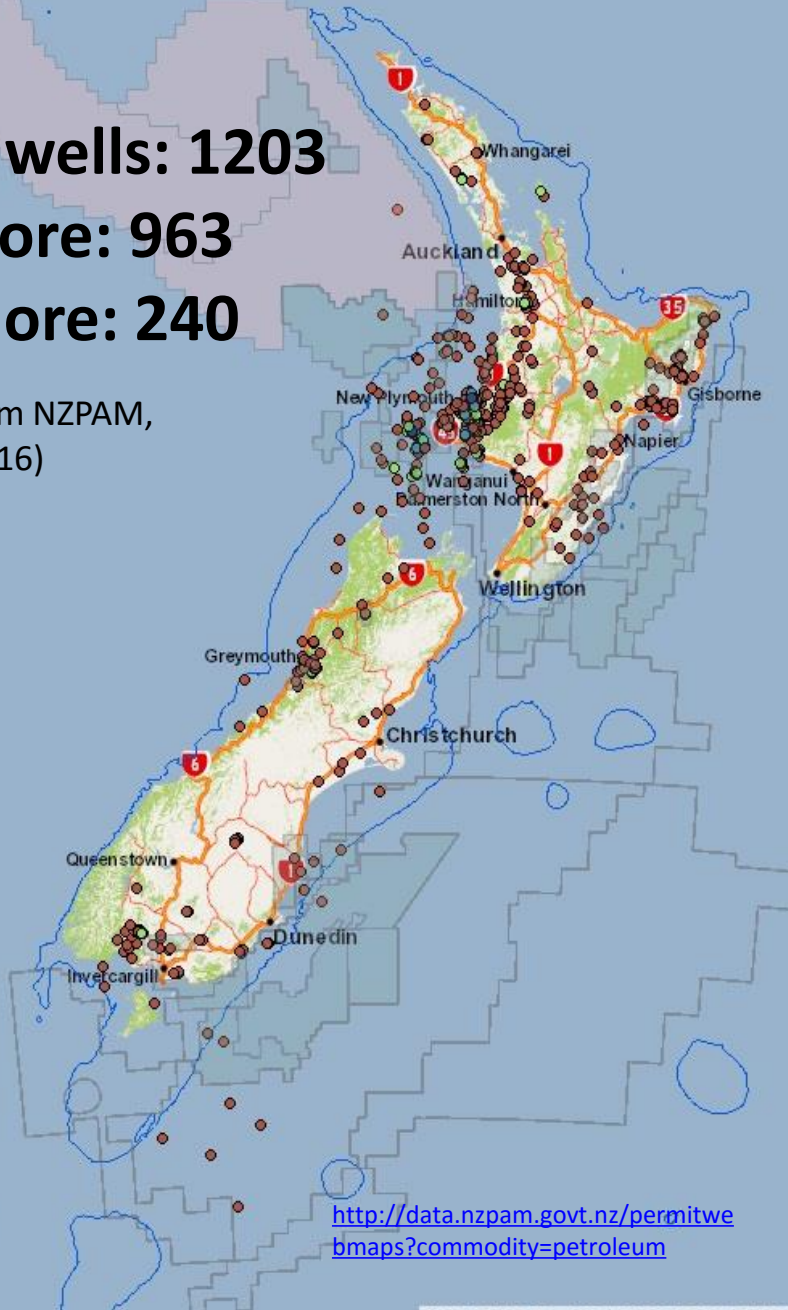
*By Frack Free Kapiti and
Climate Justice Taranaki*

**Greymouth
Ohanga-A wellsite,
Taranaki**

Photo by Fiona Clark, 26 Nov 2014

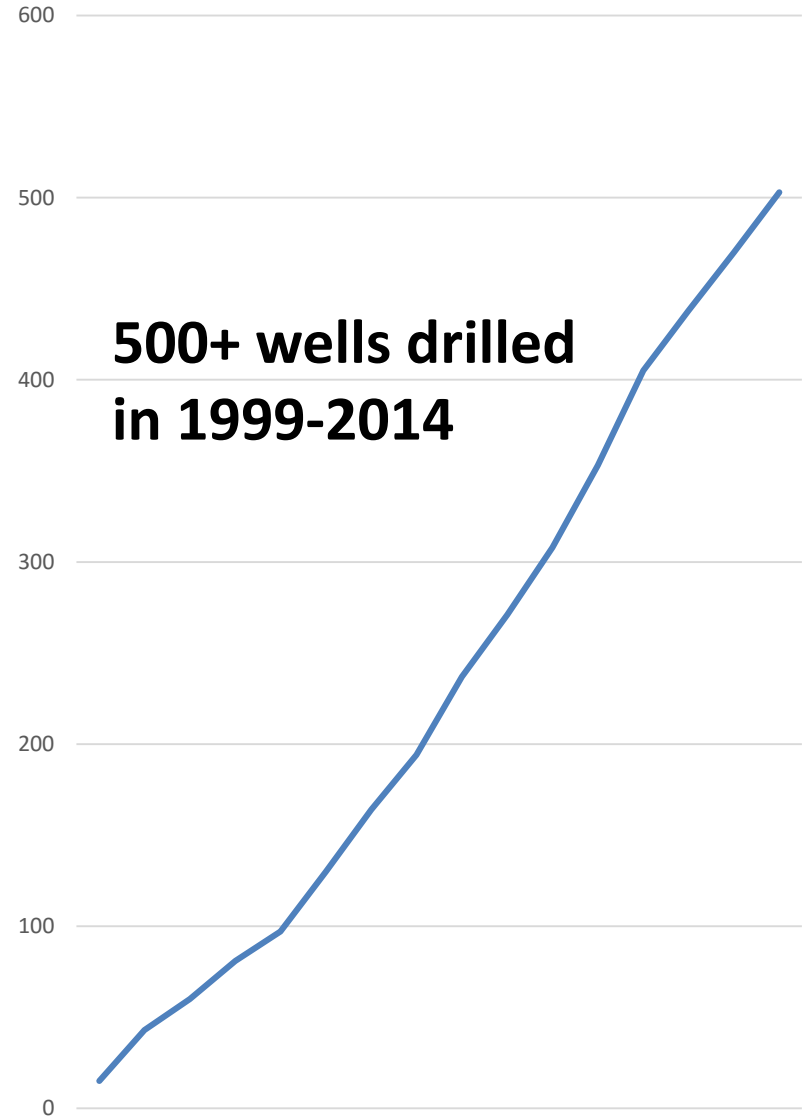
Total wells: 1203
Onshore: 963
Offshore: 240

(Email from NZPAM,
12 Feb 2016)



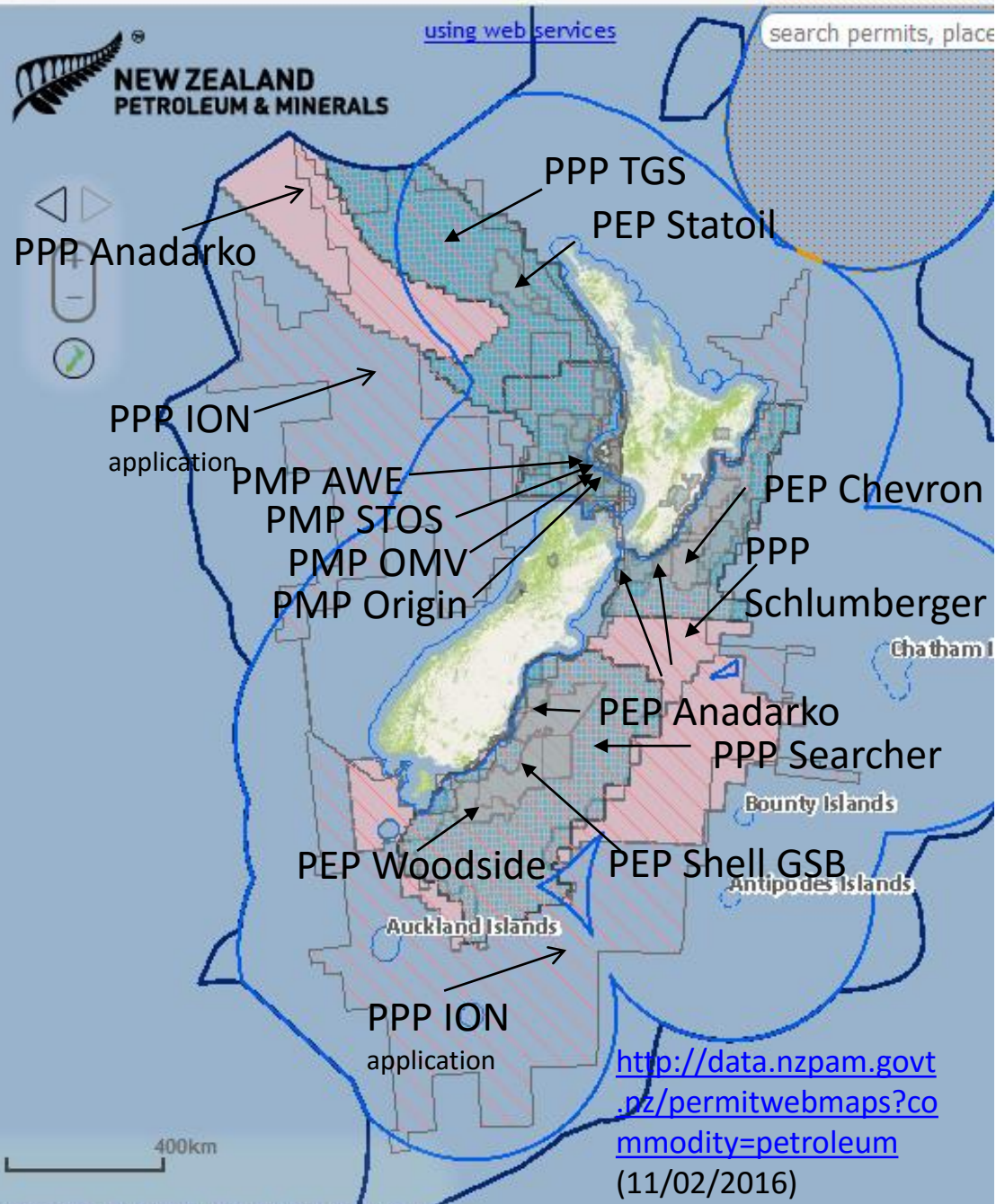
<http://data.nzpam.govt.nz/permitwebmaps?commodity=petroleum>

How many oil/gas wells?



**500+ wells drilled
in 1999-2014**

<http://www.med.govt.nz/sectors-industries/energy/energy-modelling/publications/energy-in-new-zealand>



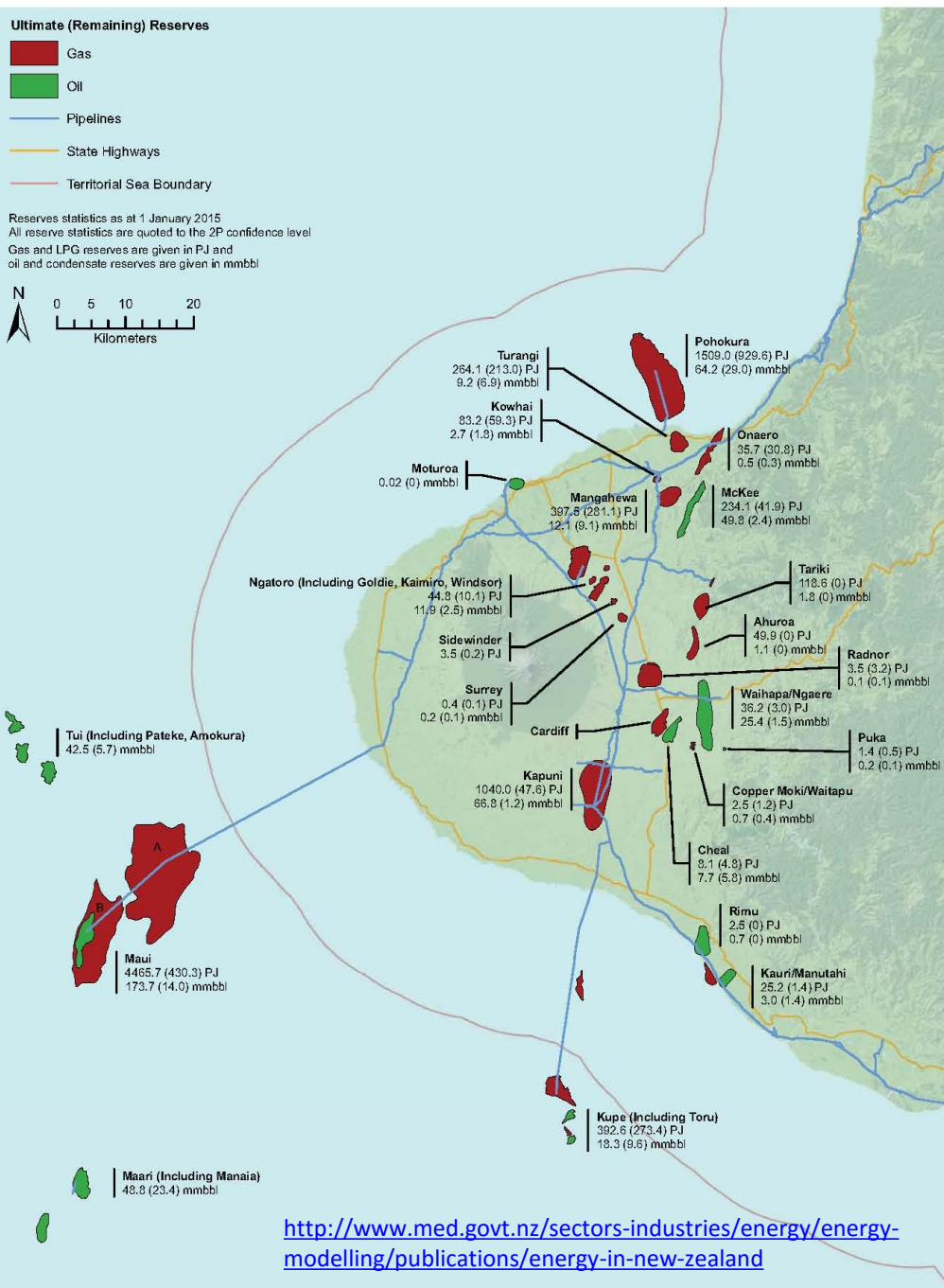
“Government aims to increase the value of NZ petroleum exports **ten-fold** from \$3 billion to \$30 billion a year by 2025.”

NZ Trade & Enterprise

<https://www.nzte.govt.nz/en/invest/sectors-of-opportunity/oil-and-gas/>

Using Taranaki as the ‘model’ for expansion...

Figure D.1: Taranaki Oil and Gas Fields



<http://www.med.govt.nz/sectors-industries/energy/energy-modelling/publications/energy-in-new-zealand>

What's all that gas for?

49% - petrochemicals

30% - electricity generation

15% - industries

6% - domestic customers

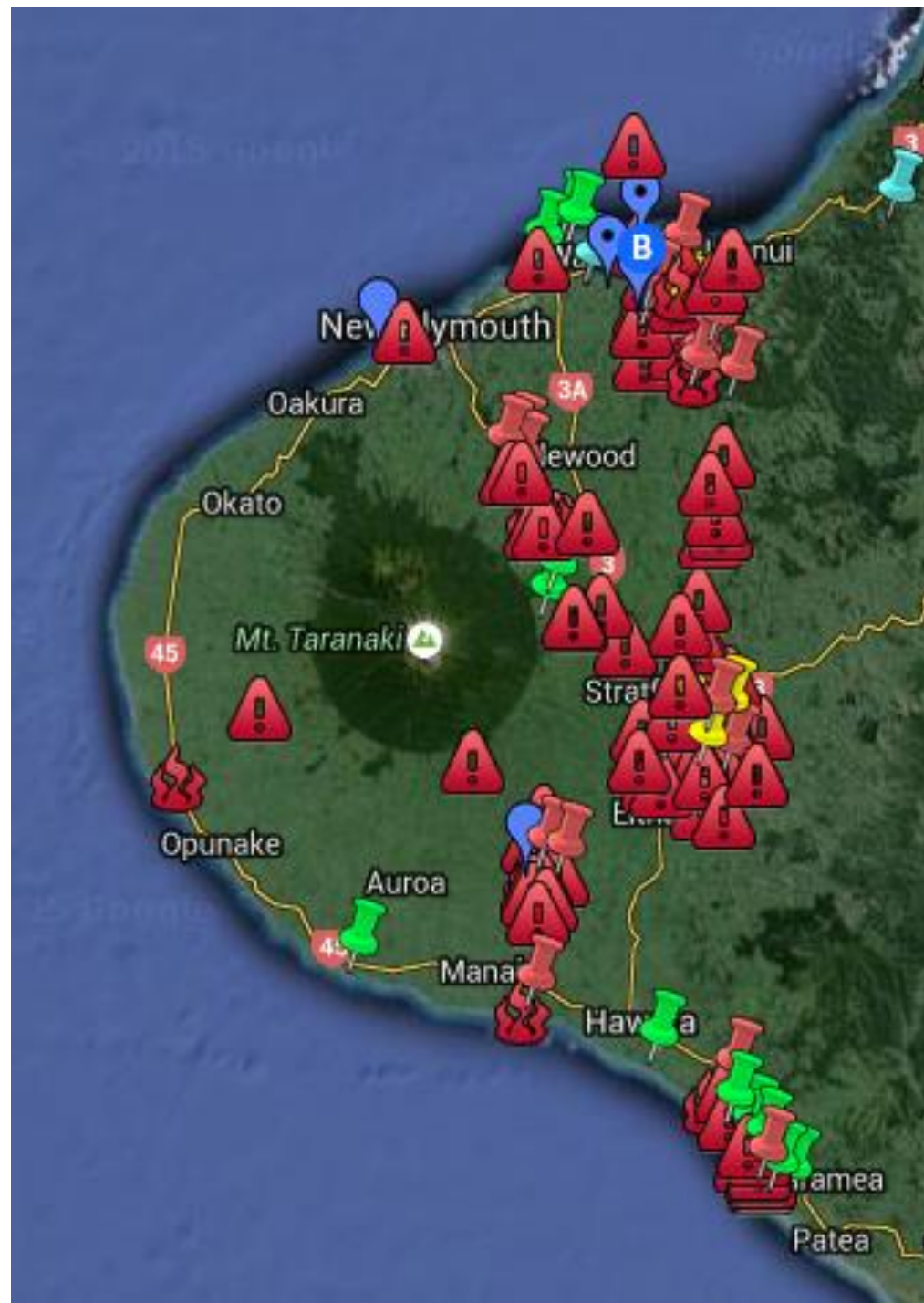
<http://www.gasindustry.co.nz/about-the-industry/nz-gas-story/>



<http://www.energystream.co.nz/community/meet-the-people-in-the-industry/motunui-1-restart-a-taranaki-triumph>

It's NOT just the wells!

- Wellsites
- Production stations
- Deepwell injection sites
- Mix Bury Cover sites
- Land farms
- Worm farms
- Tank farms
- and...



Compendium of
Scientific, Medical and
Media Findings
Demonstrating Risks
and Harms of Fracking,
Physicians for Social
Responsibilities, 2015

<http://www.psr.org/assets/pdfs/fracking-compendium.pdf>

Association between
density and proximity of
gas wells within 10-mile
[16km] of maternal
home and prevalence of
congenital heart defects
and possibly **neural tube**
defects.

McKenzie et al. 2014

<http://dx.doi.org/10.1289/ehp.1306722>

Health Impacts



FRACK TO SCHOOL

Norfolk School in Taranaki is ~600m from Tag Oil's
proposed Sidewinder B wellsite.

<http://www.norfolk.school.nz/?p=1957>

Flare at Todd Energy Mangahewa-E wellsite

Performance rating = *“Improvement required”*
during 2013-2015

Taranaki Regional Council, Feb 2016



Photo by Fiona Clark, 29 Dec 2014

**Drill Rig “Big Ben”
at Todd Taranaki
Mangahewa-E
Wellsite**

**Able to drill
multiple wells
within close
distances –
intensifying
impacts & risks**

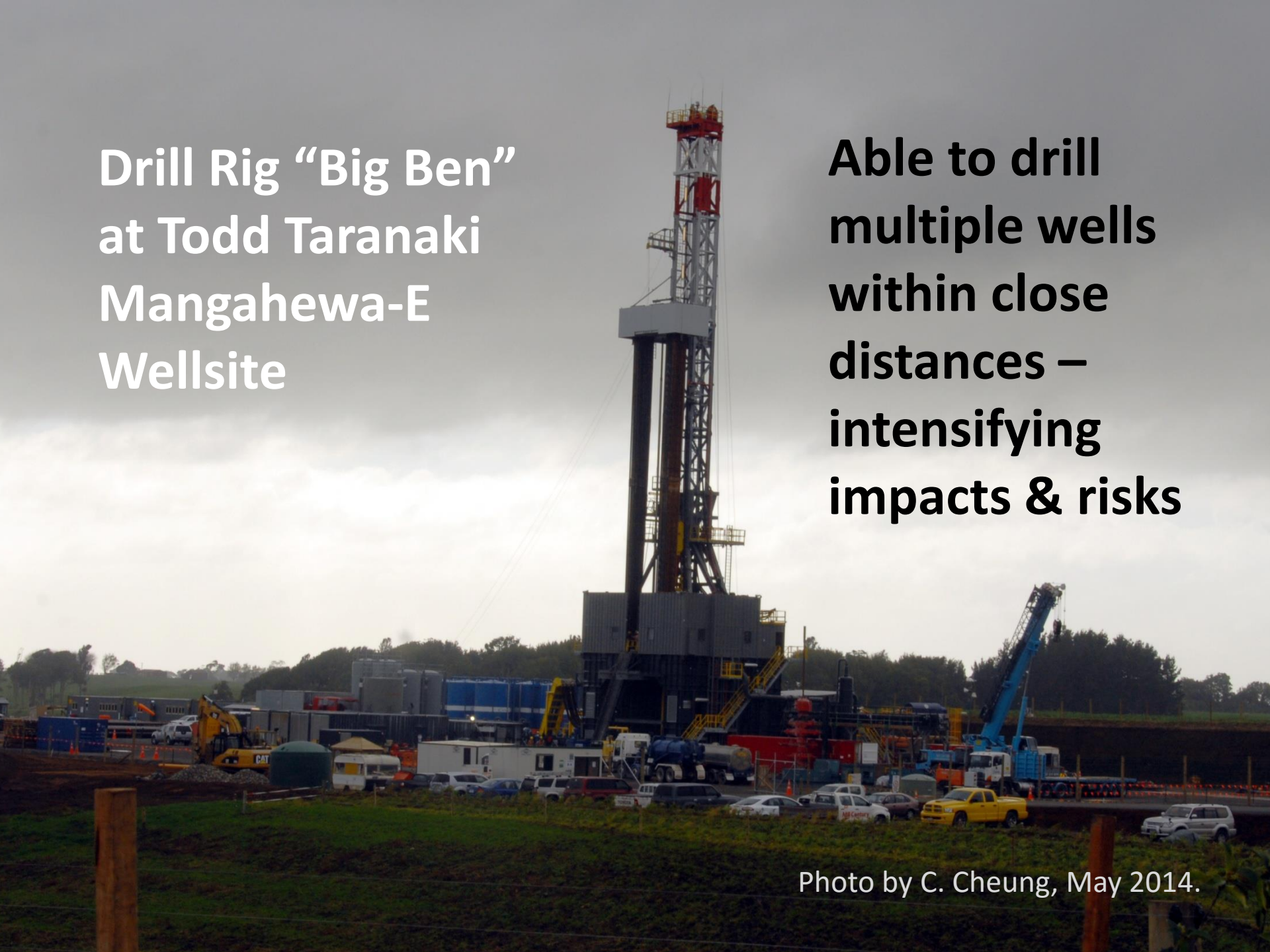
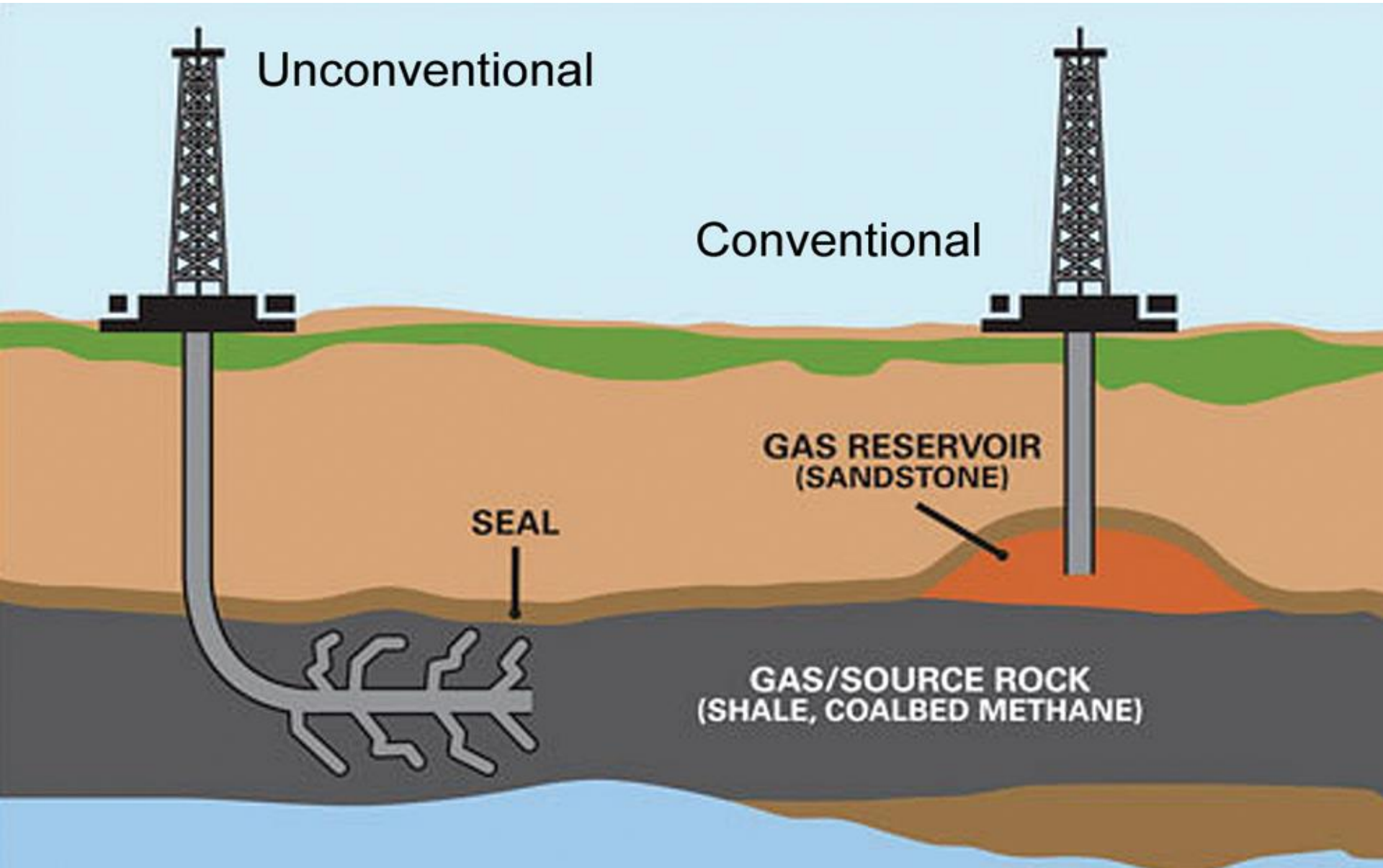
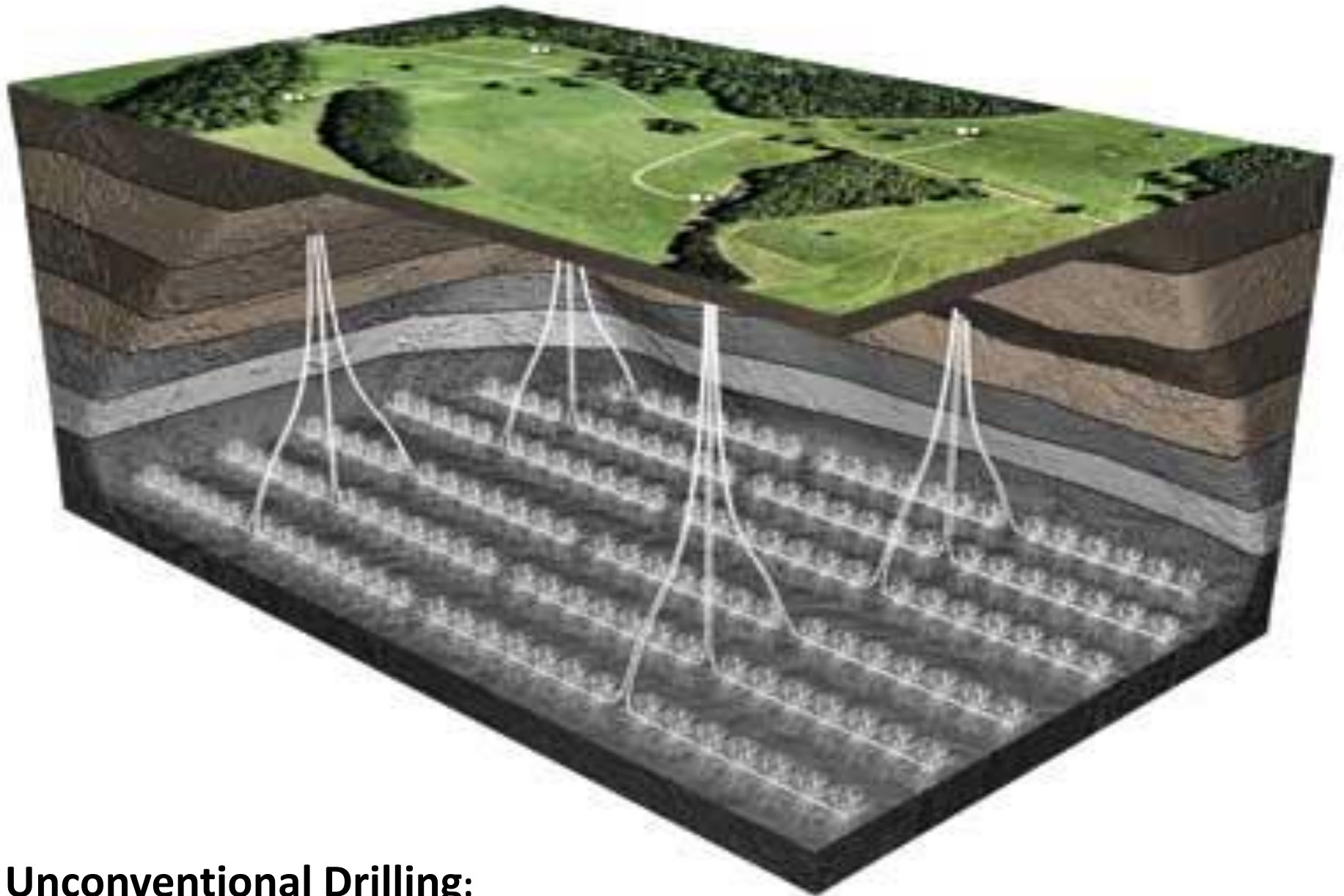


Photo by C. Cheung, May 2014.

Wells Leak Methane





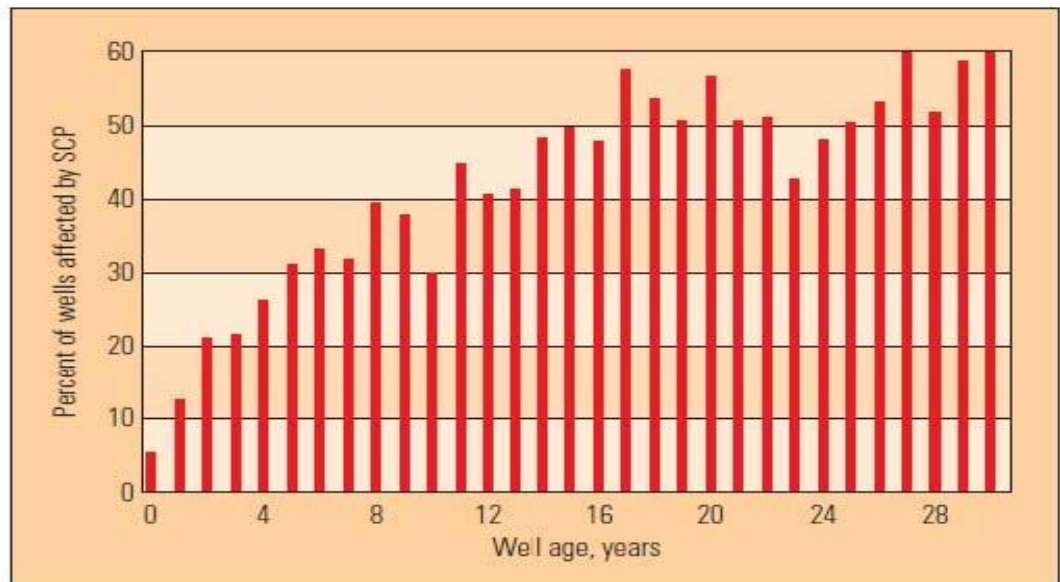
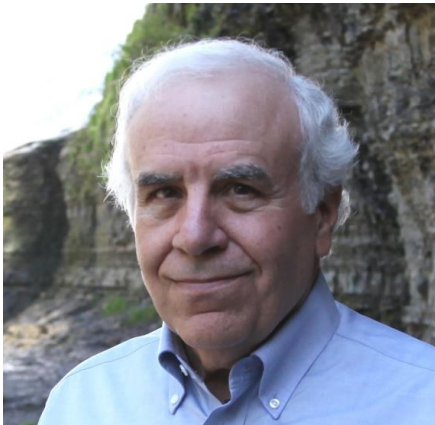
Unconventional Drilling:
multiple wells, clustered pads, long laterals, high volume slick water fracking,

Fact:

All well casing leaks. Even new wells can leak. In <20 years, over half of the wells will leak.

Unconventional wells are more likely to leak than conventional wells.

<http://www.pnas.org/content/111/30/10955.abstract>



^ Wells with SCP by age. Statistics from the United States Mineral Management Service (MMS) show the percentage of wells with SCP for wells in the outer continental shelf (OCS) area of the Gulf of Mexico, grouped by age of the wells. These data do not include wells in state waters or land locations.

Prof Anthony Ingraffea TEDx Albany talk, 2013.
https://www.youtube.com/watch?v=Dxis-vYGM_M

Bruffato, et al. 2003. *From mud to cement-building gas wells*, Schlumberger. Oil Field Review, 62-76, Autumn, 2003.
https://www.slb.com/~media/Files/resources/oilfield_review/ors03/aut03/p62_76.ashx

Commissioner at EPA Maui hearing:

*“When we’re talking about **unplanned escape** are we talking about sort of a catastrophic failure or are we talking about minor leakage...?”*



Shell Todd Oil Services (STOS) expert witness:

*“... It’s basically any uncontrolled escape... Then, depending on the volume, we’ll instigate the appropriate level of response, etc. But, no, the whole philosophy and design behind how we construct the wells is that we will have **no uncontrolled escape** from the well...”*

Commissioner for EPA STOS Hearing:

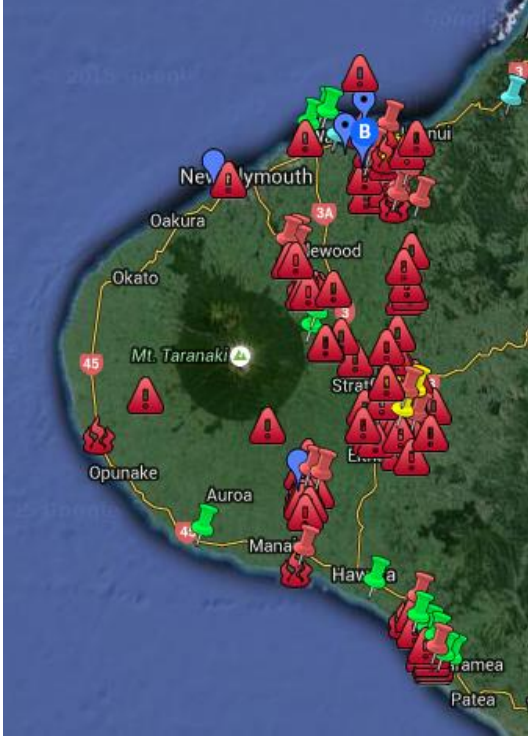
*“Have you found leakage from **abandoned wells** “?”*

STOS expert witness:

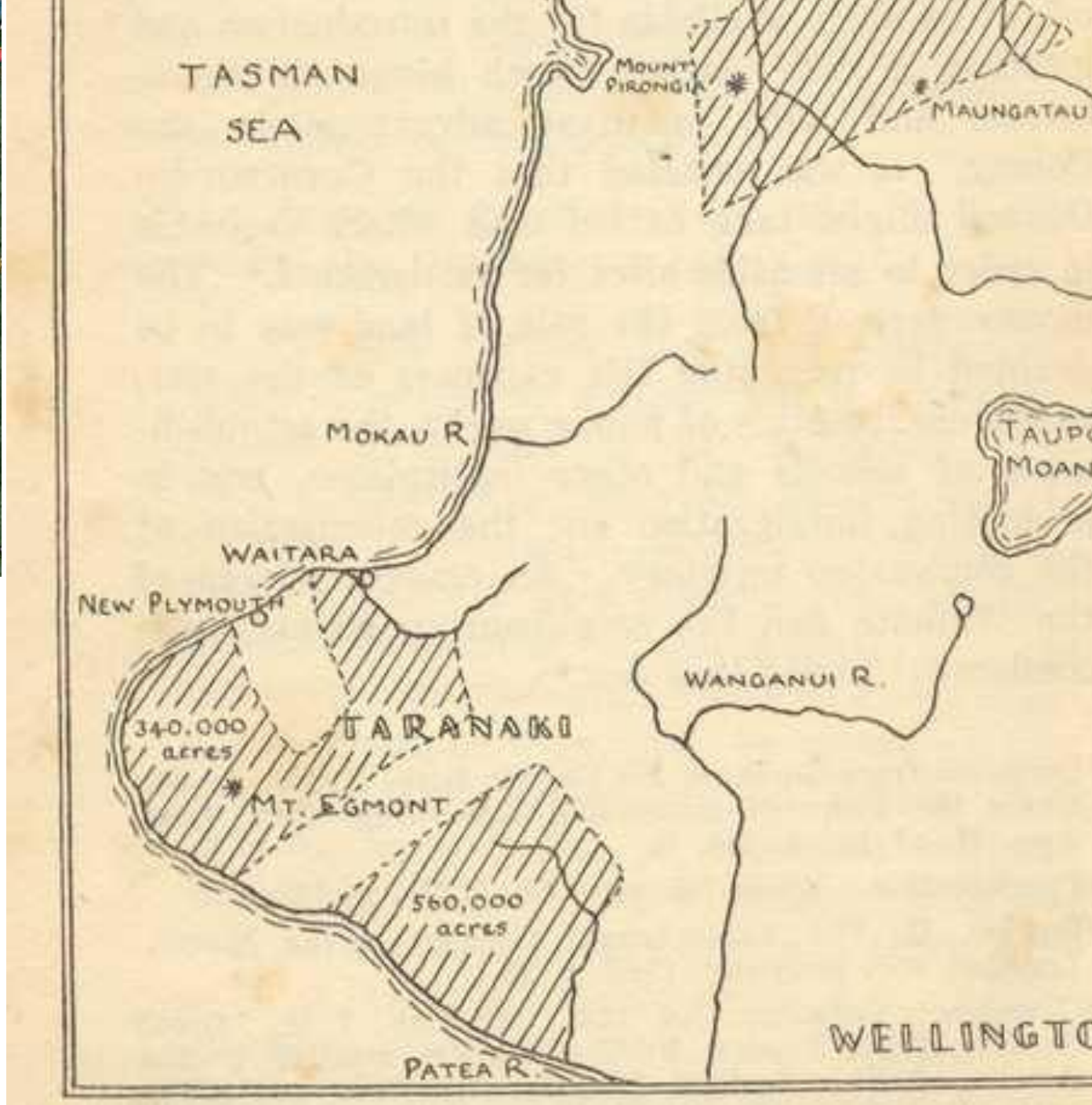
*“Once the well is abandoned, in accordance with the legislation and also with our own internal standards, then it is formally **no longer monitored** at all.*

The well is closed; the files are closed. “

**BUT the absence of evidence is NOT
the evidence of absence!**

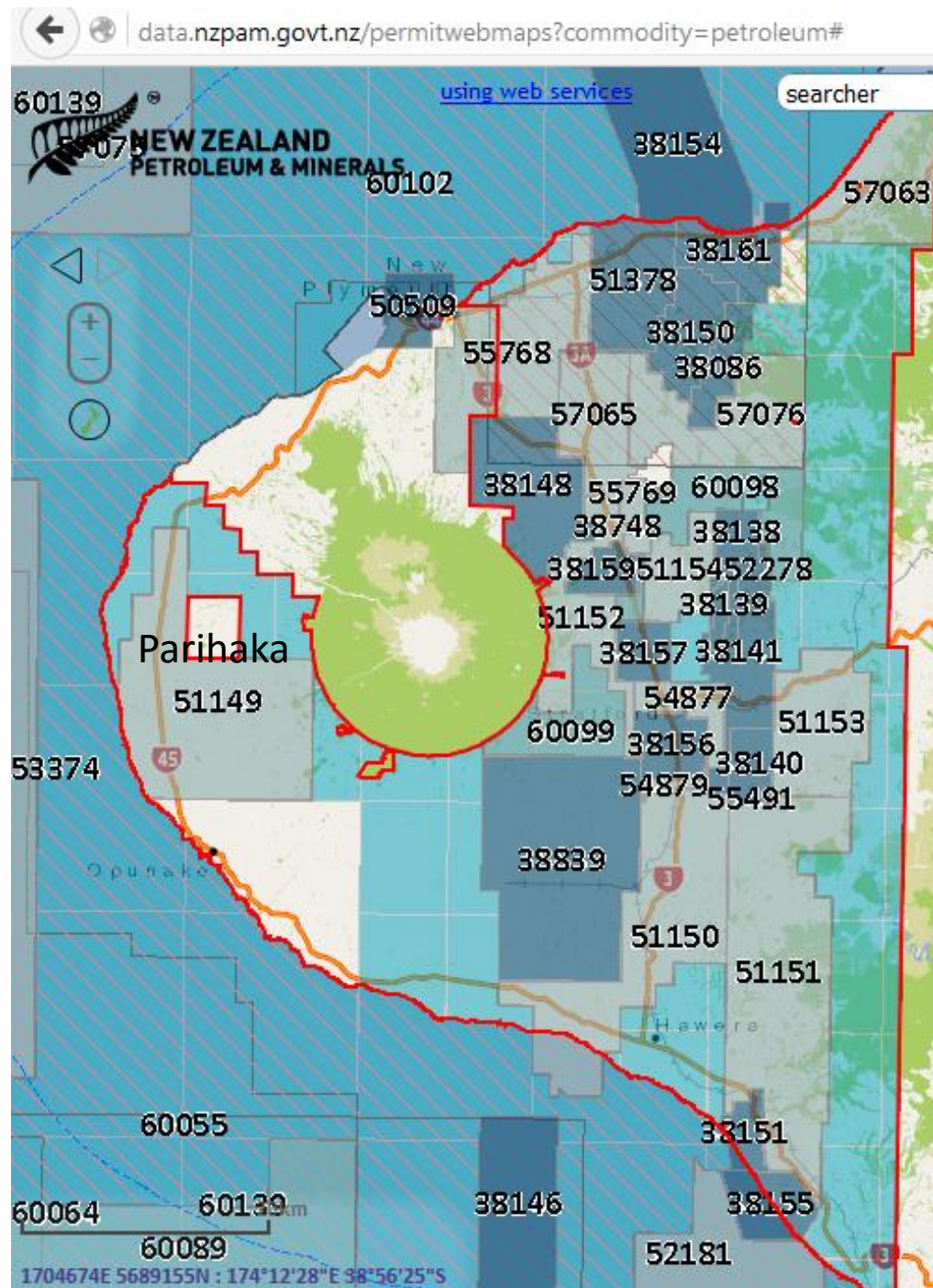


MAP showing the Territory confiscated in the Waikato country in the Province of Taranaki and near Wanganui under the New Zealand Native Land Settlements Act, 1863.



Taranaki 2016 petroleum Block Offer Consultation Release Area onshore

<http://data.nzpam.govt.nz/permitwebmaps?commodity=petroleum> (11/02/2016)





PARIHAKA SAYS
NO MORE DRILLING

STOP DEEP SEA OIL

TANGATA
TOMUA
TE WHENUA
TE MOANA
TOMURI

STOP DEEP SEA OIL

STOP DEEP SEA OIL

STOP DEEP SEA OIL

Climate Justice Taranaki

Committed to justice, action and true solutions to climate change



www.ClimateJusticeTaranaki.info