



Origin Schrider landfarm, Manutahi, TRC
report 1291512, May 2014.



Origin Schrider landfarm,
Manutahi, TRC report 1291512,
May 2014.



Consent 7884-1 purpose:

“To discharge wastes from hydrocarbon exploration, **well work-over**, production and storage activities, onto and into land via landfarming at ...” Well work-over fluids include ‘**frac fluids**’



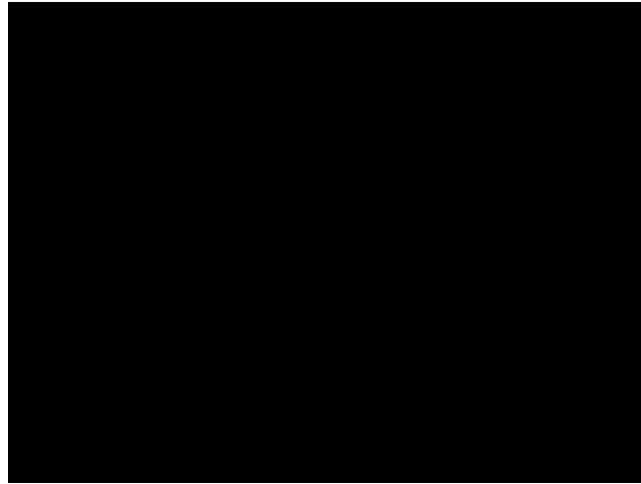
BTW Brown Road landfarm (Waitara)
lined pits, TRC report 98770, March
2012



We are all stakeholders in Earth's climate and therefore in man's climate changing activities.

Halliburton Frack Job.

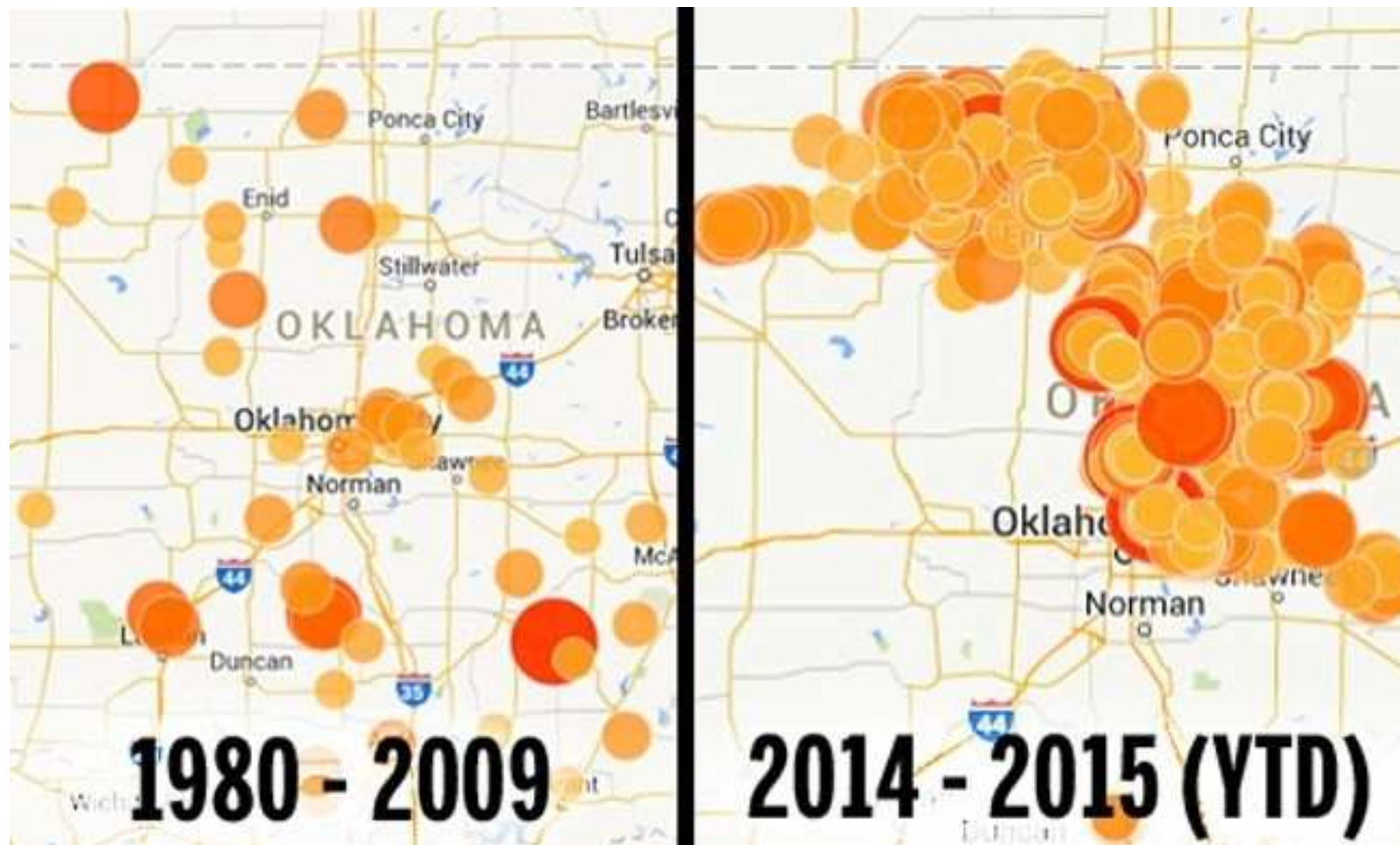
5 minute video in the middle of a frack job in the US.



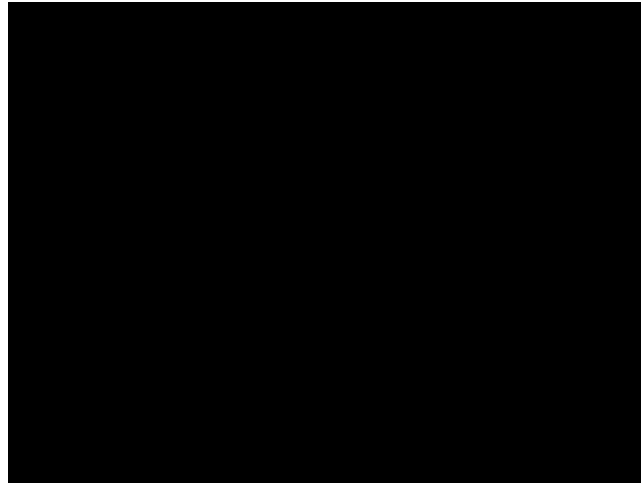


**90 barrels per minute over 11 hours
at 7600 PSI**

Earthquakes in Oklahoma are now clustered around deep wells used to dispose of fracking waste.

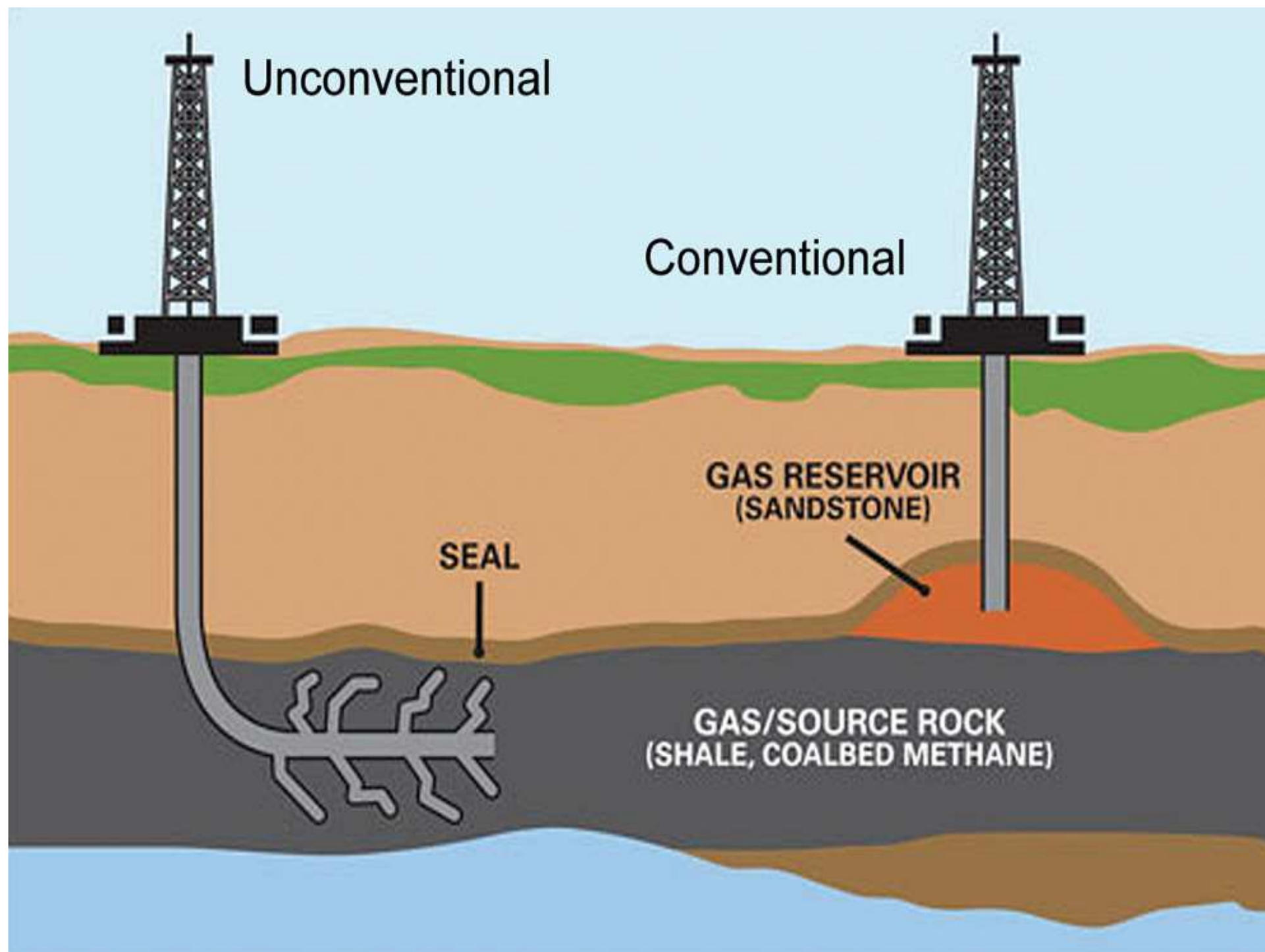


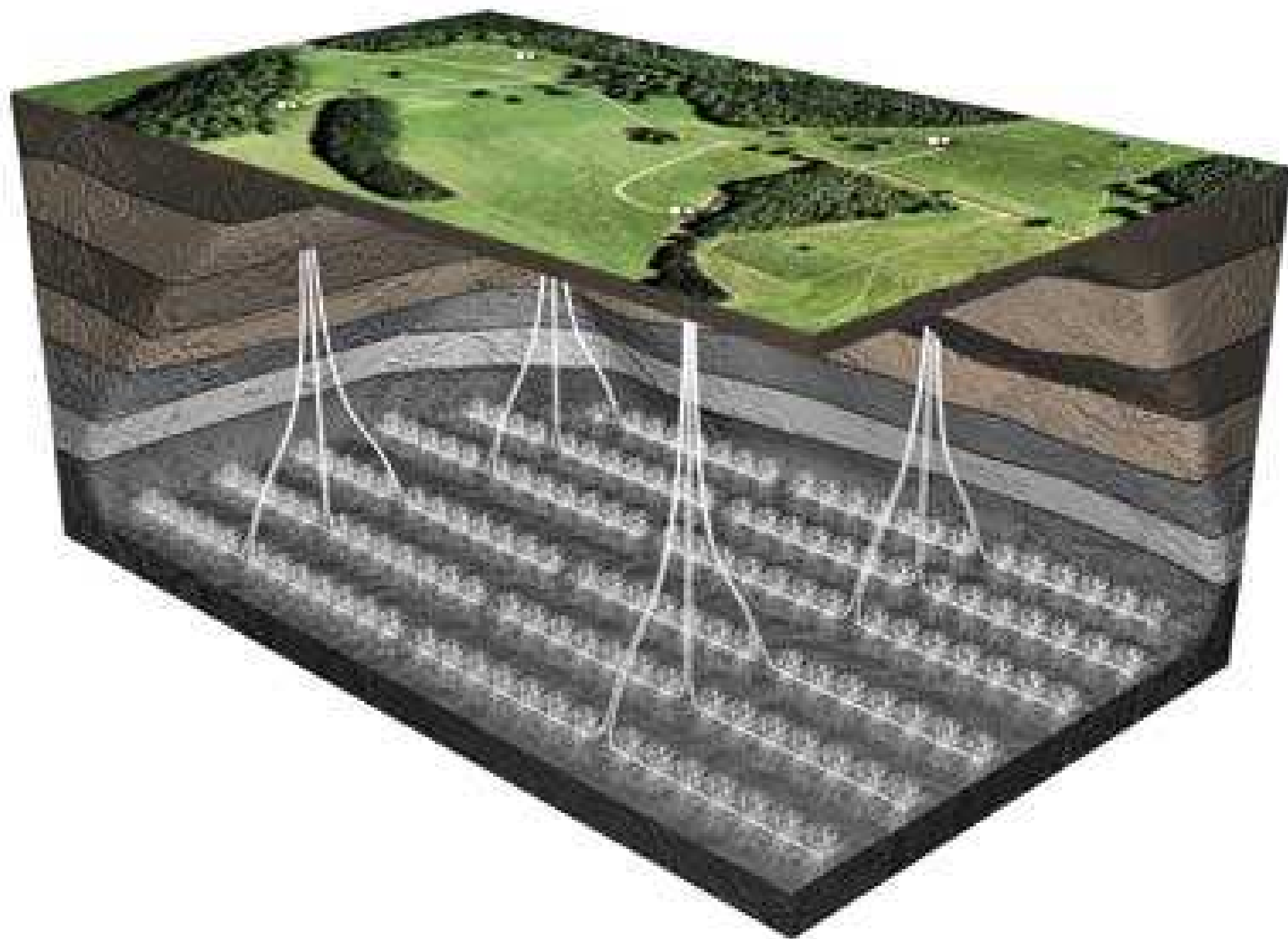
Wells leak methane- Dr Ingraffea





Steers seen on BTW
landfarm, June 2014.















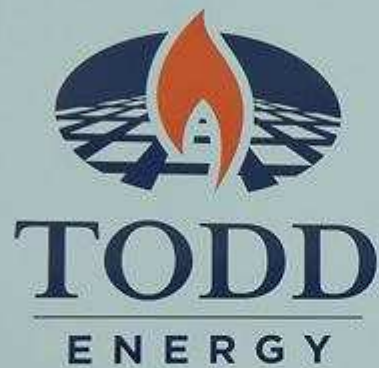


Greymouth Kowhai-B Wellsite

- The U.S. Environmental Protection Agency (EPA) released a [report](#) in March 2015 that found there are nearly 700 chemicals used in the [fracking](#) process.



Kowhai-B



MCKEE &
MANGAHEWA
PRODUCTION
STATION



Hazardous Chemicals found in Fracking Fluid and Waste

Benzene,

Formaldehyde,

Toluene,

Ethylene Glycol,

Ethyl benzene,

Glycol thers,

Xylene,

Hydrochloric acid,

Polycyclic

Ethanol,

Aromatic

1,2-Dichloroethane

Hydrocarbons,

and many more...

What Chemicals?

Of 46 “fracturing products”, **38 are hazardous** (i.e. explosive, flammable, acutely toxic, carcinogenic, mutagenic and/or ecotoxic).

More than ten products had **undisclosed components**; stated as proprietary, trade secret or simply not listed.

Based on information from TRC Hydrogeologic Risk Assessment of Hydraulic Fracturing for Gas Recovery in the Taranaki Region, Appendix 1 (Feb 2012)
<http://www.trc.govt.nz/assets/Publications/guidelines-procedures-and-publications/Fresh-water-2/fracing-appendices-feb2012-w.pdf>

Table 2: Drilling Phase Hazardous Substance Inventory

Substance Name	Form	Conc (%)	Specific Gravity	Proposed Quantity (in known units)	Proposed Quantity (in t or m3)	UN No.	UN Class	HSNO CLASS	Storage or Use	Distance from site boundary
Barite (Halliburton and MI)	Powder	100		40000kg	40t			carcinogenic → 6.1D, 6.7A, 6.9A, 9.3C	Storage	>30m
Class Cement G	Powder	100	3.15	5.1MT 5100kg	5.1t			acute toxicity → 6.1D, 6.5A, 6.5B, 8.2C, 8.3A	Storage	>30m
Diesel	Liquid	100	0.85	20000L	17t			flammable → 3.1D, 6.1E, 6.3B, 6.7B, 9.1B	Storage	>30m
Ecotrol RD	Solid	100		1225kg	1.2t			mutagen → 3.1C, 6.1C, 6.1E, 6.3B, 6.4A, 6.6B, 6.8B, 6.9B, 9.1D	Storage	>30m
Frac Attack*	Powder	100		5000kg	5t			reproductive toxicity → 6.3B, 6.4A, 6.7B	Storage	>30m
Gacscon 469	Liquid	100	1.1	2000L	2.2t			skin corrosion → 6.1E, 6.3A, 6.4A, 6.7A, 6.9A	Storage	>30m
G-Seal	Powder	100		4000kg	4t			eye damage → 6.1E, 6.3B, 6.4A, 9.1D	Storage	>30m
HZ-20	Liquid	100		1200L				aquatic toxicity → 9.1B	Storage	>30m
KCl (Halliburton and MI)	Powder	100		24075kg	24t			ecotoxic → 6.1E, 6.3B, 6.4A, 9.3B	Storage	>30m
Lime	Powder	100		2000kg	2t				Storage	>30m
LPG	Gas	100	1.6	100m3	100m3	1075	2.1	2.1.1A	Storage	>30m
Methanol	Liquid	100	0.79	1500L	1.185t	1230	3(II)	3.1B, 6.1D, 6.4A, 6.8B, 6.9A, 9.3C	Storage	>30m

Source: Todd Energy AEE for Te Kiri North-A wellsite, Kina Road, March 2014.



<http://ecnz.co.nz/case-study/tikorangi/>



<http://ecnz.co.nz/case-study/tikorangi/>



<http://ecnz.co.nz/case-study/tikorangi/>



<http://ecnz.co.nz/case-study/tikorangi/>

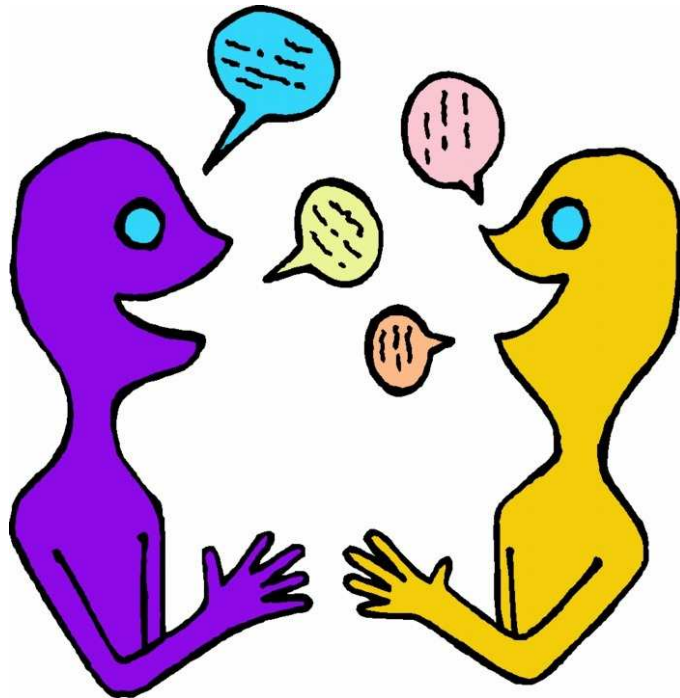






Finding more information

Climate Justice Taranaki website
Taranaki Energy Watch website
PCE Reports
Frack Free
Internet Search
Email Members of Parliament
Talk to people



COMPENDIUM OF SCIENTIFIC, MEDICAL, AND MEDIA FINDINGS DEMONSTRATING RISKS AND HARMS OF FRACKING (UNCONVENTIONAL GAS AND OIL EXTRACTION)

July 10, 2014



Copyright: Les Stone

Introduction

Horizontal drilling combined with high-volume hydraulic fracturing and clustered multi-well pads are recently combined technologies for extracting oil and natural gas from shale bedrock. As this unconventional extraction method (collectively known as "fracking") has pushed into more densely populated areas of the United States, and as fracking operations have increased in frequency and intensity, a significant body of evidence has emerged to demonstrate that these activities are inherently dangerous to people and their communities. Risks include adverse impacts on water, air, agriculture, public health and safety, property values, climate stability and economic vitality.