

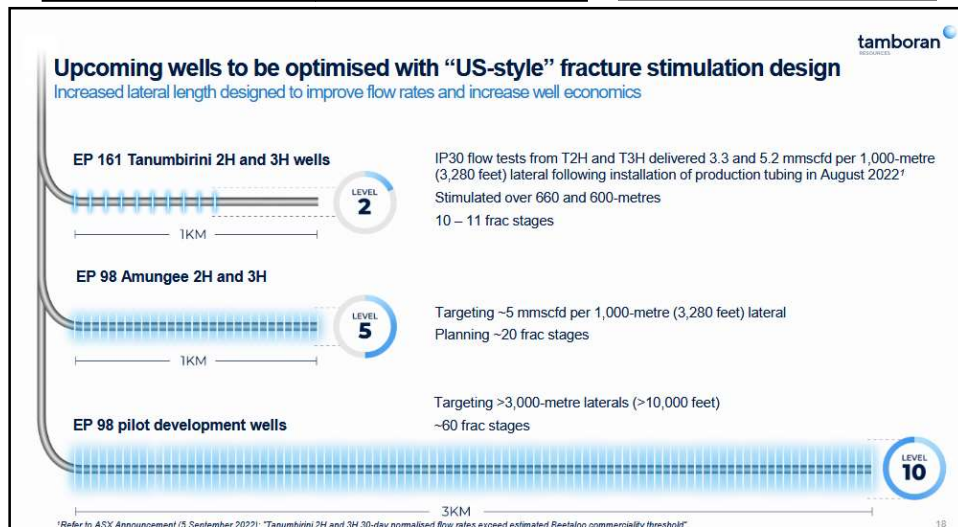
# Tamboran's Beetaloo mega-fracker means potentially huge increases in water and chemical use, and greenhouse gas emissions – with no assessment

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Tamboran Resources Ltd has contracted a massive fracking rig from the US for a minimum of two years to be used in Tamboran's proposed 2023/24 Beetaloo Basin drilling program. Helmerich & Payne, the rig owners, have just shipped the 'Super-spec FlexRig' from the United States to Australia's Beetaloo Basin.

According to [Tamboran](#), "Once operational in Australia, the rig is expected to be the country's most powerful onshore drilling rig, capable of drilling **more than 4,000-metre horizontal sections** within the Mid-Velkerri B Shale."

**Despite its significantly increased impacts and risks, as discussed below, the use of this huge US frack rig has not been subject to any environmental impact assessment and approval process, or any community consultation and consent process – in the Beetaloo or wider NT.**



<https://www.investi.com.au/api/announcements/tbn/295c865c-f1d.pdf>

Tamboran needs this new fracking technology from the US to boost the questionable commercial viability of its Beetaloo gas fracking project – allowing it to drill horizontal wells that are at least twice as long as existing wells. In fact, Tamboran CEO Joel Riddle has stated, "These new rigs will allow us to drill three or four times longer through the shale section and that will result in three or four times more reserves being recovered per well." (Australian Financial Review, 21/9/2022). Mr Riddle [told the ABC](#) (20/9/2022) that Helmerich and Payne would be providing, "the first of five modern US rigs into the Beetaloo starting next year."

**There has been no independent assessment: Local communities and the wider public do not know what the potentially serious increased impacts and risks of this mega-fracker could be.**

1. The increased water, sand and chemicals required for the proposed new 3-4km+ wells;
2. The increased volume of contaminated wastewater to be stored in tanks at each well site;
3. The increased greenhouse gas emissions per well – from longer drilling and more gas flaring;
4. The increased risk of encountering faults or seismic activity with longer wells, resulting in well integrity failure.

**The following are indicative estimates of mega-fracker impacts based on current Beetaloo operations, with conservative assumptions that new wells will be (only) twice as long and involve twice as many frack stages per well.**

Under its [current approvals](#), Tamboran has commenced drilling and fracking **12 wells** in its ‘EP98’ exploration permit area, the [‘Amungee NW Delineation Program’](#):

“The Amungee 2H (A2H) well in EP 98 was successfully drilled to a total depth (TD) of 3,883 metres, including a **1,275-metre horizontal section** ...Tamboran is planning up to **24 stimulation stages** within the Mid-Velkerri “B Shale”, expected to commence during the first quarter of calendar year 2023, subject to weather conditions.” (Tamboran ASX announcement, 22 December 2022)

According to the approved [Environmental Management Plan](#) (EMP) for the EP98 Amungee 2H/3H wells, submitted by Origin Energy (prior to Tamboran acquiring Origin’s Beetaloo interests in November 2022), the planned 1km+/20-25 stage frack wells would require;

- “It is anticipated that approximately 1.5ML of water and 180-250 tonnes of proppant (sand) will be used **for each stage**. This equals an approximate volume of **40 ML of water** and **between 2,700-7,500 tonnes of sand per well**. Water will be sourced from the Gum Ridge Formation. Proppant will be sourced from locations within Australia (such as South Australia) or imported from international sources.” (EMP, p. 72)
- Fracking chemical volumes (table 16, pp 82-85):
  - ~ **230,000 litres of mixed chemical fluid per well**, including biocides, corrosion inhibitors, surfactants, scale inhibitors, acids and friction reducers;
  - ~ **477 tonnes of other chemical additives per well**, including breakers, cross-linkers, oxygen scavengers, lubricants, formation inhibitors, drilling fluids, and viscosity increasers.

**Indicative results (based on conservative assumption of mega-fracker wells being twice as long)**

Drilling and fracking inputs	Approved frack wells (per well)	Tamboran mega-fracker wells (per well)
• Water	40,000,000 litres (40ML)	<b>80,000,000 litres (80ML x 12 wells)</b>
• Sand (‘proppant’)	2,700-7,500 tonnes	<b>5,400 – 15,000 tonnes (x 12 wells)</b>
• Chemical cocktail	230,000 litres + 477 tonnes	<b>460,000 litres + 954 tonnes (x 12 wells)</b>
<b>Greenhouse gas emissions (‘Scope 1’)</b>	43,514 tCO2-e per well (based on EPA NT Advice to Minister (2022) stating total emissions from 12 wells of 522,172 tCO2-e)	<b>1,044,336 tCO2-e TOTAL emissions</b>

In relation to greenhouse gas emissions, there are likely to be significantly greater emissions per well due to:

- Increased diesel required to drill and frack wells twice as long and with twice as many stages;
- Increased land clearing, for larger well sites to accommodate larger rig and more wastewater storage;
- Increased flaring and fugitive emissions as a result of more gas accessed per well (the current EMP states maximum flaring period averages 135 days per well.);
- Potentially significantly increased risk of well integrity failures and fugitive emissions due to longer wells intersecting faults and fractures and other geological anomalies, or experiencing seismic activity.

Tamboran claims the use of mega-frackers will result in less wells overall, but there is no guarantee this will be the case and regardless, the proposed huge increase in the Beetaloo’s early-stage water, sand and chemical use, and greenhouse gas emissions, have not been assessed or approved or consented to.

**A full, independent and expert assessment of the impacts and risks of Tamboran’s new “US style” fracking mega-rig is required before the H&R rigs are allowed to operate in Australia. This assessment should then form part of a statutory approvals process under relevant NT and Commonwealth environmental assessment laws.**