

## Morning Report PNR1z

<b>Management System:</b>	HSE	<b>File Name:</b>	069_PNR1z_15.12.18_RMR	
<b>Approver:</b>	Senior Geoscientist	<b>Version No:</b>	2	
<b>Reviewer:</b>	Frac Manager	<b>Date of Issue:</b>	16 <sup>th</sup> December 2018	
<b>Author:</b>	Senior Frac Engineer	<b>Proposed date of Review:</b>	n/a	
Version	Section	Revision Information	Date	Reviser
0.1	All	Draft Publication	16/12/2018	Senior Frac Engineer

*Documents are reviewed as per proposed review date, or sooner if a significant change to the operation has taken place, to ensure relevance to the systems and process that they define.*

## Summary

Overview of day's operations (midnight to midnight):

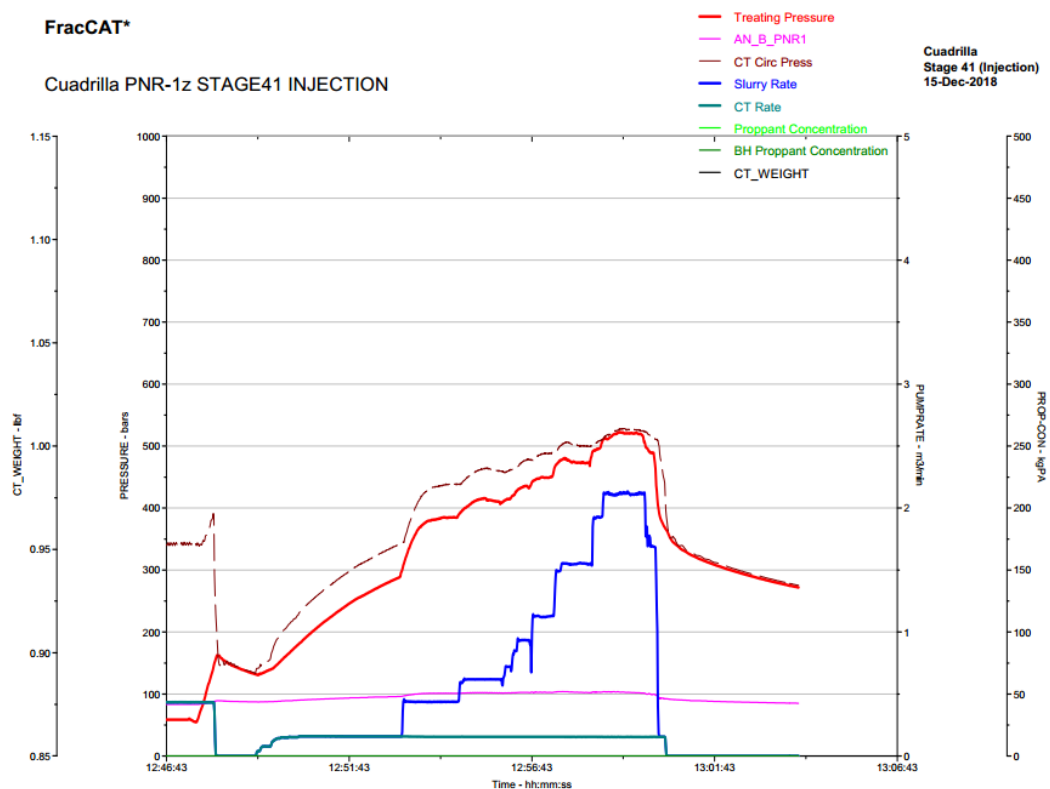
- Opened sleeve 41. Injection test and shut in well to watch minifrac pressure decline.
- No immediate post-frac flowback performed
- Induced seismicity: none
- No red line boundary breached

## Injection Summary

### Stage 41

Injection Depth m (RT)	Volume (fluid m3, proppant tonne)	Fluid System	Additives (type, mass kg, %)
-2664.3 m MDRT	Slickwater (18.1 m <sup>3</sup> ) 10% HCl (3.0 m <sup>3</sup> )	Slickwater HCl	B528 Friction Reducer, Slickwater – 4.0 kg – 0.01%
-2343.1 m TVDRT			

## Injection Chart

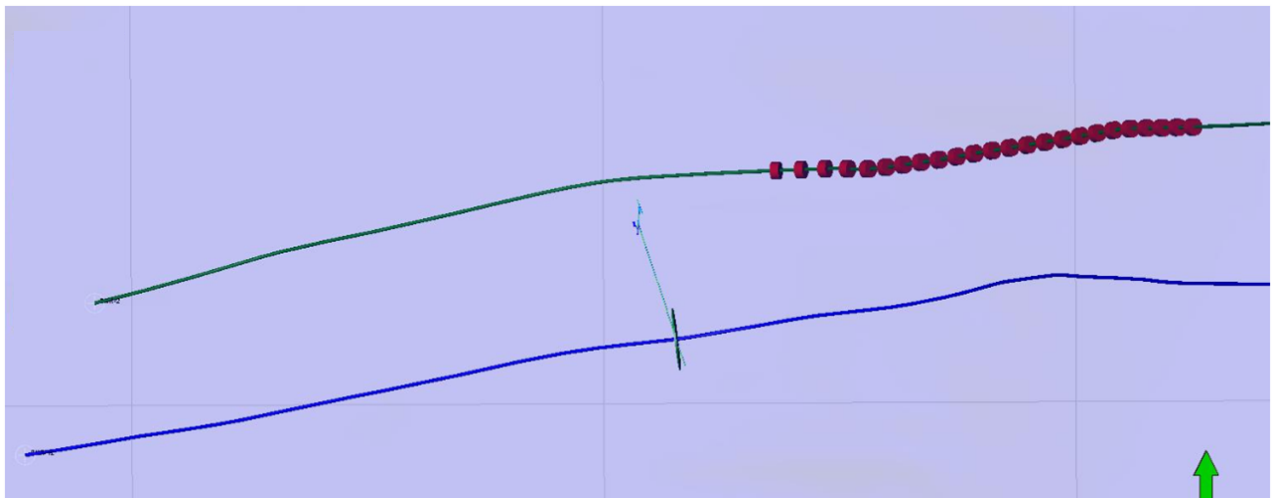


Pumping Time:

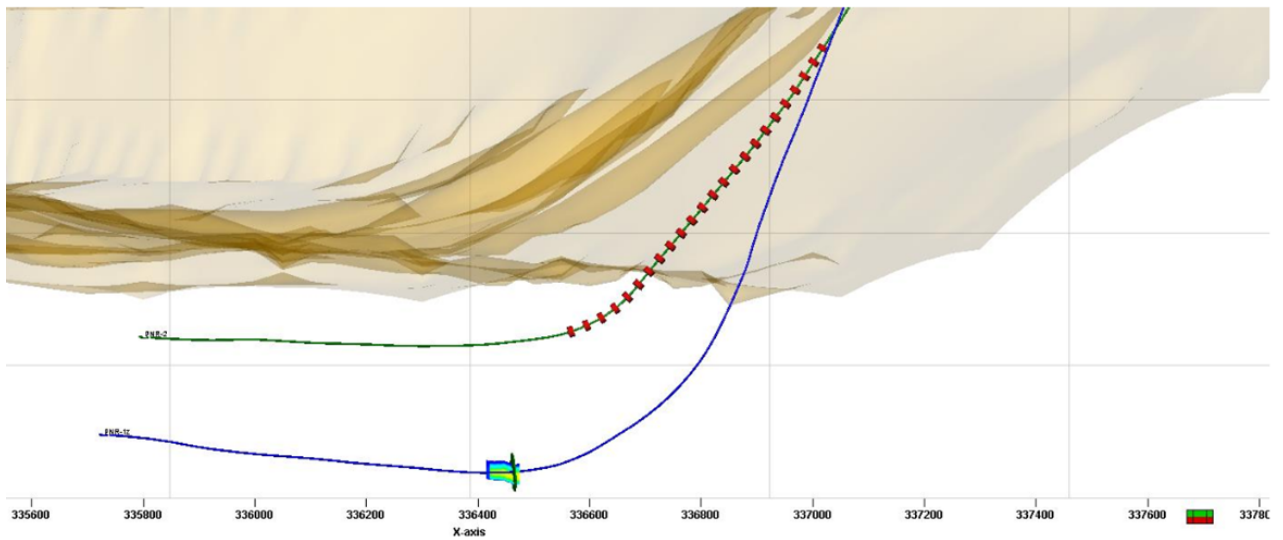
1) 15/12/2018 09:50:14 - 15/12/2018 13:00:00

**PRIVATE & CONFIDENTIAL**

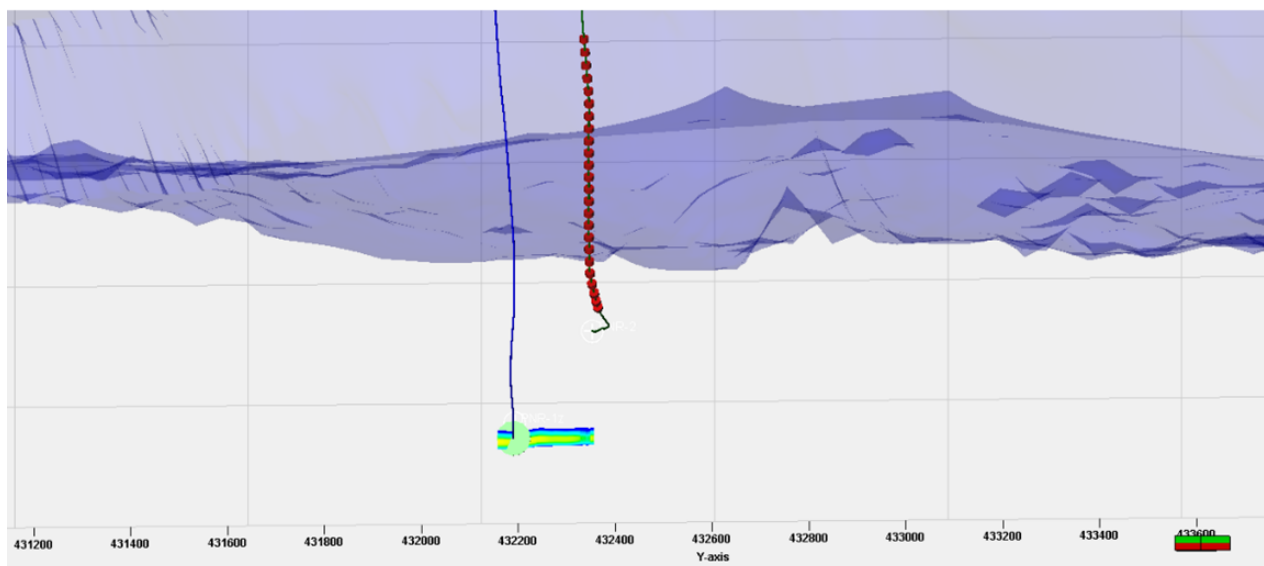
## Fracture Growth



- Map View, scale north bar



- X-section due north



- X-section due east
- Max hydraulic frac half length: 97.2 m
- Hydraulic frac height at well: 37.0 m

#### Well Integrity Status

- No change

#### Seismicity of Note

- None

#### Update to Stress Magnitude

- No update to stress magnitude as closure was not observed
- $S_{Hmin} = 0.0148 \text{ MPa/m}$