

## Morning Report PNR1z

<b>Management System:</b>	HSE	<b>File Name:</b>	062_PNR1z_08.12.18_RMR	
<b>Approver:</b>	Senior Geoscientist	<b>Version No:</b>	2	
<b>Reviewer:</b>	Frac Manager	<b>Date of Issue:</b>	9 <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	09/12/2018	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):

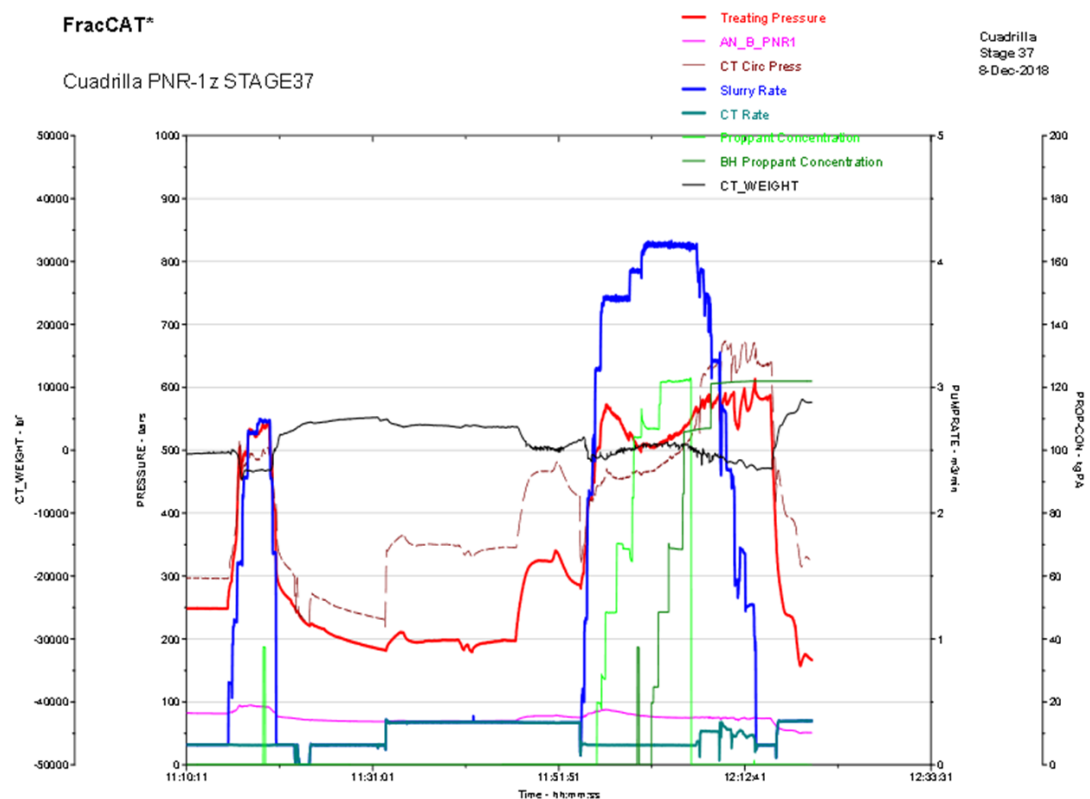
- Ran in well with coiled tubing and NCS frac tool. Opened sleeves 32 to 36. Opened and proppant fractured sleeve 37. Flowed back well.
- Immediate post-frac flowback performed
- Induced seismicity - none
- No red line boundary breached

## Injection Summary

### Stage 37

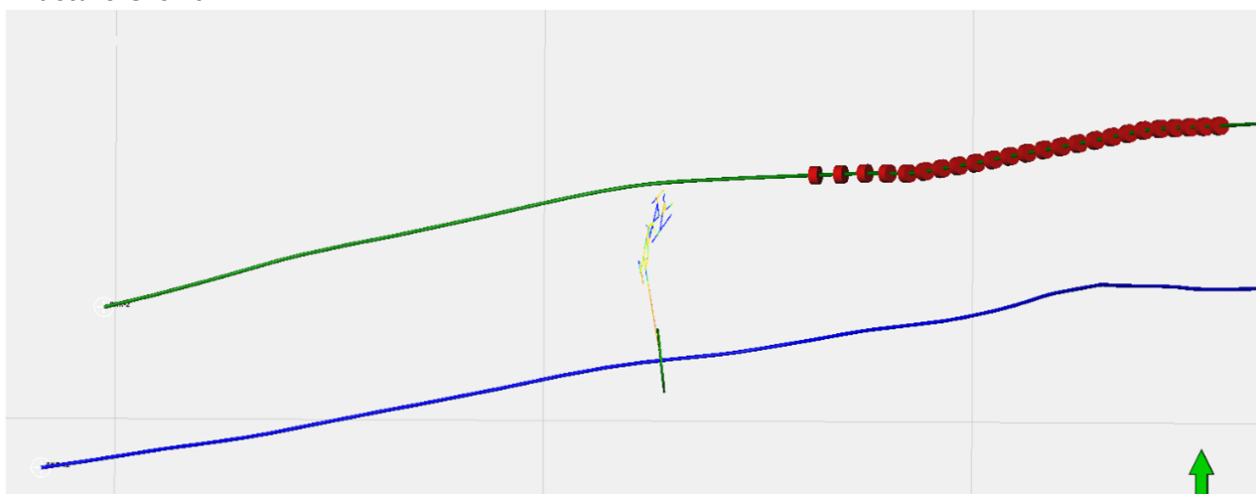
Injection Depth m (RT)	Volume (fluid m3, proppant tonne)	Fluid System	Additives (type, mass kg, %)
-2734.8 m MDRT	Slickwater (78.4 m <sup>3</sup> & 3.6 T) 10% HCl (1 m <sup>3</sup> )	Slickwater HCl	<b>B528 Friction Reducer,</b> <b>Slickwater – 18.3 kg</b> <b>– 0.02%</b>
-2344.2 m TVDRT			

## Injection Chart

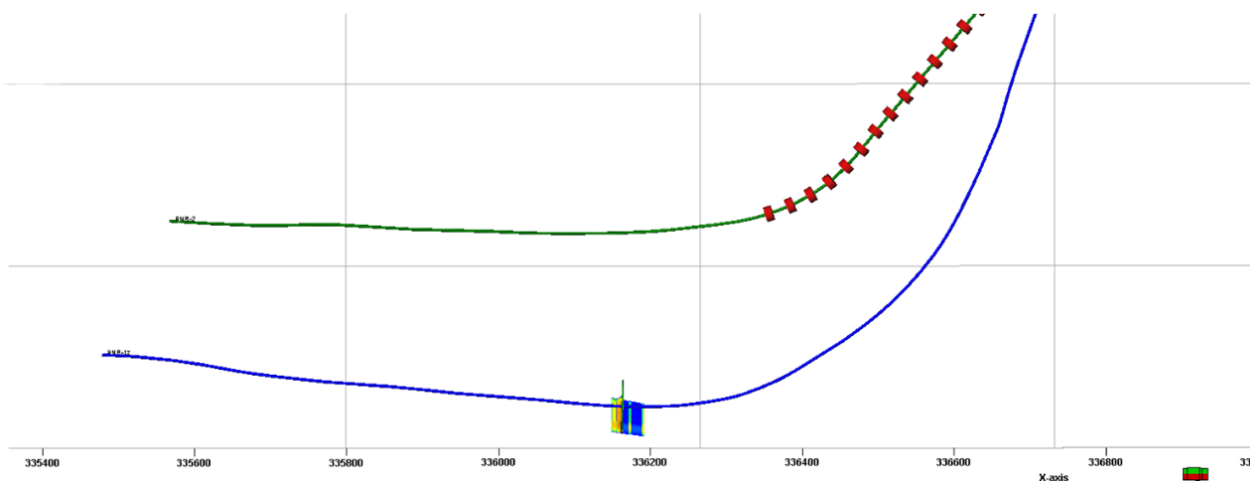


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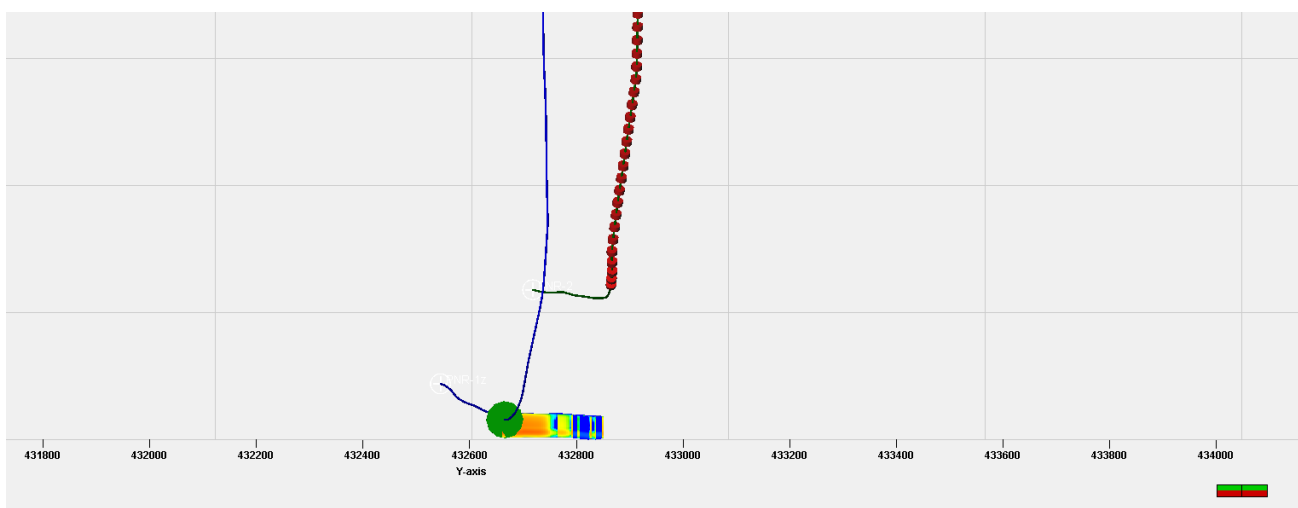
## Fracture Growth



- Map View, scale north bar



- X-section due north



- X-section due east
- Max hydraulic frac half length: 92.7 m
- Hydraulic frac height at well: 47.0 m

#### Well Integrity Status

- No change

#### Seismicity of Note

- None

#### Update to Stress Magnitude

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