

## Morning Report PNR1z

<b>Management System:</b>	HSE	<b>File Name:</b>	067_PNR1z_13.12.18_RMR	
<b>Approver:</b>	Senior Geoscientist	<b>Version No:</b>	1	
<b>Reviewer:</b>	Frac Manager	<b>Date of Issue:</b>	14 <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	14/12/2018	Senior Frac Engineer
<i>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.</i>				

## Summary

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

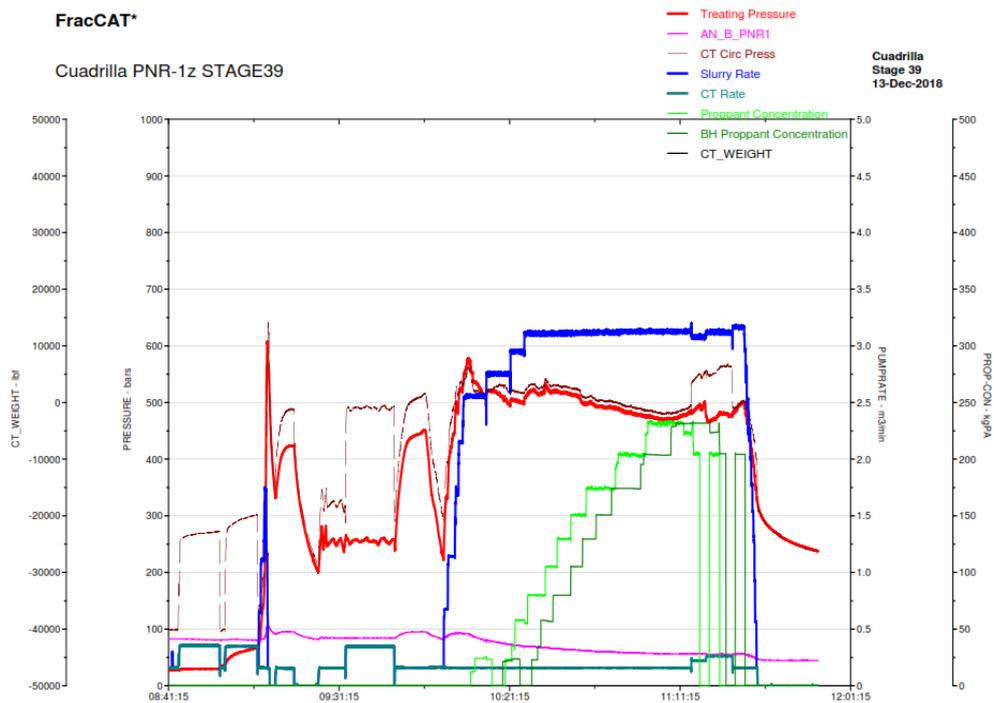
- Opened and proppant fractured sleeve 39. Flowed back well.
- Immediate post-frac flowback performed
- Induced seismicity: none
- No red line boundary breached

## Injection Summary

### Stage 39

Injection Depth m (RT)	Volume (fluid m <sup>3</sup> , proppant tonne)	Fluid System	Additives (type, mass kg, %)
-2699.6 m MDRT	Slickwater (261.2 m <sup>3</sup> & 27.2 T) 10% HCl (2.5 m <sup>3</sup> )	Slickwater HCl	<b>B528 Friction Reducer,</b> <b>Slickwater – 63.0 kg</b> <b>– 0.02%</b>
-2344.5 m TVDRT			

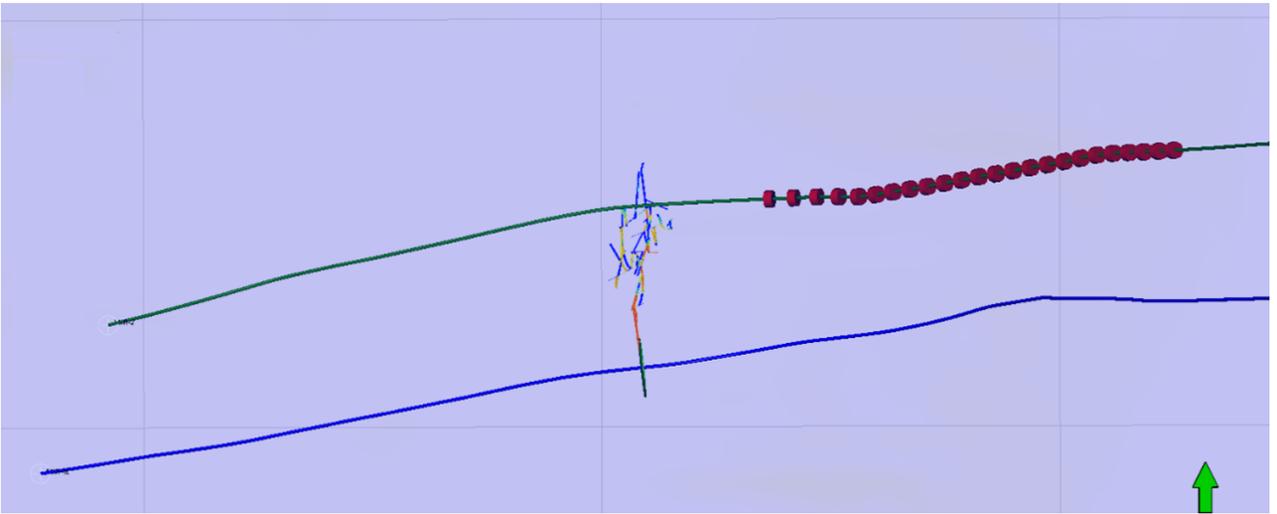
## Injection Chart



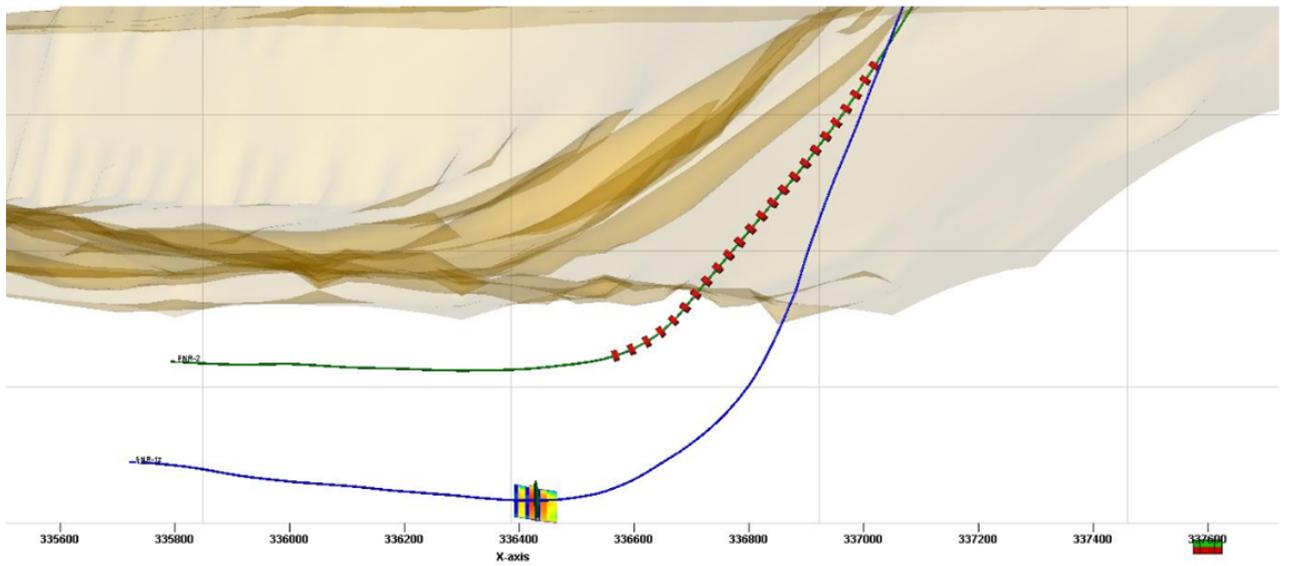
### Pumping Time:

1) 13/12/2018 08:32:00 - 13/12/2018 11:34:00

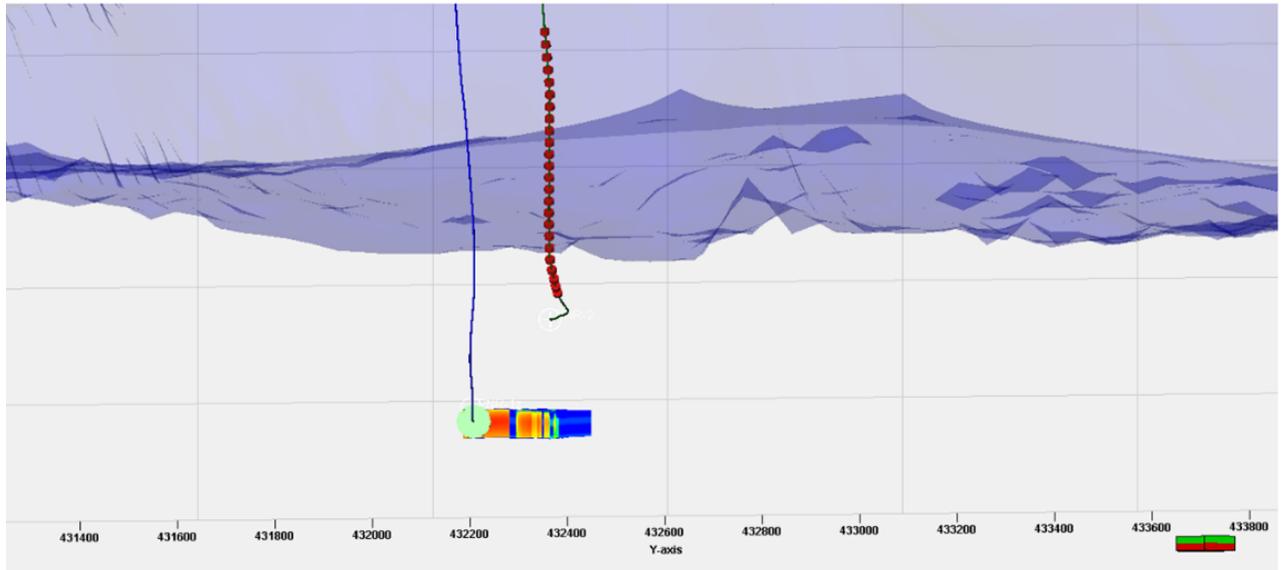
# Fracture Growth



• Map View, scale north bar



• X-section due north



- X-section due east
- Max hydraulic frac half length: 128.3 m
- Hydraulic frac height at well: 60.2 m

#### Well Integrity Status

- No change

#### Seismicity of Note

- None

#### Update to Stress Magnitude

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