

## Morning Report PNR1z

<b>Management System:</b>	HSE	<b>File Name:</b>	013-PNR1z-20.10.18-RMR	
<b>Approver:</b>	Senior Geoscientist	<b>Version No:</b>	1	
<b>Reviewer:</b>	Frac Manager	<b>Date of Issue:</b>	21 <sup>th</sup> October 2018	
<b>Author:</b>	Senior Geoscientist	<b>Proposed date of Review:</b>	n/a	
Version	Section	Revision Information	Date	Reviser
0.1	All	Draft Publication	21/10/2018	Senior Geoscientist
<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>				

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## Summary

Overview of day's operations:

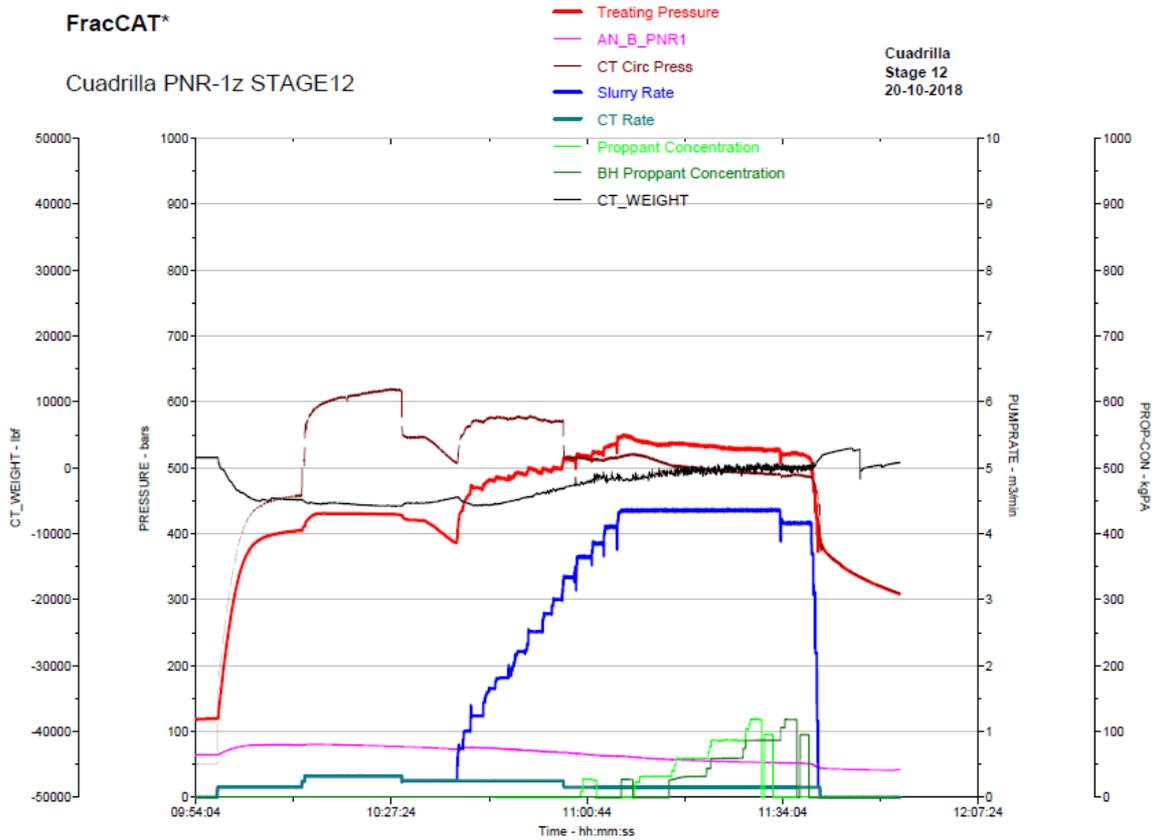
- 1x Slickwater Frac with Proppant
- Flow back performed – 22.49 m<sup>3</sup>
- No Induced seismicity or any red line boundary breached

## Injection Summary

### Stage 12

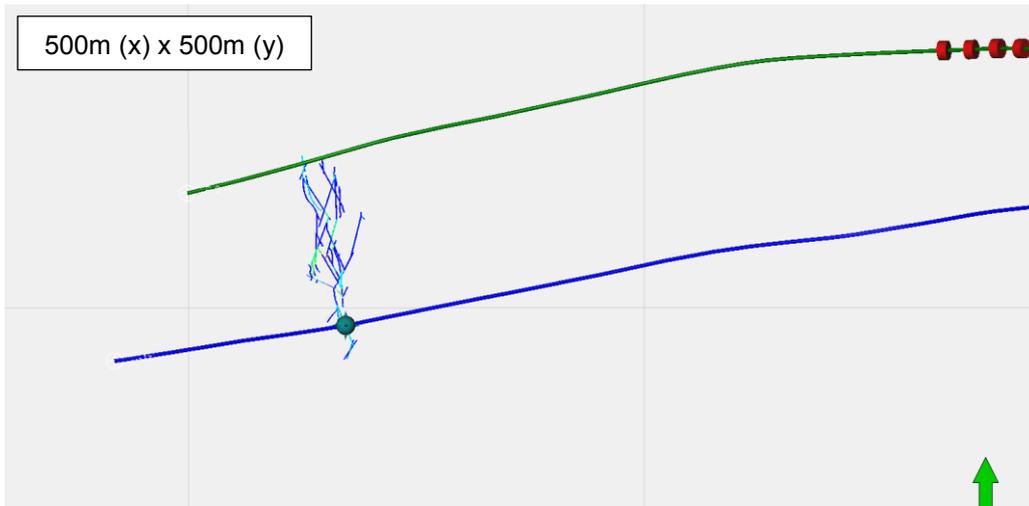
Injection Depth m (RT)	Volume (fluid m <sup>3</sup> , proppant tonne)	Fluid System	Additives (type, mass kg, %)
3180.76 M MDRT	Slickwater Frac (221.6 m <sup>3</sup> & 6.5 T)	Slickwater	B528 Friction Reducer, Slickwater Frac – 53 kg - <0.02%
-2306.54 M TVDRT			

## Injection Chart

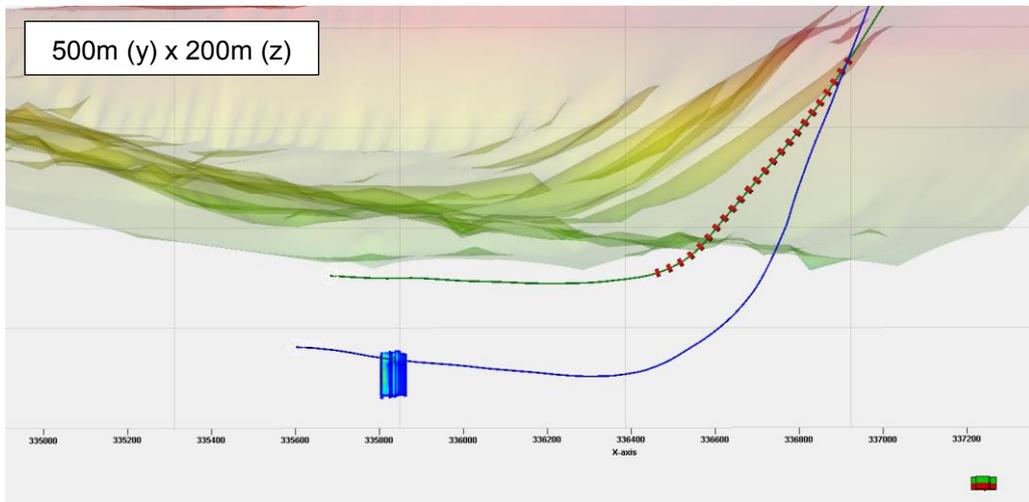


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## Fracture Growth

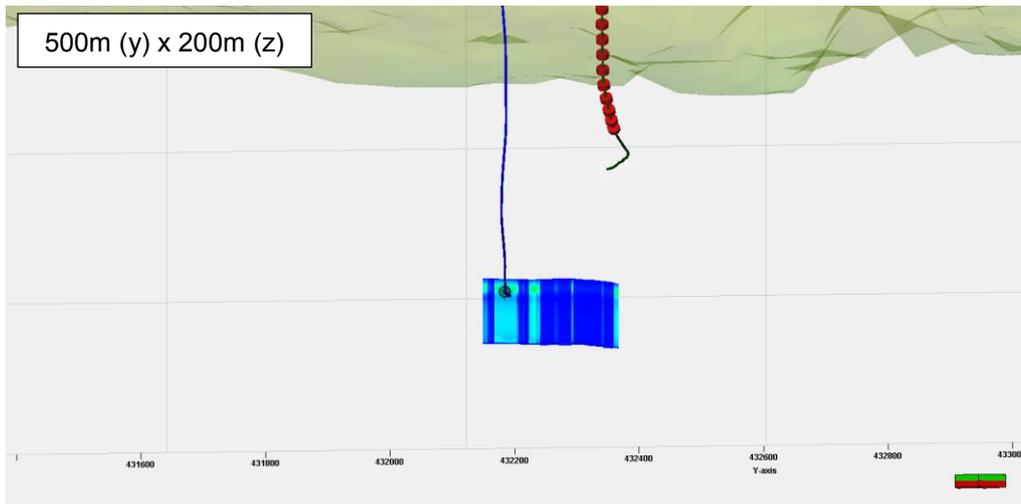


- Map View, scale north bar



- X-section due north

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- X-section due east
- Max hydraulic frac half length: 201.6 m
- Hydraulic frac height at well: 98.9 m

### Well Integrity Status

- No change

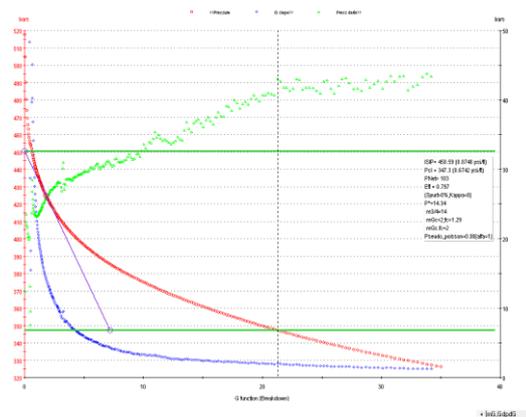
### Induced Seismicity of Note

- No induced seismicity of note

### Update to Stress Magnitude

No update to stress magnitude as closure was not observed

- $S_{Hmin} = 0.0152 \text{ MPa/m}$



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