

## Morning Report PNR1z

<b>Management System:</b>		HSE	<b>File Name:</b>	016-PNR1z-23.10.18-RMR	
<b>Approver:</b>		Senior Geoscientist	<b>Version No:</b>	1	
<b>Reviewer:</b>		Frac Manager	<b>Date of Issue:</b>	24 <sup>th</sup> October 2018	
<b>Author:</b>		Senior Geoscientist	<b>Proposed date of Review:</b>	n/a	
<b>Version</b>	<b>Section</b>	<b>Revision Information</b>		<b>Date</b>	<b>Reviser</b>
0.1	All	Draft Publication		24/10/2018	Senior Geoscientist
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.					

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## Summary

Overview of day's operations:

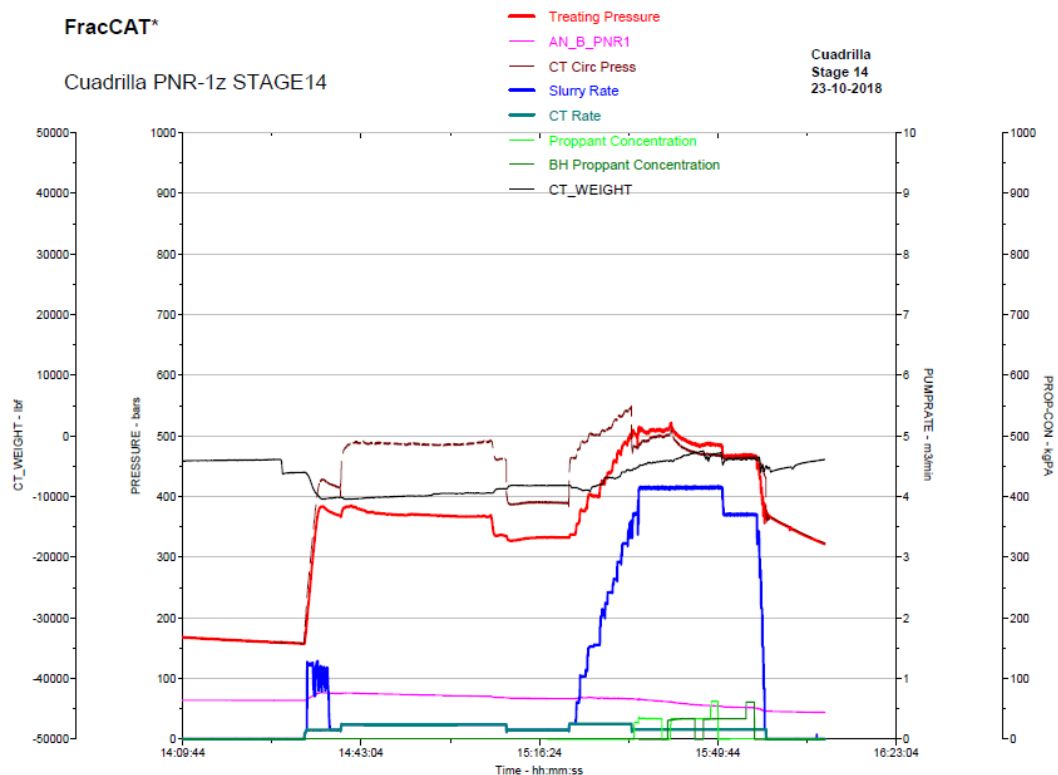
- 1x Diagnostic injection test into Stage 14
- Attempt at injection into Stage 14
- Flow back performed – 17.93 m<sup>3</sup>
- Induced seismicity at 15:45:32 – M<sub>L</sub> = 0.4
- No red line boundary breached

## Injection Summary

### Stage 14

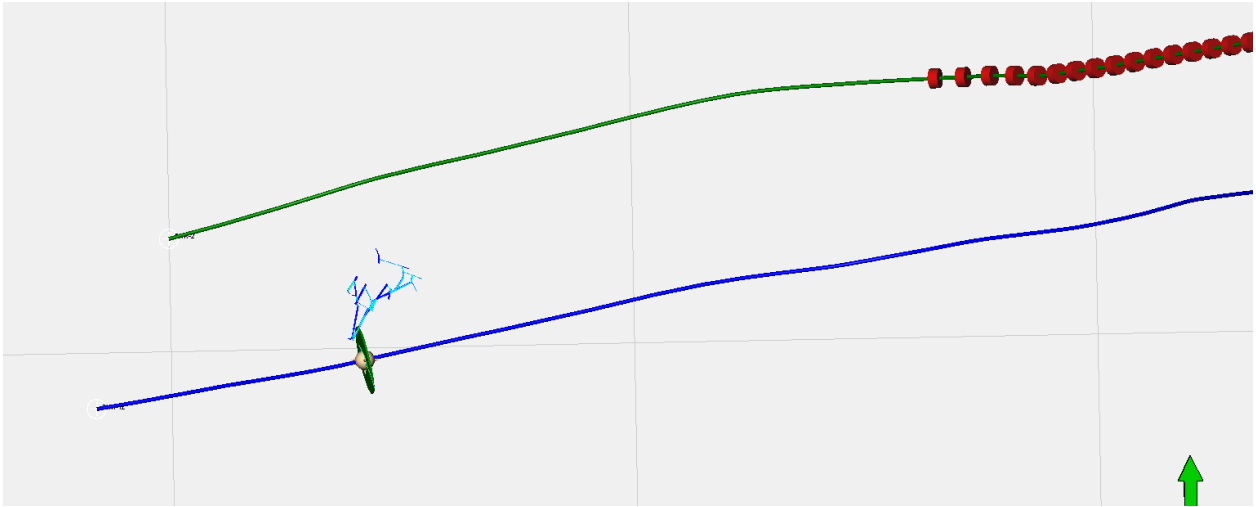
Injection Depth m (RT)	Volume (fluid m3, proppant tonne)	Fluid System	Additives (type, mass kg, %)
-3145.42 M MDRT	Slickwater Frac (128.9 m3 & 2.0T)	Slickwater	B528 Friction Reducer, Slickwater Frac – 31 kg – 0.02 %
-2310.49 M TVDRT			

## Injection Chart

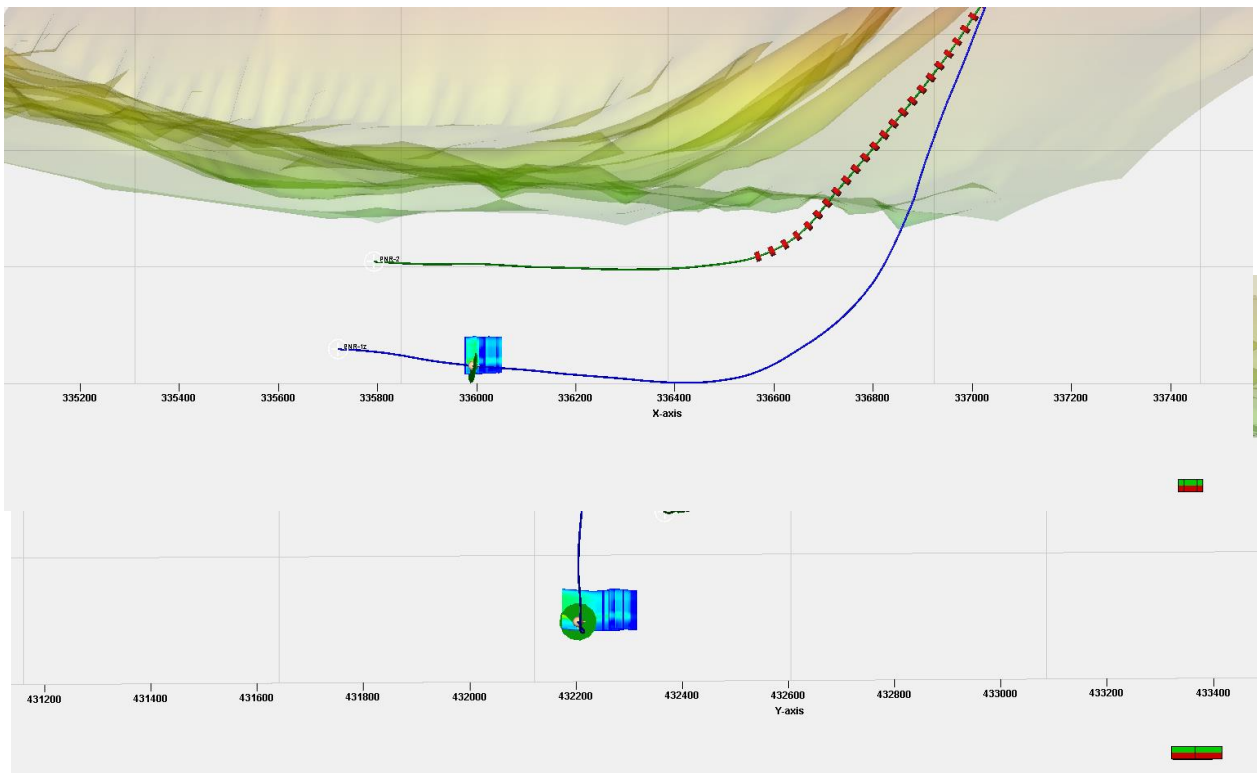


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## Fracture Growth



- Map View, scale north bar



- X-section due east
- Max hydraulic frac half length: 137 m
- Hydraulic frac height at well: 76 m

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## Well Integrity Status

- No change

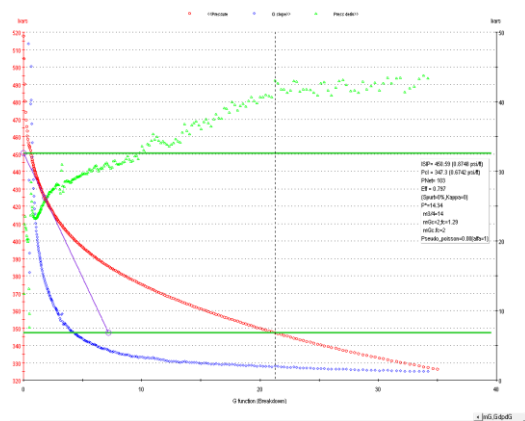
## Induced Seismicity of Note

- 23/10//2018 15:45:32 =  $M_w = 0.524$  &  $M_L = 0.4$

## Update to Stress Magnitude

No update to stress magnitude as closure was not observed

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



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