

Morning Report PNR1z

Management System:	HSE	File Name:	019-PNR1z-26.10.18-RMR	
Approver:	Senior Geoscientist	Version No:	1	
Reviewer:	Frac Manager	Date of Issue:	27 th October 2018	
Author:	Senior Geoscientist	Proposed date of Review:	n/a	
Version	Section	Revision Information	Date	Reviser
0.1	All	Draft Publication	27/10/2018	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:

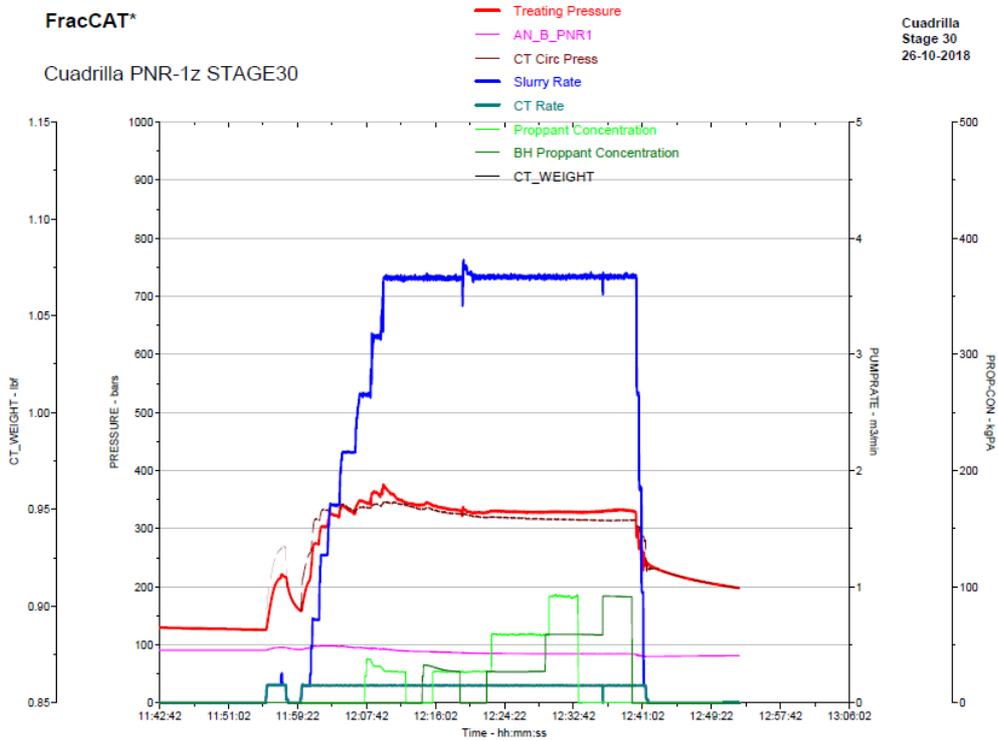
- 1x Diagnostic Injection Test + 1x Main Frac into Stage 30
- Flow back performed
- Induced seismicity at:
 - 12:26:43 – $M_L = 0.26$ [Amber]
 - 12:36:59 – $M_L = 0.76$ [Red]
- No red line boundary breached

Injection Summary

Stage 30

Injection Depth m (RT)	Volume (fluid m3, proppant tonne)	Fluid System	Additives (type, mass kg, %)
-2858.25 M MDRT	Slickwater Frac (142.2 m3 & 3.6 T)	Slickwater	B528 Friction Reducer, Slickwater Frac – 35 kg – 0.02 %
-2334.25 M TVDRT			

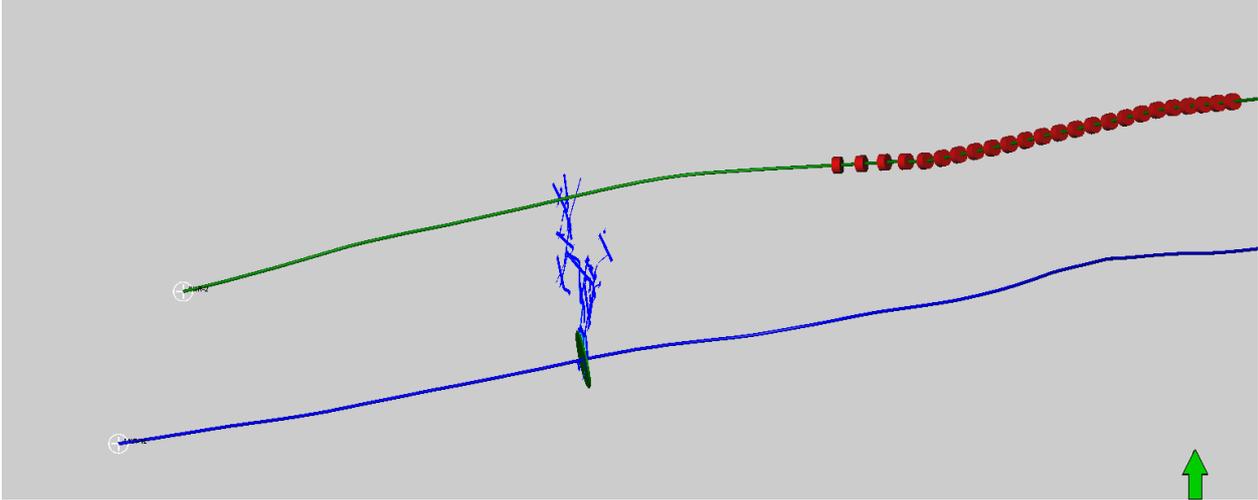
Injection Chart



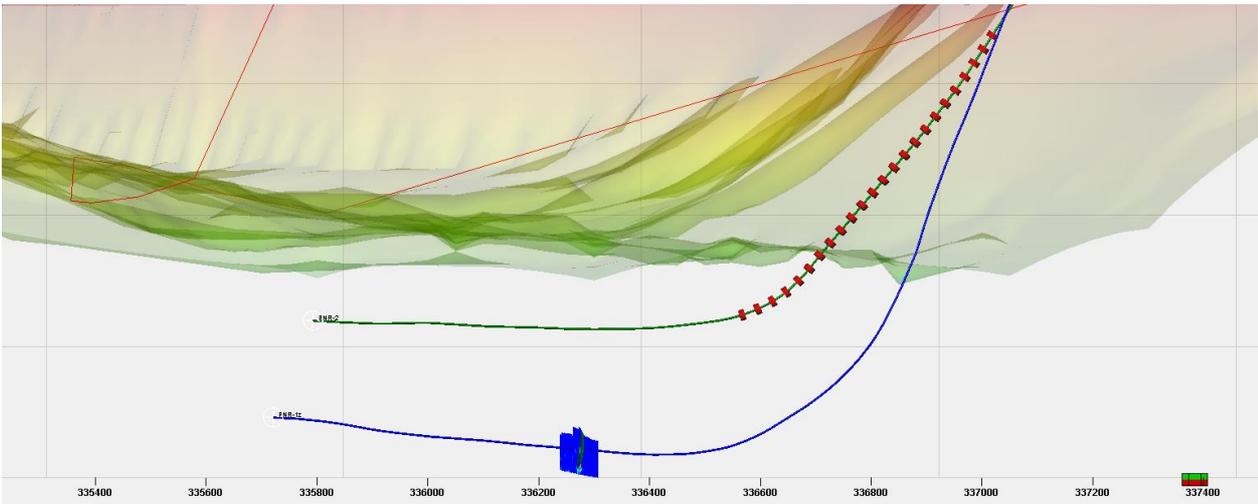
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Pumping Time:
1) 26/10/2018 11:59:42 – 26/10/2018 12:41:42

Fracture Growth

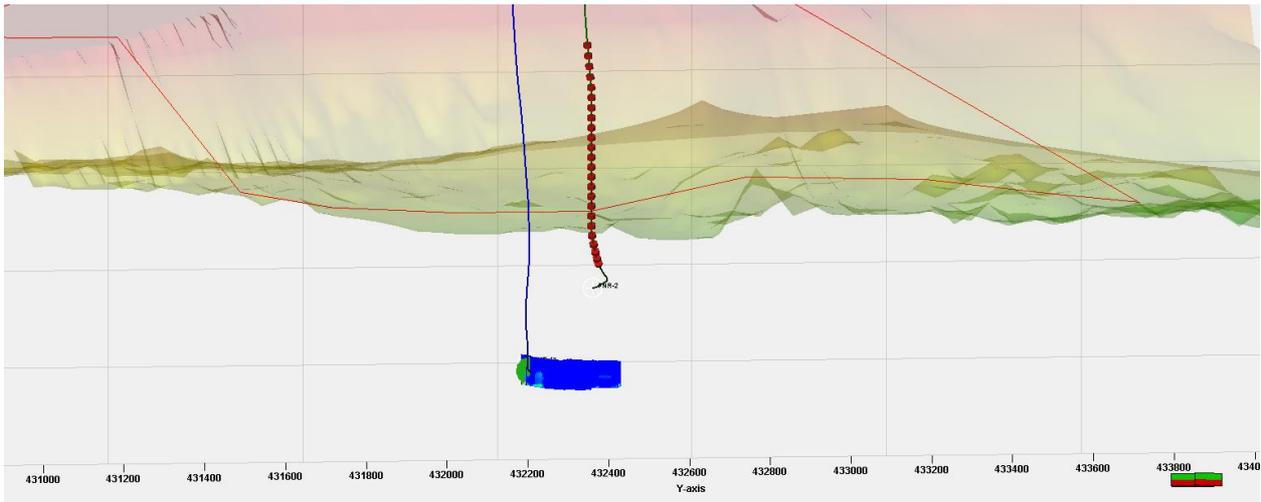


- Map View, scale north bar



- X-section due north

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- X-section due east
- Max hydraulic frac half length: 241.80 m
- Hydraulic frac height at well: 69.98 m

Well Integrity Status

- No change

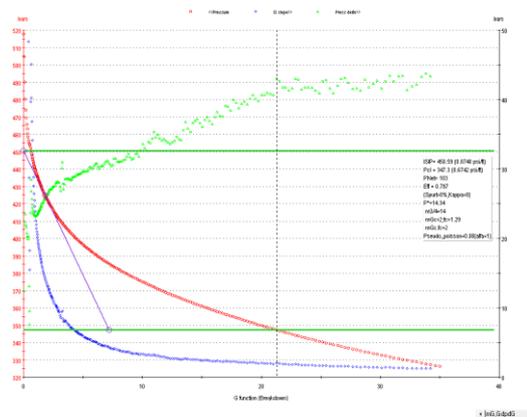
Induced Seismicity of Note

- 26/10//2018 12:26:43 = $M_w = 0.41$ & $M_L = 0.26$
- 26/10//2018 12:36:59 = $M_w = 0.61$ & $M_L = 0.76$

Update to Stress Magnitude

No update to stress magnitude as closure was not observed

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



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